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Forest Statistics for New York: 1980 and 1993

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Abstract

A statistical report on the fourth forest inventory of New York conducted in 1991-94 by the Forest Inventory and Analysis Unit, Northeastern Forest Experiment Station. Statistics for forest area, numbers of trees, wildlife habitat, tree biomass, timber volume, timber products output, growth, and change are displayed at the state and, when appropriate, at the unit and county levels. The current inventory indicates that there are approximately 21.8 billion cubic feet of growing-stock volume on 15.4 million acres of timberland in New York.

Foreword

The fourth inventory of New York was under the overall direction of John R. Peters, Project Leader of the Forest Inventory and Analysis Unit. David J. Alerich supervised the data collection phase of the inventory. He was assisted by Robert E. Ilgenfritz, Richard A. McCullough, and Lucretia B. Stewart at unit headquarters in Radnor, PA; and by Edward A. Doane, Scott H. Tepke, and Kathryn M. Tillman, who coordinated the activities of the following members of the data-collection field staff in New York:

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The Forest Inventory and Analysis Unit thanks the landowners of New York and the New York State Department of Environmental Conservation for their cooperation and assistance during this inventory.

The cover illustration is a graphic representation of 82,775 interpreted photo points depicting forest land in New York.

**Forest Statistics
for New York:
1980 and 1993**

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Highlights

Forest-Land Area

The 18.6 million acres of forest land in New York cover 62 percent of the state's total land area (30.2 million acres). Increases and decreases in forest land at the unit level resulted in a negligible change in the amount of total forest land in the state since 1980.

Figure 1. Area by land class, New York, 1993

Timberland (formerly known as commercial forest land) makes up 83 percent of the forest land, totaling 15.4 million acres. The Adirondack and Catskill Preserves, with 2.5 million acres of reserved productive forest land, contribute 88 percent of the reserved productive acreage; various federal, state, county, and municipal agencies hold the remainder.

The Lake Plain Unit in the western part of New York showed the largest increase in forest land; this partly offset losses in other units, particularly the Eastern Adirondack Unit in the north.

Unit	1980	1993	Percent change
Lake Plain	2,361.6	2,505.1	+ 6.1
Southwest Highlands	1,798.3	1,816.2	+1.0
South-central Highlands	2,484.9	2,466.7	- 0.7
St. Lawrence/No. Adirondack	3,017.4	3,018.7	none
W. Adirondack	2,012.8	2,002.7	- 0.5
E. Adirondack	2,696.1	2,646.4	- 1.8
Capitol District	1,487.1	1,500.5	+ 0.9
Catskill/Lower Hudson	2,647.5	2,685.1	+ 1.4
State total	18,505.9	18,641.4	+ 0.7

Figure 2. Area (in thousand acres) of forest land and percent change, New York, 1980 and 1993.

Timberland

Northern hardwoods is the most common forest-type group in New York. Characterized by sugar maple, beech, yellow birch, and black cherry, this type group makes up 54 percent of the timberland area (8.4 million acres). Oak/hickory forests cover 2.1 million acres; white/red pine, 2.0 million; elm/ash/red maple, 1.2 million; aspen/birch, .7 million; and spruce/fir, .6 million acres. Other type groups contribute a half million acres.

Figure 3. Timberland by forest-type group, New York, 1993

Sawtimber stands (stands in which the stocking of live sawtimber trees makes up more than half) are found on 53 percent of the timberland, or 8.2 million acres. Poletimber stands cover 30 percent (4.6 million acres), sapling and seedling stands account for 16 percent (2.5 million acres), and nonstocked stands make up less than one percent. In 1980, stand sizes were distributed more evenly. Sawtimber stands covered 6.7 million acres (43 percent), while poletimber stands accounted for 4.1 million acres (27 percent). The greatest difference is in the area of timberland in sapling and seedling stands. This class has decreased by 45 percent since 1980 when these stands covered 30 percent (4.6 million acres) of timberland.

Figure 4. Area of timberland (in million acres) by stand-size class, New York, 1980 and 1993.

New York's timberland is primarily privately owned. Ninety-three percent (14.4 million acres) of all timberland is owned by individuals, corporations, clubs, forest industries, and other nonpublic owners. The remainder is administered by public agencies, primarily the New York Department of Environmental Conservation.

Figure 5. Timberland by owner class, New York, 1993

Numbers of Trees

There are 9.7 billion live trees 1.0 inch or larger in diameter at breast height (d.b.h.) on New York's timberland, or 631 trees per acre. Of these, 2.4 billion (156 trees per acre) are at least 5.0 inches in d.b.h. Red maple is the most common tree species in New York, accounting for 14 percent of all saplings and 18 percent of the live trees 5.0 inches and larger in d.b.h. Sugar maple is the second most common tree species, with 12 percent of the saplings and 14 percent of the live trees at least 5.0 inches in diameter. American beech rounds out the top three overall, with 9 percent of the saplings and 7 percent of the live trees 5.0 inches and larger in d.b.h., although eastern hemlock is third in numbers of live trees at least 5.0 inches in diameter, with 8 percent.

Growing-stock trees make up 90 percent of live trees 5.0 inches and larger in d.b.h. Red maple is the most common of the trees 5.0 inches and larger in d.b.h., with 18 percent of the growing-stock trees. Sugar maple makes up 15 percent of the total. 95 percent of all live sugar maple trees 5.0 inches and larger in d.b.h. are classified as growing stock. Eastern hemlock is third, with 8 percent of all growing-stock trees.

There has been a 19-percent increase in the number of growing-stock trees since 1980. In trees 5.0 to 10.9 inches in d.b.h., the increase of

14 percent is much less than that for trees that are 11.0 inches and larger in diameter. The larger trees increased from 359 million to 497 million (38 percent).

Figure 6. Number of growing-stock trees (in billion trees) on timberland by diameter group, New York, 1980 and 1993

Growing-Stock Volume

The volume of growing-stock trees in New York is 21.8 billion cubic feet, or 1,413 cubic feet per acre. This is a 32-percent increase since 1980 when the volume totaled 16.5 billion feet, or 1,070 cubic feet per acre. Sugar maple is the leading species in growing-stock volume, barely edging out red maple with 3.5 billion cubic feet, or 16 percent of the total. Red maple growing-stock trees contribute another 3.4 billion cubic feet. Eastern hemlock ranks third with 9 percent of the total (1.9 billion cubic feet). There has been no change in the ranking of the top three species since 1980.

Figure 7. Net volume of growing-stock trees (in billion cubic feet) on timberland, top five species, New York, 1980 and 1993

Sawtimber Volume

With an average of 4,008 board feet per acre, there are 61.7 billion board feet of sawtimber volume in New York. In 1980, the volume was 42.3 billion board feet, or 2,739 board feet per acre; sawtimber volume has increased by 46 percent since the last inventory. As with growing-stock volume, sugar maple is the top species with 10.0 billion board feet, or 16 percent of the total. Red maple has 13 percent (8.1 billion board feet) of the total sawtimber volume. Rounding out the top three sawtimber volume species is eastern white pine with 12 percent.

Figure 8. Net volume of sawtimber trees (in billion board feet) on timberland, top five species, New York, 1980 and 1993

For all size classes, northern red oak is the hardwood species with the highest percentage of its total volume in tree grades 1 and 2; 56 percent of its volume is in the higher quality grades. Sugar maple has 32 percent in tree grades 1 and 2, and red maple has 22 percent. As expected, for trees of larger diameter (15 inches and larger in d.b.h.), the percentage of volume in the higher tree grades rises, as diameter is a consideration when grading a tree. Trees in grades 1 and 2 account for 73 percent of the volume of larger northern red oaks, 45 percent of sugar maples, and 32 percent of red maples.

Growth and Removals

Since the last inventory, the average annual net growth of growing stock is 585.9 million cubic feet, or 38.0 cubic feet per acre per year. This

represents 2.7 percent of the current inventory. Average annual removals of growing stock total 194.7 million cubic feet, or 12.6 cubic feet per acre per year. Net change is positive over the period since the last inventory, with an average annual net change of 391.2 million cubic feet.

At the state level, all species except chestnut oak and select white oaks (white oak, swamp white oak, and bur oak) showed an average annual increase in growing-stock volume. Red maple showed an annual increase of 78.5 million cubic feet, or 5.1 cubic feet per acre yearly. Sugar maple increased at an annual rate of 57.8 million cubic feet, and northern red oak annually rose by 11.2 million cubic feet.

Rates of growth to removals of growing-stock volume vary with tree species. Red maple is growing four times faster than it is being removed, either by harvest or by land-use change, while northern red oak is outgrowing removals at a much lower rate of 1.6 to 1. Sugar maple shows the highest amount of total removals at 30 million board feet annually; growth still outpaces removals by 2.9 to 1.

Average annual net growth of sawtimber is 2.1 billion board feet, or 135.9 board feet per acre per year. The rate of growth to removals of sawtimber volume is 3 to 1. Annual removals of 673.0 million board feet per year, or 43.7 board feet per acre annually. Removals combined with growth yielded a positive annual change in board-foot volume of 1.4 billion board feet.

For all species there was a positive change in board-foot volume, with red maple showing the largest annual increase at 242.6 million board feet, and a growth-to-removals ratio of 4.3 to 1. Sugar maple had an annual increase of 224.0 million board feet, with a growth-to-removals ratio of 3 to 1. Northern red oak, despite a growth-to-removals ratio of 1.7 to 1, showed an annual increase of 53.9 million board feet.

Species	Growing stock	Sawtimber
Sugar maple	2.9 to 1	3.0 to 1
Red maple	4.2 to 1	4.3 to 1
Eastern hemlock	3.7 to 1	3.5 to 1
White pine	4.0 to 1	4.3 to 1
Northern red oak	1.6 to 1	1.7 to 1

Figure 9. Growth to removals ratios of growing-stock and sawtimber volume on timberland, top five species, New York, 1979-92.

Nontimber Resources

Although designed primarily to sample the timber resource, the inventory also provides information that relates to wildlife habitat and other nontimber factors.

On all forest land excluding Preserve acreage, there are 10.0 billion trees that are 1.0 inches and larger in d.b.h. The dry weight biomass of all live trees (seedling and larger) and shrubs on all non-Preserve forest land is 1.1 billion dry tons, or 70 dry tons per acre. Rough and rotten cull trees and noncommercial tree species contribute 10 percent (250.6 million trees) of the live trees at least 5.0 inches in diameter on timberland. These trees have limited timber value, but many are used by wildlife for habitat

or food. Also, all trees sequester carbon, which is a valuable asset to the environment.

New York's timberland includes 250 million dead trees, or 16 dead trees per acre, that are 5.0 inches and larger in d.b.h. Of these, 70 million are standing and have some form of cavity that can provide nesting sites for birds and dens for animals. Seven percent (161 million) of standing live trees that are at least 5.0 inches in diameter have some sort of cavity.

Understory vegetation (seedlings, saplings, and shrubs) totals 152 billion stems on the state's timberland. The most common tree species are white ash, sugar maple, beech, and red maple. *Rubus* species, panicled dogwood, spirea, and blueberry are the most common shrubs.

Introduction

Under the authority of the McSweeney-McNary Forest Research Act of 1928 and subsequent acts, including the Renewable Resources Planning Act of 1974 and the Renewable Resources Research Act of 1978, the USDA Forest Service conducts periodic inventories of all states to provide up-to-date information on the forest resources of the Nation. The initial inventory of New York's forest resources was conducted in 1949-52, the second was completed in 1966-68, and the third was carried out in 1978-79. This report presents forest-resource data from the fourth inventory, which was conducted in 1991-94. This inventory was a cooperative effort of the Northeastern Forest Experiment Station, the New York State Department of Environmental Conservation, and the landowners of New York.

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

Land area estimates of the Adirondack and Catskill Preserves found in the total land area tables were provided by the New York State Department of Environmental Conservation.

Land within the counties of Bronx, Kings, Nassau, New York, Queens, and Richmond were considered nonforest based on Forest Inventory and Analysis definitions and were not ground sampled. Acreages for these counties are included in tables showing total land area only.

The sampling procedure used during the current inventory included the use of aerial photography, the remeasurement of a sample of ground plots established in earlier inventories, and the establishment of new ground plots. For New York, this procedure required the photointerpretation and classification of 82,775 new photo points and 6,452 previously sampled ground plot locations into land-use and cubic-foot volume classes. Then, 4,906 ground plots from the previous inventory were remeasured and 497 new ground plots were established. Of

the total 5,403 plots, 3,099 were forested. The data collected were summarized using the FINSYS computer system developed at the Northeastern Forest Experiment Station.

The resurvey of New York's forest resources involved several associated studies and considerable analysis. Reports on the state's private forest-land owners and its primary forest products industry also will be available, and a report analyzing New York's forest resource in greater detail is being prepared.

The forest area, numbers of trees, wildlife habitat, biomass, timber volume, growth, and change statistics in this report summarize the information collected (see **List of Available Tables** in this report). 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, Radnor, PA 19087-4585 (Telephone: 610-975-4075; Fax: 610-975-4200)**.

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 of these tables will be identical for all 37 states in the Stations' territories. Rather than being grouped as a set, these core tables have been interspersed throughout this publication according to their level of data or content. The index in this report includes both a list of tables in this publication and the corresponding core-table number.

Reliability of the Estimates

The data in this report were based on a carefully designed sample of forest conditions throughout New York. 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. Statistically, accuracy refers to the success of estimating the true value; precision refers to the clustering of sample values about their own averages or to the variation among repeated samples. We are interested primarily

in the accuracy of the inventory, but in most cases we can only measure its precision.

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

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

Here is an example of how the sampling error is used to indicate reliability. The estimate of timberland for New York is 15,405,500 acres. The associated sampling error is 0.7 percent, or 107,800 acres. This means that if there are no errors in the procedure, we are 68 percent confident that the true number of acres is between 15,297,700 and 15,513,300 acres, or $15,405,500 \pm 107,800$ (one standard deviation). Similarly, we are 95 percent confident that the true number of acres is within $\pm 215,600$ acres (two standard deviations). County estimates are less precise. In New York, for example, while the sampling error for timberland at the state level is 0.7 percent, the sampling error for Orleans County is 11.8 percent. In general, as the size of the sample decreases in relation to the total, the sampling error, expressed as a percentage of the estimate, increases. A high amount of variance within a county increases the sampling error.

For many of the tables in this report, both the last column and last row are labeled "SE." These figures are the sampling errors of the column and row totals. The last sampling error given (SE) is for the table total (T). To calculate the approximate sampling error (se) for a table cell (X), use the following formula (**this formula**

is reliable only for estimating sampling errors of individual cells in AREA tables):

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

where:

- T = estimated table total (sum over all cells in table)
- SE = sampling error of T
- X = estimate for a table cell
- se = approximate sampling error of X, in percent.

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

Comparison Between Inventories

To evaluate the condition of the forest resource, it is useful to compare the current estimates with those from the previous inventory. However, as a result of ongoing efforts to improve the efficiency of the inventory, we have made several changes in procedures and definitions since 1980. Because these changes make inappropriate the direct comparison of some of the current estimates with those published by Considine and Frieswyk (1982), users should use caution when comparing the data in this report with those in the 1980 report. In this report, several tables containing 1980 data are provided to allow comparisons. The changes in methods and definitions follow:

Forest Inventory uses Bureau of Census estimates of total land area in a state or county as the basis for estimating land area by various classes. For the 1980 report (1982), 1977 Bureau of Census data were used; in 1993, 1990 data were available. Between 1977 and 1990, Bureau of Census made changes to their estimating procedures. It now is able to identify as inland water streams more than 200 feet wide and bodies of water 4.5 acres and larger in area. Previously, the minimum sizes were 660

feet in width for streams and 40 acres in size for bodies of water. This procedure results in a decrease in total land area. For comparison of land area between inventories, 1980 estimates of land area by class were recalculated using 1990 total land-area values from the Bureau of Census.

Stand size is a classification (sapling/seedling, poletimber, sawtimber, or nonstocked) of forest land based on the size of the trees that dominate an area. In the 1980 inventory, only growing-stock trees were considered in determining stand size; the 1993 procedure considered all live trees. To allow comparisons, this report includes several 1980 area tables showing an estimate of area of timberland by stand-size class that is based on all live trees.

Seventy-six percent of the plots that were visited during the 1980 inventory, either as remeasurement or as new plots, were remeasured in 1991-94. The estimates of average annual net growth and change are derived from this set of data. These estimates afford an opportunity to look at change in overall volume from occasion to occasion and from plot to plot. The estimates showing 1980 information are from the plots that were selected at that occasion to produce an estimate of the current area and volume. These data have been used in current procedures to recalculate estimates of area and volume at the 1980 occasion so that comparisons can be made. Although the data set from which estimates of growth and change are derived contains a portion of the plots from which the 1980 recalculated estimates were calculated, they are different data sets designed to produce different types of estimates. Inconsistencies in trends for certain species at the unit level may result when the annual change tables are compared with the total change between the 1980 and 1993 tables. Sampling errors have been included in unit-level growth tables to indicate the precision of the data at the species level.

In addition to the traditional data gathered to estimate forest area and tree volumes, information was collected to describe forest wildlife habitat and forest-tree biomass.

Definitions of Terms

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

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

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

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

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

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

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

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

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

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

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

Cull tree. A rough tree or a rotten tree.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Gross growth. The sum of accretion and ingrowth.

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

Growing-stock volume. Net volume, in cubic feet, of growing-stock trees 5.0 inches d.b.h. and larger from a 1-foot stump to a minimum 4.0-inch top diameter outside bark of the central stem, or to the point where the central stem breaks into limbs. Net volume equals gross volume less deduction for cull.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Poletimber tree. A live tree of commercial species meeting regional specifications of soundness and

form and at least 5.0 inches in d.b.h., but smaller than a sawtimber tree.

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

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

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

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

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

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

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

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

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

divided by the estimate, and multiplied by 100. Indicated in statistical tables as "SE".

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

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

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

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

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

Sawtimber stand. A stand-size class of forest land that is 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 tree. A live tree of commercial species at least 9.0 inches d.b.h. for softwoods or 11.0 inches for hardwoods, containing at least one 12-foot sawlog or two noncontiguous 8-foot sawlogs, and meeting regional specifications for freedom from defect.

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

SE. See Sampling error.

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

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

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

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

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

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

Stand-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.

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 with the basal area and/or number of trees required to fully use the growth potential of the land (or the stocking standard). In the Eastern United States this standard is 75 square feet of basal area per acre for trees 5.0 inches d.b.h. and larger, or its equivalent in numbers of trees per acre for seedlings and saplings. Two categories of stocking are used in this report: all live trees and growing-stock trees. The relationships between the classes and the percentage of the stocking standard are: nonstocked (0 to 9); poorly stocked (10 to 59); moderately stocked (60 to 99); fully stocked (100 to 129); and overstocked (130 to 160).

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

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

Timberland. Forest land producing or capable of producing crops of industrial wood (more than 20

cubic feet per acre per year) and not withdrawn from timber utilization (formerly known as commercial forest land).

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

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

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

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

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

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

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

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

Unproductive forest land. See Other forest land.

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

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

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

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.

References

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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.

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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>pagodifolia</i>	cherrybark oak
<i>Q. rubra</i>	northern red oak
<i>Q. shumardii</i>	shumard oak
Other White Oaks	
<i>Q. lyrata</i>	overcup oak
<i>Q. prinus</i>	chestnut oak
<i>Q. stellata</i>	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 New York (as encountered on field plots)

Scientific Name ***	Common Name(s)	Occurrence**
Softwoods		
<i>Abies balsamea</i> (L.) Mill.	balsam fir	c
<i>Chamaecyparis thyoides</i> (L.) B.S.P.	Atlantic white-cedar	vr
<i>Juniperus virginiana</i> L.	eastern redcedar	r
<i>Larix</i> Mill.	larch (introduced)	r
<i>L. laricina</i> (Du Roi) K. Koch	tamarack (native)	r
<i>Picea abies</i> (L.) Karst.	Norway spruce	c
<i>P. glauca</i> (Moench) Voss	white spruce	r
<i>P. mariana</i> (Mill.) B.S.P.	black spruce	r
<i>P. pungens</i> Engelm.	blue spruce	vr
<i>P. rubens</i> Sarg.	red spruce	c
<i>Pinus banksiana</i> Lamb.	jack pine	vr
<i>P. resinosa</i> Ait.	red pine	c
<i>P. rigida</i> Mill.	pitch pine	r
<i>P. strobus</i> L.	eastern white pine	vc
<i>P. sylvestris</i> L.	Scotch pine	c
<i>Pseudotsuga menziesii</i> (Mirb.) Franco	Douglas-fir	vr
<i>Thuja occidentalis</i> L.	northern white-cedar	c
<i>Tsuga canadensis</i> (L.) Carr.	eastern hemlock	vc
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. platanoides</i> L.	Norway maple	vr
<i>A. rubrum</i> L.	red maple	vc
<i>A. saccharinum</i> L.	silver maple	r
<i>A. saccharum</i> Marsh.	sugar maple	vc
<i>A. spicatum</i> Lam.*	mountain maple	vr
<i>Aesculus</i> L.	buckeye	vr
<i>Ailanthus altissima</i> (Mill.)Swingle*	ailanthus	vr
<i>Amelanchier</i> Medic.*	serviceberry	r
<i>Betula alleghaniensis</i> Britton	yellow birch	c
<i>B. lenta</i> L.	sweet birch	c
<i>B. nigra</i> L.	river birch	vr
<i>B. papyrifera</i> Marsh.	paper birch	c
<i>B. populifolia</i> Marsh.*	gray birch	c
<i>Carpinus caroliniana</i> Walt.*	American hornbeam	r
<i>Carya</i> Nutt.	hickory	c
<i>Castanea dentata</i> (Marsh.)Borkh.*	American chestnut	vr
<i>Catalpa</i> Scop.*	catalpa	vr
<i>Celtis occidentalis</i> L.	hackberry	vr
<i>Cornus florida</i> L.*	flowering dogwood	vr
<i>Crataegus</i> L.*	hawthorn	r
<i>Fagus grandifolia</i> Ehrh.	American beech	vc
<i>Fraxinus americana</i> L.	white ash	vc
<i>F. nigra</i> Marsh.	black ash	r

Tree Species of New York (continued)

Scientific Name ***	Common Name(s)	Occurrence**
<i>F. pennsylvanica</i> Marsh.	green ash	r
<i>Gleditsia triacanthos</i> L.	honeylocust	vr
<i>Juglans cinerea</i> L.	butternut	r
<i>J. nigra</i> L.	black walnut	r
<i>Liquidambar styraciflua</i> L.	sweetgum	vr
<i>Liriodendron tulipifera</i> L.	yellow-poplar (tulip tree)	r
<i>Maclura pomifera</i> (Raf.)*	osage-orange	vr
<i>Magnolia acuminata</i> L.	cucumbertree	vr
<i>Malus</i> Mill.*	apple	c
<i>Morus</i> L.*	mulberry	vr
<i>Nyssa sylvatica</i> Marsh.	blackgum	r
<i>Ostrya virginiana</i> (Mill.)K. Koch*	eastern hophornbeam	c
<i>Platanus occidentalis</i> L.	American sycamore	vr
<i>Populus balsamifera</i> L.	balsam poplar	r
<i>P. deltoides</i> Bartr. ex Marsh.	eastern cottonwood	r
<i>P. grandidentata</i> Michx.	bigtooth aspen	c
<i>P. tremuloides</i> Michx.	quaking aspen	c
<i>Prunus</i> L.*	cherry, plum	r
<i>Prunus pensylvanica</i> L. f.*	pin cherry	r
<i>P. serotina</i> Ehrh.	black cherry	c
<i>P. virginiana</i> L.*	chokecherry	vr
<i>Quercus alba</i> L.	white oak	c
<i>Q. bicolor</i> Willd.	swamp white oak	r
<i>Q. coccinea</i> Muenchh.	scarlet oak	r
<i>Q. ellipsoidalis</i> E. J. Hill	northern pin oak	vr
<i>Q. macrocarpa</i> Michx.	bur oak	r
<i>Q. muehlenbergii</i> Engelm.	chinkapin oak	vr
<i>Q. palustris</i> Muenchh.	pin oak	r
<i>Q. prinus</i> L.	chestnut oak	c
<i>Q. rubra</i> L.	northern red oak	c
<i>Q. stellata</i> Wangenh.	post oak	vr
<i>Q. velutina</i> Lam.	black oak	r
<i>Robinia pseudoacacia</i> L.	black locust	c
<i>Salix</i> L.*	willow	vr
<i>Salix nigra</i> Marsh.	black willow	r
<i>Sassafras albidum</i> (Nutt.) Nees*	sassafras	vr
<i>Sorbus americana</i> Marsh.*	American mountain-ash	vr
<i>Tilia americana</i> L.	American basswood	c
<i>Ulmus</i> L.	elm	vr
<i>U. americana</i> L.	American elm	c
<i>U. rubra</i> Muhl.	slippery elm	r
<i>U. thomasii</i> Sarg.	rock elm	vr

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

** Occurrence is based on the proportion of the species among all live trees 5.0 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.

Tree-Grade Classification

HARDWOOD TREE GRADES

GRADE FACTOR	TREE GRADE 1	TREE GRADE 2	TREE GRADE 3
Length of grading zone (feet)	Butt 16	Butt 16	Butt 16
Length of grading section ^a (feet)	Best 12	Best 12	Best 12
Minimum DBH (inches)	16 ^b	13	10
Minimum diameter inside bark at top of grading section (Inches)	13 ^b 16 20	11 ^c 12	8
Clear cuttings on 3rd best face ^d			
minimum length (feet)	7 5 3	3 3	2
number on face (maximum)	2	2 3	unlimited
yield in face length (minimum)	5/6	4/6	3/6
Cull deduction, including crook and sweep but excluding shake, maximum within grading section (%)	9	9 ^e	50

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

Tree-Grade Classification (continued)

EASTERN WHITE PINE TREE GRADE SPECIFICATIONS

GRADING FACTOR	TREE GRADE 1	TREE GRADE 2	TREE GRADE 3	TREE GRADE 4
(1) Minimum DBH (inches)	10	10	10	10
(2) Maximum weevil injury in butt 16-ft. section (number)	None	None	2 injuries	No limit
(3) Minimum face requirements on butt 16-ft. section	Two full length or four 50% length good faces. ¹ (In addition, knots on balance of faces shall not exceed size limitations of Grade 2 sections.)	No GOOD faces required. Maximum diameter of log knots on three best faces:		Includes all trees not qualifying for Grade 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 1/6 scaling diameter and 3 inch maximum. ² DEAD OR BLACK KNOTS including overgrown knots not to exceed 1/12 scaling diameter and 1.5 inch maximum. ²	SOUND RED KNOTS not to exceed 1/3 scaling diameter and 5 inch maximum. ² DEAD OR BLACK KNOTS including overgrown knots not to exceed 1/6 scaling diameter and 2.5 inch maximum. ²	
(4) Maximum sweep or crook in butt 16-ft. section (percent)	20	30	40	No limit
(5) Maximum total scaling deduction in butt 16-ft. section (percent)	50	50	50	No limit
After the tentative grade of the section is established from face examination, the section will be reduced in grade whenever the following defects are evident:				
(6) Conks, punk knots, and pine borer damage on surface of section ³ Degrade one grade if present on one face. Degrade two grades if present on two faces. Degrade three grades if present on three or more faces.				
(7) If the final grade of the grading section is 1, 2, or 3, examine the tree for weevil injuries in the merchantable stem above 16 ft. If the total apparent weevil injuries exceed three, degrade the tree one grade below the section grade. ³ Otherwise the tree grade is the same as the final section grade.				

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

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

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

Tree-Grade Classification (continued)

SOUTHERN PINE TREE GRADES

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

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

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

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

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

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

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

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

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

SPRUCE, FIR, CEDAR, TAMARACK, AND HEMLOCK LOGS

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

¹ ...at small end of log.

² ...without trim.

TREE GRADE 5 (ALL SPECIES)

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

Metric Equivalents

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

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

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STATE TABLES

Area by land class, New York, 1980 and 1993

Table 1.--Land area by land class, New York, 1980 and 1993^a(In thousands of acres)^b

Land class	1980	Percent	1993	Percent
Timberland	15,448.3	51.1	15,405.5	51.0
Noncommercial forest land:				
Reserved productive ^c	2,553.7	8.4	2,786.5	9.2
Urban forest land ^d	68.8	.2	99.6	.3
Other forest land ^d	238.2	.8	122.8	.4
Reserved other forest land ^e	179.7	.6	166.9	.6
Christmas tree plantations	17.2	.1	60.0	.2
Total noncommercial forest land	3,057.6	10.1	3,235.8	10.7
Total forest land	18,505.9	61.2	18,641.3	61.7
Nonforest land:				
Cropland ^f	4,347.7	14.4	4,166.6	13.8
Pasture ^f	1,917.4	6.3	1,263.9	4.2
Other	5,452.3	18.1	6,151.4	20.3
Total nonforest land	11,717.4	38.8	11,581.9	38.3
Total land area ^{gh}	30,223.3	100.0	30,223.3	100.0

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

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

^c Includes 2,288,000 acres (1980) and 2,456,000 acres (1993) of Adirondack and Catskill Preserve that were not sampled by Forest Inventory and Analysis.

^d "Other forest land" formerly known as unproductive forest land.

^e Includes 158,400 acres (1980) and 138,600 acres (1993) of Adirondack and Catskill Preserve that were not sampled by Forest Inventory and Analysis.

^f Source: 1978 Census of Agriculture; 1992 Census of Agriculture.

^g Source: 1990 United States Department of Commerce, Bureau of Census.

^h Includes 381,300 acres of land in Bronx, Kings, Nassau, New York, Queens, and Richmond counties that are nonforest based on Forest Inventory and Analysis definition of nonforest land, and were not ground sampled.

Table 2.--Area of all reserved and other forest land (excluding Preserve land) by forest-type group and land class, New York, 1993

(In thousands of acres)

Forest-type group	Land class				Total
	Urban forest	Other forest land	Reser. pro. forest land	Reser. oth. forest land	
White/red pine	.0	12.5	34.4	.0	47.0
Spruce/fir	.0	11.3	48.7	.0	60.0
Loblolly/shortleaf	22.9	8.0	33.1	.0	64.1
Oak/pine	16.2	.0	.0	.0	16.2
Oak/hickory	15.0	11.0	102.5	28.3	156.8
Elm/ash/red maple	18.0	60.9	31.1	.0	110.0
Northern hardwoods	24.1	13.6	80.6	.0	118.3
Aspen/birch	3.2	5.6	.0	.0	8.8
All groups	99.6	122.8	330.5	28.3	581.2

Area of timberland by stand-size class, New York, 1980 and 1993

1980

1993

Table 3.--Area of timberland by forest type, forest-type group, and stand-size class, New York, 1980

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Jack pine	.0	6.1	19.4	.0	25.4	48.6
Red pine	106.0	61.1	67.5	.0	234.6	15.9
White pine	523.4	147.4	284.0	.0	954.9	7.5
White pine/hemlock	200.1	30.1	24.4	.0	254.7	15.6
Hemlock	402.7	62.2	65.1	.0	530.0	10.5
Scotch pine	19.0	30.2	53.5	.0	102.8	24.2
White/red pine group	1,251.3	337.1	514.0	.0	2,102.4	4.8
Balsam fir	6.5	64.9	30.9	.0	102.3	24.2
Red spruce	44.1	52.7	25.6	.0	122.4	21.8
Red spruce/balsam fir	59.6	31.4	12.4	7.4	110.8	23.4
White spruce	6.2	5.5	33.2	.0	45.0	38.1
Black spruce	.0	6.8	11.1	.0	17.8	58.0
Norway spruce	35.6	23.7	19.2	.0	78.5	27.8
Northern white-cedar	37.6	24.9	57.9	.0	120.4	22.8
Tamarack	12.3	.0	11.9	.0	24.2	50.1
Larch plantation	.0	5.6	24.2	.0	29.8	44.8
Spruce/fir group	201.9	215.6	226.4	7.4	651.3	8.9
Eastern redcedar	5.5	5.4	38.9	.0	49.8	36.3
Pitch pine	6.8	13.9	19.8	.0	40.5	40.7
Loblolly/shortleaf group	12.2	19.3	58.7	.0	90.3	27.1
Wh. pine/no. red oak/wh. ash	163.2	92.4	11.9	.0	267.6	14.8
Eastern redcedar/hardwood	5.5	6.6	17.9	.0	29.9	44.9
Other oak/pine	6.6	6.9	12.8	.0	26.3	50.0
Oak/pine group	175.3	105.9	42.6	.0	323.8	13.5
Post, black, or bear oak	5.2	5.7	7.2	.0	18.1	58.3
Chestnut oak	32.0	60.5	26.8	.0	119.3	22.4
White oak/red oak/hickory	173.7	109.5	94.6	.0	377.8	12.5
White oak	39.0	19.6	14.2	.0	72.8	30.0
Northern red oak	179.6	120.0	49.5	.0	349.0	13.0
Y. poplar/wh. oak/no. red oak	23.2	.0	.0	.0	23.2	50.1
Black locust	.0	17.9	30.9	.0	48.8	35.4
Black walnut	.0	6.6	.0	.0	6.6	100.0
Hawthorn/reverting field	5.9	6.1	327.2	18.1	357.3	12.7
Scarlet oak	6.0	12.9	10.7	.0	29.6	45.0
Red maple/central hardwoods	12.1	35.8	31.6	.0	79.5	27.7

Table 3.-continued

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw- timber	Pole- timber	Sapling and seedling	Non- stocked		
Mixed central hardwoods	404.9	374.1	183.1	.0	962.1	7.6
Oak/hickory group	881.6	768.7	775.7	18.1	2,444.1	4.4
Black ash/Amer. elm/red maple	90.4	101.8	331.7	5.8	529.7	10.5
Red maple(lowland)	49.4	79.4	62.2	.0	191.0	17.9
Red maple(upland)	43.8	84.8	152.4	.0	281.0	14.4
Cottonwood	5.6	14.1	11.3	.0	31.0	45.1
Willow	66.6	11.8	118.2	6.2	202.9	18.0
American elm/green ash	.0	.0	11.6	.0	11.6	70.8
Elm/ash/red maple group	255.8	292.0	687.3	12.0	1,247.2	6.7
Sugar maple/beech/yellow birch	2,442.1	1,076.5	563.0	.0	4,081.6	3.1
Black cherry	143.5	126.4	242.2	.0	512.1	10.8
Red maple/northern hardwoods	685.8	528.6	232.4	5.9	1,452.7	6.1
Pin cherry/reverting field	5.6	19.5	335.6	11.8	372.5	12.7
Mixed northern hardwoods	536.9	364.1	521.8	.0	1,422.8	6.2
Northern hardwoods group	3,814.0	2,115.1	1,894.9	17.7	7,841.7	1.9
Aspen	82.3	178.8	320.4	.0	581.4	10.0
Paper birch	.0	51.1	18.6	.0	69.7	30.2
Gray birch	.0	10.8	85.5	.0	96.3	24.3
Aspen/birch group	82.3	240.8	424.4	.0	747.5	8.7
All forest types	6,674.5	4,094.5	4,624.1	55.2	15,448.3	.7
SE	2.1	3.2	2.8	33.3	.7	

Table 4.--Area of timberland by forest type, forest-type group, and stand-size class, New York, 1993

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Jack pine	6.5	.0	.0	.0	6.5	100.0
Red pine	116.2	48.6	18.6	.0	183.5	16.6
White pine	667.5	115.4	72.4	.0	855.3	7.4
White pine/hemlock	192.6	52.4	4.2	.0	249.1	14.4
Hemlock	457.3	70.0	35.4	.0	562.8	9.3
Scotch pine	24.3	41.8	31.1	.0	97.3	23.2
White/red pine group	1,464.4	328.2	161.8	.0	1,954.4	4.6
Balsam fir	16.7	26.8	7.0	.0	50.6	33.6
Red spruce	51.9	26.5	3.7	.0	82.1	26.0
Red spruce/balsam fir	37.4	33.9	17.3	.0	88.5	25.7
White spruce	10.6	40.5	3.7	.0	54.7	30.5
Black spruce	.0	.0	10.0	.0	10.0	70.7
Norway spruce	45.8	35.7	18.4	.0	99.9	21.1
Northern white-cedar	68.2	37.8	9.3	.0	115.2	21.6
Tamarack	9.9	16.0	7.0	.0	32.9	41.2
Larch plantation	26.3	.0	15.7	.0	42.0	35.4
Spruce/fir group	266.8	217.2	92.0	.0	576.0	9.3
Eastern redcedar	4.9	4.8	25.3	.0	35.0	37.0
Pitch pine	24.3	6.8	7.1	.0	38.2	39.1
Loblolly/shortleaf group	29.2	11.6	32.4	.0	73.2	27.0
Wh. pine/no. red oak/wh. ash	192.4	175.5	12.8	.0	380.7	11.7
Eastern redcedar/hardwood	4.2	24.3	15.1	.0	43.5	32.7
Other oak/pine	.0	6.5	.0	.0	6.5	100.0
Oak/pine group	196.5	206.3	27.9	.0	430.7	11.0
Post, black, or bear oak	39.3	.0	.0	.0	39.3	37.0
Chestnut oak	35.8	36.3	16.2	.0	88.3	24.1
White oak/red oak/hickory	146.1	156.3	9.5	.0	312.0	12.6
White oak	24.8	5.4	10.1	.0	40.4	35.5
Northern red oak	241.1	102.6	15.1	.0	358.7	11.8
Y. poplar/wh. oak/no. red oak	9.3	.0	.0	.0	9.3	70.8
Black locust	19.4	19.6	13.3	.0	52.3	33.0
Black walnut	10.5	.0	.0	.0	10.5	70.7
Hawthorn/reverting field	4.1	8.9	30.2	.0	43.2	33.8
Scarlet oak	.0	6.4	18.4	.0	24.8	50.6
Red maple/central hardwoods	23.0	10.9	15.0	.0	48.9	33.5

Table 4.-continued

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Mixed central hardwoods	595.8	392.4	88.6	.0	1,076.7	6.6
Oak/hickory group	1,149.2	738.7	216.4	.0	2,104.3	4.4
Atlantic white cedar	.0	.0	5.6	.0	5.6	100.0
Oak/gum/cypress group	.0	.0	5.6	.0	5.6	100.0
Black ash/Amer. elm/red maple	107.1	142.0	132.1	5.5	386.7	11.3
Red maple(lowland)	66.8	44.7	.0	.0	111.5	20.6
Red maple(upland)	128.2	120.0	62.0	.0	310.2	12.7
River birch/sycamore	.0	5.5	11.1	.0	16.6	57.7
Cottonwood	30.3	17.8	39.6	.0	87.7	24.8
Willow	112.7	30.7	95.2	.0	238.6	14.1
Sycamore/pecan/American elm	9.5	.0	.0	.0	9.5	71.7
American elm/green ash	9.7	17.7	37.3	.0	64.8	27.4
Elm/ash/red maple group	464.3	378.4	377.3	5.5	1,225.6	6.1
Sugar maple/beech/yellow birch	2,569.2	1,087.4	203.4	.0	3,860.1	3.1
Black cherry	299.9	147.5	117.4	.0	564.9	9.4
Red maple/northern hardwoods	789.8	600.2	186.7	.0	1,576.7	5.4
Pin cherry/reverting field	39.3	76.3	613.1	24.4	753.0	8.0
Mixed northern hardwoods	822.0	553.7	244.1	.0	1,619.8	5.4
Northern hardwoods group	4,520.3	2,465.1	1,364.8	24.4	8,374.6	1.7
Aspen	95.4	272.4	210.7	.0	578.5	9.4
Paper birch	5.3	22.1	3.5	.0	30.9	41.5
Gray birch	.0	5.1	46.6	.0	51.7	31.7
Aspen/birch group	100.7	299.6	260.8	.0	661.1	8.7
All forest types	8,191.5	4,645.1	2,539.0	30.0	15,405.5	.7
SE	1.7	2.8	3.9	41.1	.7	

Area of timberland by forest-type group, New York, 1980 and 1993

Table 5.--Area of timberland by forest-type group and ownership class, New York, 1993

(In thousands of acres)

Forest-type group	Owner class				All classes
	National Forest	Other public	Forest industry	Other private	
White/red pine	.0	173.3	65.2	1,715.9	1,954.4
Spruce/fir	.0	76.0	112.4	387.6	576.0
Loblolly/shortleaf	.0	11.1	.0	62.2	73.2
Oak/pine	.0	23.2	22.9	384.6	430.7
Oak/hickory	.0	129.6	46.2	1,928.5	2,104.3
Oak/gum/cypress	.0	.0	.0	5.6	5.6
Elm/ash/red maple	.0	61.0	37.5	1,127.2	1,225.6
Northern hardwoods	7.5	517.5	902.3	6,947.2	8,374.6
Aspen/birch	.0	39.0	33.2	588.8	661.1
All groups	7.5	1,030.8	1,219.7	13,147.6	15,405.5

Table 6.--Area of timberland by stand-size class and ownership class, New York, 1993

(In thousands of acres)

Stand-size class	Owner class				All classes
	National Forest	Other public	Forest industry	Other private	
Sawtimber	7.5	683.0	735.9	6,765.2	8,191.5
Poletimber	.0	249.0	401.2	3,994.8	4,645.1
Sapling and seedling	.0	98.8	82.6	2,357.6	2,539.0
Nonstocked	.0	.0	.0	30.0	30.0
All classes	7.5	1,030.8	1,219.7	13,147.6	15,405.5

Table 7.--Area of timberland by board-foot stand-volume class and ownership class, New York, 1993

(In thousands of acres)

Stand-volume class	Owner class				All classes
	National Forest	Other public	Forest industry	Other private	
0 - 1,999	.0	285.4	313.7	5,385.0	5,984.1
2,000 - 3,999	.0	198.0	368.9	2,550.2	3,117.1
4,000 - 5,999	.0	189.6	228.6	2,021.6	2,439.8
6,000 - 7,999	.0	123.3	163.1	1,425.2	1,711.5
8,000 - 9,999	.0	70.5	68.3	715.4	854.2
10,000+	7.5	164.0	77.1	1,050.2	1,298.7
All classes	7.5	1,030.8	1,219.7	13,147.6	15,405.5

Table 8.--Area of timberland by stocking class of growing-stock trees and ownership class, New York, 1993

(In thousands of acres)

Stocking class	Owner class				All classes
	National Forest	Other public	Forest industry	Other private	
Nonstocked	.0	17.8	.0	267.4	285.2
Poorly stocked	.0	90.7	53.1	1,890.0	2,033.8
Moderately stocked	.0	166.8	305.6	3,543.5	4,015.9
Fully stocked	7.5	357.1	486.6	3,945.4	4,796.5
Overstocked	.0	398.4	374.5	3,501.2	4,274.1
All classes	7.5	1,030.8	1,219.7	13,147.6	15,405.5

Table 9.--Area of timberland by forest-type group and stocking class of all live trees, New York, 1980

(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	65.3	248.9	899.1	889.1	2,102.4	4.8
Spruce/fir	7.4	28.0	66.7	285.0	264.3	651.3	8.9
Loblolly/shortleaf	.0	16.5	16.4	40.0	17.4	90.3	27.1
Oak/pine	.0	6.1	35.4	143.2	139.1	323.8	13.5
Oak/hickory	18.1	233.6	402.8	1,199.1	590.6	2,444.1	4.4
Elm/ash/red maple	12.0	137.1	422.7	433.4	242.0	1,247.2	6.7
Northern hardwoods	17.7	320.2	1,041.6	3,871.6	2,590.6	7,841.7	1.9
Aspen/birch	.0	87.3	114.8	283.4	261.9	747.5	8.7
All groups	55.2	894.1	2,349.2	7,154.7	4,995.1	15,448.3	.7
SE	33.3	7.9	4.7	2.2	2.8	.7	

Table 10.--Area of timberland by forest-type group and stocking class of all live trees, New York, 1993

(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	87.5	302.5	486.9	1,077.5	1,954.4	4.6
Spruce/fir	.0	39.9	89.7	164.1	282.3	576.0	9.3
Loblolly/shortleaf	.0	22.0	34.1	10.3	6.8	73.2	27.0
Oak/pine	.0	19.1	68.4	120.3	223.0	430.7	11.0
Oak/hickory	.0	79.8	485.7	807.3	731.5	2,104.3	4.4
Oak/gum/cypress	.0	.0	5.6	.0	.0	5.6	100.0
Elm/ash/red maple	5.5	216.5	365.7	393.7	244.1	1,225.6	6.1
Northern hardwoods	24.4	577.3	1,667.4	2,864.7	3,240.8	8,374.6	1.7
Aspen/birch	.0	72.2	200.2	219.1	169.6	661.1	8.7
All groups	30.0	1,114.2	3,219.2	5,066.4	5,975.7	15,405.5	.7
SE	41.1	6.5	3.7	2.7	2.2	.7	

Table 11.--Area of timberland by forest-type group and stocking class of growing-stock trees, New York, 1980

(In thousands of acres)

Forest-type group	Stocking class					All classes	SE
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Over- stocked		
White/red pine	30.9	203.4	556.9	820.2	491.0	2,102.4	4.8
Spruce/fir	7.4	47.9	134.8	314.6	146.7	651.3	8.9
Loblolly/shortleaf	.0	22.0	30.8	31.6	5.9	90.3	27.1
Oak/pine	.0	29.2	79.8	161.4	53.4	323.8	13.5
Oak/hickory	148.1	318.5	699.2	988.2	290.2	2,444.1	4.4
Elm/ash/red maple	53.2	367.4	382.0	382.3	62.3	1,247.2	6.7
Northern hardwoods	113.1	865.3	2,583.3	3,313.9	966.1	7,841.7	1.9
Aspen/birch	12.1	166.8	239.6	223.2	105.7	747.5	8.7
All groups	364.8	2,020.5	4,706.3	6,235.4	2,121.3	15,448.3	.7
SE	12.6	5.0	3.1	2.4	4.9	.7	

Table 12.--Area of timberland by forest-type group and stocking class of growing-stock trees, New York, 1993

(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	197.9	329.4	559.5	867.6	1,954.4	4.6
Spruce/fir	5.1	64.1	98.9	171.5	236.5	576.0	9.3
Loblolly/shortleaf	.0	40.5	21.1	4.9	6.8	73.2	27.0
Oak/pine	.0	36.0	83.9	135.7	175.1	430.7	11.0
Oak/hickory	18.9	204.9	635.1	766.6	478.8	2,104.3	4.4
Oak/gum/cypress	.0	.0	5.6	.0	.0	5.6	100.0
Elm/ash/red maple	30.9	337.7	440.1	267.5	149.4	1,225.6	6.1
Northern hardwoods	202.4	990.2	2,225.3	2,703.9	2,252.9	8,374.6	1.7
Aspen/birch	27.8	162.6	176.6	187.0	107.0	661.1	8.7
All groups	285.2	2,033.8	4,015.9	4,796.5	4,274.1	15,405.5	.7
SE	13.2	4.6	3.2	2.8	2.8	.7	

Table 13.--Area of timberland by stand-size class, forest-type group, and basal-area class (all live trees), New York, 1993

(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+		
Sawtimber:							
White/red pine	27.2	224.3	587.5	476.0	149.4	1,464.4	5.3
Spruce/fir	21.1	41.9	85.0	86.8	32.0	266.8	14.0
Loblolly/shortleaf	.0	22.4	6.8	.0	.0	29.2	45.0
Oak/pine	4.2	27.7	118.0	41.4	5.2	196.5	16.4
Oak/hickory	23.3	378.8	567.5	172.8	6.8	1,149.2	6.2
Elm/ash/red maple	45.6	184.6	191.3	38.0	4.9	464.3	10.3
Northern hardwoods	121.5	1,017.5	2,570.9	744.7	65.6	4,520.3	2.7
Aspen/birch	10.6	13.8	53.0	23.3	.0	100.7	23.0
All type groups	253.5	1,910.9	4,180.1	1,583.0	263.9	8,191.5	1.7
Poletimber:							
White/red pine	37.7	120.5	131.3	28.1	10.5	328.2	12.4
Spruce/fir	15.0	37.5	130.3	34.4	.0	217.2	15.4
Loblolly/shortleaf	11.6	.0	.0	.0	.0	11.6	71.7
Oak/pine	4.6	71.8	107.6	22.2	.0	206.3	16.0
Oak/hickory	15.6	304.2	397.9	21.0	.0	738.7	8.0
Elm/ash/red maple	102.8	150.0	115.2	10.5	.0	378.4	11.4
Northern hardwoods	160.2	1,047.3	1,127.1	130.6	.0	2,465.1	4.3
Aspen/birch	15.2	176.9	79.5	28.0	.0	299.6	13.1
All type groups	362.8	1,908.2	2,088.8	274.8	10.5	4,645.1	2.8
Seedling/sapling:							
White/red pine	117.6	44.1	.0	.0	.0	161.8	18.0
Spruce/fir	52.0	17.3	10.1	5.6	7.0	92.0	24.0
Loblolly/shortleaf	27.5	4.9	.0	.0	.0	32.4	41.2
Oak/pine	15.1	12.8	.0	.0	.0	27.9	44.7
Oak/hickory	117.5	98.9	.0	.0	.0	216.4	15.6
Oak/gum/cypress	5.6	.0	.0	.0	.0	5.6	100.0
Elm/ash/red maple	307.7	69.7	.0	.0	.0	377.3	11.3
Northern hardwoods	973.4	354.0	37.4	.0	.0	1,364.8	5.7
Aspen/birch	184.6	67.3	8.9	.0	.0	260.8	14.0
All type groups	1,801.0	669.0	56.4	5.6	7.0	2,539.0	3.9
Nonstocked:							
Elm/ash/red maple	5.5	.0	.0	.0	.0	5.5	100.0
Northern hardwoods	24.4	.0	.0	.0	.0	24.4	45.0
All type groups	30.0	.0	.0	.0	.0	30.0	41.1
All classes	2,447.3	4,488.1	6,325.3	1,863.4	281.4	15,405.5	.7
SE	4.0	2.9	2.1	4.8	13.5	.7	

Table 14.--Number of live trees (1.0+ inches d.b.h.) on all forest land (excluding Preserve land) by species and diameter group, New York, 1993

(In thousands of trees)

Species	Diameter class (inches at breast height)							All classes	SE
	1.0-4.9	5.0-9.9	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0+		
Balsam fir	293,515	35,661	4,398	219	9	0	0	333,802	13.2
Atlantic white-cedar	5,802	111	0	0	0	0	0	5,913	71.4
Eastern redcedar	28,910	9,394	376	35	7	5	0	38,728	23.6
Larch (introduced)	5,510	2,109	2,186	389	0	0	0	10,194	52.6
Tamarack (native)	5,315	5,075	1,561	199	0	0	0	12,150	36.0
Norway spruce	18,956	13,976	3,813	1,119	34	0	0	37,898	21.8
White spruce	24,439	8,343	1,122	146	15	0	0	34,065	29.8
Black spruce	28,230	2,673	125	0	0	0	0	31,028	49.3
Blue spruce	2,637	176	29	0	0	0	0	2,843	54.5
Red spruce	113,575	36,586	7,852	1,175	101	0	0	159,290	9.5
Jack pine	275	867	499	0	0	0	0	1,641	57.2
Red pine	11,865	21,537	13,831	1,157	37	0	0	48,428	14.9
Pitch pine	12,592	9,714	2,573	236	0	0	0	25,115	20.5
White pine	191,326	74,407	39,104	15,259	4,057	1,309	592	326,055	6.8
Scotch pine	19,120	15,026	1,908	132	8	0	0	36,195	20.2
Douglas fir	1,126	726	28	0	0	0	0	1,880	74.3
Northern white-cedar	114,430	21,110	4,859	764	56	5	0	141,224	23.7
Eastern hemlock	304,600	127,339	48,159	13,432	2,484	411	60	496,486	5.3
All softwoods	1,182,226	384,830	132,424	34,263	6,809	1,730	652	1,742,935	4.2
Maple species	406	84	0	11	9	0	0	511	71.3
Boxelder	22,355	3,173	770	75	51	0	0	26,423	25.6
Black maple	692	27	0	24	16	0	4	764	64.3
Striped maple	224,903	5,608	75	0	0	0	0	230,587	9.3
Red maple	1,028,609	319,032	92,658	18,133	4,219	806	472	1,463,929	3.4
Silver maple	17,055	5,328	2,057	711	277	142	33	25,604	26.8
Sugar maple	860,791	222,686	81,833	22,944	4,874	1,445	978	1,195,550	3.6
Mountain maple	13,958	462	0	0	0	0	0	14,420	35.8
Buckeye species	0	45	0	0	0	0	0	45	100.0
Tree-of-heaven	3,555	597	304	55	0	0	0	4,512	44.7
Serviceberry	135,419	5,643	113	0	0	0	0	141,174	9.7
Yellow birch	194,765	52,169	16,124	3,651	745	257	84	267,795	6.9
Sweet birch	75,293	28,346	8,675	1,263	73	0	5	113,655	7.5
River birch	0	183	91	0	0	0	0	274	100.0
Paper birch	59,328	23,187	5,249	576	32	0	0	88,373	15.1
Gray birch	129,469	13,852	188	0	0	0	0	143,508	15.5
American hornbeam	269,549	4,710	76	0	5	0	0	274,340	8.2
Hickory species	66,639	29,723	9,554	1,669	369	111	15	108,081	8.5
Bitternut hickory	3,579	1,399	503	118	12	0	0	5,611	26.5
Pignut hickory	0	0	52	0	0	0	0	52	100.0
Shellbark hickory	0	132	84	16	50	0	0	282	69.0
Shagbark hickory	5,205	3,437	709	222	27	30	0	9,630	22.7
American chestnut	4,215	351	37	0	0	0	0	4,603	29.8
Catalpa species	0	27	0	11	9	0	0	47	71.6
Hackberry	1,068	21	0	0	0	0	0	1,090	56.8
Flowering dogwood	31,463	986	0	0	0	0	0	32,449	20.2
Hawthorn species	328,869	9,426	162	0	0	0	0	338,457	8.9
Beech	694,413	112,703	34,601	8,309	2,134	382	43	852,586	4.3
White ash	540,696	106,319	31,416	6,754	1,267	182	127	686,761	5.3
Black ash	38,386	12,667	783	86	0	0	0	51,922	20.4
Green ash	38,481	7,187	1,804	310	12	26	0	47,821	18.5
Honeylocust	332	289	59	28	0	0	0	708	80.2
Butternut	1,559	1,205	981	387	123	34	13	4,301	22.0
Black walnut	2,917	2,671	1,140	228	61	5	0	7,022	26.2
Sweetgum	0	51	0	0	0	0	0	51	70.7
Tulip-poplar	3,150	1,278	939	457	201	37	33	6,096	28.3
Osage-orange	0	125	29	0	0	0	0	154	100.0
Cucumbertree	1,647	174	163	32	7	34	5	2,062	66.6
Apple species	192,095	22,500	2,252	351	61	9	0	217,268	10.7
Red mulberry	0	272	0	25	0	0	0	297	78.6

Table 14.-continued

(In thousands of trees)

Species	Diameter class (inches at breast height)							All classes	SE
	1.0- 4.9	5.0- 9.9	10.0- 14.9	15.0- 19.9	20.0- 24.9	25.0- 29.9	30.0+		
Blackgum	9,258	1,272	377	22	7	4	0	10,939	42.9
Eastern hophornbeam	318,027	33,020	1,741	247	52	0	0	353,087	5.8
American sycamore	2,331	158	245	108	48	5	3	2,898	84.3
Balsam poplar	1,589	769	502	84	0	0	0	2,944	58.9
Eastern cottonwood	2,629	1,883	855	440	201	58	52	6,119	23.2
Bigtooth aspen	30,416	11,950	8,428	2,134	291	21	5	53,246	14.5
Quaking aspen	144,580	64,775	16,318	1,600	49	0	4	227,326	8.5
Prunus species	14,636	1,171	191	33	0	6	0	16,037	26.9
Pin cherry	35,987	2,546	189	0	0	0	0	38,723	22.5
Black cherry	238,589	59,241	29,705	8,583	1,261	314	128	337,822	5.4
Choke cherry	20,541	1,018	65	0	0	0	0	21,624	20.5
White oak	35,049	13,210	6,440	1,975	683	205	94	57,656	12.8
Swamp white oak	1,702	868	365	133	52	31	10	3,161	30.6
Scarlet oak	30,494	5,129	1,357	329	49	5	0	37,364	34.4
Northern pin oak	285	47	0	0	0	0	0	332	100.0
Bear oak	5,758	0	0	0	0	0	0	5,758	38.4
Bur oak	0	739	369	81	37	30	14	1,271	43.3
Chinkapin oak	321	27	0	0	0	0	4	352	91.4
Pin oak	1,936	1,318	659	439	73	17	56	4,497	29.3
Chestnut oak	14,758	19,461	10,357	1,903	137	17	4	46,637	12.1
Northern red oak	85,151	48,613	30,983	10,391	1,874	635	326	177,973	6.3
Post oak	0	124	18	22	0	0	0	164	79.5
Black oak	9,009	4,513	2,731	877	491	115	100	17,838	16.7
Black locust	16,405	10,205	2,529	323	192	11	4	29,669	18.6
Willow species	42,826	781	74	10	0	0	0	43,691	22.8
Black willow	32,429	3,040	1,462	787	432	130	226	38,506	23.9
Sassafras	5,750	760	169	0	8	0	0	6,687	36.3
American mountain-ash	3,030	148	0	0	0	0	0	3,178	67.3
American basswood	44,052	20,908	10,824	3,321	670	110	40	79,927	9.4
Elm species	3,651	303	22	12	13	0	0	4,002	91.3
American elm	181,425	32,343	3,522	542	36	0	0	217,867	7.1
Slippery elm	7,786	1,357	223	0	9	0	0	9,376	26.5
Rock elm	622	0	49	0	0	0	0	671	92.9
Unknown	4,630	191	45	4	0	0	0	4,870	29.7
All hardwoods	6,336,517	1,339,966	424,295	100,846	21,302	5,219	2,883	8,231,027	1.5
All species	7,518,743	1,724,797	556,719	135,109	28,111	6,949	3,535	9,973,963	1.4
SE	1.7	1.2	1.2	1.9	3.3	5.4	7.0	1.4	

Table 15.--Number of live trees (1.0+ inches d.b.h.) on timberland by species and diameter class, New York, 1993
(In thousands of trees)

Species	Diameter class (inches at breast height)									
	1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9		
Balsam fir	231,271	61,701	21,708	10,853	4,709	2,195	533	179		
Spruces	124,542	59,186	33,808	21,326	10,147	5,537	3,215	1,580		
Red pine	5,202	6,195	7,829	9,994	7,671	5,750	3,453	955		
White pine	127,470	62,093	36,264	26,834	21,333	16,165	12,024	8,467		
Eastern hemlock	197,130	104,937	65,873	44,208	30,901	19,902	13,716	7,973		
Other softwoods	120,540	56,348	31,638	19,640	10,546	6,122	2,592	1,195		
Total softwoods	806,156	350,461	197,120	132,855	85,307	55,672	35,533	20,348		
Red maple	702,741	304,375	165,685	110,805	66,461	40,263	22,103	10,803		
Sugar maple	652,367	199,097	110,787	79,766	54,935	35,482	20,720	13,387		
Yellow birch	143,757	49,169	27,269	17,288	11,643	6,982	4,363	1,863		
Sweet birch	49,541	23,909	14,110	10,528	5,958	3,585	2,107	755		
Paper birch	37,047	21,772	12,650	7,793	4,567	2,373	857	394		
Hickory	49,355	24,401	17,500	12,298	7,756	4,429	2,678	1,143		
American beech	552,934	135,782	60,215	37,166	25,291	15,273	8,063	4,530		
White ash	424,409	107,405	56,019	35,636	22,558	13,759	7,252	4,329		
Aspen	130,613	47,395	39,743	28,134	18,767	11,174	6,261	2,855		
Black cherry	182,327	51,879	27,029	22,679	17,530	11,975	8,187	4,942		
Select white oaks	17,214	7,872	6,501	4,964	4,101	2,907	1,866	1,255		
Chestnut oak	7,250	4,863	6,064	6,883	6,867	4,105	2,750	1,385		
Northern red oak	56,033	22,848	17,773	20,344	17,514	12,855	8,887	6,105		
Other oaks	16,734	6,363	4,649	3,160	2,691	1,705	1,335	919		
Basswood	31,000	12,216	9,879	7,730	5,370	4,885	3,367	1,880		
Elm	139,440	51,635	20,475	10,549	3,882	1,698	719	333		
Other commercial hardwoods	106,227	47,476	23,887	13,278	7,978	5,317	2,841	1,837		
Noncommercial hardwoods	1,419,237	326,827	78,867	22,208	6,806	2,416	1,183	455		
Total hardwoods	4,718,228	1,445,286	699,101	451,212	290,676	181,183	105,540	59,172		
All species	5,524,384	1,795,746	896,221	584,067	375,983	236,855	141,073	79,520		
SE	2.0	2.0	1.6	1.5	1.4	1.5	1.8	2.2		

Table 15.-continued

Species	Diameter class (inches at breast height)						SE
	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+	Total 5.0+	All classes	
Balsam fir	30	19	0	0	40,226	333,198	13.2
Spruces	687	194	97	0	76,590	260,318	9.5
Red pine	66	61	36	0	35,817	47,214	15.1
White pine	4,922	2,907	3,759	731	133,407	322,970	6.9
Eastern hemlock	4,022	1,985	2,124	89	190,793	492,860	5.4
Other softwoods	443	134	26	5	72,343	249,231	14.5
Total softwoods	10,170	5,302	6,042	825	549,176	1,705,792	4.3
Red maple	5,327	3,077	3,361	547	428,430	1,435,545	3.4
Sugar maple	7,037	3,661	4,574	1,084	331,435	1,182,899	3.6
Yellow birch	1,312	708	726	99	72,254	265,180	7.1
Sweet birch	400	113	32	5	37,593	111,043	7.8
Paper birch	178	10	22	0	28,845	87,664	15.1
Hickory	617	401	342	20	47,185	120,942	8.0
American beech	2,920	1,477	1,665	86	156,686	845,402	4.3
White ash	1,587	1,092	881	145	143,260	675,075	5.3
Aspen	851	773	335	66	108,959	286,967	7.7
Black cherry	2,527	1,277	1,063	165	97,374	331,581	5.4
Select white oaks	713	407	656	221	23,592	48,678	11.5
Chestnut oak	344	113	88	4	28,603	40,716	12.3
Northern red oak	3,142	1,582	1,862	342	90,406	169,287	6.3
Other oaks	542	390	471	202	16,065	39,163	25.7
Basswood	956	621	525	51	35,265	78,481	9.5
Elm	121	126	29	0	37,932	229,007	7.0
Other commercial hardwoods	1,123	682	1,329	333	58,605	212,309	9.0
Noncommercial hardwoods	303	75	193	0	112,507	1,858,572	3.4
Total hardwoods	30,001	16,585	18,154	3,372	1,854,997	8,018,511	1.5
All species	40,171	21,888	24,196	4,198	2,404,173	9,724,303	1.4
SE	2.7	3.2	3.5	6.6	1.0	1.4	

Table 16.--Number of all live trees on timberland by diameter class, tree class,
and species group, New York, 1993

(In thousands of trees)

Diameter class	Growing stock		Cull		All classes	SE
	Soft- woods	Hard- woods	Soft- woods	Hard- woods		
Seedlings	3,553,923	38,873,036	-	12,861,509	55,288,468	1.9
1.0 - 2.9	806,156	3,298,991	-	1,419,237	5,524,384	2.0
3.0 - 4.9	350,461	1,118,458	-	326,827	1,795,746	2.0
Total saplings	1,156,617	4,417,449	-	1,746,065	7,320,130	1.8
5.0 - 6.9	188,748	581,584	8,372	117,516	896,221	1.6
7.0 - 8.9	129,120	408,415	3,735	42,797	584,067	1.5
9.0 - 10.9	-	273,739	-	16,936	290,676	1.6
Total poletimber	317,868	1,263,739	12,107	177,250	1,770,964	1.2
9.0 - 10.9	75,103	-	10,204	-	85,307	3.7
11.0 - 12.9	52,013	161,945	3,659	19,238	236,855	1.5
13.0 - 14.9	33,769	95,461	1,764	10,079	141,073	1.8
Total small sawtimber	160,885	257,406	15,627	29,317	463,236	1.5
15.0 - 16.9	19,587	54,164	761	5,007	79,520	2.2
17.0 - 18.9	9,774	26,808	396	3,193	40,171	2.7
19.0 - 20.9	5,163	14,898	139	1,688	21,888	3.2
21.0 - 28.9	5,670	14,658	372	3,496	24,196	3.5
29.0 and larger	731	2,245	94	1,127	4,198	6.6
Total large sawtimber	40,925	112,773	1,763	14,512	169,973	1.8
All classes	5,230,218	44,924,403	29,498	14,828,652	65,012,771	1.7
SE	6.2	2.0	7.0	3.1	1.7	

Table 17.--Number of trees (5.0+ inches d.b.h.) on timberland by species and tree class, New York, 1993

(In thousands of trees)

Species	Tree class					All classes		SE
	Preferred	Acceptable	All growing stock	Rough cult	Rotten cult	All live	Salvable dead	
Balsam fir	1,239	38,371	39,610	400	216	40,226	1,759	11.0
Spruces	982	73,026	74,007	2,479	103	76,590	3,135	8.8
Red pine	75	35,293	35,368	365	83	35,817	1,287	14.9
White pine	2,000	122,381	124,381	8,394	632	133,407	1,606	5.8
Eastern hemlock	2,233	178,276	180,509	9,301	983	190,793	3,437	4.8
Other softwoods	281	65,521	65,802	4,801	1,740	72,343	3,532	10.1
Total softwoods	6,809	512,869	519,678	25,741	3,757	549,176	14,756	2.9
Red maple	893	393,418	394,311	19,707	14,411	428,430	5,341	2.8
Sugar maple	2,509	313,615	316,124	8,172	7,138	331,435	2,720	3.0
Yellow birch	167	65,760	65,927	4,144	2,182	72,254	1,551	4.9
Sweet birch	22	36,087	36,109	757	726	37,593	513	7.0
Paper birch	32	27,181	27,213	1,016	615	28,845	778	9.7
Hickory	401	45,537	45,938	781	466	47,185	651	7.6
American beech	48	141,942	141,990	6,296	8,400	156,686	1,675	4.4
White ash	1,403	135,844	137,247	4,202	1,812	143,260	4,590	4.1
Aspen	394	105,641	106,035	1,566	1,358	108,959	3,541	5.3
Black cherry	796	85,944	86,740	8,294	2,340	97,374	1,840	4.6
Select white oaks	203	22,608	22,811	716	65	23,592	558	8.2
Chestnut oak	82	27,777	27,859	553	192	28,603	669	10.7
Northern red oak	2,205	85,481	87,687	1,606	1,113	90,406	569	5.6
Other oaks	157	15,231	15,388	515	162	16,065	199	11.0
Basswood	208	33,909	34,117	551	597	35,265	455	7.2
Elm	55	36,161	36,215	1,478	238	37,932	1,569	6.2
Other commercial hardwoods	240	51,966	52,205	4,048	2,352	58,605	693	8.0
Noncommercial hardwoods	-	-	-	106,915	5,592	112,507	4,326	4.4
Total hardwoods	9,815	1,624,103	1,633,918	171,319	49,760	1,854,997	32,239	1.1
All species	16,625	2,136,972	2,153,596	197,059	53,517	2,404,173	46,995	1.0
SE	7.1	1.1	1.1	3.0	4.1	1.0	5.1	1.0

Table 18.--Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, New York, 1980
(In thousands of trees)

Species	Diameter class (inches at breast height)												All classes	SE
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9		
Balsam fir	20,768	11,117	4,253	1,265	379	16	29	0	0	0	0	0	37,826	11.7
Spruces	41,044	20,811	11,146	5,037	2,243	995	281	128	67	0	0	0	81,752	8.9
Red pine	8,545	11,194	8,119	4,762	1,410	266	13	0	0	0	0	0	34,309	16.0
White pine	37,256	28,128	17,311	11,506	7,262	4,288	2,520	1,336	1,785	130	130	111,522	6.9	
Eastern hemlock	52,167	36,628	21,588	15,188	9,078	5,864	3,136	1,675	1,365	54	54	146,745	5.3	
Other softwoods	26,327	14,250	6,436	2,890	1,379	577	168	64	62	0	0	52,153	10.9	
Total softwoods	186,107	122,127	68,853	40,647	21,751	12,008	6,146	3,204	3,279	184	184	464,307	3.2	
Red maple	142,449	82,868	46,572	25,801	13,219	6,283	2,834	1,327	1,423	179	179	322,954	3.4	
Sugar maple	104,765	66,041	42,887	25,493	15,814	8,389	4,377	1,712	2,094	242	242	271,814	3.5	
Yellow birch	19,888	13,169	8,627	5,654	3,106	1,998	949	565	683	106	106	54,746	5.8	
Sweet birch	11,822	7,622	4,832	2,707	1,127	603	322	40	22	4	4	29,100	8.8	
Paper birch	13,690	9,044	4,278	2,089	1,004	366	26	21	7	0	0	30,526	10.6	
Hickory	15,984	9,989	5,794	2,831	1,336	628	330	175	182	25	25	37,274	8.3	
American beech	37,899	26,721	18,040	11,112	6,423	3,361	1,854	860	590	19	19	106,879	5.4	
White ash	40,818	25,808	15,637	9,494	4,571	2,372	1,211	541	349	32	32	100,834	5.0	
Aspen	36,277	22,989	14,343	6,549	3,217	1,493	348	149	42	8	8	85,415	6.2	
Black cherry	20,971	16,856	12,952	7,172	5,385	2,545	992	451	421	47	47	67,792	6.4	
Select white oaks	5,807	5,670	3,950	2,613	1,779	1,291	786	340	389	59	59	22,684	8.8	
Chestnut oak	9,061	10,174	7,284	3,906	1,727	952	270	83	88	0	0	33,547	11.5	
Northern red oak	19,244	18,157	15,242	10,974	7,575	4,725	2,328	1,298	1,380	176	176	81,099	6.2	
Other oaks	4,772	3,238	2,978	1,811	1,067	646	448	197	267	57	57	15,481	13.7	
Basswood	7,895	7,559	4,689	3,533	2,529	1,064	752	277	250	40	40	28,590	8.8	
Elm	13,401	5,201	2,793	1,158	543	342	181	99	40	0	0	23,758	9.8	
Other hardwoods	14,687	8,579	5,328	2,632	1,376	919	501	389	389	99	99	34,901	11.2	
Total hardwoods	519,430	339,686	216,226	125,529	71,799	37,977	18,509	8,527	8,617	1,093	1,093	1,347,394	1.4	
All species	705,538	461,813	285,079	166,176	93,550	49,984	24,655	11,731	11,896	1,277	1,277	1,811,701	1.2	
SE	1.9	1.7	1.8	1.9	2.2	2.6	3.3	3.8	4.0	7.7	7.7	1.2		

Table 19. ---Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, New York, 1993

(In thousands of trees)												
Species	Diameter class (inches at breast height)										All classes	SE
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+		
Balsam fir	21,439	10,736	4,556	2,140	512	179	30	19	0	0	39,610	11.2
Spruces	32,710	21,168	9,088	5,367	3,191	1,505	687	194	97	0	74,007	9.3
Red pine	7,585	9,973	7,602	5,725	3,413	938	66	28	36	0	35,368	15.1
White pine	34,825	25,565	18,587	14,670	11,145	7,945	4,689	2,845	3,470	641	124,381	6.0
Eastern hemlock	63,451	43,032	26,487	18,508	13,121	7,886	3,919	1,951	2,067	85	180,509	4.9
Other softwoods	28,739	18,645	8,783	5,602	2,387	1,133	383	125	0	5	65,802	9.9
Total softwoods	188,748	129,120	75,103	52,013	33,769	19,587	9,774	5,163	5,670	731	519,678	3.0
Red maple	153,056	103,637	63,354	34,802	19,425	9,604	4,599	2,632	2,794	409	394,311	2.8
Sugar maple	105,726	77,289	53,595	32,909	19,564	12,585	6,574	3,516	3,733	633	316,124	3.0
Yellow birch	24,981	16,462	11,044	5,880	3,667	1,599	1,026	586	632	51	65,927	5.3
Sweet birch	13,305	10,466	5,781	3,406	1,962	692	378	88	26	5	36,109	7.3
Paper birch	11,855	7,336	4,503	2,165	795	394	141	10	15	0	27,213	10.2
Hickory	16,949	12,272	7,625	4,178	2,625	1,088	529	366	291	14	45,938	7.7
American beech	56,249	34,267	23,541	13,089	6,642	3,663	2,264	1,207	1,029	39	141,990	4.7
White ash	53,693	34,345	22,055	12,802	6,898	4,108	1,526	959	739	122	137,247	4.3
Aspen	38,675	27,361	18,386	10,857	6,044	2,799	802	738	326	45	106,035	5.5
Black cherry	22,853	20,602	16,534	10,505	7,281	4,529	2,369	1,076	860	130	86,740	4.6
Select white oaks	6,371	4,939	4,041	2,734	1,831	1,195	702	380	469	148	22,811	8.5
Chestnut oak	5,823	6,853	6,771	3,955	2,588	1,359	323	105	83	0	27,859	10.9
Northern red oak	17,340	19,566	17,335	12,475	8,517	5,863	3,065	1,532	1,723	272	87,687	5.6
Other oaks	4,262	3,111	2,659	1,675	1,313	900	530	378	433	127	15,388	11.4
Basswood	9,632	7,655	5,091	4,585	3,324	1,855	903	606	429	36	34,117	7.4
Elm	19,684	10,203	3,769	1,432	604	297	81	116	29	0	36,215	7.2
Other hardwoods	21,129	12,052	7,655	4,497	2,381	1,634	995	600	1,046	215	52,205	8.3
Total hardwoods	581,584	408,415	273,739	161,945	95,461	54,164	26,808	14,898	14,658	2,245	1,633,918	1.2
All species	770,333	537,535	348,843	213,958	129,230	73,752	36,582	20,061	20,327	2,976	2,153,596	1.1
SE	1.7	1.5	1.5	1.6	1.9	2.3	2.9	3.4	3.8	7.3	1.1	

Number of growing-stock trees on timberland, New York, 1980 and 1993

Table 20.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, New York, 1993

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Balsam fir	622	492	208	0	1,322	12.0
Atlantic white cedar	0	0	9	0	9	72.9
Common juniper	12	1	73	0	86	58.0
Eastern redcedar	13	15	21	0	50	21.9
Larch	6	20	11	0	37	51.1
Spruce species	524	385	188	0	1,098	16.6
Jack pine	0	0	0	0	0	100.0
Red pine	7	11	1	0	20	23.6
Pitch pine	11	5	6	0	22	49.1
Eastern white pine	445	169	49	0	663	12.0
Scotch pine	1	9	20	0	30	27.1
Douglas fir	0	1	1	0	2	72.0
Canada yew	161	30	2	0	193	30.3
Northern white-cedar	121	263	148	0	532	23.6
Eastern hemlock	733	182	11	0	926	9.7
Maple species	0	1	0	0	1	75.7
Boxelder	75	8	25	0	108	32.9
Black maple	9	0	0	0	9	92.7
Striped maple	1,931	813	81	0	2,825	6.4
Red maple	2,468	1,896	985	0	5,349	4.5
Silver maple	27	20	22	0	70	37.3
Sugar maple	5,244	2,542	665	0	8,452	5.4
Mountain maple	114	38	1	0	153	22.6
Ailanthus species	9	0	0	0	9	50.5
Alder species	411	577	744	0	1,733	13.7
Hercules club	0	3	3	0	6	70.7
Serviceberry	739	711	266	0	1,716	7.6
Bog rosemary	0	0	6	0	6	100.0
Chokeberry species	8	7	2	0	18	51.5
Azalea species	1	16	0	0	17	73.7
Barberry	127	65	52	0	244	26.6
Yellow birch	1,122	465	93	0	1,679	12.2
Sweet birch	380	223	19	0	621	13.4
Paper birch	95	178	43	0	316	20.4
Gray birch	74	95	201	0	370	19.8
American hornbeam	831	681	153	0	1,665	9.0
Hickory species	191	121	17	0	329	9.1
Bitternut hickory	18	10	2	0	31	29.4
Shagbark hickory	13	8	0	0	22	31.7
American chestnut	35	22	4	0	62	31.3
New Jersey tea	0	1	1	0	2	70.7
Hackberry	2	0	0	0	2	59.1
Sweetfern	24	12	42	0	78	58.2
Flowering dogwood	90	42	25	0	157	24.0
Alternate-leaved dogwood	129	98	47	0	273	17.0
Silky dogwood	39	110	211	0	361	24.6
Round-leaved dogwood	2	7	45	0	54	56.6
Panicled dogwood	2,076	3,153	7,761	258	13,249	7.8
Red-osier dogwood	569	796	1,627	33	3,025	11.5
Hawthorn species	516	464	991	0	1,971	8.1
American hazelnut	200	91	0	0	292	31.1
Beaked hazelnut	54	105	5	0	164	27.9
Leatherwood	3	11	0	0	14	64.4
American beech	4,433	1,853	199	0	6,486	4.9
Russian olive	0	29	19	0	48	48.9
White ash	4,303	3,492	1,995	2	9,792	4.4
Black ash	55	103	86	0	244	23.8
Green ash	188	234	113	0	535	25.5
Huckleberry	0	3	7	0	11	76.1
Honeylocust	6	0	0	0	6	94.3
Witch-hazel	821	657	102	0	1,581	8.9

Table 20.-continued

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Large-leaved holly	2	18	10	0	30	68.2
Winterberry holly	100	114	32	0	246	37.2
Butternut	19	1	2	0	23	73.6
Black walnut	9	5	2	0	16	42.3
Sheep laurel	0	12	5	0	17	63.0
Mountain laurel	1,163	364	10	0	1,537	22.7
Labrador tea	11	0	102	0	113	66.4
Common spicebush	775	313	25	0	1,113	12.7
Yellow-poplar	13	5	1	0	20	28.6
Bush honeysuckle	781	970	537	17	2,305	12.3
Cucumbertree	11	1	0	0	12	47.8
Apple species	75	121	368	0	564	10.6
Mountain holly	127	122	13	0	263	38.7
Blackgum	37	31	0	0	68	43.3
Eastern hophornbeam	1,224	841	114	0	2,179	6.7
Ninebark	0	0	26	0	26	88.8
American sycamore	0	0	5	0	5	100.0
Balsam poplar	18	11	5	0	33	49.3
Eastern cottonwood	8	1	5	0	15	38.4
Bigtooth aspen	44	72	24	0	139	18.9
Quaking aspen	233	381	442	0	1,056	9.5
Cherry species	47	68	91	0	205	21.3
Pin cherry	137	74	29	0	239	25.9
Black cherry	2,629	1,579	802	0	5,010	5.4
Chokecherry	321	360	415	0	1,096	10.7
White oak	148	109	21	0	279	16.6
Swamp white oak	9	1	1	0	11	63.8
Scarlet oak	31	26	23	0	79	32.3
Northern pin oak	0	4	0	0	4	100.0
Scrub, bear oak	106	3	170	0	279	38.0
Bur oak	5	0	0	0	5	100.0
Chinkapin oak	0	0	0	0	0	100.0
Pin oak	5	1	7	0	14	45.3
Chestnut oak	110	64	10	0	184	20.2
Northern red oak	379	369	30	0	777	9.4
Black oak	33	27	8	0	68	21.8
Buckthorn species	470	427	664	2	1,563	25.1
Rhododendron species	3	4	0	0	7	71.2
Smooth sumac	28	2	8	0	38	48.0
Staghorn sumac	60	47	162	2	271	19.6
Poison sumac	0	18	0	0	18	77.3
Currant species	192	291	44	0	527	23.0
Black locust	21	14	4	0	39	28.1
Rose species	271	151	91	2	516	16.2
Rubus species	10,213	6,763	6,384	58	23,417	4.7
Willow species	58	67	437	0	563	18.1
Black willow	45	42	314	0	401	23.1
American elderberry	87	33	18	0	138	22.6
Red-berried alder	31	14	2	0	47	27.9
Sassafras	33	31	46	0	111	47.0
American mountain-ash	10	23	37	0	70	58.0
Spirea species	1,219	2,385	5,571	0	9,175	11.5
Sweetleaf	0	8	0	0	8	100.0
American basswood	137	83	42	0	262	13.5
Elm species	0	1	5	0	6	64.7
American elm	284	248	218	1	751	7.9
Slippery elm	31	3	29	0	63	41.0
Rock elm	1	0	0	0	1	100.0
American bladdernut	36	32	21	0	89	44.9
Blueberry	3,547	3,025	2,464	0	9,036	12.0
Viburnum species	327	522	251	0	1,099	16.7
Maple-leaved viburnum	1,745	1,136	122	0	3,002	9.4
Hobblebush viburnum	2,516	735	38	0	3,289	10.4

Table 20.-continued

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw- timber	Pole- timber	Sapling and seedling	Non- stocked		
Wild raisin	391	380	379	0	1,151	17.1
Arrowwood	1,459	1,865	2,942	15	6,282	9.3
Nannyberry	316	392	436	0	1,144	13.1
Blackhaw	7	20	16	0	43	42.0
Highbush cranberry	10	2	1	0	14	58.9
Common prickly ash	127	179	80	0	385	27.4
Unknown deciduous shrub	247	337	155	4	743	16.3
Unknown evergreen shrub	163	42	39	0	244	43.5
Unknown tree	142	28	97	0	267	50.0
All species	62,935	46,771	41,864	395	151,965	1.9
SE	3.1	4.0	5.6	51.0	1.9	

Table 21.--Number of standing trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, New York, 1993

(In thousands of trees)									
Species	Live trees				Dead trees				Total all trees
	One or more small	One or more large	Multiple or small	Total live	One or more small	One or more large	Multiple or small	Total dead	
Balsam fir	655	92	38	784	754	67	535	1,356	2,140
Spruces	235	15	13	264	725	52	315	1,092	1,356
Red pine	89	25	50	164	433	21	235	689	853
White pine	1,733	353	818	2,904	2,655	471	1,837	4,962	7,866
Eastern hemlock	1,559	931	665	3,156	1,275	499	712	2,487	5,642
Other softwoods	1,856	619	359	2,834	756	118	277	1,152	3,986
Total softwoods	6,128	2,035	1,943	10,106	6,599	1,228	3,911	11,737	21,843
Red maple	21,930	12,976	5,646	40,552	4,917	2,321	2,765	10,003	50,556
Sugar maple	13,629	11,118	5,179	29,927	3,666	1,596	2,465	7,727	37,654
Yellow birch	2,758	2,211	674	5,643	2,045	740	1,656	4,442	10,085
Sweet birch	1,014	720	265	1,999	309	167	751	2,750	2,750
Paper birch	837	271	95	1,204	1,053	74	258	1,386	2,590
Hickory	894	884	246	2,024	82	0	182	2,287	2,287
American beech	14,493	6,554	5,938	26,984	2,755	1,599	4,114	8,467	35,452
White ash	2,261	1,311	956	4,528	975	246	322	1,543	6,071
Aspen	2,637	2,045	770	5,451	2,967	772	1,626	5,365	10,817
Black cherry	3,739	1,522	795	6,056	2,777	706	683	4,166	10,222
Select white oaks	277	336	74	687	925	31	149	1,792	1,792
Chestnut oak	393	556	165	1,114	1,296	267	399	1,962	3,076
Northern red oak	1,749	1,661	913	4,323	809	145	414	1,368	5,691
Other oaks	405	405	85	896	87	78	132	296	1,192
Basswood	1,842	1,565	968	4,375	525	141	316	981	5,357
Elm	169	74	22	265	1,741	506	931	3,177	3,442
Other commercial hardwoods	2,517	1,199	681	4,397	982	125	439	1,546	5,942
Noncommercial hardwoods	7,057	2,028	1,422	10,507	2,183	832	1,084	4,099	14,606
Total hardwoods	78,601	47,438	24,894	150,934	30,095	10,345	18,208	58,648	209,582
All species	84,729	49,474	26,837	161,040	36,694	11,573	22,119	70,386	231,425

Table 22.--Net volume of all trees on timberland by class of timber and species group, New York, 1993

(In millions of cubic feet)

Class of timber	Species group				All groups	SE
	Pines	Other softwoods	Soft hardwoods	Hard hardwoods		
Sawtimber trees:						
Sawlog portion	1,796.1	1,911.4	3,614.3	4,057.1	11,379.0	1.6
Upper stem	210.8	244.2	877.2	959.0	2,291.3	1.4
Total sawtimber trees	2,007.0	2,155.7	4,491.5	5,016.1	13,670.3	1.5
Poletimber trees	392.1	842.3	3,574.1	3,285.3	8,093.9	1.3
Total growing-stock trees	2,399.1	2,998.0	8,065.6	8,301.4	21,764.2	1.1
Rough trees:						
Sawtimber size	64.0	71.3	215.8	206.7	557.9	3.5
Poletimber size	8.7	9.9	124.1	189.3	331.9	4.0
Total rough trees	72.6	81.2	339.9	396.0	889.8	2.8
Rotten trees:						
Sawtimber size	5.3	7.8	65.7	111.3	190.1	5.9
Poletimber size	1.0	1.0	31.9	26.9	60.8	7.6
Total rotten trees	6.4	8.9	97.5	138.2	250.9	4.8
Salvable dead ^a trees:						
Sawtimber size	13.0	30.1	38.1	36.3	117.4	8.7
Poletimber size	9.9	23.7	63.9	28.8	126.2	6.4
Total salvable dead trees	22.8	53.8	101.9	65.0	243.6	5.7
All classes	2,501.0	3,141.8	8,605.0	8,900.6	23,148.4	1.1
SE	5.6	4.0	1.8	1.9	1.1	

^a Includes noncommercial species.

Table 23.--Net volume of all live, growing-stock, and sawtimber trees on timberland
by species group and ownership class, New York, 1993

Species group	Owner class				All classes
	National Forest	Other public	Forest industry	Other private	
<u>All live</u>					
(In millions of cubic feet)					
Softwoods	6.2	672.2	364.5	4,523.3	5,566.2
Hardwoods	17.1	1,256.1	1,591.9	14,473.6	17,338.7
Total all live	23.3	1,928.2	1,956.4	18,996.9	22,904.9
<u>Growing stock</u>					
(In millions of cubic feet)					
Softwoods	6.2	661.1	355.1	4,374.7	5,397.1
Hardwoods	17.1	1,192.4	1,520.6	13,637.0	16,367.0
Total growing stock	23.3	1,853.5	1,875.7	18,011.6	21,764.2
<u>Sawtimber</u>					
(In millions of board feet ^a)					
Softwoods	21.9	2,218.1	1,093.3	14,797.4	18,130.8
Hardwoods	54.2	3,262.3	4,120.5	36,171.7	43,608.7
Total sawtimber	76.1	5,480.4	5,213.8	50,969.1	61,739.5

^a For all board-foot volume tables, International 1/4-inch rule is used.

Table 24.--Net volume of growing-stock trees on timberland by forest-type group and stand-size class, New York, 1993

(In millions of cubic feet)

Forest-type group	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
White/red pine	3,464.1	381.4	31.1	.0	3,876.6	5.3
Spruce/fir	571.5	271.8	24.0	.0	867.3	11.7
Loblolly/shortleaf	26.5	6.0	2.0	.0	34.6	37.8
Oak/pine	420.2	249.7	5.9	.0	675.9	12.9
Oak/hickory	1,976.8	904.4	38.5	.0	2,919.7	5.2
Oak/gum/cypress	.0	.0	.1	.0	.1	100.0
Elm/ash/red maple	701.4	297.0	57.9	.3	1,056.7	8.8
Northern hardwoods	8,623.8	2,946.2	189.6	.4	11,760.0	2.2
Aspen/birch	198.8	336.5	38.0	.0	573.3	12.4
All groups	15,983.1	5,393.0	387.3	.7	21,764.2	1.1
SE	1.9	3.3	7.2	66.1	1.1	

Table 25.--Net volume of growing-stock trees on timberland by species and forest-type group, New York, 1993

(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			
Balsam fir	22.5	122.2	.0	3.8	2.2	.0	3.6	77.2	6.7	238.2	11.8	
Spruces	49.7	312.3	.0	9.7	2.7	.0	3.8	216.0	7.7	601.9	9.2	
Red pine	341.7	22.7	.0	18.1	6.3	.0	2.0	40.6	5.1	436.5	15.4	
White pine	1,296.7	23.0	1.5	211.7	83.4	.0	7.8	187.4	12.3	1,823.8	6.4	
Eastern hemlock	973.8	22.8	.0	44.9	101.9	.0	6.6	711.6	2.7	1,864.5	5.2	
Other softwoods	127.1	198.2	25.0	17.1	6.0	.1	7.8	48.8	2.2	432.2	11.8	
Total softwoods	2,811.5	701.2	26.5	305.3	202.4	.1	31.7	1,281.7	36.7	5,397.1	3.1	
Red maple	303.1	50.3	1.5	108.4	316.5	.0	522.5	2,107.0	39.6	3,448.8	3.0	
Sugar maple	124.5	11.2	.3	22.4	155.9	.0	18.9	3,178.3	19.7	3,531.3	3.3	
Yellow birch	62.1	10.4	.0	1.7	12.5	.0	12.3	475.9	5.2	580.0	5.1	
Sweet birch	36.1	.5	.0	9.0	78.0	.0	2.9	183.1	4.3	313.9	7.6	
Paper birch	38.4	12.7	.0	6.7	15.6	.0	1.0	93.5	37.6	205.4	9.1	
Hickory	17.0	2.0	.2	19.9	222.9	.0	10.6	169.7	2.2	444.4	7.1	
American beech	54.0	.5	.0	4.4	75.1	.0	9.1	1,131.6	5.6	1,280.3	4.6	
White ash	66.0	9.4	.5	28.7	102.3	.0	58.4	1,017.4	19.3	1,302.0	4.3	
Aspen	103.5	34.2	2.6	46.0	71.1	.0	57.4	363.9	368.3	1,046.9	5.6	
Black cherry	75.4	25.0	1.1	13.9	40.7	.0	19.5	884.2	14.6	1,074.4	5.2	
Select white oaks	24.8	.2	.4	8.7	192.3	.0	7.5	33.6	2.0	269.5	7.5	
Chestnut oak	16.9	.0	.0	10.4	224.5	.0	.0	15.4	.0	267.2	10.3	
Northern red oak	93.9	.3	.0	68.2	868.7	.0	5.9	204.4	7.7	1,249.2	5.3	
Other oaks	7.1	.0	.8	12.1	169.6	.0	7.6	12.8	.0	210.0	11.0	
Basswood	15.1	.7	.0	3.2	37.2	.0	7.2	404.6	.3	468.2	7.3	
Elm	13.0	5.0	.2	5.1	25.9	.0	53.3	50.5	8.2	161.2	7.4	
Other hardwoods	14.3	3.7	.5	1.9	108.5	.0	231.0	152.4	2.1	514.3	8.6	
Total hardwoods	1,065.1	166.1	8.1	370.6	2,717.3	.0	1,025.0	10,478.3	536.5	16,367.0	1.3	
All species	3,876.6	867.3	34.6	675.9	2,919.7	.1	1,056.7	11,760.0	573.3	21,764.2	1.1	
SE	5.3	11.7	37.8	12.9	5.2	100.0	8.8	2.2	12.4	1.1		

Table 26.--Net volume of growing-stock trees on timberland by species and stand-size class, New York, 1993

(In millions of cubic feet)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Balsam fir	132.8	94.6	10.8	.0	238.2	11.8
Spruces	426.3	162.9	12.8	.0	601.9	9.2
Red pine	358.8	74.7	3.0	.0	436.5	15.4
White pine	1,557.3	247.2	19.3	.0	1,823.8	6.4
Eastern hemlock	1,650.3	195.7	18.5	.0	1,864.5	5.2
Other softwoods	284.4	130.8	17.1	.0	432.2	11.8
Total softwoods	4,409.8	906.0	81.3	.0	5,397.1	3.1
Red maple	2,444.9	942.6	61.3	.0	3,448.8	3.0
Sugar maple	2,753.3	736.2	41.8	.0	3,531.3	3.3
Yellow birch	446.7	128.9	4.5	.0	580.0	5.1
Sweet birch	249.5	63.7	.6	.0	313.9	7.6
Paper birch	101.4	101.8	2.2	.0	205.4	9.1
Hickory	272.7	162.8	8.9	.0	444.4	7.1
American beech	977.6	293.2	9.5	.0	1,280.3	4.6
White ash	860.6	400.5	40.9	.0	1,302.0	4.3
Aspen	481.9	516.1	48.6	.3	1,046.9	5.6
Black cherry	794.5	252.0	27.9	.0	1,074.4	5.2
Select white oaks	191.4	75.2	3.0	.0	269.5	7.5
Chestnut oak	175.5	89.9	1.9	.0	267.2	10.3
Northern red oak	880.4	359.8	8.9	.0	1,249.2	5.3
Other oaks	149.0	57.9	3.2	.0	210.0	11.0
Basswood	348.5	112.6	7.1	.0	468.2	7.3
Elm	75.3	72.8	12.7	.4	161.2	7.4
Other hardwoods	370.1	121.1	23.1	.0	514.3	8.6
Total hardwoods	11,573.3	4,487.0	306.0	.7	16,367.0	1.3
All species	15,983.1	5,393.0	387.3	.7	21,764.2	1.1
SE	1.9	3.3	7.2	66.1	1.1	

Table 27.--Net volume of growing-stock trees on timberland by species and diameter class, New York, 1980
(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- 22.9	29.0+		
Balsam fir	57.6	73.8	49.0	22.1	9.7	.6	.9	.0	.0	213.7	12.2	
Spruces	114.4	132.5	125.3	89.4	53.1	32.4	12.2	6.6	5.0	570.9	8.2	
Red pine	24.9	72.5	97.5	84.2	34.2	9.1	.5	.0	.0	322.9	16.0	
White pine	102.4	175.2	195.6	198.4	175.6	136.9	101.3	67.3	127.6	1,296.6	6.4	
Eastern hemlock	128.1	200.2	220.9	240.5	206.4	178.3	121.1	79.9	88.5	1,469.8	5.5	
Other softwoods	61.8	74.2	63.4	41.9	28.3	15.8	5.5	2.6	2.8	296.4	10.9	
Total softwoods	489.2	728.5	751.8	676.5	507.3	373.2	241.5	156.4	223.9	22.2	4,170.4	3.3
Red maple	338.6	481.6	500.4	405.9	293.6	186.2	107.9	60.9	85.7	20.7	2,481.4	3.3
Sugar maple	292.4	428.3	488.8	428.1	369.3	259.0	166.1	79.7	130.1	25.7	2,667.5	3.5
Yellow birch	52.2	78.6	92.7	86.5	63.3	55.3	31.7	24.5	41.5	11.2	537.3	5.5
Sweet birch	32.6	48.2	55.6	44.3	25.7	17.1	11.9	1.8	1.2	.3	238.8	8.7
Paper birch	39.1	56.4	46.8	32.3	22.0	10.3	.9	.8	.4	.0	208.9	9.1
Hickory	42.1	64.8	69.2	48.3	32.3	20.3	13.2	8.6	11.9	2.9	313.6	7.2
American beech	84.6	159.3	202.9	185.1	150.1	102.6	71.7	40.3	36.5	1.8	1,035.0	4.7
White ash	115.6	170.9	183.8	162.5	111.0	75.1	48.2	26.9	21.7	3.5	919.4	4.6
Aspen	103.3	155.5	170.0	108.9	75.9	44.5	13.1	7.0	2.3	.8	681.3	6.0
Black cherry	53.6	103.7	146.8	122.1	126.8	78.1	40.2	22.5	26.2	5.3	725.4	6.3
Select white oaks	13.5	27.9	36.6	37.7	35.8	34.5	26.1	14.2	22.8	6.2	255.3	8.5
Chestnut oak	24.3	56.9	68.3	53.0	32.8	24.2	8.9	3.1	4.5	.0	275.9	10.3
Northern red oak	50.5	113.6	169.5	173.7	167.3	139.1	86.3	57.6	82.2	18.5	1,058.3	5.6
Other oaks	12.4	20.1	33.3	27.5	22.7	18.4	15.5	8.9	15.6	6.3	180.7	10.8
Basswood	17.7	49.4	54.8	61.7	61.6	33.8	30.3	13.8	15.4	4.6	343.1	7.4
Elm	29.9	26.4	24.9	16.2	10.4	8.7	5.6	3.7	2.2	.0	127.9	8.7
Other hardwoods	36.2	48.3	54.3	39.7	30.7	26.7	20.1	18.0	24.6	13.9	312.4	10.0
Total hardwoods	1,338.6	2,089.8	2,398.7	2,033.4	1,631.3	1,134.0	697.7	392.5	524.7	121.8	12,362.4	1.3
All species	1,827.8	2,818.3	3,150.5	2,710.0	2,138.6	1,507.1	939.2	548.9	748.6	144.0	16,532.8	1.1
SE	1.9	1.7	1.9	1.9	2.2	2.6	3.3	3.9	4.2	7.8	1.1	

Table 28.--Net volume of growing-stock trees on timberland by species and diameter class, New York, 1993

(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+		
Balsam fir	58.1	70.9	52.3	37.6	12.5	5.0	1.1	.8	.0	.0	238.2	11.8
Spruces	89.6	136.1	104.2	96.5	79.0	49.9	29.4	10.3	6.8	.0	601.9	9.2
Red pine	24.6	71.8	96.0	111.7	92.9	32.1	3.0	1.6	2.9	.0	436.5	15.4
White pine	90.3	146.6	200.3	239.1	258.4	245.0	182.3	137.5	244.7	79.7	1,823.8	6.4
Eastern hemlock	152.8	228.8	265.5	288.3	296.0	236.9	155.8	93.9	135.7	10.7	1,864.5	5.2
Other softwoods	66.6	98.4	86.4	82.0	48.0	32.7	12.7	5.1	.0	.3	432.2	11.8
Total softwoods	482.0	752.5	804.8	855.3	786.8	601.6	384.3	249.2	390.0	90.6	5,397.1	3.1
Red maple	364.8	597.8	660.8	555.7	440.1	290.6	175.9	128.0	179.1	56.0	3,448.8	3.0
Sugar maple	293.5	484.6	590.5	561.6	463.1	395.8	260.0	168.3	245.0	68.9	3,531.3	3.3
Yellow birch	61.0	89.6	107.1	88.0	76.4	44.3	36.8	26.0	44.3	6.6	580.0	5.1
Sweet birch	38.2	66.3	64.1	57.3	46.4	21.9	13.9	3.9	1.4	.5	313.9	7.6
Paper birch	37.0	47.9	50.1	34.4	18.3	11.7	4.7	.6	.7	.0	205.4	9.1
Hickory	46.1	79.1	86.6	72.4	63.5	34.4	21.8	17.1	21.7	1.7	444.4	7.1
American beech	127.6	206.0	253.5	216.5	155.8	111.8	84.5	57.5	62.4	4.8	1,280.3	4.6
White ash	148.2	217.1	245.2	221.6	166.7	131.1	60.6	49.3	48.9	13.3	1,302.0	4.3
Aspen	115.2	187.1	217.7	191.3	150.7	88.6	33.6	33.4	20.7	8.6	1,046.9	5.6
Black cherry	57.7	117.7	174.4	182.3	179.2	142.6	94.0	55.4	55.9	15.2	1,074.4	5.2
Select white oaks	15.5	26.5	38.4	40.8	37.5	31.5	23.4	16.1	25.6	14.4	269.5	7.5
Chestnut oak	14.9	35.4	59.6	53.9	49.9	35.1	10.6	3.5	4.3	.0	267.2	10.3
Northern red oak	46.7	121.4	187.4	200.3	191.3	170.8	115.6	70.1	115.0	30.7	1,249.2	5.3
Other oaks	11.0	17.6	26.7	26.2	27.3	25.9	20.4	17.1	25.8	11.8	210.0	11.0
Basswood	22.6	49.1	58.9	83.6	84.7	63.1	38.3	32.4	30.6	4.9	468.2	7.3
Elm	41.0	43.8	28.4	18.9	11.5	8.8	2.7	4.6	1.5	.0	161.2	7.4
Other hardwoods	47.6	64.1	70.3	69.7	53.5	47.2	37.6	27.5	69.1	27.7	514.3	8.6
Total hardwoods	1,488.6	2,451.1	2,919.7	2,674.5	2,216.0	1,655.1	1,034.3	710.8	951.8	265.2	16,367.0	1.3
All species	1,970.6	3,203.6	3,724.5	3,529.8	3,002.8	2,256.7	1,418.6	960.0	1,341.8	355.8	21,764.2	1.1
SE	1.8	1.6	1.6	1.7	2.0	2.4	3.0	3.6	4.2	7.8	1.1	

Net volume of growing-stock trees on timberland,
New York, 1980 and 1993

Net volume of growing-stock trees on timberland, top 10 species,
New York, 1980 and 1993

Table 29.--Net volume of growing stock in the sawlog portion of sawtimber trees on timberland by species and diameter class, New York, 1993

Species	(In millions of cubic feet)										All classes	SE
	Diameter class (inches at breast height)											
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	26.0- 27.9		
Balsam fir	44.0	32.7	11.1	4.6	1.0	.7	.0	.0	.0	.0	94.1	14.6
Spruces	87.6	84.0	70.7	45.4	27.1	9.6	6.3	.0	.0	.0	330.8	10.7
Red pine	80.8	97.2	83.1	29.2	2.7	1.5	2.7	.0	.0	.0	297.1	17.0
White pine	168.5	208.0	231.0	222.9	168.1	127.8	228.8	74.5	74.5	74.5	1,429.7	6.7
Eastern hemlock	223.3	250.8	264.6	215.6	143.8	87.4	126.9	10.0	10.0	10.0	1,322.4	5.7
Other softwoods	72.7	71.4	42.9	29.8	11.7	4.7	.0	.2	.2	.0	233.4	14.7
Total softwoods	676.9	744.1	703.4	547.5	354.5	231.8	364.6	84.7	84.7	84.7	3,707.5	3.5
Red maple	-	409.0	356.5	244.1	149.5	108.8	152.2	47.6	47.6	47.6	1,467.7	4.1
Sugar maple	-	413.3	375.1	332.5	221.0	143.1	208.2	58.6	58.6	58.6	1,751.7	4.2
Yellow birch	-	64.7	61.9	37.2	31.3	22.1	37.6	5.6	5.6	5.6	260.5	6.9
Sweet birch	-	42.1	37.6	18.4	11.8	3.3	1.2	.4	.4	.4	114.9	10.4
Paper birch	-	25.3	14.8	9.8	4.0	.5	.6	.0	.0	.0	55.1	13.7
Hickory	-	53.3	51.5	28.9	18.5	14.5	18.4	1.5	1.5	1.5	186.6	9.0
American beech	-	159.3	126.2	93.9	71.8	48.9	53.0	4.0	4.0	4.0	557.2	5.6
White ash	-	163.1	135.1	110.1	51.5	41.9	41.5	11.3	11.3	11.3	554.6	5.5
Aspen	-	140.8	122.1	74.4	28.6	28.4	17.6	7.3	7.3	7.3	419.2	7.5
Black cherry	-	134.2	145.2	119.8	79.9	47.1	47.5	12.9	12.9	12.9	586.5	6.3
Select white oaks	-	30.0	30.3	26.5	19.9	13.6	21.7	12.2	12.2	12.2	154.3	8.5
Chestnut oak	-	39.7	40.4	29.5	9.0	3.0	3.7	.0	.0	.0	125.2	12.0
Northern red oak	-	147.4	155.0	143.5	98.3	59.6	97.7	26.1	26.1	26.1	727.4	5.9
Other oaks	-	19.3	22.1	21.8	17.4	14.6	21.9	10.1	10.1	10.1	127.2	12.8
Basswood	-	61.6	68.6	53.0	32.6	27.5	26.0	4.2	4.2	4.2	273.5	8.3
Elm	-	13.9	9.3	7.4	2.3	3.9	1.2	.0	.0	.0	38.1	13.4
Other hardwoods	-	51.3	43.3	39.6	31.9	23.4	58.8	23.5	23.5	23.5	271.9	10.7
Total hardwoods	-	1,968.4	1,795.0	1,390.3	879.2	604.1	809.1	225.4	225.4	225.4	7,671.4	1.8
All species	676.9	2,712.5	2,498.4	1,937.7	1,233.7	835.9	1,173.7	310.1	310.1	310.1	11,379.0	1.6
SE	4.2	1.8	2.1	2.4	3.1	3.6	4.2	7.9	7.9	7.9	1.6	

Table 30.--Net volume of sawtimber trees on timberland by species and diameter class, New York, 1980
(In millions of board feet)

Species	Diameter class (inches at breast height)										All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9		
Balsam fir	186.2	96.5	46.6	2.9	4.6	.0	.0	.0	.0	.0	336.8	15.0
Spruces	439.0	380.8	244.0	157.3	62.4	33.2	28.0	.0	.0	.0	1,344.7	9.3
Red pine	340.7	347.5	154.2	43.1	2.3	.0	.0	.0	.0	.0	887.9	18.0
White pine	697.9	834.7	802.2	652.1	502.6	344.1	667.8	88.3	.0	.0	4,589.7	6.9
Eastern hemlock	726.0	938.7	871.5	805.5	567.0	383.3	438.9	31.1	.0	.0	4,762.0	6.1
Other softwoods	191.1	149.3	111.5	63.7	24.4	11.2	12.7	.0	.0	.0	563.9	14.9
Total softwoods	2,581.0	2,747.5	2,229.9	1,724.6	1,163.3	771.8	1,147.4	119.4	119.4	119.4	12,484.9	3.9
Red maple	-	1,663.6	1,289.0	847.3	522.1	299.5	444.8	115.5	.0	.0	5,181.9	4.6
Sugar maple	-	1,799.4	1,643.4	1,213.6	798.4	394.8	656.6	136.9	.0	.0	6,643.1	4.4
Yellow birch	-	372.1	276.8	247.6	143.8	112.3	206.1	59.1	.0	.0	1,417.9	7.0
Sweet birch	-	190.0	114.6	77.9	54.1	8.5	6.0	1.7	.0	.0	452.8	11.5
Paper birch	-	141.9	97.5	47.1	3.9	3.5	1.8	.0	.0	.0	295.8	11.7
Hickory	-	205.8	145.9	97.4	67.0	46.1	64.1	16.4	.0	.0	642.7	9.7
American beech	-	802.9	710.4	497.7	364.6	202.4	202.1	10.6	.0	.0	2,790.6	5.5
White ash	-	708.0	511.6	353.7	229.4	130.9	109.2	18.6	.0	.0	2,061.4	6.0
Aspen	-	480.0	352.9	213.5	63.4	34.2	11.5	4.3	.0	.0	1,159.8	8.8
Black cherry	-	511.6	574.3	377.4	197.8	116.0	139.8	30.0	.0	.0	1,946.9	7.5
Select white oaks	-	158.1	162.8	158.9	125.1	71.5	115.9	32.5	.0	.0	824.8	9.7
Chestnut oak	-	213.1	137.7	107.4	41.7	13.7	22.5	.0	.0	.0	536.2	12.4
Northern red oak	-	704.7	723.5	629.9	411.3	278.8	407.2	99.6	.0	.0	3,255.0	6.2
Other oaks	-	111.9	98.8	82.6	74.6	44.8	77.3	33.2	.0	.0	523.2	11.6
Basswood	-	258.6	284.5	166.5	154.1	74.9	85.7	27.7	.0	.0	1,052.0	8.4
Elm	-	67.5	47.9	39.4	27.2	18.3	10.8	.0	.0	.0	211.1	12.9
Other hardwoods	-	163.1	137.6	125.2	101.8	92.1	131.3	79.0	.0	.0	830.1	11.2
Total hardwoods	-	8,552.3	7,309.2	5,283.1	3,380.3	1,942.4	2,692.7	665.2	665.2	665.2	29,825.2	1.9
All species	2,581.0	11,299.8	9,539.0	7,007.7	4,543.6	2,714.2	3,840.1	784.6	784.6	784.6	42,310.1	1.7
SE	5.1	1.9	2.2	2.7	3.3	3.9	4.3	7.8	7.8	7.8	1.7	

Table 31.--Net volume of sawtimber trees on timberland by species and diameter class, New York, 1993

(In millions of board feet)

Species	Diameter class (inches at breast height)							All classes	SE
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+	
Balsam fir	196.6	164.8	59.7	25.4	5.0	4.1	.0	455.8	14.9
Spruces	364.5	399.8	355.8	230.9	138.9	49.4	38.3	1,577.5	10.7
Red pine	357.0	479.4	431.1	152.5	14.4	8.2	15.9	1,458.4	17.3
White pine	708.7	996.8	1,182.6	1,180.3	907.2	700.3	1,295.3	432.4	6.9
Eastern hemlock	877.3	1,130.0	1,255.4	1,066.2	730.0	451.8	676.0	56.0	5.8
Other softwoods	277.2	306.9	195.1	136.9	54.4	21.6	.0	992.9	15.5
Total softwoods	2,781.2	3,477.7	3,479.6	2,792.2	1,849.8	1,235.3	2,025.5	489.4	3.7
Red maple	-	2,266.6	1,926.9	1,314.3	831.1	609.6	897.8	296.4	4.1
Sugar maple	-	2,355.1	2,066.2	1,858.6	1,247.0	829.1	1,239.1	369.2	4.2
Yellow birch	-	385.9	333.0	196.7	165.5	116.4	213.8	37.4	7.1
Sweet birch	-	245.9	203.4	100.4	65.6	18.0	6.1	2.7	10.3
Paper birch	-	151.8	85.2	51.7	23.3	2.5	3.5	.0	13.8
Hickory	-	306.1	290.0	164.2	111.3	86.8	114.9	9.2	9.1
American beech	-	945.7	747.0	548.6	426.6	286.4	353.2	29.2	5.6
White ash	-	951.7	751.9	610.5	281.1	236.9	243.3	70.9	5.5
Aspen	-	842.8	689.9	414.0	165.2	166.4	103.7	51.1	7.4
Black cherry	-	768.3	820.4	683.8	463.7	283.4	295.5	88.4	6.3
Select white oaks	-	175.8	176.7	150.5	113.2	80.0	129.2	77.8	8.6
Chestnut oak	-	220.5	211.2	154.9	47.0	15.8	20.6	.0	11.9
Northern red oak	-	820.6	829.6	774.0	546.3	335.6	574.8	162.8	6.0
Other oaks	-	102.6	115.2	113.7	96.4	81.4	129.8	62.6	13.2
Basswood	-	348.3	388.3	304.0	187.3	168.4	155.8	28.5	8.3
Elm	-	76.2	51.8	39.8	13.5	21.9	7.0	.0	13.8
Other hardwoods	-	281.4	240.4	216.9	185.9	135.6	363.9	156.9	11.2
Total hardwoods	-	11,245.5	9,927.1	7,696.6	4,970.0	3,474.3	4,852.0	1,443.2	1.8
All species	2,781.2	14,723.2	13,406.7	10,488.8	6,819.8	4,709.6	6,877.5	1,932.6	1.6
SE	4.4	1.8	2.1	2.4	3.1	3.7	4.3	7.9	1.6

Net volume of sawtimber trees on timberland,
New York, 1980 and 1993

Net volume of sawtimber trees on timberland, top 10 species,
New York, 1980 and 1993

Table 32.--Net volume of sawtimber trees on timberland by species, size class, and tree grade, New York, 1993

(In millions of board feet)

Species	>15" Diameter at breast height					All size classes						
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades
Balsam fir	18.9	-	-	-	15.7	34.6	400.5	-	-	-	55.3	455.8
Spruces	358.3	-	-	-	99.1	457.4	1,329.8	-	-	-	247.7	1,577.5
Red pine	49.7	13.4	120.4	-	7.5	190.9	357.3	101.1	984.4	-	15.6	1,458.4
White pine	699.2	918.3	1,094.3	559.9	1,243.7	4,515.5	957.3	1,754.4	2,192.1	963.1	1,536.7	7,403.5
Eastern hemlock	1,977.4	-	-	-	1,002.6	2,980.0	4,648.2	-	-	-	1,594.6	6,242.7
Other softwoods	147.2	1.6	34.6	-	30.3	213.7	608.4	5.4	258.8	-	120.3	992.9
Total softwoods	3,250.7	933.3	1,249.3	559.9	2,399.0	8,392.2	8,301.4	1,860.9	3,435.3	963.1	3,570.2	18,130.8
Red maple	391.6	861.8	1,088.7	378.1	1,229.1	3,949.3	391.6	1,393.8	3,776.9	949.0	1,631.6	8,142.9
Sugar maple	958.1	1,554.7	1,347.7	397.1	1,285.4	5,543.0	958.1	2,240.6	4,348.7	797.0	1,619.9	9,964.2
Yellow birch	120.8	197.2	228.9	72.9	110.0	729.8	120.8	309.4	736.2	123.2	159.2	1,448.7
Sweet birch	45.4	68.9	50.0	7.9	20.6	192.8	45.4	134.1	384.4	46.3	31.9	642.1
Paper birch	7.6	19.5	21.6	13.5	18.7	81.0	7.6	55.9	186.2	42.8	25.5	318.0
Hickory	99.2	187.6	85.3	44.7	69.7	486.4	99.2	335.1	428.3	133.3	86.7	1,082.5
American beech	100.7	221.2	518.8	324.1	479.3	1,644.0	100.7	341.3	1,488.1	757.0	649.6	3,336.7
White ash	498.6	471.5	176.0	46.2	250.4	1,442.7	498.6	898.2	1,283.9	123.3	342.3	3,146.3
Aspen	153.4	232.4	308.8	116.5	89.3	900.4	153.4	404.2	1,329.1	403.2	143.2	2,433.1
Black cherry	429.6	440.4	319.3	62.3	563.2	1,814.9	429.6	780.5	1,354.4	146.2	692.8	3,403.5
Select white oaks	147.2	153.2	119.0	41.1	90.1	550.7	147.2	251.6	341.7	59.9	102.8	903.2
Chestnut oak	51.5	124.5	38.1	11.2	12.9	238.2	51.5	227.8	345.3	27.0	18.2	669.8
Northern red oak	1,051.8	705.0	308.5	89.5	238.7	2,393.5	1,051.8	1,216.4	1,333.0	160.7	281.7	4,043.7
Other oaks	146.3	147.7	108.2	52.0	29.7	483.9	146.3	204.6	242.1	75.2	33.5	701.8
Basswood	239.6	229.2	199.0	34.2	142.1	844.1	239.6	451.3	644.7	73.6	171.5	1,580.7
Elm	15.7	29.4	22.4	5.2	9.5	82.2	15.7	35.8	123.5	21.4	13.8	210.3
Other hardwoods	143.0	224.9	215.5	141.0	334.9	1,059.1	143.0	274.4	555.8	223.2	384.5	1,580.9
Total hardwoods	4,600.1	5,869.2	5,155.8	1,837.5	4,973.5	22,436.1	4,600.1	9,555.2	18,902.2	4,162.3	6,389.0	43,608.7
All species	7,850.8	6,802.5	6,405.1	2,397.4	7,372.5	30,828.3	12,901.5	11,416.0	22,337.4	5,125.4	9,959.1	61,739.5

Table 33.---Average annual net change of growing-stock volume on timberland by species and component of change, New York, 1979-92
(In thousands of cubic feet)

Species	Component of change							Net change
	Ingrowth	Accretion	Gross growth	Mortality	Cull decrement	Cull increment	Net growth	
Balsam fir	4,263	5,671	9,935	-4,971	347	-31	5,280	3,466
Spruces	5,146	14,252	19,398	-3,996	2,269	-256	17,415	8,771
Red pine	1,435	8,302	9,737	-1,833	341	-107	8,137	3,115
White pine	7,460	41,371	48,831	-5,583	10,804	-894	53,159	39,808
Eastern hemlock	7,910	38,034	45,945	-4,974	8,419	-2,381	47,008	34,197
Other softwoods	4,930	10,077	15,007	-1,904	1,816	-831	14,089	12,760
Total softwoods	31,144	117,709	148,853	-23,262	23,995	-4,500	145,087	102,117
Red maple	20,610	80,142	100,752	-12,274	20,949	-6,296	103,131	78,511
Sugar maple	15,984	72,734	88,718	-13,763	17,666	-4,068	88,553	57,819
Yellow birch	3,296	10,997	14,293	-5,230	4,967	-931	13,099	6,669
Sweet birch	1,859	6,223	8,082	-1,361	998	-309	7,408	6,082
Paper birch	1,284	3,058	4,342	-1,778	441	-174	2,831	1,944
Hickory	2,273	8,180	10,453	-1,345	699	-340	9,467	5,969
American beech	7,822	29,113	36,935	-8,927	11,473	-3,905	35,576	19,962
White ash	14,837	34,644	49,481	-5,780	2,858	-1,718	44,842	32,920
Aspen	12,713	26,250	38,963	-11,447	2,437	-539	29,414	22,379
Black cherry	7,617	26,914	34,531	-3,349	6,705	-1,880	36,007	24,167
Select white oaks	802	4,403	5,205	-2,107	840	-348	3,591	-255
Chestnut oak	325	3,516	3,841	-4,370	692	-166	-3	-1,822
Northern red oak	3,850	27,038	30,888	-3,319	1,827	-611	28,785	11,178
Other oaks	1,093	4,522	5,615	-1,222	379	-369	4,403	858
Basswood	1,350	7,788	9,138	-3,657	2,319	-375	7,425	4,952
Elm	4,922	4,406	9,327	-4,244	701	-155	5,630	4,221
Other hardwoods	5,816	14,859	20,675	-1,840	2,793	-1,013	20,615	13,486
Total hardwoods	106,453	364,788	471,241	-86,015	78,746	-23,198	440,774	289,039
ALL species	137,597	482,497	620,095	-109,277	102,741	-27,698	585,861	391,157

Table 34.--Average annual net growth and average annual
removals of growing-stock volume on
timberland by species, New York, 1979-92

(In thousands of cubic feet)

Species	Growth and removals	
	Net growth	Removals
Balsam fir	5,280	1,813
Spruces	17,415	8,643
Red pine	8,137	5,022
White pine	53,159	13,351
Eastern hemlock	47,008	12,811
Other softwoods	14,089	1,329
Total softwoods	145,087	42,970
Red maple	103,131	24,620
Sugar maple	88,553	30,735
Yellow birch	13,099	6,430
Sweet birch	7,408	1,327
Paper birch	2,831	887
Hickory	9,467	3,498
American beech	35,576	15,614
White ash	44,842	11,922
Aspen	29,414	7,035
Black cherry	36,007	11,839
Select white oaks	3,591	3,847
Chestnut oak	-3	1,819
Northern red oak	28,785	17,606
Other oaks	4,403	3,545
Basswood	7,425	2,473
Elm	5,630	1,409
Other hardwoods	20,615	7,129
Total hardwoods	440,774	151,735
All species	585,861	194,705

Table 35.--Average annual net growth and average annual
removals of sawtimber volume on timberland by
species, New York, 1979-92

(In thousands of board feet)

Species	Growth and removals	
	Net growth	Removals
Balsam fir	13,384	2,826
Spruces	59,878	23,283
Red pine	38,693	16,100
White pine	245,691	57,459
Eastern hemlock	178,452	51,179
Other softwoods	38,142	2,766
Total softwoods	574,241	153,613
Red maple	315,278	72,647
Sugar maple	337,343	113,333
Yellow birch	39,807	23,343
Sweet birch	21,828	4,562
Paper birch	8,567	1,765
Hickory	31,450	8,433
American beech	106,520	54,121
White ash	134,623	38,297
Aspen	96,291	16,037
Black cherry	146,632	41,916
Select white oaks	16,407	14,512
Chestnut oak	10,657	4,785
Northern red oak	129,391	75,509
Other oaks	19,468	9,223
Basswood	32,476	10,862
Elm	5,073	2,520
Other hardwoods	67,133	27,482
Total hardwoods	1,518,945	519,347
All species	2,093,186	672,960

**Average annual net growth and average annual removals
of growing-stock volume on timberland by species,
New York, 1979-92**

**Average annual net growth and average annual removals
of sawtimber volume on timberland by species,
New York, 1979-92**

Table 36.--Average annual mortality of growing-stock and sawtimber volume on timberland by species, New York, 1979-92

(In thousands of feet)

Species	Mortality	
	Growing stock (cubic feet)	Sawtimber (board feet)
Balsam fir	4,971	11,189
Spruces	3,996	7,890
Red pine	1,833	2,398
White pine	5,583	17,287
Eastern hemlock	4,974	14,867
Other softwoods	1,904	3,141
Total softwoods	23,262	56,773
Red maple	12,274	21,806
Sugar maple	13,763	30,706
Yellow birch	5,230	12,597
Sweet birch	1,361	2,137
Paper birch	1,778	2,168
Hickory	1,345	3,465
American beech	8,927	30,767
White ash	5,780	10,395
Aspen	11,447	18,123
Black cherry	3,349	6,887
Select white oaks	2,107	6,713
Chestnut oak	4,370	7,822
Northern red oak	3,319	7,099
Other oaks	1,222	2,660
Basswood	3,657	12,375
Elm	4,244	7,362
Other hardwoods	1,840	5,184
Total hardwoods	86,015	188,267
All species	109,277	245,040

Table 37.--Average annual net growth and average annual removals of growing-stock volume on timberland by ownership class and species group, New York, 1979-92

(In thousands of cubic feet)

Owner class	Net growth			Removals		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
National Forest	5	318	323	0	0	0
Other public	19,530	33,175	52,705	12,080	21,534	33,614
Forest industry	7,585	35,380	42,965	5,104	18,022	23,126
Other private	117,968	371,901	489,869	25,786	112,179	137,965
All classes	145,087	440,774	585,861	42,970	151,735	194,705

Table 38.--Average annual net growth and average annual removals of sawtimber volume on timberland by ownership class and species group, New York, 1979-92

(In thousands of board feet)

Owner class	Net growth			Removals		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
National Forest	271	1,281	1,553	0	0	0
Other public	85,815	114,842	200,657	31,265	61,119	92,384
Forest industry	32,585	133,590	166,175	18,027	70,808	88,835
Other private	455,569	1,269,232	1,724,801	104,321	387,420	491,741
All classes	574,241	1,518,945	2,093,186	153,613	519,347	672,960

Table 39.--Land area by land class and geographic unit, New York, 1979-92 and 1993

(In thousands of acres)

Land use	Geographic unit								All units
	Lake Plain	Southwest Highlands	S. central Highlands	St. Lawrence/Adirondack	Western Adirondack	Eastern Adirondack	Capitol District	Catskill/Lower Hudson	
1980									
Timberland	2,262.0	1,711.3	2,420.4	2,506.9	1,552.3	1,339.8	1,429.7	2,225.8	15,448.3
Reserved productive	30.3	59.3	46.4	372.1	419.1	1,244.0	41.4	341.0	2,553.7
Urban forest land	23.1	4.8	3.0	.0	.0	.0	3.6	34.3	68.8
Other forest land	35.1	20.0	13.0	95.2	20.4	20.5	9.5	24.5	238.2
Reserved other forest land	4.6	t	.3	43.2	21.0	91.8	1.2	17.6	179.7
Christmas tree plantations	6.5	2.9	1.8	.0	.0	.0	1.7	4.3	17.2
Total forest land	2,361.6	1,798.3	2,484.9	3,017.4	2,012.8	2,696.1	1,487.1	2,647.5	18,505.9
Nonforest land	3,611.0	1,270.6	1,535.6	1,225.2	800.9	111.8	1,119.0	2,043.5	11,717.4
Total land area	5,972.6	3,068.9	4,020.5	4,242.6	2,813.7	2,807.9	2,606.1	4,691.0	30,223.3
1993									
Timberland	2,397.1	1,736.5	2,393.3	2,504.6	1,509.2	1,258.7	1,424.7	2,181.4	15,405.5
Reserved productive	37.1	65.8	51.7	444.5	447.3	1,275.8	49.0	415.3	2,786.5
Urban forest land	36.4	3.0	.0	.0	.0	.0	.0	60.2	99.6
Other forest land	12.0	10.1	.0	44.4	21.3	7.0	14.8	13.3	122.8
Reserved other forest land	6.3	.9	.2	19.5	18.9	104.9	1.3	14.9	166.9
Christmas tree plantations	16.1	.0	21.5	5.8	6.0	.0	10.7	.0	60.0
Total forest land	2,505.1	1,816.2	2,466.7	3,018.7	2,002.7	2,646.4	1,500.5	2,685.1	18,641.4
Nonforest land	3,467.5	1,252.7	1,553.8	1,223.9	811.0	161.5	1,105.6	2,005.9	11,581.9
Total land area	5,972.6	3,068.9	4,020.5	4,242.6	2,813.7	2,807.9	2,606.1	4,691.0	30,223.3

t Less than 50 acres.

Table 40.--Net volume of growing-stock trees on timberland by species and geographic unit, New York, 1993

(In millions of cubic feet)

Species	Geographic unit								All units
	Lake Plain	Southwest Highlands	S. central Highlands	St. Lawrence/ Adirondack	Western Adirondack	Eastern Adirondack	Capitol District	Catskill/ Lower Hudson	
Balsam fir	3.2	.0	.4	119.1	32.5	79.6	2.8	.7	238.2
Spruces	71.5	28.9	64.4	147.7	103.0	139.5	22.2	24.8	601.9
Red pine	88.6	25.6	98.4	57.6	51.5	21.1	49.3	44.5	436.5
White pine	95.9	102.9	212.4	153.2	194.3	319.2	395.4	350.6	1,823.8
Eastern hemlock	217.5	130.0	375.7	143.9	201.4	224.1	251.2	320.7	1,864.5
Other softwoods	68.6	28.2	32.8	109.1	26.2	61.3	59.0	47.1	432.2
Total softwoods	545.2	315.6	784.0	730.6	608.8	844.8	779.9	788.2	5,397.1
Red maple	524.8	276.2	776.3	526.8	432.4	169.2	265.1	477.9	3,448.8
Sugar maple	540.5	438.3	540.7	584.8	379.7	375.0	267.5	404.7	3,531.3
Yellow birch	51.2	17.7	52.0	119.7	137.1	99.2	39.2	63.8	580.0
Sweet birch	5.2	23.8	76.7	.6	.0	11.0	54.2	142.4	313.9
Paper birch	.5	4.2	14.4	56.7	3.1	75.6	35.8	15.1	205.4
Hickory	147.4	62.1	33.8	29.9	20.9	6.0	46.3	98.0	444.4
American beech	121.6	128.7	248.3	236.2	159.7	209.9	63.8	112.0	1,280.3
White ash	289.8	227.6	263.1	113.9	90.9	53.2	86.6	176.9	1,302.0
Aspen	116.7	176.0	163.7	239.7	86.6	91.4	107.5	65.3	1,046.9
Black cherry	232.8	157.0	160.3	183.7	156.1	17.8	69.8	96.8	1,074.4
Select white oaks	42.1	48.0	26.8	9.0	1.1	3.9	29.3	109.3	269.5
Chestnut oak	18.1	4.9	27.6	.0	.0	5.5	51.6	159.7	267.2
Northern red oak	117.0	213.0	215.8	53.0	14.3	125.3	200.6	310.3	1,249.2
Other oaks	12.1	8.9	8.4	.0	2.2	2.1	13.7	162.6	210.0
Basswood	114.1	72.4	90.1	68.1	28.1	34.6	34.6	26.3	468.2
Elm	34.3	10.7	4.0	29.2	14.9	2.3	31.1	34.6	161.2
Other hardwoods	232.1	44.3	28.8	67.0	17.3	7.5	44.5	72.7	514.3
Total hardwoods	2,600.4	1,913.9	2,730.9	2,318.3	1,544.5	1,289.7	1,441.1	2,528.3	16,367.0
All species	3,145.6	2,229.5	3,514.9	3,048.9	2,153.3	2,134.5	2,221.0	3,316.5	21,764.2

Table 41.--Net volume of sawtimber trees on timberland by species and geographic unit, New York, 1993

Species	(In millions of board feet)								All units
	Geographic unit								
	Lake Plain	Southwest Highlands	S. central Highlands	St. Lawrence/ Adirondack	Western Adirondack	Eastern Adirondack	Capitol District	Catskill/ Lower Hudson	
Balsam fir	.0	.0	.0	234.6	49.9	163.0	6.8	1.4	455.8
Spruces	222.2	48.9	153.2	370.7	302.4	377.0	37.8	65.3	1,577.5
Red pine	271.8	84.7	334.8	194.9	201.3	84.9	113.9	172.1	1,458.4
White pine	370.7	372.4	803.5	652.0	761.1	1,337.3	1,638.5	1,468.0	7,403.5
Eastern hemlock	689.3	401.1	1,217.3	487.6	660.7	765.5	859.5	1,161.7	6,242.7
Other softwoods	153.2	58.9	98.3	216.8	41.8	151.1	192.2	80.6	992.9
Total softwoods	1,707.3	966.0	2,607.1	2,156.6	2,017.3	2,878.7	2,848.7	2,949.1	18,130.8
Red maple	1,470.3	608.3	1,935.4	962.7	1,060.8	373.7	581.3	1,150.4	8,142.9
Sugar maple	1,530.5	1,050.0	1,531.6	1,521.3	1,170.9	1,134.1	834.0	1,191.7	9,964.2
Yellow birch	81.3	25.8	116.8	316.5	386.9	324.1	52.2	145.1	1,448.7
Sweet birch	9.3	31.5	140.2	2.4	.0	19.9	113.1	325.8	642.1
Paper birch	1.9	1.7	15.6	71.4	3.4	138.9	65.5	19.7	318.0
Hickory	354.8	162.2	100.7	53.7	71.9	3.3	103.7	232.3	1,082.5
American beech	433.7	316.1	701.7	526.2	444.3	439.8	156.5	318.4	3,336.7
White ash	604.1	570.1	696.3	243.5	249.5	121.7	189.6	471.5	3,146.3
Aspen	223.0	310.3	355.7	658.8	225.6	248.5	261.5	149.8	2,433.1
Black cherry	807.2	493.4	508.4	618.4	495.3	42.3	183.3	255.3	3,403.5
Select white oaks	160.2	145.5	99.0	27.3	3.8	13.6	92.5	361.3	903.2
Chestnut oak	58.6	13.0	67.2	.0	.0	7.3	108.3	415.4	669.8
Northern red oak	409.5	658.4	680.8	130.3	41.3	368.6	692.0	1,063.0	4,043.7
Other oaks	45.0	22.2	20.8	.0	4.1	2.4	42.6	564.6	701.8
Basswood	363.4	236.2	328.3	224.3	98.1	130.3	99.4	100.7	1,580.7
Elm	36.5	12.6	2.6	21.8	14.6	.0	73.7	48.4	210.3
Other hardwoods	772.6	134.1	86.4	149.0	39.1	5.6	147.9	246.2	1,580.9
Total hardwoods	7,361.9	4,791.6	7,387.5	5,527.4	4,309.7	3,374.1	3,797.0	7,059.7	43,608.7
All species	9,069.2	5,757.6	9,994.6	7,684.0	6,326.9	6,252.8	6,645.7	10,008.8	61,739.5

LAKE PLAIN UNIT TABLES

Table 42.--Area of timberland by forest type, forest-type group, and stand-size class, Lake Plain Unit, New York, 1980

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	23.7	12.9	15.3	.0	52.0	32.8
White pine	12.2	5.9	6.1	.0	24.2	50.0
White pine/hemlock	6.4	12.5	.0	.0	19.0	57.7
Hemlock	50.6	.0	12.1	.0	62.7	31.3
Scotch pine	.0	5.4	18.7	.0	24.1	50.1
White/red pine group	93.0	36.8	52.2	.0	182.0	17.4
Balsam fir	.0	6.8	.0	.0	6.8	100.0
Red spruce	.0	6.7	.0	.0	6.7	100.0
Norway spruce	11.8	.0	6.4	.0	18.3	58.4
Tamarack	12.3	.0	.0	.0	12.3	70.8
Spruce/fir group	24.2	13.6	6.4	.0	44.2	38.0
Wh. pine/no. red oak/wh. ash	6.1	.0	.0	.0	6.1	100.0
Other oak/pine	.0	.0	6.1	.0	6.1	100.0
Oak/pine group	6.1	.0	6.1	.0	12.2	70.7
Chestnut oak	6.4	.0	.0	.0	6.4	100.0
White oak/red oak/hickory	19.8	18.1	24.5	.0	62.4	31.1
White oak	12.8	.0	.0	.0	12.8	70.9
Northern red oak	31.4	5.4	6.5	.0	43.3	35.7
Black locust	.0	6.3	19.2	.0	25.5	50.1
Black walnut	.0	6.6	.0	.0	6.6	100.0
Hawthorn/reverting field	5.9	6.1	117.3	12.3	141.5	20.2
Scarlet oak	6.0	.0	.0	.0	6.0	100.0
Red maple/central hardwoods	.0	.0	6.4	.0	6.4	100.0
Mixed central hardwoods	48.2	43.9	43.9	.0	136.0	21.2
Oak/hickory group	130.6	86.5	217.7	12.3	447.0	10.8
Black ash/Amer. elm/red maple	43.3	23.8	105.5	5.8	178.5	16.7
Red maple(lowland)	33.0	20.0	18.6	.0	71.6	28.4
Red maple(upland)	.0	.0	12.2	.0	12.2	70.7
Cottonwood	.0	7.6	11.3	.0	18.9	58.3
Willow	37.0	11.8	13.1	.0	62.0	31.4
Elm/ash/red maple group	113.3	63.2	160.8	5.8	343.1	12.2
Sugar maple/beech/yellow birch	288.5	75.3	75.8	.0	439.6	10.0
Black cherry	12.6	24.3	37.7	.0	74.6	27.6
Red maple/northern hardwoods	82.6	68.7	36.8	.0	188.2	16.9
Pin cherry/reverting field	5.6	12.5	125.9	6.2	150.2	19.3
Mixed northern hardwoods	69.0	68.0	140.9	.0	278.0	13.5
Northern hardwoods group	458.3	249.0	417.0	6.2	1,130.5	5.4
Aspen	.0	16.9	86.1	.0	103.1	23.5
Aspen/birch group	.0	16.9	86.1	.0	103.1	23.5
All forest types	825.3	466.0	946.4	24.2	2,262.0	2.2
SE	6.1	10.0	6.0	49.6	2.2	

Table 43.--Area of timberland by forest type, forest-type group, and stand-size class, Lake Plain Unit, New York, 1993

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	25.7	17.5	3.3	.0	46.5	32.0
White pine	25.1	.0	4.9	.0	30.1	40.9
White pine/hemlock	14.2	4.5	4.2	.0	22.9	45.2
Hemlock	39.3	4.8	5.6	.0	49.7	29.9
Scotch pine	4.1	13.9	5.2	.0	23.2	45.6
White/red pine group	108.5	40.7	23.2	.0	172.4	15.9
Red spruce	.0	.0	3.7	.0	3.7	100.0
White spruce	.0	3.3	3.7	.0	6.9	70.8
Norway spruce	14.6	7.9	13.2	.0	35.7	33.0
Northern white-cedar	.0	4.7	3.7	.0	8.4	71.3
Tamarack	.0	4.9	.0	.0	4.9	100.0
Larch plantation	10.8	.0	.0	.0	10.8	70.8
Spruce/fir group	25.4	20.8	24.2	.0	70.4	24.3
Wh. pine/no. red oak/wh. ash	10.6	15.5	.0	.0	26.2	44.8
Eastern redcedar/hardwood	.0	.0	4.8	.0	4.8	100.0
Oak/pine group	10.6	15.5	4.8	.0	31.0	40.9
Chestnut oak	5.4	.0	.0	.0	5.4	100.0
White oak/red oak/hickory	27.1	43.7	3.9	.0	74.6	25.1
White oak	9.7	.0	.0	.0	9.7	71.4
Northern red oak	25.6	9.1	4.8	.0	39.5	35.1
Black locust	.0	3.1	6.7	.0	9.8	58.4
Black walnut	5.3	.0	.0	.0	5.3	100.0
Hawthorn/reverting field	.0	4.1	19.0	.0	23.1	45.4
Red maple/central hardwoods	6.8	.0	.0	.0	6.8	100.0
Mixed central hardwoods	89.2	42.6	18.2	.0	149.9	17.5
Oak/hickory group	169.1	102.5	52.6	.0	324.2	10.9
Black ash/Amer. elm/red maple	50.7	47.1	26.2	.0	124.0	18.9
Red maple(lowland)	47.1	20.7	.0	.0	67.8	26.3
Red maple(upland)	17.5	9.0	5.6	.0	32.1	38.1
Cottonwood	5.4	17.8	33.8	.0	57.0	29.3
Willow	50.8	7.3	30.8	.0	89.0	21.3
American elm/green ash	9.7	12.8	15.9	.0	38.4	34.5
Elm/ash/red maple group	181.3	114.7	112.3	.0	408.3	9.8
Sugar maple/beech/yellow birch	323.8	122.0	34.4	.0	480.2	8.6
Black cherry	75.7	5.3	20.3	.0	101.2	20.9
Red maple/northern hardwoods	98.4	89.3	18.9	.0	206.5	13.2
Pin cherry/reverting field	17.3	24.2	163.6	8.4	213.5	14.5
Mixed northern hardwoods	120.1	106.1	70.4	.0	296.6	11.9
Northern hardwoods group	635.2	346.8	307.6	8.4	1,298.0	4.5
Aspen	3.7	62.1	27.0	.0	92.9	21.8
Aspen/birch group	3.7	62.1	27.0	.0	92.9	21.8
All forest types	1,133.9	703.1	551.8	8.4	2,397.1	2.1
SE	4.5	6.8	8.1	70.7	2.1	

**Area of timberland by stand-size class,
Lake Plain Unit, New York, 1980 and 1993**

Million acres

**Area of timberland by forest-type group,
Lake Plain Unit, New York, 1993**

Table 45.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Lake Plain Unit, New York, 1993

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Balsam fir	0	2	0	0	2	75.3
Atlantic white cedar	0	0	6	0	6	100.0
Common juniper	5	0	0	0	5	100.0
Eastern redcedar	0	0	1	0	1	74.1
Spruce species	12	9	5	0	26	32.3
Red pine	0	4	0	0	5	49.0
Eastern white pine	3	4	1	0	7	41.7
Scotch pine	0	4	1	0	5	31.5
Douglas fir	0	1	1	0	2	72.0
Canada yew	5	9	0	0	14	71.7
Northern white-cedar	0	16	20	0	36	71.0
Eastern hemlock	61	29	3	0	93	21.2
Maple species	0	0	0	0	0	71.8
Boxelder	60	5	10	0	75	45.1
Black maple	0	0	0	0	0	100.0
Striped maple	101	11	0	0	113	25.7
Red maple	330	151	87	0	569	14.5
Silver maple	12	11	1	0	25	34.7
Sugar maple	951	251	83	0	1,285	12.3
Mountain maple	11	0	0	0	11	78.5
Ailanthus species	3	0	0	0	3	100.0
Alder species	49	99	46	0	195	25.3
Hercules club	0	3	0	0	3	100.0
Serviceberry	61	43	11	0	116	18.8
Barberry	9	0	0	0	9	100.0
Yellow birch	67	31	2	0	100	19.4
Sweet birch	7	18	2	0	27	69.0
Gray birch	6	0	4	0	10	61.9
American hornbeam	166	102	18	0	286	18.0
Hickory species	41	30	7	0	78	15.6
Bitternut hickory	9	0	1	0	10	46.7
Shagbark hickory	2	0	0	0	3	82.8
American chestnut	6	3	0	0	9	64.6
New Jersey tea	0	1	1	0	2	70.7
Hackberry	0	0	0	0	0	100.0
Flowering dogwood	15	11	7	0	32	37.7
Alternate-leaved dogwood	9	23	7	0	38	35.1
Silky dogwood	26	28	142	0	197	31.9
Panicked dogwood	521	1,019	1,877	116	3,534	13.1
Red-osier dogwood	188	311	470	1	969	15.2
Hawthorn species	71	78	178	0	328	20.0
American hazelnut	5	0	0	0	5	73.1
Beaked hazelnut	0	0	4	0	4	100.0
Leatherwood	1	0	0	0	1	100.0
American beech	255	59	1	0	315	15.1
Russian olive	0	0	4	0	4	100.0
White ash	851	897	568	1	2,317	9.9
Black ash	37	23	35	0	95	33.5
Green ash	121	110	36	0	268	29.0
Witch-hazel	105	71	26	0	203	27.9
Butternut	0	0	0	0	1	71.5
Black walnut	2	2	1	0	6	51.1
Common spicebush	353	166	22	0	541	19.1
Yellow-poplar	5	0	0	0	5	47.4
Bush honeysuckle	131	203	88	17	439	24.7
Apple species	11	50	112	0	173	19.9
Blackgum	33	15	0	0	47	55.2
Eastern hophornbeam	93	61	7	0	161	17.7
Balsam poplar	0	0	1	0	1	81.4
Eastern cottonwood	0	0	5	0	5	60.6
Bigtooth aspen	2	12	0	0	15	75.2

Table 45.-continued

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw- timber	Pole- timber	Sapling and seedling	Non- stocked		
Quaking aspen	11	55	32	0	98	26.3
Cherry species	24	32	40	0	97	29.9
Pin cherry	6	3	3	0	12	43.0
Black cherry	501	288	80	0	869	11.3
Chokecherry	44	43	72	0	158	26.1
White oak	5	4	0	0	9	47.2
Swamp white oak	0	1	0	0	1	78.3
Chestnut oak	11	0	0	0	11	66.5
Northern red oak	28	8	1	0	38	44.3
Black oak	1	0	0	0	1	85.8
Buckthorn species	171	55	138	0	363	27.9
Smooth sumac	10	2	0	0	12	84.0
Staghorn sumac	22	9	22	2	55	27.8
Poison sumac	0	18	0	0	18	77.3
Currant species	62	68	4	0	134	20.8
Black locust	3	4	3	0	10	39.2
Rose species	129	31	47	0	207	29.3
Rubus species	1,165	755	1,085	32	3,038	15.0
Willow species	1	3	40	0	44	45.6
Black willow	5	11	116	0	132	37.5
American elderberry	30	4	0	0	34	40.0
Red-berried alder	0	3	2	0	5	71.7
Sassafras	0	5	2	0	7	54.7
Spiraea species	38	59	84	0	182	43.1
American basswood	42	17	8	0	67	22.3
Elm species	0	0	2	0	2	100.0
American elm	82	59	51	0	192	16.5
Slippery elm	3	0	21	0	24	71.9
American bladdernut	36	2	0	0	38	70.6
Blueberry	238	95	20	0	353	56.6
Viburnum species	178	283	175	0	636	24.0
Maple-leaved viburnum	254	333	65	0	652	22.0
Hobblebush viburnum	109	5	0	0	113	40.8
Wild raisin	24	80	97	0	201	40.9
Arrowwood	566	922	1,209	0	2,696	14.4
Nannyberry	51	116	44	0	212	29.3
Blackhaw	1	2	12	0	15	80.9
Highbush cranberry	1	2	0	0	4	69.3
Common prickly ash	1	8	5	0	14	52.9
Unknown deciduous shrub	33	83	27	4	147	36.4
Unknown evergreen shrub	1	0	0	0	1	100.0
Unknown tree	6	3	4	0	13	43.3
All species	8,709	7,451	7,414	173	23,747	4.1
SE	7.2	9.0	10.9	77.6	4.1	

Table 46. --Number of standing trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, Lake Plain Unit, New York, 1993

(In thousands of trees)

Species	Live trees				Dead trees			
	One or more small	One or more large	Multiple or small	Total live	One or more small	One or more large	Multiple or small	Total all trees
Spruces	0	0	0	0	0	0	9	9
Red pine	0	0	0	0	0	0	28	28
White pine	138	12	52	202	253	8	98	562
Eastern hemlock	238	86	10	334	193	201	131	859
Other softwoods	57	10	0	67	0	0	24	91
Total softwoods	433	108	62	604	446	209	289	1,548
Red maple	2,913	1,541	456	4,910	615	317	269	6,111
Sugar maple	2,101	1,120	560	3,781	503	95	297	4,677
Yellow birch	383	293	77	753	194	155	327	1,429
Sweet birch	8	0	0	8	0	47	0	55
Paper birch	0	0	0	0	25	0	0	25
Hickory	432	450	13	895	0	0	53	948
American beech	1,257	474	427	2,157	68	76	343	2,645
White ash	798	219	202	1,219	492	4	111	1,827
Aspen	140	388	11	539	255	165	121	1,080
Black cherry	1,100	270	93	1,463	500	178	51	2,193
Select white oaks	4	6	37	46	16	0	0	62
Chestnut oak	87	41	0	127	183	27	27	365
Northern red oak	155	77	61	293	0	0	6	299
Basswood	592	457	245	1,293	137	24	81	1,535
Elm	76	0	0	76	320	81	221	698
Other commercial hardwoods	830	391	193	1,415	93	59	61	1,628
Noncommercial hardwoods	1,859	440	372	2,671	573	323	451	4,019
Total hardwoods	12,737	6,165	2,747	21,649	3,974	1,553	2,421	29,596
All species	13,170	6,273	2,808	22,252	4,420	1,762	2,710	31,145

Table 47.--Net volume of all trees on timberland by class of timber and species group, Lake Plain Unit, New York, 1993

(In millions of cubic feet)

Class of timber	Species group				All groups	SE
	Pines	Other softwoods	Soft hardwoods	Hard hardwoods		
Sawtimber trees:						
Sawlog portion	133.6	228.3	738.2	553.0	1,653.1	4.2
Upper stem	18.0	28.9	173.5	127.6	348.0	3.9
Total sawtimber trees	151.6	257.1	911.7	680.5	2,001.0	4.1
Poletimber trees	60.5	76.0	594.5	413.6	1,144.6	3.6
Total growing-stock trees	212.1	333.1	1,506.2	1,094.1	3,145.6	3.0
Rough trees:						
Sawtimber size	4.4	5.8	38.2	25.4	73.8	9.0
Poletimber size	3.8	1.0	19.7	39.0	63.6	8.8
Total rough trees	8.2	6.9	57.9	64.4	137.4	6.7
Rotten trees:						
Sawtimber size	.0	.8	9.7	13.4	24.0	12.7
Poletimber size	.1	.0	5.3	2.2	7.7	19.6
Total rotten trees	.1	.8	15.1	15.6	31.6	10.7
Salvable dead ^a trees:						
Sawtimber size	1.9	5.5	5.7	4.4	17.5	17.6
Poletimber size	5.1	2.0	10.9	4.2	22.2	17.2
Total salvable dead trees	7.0	7.5	16.6	8.6	39.7	13.1
All classes	227.4	348.3	1,595.9	1,182.8	3,354.3	2.9
SE	19.6	12.6	4.4	5.5	2.9	

^a Includes noncommercial species.

Table 48.--Net volume of growing-stock trees on timberland by species and diameter class, Lake Plain Unit, New York, 1980
(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- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9		
Balsam fir	4.5	1.7	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.8	93.0
Spruces	2.8	6.9	10.8	7.7	2.0	1.0	.0	.0	.0	.0	.0	.0	31.2	44.2
Red pine	6.2	16.9	12.1	14.8	7.6	1.1	.0	.0	.0	.0	.0	.0	58.7	34.8
White pine	4.4	17.8	19.2	11.2	8.6	2.9	3.4	3.0	1.1	.0	.0	.0	71.5	29.8
Eastern hemlock	14.9	25.4	25.5	24.9	21.2	18.7	12.0	4.8	5.9	.6	.0	.0	154.0	14.9
Other softwoods	9.6	10.3	12.3	5.7	4.9	1.2	.0	.0	.0	.0	.0	.0	43.9	38.6
Total softwoods	42.4	79.1	80.4	64.3	44.2	25.0	15.4	7.8	7.0	.6	.0	.0	366.2	12.3
Red maple	41.3	52.3	55.7	49.8	43.9	33.9	25.9	13.3	19.1	5.9	.0	.0	341.2	10.8
Sugar maple	47.1	45.1	59.0	53.3	48.9	38.8	19.4	12.6	13.9	3.0	.0	.0	341.0	9.8
Yellow birch	7.0	8.9	9.3	4.9	4.8	.5	1.0	2.1	.9	.0	.0	.0	39.3	18.2
Sweet birch	.9	.9	.5	1.0	.5	.0	.6	.4	.0	.0	.0	.0	4.8	48.8
Hickory	10.8	17.7	20.8	10.6	7.2	8.3	3.8	4.7	3.4	1.6	.0	.0	88.9	13.8
American beech	4.5	13.7	16.7	11.9	15.1	11.8	12.0	7.1	9.6	1.4	.0	.0	103.8	14.8
White ash	31.8	41.0	33.3	30.8	19.2	10.6	9.8	3.5	3.0	.9	.0	.0	183.9	11.0
Aspen	8.7	17.5	12.7	5.2	4.1	3.6	1.2	.5	.5	.4	.0	.0	54.4	22.9
Black cherry	7.4	17.2	31.3	20.3	13.5	11.2	12.0	3.1	7.7	1.8	.0	.0	125.4	15.2
Select white oaks	1.9	.7	2.2	3.1	4.6	5.4	3.6	3.4	6.5	.7	.0	.0	32.2	24.5
Chestnut oak	1.6	.3	4.6	1.6	1.7	1.7	.5	.0	.0	.0	.0	.0	12.1	41.8
Northern red oak	2.3	7.0	14.1	12.8	11.6	11.0	7.1	5.3	10.4	3.2	.0	.0	84.7	17.3
Other oaks	.0	1.3	.9	.0	2.1	2.9	1.0	.9	3.1	.5	.0	.0	12.9	42.6
Basswood	4.1	9.3	14.7	13.9	17.2	7.2	6.3	4.3	5.0	1.1	.0	.0	82.9	14.0
Elm	5.7	3.2	2.8	1.9	.0	.5	.9	.9	.0	.0	.0	.0	15.8	21.0
Other hardwoods	12.2	14.2	22.3	13.9	10.9	10.2	4.9	5.8	10.2	7.7	.0	.0	112.3	15.2
Total hardwoods	187.0	250.3	301.1	234.8	205.2	157.7	110.1	67.9	93.4	28.2	.0	.0	1,635.7	4.0
All species	229.4	329.4	381.5	299.2	249.4	182.6	125.5	75.7	100.4	28.8	.0	.0	2,001.9	3.4
SE	5.9	5.0	5.5	6.1	6.2	7.6	8.8	10.6	9.8	17.2	.0	.0	3.4	

Table 49.--Net volume of growing-stock trees on timberland by species and diameter class, Lake Plain Unit, New York, 1993

(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+		
Balsam fir	2.1	1.1	.0	.0	.0	.0	.0	.0	.0	.0	3.2	100.0
Spruces	8.7	9.0	10.2	9.3	8.8	14.7	6.2	4.6	.0	.0	71.5	32.6
Red pine	8.5	16.7	17.5	15.2	20.4	7.0	1.2	1.6	.0	.0	88.6	31.2
White pine	4.7	10.1	21.5	15.8	16.5	7.0	2.5	6.3	10.6	.8	95.9	26.1
Eastern hemlock	19.2	28.0	27.9	41.2	38.3	29.4	12.8	5.8	14.2	.6	217.5	15.6
Other softwoods	9.0	19.2	13.6	12.7	5.8	6.3	1.9	.0	.0	.0	68.6	34.1
Total softwoods	52.3	84.1	90.7	94.2	89.9	64.7	24.7	18.3	24.9	1.5	545.2	10.8
Red maple	49.0	68.8	82.5	77.4	63.7	50.1	26.2	37.0	44.9	25.2	524.8	8.6
Sugar maple	53.6	72.3	78.7	81.2	75.0	59.4	45.1	25.2	39.0	10.9	540.5	8.7
Yellow birch	7.1	8.8	16.0	5.2	5.5	3.0	2.8	1.7	1.0	.0	51.2	12.8
Sweet birch	.6	.6	1.8	.5	1.3	.0	.0	.0	.5	.0	5.2	47.3
Paper birch	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.5	100.0
Hickory	14.1	26.4	31.6	25.2	18.6	11.0	6.0	6.5	7.4	.7	147.4	12.3
American beech	7.4	12.5	17.3	16.2	16.9	14.5	7.5	9.3	18.2	1.9	121.6	14.0
White ash	35.3	57.2	60.8	50.2	36.2	20.2	7.5	9.5	12.4	.6	289.8	10.1
Aspen	17.0	26.5	24.5	21.3	7.2	6.2	1.8	4.4	3.6	4.4	116.7	14.7
Black cherry	11.4	19.3	31.0	45.3	32.3	34.5	15.8	13.1	22.8	7.4	232.8	11.6
Select white oaks	1.7	2.5	4.9	6.3	4.7	7.8	3.6	3.2	5.7	1.7	42.1	18.9
Chestnut oak	.8	1.1	2.1	3.0	6.8	3.9	.4	.0	.0	.0	18.1	41.6
Northern red oak	3.7	7.6	14.4	15.7	18.8	6.0	12.8	4.7	28.9	4.4	117.0	17.4
Other oaks	.1	.7	2.2	.5	1.5	.0	2.4	2.5	1.7	.5	12.1	33.9
Basswood	6.6	17.2	14.1	18.8	20.3	11.5	9.8	8.9	6.5	.4	114.1	14.0
Elm	9.1	9.4	7.4	3.7	2.3	1.0	.6	.3	.3	.0	34.3	13.5
Other hardwoods	15.3	27.3	27.8	33.9	27.1	24.6	16.4	9.7	32.1	17.7	232.1	14.5
Total hardwoods	232.9	358.2	417.0	404.8	338.2	253.7	158.7	136.1	224.9	75.8	2,600.4	3.5
All species	285.2	442.3	507.7	499.0	428.0	318.5	183.4	154.4	249.8	77.3	3,145.6	3.0
SE	5.1	4.4	4.2	4.4	5.4	6.3	7.4	9.0	10.8	18.8	3.0	

Table 50.--Net volume of sawtimber trees on timberland by species and diameter class, Lake Plain Unit, New York, 1980

Species	(In millions of board feet)										All classes	SE
	Diameter class (inches at breast height)											
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	26.0- 27.9		
Balsam fir	2.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	100.0
Spruces	36.4	29.5	8.3	4.3	.0	.0	.0	.0	.0	.0	78.5	50.4
Red pine	44.0	62.5	34.0	5.4	.0	.0	.0	.0	.0	.0	145.8	43.8
White pine	69.4	47.1	38.8	13.6	16.6	15.3	5.5	.0	.0	.0	206.4	29.5
Eastern hemlock	81.9	95.2	87.8	82.5	55.0	23.0	29.9	2.9	.0	.0	458.2	16.0
Other softwoods	40.9	21.6	20.3	4.7	.0	.0	.0	.0	.0	.0	87.6	55.7
Total softwoods	274.6	256.0	189.3	110.6	71.6	38.3	35.4	2.9	.0	.0	978.7	13.0
Red maple	-	199.0	190.7	151.9	124.2	64.3	101.8	33.4	.0	.0	865.3	14.8
Sugar maple	-	221.8	217.2	179.2	91.5	60.8	69.3	15.8	.0	.0	855.6	12.8
Yellow birch	-	20.2	21.0	2.3	3.8	7.6	4.3	.0	.0	.0	59.1	23.0
Sweet birch	-	4.1	2.0	.0	2.4	1.5	.0	.0	.0	.0	10.0	45.3
Hickory	-	45.6	33.0	40.1	19.9	25.6	18.3	9.4	.0	.0	192.1	17.7
American beech	-	52.4	71.5	58.4	60.4	35.5	53.5	8.3	.0	.0	340.0	17.6
White ash	-	129.5	83.9	49.3	46.4	17.4	14.4	4.3	.0	.0	345.2	14.2
Aspen	-	22.0	17.8	16.6	5.5	2.5	2.4	2.0	.0	.0	68.9	35.6
Black cherry	-	85.9	60.0	54.1	58.2	15.5	41.3	10.4	.0	.0	325.5	15.4
Select white oaks	-	12.9	20.7	25.5	18.0	17.7	33.4	3.7	.0	.0	131.9	26.1
Chestnut oak	-	6.4	6.7	7.0	2.1	.0	.0	.0	.0	.0	22.1	45.1
Northern red oak	-	49.6	48.7	49.3	32.6	25.5	51.4	17.2	.0	.0	274.3	19.7
Other oaks	-	.0	8.9	12.5	4.8	4.3	15.4	2.7	.0	.0	48.7	47.5
Basswood	-	57.8	78.4	36.7	32.4	23.0	30.0	6.5	.0	.0	264.8	18.0
Elm	-	7.7	.0	2.4	4.7	4.3	.0	.0	.0	.0	19.0	44.3
Other hardwoods	-	56.5	48.1	46.9	23.9	28.4	53.5	43.4	.0	.0	300.7	16.4
Total hardwoods	-	971.4	908.7	732.3	530.8	334.0	489.2	157.0	.0	.0	4,123.4	5.6
All species	274.6	1,227.4	1,098.0	842.8	602.4	372.3	524.6	159.9	.0	.0	5,102.0	4.8
SE	18.6	6.2	6.2	7.6	8.9	10.7	10.0	17.1	.0	.0	4.8	

Table 51.--Net volume of sawtimber trees on timberland by species and diameter class, Lake Plain Unit, New York, 1993

(In millions of board feet)

Species	Diameter class (inches at breast height)							All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+	
Spruces	35.2	36.4	38.3	64.9	27.5	19.9	.0	.0	41.6
Red pine	63.7	65.2	94.3	34.8	5.6	8.2	.0	.0	37.5
White pine	80.6	68.2	77.7	35.2	13.0	34.1	56.9	4.9	26.7
Eastern hemlock	88.7	156.3	156.4	127.6	60.0	27.3	69.6	3.5	17.3
Other softwoods	45.2	49.2	23.9	26.4	8.5	.0	.0	.0	47.0
Total softwoods	313.4	375.4	390.5	288.9	114.6	89.5	126.5	8.4	1,707.3
Red maple	-	304.4	279.3	223.8	122.8	175.3	230.2	134.6	11.4
Sugar maple	-	331.1	332.1	274.5	212.4	121.3	202.6	56.5	11.3
Yellow birch	-	20.9	23.6	14.0	10.7	7.0	5.1	.0	18.4
Sweet birch	-	2.0	5.1	.0	.0	.0	2.3	.0	45.1
Paper birch	-	1.9	.0	.0	.0	.0	.0	.0	100.0
Hickory	-	108.3	84.8	51.9	31.6	34.5	40.1	3.5	14.3
American beech	-	73.6	81.5	73.7	37.7	48.1	106.9	12.1	17.9
White ash	-	209.3	157.1	94.9	33.1	46.8	59.7	3.3	11.9
Aspen	-	91.5	30.7	29.3	8.1	21.1	14.8	27.5	17.8
Black cherry	-	192.4	146.5	163.5	76.4	63.2	121.3	44.0	12.9
Select white oaks	-	26.4	21.8	37.9	17.3	17.6	29.3	9.9	20.9
Chestnut oak	-	11.4	28.1	17.6	1.5	.0	.0	.0	43.8
Northern red oak	-	58.6	79.4	25.4	57.0	23.3	141.8	23.9	20.1
Other oaks	-	1.6	6.3	.0	12.1	11.4	10.1	3.6	45.3
Basswood	-	80.7	93.8	55.7	48.5	46.9	36.2	1.5	17.3
Elm	-	14.0	11.6	4.8	2.5	1.8	1.8	.0	22.5
Other hardwoods	-	138.3	117.9	111.9	80.9	46.2	176.6	100.9	18.5
Total hardwoods	-	1,666.3	1,499.5	1,178.9	752.8	664.5	1,178.7	421.1	4.9
All species	313.4	2,041.7	1,890.0	1,467.8	867.4	754.0	1,305.3	429.5	4.3
SE	14.7	4.5	5.4	6.3	7.4	9.0	11.3	18.9	4.3

**Net volume of growing-stock trees on timberland,
top five species,
Lake Plain Unit, New York, 1980 and 1993**

**Net volume of sawtimber trees on timberland,
top five species,
Lake Plain Unit, New York, 1980 and 1993**

Table 53.--Average annual mortality^a, average annual net growth, and average annual removals of growing-stock and sawtimber volume on timberland by species, Lake Plain Unit, New York, 1979-92

Species	Growing stock (cu. ft.)						Sawtimber (bd. ft.)					
	Mortality	SE	Net growth	SE	Removals	SE	Mortality	SE	Net growth	SE	Removals	SE
(In thousands of feet)												
Balsam fir	174	100.0	-104	100.0	0	.0	115	100.0	-115	100.0	0	.0
Spruces	79	73.8	3,473	42.1	0	.0	103	100.0	13,235	51.8	0	.0
Red pine	384	44.8	1,825	40.0	1,546	59.3	0	.0	6,936	44.4	5,102	62.9
White pine	494	41.5	2,280	23.2	175	76.6	1,527	48.0	12,081	23.6	851	76.6
Eastern hemlock	607	27.2	5,457	16.4	1,184	32.6	1,180	34.8	20,081	16.8	4,646	34.6
Other softwoods	172	46.9	2,890	30.6	92	95.4	213	70.7	7,815	39.0	0	.0
Total softwoods	1,909	20.7	15,821	14.4	2,998	33.2	3,138	27.5	60,032	16.6	10,599	33.7
Red maple	2,163	22.0	17,285	9.5	4,148	18.8	4,980	33.4	56,437	11.0	15,582	20.0
sugar maple	1,492	20.3	14,298	10.8	3,858	32.8	2,874	29.3	54,109	12.2	15,742	38.6
Yellow birch	614	32.4	773	46.5	309	45.6	897	38.1	1,726	43.0	1,171	48.9
sweet birch	25	100.0	211	73.6	0	.0	0	.0	195	53.7	0	.0
Paper birch	0	.0	64	100.0	0	.0	0	.0	259	100.0	0	.0
Hickory	465	40.5	3,412	17.8	1,422	50.5	807	63.3	11,647	19.4	3,185	43.0
American beech	477	41.2	3,010	18.7	1,068	33.8	2,080	47.3	14,512	20.1	4,189	36.4
White ash	1,773	19.7	10,242	12.9	1,798	21.0	3,713	31.2	27,979	16.4	5,008	27.3
Aspen	847	25.4	5,593	18.0	526	44.9	1,088	60.5	13,741	23.8	329	65.0
Black cherry	567	41.0	7,847	13.6	1,618	25.8	1,299	57.5	35,191	14.7	5,318	31.5
Select white oaks	168	60.7	687	37.0	174	46.2	584	75.3	3,239	41.6	721	52.2
Chestnut oak	308	58.6	60	*	28	100.0	434	65.1	1,610	42.7	112	100.0
Northern red oak	399	48.2	3,153	24.8	1,670	35.7	1,251	70.4	15,213	24.8	7,029	32.0
Other oaks	27	100.0	217	49.0	142	81.1	0	.0	1,196	37.7	343	72.5
Basswood	371	35.3	1,942	18.7	597	46.7	750	58.7	7,095	22.2	2,698	51.2
Elm	735	26.1	1,909	24.5	351	41.6	1,311	46.5	1,599	56.0	330	71.8
Other hardwoods	450	33.3	10,781	13.7	2,299	45.5	1,222	46.9	38,860	17.6	12,399	52.6
Total hardwoods	10,882	9.0	81,486	4.5	20,010	13.1	23,292	14.0	284,607	5.5	74,155	16.1
All species	12,791	8.2	97,307	4.2	23,008	12.5	26,429	12.8	344,639	5.0	84,755	15.0

^a Mortality is a component of net growth.

* Sampling error is greater than 100 percent.

SOUTHWEST HIGHLANDS UNIT TABLES

Table 54.--Area of timberland by forest type, forest-type group, and stand-size class, Southwest Highlands Unit, New York, 1980

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	5.9	6.5	18.6	.0	31.0	44.8
White pine	26.0	.0	30.9	.0	56.9	32.4
White pine/hemlock	10.8	.0	.0	.0	10.8	71.0
Hemlock	24.2	12.4	5.8	.0	42.5	37.5
Scotch pine	.0	12.5	18.1	.0	30.5	44.2
White/red pine group	67.0	31.4	73.4	.0	171.7	17.8
White spruce	6.2	.0	6.5	.0	12.7	70.7
Norway spruce	.0	12.2	12.7	.0	24.9	49.4
Larch plantation	.0	.0	6.4	.0	6.4	100.0
Spruce/fir group	6.2	12.2	25.6	.0	44.0	36.7
Wh. pine/no. red oak/wh. ash	12.3	.0	.0	.0	12.3	70.8
Oak/pine group	12.3	.0	.0	.0	12.3	70.8
White oak/red oak/hickory	12.8	6.1	12.8	.0	31.6	44.7
White oak	6.7	6.4	.0	.0	13.1	70.7
Northern red oak	44.4	12.8	12.4	.0	69.6	29.2
Y. poplar/wh. oak/no. red oak	6.6	.0	.0	.0	6.6	100.0
Black locust	.0	.0	5.8	.0	5.8	100.0
Hawthorn/reverting field	.0	.0	87.4	5.8	93.2	24.3
Red maple/central hardwoods	.0	6.7	.0	.0	6.7	100.0
Mixed central hardwoods	44.0	32.7	18.8	.0	95.5	25.1
Oak/hickory group	114.4	64.6	137.3	5.8	322.1	12.8
Black ash/Amer. elm/red maple	6.0	.0	.0	.0	6.0	100.0
Red maple(upland)	.0	18.2	44.4	.0	62.6	31.5
Willow	.0	.0	19.2	6.2	25.4	50.0
Elm/ash/red maple group	6.0	18.2	63.5	6.2	94.0	25.3
Sugar maple/beech/yellow birch	306.2	169.7	107.7	.0	583.7	8.1
Black cherry	19.1	38.3	42.6	.0	100.0	24.1
Red maple/northern hardwoods	18.5	30.8	12.5	.0	61.7	30.9
Pin cherry/reverting field	.0	.0	55.0	.0	55.0	33.1
Mixed northern hardwoods	105.0	49.7	62.9	.0	217.6	15.6
Northern hardwoods group	448.8	288.5	280.7	.0	1,018.0	5.2
Aspen	6.4	12.2	30.5	.0	49.1	35.1
Aspen/birch group	6.4	12.2	30.5	.0	49.1	35.1
All forest types	661.2	427.1	611.1	12.0	1,711.3	1.9
SE	6.7	10.3	7.0	70.8	1.9	

Table 55.--Area of timberland by forest type, forest-type group, and stand-size class, Southwest Highlands Unit, New York, 1993

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	10.6	.0	4.3	.0	14.9	58.1
White pine	43.8	.0	5.4	.0	49.2	32.0
Hemlock	46.5	10.7	.0	.0	57.2	28.3
Scotch pine	10.4	.0	10.3	.0	20.7	50.1
White/red pine group	111.3	10.7	20.0	.0	142.0	17.8
White spruce	.0	4.9	.0	.0	4.9	100.0
Norway spruce	4.8	19.6	5.2	.0	29.6	40.0
Spruce/fir group	4.8	24.4	5.2	.0	34.4	36.6
Wh. pine/no. red oak/wh. ash	30.9	4.3	.0	.0	35.2	36.9
Oak/pine group	30.9	4.3	.0	.0	35.2	36.9
White oak/red oak/hickory	20.5	42.4	5.6	.0	68.5	26.8
White oak	.0	5.4	.0	.0	5.4	100.0
Northern red oak	42.3	27.3	5.0	.0	74.6	25.7
Black locust	5.3	9.7	.0	.0	15.0	58.0
Hawthorn/reverting field	.0	4.8	5.3	.0	10.1	70.8
Red maple/central hardwoods	.0	.0	5.2	.0	5.2	100.0
Mixed central hardwoods	47.3	37.0	27.1	.0	111.4	21.3
Oak/hickory group	115.3	126.7	48.2	.0	290.2	12.1
Black ash/Amer. elm/red maple	.0	4.3	10.7	.0	15.0	57.6
Red maple(upland)	16.3	20.7	5.5	.0	42.5	34.6
River birch/sycamore	.0	5.5	11.1	.0	16.6	57.7
Willow	22.1	.0	14.6	.0	36.7	34.1
American elm/green ash	.0	.0	4.8	.0	4.8	100.0
Elm/ash/red maple group	38.3	30.5	46.7	.0	115.6	20.2
Sugar maple/beech/yellow birch	285.4	164.8	40.2	.0	490.4	8.6
Black cherry	36.3	31.5	21.4	.0	89.3	23.8
Red maple/northern hardwoods	49.1	41.2	21.1	.0	111.4	21.3
Pin cherry/reverting field	5.4	15.5	58.1	.0	79.0	24.6
Mixed northern hardwoods	140.8	67.2	46.1	.0	254.2	13.1
Northern hardwoods group	517.1	320.2	186.9	.0	1,024.2	4.9
Aspen	20.2	42.5	32.1	.0	94.8	22.4
Aspen/birch group	20.2	42.5	32.1	.0	94.8	22.4
All forest types	837.9	559.4	339.2	.0	1,736.5	1.9
SE	5.4	7.9	9.9	.0	1.9	

Area of timberland by stand-size class,
Southwest Highlands Unit, New York, 1980 and 1993

Area of timberland by forest-type group,
Southwest Highlands Unit, New York, 1993

Table 56.---Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Southwest Highlands Unit, New York, 1993

Species	(In thousands of trees)													All classes	SE
	Diameter class (inches at breast height)														
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+					
Spruces	3,346	1,347	411	237	168	41	10	0	0	0	0	0	5,560	51.2	
Red pine	489	487	355	455	260	80	0	0	0	0	0	0	2,125	43.3	
White pine	2,029	2,635	1,178	1,016	820	373	269	51	98	56	0	0	8,527	23.3	
Eastern hemlock	6,061	3,660	2,253	1,180	997	667	204	125	35	0	0	0	15,182	20.0	
Other softwoods	1,706	1,491	796	544	37	26	0	0	0	0	0	0	4,601	37.1	
Total softwoods	13,631	9,620	4,993	3,432	2,283	1,188	483	177	133	56	0	0	35,996	12.1	
Red maple	13,517	7,978	5,352	2,547	1,389	667	395	237	263	28	0	0	32,373	8.9	
Sugar maple	14,592	11,115	7,505	3,518	2,469	1,159	527	356	461	119	0	0	41,820	8.1	
Yellow birch	1,217	731	539	306	64	14	0	0	0	0	0	0	2,871	23.7	
Sweet birch	1,916	874	400	186	134	18	36	0	0	0	0	0	3,563	26.0	
Paper birch	405	319	45	29	0	0	0	0	0	0	0	0	798	60.6	
Hickory	2,438	1,672	753	424	469	144	148	49	63	0	0	0	6,161	20.2	
American beech	4,917	3,343	2,709	1,487	711	172	155	131	103	12	0	0	13,741	15.5	
White ash	9,721	6,005	3,509	2,024	994	825	428	119	143	36	0	0	23,804	10.4	
Aspen	7,938	5,479	3,922	1,738	769	364	127	56	0	0	0	0	20,394	13.4	
Black cherry	4,009	2,911	2,265	1,078	693	743	339	277	192	36	0	0	12,545	12.4	
Select white oaks	1,105	954	767	565	234	200	151	45	46	14	0	0	4,082	24.8	
Chestnut oak	103	26	85	83	0	79	0	0	0	0	0	0	377	50.0	
Northern red oak	2,852	3,380	3,062	1,971	1,335	963	591	190	168	46	0	0	14,559	15.2	
Other oaks	411	244	68	150	72	26	0	19	0	4	0	0	995	42.9	
Basswood	910	1,172	814	664	569	249	106	136	49	0	0	0	4,671	23.0	
Elm	1,226	815	211	164	32	15	0	0	0	0	0	0	2,463	19.9	
Other hardwoods	1,372	1,195	733	502	163	70	153	108	123	38	0	0	4,458	24.5	
Total hardwoods	68,649	48,214	32,741	17,438	10,096	5,709	3,158	1,724	1,613	333	0	0	189,676	3.3	
All species	82,280	57,834	37,734	20,871	12,379	6,897	3,641	1,901	1,746	389	0	0	225,672	3.2	
SE	5.0	4.5	4.3	4.9	6.1	6.8	8.3	10.9	11.5	22.7	0	0	3.2		

Table 57.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Southwest Highlands Unit, New York, 1993

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Balsam fir	0	0	4	0	4	100.0
Spruce species	1	9	2	0	12	40.4
Red pine	2	0	0	0	2	89.8
Eastern white pine	14	1	2	0	17	43.0
Scotch pine	0	1	9	0	10	61.7
Eastern hemlock	26	4	0	0	30	34.8
Boxelder	0	0	1	0	1	80.8
Striped maple	84	11	6	0	101	27.4
Red maple	158	114	195	0	467	15.1
Silver maple	0	0	0	0	0	100.0
Sugar maple	378	304	105	0	787	12.7
Ailanthus species	0	0	0	0	0	100.0
Alder species	19	0	200	0	219	45.6
Hercules club	0	0	3	0	3	100.0
Serviceberry	106	115	31	0	252	22.9
Barberry	13	1	2	0	16	68.8
Yellow birch	40	13	0	0	53	33.8
Sweet birch	26	14	0	0	41	51.9
Paper birch	11	0	0	0	11	57.5
Gray birch	0	2	2	0	4	70.9
American hornbeam	132	249	90	0	470	20.0
Hickory species	34	11	0	0	45	26.5
Bitternut hickory	3	2	1	0	7	59.6
Shagbark hickory	0	2	0	0	2	83.6
American chestnut	4	2	0	0	6	60.5
Flowering dogwood	7	7	0	0	13	39.7
Alternate-leaved dogwood	47	16	0	0	63	48.9
Silky dogwood	0	3	0	0	3	100.0
Panicked dogwood	291	372	1,355	0	2,018	26.5
Red-osier dogwood	105	150	117	0	371	34.2
Hawthorn species	292	148	228	0	668	15.0
American hazelnut	1	4	0	0	5	58.9
Beaked hazelnut	19	8	0	0	26	53.2
American beech	470	222	23	0	714	14.7
Russian olive	0	11	0	0	11	100.0
White ash	710	660	341	0	1,711	10.7
Black ash	1	0	0	0	1	100.0
Green ash	17	0	10	0	27	61.5
Huckleberry	0	0	7	0	7	100.0
Witch-hazel	94	122	13	0	228	19.4
Large-leaved holly	1	0	0	0	1	100.0
Black walnut	0	0	0	0	0	100.0
Mountain laurel	32	0	0	0	32	69.4
Common spicebush	40	40	0	0	81	57.4
Yellow-poplar	1	0	1	0	2	71.8
Bush honeysuckle	60	61	14	0	135	30.4
Cucumbertree	11	1	0	0	12	47.8
Apple species	20	17	41	0	78	23.4
Eastern hophornbeam	136	132	38	0	306	16.1
Ninebark	0	0	23	0	23	100.0
American sycamore	0	0	5	0	5	100.0
Eastern cottonwood	0	1	0	0	1	100.0
Bigtooth aspen	7	12	0	0	19	56.3
Quaking aspen	45	69	78	0	192	23.9
Cherry species	5	1	4	0	10	44.4
Pin cherry	71	0	1	0	73	60.8
Black cherry	385	190	122	0	697	13.6
Chokecherry	1	24	23	0	49	44.9

Table 57.-continued

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
White oak	19	17	6	0	41	43.7
Bur oak	5	0	0	0	5	100.0
Chestnut oak	1	0	0	0	1	100.0
Northern red oak	49	55	6	0	111	25.4
Black oak	4	2	0	0	6	58.5
Buckthorn species	91	10	7	0	108	61.3
Smooth sumac	17	0	0	0	17	79.3
Staghorn sumac	14	2	29	0	45	49.1
Currant species	32	5	5	0	43	44.9
Black locust	1	2	0	0	3	46.3
Rose species	9	6	17	0	32	39.8
Rubus species	1,841	820	610	0	3,272	11.2
Willow species	0	19	9	0	28	58.9
Black willow	30	13	70	0	113	55.6
American elderberry	29	1	0	0	30	57.9
Sassafras	3	1	0	0	4	79.7
Spiraea species	97	0	13	0	110	82.0
American basswood	1	2	1	0	4	47.2
American elm	10	30	19	0	60	36.8
Slippery elm	0	0	1	0	1	100.0
Blueberry	133	59	14	0	205	39.2
Viburnum species	0	16	0	0	16	72.3
Maple-leaved viburnum	226	209	7	0	443	28.6
Hobblebush viburnum	0	14	0	0	14	70.7
Wild raisin	5	16	26	0	47	62.2
Arrowwood	319	431	1,035	0	1,785	21.0
Nannyberry	43	43	13	0	99	42.8
Unknown deciduous shrub	43	13	0	0	57	76.2
Unknown tree	4	8	5	0	17	44.1
All species	6,951	4,919	4,992	0	16,863	5.3
SE	8.8	11.1	15.0	.0	5.3	

Table 58.--Number of standing trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, Southwest Highlands Unit, New York, 1993

(In thousands of trees)

Species	Live trees				Dead trees			
	One or more small	One or more large	Multiple or small	Total live	One or more small	One or more large	Multiple or small	Total all trees
Red pine	0	0	0	0	0	21	0	21
White pine	133	24	38	195	195	123	227	740
Eastern hemlock	74	39	0	113	0	7	39	160
Other softwoods	26	0	0	26	0	0	0	26
Total softwoods	233	63	38	334	195	151	266	946
Red maple	1,501	1,136	375	3,013	498	58	58	3,626
Sugar maple	1,675	1,195	600	3,471	401	53	185	4,110
Yellow birch	62	68	31	161	62	0	74	297
Sweet birch	0	64	0	64	28	0	28	119
Hickory	27	0	0	27	64	0	34	125
American beech	1,378	871	887	3,136	221	223	281	3,861
White ash	361	144	164	669	40	0	50	760
Aspen	430	233	137	801	510	109	63	1,483
Black cherry	373	42	104	519	74	30	10	633
Select white oaks	21	31	8	60	137	18	16	231
Chestnut oak	0	0	0	0	0	27	0	27
Northern red oak	58	133	54	245	104	26	0	375
Other oaks	0	4	0	4	36	46	0	86
Basswood	196	194	117	508	47	27	0	582
Elm	0	0	0	0	26	0	66	92
Other commercial hardwoods	333	52	82	467	210	0	0	677
Noncommercial hardwoods	942	105	226	1,273	170	24	84	1,551
Total hardwoods	7,359	4,274	2,786	14,419	2,627	641	949	18,636
All species	7,591	4,337	2,824	14,753	2,822	792	1,215	19,582

Table 59.--Net volume of all trees on timberland by class of timber and species group, Southwest Highlands Unit, New York, 1993

(In millions of cubic feet)

Class of timber	Species group				All groups	SE
	Pines	Other softwoods	Soft hardwoods	Hard hardwoods		
Sawtimber trees:						
Sawlog portion	100.0	104.4	413.7	442.4	1,060.5	4.8
Upper stem	12.7	13.9	99.3	105.8	231.6	4.5
Total sawtimber trees	112.6	118.3	513.0	548.2	1,292.1	4.7
Poletimber trees	32.3	52.4	435.9	416.8	937.4	3.8
Total growing-stock trees	144.9	170.7	948.9	965.0	2,229.5	3.4
Rough trees:						
Sawtimber size	3.2	3.9	19.8	30.6	57.4	10.3
Poletimber size	.4	.6	5.4	30.7	37.1	11.6
Total rough trees	3.6	4.5	25.2	61.3	94.6	8.2
Rotten trees:						
Sawtimber size	.2	.5	4.5	17.4	22.6	25.8
Poletimber size	.0	.0	1.1	1.8	3.0	32.9
Total rotten trees	.2	.5	5.7	19.3	25.6	23.0
Salvable dead ^a trees:						
Sawtimber size	.7	.9	3.7	3.3	8.6	24.3
Poletimber size	2.0	.9	7.2	4.8	14.9	17.2
Total salvable dead trees	2.8	1.8	10.9	8.1	23.5	14.4
All classes	151.5	177.5	990.6	1,053.6	2,373.2	3.3
SE	24.2	15.1	5.4	5.4	3.3	

^a Includes noncommercial species.

Table 60.--Net volume of growing-stock trees on timberland by species and diameter class, Southwest Highlands Unit, New York, 1980

(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+		
Spruces	7.8	7.6	5.8	5.4	1.7	.6	.0	.0	.0	.0	28.9	45.9
Red pine	.7	5.6	9.9	10.3	3.3	.0	.0	.0	.0	.0	29.8	39.5
White pine	5.3	7.0	8.4	7.6	7.8	4.8	2.7	1.7	.4	.8	46.4	27.7
Eastern hemlock	14.9	21.0	20.5	21.2	20.0	13.1	6.0	3.0	2.7	.0	122.4	16.2
Other softwoods	5.3	7.1	2.2	.0	.0	.0	.0	.0	.0	.0	14.6	42.9
Total softwoods	34.0	48.3	46.8	44.5	32.7	18.5	8.7	4.7	3.1	.8	242.1	12.2
Red maple	30.4	36.4	40.3	43.0	25.6	14.5	6.0	4.1	8.9	1.2	210.4	11.4
Sugar maple	46.1	82.2	73.8	62.5	58.6	39.0	23.8	11.3	16.3	7.9	423.4	8.8
Yellow birch	4.5	3.1	7.0	3.2	2.2	.4	.0	.0	1.0	.0	21.3	24.9
Sweet birch	4.4	7.7	8.5	4.5	2.0	1.0	.5	.0	.0	.0	28.6	29.1
Paper birch	2.0	1.7	.0	.0	.8	.0	.0	.0	.0	.0	4.5	60.6
Hickory	6.5	7.4	8.0	6.1	8.2	2.6	3.3	.8	1.4	.0	44.3	19.3
American beech	13.9	21.9	29.1	28.4	27.7	15.1	11.4	5.4	5.9	.0	158.7	12.0
White ash	20.6	31.7	23.8	36.1	18.4	14.5	8.0	3.8	3.4	.9	161.1	11.8
Aspen	13.2	24.5	31.1	21.5	9.0	4.2	.0	.0	.0	.0	103.4	17.0
Black cherry	6.2	14.6	22.0	18.2	21.2	9.6	5.1	5.2	5.4	1.4	108.9	16.3
Select white oaks	1.3	3.9	8.1	5.8	4.2	5.3	4.4	2.9	3.7	.4	39.9	26.8
Northern red oak	5.1	13.9	19.2	30.2	30.5	21.2	15.4	14.0	13.6	3.6	166.7	16.9
Other oaks	.7	1.3	1.6	1.5	1.5	1.1	1.5	1.2	1.0	.0	11.4	51.6
Basswood	5.0	10.6	13.6	9.8	9.5	4.9	2.9	2.6	.5	1.7	61.0	19.7
Elm	.5	.3	.4	.9	.0	.0	.0	.5	.0	.0	2.6	50.8
Other hardwoods	2.4	2.1	2.1	4.5	4.9	2.7	3.1	2.8	1.8	.9	27.2	27.3
Total hardwoods	162.7	263.0	288.6	276.2	224.3	136.1	87.3	54.6	62.8	18.0	1,573.4	4.1
All species	196.7	311.2	335.4	320.6	257.0	154.6	96.0	59.2	65.9	18.8	1,815.5	3.7
SE	5.9	5.2	6.3	6.0	6.5	8.1	10.6	14.0	15.0	24.3	3.7	

Table 61.--Net volume of growing-stock trees on timberland by species and diameter class, Southwest Highlands Unit, New York, 1993

(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+		
Spruces	7.8	7.7	4.3	4.0	3.6	1.1	.4	.0	.0	.0	28.9	40.3
Red pine	1.8	3.3	4.6	7.8	5.9	2.2	.0	.0	.0	.0	25.6	48.8
White pine	5.4	13.9	12.7	16.1	18.8	10.9	11.4	1.6	5.6	6.5	102.9	32.0
Eastern hemlock	13.7	19.1	22.6	17.6	22.3	19.7	7.0	5.8	2.1	.0	130.0	18.8
Other softwoods	4.0	8.0	7.6	7.0	.8	.8	.0	.0	.0	.0	28.2	37.2
Total softwoods	32.7	52.1	51.8	52.5	51.4	34.7	18.8	7.5	7.8	6.5	315.6	12.7
Red maple	32.5	46.7	57.5	41.3	34.3	20.5	15.1	10.0	15.7	2.6	276.2	10.0
Sugar maple	39.3	73.7	89.9	62.5	60.8	36.1	20.2	16.1	26.3	13.4	438.3	9.3
Yellow birch	2.9	4.2	5.0	4.2	1.1	.3	.0	.0	.0	.0	17.7	23.2
Sweet birch	6.1	5.6	4.6	3.1	3.2	.5	.9	.0	.0	.0	23.8	21.9
Paper birch	1.2	2.1	.5	.5	.0	.0	.0	.0	.0	.0	4.2	62.7
Hickory	6.4	11.7	8.7	7.5	11.0	4.0	6.3	1.7	4.7	.0	62.1	22.0
American beech	10.5	20.7	30.8	25.0	17.0	4.8	5.9	6.2	6.0	1.8	128.7	14.7
White ash	26.5	39.6	38.1	35.2	24.0	26.9	17.3	6.6	9.6	3.8	227.6	10.3
Aspen	23.6	37.7	45.6	30.8	18.5	11.8	5.1	3.0	.0	.0	176.0	14.4
Black cherry	10.4	17.6	24.7	19.5	18.1	23.2	13.7	15.2	10.8	3.8	157.0	13.5
Select white oaks	2.6	5.7	8.1	9.6	5.6	5.2	4.9	2.2	2.7	1.3	48.0	19.4
Chestnut oak	.2	.1	1.2	1.4	.0	1.9	.0	.0	.0	.0	4.9	42.3
Northern red oak	7.6	21.5	35.6	34.5	33.2	31.4	24.0	9.6	10.8	4.7	213.0	15.5
Other oaks	1.1	1.3	.8	2.3	1.5	.7	.0	.8	.0	.4	8.9	41.2
Basswood	2.3	7.5	9.9	12.9	14.7	8.2	5.3	7.7	3.9	.0	72.4	22.2
Elm	2.4	3.3	1.8	2.1	.7	.5	.0	.0	.0	.0	10.7	19.8
Other hardwoods	3.3	5.6	6.4	8.4	3.2	1.3	4.3	3.9	5.9	2.1	44.3	22.1
Total hardwoods	179.0	304.5	369.2	300.7	246.7	177.4	123.0	83.0	96.5	33.9	1,913.9	3.8
All species	211.7	356.5	421.0	353.2	298.1	212.1	141.8	90.5	104.2	40.4	2,229.5	3.4
SE	5.2	4.7	4.6	5.2	6.5	7.3	9.3	11.4	11.9	23.9	3.4	

Table 62.--Net volume of sawtimber trees on timberland by species and diameter class, Southwest Highlands Unit, New York, 1980

Species	(In millions of board feet)										All classes	SE
	Diameter class (inches at breast height)											
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9		
Spruces	18.2	22.9	7.7	3.1	.0	.0	.0	.0	.0	.0	51.9	62.8
Red pine	34.5	41.0	14.3	.0	.0	.0	.0	.0	.0	.0	89.8	42.8
White pine	29.7	30.0	34.5	22.4	14.1	8.3	2.2	4.4	4.4	4.4	145.7	28.7
Eastern hemlock	65.6	82.7	84.2	60.2	28.4	14.8	13.6	.0	.0	.0	349.6	17.1
Other softwoods	7.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	7.5	66.0
Total softwoods	155.4	176.6	140.8	85.7	42.5	23.1	15.8	4.4	4.4	4.4	644.4	13.5
Red maple	-	168.0	110.0	64.4	28.2	21.4	46.0	6.4	6.4	6.4	444.6	14.9
Sugar maple	-	248.2	253.2	176.5	125.3	54.0	81.8	42.5	42.5	42.5	981.5	10.5
Yellow birch	-	12.7	9.4	1.6	.0	.0	4.7	.0	.0	.0	28.5	30.0
Sweet birch	-	18.2	8.3	4.1	2.6	.0	.0	.0	.0	.0	33.2	47.5
Paper birch	-	.0	3.5	.0	.0	.0	.0	.0	.0	.0	3.5	71.0
Hickory	-	26.0	34.6	12.5	16.6	4.0	7.2	.0	.0	.0	100.8	26.7
American beech	-	114.8	124.0	72.8	53.6	29.2	31.0	.0	.0	.0	425.4	14.0
White ash	-	152.8	84.7	68.8	38.9	19.2	17.6	5.0	5.0	5.0	387.1	15.0
Aspen	-	91.4	41.3	19.9	.0	.0	.0	.0	.0	.0	152.6	23.6
Black cherry	-	75.1	97.0	47.0	25.1	28.1	26.6	7.6	7.6	7.6	306.5	17.4
Select white oaks	-	23.5	18.9	24.2	21.4	14.8	18.1	2.0	2.0	2.0	122.9	33.2
Northern red oak	-	123.1	130.0	97.9	75.3	70.2	66.9	19.0	19.0	19.0	582.3	18.0
Other oaks	-	6.4	6.3	5.0	6.8	6.2	5.4	.0	.0	.0	36.2	52.5
Basswood	-	38.8	43.6	22.6	14.9	13.9	2.5	10.3	10.3	10.3	146.6	23.3
Elm	-	3.6	.0	.0	.0	2.7	.0	.0	.0	.0	6.3	78.6
Other hardwoods	-	18.3	22.7	12.5	16.6	15.1	9.6	4.9	4.9	4.9	99.6	30.1
Total hardwoods	-	1,120.8	987.6	629.7	425.4	278.6	317.4	97.6	97.6	97.6	3,857.3	5.7
All species	155.4	1,297.4	1,128.4	715.5	468.0	301.7	333.2	102.1	102.1	102.1	4,501.7	5.2
SE	19.3	6.0	6.5	8.1	10.6	14.1	15.4	24.4	24.4	24.4	5.2	

Table 63.--Net volume of sawtimber trees on timberland by species and diameter class, Southwest Highlands Unit, New York, 1993

Species	(In millions of board feet)								All classes	SE
	Diameter class (inches at breast height)									
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+		
Spruces	14.0	15.0	13.7	4.5	1.8	.0	.0	.0	48.9	41.1
Red pine	16.5	31.1	26.8	10.4	.0	.0	.0	.0	84.7	56.6
White pine	44.6	64.4	82.5	50.8	58.9	7.3	27.2	36.7	372.4	36.6
Eastern hemlock	73.8	68.7	95.1	89.6	33.7	29.0	11.2	.0	401.1	19.6
Other softwoods	25.3	27.0	3.4	3.1	.0	.0	.0	.0	58.9	40.1
Total softwoods	174.2	206.2	221.5	158.4	94.4	36.3	38.4	36.7	966.0	15.8
Red maple	-	161.4	147.7	92.6	70.5	49.2	73.5	13.5	608.3	13.3
Sugar maple	-	252.1	259.1	163.3	96.1	77.4	130.5	71.5	1,050.0	11.4
Yellow birch	-	20.2	4.4	1.2	.0	.0	.0	.0	25.8	29.6
Sweet birch	-	12.9	13.1	1.8	3.8	.0	.0	.0	31.5	28.8
Paper birch	-	1.7	.0	.0	.0	.0	.0	.0	1.7	100.0
Hickory	-	31.3	47.1	19.6	30.2	8.3	25.8	.0	162.2	31.3
American beech	-	104.0	79.8	23.3	26.7	34.2	35.5	12.6	316.1	18.4
White ash	-	147.8	110.4	128.5	82.7	31.5	47.1	22.2	570.1	14.3
Aspen	-	131.4	83.4	53.2	25.6	16.8	.0	.0	310.3	18.5
Black cherry	-	81.9	81.2	109.2	65.7	82.4	51.1	22.0	493.4	16.2
Select white oaks	-	41.6	25.0	23.4	24.0	10.9	13.6	6.9	145.5	21.1
Chestnut oak	-	5.2	.0	7.9	.0	.0	.0	.0	13.0	44.9
Northern red oak	-	138.7	141.1	139.5	114.2	47.4	53.8	23.6	658.4	18.0
Other oaks	-	8.7	5.6	2.8	.0	3.5	.0	1.7	22.2	43.6
Basswood	-	49.6	65.8	38.4	25.8	37.3	19.3	.0	236.2	26.1
Elm	-	7.6	3.0	2.1	.0	.0	.0	.0	12.6	35.7
Other hardwoods	-	31.2	14.9	6.4	19.9	20.3	28.7	12.7	134.1	23.4
Total hardwoods	-	1,227.1	1,081.7	813.0	585.2	419.2	478.8	186.6	4,791.6	5.4
All species	174.2	1,433.2	1,303.2	971.3	679.6	455.5	517.2	223.2	5,757.6	4.9
SE	13.8	5.4	6.6	7.4	9.6	11.7	12.1	24.5	4.9	

Net volume of growing-stock trees on timberland,
top five species,
Southwest Highlands Unit, New York, 1980 and 1993

Net volume of sawtimber trees on timberland,
top five species,
Southwest Highlands Unit, New York, 1980 and 1993

Table 64.--Net volume of sawtimber trees on timberland by species, size class, and tree grade, Southwest Highlands Unit, New York, 1993
(In millions of board feet)

Species	>15" Diameter at breast height					All grades	All size classes					All grades
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5		Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	
Spruces	6.2	-	-	-	.0	6.2	47.3	-	-	-	1.7	48.9
Red pine	4.6	.0	4.1	-	1.7	10.4	30.8	9.2	43.0	-	1.7	84.7
White pine	14.6	43.4	24.8	7.3	90.8	180.9	18.1	78.7	144.2	21.7	109.8	372.4
Eastern hemlock	114.3	-	-	-	49.2	163.5	314.5	-	-	-	86.6	401.1
Other softwoods	3.1	.0	.0	-	.0	3.1	25.4	.0	30.2	-	3.2	58.9
Total softwoods	142.9	43.4	28.9	7.3	141.6	364.1	436.2	87.9	217.3	21.7	202.9	966.0
Red maple	9.6	38.8	88.2	41.5	121.0	299.2	9.6	75.9	291.2	87.7	143.8	608.3
Sugar maple	41.6	119.4	123.4	40.3	214.1	538.8	41.6	192.2	474.8	99.8	241.6	1,050.0
Yellow birch	.0	.0	.0	1.2	.0	1.2	.0	.0	21.2	4.6	.0	25.8
Sweet birch	.0	.0	1.2	1.8	2.6	5.5	.0	5.7	15.6	7.6	2.6	31.5
Paper birch	.0	.0	.0	.0	.0	.0	.0	.0	1.7	.0	.0	1.7
Hickory	6.3	35.2	32.2	2.2	7.9	83.8	6.3	64.8	61.5	21.7	7.9	162.2
American beech	7.8	14.3	38.1	9.7	62.5	132.3	7.8	38.6	174.8	25.2	69.7	316.1
White ash	94.0	103.5	45.9	3.5	65.0	311.9	94.0	163.4	223.6	9.8	79.3	570.1
Aspen	25.3	23.3	26.3	16.2	4.5	95.5	25.3	45.2	164.1	67.1	8.6	310.3
Black cherry	54.9	59.0	69.1	8.7	138.6	330.3	54.9	85.6	187.0	16.1	149.9	493.4
Select white oaks	13.8	25.7	24.7	1.1	13.5	78.8	13.8	36.0	78.5	3.6	13.5	145.5
Chestnut oak	.0	2.8	2.9	2.2	.0	7.9	.0	2.8	8.0	2.2	.0	13.0
Northern red oak	162.7	128.5	42.4	2.4	42.5	378.6	162.7	232.5	208.4	4.8	49.9	658.4
Other oaks	1.7	2.8	1.9	.0	1.7	8.0	1.7	6.9	12.1	.0	1.7	22.2
Basswood	6.0	38.7	63.0	5.7	7.4	120.8	6.0	76.5	126.6	19.7	7.4	236.2
Elm	.0	.0	2.1	.0	.0	2.1	.0	.0	8.5	4.1	.0	12.6
Other hardwoods	1.9	16.3	12.6	19.2	38.1	88.0	1.9	21.2	46.2	22.7	42.2	134.1
Total hardwoods	425.6	608.4	573.9	155.5	719.4	2,482.8	425.6	1,047.2	2,103.8	396.8	818.2	4,791.6
All species	568.4	651.7	602.8	162.8	861.1	2,846.9	861.8	1,135.0	2,321.2	418.4	1,021.2	5,757.6

Table 65.--Average annual mortality^a, average annual net growth, and average annual removals of growing-stock and sawtimber volume on timberland by species, Southwest Highlands Unit, New York, 1979-92

Species	Growing stock (cu. ft.)					Sawtimber (bd. ft.)							
	Mortality	SE	Net growth	SE	Removals	SE	Mortality	SE	Net growth	SE	Removals	SE	
(In thousands of feet)													
Spruces	0	.0	1,421	50.2	0	.0	0	0	.0	1,977	52.6	0	.0
Red pine	123	77.5	513	45.5	0	.0	0	0	.0	3,037	45.7	0	.0
White pine	420	40.6	2,566	31.1	78	91.0	839	55.6	11,010	32.1	322	100.0	
Eastern hemlock	124	44.3	2,585	20.4	699	52.2	428	55.4	9,753	20.1	2,257	48.2	
Other softwoods	42	93.3	1,126	39.3	0	.0	0	0	.0	3,557	45.8	0	.0
Total softwoods	709	27.8	8,211	13.9	777	47.8	1,267	40.6	29,334	14.8	2,579	44.0	
Red maple	806	31.0	8,931	11.6	1,620	40.2	1,068	61.1	24,983	17.1	3,414	56.1	
Sugar maple	1,149	22.1	12,157	11.6	3,901	22.8	2,289	39.4	39,070	13.0	14,794	25.3	
Yellow birch	83	56.9	457	39.2	163	96.6	129	100.0	963	63.2	0	.0	
Sweet birch	146	81.7	771	29.8	0	.0	0	.0	1,719	33.5	0	.0	
Paper birch	30	100.0	24	*	27	100.0	0	.0	116	100.0	115	100.0	
Hickory	178	53.0	1,186	27.4	610	55.6	483	71.4	1,844	55.6	2,305	60.3	
American beech	787	33.8	2,703	26.3	2,051	31.7	1,831	40.2	11,869	27.8	7,741	35.1	
White ash	729	40.4	9,010	13.3	2,177	23.3	475	71.9	23,272	14.9	7,450	26.1	
Aspen	1,546	23.0	5,927	23.1	620	51.6	1,210	41.9	15,457	21.0	1,446	71.2	
Black cherry	289	43.4	6,456	17.5	2,446	25.4	468	58.0	24,024	17.1	9,629	27.8	
Select white oaks	126	48.1	1,216	39.0	878	53.4	402	57.7	5,028	27.0	3,924	53.3	
Chestnut oak	35	73.1	-22	61.3	94	100.0	0	.0	207	67.6	343	100.0	
Northern red oak	393	45.1	4,890	16.3	3,859	28.9	904	70.1	19,435	16.6	17,183	28.4	
Other oaks	130	100.0	83	*	305	58.4	262	100.0	-163	*	1,457	58.5	
Basswood	457	36.8	1,050	32.4	412	47.2	1,077	44.2	5,923	30.7	1,667	52.0	
Elm	35	100.0	804	31.7	36	100.0	143	100.0	1,113	67.1	191	100.0	
Other hardwoods	158	51.5	2,247	41.0	1,280	69.9	605	59.7	7,899	42.6	5,601	73.0	
Total hardwoods	7,077	11.6	57,890	5.3	20,479	14.3	11,347	17.5	182,760	6.0	77,261	15.5	
All species	7,787	10.8	66,102	4.8	21,256	14.4	12,613	16.6	212,095	5.3	79,840	15.4	

^a Mortality is a component of net growth.

* Sampling error is greater than 100 percent.

SOUTH-CENTRAL HIGHLANDS UNIT TABLES

Table 66.--Area of timberland by forest type, forest-type group, and stand-size class, South-central Highlands Unit, New York, 1980

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Jack pine	.0	6.1	.0	.0	6.1	100.0
Red pine	34.8	11.3	.0	.0	46.1	33.6
White pine	45.4	18.2	52.1	.0	115.7	22.2
White pine/hemlock	5.6	.0	.0	.0	5.6	100.0
Hemlock	68.9	.0	6.2	.0	75.1	27.2
Scotch pine	.0	5.5	.0	.0	5.5	100.0
White/red pine group	154.7	41.0	58.3	.0	254.0	14.4
Red spruce	.0	.0	5.9	.0	5.9	100.0
White spruce	.0	.0	14.0	.0	14.0	71.5
Norway spruce	16.8	5.3	.0	.0	22.1	50.0
Northern white-cedar	.0	.0	5.5	.0	5.5	100.0
Larch plantation	.0	5.6	5.7	.0	11.3	70.7
Spruce/fir group	16.8	11.0	31.2	.0	58.9	31.9
Eastern redcedar	.0	.0	6.5	.0	6.5	100.0
Loblolly/shortleaf group	.0	.0	6.5	.0	6.5	100.0
Wh. pine/no. red oak/wh. ash	35.3	11.2	.0	.0	46.6	35.3
Oak/pine group	35.3	11.2	.0	.0	46.6	35.3
Post, black, or bear oak	.0	5.7	.0	.0	5.7	100.0
Chestnut oak	.0	5.6	.0	.0	5.6	100.0
White oak/red oak/hickory	53.1	23.5	.0	.0	76.6	27.4
White oak	6.2	.0	.0	.0	6.2	100.0
Northern red oak	11.9	41.3	11.3	.0	64.5	30.2
Hawthorn/reverting field	.0	.0	56.9	.0	56.9	29.5
Red maple/central hardwoods	6.7	23.4	18.2	.0	48.3	35.2
Mixed central hardwoods	39.7	54.0	35.1	.0	128.8	20.4
Oak/hickory group	117.5	153.5	121.5	.0	392.5	11.0
Black ash/Amer. elm/red maple	.0	.0	11.3	.0	11.3	70.7
Red maple(lowland)	.0	.0	17.3	.0	17.3	57.7
Red maple(upland)	19.7	47.3	78.0	.0	145.1	19.5
Willow	6.1	.0	18.1	.0	24.2	50.1
Elm/ash/red maple group	25.8	47.3	124.7	.0	197.8	16.7
Sugar maple/beech/yellow birch	409.9	236.3	121.5	.0	767.6	7.0
Black cherry	26.2	.0	47.7	.0	73.9	28.6
Red maple/northern hardwoods	168.0	62.9	88.0	5.9	324.8	12.6
Pin cherry/reverting field	.0	.0	41.7	.0	41.7	37.9
Mixed northern hardwoods	62.2	81.8	52.9	.0	196.9	16.8
Northern hardwoods group	666.3	381.0	351.8	5.9	1,405.0	4.3
Aspen	12.7	11.4	35.0	.0	59.1	31.5
Aspen/birch group	12.7	11.4	35.0	.0	59.1	31.5
All forest types	1,029.1	656.4	729.0	5.9	2,420.4	1.5
SE	5.2	8.1	6.2	100.0	1.5	

Table 67.--Area of timberland by forest type, forest-type group, and stand-size class, South-central Highlands Unit, New York, 1993

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	21.0	10.2	.0	.0	31.2	39.2
White pine	59.9	35.9	5.1	.0	100.9	23.0
White pine/hemlock	18.3	5.2	.0	.0	23.5	44.2
Hemlock	104.7	3.8	.0	.0	108.5	20.6
Scotch pine	.0	.0	5.3	.0	5.3	100.0
White/red pine group	203.9	55.2	10.3	.0	269.4	12.8
White spruce	5.0	5.3	.0	.0	10.3	70.7
Norway spruce	20.8	8.3	.0	.0	29.0	40.3
Larch plantation	10.0	.0	15.7	.0	25.7	44.8
Spruce/fir group	35.8	13.6	15.7	.0	65.1	27.3
Pitch pine	5.5	.0	.0	.0	5.5	100.0
Loblolly/shortleaf group	5.5	.0	.0	.0	5.5	100.0
Wh. pine/no. red oak/wh. ash	20.6	52.5	5.8	.0	79.0	25.7
Oak/pine group	20.6	52.5	5.8	.0	79.0	25.7
White oak/red oak/hickory	15.7	5.5	.0	.0	21.2	48.8
Northern red oak	46.7	10.2	5.2	.0	62.1	28.9
Y. poplar/wh. oak/no. red oak	4.9	.0	.0	.0	4.9	100.0
Hawthorn/reverting field	4.1	.0	5.9	.0	10.0	71.8
Red maple/central hardwoods	16.2	10.9	.0	.0	27.1	44.7
Mixed central hardwoods	68.6	57.4	5.3	.0	131.3	19.8
Oak/hickory group	156.3	84.0	16.4	.0	256.7	13.5
Black ash/Amer. elm/red maple	5.5	.0	.0	.0	5.5	100.0
Red maple(upland)	51.8	24.0	45.1	.0	120.9	20.1
Willow	12.4	.0	17.0	.0	29.4	42.2
American elm/green ash	.0	.0	5.9	.0	5.9	100.0
Elm/ash/red maple group	69.8	24.0	68.0	.0	161.7	17.6
Sugar maple/beech/yellow birch	451.4	121.5	28.2	.0	601.1	7.7
Black cherry	27.6	22.2	16.4	.0	66.1	28.3
Red maple/northern hardwoods	175.4	127.4	41.5	.0	344.2	11.5
Pin cherry/reverting field	5.9	5.4	129.0	.0	140.3	18.7
Mixed northern hardwoods	179.0	92.3	60.0	.0	331.3	11.6
Northern hardwoods group	839.3	368.7	275.0	.0	1,483.0	4.0
Aspen	14.6	15.0	32.2	.0	61.9	28.9
Paper birch	.0	11.0	.0	.0	11.0	70.8
Aspen/birch group	14.6	26.0	32.2	.0	72.8	26.2
All forest types	1,345.9	623.9	423.4	.0	2,393.3	1.8
SE	3.8	7.8	9.5	.0	1.8	

**Area of timberland by stand-size class,
South-central Highlands Unit, New York, 1980 and 1993**

Million acres

**Area of timberland by forest-type group,
South-central Highlands Unit, New York, 1993**

Table 68.--Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, South-central Highlands Unit, New York, 1993

(In thousands of trees)

Species	Diameter class (inches at breast height)										All classes	SE
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+		
Balsam fir	0	50	0	0	0	0	0	0	0	0	50	100.0
Spruces	3,525	2,522	715	888	333	224	85	10	0	0	8,301	32.4
Red pine	1,077	1,953	1,811	1,132	782	215	23	0	0	0	6,995	30.6
White pine	6,183	4,535	2,435	1,536	1,250	953	634	280	452	76	18,335	13.7
Eastern hemlock	12,671	9,276	5,846	3,747	2,578	1,493	715	389	317	19	37,050	10.7
Other softwoods	1,346	893	568	600	179	130	12	0	0	0	3,728	34.1
Total softwoods	24,802	19,230	11,375	7,903	5,122	3,016	1,469	679	769	94	74,460	7.1
Red maple	34,302	22,469	13,663	7,788	4,992	2,314	1,049	480	628	91	87,777	6.1
Sugar maple	18,165	11,465	8,770	5,195	2,917	1,993	986	327	505	120	50,441	6.9
Yellow birch	2,221	1,825	1,030	658	391	109	21	25	14	3	6,297	18.0
Sweet birch	4,432	2,654	1,278	717	382	174	95	9	0	0	9,742	14.1
Paper birch	1,783	390	233	97	38	61	0	0	0	0	2,601	40.8
Hickory	1,021	723	466	337	223	95	23	18	40	10	2,955	26.9
American beech	8,876	7,141	4,028	2,903	1,270	995	495	129	100	0	25,937	10.7
White ash	8,463	6,263	4,232	3,022	1,633	927	339	109	98	9	25,094	10.3
Aspen	6,975	4,202	2,641	1,846	1,011	353	78	78	0	0	17,186	12.1
Black cherry	3,376	2,854	2,874	1,498	1,214	558	365	93	101	19	12,952	10.6
Select white oaks	719	289	169	272	307	163	108	0	34	5	2,066	29.3
Chestnut oak	460	808	535	331	237	169	37	19	0	0	2,597	30.1
Northern red oak	2,395	3,026	3,030	2,027	1,611	1,071	363	357	197	76	14,153	12.8
Other oaks	306	108	177	79	123	45	0	9	0	0	847	38.1
Basswood	1,277	748	849	954	597	419	255	87	80	11	5,277	20.6
Elm	419	416	136	19	18	0	0	0	0	0	1,007	26.4
Other hardwoods	1,341	416	758	215	178	86	25	122	88	6	3,235	27.5
Total hardwoods	96,531	65,798	44,869	27,958	17,143	9,530	4,240	1,863	1,885	349	270,167	2.7
All species	121,333	85,028	56,244	35,861	22,265	12,546	5,709	2,542	2,654	443	344,627	2.5
SE	4.3	3.8	3.7	3.8	4.4	4.9	7.6	8.9	9.2	16.5	2.5	

Table 69.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, South-central Highlands Unit, New York, 1993

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Balsam fir	12	0	0	0	12	100.0
Eastern redcedar	0	1	0	0	1	81.2
Larch	0	0	5	0	5	89.7
Spruce species	7	5	6	0	18	37.1
Red pine	2	1	1	0	5	43.8
Pitch pine	0	0	0	0	0	100.0
Eastern white pine	16	36	13	0	65	19.6
Scotch pine	0	0	6	0	6	48.8
Northern white-cedar	0	0	0	0	0	100.0
Eastern hemlock	81	13	1	0	94	26.0
Boxelder	0	0	3	0	3	100.0
Striped maple	223	86	5	0	313	16.7
Red maple	260	258	171	0	688	11.4
Silver maple	2	0	0	0	2	100.0
Sugar maple	666	258	128	0	1,052	13.8
Mountain maple	1	0	0	0	2	44.7
Alder species	7	15	92	0	114	58.4
Serviceberry	133	123	28	0	285	18.2
Chokeberry species	0	3	0	0	3	72.2
Azalea species	1	0	0	0	1	100.0
Barberry	0	0	1	0	1	100.0
Yellow birch	56	7	0	0	63	28.4
Sweet birch	85	58	7	0	151	19.9
Paper birch	6	4	7	0	17	48.4
Gray birch	0	0	1	0	1	100.0
American hornbeam	148	135	13	0	296	23.2
Hickory species	12	9	0	0	22	39.6
Bitternut hickory	0	0	0	0	0	100.0
Shagbark hickory	8	5	0	0	13	46.8
American chestnut	3	15	0	0	19	83.1
Flowering dogwood	11	5	1	0	18	40.4
Alternate-leaved dogwood	31	2	5	0	38	46.3
Panicked dogwood	277	820	1,072	0	2,169	16.6
Red-osier dogwood	86	1	79	0	167	52.1
Hawthorn species	123	139	304	0	565	13.1
American hazelnut	103	0	0	0	103	69.6
Beaked hazelnut	12	17	0	0	29	43.0
American beech	660	268	21	0	949	10.0
Russian olive	0	18	0	0	18	100.0
White ash	934	762	434	0	2,130	10.9
Green ash	0	97	19	0	116	85.3
Huckleberry	0	3	0	0	3	100.0
Witch-hazel	135	100	49	0	284	15.5

Table 69.-continued

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw- timber	Pole- timber	Sapling and seedling	Non- stocked		
Butternut	0	0	0	0	0	100.0
Black walnut	6	0	0	0	6	95.2
Mountain laurel	167	0	0	0	167	66.0
Common spicebush	7	14	0	0	21	53.4
Bush honeysuckle	30	57	191	0	279	41.2
Apple species	11	5	74	0	89	26.4
Eastern hophornbeam	321	141	33	0	495	18.0
Bigtooth aspen	0	4	0	0	4	53.7
Quaking aspen	15	53	61	0	128	24.6
Pin cherry	4	1	8	0	12	60.7
Black cherry	406	245	173	0	825	15.3
Chokecherry	31	36	76	0	143	37.6
White oak	22	13	2	0	37	26.7
Scarlet oak	0	0	0	0	0	100.0
Chestnut oak	35	13	0	0	47	45.4
Northern red oak	82	81	2	0	165	21.3
Black oak	0	2	3	0	6	56.6
Buckthorn species	89	95	6	0	191	48.1
Staghorn sumac	4	1	2	0	7	51.5
Currant species	16	28	1	0	46	40.1
Black locust	1	1	0	0	2	59.2
Rose species	33	16	14	0	63	30.1
Rubus species	2,650	1,011	1,175	0	4,837	10.2
Willow species	4	8	47	0	60	45.1
Black willow	0	0	19	0	19	61.6
American elderberry	13	0	0	0	13	76.7
Red-berried alder	13	7	0	0	20	47.8
Sassafras	0	1	0	0	1	100.0
Spirea species	306	369	496	0	1,171	21.3
American basswood	11	0	0	0	11	45.5
Elm species	0	1	0	0	1	100.0
American elm	13	5	10	0	29	30.5
Blueberry	156	292	109	0	557	25.4
Viburnum species	1	1	0	0	2	70.9
Maple-leaved viburnum	386	143	6	0	535	20.8
Hobblebush viburnum	50	19	0	0	69	38.6
Wild raisin	105	25	102	0	231	49.5
Arrowwood	60	67	63	0	191	26.9
Nannyberry	59	87	66	0	213	30.9
Unknown deciduous shrub	30	0	33	0	63	61.1
Unknown tree	0	3	0	0	3	75.1
All species	9,244	6,113	5,246	0	20,604	4.8
SE	7.2	11.4	12.5	.0	4.8	

Table 70.--Number of standing trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, South-central Highlands Unit, New York, 1993

Species	(In thousands of trees)							
	Live trees				Dead trees			
	One or more small	One or more large	Multiple or small	Total live	One or more small	One or more large	Multiple or small	Total all trees
Balsam fir	0	0	0	0	0	0	18	18
Spruces	26	0	0	26	0	0	0	26
Red pine	0	0	0	0	47	0	0	47
White pine	361	15	121	497	61	46	296	900
Eastern hemlock	205	148	18	371	29	0	36	436
Other softwoods	0	0	45	45	0	0	0	45
Total softwoods	592	163	184	939	136	46	351	1,472
Red maple	2,600	2,872	1,560	7,032	440	155	376	971
Sugar maple	771	1,700	815	3,287	438	134	337	909
Yellow birch	65	301	14	381	124	64	108	295
Sweet birch	67	147	32	246	53	0	38	91
Paper birch	83	0	0	83	0	0	0	83
Hickory	0	63	17	79	0	0	0	79
American beech	2,582	1,989	1,452	6,024	473	295	672	1,440
White ash	124	186	92	402	45	109	0	154
Aspen	159	311	33	502	327	67	193	586
Black cherry	373	179	58	609	227	56	55	337
Select white oaks	0	0	19	19	0	0	0	19
Chestnut oak	0	30	36	66	0	0	133	199
Northern red oak	100	251	77	428	80	0	27	534
Basswood	138	231	124	493	0	26	31	57
Elm	0	25	0	25	0	3	28	31
Other commercial hardwoods	114	66	55	236	69	0	50	119
Noncommercial hardwoods	1,154	231	88	1,472	121	77	143	1,813
Total hardwoods	8,331	8,581	4,471	21,383	2,395	985	2,191	26,954
All species	8,923	8,744	4,655	22,323	2,532	1,030	2,542	28,426

Table 71.--Net volume of all trees on timberland by class of timber and species group, South-central Highlands Unit, New York, 1993

(In millions of cubic feet)

Class of timber	Species group				All groups	SE
	Pines &	Other	Soft	Hard		
		softwoods	hardwoods	hardwoods		
Sawtimber trees:						
Sawlog portion	234.7	320.1	685.3	613.0	1,853.2	3.6
Upper stem	28.3	40.1	169.4	147.6	385.4	3.4
Total sawtimber trees	263.0	360.2	854.7	760.6	2,238.7	3.5
Poletimber trees	57.6	103.1	635.2	480.3	1,276.2	3.1
Total growing-stock trees	320.6	463.4	1,489.9	1,240.9	3,514.9	2.6
Rough trees:						
Sawtimber size	18.3	14.4	40.7	32.5	105.8	8.0
Poletimber size	.6	.4	11.9	26.6	39.4	10.2
Total rough trees	18.8	14.8	52.5	59.1	145.2	6.8
Rotten trees:						
Sawtimber size	.1	.2	10.5	19.8	30.6	13.8
Poletimber size	.1	.0	.7	1.3	2.1	24.8
Total rotten trees	.1	.3	11.2	21.1	32.7	13.1
Salvable dead ^a trees:						
Sawtimber size	5.0	2.2	2.0	3.6	12.9	38.1
Poletimber size	.7	1.8	7.2	4.7	14.4	18.2
Total salvable dead trees	5.7	4.0	9.3	8.3	27.3	20.9
All classes	345.3	482.5	1,563.0	1,329.3	3,720.1	2.5
SE	13.0	9.3	4.1	4.5	2.5	

^a Includes noncommercial species.

Table 72.--Net volume of growing-stock trees on timberland by species and diameter class, South-central Highlands Unit, New York, 1980
(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- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9		
Balsam fir	.9	1.5	.5	.0	.5	.0	.0	.0	.0	.0	.0	.0	3.4	72.1
Spruces	6.7	8.8	12.3	4.4	2.6	.8	.0	.0	.0	.0	.0	.0	35.6	44.0
Red pine	3.2	19.5	29.8	20.6	5.4	1.5	.0	.0	.0	.0	.0	.0	80.1	30.2
White pine	9.9	17.5	14.2	19.6	16.5	10.1	10.0	6.5	13.7	.4	.4	.4	118.5	17.2
Eastern hemlock	25.2	37.8	34.9	40.5	35.2	24.8	13.5	8.5	10.0	.9	.9	.9	231.3	11.8
Other softwoods	5.1	8.3	8.0	4.2	4.4	1.4	.0	.0	.0	.0	.0	.0	31.3	35.2
Total softwoods	51.1	93.4	99.6	89.3	64.6	38.7	23.5	15.0	23.7	1.3	500.3	8.7		
Red maple	72.2	106.7	109.7	100.6	72.7	41.1	18.8	10.5	17.7	8.9	558.9	6.8		
Sugar maple	40.6	70.3	92.3	93.8	78.8	39.6	22.1	7.7	18.7	2.2	466.1	7.8		
Yellow birch	4.6	10.2	8.5	7.0	4.9	2.7	1.6	2.0	.8	.0	42.2	16.9		
Sweet birch	6.3	8.7	16.7	8.7	1.6	3.5	1.5	.4	.0	.0	47.4	15.4		
Paper birch	1.9	2.1	1.9	2.7	2.6	1.1	.0	.0	.0	.0	12.4	32.3		
Hickory	4.7	7.9	4.1	4.1	3.0	2.0	.0	.0	1.5	.0	27.3	29.7		
American beech	14.7	37.9	44.7	39.7	31.6	20.5	12.5	7.2	4.5	.0	213.3	10.7		
White ash	17.1	32.0	41.0	31.4	25.4	15.9	6.3	4.7	4.3	.0	178.2	9.7		
Aspen	18.2	20.5	20.5	18.5	16.8	7.8	1.0	.5	.5	.0	104.3	14.8		
Black cherry	8.1	14.3	21.8	22.5	21.2	10.6	5.3	.0	2.4	.0	106.1	15.9		
Select white oaks	1.4	2.5	2.5	7.4	8.3	5.7	3.9	1.5	1.2	.0	34.3	22.6		
Chestnut oak	2.1	8.9	8.1	10.6	6.7	6.5	2.0	.4	.0	.0	45.3	20.8		
Northern red oak	10.3	22.9	49.2	39.8	35.1	29.3	19.5	8.7	11.1	3.0	228.8	12.9		
Other oaks	1.0	3.3	6.2	5.2	1.4	.5	.0	.0	.4	.0	17.9	49.8		
Basswood	3.3	12.2	12.9	15.2	16.4	8.8	9.1	2.5	1.7	.4	82.4	17.7		
Elm	1.7	1.6	1.6	.4	.0	.4	.0	.8	.0	.0	6.4	45.8		
Other hardwoods	1.5	2.6	2.3	2.2	.9	.5	.9	1.2	.4	.4	12.8	36.9		
Total hardwoods	209.7	364.4	443.9	409.6	327.5	196.4	104.5	48.1	65.2	14.9	2,184.3	2.9		
All species	260.8	457.7	543.5	499.0	392.2	235.1	128.0	63.1	88.8	16.2	2,684.5	2.5		
SE	4.6	3.9	4.4	4.5	4.9	6.3	9.1	10.2	11.6	23.3	2.5			

Table 73.--Net volume of growing-stock trees on timberland by species and diameter class, South-central Highlands Unit, New York, 1993

Species	(In millions of cubic feet)											All classes	SE
	Diameter class (inches at breast height)												
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+			
Balsam fir	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.4	100.0	
Spruces	8.5	14.7	8.0	14.6	8.2	6.9	3.1	.4	.0	.0	64.4	34.5	
Red pine	3.8	15.1	23.3	23.3	23.3	8.4	1.2	.0	.0	.0	98.4	30.7	
White pine	12.6	22.3	23.4	23.4	28.2	25.5	24.0	12.1	30.4	10.4	212.4	14.5	
Eastern hemlock	29.4	46.9	58.5	58.1	60.6	46.4	30.5	19.2	23.9	2.2	375.7	10.9	
Other softwoods	2.7	4.4	5.7	10.3	4.8	4.4	.4	.0	.0	.0	32.8	38.2	
Total softwoods	57.0	103.8	118.9	129.7	125.2	91.6	59.2	31.7	54.3	12.6	784.0	7.4	
Red maple	76.2	127.7	142.1	130.8	116.5	73.1	40.7	23.8	36.8	8.8	776.3	6.4	
Sugar maple	46.4	69.1	96.1	91.4	71.3	66.1	39.1	15.5	33.9	11.9	540.7	7.5	
Yellow birch	5.1	10.1	10.2	11.0	8.8	3.4	.8	1.0	.8	.7	52.0	15.3	
Sweet birch	12.1	17.9	14.4	12.5	9.7	5.8	3.7	.4	.0	.0	76.7	13.6	
Paper birch	5.0	2.9	2.9	1.2	.9	1.5	.0	.0	.0	.0	14.4	34.1	
Hickory	2.6	5.0	5.2	5.9	5.7	2.9	.8	.9	3.8	1.1	33.8	28.2	
American beech	18.4	39.7	41.4	51.0	31.5	32.8	19.7	7.1	6.7	.0	248.3	10.0	
White ash	23.7	40.2	47.5	52.7	40.8	31.8	13.8	5.7	6.1	.9	263.1	10.1	
Aspen	22.1	30.6	33.5	32.9	26.2	11.7	3.2	3.4	.0	.0	163.7	11.1	
Black cherry	8.3	16.2	30.1	27.6	32.0	17.7	15.0	4.8	6.5	2.2	160.3	12.3	
Select white oaks	1.9	1.6	1.7	4.2	7.2	4.7	3.9	.0	1.6	.2	26.8	22.3	
Chestnut oak	1.8	4.5	5.0	5.0	5.0	4.5	1.1	.8	.0	.0	27.6	26.6	
Northern red oak	6.8	18.9	34.6	33.0	37.8	31.5	14.8	17.0	13.7	7.8	215.8	12.7	
Other oaks	.7	.6	1.7	1.2	2.9	1.0	.0	.4	.0	.0	8.4	34.2	
Basswood	3.0	5.7	10.6	19.1	16.7	14.2	10.3	4.6	4.7	1.1	90.1	18.1	
Elm	.6	1.6	1.1	.3	.4	.0	.0	.0	.0	.0	4.0	26.4	
Other hardwoods	2.2	2.1	6.3	2.5	3.5	2.0	1.1	5.0	3.6	.4	28.8	30.2	
Total hardwoods	236.8	394.4	484.3	482.3	416.8	304.7	167.9	90.5	118.1	35.0	2,730.9	2.9	
All species	293.8	498.2	603.2	611.9	542.0	396.3	227.2	122.2	172.5	47.7	3,514.9	2.6	
SE	4.4	4.0	3.9	4.1	4.8	5.5	8.2	9.3	10.0	17.7	2.6		

Table 74.--Net volume of sawtimber trees on timberland by species and diameter class, South-central Highlands Unit, New York, 1980
(In millions of board feet)

Species	Diameter class (inches at breast height)										All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9		
Balsam fir	1.8	.0	2.6	.0	.0	.0	.0	.0	.0	.0	4.4	71.9
Spruces	37.2	16.3	10.2	3.7	.0	.0	.0	.0	.0	.0	67.4	49.9
Red pine	100.2	83.7	24.0	7.0	.0	.0	.0	.0	.0	.0	214.9	34.2
White pine	47.3	80.2	73.8	46.9	46.8	32.0	70.7	2.3	399.8	20.8	673.4	12.8
Eastern hemlock	108.0	151.2	145.9	110.8	61.0	40.8	50.6	.0	63.1	45.3	1,423.0	10.3
Other softwoods	24.3	15.3	17.4	6.1	.0	.0	.0	.0	.0	.0	7.3	71.9
Total softwoods	318.9	346.7	273.9	174.4	107.8	72.8	121.2	7.3	1,423.0	10.3	7.3	71.9
Red maple	-	418.6	321.3	189.5	90.5	52.4	89.4	48.3	1,210.1	9.7	48.3	9.7
Sugar maple	-	397.0	345.5	184.3	109.7	39.9	96.7	12.1	1,185.2	8.9	12.1	8.9
Yellow birch	-	30.1	21.4	11.8	7.1	9.6	4.2	.0	84.3	26.6	.0	26.6
Sweet birch	-	37.7	7.2	15.9	6.8	2.1	.0	.0	69.8	23.7	.0	23.7
Paper birch	-	11.3	11.6	5.0	.0	.0	.0	.0	28.0	35.0	.0	35.0
Hickory	-	17.5	13.1	9.1	.0	.0	9.3	.0	49.0	48.0	.0	48.0
American beech	-	173.9	147.9	97.7	63.8	37.0	26.0	.0	546.3	12.7	.0	12.7
White ash	-	139.7	117.4	76.2	29.9	20.6	22.7	.0	406.4	12.8	.0	12.8
Aspen	-	82.7	78.2	37.8	4.8	2.4	2.4	.0	208.3	20.1	.0	20.1
Black cherry	-	96.5	98.0	50.8	27.7	.0	13.6	.0	286.6	18.3	.0	18.3
Select white oaks	-	29.3	37.4	25.0	18.9	7.4	6.1	.0	124.0	24.1	.0	24.1
Chestnut oak	-	39.0	26.9	27.7	9.6	1.9	.0	.0	104.9	23.2	.0	23.2
Northern red oak	-	156.5	147.0	128.9	92.2	39.5	56.1	16.2	636.5	12.5	.0	12.5
Other oaks	-	20.5	5.7	2.1	.0	.0	2.0	.0	30.3	41.3	.0	41.3
Basswood	-	65.3	76.7	42.2	46.1	14.0	8.1	2.0	254.4	19.2	.0	19.2
Elm	-	1.4	.0	1.6	.0	3.9	.0	.0	6.8	50.0	.0	50.0
Other hardwoods	-	8.8	4.1	2.0	4.4	5.7	2.0	2.0	29.0	52.8	.0	52.8
Total hardwoods	-	1,725.9	1,459.6	907.5	511.3	236.4	338.5	80.7	5,259.8	4.3	80.7	4.3
All species	318.9	2,072.6	1,733.5	1,081.9	619.1	309.2	459.7	88.0	6,682.8	3.7	88.0	3.7
SE	15.6	4.5	4.9	6.3	9.1	10.2	11.6	23.2	3.7	3.7	23.2	3.7

Table 75.--Net volume of sawtimber trees on timberland by species and diameter class, South-central Highlands Unit, New York, 1993

(In millions of board feet)

Species	Diameter class (inches at breast height)							All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+	
Spruces	23.7	50.7	33.2	30.9	12.8	2.0	.0	.0	153.2
Red pine	83.5	97.8	107.6	39.7	6.1	.0	.0	.0	334.8
White pine	76.1	93.0	123.3	119.7	112.3	60.9	159.1	59.1	803.5
Eastern hemlock	182.3	218.3	250.2	206.1	139.0	90.2	118.7	12.5	1,217.3
Other softwoods	18.3	40.3	19.4	18.4	1.9	.0	.0	.0	98.3
Total softwoods	383.9	500.1	533.7	414.8	272.1	153.1	277.8	71.6	2,607.1
Red maple	-	541.7	515.8	331.5	194.5	116.4	183.9	51.5	1,935.4
Sugar maple	-	388.9	320.5	312.8	193.8	78.8	174.0	62.8	1,531.6
Yellow birch	-	46.7	39.0	14.4	3.3	5.5	4.6	3.2	116.8
Sweet birch	-	54.8	40.5	26.1	17.1	1.7	.0	.0	140.2
Paper birch	-	5.4	3.9	6.3	.0	.0	.0	.0	15.6
Hickory	-	25.6	25.9	13.9	4.1	4.2	21.4	5.7	100.7
American beech	-	220.9	147.0	159.1	99.2	38.6	37.0	.0	701.7
White ash	-	229.1	187.0	152.4	65.7	25.3	32.1	4.7	696.3
Aspen	-	147.5	123.7	53.7	15.6	15.2	.0	.0	355.7
Black cherry	-	117.3	151.3	86.6	76.6	26.2	37.3	13.1	508.4
Select white oaks	-	16.0	33.3	21.2	19.0	.0	8.5	1.0	99.0
Chestnut oak	-	18.7	20.1	19.5	5.3	3.6	.0	.0	67.2
Northern red oak	-	131.5	160.0	138.0	67.2	75.5	66.2	42.3	680.8
Other oaks	-	4.4	11.0	4.3	.0	1.1	.0	.0	20.8
Basswood	-	80.6	78.1	67.5	50.7	24.9	21.0	5.6	328.3
Elm	-	1.0	1.6	.0	.0	.0	.0	.0	2.6
Other hardwoods	-	10.6	15.9	8.0	5.6	24.3	19.7	2.4	86.4
Total hardwoods	-	2,040.7	1,874.7	1,415.3	817.6	441.3	605.6	192.3	7,387.5
All species	383.9	2,540.8	2,408.3	1,830.1	1,089.7	594.4	883.4	264.0	9,994.6
SE	11.2	4.2	4.9	5.7	8.1	9.3	9.6	17.5	3.6

**Net volume of growing-stock trees on timberland,
top five species,
South-central Highlands Unit, New York, 1980 and 1993**

**Net volume of sawtimber trees on timberland,
top five species,
South-central Highlands Unit, New York, 1980 and 1993**

Table 76.--Net volume of sawtimber trees on timberland by species, size class, and tree grade, South-central Highlands Unit, New York, 1993

Species	(In millions of board feet)									
	>15" Diameter at breast height					All size classes				
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	Grade 1	Grade 2	Grade 3	All grades
Spruces	28.9	-	-	-	16.7	45.6	117.9	-	-	153.2
Red pine	35.7	6.0	2.4	-	1.8	45.9	200.8	59.0	73.2	334.8
White pine	23.4	45.8	91.7	89.7	260.5	511.1	38.3	78.7	219.2	803.5
Eastern hemlock	409.4	-	-	-	157.1	566.5	992.2	-	-	1,217.3
Other softwoods	17.0	.0	3.3	-	.0	20.3	79.4	.0	17.9	98.3
Total softwoods	514.4	51.8	97.3	89.7	436.2	1,189.4	1,428.6	137.7	310.2	2,607.1
Red maple	124.9	202.8	212.3	52.3	285.6	877.9	124.9	411.7	891.5	1,935.4
Sugar maple	165.4	251.4	144.7	59.9	200.8	822.2	165.4	423.5	584.8	1,531.6
Yellow birch	2.3	6.7	9.6	3.5	9.0	31.1	2.3	26.3	67.6	116.8
Sweet birch	12.3	19.1	10.6	.0	3.0	45.0	12.3	30.2	90.9	140.2
Paper birch	.0	.0	.0	3.2	3.1	6.3	.0	2.3	2.9	15.6
Hickory	22.5	7.4	3.7	4.0	11.5	49.2	22.5	25.6	28.2	100.7
American beech	43.4	71.5	89.6	47.9	81.3	333.8	43.4	120.2	300.2	701.7
White ash	113.1	100.5	22.1	1.1	43.4	280.2	113.1	224.0	276.2	696.3
Aspen	6.5	35.6	25.6	13.5	3.2	84.4	6.5	85.7	206.8	355.7
Black cherry	80.6	77.4	18.8	8.0	54.9	239.7	80.6	169.2	162.3	508.4
Select white oaks	20.2	20.6	.0	2.6	6.3	49.7	20.2	48.3	14.7	99.0
Chestnut oak	6.4	14.0	5.2	2.7	.0	28.4	6.4	26.8	31.2	67.2
Northern red oak	157.6	137.2	37.9	7.4	49.2	389.3	157.6	253.8	194.3	680.8
Other oaks	.0	1.6	2.7	1.1	.0	5.4	.0	11.1	8.6	20.8
Basswood	44.6	53.5	22.9	6.9	41.8	169.6	44.6	108.0	122.9	328.3
Elm	.0	.0	.0	.0	.0	.0	.0	.0	2.6	2.6
Other hardwoods	5.5	5.7	11.5	25.4	11.8	60.0	5.5	8.8	27.4	86.4
Total hardwoods	805.4	1,004.9	617.2	239.6	805.0	3,472.1	805.4	1,975.5	3,013.4	7,387.5
All species	1,319.8	1,056.7	714.6	329.3	1,241.1	4,661.5	2,234.0	2,113.2	3,323.7	9,994.6

Table 77.--Average annual mortality^a, average annual net growth, and average annual removals of growing-stock and sawtimber volume on timberland by species, South-central Highlands Unit, New York, 1979-92

(In thousands of feet)

Species	Growing stock (cu. ft.)					Sawtimber (bd. ft.)				
	Mortality	SE	Net growth	SE	Removals	SE	Mortality	SE	Net growth	SE
Balsam fir	111	73.0	-114	73.3	101	100.0	192	100.0	-192	100.0
Spruces	61	66.2	2,824	31.1	163	90.5	0	.0	7,985	37.5
Red pine	414	52.1	989	39.8	1,339	61.2	1,188	54.2	6,877	34.8
White pine	860	32.7	6,659	17.6	1,278	43.1	3,120	37.8	27,797	19.0
Eastern hemlock	733	28.4	10,915	12.1	1,796	37.1	1,653	37.8	40,951	12.7
Other softwoods	52	68.8	1,337	32.6	425	78.0	98	100.0	4,263	36.4
Total softwoods	2,231	20.7	22,611	8.4	5,103	25.9	6,250	25.4	87,681	9.0
Red maple	1,560	15.5	23,975	6.6	4,345	18.4	3,056	27.7	75,341	8.7
Sugar maple	3,382	24.9	13,206	12.2	4,047	16.8	8,578	26.3	50,623	12.8
Yellow birch	396	29.2	999	26.4	289	50.6	377	57.3	3,702	25.6
Sweet birch	301	37.1	1,823	17.5	241	36.3	425	58.6	4,915	23.3
Paper birch	103	65.0	490	45.4	37	100.0	0	.0	745	54.1
Hickory	51	72.0	790	35.4	46	100.0	131	100.0	3,235	34.3
American beech	1,980	19.7	6,007	13.9	3,112	32.3	6,335	24.9	20,638	17.7
White ash	767	30.9	9,495	11.1	1,911	22.7	1,735	43.4	32,561	13.1
Aspen	2,157	21.9	4,171	19.5	826	44.3	3,321	44.4	14,005	19.6
Black cherry	388	40.2	5,021	13.4	1,042	21.9	1,449	58.3	19,994	17.1
Select white oaks	141	41.2	479	34.2	459	34.8	378	58.6	2,249	29.2
Chestnut oak	449	37.6	197	96.5	673	52.1	641	69.0	1,795	43.1
Northern red oak	419	29.5	5,667	12.9	2,407	23.3	666	45.4	25,966	12.5
Other oaks	144	66.6	213	76.1	36	86.5	377	72.9	889	64.7
Basswood	889	27.8	894	41.7	613	43.8	2,292	37.4	6,022	28.5
Elm	94	41.0	183	46.5	74	57.3	0	.0	282	71.4
Other hardwoods	98	48.6	893	33.8	276	50.1	0	.0	2,997	42.4
Total hardwoods	13,320	9.0	74,505	3.8	20,437	11.1	29,764	13.0	265,958	4.5
All species	15,551	8.4	97,116	3.5	25,540	10.6	36,014	11.8	353,639	3.9
										11.2

^a Mortality is a component of net growth.

* Sampling error is greater than 100 percent.

ST. LAWRENCE/ NORTHERN ADIRONDACK UNIT TABLES

Table 78.--Area of timberland by forest type, forest-type group, and stand-size class, St. Lawrence/No. Adirondack Unit, New York, 1980

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Jack pine	.0	.0	19.4	.0	19.4	55.6
Red pine	30.8	6.5	15.6	.0	52.9	35.7
White pine	35.4	13.3	80.9	.0	129.5	21.6
White pine/hemlock	46.2	.0	6.5	.0	52.7	35.5
Hemlock	23.9	7.5	29.2	.0	60.5	33.4
Scotch pine	6.4	.0	5.4	.0	11.8	71.0
White/red pine group	142.6	27.3	156.9	.0	326.8	12.7
Balsam fir	6.5	46.9	6.5	.0	59.8	31.5
Red spruce	19.4	34.6	13.0	.0	67.0	28.5
Red spruce/balsam fir	30.1	18.5	5.5	.0	54.1	33.2
White spruce	.0	5.5	.0	.0	5.5	100.0
Black spruce	.0	.0	5.5	.0	5.5	100.0
Northern white-cedar	13.5	24.9	52.4	.0	90.8	26.5
Tamarack	.0	.0	6.5	.0	6.5	100.0
Larch plantation	.0	.0	6.5	.0	6.5	100.0
Spruce/fir group	69.4	130.4	96.1	.0	295.9	12.4
Eastern redcedar	.0	.0	10.0	.0	10.0	100.0
Pitch pine	.0	7.0	.0	.0	7.0	100.0
Loblolly/shortleaf group	.0	7.0	10.0	.0	17.1	71.8
Wh. pine/no. red oak/wh. ash	.0	7.0	.0	.0	7.0	100.0
Oak/pine group	.0	7.0	.0	.0	7.0	100.0
White oak/red oak/hickory	7.5	.0	6.5	.0	13.9	70.9
White oak	.0	.0	7.5	.0	7.5	100.0
Northern red oak	.0	6.5	.0	.0	6.5	100.0
Hawthorn/reverting field	.0	.0	13.9	.0	13.9	70.9
Mixed central hardwoods	6.0	12.2	12.9	.0	31.1	44.3
Oak/hickory group	13.4	18.6	40.8	.0	72.9	29.5
Black ash/Amer. elm/red maple	15.4	24.6	80.2	.0	120.2	23.1
Red maple(lowland)	.0	6.4	20.7	.0	27.1	50.1
Red maple(upland)	12.0	5.7	6.5	.0	24.2	50.3
Willow	7.5	.0	43.2	.0	50.7	37.6
Elm/ash/red maple group	34.9	36.7	150.5	.0	222.1	16.7
Sugar maple/beech/yellow birch	417.5	153.0	78.3	.0	648.8	8.0
Black cherry	37.7	19.3	33.3	.0	90.3	26.3
Red maple/northern hardwoods	137.2	200.5	23.3	.0	361.1	12.0
Pin cherry/reverting field	.0	.0	36.1	.0	36.1	45.0
Mixed northern hardwoods	57.8	37.6	84.9	.0	180.3	18.2
Northern hardwoods group	650.2	410.4	256.0	.0	1,316.6	4.6
Aspen	32.6	50.0	96.4	.0	178.9	18.1
Paper birch	.0	7.0	6.5	.0	13.5	70.8
Gray birch	.0	.0	56.1	.0	56.1	33.0
Aspen/birch group	32.6	57.0	158.9	.0	248.5	15.1
All forest types	943.2	694.5	869.2	.0	2,506.9	1.6
SE	5.7	7.6	6.2	.0	1.6	

Table 79.--Area of timberland by forest type, forest-type group, and stand-size class, St. Lawrence/No. Adirondack Unit, New York, 1993

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	21.5	5.5	5.6	.0	32.6	40.3
White pine	65.0	21.8	16.6	.0	103.4	22.7
White pine/hemlock	39.2	10.9	.0	.0	50.1	32.8
Hemlock	30.9	23.4	10.7	.0	65.0	28.3
Scotch pine	5.2	4.9	5.4	.0	15.5	57.8
White/red pine group	161.9	66.5	38.3	.0	266.7	13.3
Balsam fir	10.1	21.7	.0	.0	31.8	40.9
Red spruce	11.3	20.4	.0	.0	31.7	40.4
Red spruce/balsam fir	21.7	5.3	5.0	.0	32.0	40.2
White spruce	.0	10.6	.0	.0	10.6	70.8
Black spruce	.0	.0	10.0	.0	10.0	70.7
Northern white-cedar	42.6	15.9	5.6	.0	64.1	28.5
Tamarack	5.0	.0	.0	.0	5.0	100.0
Spruce/fir group	90.8	73.8	20.5	.0	185.0	15.9
Eastern redcedar	.0	.0	5.1	.0	5.1	100.0
Loblolly/shortleaf group	.0	.0	5.1	.0	5.1	100.0
Wh. pine/no. red oak/wh. ash	5.1	11.1	.0	.0	16.3	57.8
Oak/pine group	5.1	11.1	.0	.0	16.3	57.8
White oak/red oak/hickory	5.2	.0	.0	.0	5.2	100.0
Northern red oak	10.7	10.4	.0	.0	21.1	48.5
Mixed central hardwoods	26.8	27.4	10.7	.0	64.9	28.5
Oak/hickory group	42.7	37.7	10.7	.0	91.2	23.7
Atlantic white cedar	.0	.0	5.6	.0	5.6	100.0
Oak/gum/cypress group	.0	.0	5.6	.0	5.6	100.0
Black ash/Amer. elm/red maple	11.8	43.4	48.4	.0	103.6	22.4
Red maple(lowland)	.0	5.2	.0	.0	5.2	100.0
Red maple(upland)	16.6	41.5	5.7	.0	63.8	28.9
Willow	5.4	.0	22.3	.0	27.7	44.5
American elm/green ash	.0	4.9	10.8	.0	15.7	57.8
Elm/ash/red maple group	33.8	95.0	87.2	.0	215.9	15.1
Sugar maple/beech/yellow birch	427.6	242.3	43.4	.0	713.3	7.1
Black cherry	67.8	22.4	11.0	.0	101.2	23.1
Red maple/northern hardwoods	136.8	149.3	32.2	.0	318.3	12.4
Pin cherry/reverting field	.0	.0	156.1	.0	156.1	17.7
Mixed northern hardwoods	71.8	102.8	41.0	.0	215.7	15.3
Northern hardwoods group	703.9	516.8	283.7	.0	1,504.5	4.0
Aspen	39.2	86.0	42.4	.0	167.6	17.5
Paper birch	5.3	4.7	.0	.0	10.0	70.8
Gray birch	.0	5.1	31.7	.0	36.8	37.8
Aspen/birch group	44.5	95.8	74.1	.0	214.3	15.2
All forest types	1,082.7	896.8	525.2	.0	2,504.6	1.8
SE	5.0	6.1	8.6	.0	1.8	

**Area of timberland by stand-size class,
St. Lawrence/No. Adirondack Unit, New York, 1980 and 1993**

Million acres

**Area of timberland by forest-type group,
St. Lawrence/No. Adirondack Unit, New York, 1993**

Table 80.---Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, St. Lawrence/No. Adirondack Unit, New York, 1993

Species	(In thousands of trees)											All classes	SE		
	Diameter class (inches at breast height)														
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+					
Balsam fir	10,330	5,180	2,442	907	351	26	0	19	0	0	19,255	0	0	19,255	15.8
Spruces	8,554	5,440	2,421	1,141	701	236	146	21	73	0	18,733	21	0	18,733	16.2
Red pine	822	1,288	1,219	968	254	155	0	0	0	0	4,706	0	0	4,706	42.7
White pine	2,397	2,012	1,407	1,227	651	686	396	285	344	73	9,478	285	73	9,478	19.6
Eastern hemlock	4,894	3,496	1,782	1,182	952	642	419	262	187	18	13,834	262	18	13,834	17.0
Other softwoods	10,404	4,929	2,215	1,350	617	279	81	49	0	0	19,924	49	0	19,924	19.4
Total softwoods	37,402	22,345	11,487	6,775	3,525	2,023	1,042	636	604	91	85,931	636	91	85,931	8.2
Red maple	27,186	21,131	11,190	5,345	3,155	1,331	544	295	146	41	70,364	295	41	70,364	7.2
sugar maple	17,070	14,600	10,514	5,675	3,117	2,038	1,130	600	562	37	55,344	600	37	55,344	8.0
Yellow birch	4,512	3,172	2,697	1,492	795	307	317	102	119	16	13,529	102	16	13,529	11.5
Sweet birch	0	0	0	28	0	0	0	0	0	0	28	0	0	28	100.0
Paper birch	3,611	2,485	1,370	523	240	41	12	0	7	0	8,289	0	0	8,289	18.1
Hickory	1,233	1,027	564	268	182	40	0	50	0	0	3,364	50	0	3,364	29.2
American beech	12,849	6,895	4,455	2,472	1,124	495	313	266	132	5	29,006	266	5	29,006	12.4
White ash	5,373	3,233	1,911	1,279	461	309	105	56	58	28	12,813	56	28	12,813	14.7
Aspen	6,462	4,529	3,883	2,867	2,031	764	173	220	102	0	21,030	220	0	21,030	13.7
Black cherry	3,439	3,132	2,686	1,845	1,754	861	535	162	105	10	14,530	162	10	14,530	12.5
Select white oaks	165	316	178	76	0	45	23	28	35	13	879	28	13	879	34.1
Northern red oak	706	1,412	1,252	658	323	143	148	73	49	10	4,773	73	10	4,773	27.4
Basswood	2,494	787	937	792	409	221	158	123	84	2	6,009	123	2	6,009	18.4
Elm	5,211	2,161	521	131	68	14	0	29	0	0	8,135	29	0	8,135	16.8
Other hardwoods	6,153	1,993	1,247	464	155	137	122	29	135	4	10,438	29	4	10,438	24.6
Total hardwoods	96,463	66,875	43,405	23,914	13,814	6,746	3,580	2,033	1,535	168	258,531	2,033	168	258,531	3.3
All species	133,865	89,219	54,891	30,689	17,339	8,770	4,622	2,669	2,139	258	344,462	2,669	258	344,462	2.9
SE	4.5	3.8	3.8	4.6	5.2	6.3	7.7	9.1	10.0	22.8	2.9				

Table 81.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, St. Lawrence/No. Adirondack Unit, New York, 1993

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Balsam fir	218	317	126	0	661	16.2
Atlantic white cedar	0	0	3	0	3	100.0
Common juniper	7	0	24	0	31	69.7
Eastern redcedar	0	1	4	0	6	71.8
Larch	6	17	2	0	25	70.0
Spruce species	143	233	135	0	511	32.3
Red pine	0	1	0	0	1	100.0
Eastern white pine	58	18	7	0	83	34.7
Scotch pine	0	0	2	0	2	83.3
Northern white-cedar	85	180	128	0	393	28.8
Eastern hemlock	48	27	2	0	77	24.6
Boxelder	1	0	3	0	4	61.1
Black maple	9	0	0	0	9	96.1
Striped maple	593	290	27	0	911	12.7
Red maple	427	616	169	0	1,213	9.0
Silver maple	2	9	21	0	32	69.4
Sugar maple	1,270	949	71	0	2,290	11.9
Mountain maple	28	32	1	0	61	31.9
Alder species	132	178	166	0	476	26.3
Serviceberry	111	154	122	0	387	16.5
Bog rosemary	0	0	6	0	6	100.0
Chokeberry species	0	3	0	0	3	73.9
Barberry	0	0	3	0	3	100.0
Yellow birch	239	81	11	0	331	16.5
Sweet birch	0	4	0	0	5	93.0
Paper birch	30	65	7	0	102	41.4
Gray birch	37	62	134	0	233	28.0
American hornbeam	87	53	5	0	145	25.2
Hickory species	15	10	3	0	29	24.3
Bitternut hickory	3	8	0	0	11	59.7
American chestnut	0	0	4	0	4	100.0
Sweetfern	0	0	2	0	2	100.0
Flowering dogwood	5	8	3	0	17	31.2
Alternate-leaved dogwood	12	21	12	0	46	34.0
Silky dogwood	8	10	61	0	80	48.3
Round-leaved dogwood	0	0	2	0	2	70.7
Panicked dogwood	109	252	1,596	0	1,957	25.9
Red-osier dogwood	24	85	572	0	681	33.1
Hawthorn species	7	36	123	0	167	28.9
American hazelnut	9	11	0	0	21	45.7
Beaked hazelnut	9	11	0	0	20	59.2
Leatherwood	0	2	0	0	2	71.2
American beech	1,368	369	66	0	1,803	12.4
Russian olive	0	0	1	0	1	100.0
White ash	323	371	202	0	895	11.6
Black ash	2	31	51	0	84	50.3
Green ash	49	11	48	0	108	44.5
Witch-hazel	25	118	12	0	156	42.7
Large-leaved holly	0	18	10	0	28	73.7
Winterberry holly	67	21	0	0	89	79.7
Butternut	0	1	0	0	1	79.8
Black walnut	0	1	0	0	1	100.0
Sheep laurel	0	0	5	0	5	100.0
Labrador tea	0	0	38	0	38	100.0
Bush honeysuckle	239	144	85	0	468	34.0
Apple species	1	16	46	0	63	23.3
Blackgum	0	1	0	0	1	100.0
Eastern hophornbeam	112	101	4	0	217	16.0
Balsam poplar	17	9	3	0	30	54.1
Eastern cottonwood	5	0	0	0	5	80.8
Bigtooth aspen	22	29	10	0	61	26.9

Table 81.-continued

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw- timber	Pole- timber	Sapling and seedling	Non- stocked		
Quaking aspen	61	66	119	0	247	17.3
Cherry species	16	31	46	0	93	34.5
Pin cherry	31	39	16	0	86	39.4
Black cherry	430	398	174	0	1,003	10.7
Chokecherry	75	178	125	0	377	18.7
White oak	4	4	1	0	9	46.8
Swamp white oak	0	0	0	0	1	70.7
Northern red oak	34	30	0	0	64	28.2
Black oak	0	2	0	0	2	70.8
Buckthorn species	55	181	494	0	730	48.7
Smooth sumac	0	0	1	0	1	100.0
Staghorn sumac	1	10	24	0	35	46.8
Currant species	37	51	23	0	111	24.2
Black locust	1	0	1	0	2	71.0
Rose species	10	6	0	0	16	67.8
Rubus species	1,152	1,256	931	0	3,339	11.5
Willow species	20	23	302	0	345	25.7
Black willow	0	6	60	0	66	58.5
American elderberry	10	16	1	0	27	44.3
Red-berried alder	2	0	0	0	2	100.0
Sassafras	0	6	0	0	6	100.0
American mountain-ash	0	8	0	0	8	78.8
Spiraea species	147	488	2,311	0	2,946	18.6
American basswood	49	43	19	0	111	26.2
American elm	77	73	84	0	234	14.2
Slippery elm	29	3	2	0	33	56.7
American bladdernut	0	11	20	0	31	73.5
Blueberry	177	350	181	0	709	22.8
Viburnum species	19	12	38	0	69	61.0
Maple-leaved viburnum	66	87	11	0	165	28.7
Hobblebush viburnum	345	150	5	0	501	23.8
Wild raisin	48	25	39	0	112	37.4
Arrowwood	153	130	178	0	461	26.3
Nannyberry	75	72	152	0	300	25.1
Blackhaw	6	7	4	0	17	44.8
Common prickly ash	45	127	74	0	246	36.7
Unknown deciduous shrub	34	78	55	0	168	30.8
Unknown evergreen shrub	83	23	14	0	120	71.9
Unknown tree	0	5	87	0	92	94.4
All species	9,263	8,983	9,738	0	27,984	4.6
SE	7.6	8.3	12.0	.0	4.6	

Table 82.---Number of standing trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, St. Lawrence/No. Adirondack Unit, New York, 1993

Species	(In thousands of trees)									
	Live trees					Dead trees				
	One or more small	One or more large	Multiple or small	Large	Total live	One or more small	One or more large	Multiple or small	Total dead	Total all trees
Balsam fir	210	92	38	339	200	67	169	436	775	
Spruces	82	15	13	111	527	33	290	851	961	
Red pine	27	0	0	27	76	0	0	76	103	
White pine	243	55	40	338	247	21	265	533	871	
Eastern hemlock	154	254	145	553	144	90	70	304	857	
Other softwoods	1,055	247	115	1,418	372	118	135	626	2,044	
Total softwoods	1,771	662	353	2,786	1,567	330	930	2,827	5,612	
Red maple	5,903	2,887	814	9,603	1,533	889	558	2,980	12,583	
Sugar maple	4,585	2,645	1,140	8,370	954	396	651	2,001	10,371	
Yellow birch	902	630	85	1,617	623	235	249	1,108	2,725	
Paper birch	279	115	0	394	475	0	69	544	938	
Hickory	184	51	0	235	18	0	27	44	280	
American beech	3,330	1,209	829	5,369	819	327	543	1,688	7,057	
White ash	447	163	130	741	28	28	29	84	825	
Aspen	909	569	195	1,673	1,110	215	717	2,041	3,714	
Black cherry	599	452	160	1,211	399	307	267	972	2,183	
Select white oaks	30	135	11	176	0	0	10	10	186	
Northern red oak	145	33	123	302	29	0	65	94	396	
Basswood	315	311	199	825	265	0	22	287	1,111	
Elm	0	0	0	0	499	149	199	847		
Other commercial hardwoods	149	186	62	397	137	34	57	228	625	
Noncommercial hardwoods	1,180	206	134	1,519	472	79	195	746	2,265	
Total hardwoods	18,960	9,592	3,881	32,433	7,359	2,658	3,658	13,675	46,108	
All species	20,731	10,254	4,234	35,219	8,926	2,988	4,588	16,502	51,721	

Table 83.--Net volume of all trees on timberland by class of timber and species group, St. Lawrence/No. Adirondack Unit, New York, 1993

(In millions of cubic feet)

Class of timber	Species group				All groups	SE
	Pines	Other softwoods	Soft hardwoods	Hard hardwoods		
Sawtimber trees:						
Sawlog portion	170.2	270.9	518.7	454.4	1,414.2	4.3
Upper stem	19.9	36.4	129.3	109.8	295.4	4.0
Total sawtimber trees	190.2	307.3	647.9	564.2	1,709.7	4.2
Poletimber trees	34.6	198.5	618.3	487.9	1,339.2	3.3
Total growing-stock trees	224.8	505.8	1,266.2	1,052.1	3,048.9	2.9
Rough trees:						
Sawtimber size	1.8	11.5	26.2	27.8	67.3	8.1
Poletimber size	.1	1.2	28.4	21.6	51.2	10.6
Total rough trees	1.9	12.7	54.5	49.4	118.5	6.6
Rotten trees:						
Sawtimber size	.0	3.1	16.0	19.7	38.8	10.2
Poletimber size	.0	.5	11.3	8.0	19.8	13.7
Total rotten trees	.0	3.6	27.3	27.7	58.5	8.4
Salvable dead ^a trees:						
Sawtimber size	.2	5.8	9.6	4.9	20.5	16.3
Poletimber size	.4	7.7	15.0	3.8	27.0	14.9
Total salvable dead trees	.7	13.5	24.6	8.7	47.5	12.5
All classes	227.4	535.6	1,372.6	1,137.9	3,273.4	2.8
SE	16.9	9.0	5.0	5.7	2.8	

^a Includes noncommercial species.

Table 84.--Net volume of growing-stock trees on timberland by species and diameter class, St. Lawrence/No. Adirondack Unit, New York, 1980

(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+		
Balsam fir	26.9	43.5	30.0	15.8	4.6	.0	.5	.0	.0	.0	121.4	17.5
Spruces	41.3	51.4	40.4	27.9	19.6	9.4	2.2	1.6	1.3	.0	195.2	12.9
Red pine	7.8	14.6	30.0	15.9	10.2	4.6	.5	.0	.0	.0	83.5	42.0
White pine	9.4	13.4	15.0	15.7	8.4	10.0	10.0	3.7	15.6	2.7	104.1	15.5
Eastern hemlock	6.0	11.9	10.5	10.9	11.0	10.4	12.7	12.8	8.9	1.9	97.1	18.2
Other softwoods	19.1	25.9	21.7	14.2	7.5	3.3	3.6	1.2	.6	.0	97.0	18.4
Total softwoods	110.4	160.8	147.7	100.4	61.4	37.8	29.5	19.3	26.4	4.6	698.3	7.9
Red maple	70.9	103.7	85.6	64.1	51.4	21.6	12.4	8.8	6.4	.0	424.8	7.5
Sugar maple	42.5	80.1	81.9	54.6	52.3	32.1	31.8	15.0	27.4	3.7	421.4	9.4
Yellow birch	9.3	18.3	19.0	19.6	11.6	16.0	8.5	5.4	8.9	1.1	117.7	11.1
Sweet birch	.0	.4	.6	.0	.0	.0	.0	.0	.0	.3	1.3	59.3
Paper birch	11.1	14.1	13.2	4.3	1.8	1.6	.5	.4	.0	.0	46.9	20.8
Hickory	1.4	4.5	1.5	3.1	.5	.0	.0	.0	.6	.0	11.7	37.7
American beech	15.4	25.6	32.8	32.7	27.8	18.6	11.8	12.8	8.8	.0	186.5	11.8
White ash	7.2	13.9	17.5	16.5	7.2	3.2	3.6	2.1	1.6	.0	72.8	16.2
Aspen	24.7	34.2	39.0	32.4	21.7	13.5	7.6	3.9	.4	.0	177.3	12.1
Black cherry	8.1	20.0	23.8	29.8	31.8	23.0	5.7	5.7	4.0	.8	152.7	16.8
Select white oaks	.3	1.2	.9	.5	2.0	1.7	1.0	.5	1.5	.5	10.0	36.8
Northern red oak	2.1	4.6	8.9	4.5	3.2	1.9	2.1	1.2	.5	.0	29.1	29.4
Basswood	2.0	7.1	3.7	4.0	4.0	4.5	5.8	1.6	4.5	.0	37.2	20.5
Elm	7.5	3.3	3.7	2.0	1.3	3.6	1.4	.4	.0	.0	23.1	18.2
Other hardwoods	3.7	14.3	8.6	3.3	4.3	3.2	3.2	.8	3.4	.0	44.8	41.3
Total hardwoods	206.2	345.3	340.8	271.4	220.8	144.6	95.3	58.7	67.8	6.5	1,757.4	3.4
All species	316.6	506.0	488.5	371.8	282.2	182.3	124.8	78.0	94.2	11.1	2,455.7	2.9
SE	5.0	4.5	5.3	5.0	6.2	7.5	9.2	9.2	10.5	24.7	2.9	

Table 85.--Net volume of growing-stock trees on timberland by species and diameter class, St. Lawrence/No. Adirondack Unit, New York, 1993

Species	(In millions of cubic feet)											SE
	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+		
Balsam fir	27.7	35.9	29.0	16.4	8.5	.9	.0	.8	.0	.0	119.1	16.4
Spruces	25.4	37.4	28.0	20.4	16.5	8.0	5.7	1.0	5.3	.0	147.7	14.6
Red pine	3.0	9.5	15.0	18.0	6.6	5.4	.0	.0	.0	.0	57.6	41.7
White pine	5.7	11.4	14.4	19.3	15.3	22.2	14.4	14.5	25.3	10.6	153.2	16.9
Eastern hemlock	11.3	18.1	16.4	16.8	19.3	19.6	15.2	13.1	11.5	2.5	143.9	15.8
Other softwoods	23.0	24.5	20.0	18.1	11.0	8.1	2.4	2.0	.0	.0	109.1	21.2
Total softwoods	96.1	136.9	122.8	109.0	77.2	64.3	37.7	31.4	42.2	13.1	730.6	8.5
Red maple	67.9	121.0	113.7	78.1	63.0	36.0	20.6	13.6	9.0	3.8	526.8	7.5
Sugar maple	47.4	90.5	112.4	93.6	65.9	59.9	44.6	28.2	37.0	5.4	584.8	8.5
Yellow birch	10.2	15.7	25.1	20.8	15.5	8.4	11.6	3.8	7.0	1.7	119.7	11.8
Sweet birch	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.6	100.0
Paper birch	11.7	15.1	14.6	8.0	5.4	1.2	.4	.0	.3	.0	56.7	18.2
Hickory	4.3	6.5	6.6	4.7	3.9	1.3	.0	2.6	.0	.0	29.9	31.3
American beech	32.9	44.0	48.8	40.1	26.2	13.2	10.4	12.7	7.3	.6	236.2	12.0
White ash	16.1	20.7	22.9	22.1	10.5	9.6	3.4	2.4	2.9	3.3	113.9	14.3
Aspen	20.9	32.1	45.2	49.7	49.0	22.1	6.3	9.0	5.6	.0	239.7	13.3
Black cherry	8.8	17.0	27.1	28.8	40.5	25.5	20.3	7.4	7.0	1.1	183.7	14.8
Select white oaks	.3	1.6	1.0	.9	.0	1.0	.6	.6	1.7	1.2	9.0	36.4
Northern red oak	1.8	8.9	13.0	10.1	5.6	3.4	4.3	2.6	2.5	.9	53.0	26.7
Basswood	6.0	4.9	9.7	13.5	9.6	6.6	6.1	6.0	5.3	.4	68.1	17.1
Elm	11.1	9.5	3.7	1.9	1.3	.4	.0	1.4	.0	.0	29.2	15.5
Other hardwoods	14.4	10.7	10.5	7.1	4.2	3.8	5.2	1.1	9.3	.7	67.0	25.4
Total hardwoods	253.7	398.2	454.3	379.9	300.6	192.4	133.8	91.4	95.0	19.2	2,318.3	3.5
All species	349.9	535.1	577.0	488.9	377.8	256.6	171.5	122.7	137.2	32.2	3,048.9	2.9
SE	4.8	4.0	4.0	4.9	5.5	6.8	8.5	9.8	11.2	23.2	2.9	

Table 86.--Net volume of sawtimber trees on timberland by species and diameter class, St. Lawrence/No. Adirondack Unit, New York, 1980

(In millions of board feet)											
Species	Diameter class (inches at breast height)								All classes	SE	
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+			
Balsam fir	115.4	69.4	22.8	.0	2.6	.0	.0	.0	210.2	20.2	
Spruces	146.3	122.4	93.1	48.4	11.5	7.8	7.7	.0	437.2	14.5	
Red pine	107.4	67.3	46.7	22.1	2.3	.0	.0	.0	245.8	43.7	
White pine	52.7	67.5	39.0	48.3	51.1	18.8	84.3	15.4	377.0	16.6	
Eastern hemlock	33.6	41.0	45.6	46.4	61.1	61.2	45.3	10.0	344.1	19.9	
Other softwoods	62.6	50.6	28.9	13.3	15.7	5.4	2.6	.0	179.1	23.3	
Total softwoods	517.9	418.2	276.1	178.4	144.3	93.2	139.9	25.3	1,793.4	9.6	
Red maple	-	254.7	223.3	99.7	59.2	43.6	32.1	.0	712.7	10.7	
Sugar maple	-	228.9	231.3	149.5	147.9	73.1	140.5	20.4	991.6	12.8	
Yellow birch	-	84.5	51.3	74.5	38.7	25.5	43.0	5.7	323.1	14.0	
Sweet birch	-	.0	.0	.0	.0	.0	.0	1.7	1.7	100.0	
Paper birch	-	18.5	8.2	7.5	2.1	1.8	.0	.0	38.1	29.9	
Hickory	-	12.5	2.3	.0	.0	.0	3.3	.0	18.0	48.2	
American beech	-	144.0	136.6	91.5	59.5	62.4	47.6	.0	541.6	12.8	
White ash	-	72.1	33.5	15.6	17.7	10.2	7.8	.0	157.0	22.1	
Aspen	-	142.0	101.4	65.9	37.0	19.3	1.8	.0	367.2	16.6	
Black cherry	-	125.0	147.8	110.9	27.1	30.6	22.7	4.9	469.0	20.5	
Select white oaks	-	2.0	8.6	7.2	4.7	2.2	7.5	2.6	34.6	43.4	
Northern red oak	-	17.9	12.2	8.5	8.7	5.3	2.0	.0	54.7	32.8	
Basswood	-	17.3	18.2	22.7	28.2	8.9	24.7	.0	119.9	20.4	
Elm	-	7.8	5.3	15.5	6.6	2.0	.0	.0	37.3	29.6	
Other hardwoods	-	13.0	18.5	14.6	15.1	3.9	17.0	.0	82.1	48.4	
Total hardwoods	-	1,140.3	998.4	683.5	452.5	288.8	349.9	35.2	3,948.6	4.9	
All species	517.9	1,558.5	1,274.6	862.0	596.7	382.0	489.8	60.6	5,742.0	4.3	
SE	13.9	5.0	6.2	7.5	9.2	9.2	10.5	25.0	4.3		

Table 87.--Net volume of sawtimber trees on timberland by species and diameter class, St. Lawrence/No. Adirondack Unit, New York, 1993

(In millions of board feet)

Species	Diameter class (inches at breast height)								All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+		
Balsam fir	111.8	72.6	41.5	4.7	.0	4.1	.0	.0	234.6	20.1
Spruces	101.5	89.1	77.7	39.8	27.4	4.4	30.8	.0	370.7	16.1
Red pine	57.1	80.3	31.3	26.3	.0	.0	.0	.0	194.9	44.7
White pine	51.6	80.1	71.0	108.1	72.4	73.8	139.2	55.8	652.0	17.6
Eastern hemlock	53.5	63.9	80.4	85.0	72.2	63.6	56.4	12.7	487.6	17.5
Other softwoods	57.3	62.5	43.0	33.7	11.7	8.6	.0	.0	216.8	26.8
Total softwoods	432.8	448.5	344.7	297.5	183.7	154.5	226.4	68.5	2,156.6	10.0
Red maple	-	310.5	269.3	161.9	93.5	67.8	41.6	18.1	962.7	11.3
Sugar maple	-	389.1	290.0	274.7	210.0	136.8	190.3	30.4	1,521.3	10.9
Yellow birch	-	90.5	68.9	40.3	56.3	18.1	32.7	9.7	316.5	16.6
Sweet birch	-	2.4	.0	.0	.0	.0	.0	.0	2.4	100.0
Paper birch	-	37.6	25.9	4.4	2.1	.0	1.4	.0	71.4	32.5
Hickory	-	18.6	18.1	4.9	.0	12.0	.0	.0	53.7	38.3
American beech	-	171.7	129.9	67.0	52.9	58.5	43.8	2.4	526.2	13.0
White ash	-	95.6	45.2	45.1	16.0	12.5	14.4	14.6	243.5	18.7
Aspen	-	221.1	225.3	106.4	30.6	47.1	28.3	.0	658.8	15.6
Black cherry	-	121.9	188.4	124.4	99.9	39.9	38.1	5.8	618.4	18.0
Select white oaks	-	3.8	.0	3.9	2.8	3.1	7.9	5.7	27.3	45.5
Northern red oak	-	41.5	24.1	15.2	19.2	12.2	13.1	5.0	130.3	27.6
Basswood	-	57.9	42.0	32.9	30.1	29.7	29.1	2.7	224.3	18.2
Elm	-	8.4	5.5	1.5	.0	6.3	.0	.0	21.8	32.9
Other hardwoods	-	27.9	19.7	17.5	26.7	4.5	48.3	4.3	149.0	41.5
Total hardwoods	-	1,598.4	1,352.3	900.1	640.3	448.5	488.9	98.8	5,527.4	5.1
All species	432.8	2,046.9	1,697.1	1,197.7	824.0	603.0	715.3	167.2	7,684.0	4.3
SE	11.7	4.9	5.6	6.8	8.5	10.0	11.4	22.6	4.3	

**Net volume of growing-stock trees on timberland,
top five species,
St. Lawrence/No. Adirondack Unit, New York, 1980 and 1993**

**Net volume of sawtimber trees on timberland,
top five species,
St. Lawrence/No. Adirondack Unit, New York, 1980 and 1993**

Table 89.---Average annual mortality^a, average annual net growth, and average annual removals of growing-stock and sawtimber volume on timberland by species, St. Lawrence/No. Adirondack Unit, New York, 1979-92

Species	Growing stock (cu. ft.)				Sawtimber (bd. ft.)							
	Mortality	SE	Net growth	SE	Removals	SE	Mortality	SE	Net growth	SE	Removals	SE
(In thousands of feet)												
Balsam fir	1,941	22.9	2,748	27.0	1,209	48.6	4,578	29.0	7,563	33.8	2,234	57.5
Spruces	1,499	21.2	2,704	24.4	3,440	32.3	3,125	31.0	9,887	23.1	7,765	23.9
Red pine	307	95.5	1,070	62.4	1,331	82.8	261	100.0	6,172	53.1	4,246	78.0
White pine	426	32.9	5,025	17.0	1,123	31.1	1,583	33.9	24,653	17.5	4,840	31.4
Eastern hemlock	414	40.5	3,570	18.7	839	42.1	1,594	41.1	12,927	21.2	3,854	42.5
Other softwoods	663	38.2	3,359	23.7	128	40.9	1,375	44.1	6,885	32.3	56	100.0
Total softwoods	5,251	13.6	18,476	10.5	8,069	22.9	12,516	15.6	68,085	11.8	22,995	20.9
Red maple	3,440	13.1	14,093	10.0	5,538	19.1	4,744	20.7	36,576	13.4	14,887	24.4
Sugar maple	3,208	27.5	13,749	12.8	7,239	19.6	6,796	37.4	52,177	13.7	23,603	19.0
Yellow birch	1,745	16.6	2,276	20.7	1,630	20.1	4,657	22.6	7,599	26.1	5,920	22.9
Sweet birch	23	100.0	-29	81.5	44	100.0	0	.0	128	100.0	229	100.0
Paper birch	512	35.8	737	36.8	225	43.1	492	60.4	1,888	41.9	253	70.9
Hickory	116	59.2	717	34.2	110	53.5	193	100.0	1,469	40.3	337	71.4
American beech	1,891	26.5	6,671	15.9	4,633	18.5	7,544	30.5	14,489	27.7	17,723	20.2
White ash	283	35.9	3,917	18.8	918	30.8	345	100.0	11,025	22.7	2,143	41.2
Aspen	3,004	15.6	4,954	20.6	2,310	34.2	5,347	26.0	20,940	20.4	4,775	40.7
Black cherry	901	26.3	4,628	16.7	2,682	31.9	2,183	39.4	21,770	18.5	11,035	34.2
Select white oaks	104	46.9	94	*	101	100.0	119	100.0	645	72.6	567	100.0
Northern red oak	193	43.4	1,237	28.3	109	77.6	258	70.7	4,840	32.3	265	71.3
Basswood	1,279	59.7	821	99.4	467	42.3	5,855	65.7	2,005	*	1,783	42.5
Elm	933	23.5	931	37.1	192	56.2	1,238	34.1	-493	98.2	488	77.0
Other hardwoods	292	46.4	1,915	22.6	1,091	71.1	294	70.8	3,673	40.2	2,270	83.7
Total hardwoods	17,925	9.6	56,712	5.6	27,290	9.9	40,067	16.8	178,731	7.5	86,277	10.8
All species	23,175	8.0	75,188	4.9	35,359	8.2	52,583	13.5	246,816	6.0	109,273	9.5

^a Mortality is a component of net growth.

* Sampling error is greater than 100 percent.

WESTERN ADIRONDACK UNIT TABLES

Table 90.--Area of timberland by forest type, forest-type group, and stand-size class, Western Adirondack Unit, New York, 1980

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	5.4	.0	5.5	.0	10.9	70.7
White pine	35.5	23.8	34.6	.0	93.8	25.4
White pine/hemlock	19.2	.0	12.3	.0	31.5	45.0
Hemlock	56.6	6.0	11.8	.0	74.4	27.1
Scotch pine	5.4	6.8	.0	.0	12.2	71.2
White/red pine group	122.0	36.6	64.2	.0	222.9	14.8
Balsam fir	.0	5.6	5.6	.0	11.3	67.6
Red spruce	12.5	5.8	.0	.0	18.3	57.9
Red spruce/balsam fir	5.6	5.4	.0	.0	11.0	70.7
White spruce	.0	.0	12.7	.0	12.7	71.4
Spruce/fir group	18.1	16.9	18.3	.0	53.4	32.6
Pitch pine	6.8	.0	.0	.0	6.8	100.0
Loblolly/shortleaf group	6.8	.0	.0	.0	6.8	100.0
White oak/red oak/hickory	12.4	.0	9.3	.0	21.7	58.9
Northern red oak	.0	.0	6.8	.0	6.8	100.0
Hawthorn/reverting field	.0	.0	26.6	.0	26.6	49.9
Mixed central hardwoods	13.5	.0	.0	.0	13.5	70.7
Oak/hickory group	25.9	.0	42.7	.0	68.6	31.7
Black ash/Amer. elm/red maple	.0	15.0	29.6	.0	44.6	41.3
Red maple(lowland)	5.5	5.7	.0	.0	11.2	70.7
Red maple(upland)	.0	13.6	5.5	.0	19.0	58.0
Cottonwood	.0	6.6	.0	.0	6.6	100.0
Willow	9.7	.0	12.3	.0	22.0	59.4
American elm/green ash	.0	.0	5.5	.0	5.5	100.0
Elm/ash/red maple group	15.2	40.9	52.8	.0	108.9	24.6
Sugar maple/beech/yellow birch	332.2	111.0	58.3	.0	501.6	8.9
Black cherry	29.5	30.9	53.5	.0	113.9	22.4
Red maple/northern hardwoods	140.6	72.4	5.4	.0	218.4	15.5
Pin cherry/reverting field	.0	.0	41.6	.0	41.6	41.1
Mixed northern hardwoods	69.6	25.7	37.2	.0	132.4	21.5
Northern hardwoods group	571.9	240.0	196.0	.0	1,007.9	4.6
Aspen	12.5	16.7	36.8	.0	66.0	28.9
Gray birch	.0	.0	18.0	.0	18.0	57.9
Aspen/birch group	12.5	16.7	54.8	.0	84.0	25.2
All forest types	772.4	351.1	428.8	.0	1,552.3	2.2
SE	5.8	11.6	9.5	.0	2.2	

Table 91.--Area of timberland by forest type, forest-type group, and stand-size class, Western Adirondack Unit, New York, 1993

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	16.3	.0	5.5	.0	21.8	48.5
White pine	63.9	5.0	.0	.0	68.9	27.2
White pine/hemlock	32.2	5.1	.0	.0	37.4	37.0
Hemlock	32.8	5.5	5.8	.0	44.1	34.6
Scotch pine	4.6	5.5	.0	.0	10.1	71.0
White/red pine group	149.8	21.2	11.3	.0	182.2	15.6
Red spruce	16.7	.0	.0	.0	16.7	57.9
Red spruce/balsam fir	3.7	12.7	5.1	.0	21.5	42.4
White spruce	5.6	10.7	.0	.0	16.3	57.8
Northern white-cedar	.0	5.1	.0	.0	5.1	100.0
Tamarack	.0	5.2	.0	.0	5.2	100.0
Spruce/fir group	25.9	33.7	5.1	.0	64.7	25.8
Wh. pine/no. red oak/wh. ash	10.5	.0	.0	.0	10.5	70.7
Oak/pine group	10.5	.0	.0	.0	10.5	70.7
White oak/red oak/hickory	.0	5.3	.0	.0	5.3	100.0
Mixed central hardwoods	3.7	5.6	16.5	.0	25.7	45.2
Oak/hickory group	3.7	10.8	16.5	.0	31.0	41.2
Black ash/Amer. elm/red maple	5.2	15.8	16.0	.0	37.0	37.9
Red maple(lowland)	5.2	5.3	.0	.0	10.5	70.7
Red maple(upland)	5.3	5.4	.0	.0	10.8	70.7
Cottonwood	5.6	.0	.0	.0	5.6	100.0
Willow	.0	11.0	10.5	.0	21.4	48.5
Sycamore/pecan/American elm	5.6	.0	.0	.0	5.6	100.0
Elm/ash/red maple group	26.9	37.5	26.4	.0	90.8	23.7
Sugar maple/beech/yellow birch	358.8	121.2	16.2	.0	496.2	8.1
Black cherry	65.5	30.9	38.3	.0	134.8	19.3
Red maple/northern hardwoods	169.6	58.3	37.2	.0	265.1	12.9
Pin cherry/reverting field	5.5	21.8	49.3	5.5	82.0	25.4
Mixed northern hardwoods	59.2	27.0	5.0	.0	91.2	23.9
Northern hardwoods group	658.5	259.2	146.1	5.5	1,069.3	4.2
Aspen	5.5	22.5	32.7	.0	60.7	30.0
Aspen/birch group	5.5	22.5	32.7	.0	60.7	30.0
All forest types	880.8	384.9	238.0	5.5	1,509.2	2.4
SE	4.6	10.4	13.4	100.0	2.4	

**Area of timberland by stand-size class,
Western Adirondack Unit, New York, 1980 and 1993**

Million acres

**Area of timberland by forest-type group,
Western Adirondack Unit, New York, 1993**

Table 92. ---Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Western Adirondack Unit, New York, 1993

Species	(In thousands of trees)											All classes	SE
	Diameter class (inches at breast height)												
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+			
Balsam fir	3,502	1,646	663	209	30	28	30	0	0	0	0	6,109	23.3
Spruces	5,151	3,062	1,980	1,005	563	235	99	38	17	0	0	12,149	17.5
Red pine	247	500	890	595	688	115	11	0	0	0	0	3,045	51.1
White pine	2,972	2,259	1,287	1,774	1,114	841	542	382	363	61	0	11,594	24.0
Eastern hemlock	6,674	5,051	3,071	1,955	1,279	700	483	305	270	14	0	19,803	13.7
Other softwoods	1,712	1,819	354	365	165	14	21	0	0	0	0	4,449	38.0
Total softwoods	20,258	14,336	8,245	5,903	3,840	1,933	1,186	726	649	75	0	57,151	8.8
Red maple	16,069	12,970	8,030	5,143	2,413	1,533	575	375	417	23	0	47,549	8.3
Sugar maple	8,010	7,860	5,710	3,674	2,115	1,612	903	549	431	56	0	30,921	10.0
Yellow birch	6,230	3,357	2,014	1,203	995	549	263	201	197	18	0	15,026	10.4
Paper birch	100	201	85	24	25	0	0	0	0	0	0	435	87.5
Hickory	280	346	247	214	163	93	34	44	29	0	0	1,451	30.1
American beech	7,398	4,514	2,391	1,305	1,048	547	330	207	203	5	0	17,948	14.3
White ash	2,669	2,180	1,535	711	730	367	126	65	95	14	0	8,491	15.1
Aspen	2,653	2,188	1,419	793	821	225	51	58	21	0	0	8,231	17.3
Black cherry	3,218	3,532	2,221	1,490	1,308	792	437	157	119	4	0	13,279	11.1
Select white oaks	104	0	0	0	18	14	0	0	0	0	0	136	100.0
Northern red oak	216	241	235	26	103	91	44	38	7	8	0	1,010	35.7
Other oaks	85	66	42	28	38	0	0	0	0	0	0	259	93.6
Basswood	539	449	219	352	203	110	88	45	14	4	0	2,023	24.0
Elm	2,168	1,251	342	57	39	57	0	9	0	0	0	3,923	24.7
Other hardwoods	1,309	718	154	109	19	74	52	30	36	4	0	2,506	36.7
Total hardwoods	51,049	39,873	24,645	15,128	10,037	6,066	2,903	1,779	1,569	138	0	153,188	4.0
All species	71,307	54,209	32,891	21,031	13,877	7,999	4,089	2,504	2,219	213	0	210,339	3.4
SE	5.1	4.9	4.9	5.3	6.6	6.9	7.6	10.3	10.8	22.3	0	3.4	

Table 93.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Western Adirondack Unit, New York, 1993

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Balsam fir	160	51	9	0	221	20.7
Larch	0	2	0	0	2	91.3
Spruce species	180	75	25	0	280	22.8
Jack pine	0	0	0	0	0	100.0
Eastern white pine	27	11	0	0	39	30.7
Scotch pine	0	0	0	0	0	100.0
Canada yew	148	2	0	0	150	37.1
Northern white-cedar	13	53	0	0	66	67.8
Eastern hemlock	149	9	1	0	159	36.0
Boxelder	1	1	1	0	4	58.4
Striped maple	275	29	3	0	307	13.8
Red maple	540	342	210	0	1,092	11.3
Sugar maple	906	154	122	0	1,182	18.3
Mountain maple	19	1	0	0	20	51.2
Alder species	104	160	150	0	414	33.4
Serviceberry	76	57	65	0	198	20.5
Yellow birch	278	137	56	0	471	16.3
Paper birch	0	10	0	0	10	100.0
Gray birch	1	4	12	0	18	54.2
American hornbeam	67	6	0	0	73	46.8
Hickory species	3	9	2	0	14	58.5
Bitternut hickory	1	0	0	0	1	81.6
Alternate-leaved dogwood	16	11	23	0	49	27.3
Silky dogwood	0	40	5	0	45	88.9
Panicked dogwood	67	56	135	0	258	31.3
Red-osier dogwood	52	80	225	0	357	33.6
Hawthorn species	10	30	123	0	163	32.9
Beaked hazelnut	7	37	0	0	44	78.3
Leatherwood	2	0	0	0	2	100.0
American beech	478	219	15	0	712	13.0
Russian olive	0	0	7	0	7	84.5
White ash	227	224	185	0	636	16.3
Black ash	3	38	0	0	42	52.9
Green ash	0	0	0	0	0	100.0
Witch-hazel	33	12	0	0	44	34.3
Winterberry holly	31	89	32	0	152	37.9
Butternut	16	0	2	0	18	89.8
Black walnut	0	1	0	0	1	100.0
Sheep laurel	0	9	0	0	9	100.0
Labrador tea	11	0	0	0	11	100.0
Common spicebush	7	0	0	0	7	100.0
Bush honeysuckle	63	43	15	0	120	36.5
Apple species	7	8	61	0	76	38.5

Table 93.-continued

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw- timber	Pole- timber	Sapling and seedling	Non- stocked		
Mountain holly	7	44	10	0	61	73.6
Blackgum	1	0	0	0	1	100.0
Eastern hophornbeam	45	23	3	0	72	28.0
Eastern cottonwood	3	0	1	0	3	56.7
Bigtooth aspen	5	1	0	0	7	70.5
Quaking aspen	21	50	51	0	122	23.6
Cherry species	0	4	0	0	4	100.0
Pin cherry	1	15	0	0	16	86.5
Black cherry	252	169	97	0	518	13.4
Chokecherry	58	57	94	0	210	20.7
White oak	3	2	0	0	5	72.2
Northern red oak	4	13	3	0	21	34.0
Black oak	0	3	0	0	4	91.5
Buckthorn species	7	41	0	0	48	84.9
Staghorn sumac	0	14	38	0	52	45.6
Currant species	37	4	6	0	48	48.0
Rose species	2	1	3	0	7	53.0
Rubus species	1,088	1,214	1,820	7	4,129	12.2
Willow species	0	2	18	0	21	81.1
Black willow	5	5	48	0	58	38.3
American elderberry	1	5	4	0	10	51.5
Red-berried alder	10	0	0	0	10	58.2
Sassafras	1	0	0	0	1	100.0
American mountain-ash	1	0	37	0	38	95.6
Spiraea species	226	1,077	1,571	0	2,874	20.8
American basswood	10	3	3	0	16	34.5
Elm species	0	0	4	0	4	100.0
American elm	24	28	20	0	72	23.0
Blueberry	66	182	338	0	587	32.3
Viburnum species	13	15	0	0	27	70.9
Maple-leaved viburnum	45	7	5	0	57	41.1
Hobblebush viburnum	1,474	326	17	0	1,818	14.2
Wild raisin	97	159	75	0	331	31.0
Arrowwood	87	198	255	0	540	26.9
Nannyberry	8	33	132	0	173	43.4
Highbush cranberry	9	0	1	0	10	76.3
Unknown deciduous shrub	1	29	11	0	41	57.5
Unknown evergreen shrub	0	0	8	0	8	76.5
Unknown tree	3	4	0	0	8	68.6
All species	7,600	5,745	6,157	7	19,509	5.9
SE	8.3	13.9	17.1	100.0	5.9	

Table 95.--Net volume of all trees on timberland by class of timber and species group, Western Adirondack Unit, New York, 1993

(In millions of cubic feet)

Class of timber	Species group				All groups	SE
	Pines	Other softwoods	Soft hardwoods	Hard hardwoods		
Sawtimber trees:						
Sawlog portion	204.3	220.1	398.8	375.4	1,198.6	4.9
Upper stem	23.7	28.2	96.0	85.6	233.6	4.3
Total sawtimber trees	228.0	248.3	494.9	461.0	1,432.2	4.7
Poletimber trees	28.9	103.6	329.3	259.4	721.2	4.1
Total growing-stock trees	256.9	351.8	824.2	720.4	2,153.3	3.6
Rough trees:						
Sawtimber size	6.1	9.7	31.3	25.1	72.2	9.0
Poletimber size	.8	.9	17.2	14.5	33.4	13.5
Total rough trees	7.0	10.6	48.4	39.6	105.5	7.9
Rotten trees:						
Sawtimber size	.4	.7	11.0	10.2	22.2	15.4
Poletimber size	.0	.1	3.0	1.9	5.0	20.0
Total rotten trees	.4	.8	14.0	12.1	27.2	13.3
Salvable dead ^a trees:						
Sawtimber size	.3	2.6	7.7	5.4	16.1	23.6
Poletimber size	.2	2.2	7.5	3.9	13.8	18.3
Total salvable dead trees	.5	4.9	15.2	9.3	29.9	15.1
All classes	264.7	368.1	901.8	781.3	2,315.9	3.4
SE	22.5	10.3	5.5	6.9	3.4	

^a Includes noncommercial species.

Table 96.--Net volume of growing-stock trees on timberland by species and diameter class, Western Adirondack Unit, New York, 1980

(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+		
Balsam fir	8.7	7.9	4.2	1.8	.0	.0	.4	.0	.0	.0	23.0	27.9
Spruces	16.4	18.1	23.9	16.7	8.5	10.7	2.4	2.8	.0	.0	99.7	18.3
Red pine	.7	2.2	3.8	8.9	1.8	.7	.0	.0	.0	.0	18.0	44.9
White pine	5.9	11.7	16.9	14.4	16.7	9.3	10.7	2.8	9.1	.5	97.9	35.1
Eastern hemlock	10.6	18.7	29.4	31.9	22.5	19.6	15.0	10.3	12.0	1.3	171.3	15.2
Other softwoods	3.4	3.2	6.7	2.1	2.6	.5	.0	.0	.0	.0	18.4	47.6
Total softwoods	45.6	61.9	84.8	75.8	52.1	40.8	28.5	16.0	21.1	1.8	428.4	11.2
Red maple	27.6	49.4	66.5	46.2	37.1	24.4	15.2	8.5	13.7	.0	288.6	9.3
Sugar maple	23.9	28.1	48.3	35.9	27.7	18.9	13.2	7.3	10.6	1.6	215.6	11.0
Yellow birch	10.1	15.8	16.5	14.7	15.9	11.5	8.6	2.9	4.1	2.0	102.2	10.6
Sweet birch	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.4	100.0
Paper birch	.0	.5	.8	.0	.0	.0	.0	.0	.0	.0	1.3	72.6
Hickory	.0	1.9	3.3	1.9	1.6	2.3	.6	.5	1.2	.0	13.3	31.7
American beech	10.5	17.3	23.4	20.7	20.0	18.2	10.1	6.0	4.0	.0	130.3	13.6
White ash	6.7	12.0	17.9	15.0	8.2	8.4	4.3	4.0	1.4	.7	78.6	15.4
Aspen	9.1	13.0	12.9	6.6	5.1	1.4	.6	.5	.4	.4	50.1	19.8
Black cherry	8.0	15.3	19.0	14.9	23.0	14.1	7.3	5.9	3.6	.4	111.4	12.2
Select white oaks	.0	.0	.0	.4	.5	.0	.0	.0	.0	.0	.9	100.0
Northern red oak	1.2	1.5	1.9	2.6	1.7	1.5	1.7	1.0	1.8	.5	15.5	45.0
Basswood	.4	1.1	3.0	4.7	5.5	1.4	2.8	1.1	1.5	.5	22.1	25.6
Elm	1.5	1.6	2.1	1.1	1.2	.5	1.0	.0	.6	.0	9.6	24.9
Other hardwoods	6.2	3.1	2.6	2.0	1.9	4.1	.9	.7	.0	.0	21.5	31.2
Total hardwoods	105.3	161.2	218.2	166.7	149.4	106.7	66.3	38.4	43.0	6.1	1,061.4	4.2
All species	150.9	223.1	303.1	242.6	201.5	147.5	94.8	54.4	64.0	7.9	1,489.8	4.0
SE	6.6	5.7	5.4	6.5	6.9	8.6	11.7	11.9	12.2	26.1	4.0	

Table 97.--Net volume of growing-stock trees on timberland by species and diameter class, Western Adirondack Unit, New York, 1993

Species	(In millions of cubic feet)											All classes	SE
	Diameter class (inches at breast height)												
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+			
Balsam fir	9.3	10.3	6.7	3.4	.8	1.0	1.1	.0	.0	.0	32.5	25.7	
Spruces	13.6	18.7	22.9	18.4	13.7	8.2	4.3	2.3	1.0	.0	103.0	19.1	
Red pine	1.0	3.6	11.0	11.7	19.5	4.1	.5	.0	.0	.0	51.5	50.7	
White pine	7.4	13.0	15.6	31.3	28.3	27.7	23.5	19.1	22.7	5.7	194.3	26.7	
Eastern hemlock	15.7	25.8	29.8	28.8	27.2	19.7	19.1	15.5	17.4	2.3	201.4	13.7	
Other softwoods	4.4	9.7	3.5	5.1	2.6	.3	.5	.0	.0	.0	26.2	42.5	
Total softwoods	51.4	81.1	89.5	98.8	92.2	60.9	49.0	36.9	41.1	7.9	608.8	10.7	
Red maple	35.8	73.1	81.3	78.8	53.2	45.7	20.1	16.6	25.3	2.5	432.4	7.8	
Sugar maple	20.4	46.4	58.9	58.8	49.4	50.5	35.0	25.3	29.1	5.9	379.7	10.7	
Yellow birch	14.0	18.0	18.4	17.2	20.8	15.1	9.4	9.4	12.1	2.7	137.1	9.5	
Paper birch	.3	1.2	.9	.3	.4	.0	.0	.0	.0	.0	3.1	80.0	
Hickory	.5	2.0	2.6	3.4	4.2	3.3	1.4	1.6	2.0	.0	20.9	27.5	
American beech	15.1	26.9	25.5	21.3	22.5	16.7	11.2	8.4	11.6	.5	159.7	12.6	
White ash	6.6	11.9	16.5	11.5	16.9	10.6	5.1	3.4	6.9	1.4	90.9	13.3	
Aspen	5.8	13.3	15.5	13.4	22.4	8.6	2.7	3.4	1.6	.0	86.6	23.7	
Black cherry	7.3	17.6	21.8	25.7	29.5	23.5	16.0	7.4	6.7	.6	156.1	11.4	
Select white oaks	.3	.0	.0	.0	.4	.4	.0	.0	.0	.0	1.1	100.0	
Northern red oak	.6	1.2	2.2	.4	2.4	2.7	1.7	1.6	.4	1.2	14.3	35.9	
Other oaks	.3	.3	.4	.4	.7	.0	.0	.0	.0	.0	2.2	84.8	
Basswood	.9	2.6	2.5	5.7	5.1	4.0	3.9	2.0	1.0	.4	28.1	24.4	
Elm	4.3	4.8	2.3	.6	.7	1.8	.0	.3	.0	.0	14.9	21.1	
Other hardwoods	3.5	3.5	1.5	1.6	.3	1.8	1.2	.9	2.6	.6	17.3	32.2	
Total hardwoods	115.7	222.8	250.2	239.3	228.9	184.6	107.8	80.3	99.2	15.7	1,544.5	4.3	
All species	167.0	303.9	339.7	338.1	321.1	245.6	156.8	117.2	140.3	23.6	2,153.3	3.6	
SE	5.4	5.1	5.1	5.7	7.6	7.3	8.2	10.6	11.4	22.1	3.6		

Table 98.--Net volume of sawtimber trees on timberland by species and diameter class, Western Adirondack Unit, New York, 1980
(In millions of board feet)

Species	Diameter class (inches at breast height)										All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9		
Balsam fir	15.4	7.3	.0	.0	2.0	.0	.0	.0	.0	.0	24.7	38.9
Spruces	85.1	71.7	38.6	49.5	12.2	13.7	.0	.0	.0	.0	270.8	21.6
Red pine	12.2	35.6	7.9	3.3	.0	.0	.0	.0	.0	.0	58.9	50.8
White pine	52.5	57.1	73.9	42.6	49.4	13.7	43.8	2.3	335.2	40.9	570.4	17.2
Eastern hemlock	91.2	121.2	94.4	86.4	67.0	46.7	57.2	6.4	570.4	54.7	38.8	14.0
Other softwoods	18.8	7.6	10.4	1.9	.0	.0	.0	.0	.0	.0	1,298.7	11.0
Total softwoods	275.2	300.4	225.2	183.6	130.6	74.0	101.0	8.7	1,298.7	14.0	635.1	13.8
Red maple	-	183.1	156.6	110.3	73.9	39.8	71.4	.0	635.1	11.0	513.1	13.0
Sugar maple	-	145.0	122.0	87.8	61.2	35.9	53.2	8.0	513.1	13.8	259.6	34.0
Yellow birch	-	61.9	68.3	48.5	37.8	12.4	20.3	.0	259.6	14.8	370.6	19.0
Hickory	-	7.0	7.4	10.6	2.5	2.5	5.8	.0	35.6	30.2	187.6	14.9
American beech	-	85.1	94.5	85.0	54.0	29.7	22.2	.0	370.6	100.0	3.7	48.8
White ash	-	63.8	36.4	36.6	19.7	20.2	7.1	3.7	187.6	26.4	81.1	42.3
Aspen	-	28.0	22.5	5.9	2.6	2.4	2.2	2.3	65.9	36.3	41.5	5.6
Black cherry	-	58.0	99.8	65.6	36.5	29.1	19.8	2.5	311.3	5.7	2,568.6	5.7
Select white oaks	-	1.8	1.9	.0	.0	.0	.0	.0	3.7	100.0	44.5	26.4
Northern red oak	-	9.4	6.6	6.0	7.1	4.8	8.2	2.4	44.5	42.3	19.0	36.3
Basswood	-	17.9	25.2	7.2	13.4	6.3	8.2	3.0	44.5	5.6	2,568.6	5.7
Elm	-	4.4	5.0	2.4	4.4	.0	2.8	.0	19.0	36.3	41.5	5.6
Other hardwoods	-	7.2	8.2	18.3	4.2	3.7	.0	.0	41.5	5.6	2,568.6	5.7
Total hardwoods	-	672.6	654.3	484.2	317.2	186.9	221.3	32.2	2,568.6	5.7	3,867.4	5.7
All species	275.2	973.0	879.5	667.8	447.8	261.0	322.2	40.9	3,867.4	5.7	26.6	5.7
SE	12.9	6.5	6.9	8.6	11.6	11.8	12.2	26.6	5.7	5.7	26.6	5.7

Table 99.--Net volume of sawtimber trees on timberland by species and diameter class, Western Adirondack Unit, New York, 1993

(In millions of board feet)

Species	Diameter class (inches at breast height)							All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9		
Balsam fir	23.1	14.6	2.9	4.3	5.0	.0	.0	49.9	33.7
Spruces	82.2	80.0	63.5	37.9	21.4	12.3	5.1	302.4	23.3
Red pine	39.6	50.0	90.1	19.0	2.6	.0	.0	201.3	53.5
White pine	48.8	122.6	123.4	127.0	110.2	92.3	111.1	761.1	28.1
Eastern hemlock	95.2	110.1	114.6	87.2	85.7	73.0	82.7	660.7	14.6
Other softwoods	9.9	17.8	10.8	1.2	2.1	.0	.0	41.8	46.9
Total softwoods	298.8	395.1	405.3	276.7	226.9	177.7	198.9	2,017.3	12.7
Red maple	-	316.9	226.8	207.8	94.3	73.8	129.8	1,060.8	9.2
Sugar maple	-	242.9	224.6	234.7	168.6	126.3	141.5	1,170.9	13.2
Yellow birch	-	73.9	91.0	65.2	42.6	40.7	56.9	386.9	12.1
Paper birch	-	1.5	1.9	.0	.0	.0	.0	3.4	71.3
Hickory	-	13.4	18.5	16.2	6.0	8.2	9.7	71.9	31.4
American beech	-	90.2	108.6	80.2	59.1	42.6	61.5	444.3	14.9
White ash	-	47.8	73.9	46.1	22.3	16.4	35.9	249.5	17.9
Aspen	-	58.7	94.8	35.4	12.2	16.9	7.6	225.6	33.4
Black cherry	-	101.4	130.7	108.5	77.8	35.4	37.8	495.3	13.8
Select white oaks	-	.0	1.9	1.9	.0	.0	.0	3.8	100.0
Northern red oak	-	1.4	8.6	10.1	7.2	6.9	1.8	41.3	41.3
Other oaks	-	1.4	2.7	.0	.0	.0	.0	4.1	74.6
Basswood	-	20.2	20.8	20.5	17.5	10.8	5.0	98.1	27.1
Elm	-	2.5	2.6	8.2	.0	1.3	.0	14.6	59.6
Other hardwoods	-	5.7	1.2	7.5	4.6	4.4	13.1	39.1	50.3
Total hardwoods	-	977.8	1,008.6	842.3	512.2	383.7	500.5	4,309.7	5.6
All species	298.8	1,372.9	1,414.0	1,118.9	739.1	561.4	699.4	6,326.9	4.8
SE	13.4	5.7	7.6	7.3	8.3	10.7	11.4	21.8	4.8

**Net volume of growing-stock trees on timberland,
top five species,
Western Adirondack Unit, New York, 1980 and 1993**

**Net volume of sawtimber trees on timberland,
top five species,
Western Adirondack Unit, New York, 1980 and 1993**

Table 100.--Net volume of sawtimber trees on timberland by species, size class, and tree grade, Western Adirondack Unit, New York, 1993
(In millions of board feet)

Species	>15" Diameter at breast height					All size classes							
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	
Balsam fir	9.3	-	-	-	.0	9.3	43.0	-	-	-	-	6.9	49.9
Spruces	66.2	-	-	-	10.4	76.7	270.7	-	-	-	-	31.6	302.4
Red pine	2.3	.0	16.8	-	2.6	21.6	5.5	-	187.4	-	-	2.6	201.3
White pine	32.0	97.2	140.3	86.2	110.6	466.3	48.9	214.6	222.0	141.0	134.6	761.1	
Eastern hemlock	273.9	-	-	-	67.0	340.9	556.3	-	-	-	-	104.5	660.7
Other softwoods	.0	.0	.0	-	3.3	3.3	12.3	.0	21.1	-	-	8.4	41.8
Total softwoods	383.7	97.2	157.1	86.2	193.9	918.0	936.7	220.5	430.5	141.0	288.6	2,017.3	
Red maple	69.6	140.9	118.8	65.2	122.7	517.1	69.6	202.2	393.1	234.9	160.9	1,060.8	
Sugar maple	148.0	205.5	125.4	71.6	152.9	703.4	148.0	286.1	394.9	160.1	181.9	1,170.9	
Yellow birch	41.7	65.9	56.2	37.5	20.8	222.1	41.7	102.8	166.7	53.5	22.3	386.9	
Paper birch	.0	.0	.0	.0	.0	.0	.0	.0	1.5	1.9	.0	3.4	
Hickory	17.6	8.3	3.1	5.1	6.0	40.0	17.6	18.2	16.4	13.8	6.0	71.9	
American beech	10.2	18.6	52.6	88.9	75.4	245.5	10.2	23.5	154.2	157.6	98.8	444.3	
White ash	49.0	36.4	12.2	11.3	19.0	127.9	49.0	80.1	77.0	19.0	24.4	249.5	
Aspen	3.0	4.1	36.6	28.4	.0	72.1	3.0	12.8	126.1	77.9	5.8	225.6	
Black cherry	55.8	79.2	50.7	10.7	66.8	263.2	55.8	129.0	186.9	35.5	88.2	495.3	
Select white oaks	.0	.0	1.9	.0	.0	1.9	.0	.0	3.8	.0	.0	3.8	
Northern red oak	10.1	6.9	4.6	2.7	7.0	31.3	10.1	6.9	7.6	7.7	9.0	41.3	
Other oaks	.0	.0	.0	.0	.0	.0	.0	.0	1.4	2.7	.0	4.1	
Basswood	16.0	14.6	14.2	3.9	8.4	57.1	16.0	22.4	39.6	10.9	9.2	98.1	
Elm	5.1	3.1	1.3	.0	.0	9.5	5.1	3.1	4.3	2.0	.0	14.6	
Other hardwoods	.0	14.9	1.7	11.6	4.0	32.2	.0	14.9	5.6	14.5	4.0	39.1	
Total hardwoods	426.0	598.4	479.3	336.8	482.8	2,323.3	426.0	902.0	1,579.2	792.2	610.3	4,309.7	
All species	809.7	695.6	636.4	422.9	676.7	3,241.3	1,362.7	1,122.5	2,009.6	933.2	899.0	6,326.9	

Table 101.---Average annual mortality^a, average annual net growth, and average annual removals of growing-stock and sawtimber volume on timberland by species, Western Adirondack Unit, New York, 1979-92

(In thousands of feet)

Species	Growing stock (cu. ft.)				Sawtimber (bd. ft.)			
	Mortality	SE	Net growth	Removals	SE	Mortality	SE	Net growth
Balsam fir	455	42.9	1,409	330	33.8	888	57.1	2,344
Spruces	1,105	24.5	2,350	3,013	32.3	2,233	32.9	10,785
Red pine	95	79.9	1,181	448	58.6	292	100.0	5,534
White pine	550	57.5	6,476	2,425	25.4	1,489	67.8	27,752
Eastern hemlock	491	30.4	6,061	939	14.5	1,315	32.3	21,571
Other softwoods	49	80.9	1,020	72	35.4	112	100.0	2,165
Total softwoods	2,745	17.6	18,497	7,227	12.3	6,330	22.3	70,151
Red maple	1,504	17.6	13,842	3,478	9.3	2,979	25.2	43,630
Sugar maple	1,318	21.0	11,190	2,709	12.6	2,661	29.5	43,799
Yellow birch	1,034	24.5	4,053	729	13.1	2,385	36.3	13,480
Sweet birch	0	.0	0	26	.0	0	.0	0
Paper birch	0	.0	63	22	*	0	.0	119
Hickory	28	100.0	661	25	34.6	132	100.0	2,882
American beech	1,122	23.5	5,342	1,144	15.4	4,295	26.2	15,519
White ash	261	44.4	3,465	1,225	16.3	404	71.7	11,243
Aspen	735	26.1	2,186	392	24.1	759	43.9	7,811
Black cherry	461	29.8	5,814	1,684	13.6	580	50.1	21,529
Select white oaks	0	.0	17	0	100.0	0	.0	13
Northern red oak	29	100.0	452	334	34.9	0	.0	1,493
Other oaks	0	.0	67	0	*	0	.0	321
Basswood	47	67.2	706	83	35.9	152	100.0	2,742
Elm	364	31.1	617	83	37.7	1,023	42.9	-204
Other hardwoods	94	58.8	595	168	44.6	309	71.7	1,559
Total hardwoods	6,997	9.0	49,070	12,101	5.0	15,679	13.6	165,936
All species	9,743	7.7	67,567	19,328	4.5	22,009	11.2	236,087
							5.3	58,508
								12.7

^a Mortality is a component of net growth.

* Sampling error is greater than 100 percent.

EASTERN ADIRONDACK UNIT TABLES

Table 102.--Area of timberland by forest type, forest-type group, and stand-size class, Eastern Adirondack Unit, New York, 1980

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	.0	6.3	6.1	.0	12.4	70.7
White pine	134.6	35.8	27.5	.0	197.9	15.0
White pine/hemlock	24.2	.0	.0	.0	24.2	49.3
Hemlock	56.8	11.4	.0	.0	68.2	28.5
White/red pine group	215.6	53.6	33.6	.0	302.8	11.3
Balsam fir	.0	5.5	18.8	.0	24.3	50.5
Red spruce	12.2	5.5	.0	.0	17.8	58.8
Red spruce/balsam fir	23.9	7.5	6.8	7.4	45.6	37.1
Black spruce	.0	6.8	5.5	.0	12.3	71.1
Northern white-cedar	24.1	.0	.0	.0	24.1	50.2
Tamarack	.0	.0	5.4	.0	5.4	100.0
Spruce/fir group	60.2	25.4	36.5	7.4	129.5	19.7
Wh. pine/no. red oak/wh. ash	30.2	28.7	6.1	.0	65.0	29.9
Oak/pine group	30.2	28.7	6.1	.0	65.0	29.9
Chestnut oak	.0	4.8	.0	.0	4.8	100.0
White oak/red oak/hickory	.0	6.3	.0	.0	6.3	100.0
White oak	.0	6.6	6.8	.0	13.4	70.7
Northern red oak	6.8	6.1	6.1	.0	19.0	57.2
Mixed central hardwoods	12.1	.0	11.3	.0	23.4	50.1
Oak/hickory group	18.9	23.9	24.2	.0	67.0	29.8
Black ash/Amer. elm/red maple	.0	.0	4.9	.0	4.9	100.0
Red maple(lowland)	.0	10.2	.0	.0	10.2	100.0
Red maple(upland)	.0	.0	5.8	.0	5.8	100.0
American elm/green ash	.0	.0	6.1	.0	6.1	100.0
Elm/ash/red maple group	.0	10.2	16.9	.0	27.1	52.2
Sugar maple/beech/yellow birch	305.7	181.9	61.0	.0	548.6	7.3
Black cherry	.0	.0	10.2	.0	10.2	100.0
Red maple/northern hardwoods	24.9	6.1	6.3	.0	37.3	40.5
Mixed northern hardwoods	30.5	17.7	8.2	.0	56.4	33.2
Northern hardwoods group	361.0	205.8	85.7	.0	652.4	6.4
Aspen	6.2	39.6	5.2	.0	51.0	32.5
Paper birch	.0	38.5	6.3	.0	44.8	37.7
Aspen/birch group	6.2	78.1	11.5	.0	95.9	24.5
All forest types	692.1	425.7	214.6	7.4	1,339.8	1.6
SE	6.2	10.4	16.3	100.0	1.6	

Table 103.--Area of timberland by forest type, forest-type group, and stand-size class, Eastern Adirondack Unit, New York, 1993

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Jack pine	6.5	.0	.0	.0	6.5	100.0
White pine	124.7	12.0	7.5	.0	144.1	18.7
White pine/hemlock	36.7	5.8	.0	.0	42.5	36.3
Hemlock	65.5	11.7	8.9	.0	86.1	25.5
Scotch pine	.0	5.2	.0	.0	5.2	100.0
White/red pine group	233.4	34.6	16.3	.0	284.4	12.4
Balsam fir	6.6	5.2	7.0	.0	18.8	58.2
Red spruce	19.4	6.1	.0	.0	25.5	50.0
Red spruce/balsam fir	12.0	15.9	7.2	.0	35.1	46.8
Northern white-cedar	25.6	12.0	.0	.0	37.6	39.8
Tamarack	.0	5.9	7.0	.0	13.0	70.9
Spruce/fir group	63.5	45.2	21.2	.0	130.0	21.9
Wh. pine/no. red oak/wh. ash	24.4	35.0	7.0	.0	66.4	29.0
Oak/pine group	24.4	35.0	7.0	.0	66.4	29.0
White oak/red oak/hickory	.0	7.0	.0	.0	7.0	100.0
Northern red oak	34.0	.0	.0	.0	34.0	43.7
Black locust	.0	.0	6.6	.0	6.6	100.0
Mixed central hardwoods	18.7	14.0	5.8	.0	38.5	39.7
Oak/hickory group	52.8	21.0	12.4	.0	86.2	25.6
Black ash/Amer. elm/red maple	6.6	.0	.0	.0	6.6	100.0
Willow	.0	6.6	.0	.0	6.6	100.0
Elm/ash/red maple group	6.6	6.6	.0	.0	13.3	70.7
Sugar maple/beech/yellow birch	271.8	188.3	19.3	.0	479.3	8.5
Red maple/northern hardwoods	26.1	17.6	.0	.0	43.7	38.0
Mixed northern hardwoods	79.2	44.7	.0	.0	123.9	22.4
Northern hardwoods group	377.1	250.6	19.3	.0	647.0	6.3
Aspen	12.2	6.6	6.2	.0	25.0	50.3
Paper birch	.0	6.5	.0	.0	6.5	100.0
Aspen/birch group	12.2	13.1	6.2	.0	31.5	44.9
All forest types	770.0	406.2	82.4	.0	1,258.7	1.6
SE	6.0	10.6	28.8	.0	1.6	

**Area of timberland by stand-size class,
Eastern Adirondack Unit, New York, 1980 and 1993**

Million acres

**Area of timberland by forest-type group,
Eastern Adirondack Unit, New York, 1993**

Table 104.---Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Eastern Adirondack Unit, New York, 1993

Species	(in thousands of trees)											SE
	Diameter class (inches at breast height)											
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+	All classes	
Balsam fir	6,556	3,615	1,371	973	131	110	0	0	0	0	12,756	21.5
Spruces	5,727	5,385	1,992	1,026	915	263	190	22	7	0	15,528	20.0
Red pine	206	317	505	228	230	67	0	0	36	0	1,589	37.4
White pine	5,354	3,751	2,837	2,256	1,501	1,510	694	658	711	128	19,401	14.7
Eastern hemlock	7,491	4,473	3,340	2,182	2,090	868	310	223	130	8	21,116	15.3
Other softwoods	2,385	2,336	1,493	777	470	198	167	43	0	0	7,870	26.1
Total softwoods	27,720	19,877	11,538	7,442	5,338	3,017	1,362	946	884	136	78,260	7.2
Red maple	7,019	5,643	3,048	1,741	772	414	111	127	172	6	19,053	12.1
Sugar maple	8,404	7,975	5,088	3,968	2,227	1,357	561	355	438	23	30,396	10.2
Yellow birch	2,868	1,549	1,180	873	544	222	191	166	250	14	7,857	17.5
Sweet birch	382	587	176	183	79	0	0	0	0	0	1,406	33.1
Paper birch	3,897	2,108	1,613	855	317	237	55	10	8	0	9,100	19.6
Hickory	595	638	48	0	24	0	0	0	0	0	1,305	67.8
American beech	11,710	6,092	5,068	2,115	805	498	368	182	122	0	26,961	10.2
White ash	2,492	1,304	919	421	222	210	101	51	5	0	5,725	19.9
Aspen	1,940	2,098	1,465	1,024	379	379	194	48	52	6	7,584	18.5
Black cherry	145	621	475	189	58	65	44	32	0	0	1,629	23.5
Select white oaks	30	108	88	60	29	0	26	0	7	0	348	35.6
Chestnut oak	328	217	283	33	45	32	0	11	0	0	949	78.2
Northern red oak	2,396	2,651	2,256	1,655	659	773	296	22	84	10	10,802	19.1
Other oaks	0	296	0	0	0	0	0	0	8	0	305	71.6
Basswood	481	567	215	246	164	170	11	9	92	10	1,965	23.7
Elm	416	140	108	0	0	0	0	0	0	0	665	40.5
Other hardwoods	664	330	121	61	21	0	0	0	0	0	1,198	40.6
Total hardwoods	43,767	32,925	22,152	13,424	6,346	4,358	1,957	1,013	1,238	69	127,250	4.4
All species	71,487	52,802	33,690	20,866	11,684	7,375	3,319	1,959	2,122	205	205,510	3.4
SE	5.8	5.1	4.8	5.2	6.6	8.8	9.8	11.8	14.7	29.7	3.4	

Table 105.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Eastern Adirondack Unit, New York, 1993

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw- timber	Pole- timber	Sapling and seedling	Non- stocked		
Balsam fir	222	119	68	0	410	26.1
Eastern redcedar	3	0	0	0	3	63.7
Larch	0	0	3	0	3	92.2
Spruce species	171	35	15	0	220	19.6
Red pine	1	1	0	0	3	56.1
Pitch pine	9	0	0	0	9	100.0
Eastern white pine	163	39	5	0	208	26.8
Scotch pine	0	1	0	0	1	100.0
Canada yew	8	0	0	0	8	70.0
Northern white-cedar	22	13	0	0	35	47.3
Eastern hemlock	203	53	3	0	260	18.7
Striped maple	383	248	40	0	671	13.6
Red maple	238	154	43	0	436	15.2
Silver maple	10	0	0	0	10	100.0
Sugar maple	379	335	38	0	751	16.1
Mountain maple	50	4	0	0	55	46.0
Alder species	9	49	1	0	59	50.1
Serviceberry	66	46	0	0	113	31.2
Chokeberry species	0	0	2	0	2	100.0
Yellow birch	307	147	24	0	478	36.5
Sweet birch	22	32	0	0	55	44.9
Paper birch	29	53	27	0	109	35.6
Gray birch	1	0	1	0	3	62.8
American hornbeam	39	13	0	0	52	46.1
Hickory species	0	3	0	0	3	62.3
Bitternut hickory	1	0	0	0	1	100.0
Shagbark hickory	1	0	0	0	2	78.6
American chestnut	3	2	0	0	6	60.3
Sweetfern	4	4	0	0	8	71.0
Alternate-leaved dogwood	2	13	0	0	16	85.5
Round-leaved dogwood	0	2	0	0	2	100.0
Panicked dogwood	39	18	4	0	62	67.7
Red-osier dogwood	40	32	7	0	79	42.0
Hawthorn species	1	1	0	0	2	66.0
American hazelnut	20	55	0	0	76	57.0
Leatherwood	0	9	0	0	9	100.0
American beech	644	509	63	0	1,216	10.0
White ash	173	144	20	0	337	15.8
Black ash	10	7	0	0	17	58.2
Green ash	0	11	0	0	11	100.0
Witch-hazel	71	12	0	0	83	32.7
Large-leaved holly	1	0	0	0	1	100.0
Butternut	2	0	0	0	2	100.0

Table 105.-continued

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw- timber	Pole- timber	Sapling and seedling	Non- stocked		
Labrador tea	0	0	64	0	64	100.0
Bush honeysuckle	16	35	0	0	51	58.4
Apple species	1	9	8	0	18	60.2
Eastern hophornbeam	165	104	6	0	275	19.9
Eastern cottonwood	0	0	0	0	0	100.0
Bigtooth aspen	2	8	1	0	12	42.7
Quaking aspen	52	29	6	0	87	37.9
Pin cherry	21	10	0	0	31	68.5
Black cherry	83	82	35	0	201	23.4
Chokecherry	20	10	0	0	30	50.7
White oak	2	0	0	0	2	100.0
Chestnut oak	7	5	0	0	12	71.4
Northern red oak	31	18	0	0	50	28.8
Black oak	7	0	0	0	7	100.0
Buckthorn species	3	27	9	0	39	63.9
Staghorn sumac	0	3	3	0	6	71.1
Currant species	0	4	0	0	4	100.0
Rubus species	843	873	416	0	2,133	17.2
Willow species	3	0	7	0	10	55.5
Black willow	5	7	0	0	11	66.0
American elderberry	1	0	0	0	1	100.0
Red-berried alder	1	0	0	0	1	100.0
American mountain-ash	2	0	0	0	2	80.3
Spirea species	131	69	656	0	856	68.6
American basswood	9	3	4	0	16	39.0
American elm	29	7	0	0	37	40.8
Blueberry	180	74	4	0	258	37.2
Viburnum species	4	24	5	0	33	44.8
Maple-leaved viburnum	149	65	0	0	213	38.6
Hobblebush viburnum	380	197	15	0	593	28.2
Wild raisin	60	32	0	0	92	71.8
Arrowwood	27	0	13	0	40	55.9
Nannyberry	13	0	9	0	22	54.3
Unknown deciduous shrub	2	1	27	0	31	88.0
Unknown tree	110	2	0	0	113	88.6
All species	5,713	3,870	1,660	0	11,243	8.2
SE	10.9	14.2	43.9	.0	8.2	

Table 106.--Number of standing trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, Eastern Adirondack Unit, New York, 1993

Species	(In thousands of trees)							
	Live trees				Dead trees			
	One or more small	One or more large	Multiple or small	Total live	One or more small	One or more large	Multiple or small	Total all trees
Balsam fir	262	0	0	262	394	0	329	723
Spruces	62	0	0	62	117	19	0	137
Red pine	36	0	0	36	52	0	75	128
White pine	159	56	161	377	569	0	315	885
Eastern hemlock	284	91	69	445	219	23	41	728
Other softwoods	453	269	140	861	125	0	32	1,019
Total softwoods	1,257	416	371	2,043	1,477	42	793	4,356
Red maple	859	503	301	1,664	263	13	5	1,945
Sugar maple	1,024	1,283	437	2,743	267	122	318	3,450
Yellow birch	322	336	153	812	212	128	362	1,514
Sweet birch	106	30	0	136	0	0	0	136
Paper birch	208	119	7	334	366	74	85	859
American beech	2,081	584	633	3,298	584	225	930	5,037
White ash	110	72	99	282	51	0	0	334
Aspen	123	165	134	422	194	28	156	801
Black cherry	54	0	0	54	191	0	0	245
Select white oaks	0	30	0	30	0	0	0	30
Chestnut oak	21	0	0	21	56	0	25	101
Northern red oak	361	259	152	773	61	35	0	96
Other oaks	0	204	0	204	0	0	0	204
Basswood	50	173	11	234	32	0	0	266
Elm	0	0	0	0	83	0	32	115
Other commercial hardwoods	0	0	20	20	105	0	69	193
Noncommercial hardwoods	145	303	16	465	171	0	0	636
Total hardwoods	5,466	4,061	1,966	11,493	2,635	624	1,983	16,736
All species	6,722	4,477	2,336	13,536	4,113	666	2,777	21,092

Table 107.--Net volume of all trees on timberland by class of timber and species group, Eastern Adirondack Unit, New York, 1993

(In millions of cubic feet)

Class of timber	Species group				All groups	SE
	Pines	Other softwoods	Soft hardwoods	Hard hardwoods		
Sawtimber trees:						
Sawlog portion	276.8	300.3	188.4	398.7	1,164.2	5.4
Upper stem	30.2	40.0	46.1	95.4	211.7	4.9
Total sawtimber trees	307.0	340.3	234.4	494.1	1,375.9	5.3
Poletimber trees	47.0	150.4	212.2	349.0	758.6	4.4
Total growing-stock trees	354.0	490.8	446.6	843.0	2,134.5	3.8
Rough trees:						
Sawtimber size	5.5	8.0	5.0	10.2	28.7	14.9
Poletimber size	.1	1.6	8.8	13.4	23.9	18.0
Total rough trees	5.6	9.7	13.7	23.6	52.7	12.7
Rotten trees:						
Sawtimber size	4.0	1.5	2.6	7.6	15.7	22.1
Poletimber size	.4	.2	1.2	5.6	7.3	32.0
Total rotten trees	4.4	1.7	3.7	13.2	23.0	17.8
Salvable dead ^a trees:						
Sawtimber size	2.7	5.2	1.9	5.4	15.2	23.0
Poletimber size	.4	5.1	3.7	1.6	10.8	21.7
Total salvable dead trees	3.1	10.2	5.6	7.0	26.0	17.6
All classes	367.2	512.4	469.7	886.9	2,236.1	3.7
SE	14.3	10.8	8.9	6.3	3.7	

^a Includes noncommercial species.

Table 108.--Net volume of growing-stock trees on timberland by species and diameter class, Eastern Adirondack Unit, New York, 1980
(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- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9		
Balsam fir	16.5	18.7	13.7	4.5	4.6	.6	.0	.0	.0	.0	.0	.0	58.6	20.1
Spruces	33.6	29.0	20.6	20.0	13.9	9.2	5.7	2.2	3.6	.0	.0	.0	137.8	13.1
Red pine	26.5	4.0	4.4	6.0	3.6	1.1	.0	.0	.0	.0	.0	.0	20.6	32.6
White pine	26.5	41.0	39.7	42.2	43.7	39.6	29.3	21.7	35.7	4.1	323.4	11.8	323.4	11.8
Eastern hemlock	11.8	22.7	27.7	29.0	18.4	21.1	22.2	17.6	18.1	.0	188.5	16.0	188.5	16.0
Other softwoods	5.9	6.9	5.1	6.4	4.0	2.2	.0	.9	1.5	.0	33.0	24.8	33.0	24.8
Total softwoods	95.4	122.6	111.2	108.2	88.2	73.7	57.2	42.3	58.9	4.1	761.8	6.6	761.8	6.6
Red maple	14.9	21.1	20.0	14.9	7.1	9.0	4.5	3.3	2.7	.0	97.4	14.5	97.4	14.5
Sugar maple	28.5	46.4	52.8	42.7	30.3	33.9	22.1	13.3	23.1	4.4	297.4	10.5	297.4	10.5
Yellow birch	6.3	9.5	16.8	19.7	16.2	18.3	9.7	10.1	25.5	8.1	140.0	13.3	140.0	13.3
Sweet birch	1.8	2.0	.9	.0	1.0	.5	.0	.0	.0	.0	6.2	47.0	6.2	47.0
Paper birch	13.3	22.2	22.0	15.3	12.7	4.5	.4	.4	.4	.0	91.2	14.6	91.2	14.6
Hickory	1.0	.8	1.3	1.0	.6	.0	.0	.0	.0	.0	4.6	59.6	4.6	59.6
American beech	16.1	24.7	35.5	24.5	11.8	8.8	6.9	.9	2.0	.0	131.3	11.1	131.3	11.1
White ash	5.0	4.7	4.9	4.6	1.5	1.5	1.5	.0	.0	.0	23.7	20.8	23.7	20.8
Aspen	8.3	13.9	19.9	10.2	9.0	8.4	2.2	1.1	.5	.0	73.4	19.0	73.4	19.0
Black cherry	.8	1.3	1.7	1.9	2.6	1.7	.5	1.2	.0	.4	12.0	22.5	12.0	22.5
Select white oaks	.0	.7	.9	1.8	.0	1.1	.0	.0	.4	.0	4.9	46.2	4.9	46.2
Chestnut oak	.6	1.1	.6	.6	1.1	.0	.0	.0	.0	.0	3.9	74.0	3.9	74.0
Northern red oak	3.7	14.6	14.6	10.3	10.9	8.6	2.3	1.4	3.2	.0	69.6	18.5	69.6	18.5
Other oaks	.4	.0	.5	.0	.0	.0	.0	.0	.0	.0	.9	100.0	.9	100.0
Basswood	1.4	2.1	1.5	4.6	2.4	.7	.7	.4	1.7	.5	16.1	34.5	16.1	34.5
Elm	1.9	1.0	.4	.4	1.9	.9	.5	.0	.3	.0	7.3	33.3	7.3	33.3
Other hardwoods	2.9	.8	.5	1.6	.0	.0	.0	.0	.0	.0	5.8	51.4	5.8	51.4
Total hardwoods	106.9	167.0	194.8	154.0	108.9	97.7	51.2	32.0	59.8	13.3	985.7	4.6	985.7	4.6
All species	202.3	289.6	306.1	262.2	197.1	171.4	108.3	74.3	118.7	17.4	1,747.5	3.5	1,747.5	3.5
SE	5.8	5.0	5.5	5.6	6.6	7.8	9.7	12.3	14.0	23.5	3.5			

Table 109.--Net volume of growing-stock trees on timberland by species and diameter class, Eastern Adirondack Unit, New York, 1993

(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+		
Balsam fir	17.7	23.0	15.8	17.1	3.2	2.8	.0	.0	.0	.0	79.6	22.6
Spruces	16.9	36.1	23.8	19.5	23.5	9.1	8.6	1.5	.5	.0	139.5	19.4
Red pine	.5	1.9	5.4	3.2	5.5	1.8	.0	.0	2.9	.0	21.1	30.7
White pine	15.5	24.4	32.6	37.7	34.8	46.8	25.9	33.2	52.1	16.3	319.2	15.3
Eastern hemlock	18.5	24.9	34.5	37.4	49.3	26.0	12.8	10.6	9.0	1.1	224.1	18.9
Other softwoods	6.6	11.5	13.8	9.4	7.7	5.0	5.4	1.9	.0	.0	61.3	25.6
Total softwoods	75.6	121.8	125.9	124.3	123.9	91.5	52.7	47.1	64.4	17.4	844.8	7.6
Red maple	18.2	32.4	31.8	28.0	18.3	13.4	4.5	6.9	14.9	.7	169.2	13.8
Sugar maple	24.9	52.8	57.4	67.9	52.9	44.4	21.9	19.1	31.0	2.7	375.0	10.9
Yellow birch	7.1	9.0	12.3	13.9	12.2	6.3	6.9	8.0	22.0	1.5	99.2	15.0
Sweet birch	1.2	4.1	1.6	2.0	2.0	.0	.0	.0	.0	.0	11.0	34.7
Paper birch	12.4	14.8	17.6	13.5	7.3	7.1	1.8	.6	.5	.0	75.6	16.6
Hickory	1.3	3.4	.6	.0	.7	.0	.0	.0	.0	.0	6.0	59.5
American beech	25.4	36.0	53.6	32.7	19.2	12.9	14.1	9.4	6.7	.0	209.9	10.9
White ash	7.2	8.5	10.4	7.7	5.3	6.2	4.4	2.9	.5	.0	53.2	22.1
Aspen	6.8	13.8	17.9	17.8	9.4	11.8	8.1	1.8	3.7	.3	91.4	18.8
Black cherry	.3	4.1	4.3	2.9	1.3	1.8	1.5	1.7	.0	.0	17.8	27.3
Select white oaks	.1	.4	.7	.8	.6	.0	.9	.0	.4	.0	3.9	33.2
Chestnut oak	.8	1.0	2.0	.3	.5	.7	.0	.3	.0	.0	5.5	73.8
Northern red oak	6.6	17.2	23.1	25.3	13.9	20.9	10.9	1.0	5.2	1.0	125.3	20.7
Other oaks	.0	1.7	.0	.0	.0	.0	.0	.0	.4	.0	2.1	64.1
Basswood	1.2	4.0	2.7	4.6	4.8	6.3	.5	.5	7.9	2.1	34.6	30.8
Elm	1.0	.6	.8	.0	.0	.0	.0	.0	.0	.0	2.3	34.7
Other hardwoods	2.1	2.3	1.6	1.0	.4	.0	.0	.0	.0	.0	7.5	36.4
Total hardwoods	116.5	206.2	238.5	218.5	148.7	131.9	75.5	52.3	93.2	8.4	1,289.7	4.9
All species	192.1	328.0	364.4	342.8	272.5	223.4	128.3	99.4	157.6	25.8	2,134.5	3.8
SE	6.2	5.3	5.0	5.6	6.9	8.8	10.0	12.5	16.5	31.6	3.8	

Table 110.--Net volume of sawtimber trees on timberland by species and diameter class, Eastern Adirondack Unit, New York, 1980

(In millions of board feet)												
Species	Diameter class (inches at breast height)										All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	29.0+		
Balsam fir	51.5	19.9	21.2	2.9	.0	.0	.0	.0	.0	.0	95.3	26.6
Spruces	74.3	88.6	65.8	45.0	29.5	11.7	20.4	.0	.0	.0	335.3	16.2
Red pine	15.5	25.4	16.5	5.5	.0	.0	.0	.0	.0	.0	63.0	36.8
White pine	143.7	178.7	198.3	186.6	146.3	110.3	186.8	21.6	.0	.0	1,172.2	13.3
Eastern hemlock	94.8	117.0	79.6	96.2	104.4	85.4	88.6	.0	.0	.0	666.1	17.7
Other softwoods	14.5	20.8	14.9	8.4	.0	3.5	6.6	.0	.0	.0	68.6	30.5
Total softwoods	394.4	450.4	396.3	344.5	280.1	210.9	302.4	21.6	.0	.0	2,400.4	8.4
Red maple	-	63.0	32.4	39.3	20.7	15.1	13.1	.0	.0	.0	183.5	18.1
Sugar maple	-	188.3	142.5	166.3	108.0	66.5	115.7	22.9	.0	.0	810.2	13.6
Yellow birch	-	87.1	71.2	82.0	46.6	47.0	128.1	43.1	.0	.0	505.2	14.3
Sweet birch	-	.0	4.2	2.0	.0	.0	.0	.0	.0	.0	6.2	59.0
Paper birch	-	67.6	55.7	20.3	1.8	1.7	1.8	.0	.0	.0	149.0	17.6
Hickory	-	4.3	2.9	.0	.0	.0	.0	.0	.0	.0	7.2	78.7
American beech	-	109.6	54.7	43.3	34.3	4.6	12.4	.0	.0	.0	258.9	14.9
White ash	-	21.5	7.0	6.5	7.6	.0	.0	.0	.0	.0	42.6	33.5
Aspen	-	47.4	42.4	39.6	11.0	5.1	2.7	.0	.0	.0	148.2	28.3
Black cherry	-	8.9	11.1	8.3	2.2	5.2	.0	2.3	.0	.0	38.1	28.6
Select white oaks	-	8.9	.0	4.8	.0	.0	1.7	.0	.0	.0	15.4	41.3
Chestnut oak	-	2.4	4.3	.0	.0	.0	.0	.0	.0	.0	6.7	84.0
Northern red oak	-	42.1	46.9	41.0	11.3	6.2	16.3	.0	.0	.0	163.8	20.7
Basswood	-	20.5	11.5	3.6	3.8	2.2	9.0	2.6	.0	.0	53.2	40.8
Elm	-	1.7	9.8	3.9	2.3	.0	1.4	.0	.0	.0	19.2	45.8
Other hardwoods	-	7.6	.0	.0	.0	.0	.0	.0	.0	.0	7.6	74.2
Total hardwoods	-	680.8	496.8	461.0	249.6	153.6	302.3	70.9	.0	.0	2,414.9	7.0
All species	394.4	1,131.2	893.0	805.5	529.7	364.5	604.7	92.4	.0	.0	4,815.4	5.6
SE	9.2	5.6	6.6	7.9	9.7	12.3	14.3	23.5	.0	.0	5.6	

Table 111.--Net volume of sawtimber trees on timberland by species and diameter class, Eastern Adirondack Unit, New York, 1993

Species	(In millions of board feet)										All classes	SE
	Diameter class (inches at breast height)											
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	26.0- 28.0		
Balsam fir	58.6	74.2	15.3	14.9	.0	.0	.0	.0	.0	.0	163.0	28.1
Spruces	83.1	86.3	109.7	44.9	42.9	7.7	2.4	.0	.0	.0	377.0	19.9
Red pine	20.6	13.1	26.4	8.9	.0	.0	15.9	.0	.0	.0	84.9	30.0
White pine	120.2	162.5	158.9	225.5	131.3	170.9	275.0	93.1	1,337.3	16.9	1,337.3	16.9
Eastern hemlock	117.5	152.5	214.4	119.0	59.1	53.3	44.2	5.5	765.5	21.5	765.5	21.5
Other softwoods	42.9	32.9	28.4	19.3	20.6	6.9	.0	.0	151.1	29.1	151.1	29.1
Total softwoods	442.8	521.6	553.0	432.4	254.0	238.8	337.5	98.6	2,878.7	9.3	2,878.7	9.3
Red maple	-	113.7	79.6	57.8	21.1	30.7	68.9	1.8	373.7	21.0	373.7	21.0
Sugar maple	-	291.1	243.1	219.5	108.9	95.2	159.0	17.4	1,134.1	14.1	1,134.1	14.1
Yellow birch	-	62.1	52.8	27.0	31.1	35.8	107.5	7.7	324.1	19.1	324.1	19.1
Sweet birch	-	9.6	10.2	.0	.0	.0	.0	.0	19.9	40.7	19.9	40.7
Paper birch	-	60.3	32.3	32.4	9.2	2.5	2.1	.0	138.9	22.1	138.9	22.1
Hickory	-	.0	3.3	.0	.0	.0	.0	.0	3.3	100.0	3.3	100.0
American beech	-	145.8	84.6	61.5	65.6	44.8	37.4	.0	439.8	15.4	439.8	15.4
White ash	-	34.8	25.4	26.7	17.7	14.0	3.0	.0	121.7	29.8	121.7	29.8
Aspen	-	78.9	44.1	54.2	40.8	8.0	20.0	2.4	248.5	26.6	248.5	26.6
Black cherry	-	12.6	5.6	9.9	7.4	6.8	.0	.0	42.3	38.8	42.3	38.8
Select white oaks	-	4.1	3.3	.0	3.6	.0	2.5	.0	13.6	41.1	13.6	41.1
Chestnut oak	-	1.4	2.1	2.5	.0	1.3	.0	.0	7.3	70.7	7.3	70.7
Northern red oak	-	108.1	63.2	104.4	54.3	5.3	26.0	7.3	368.6	26.4	368.6	26.4
Other oaks	-	.0	.0	.0	.0	.0	2.4	.0	2.4	100.0	2.4	100.0
Basswood	-	21.0	22.2	29.6	2.5	3.3	37.7	14.1	130.3	35.9	130.3	35.9
Other hardwoods	-	4.5	1.1	.0	.0	.0	.0	.0	5.6	60.1	5.6	60.1
Total hardwoods	-	948.0	673.1	625.6	362.3	247.6	466.6	50.7	3,374.1	7.6	3,374.1	7.6
All species	442.8	1,469.6	1,226.2	1,058.0	616.3	486.5	804.1	149.3	6,252.8	5.6	6,252.8	5.6
SE	10.4	5.7	7.1	8.9	10.2	12.8	16.7	32.4	5.6			

**Net volume of growing-stock trees on timberland,
top five species,
Eastern Adirondack Unit, New York, 1980 and 1993**

**Net volume of sawtimber trees on timberland,
top five species,
Eastern Adirondack Unit, New York, 1980 and 1993**

Table 113.--Average annual mortality^a, average annual net growth, and average annual removals of growing-stock and sawtimber volume on timberland by species, Eastern Adirondack Unit, New York, 1979-92

Species	(In thousands of feet)						Sawtimber (bd. ft.)					
	Growing stock (cu. ft.)			Net growth			Mortality			SE		
	Mortality	SE	Net growth	SE	Removals	SE	Mortality	SE	Net growth	SE	Removals	SE
Balsam fir	2,258	27.8	1,159	77.7	174	43.9	5,416	34.7	3,404	83.7	239	70.8
Spruces	1,089	21.3	3,230	23.8	1,809	37.9	2,070	40.0	12,515	26.0	6,528	46.7
Red pine	78	100.0	137	*	177	78.0	372	100.0	1,588	64.1	845	78.1
White pine	1,094	22.0	8,742	16.4	5,901	23.9	3,628	26.5	42,631	16.4	27,300	24.1
Eastern hemlock	713	53.1	6,118	18.6	4,645	35.9	1,800	55.1	23,364	19.5	19,160	35.9
Other softwoods	451	48.4	1,540	45.6	0	.0	635	69.1	4,357	34.1	0	.0
Total softwoods	5,684	14.6	20,926	10.2	12,706	18.5	13,921	17.6	87,859	9.5	54,072	19.2
Red maple	687	24.8	5,157	13.7	984	45.0	1,052	46.1	15,230	19.6	3,359	58.5
Sugar maple	1,420	19.9	8,140	12.7	5,292	26.8	3,343	28.2	34,058	13.9	20,861	32.3
Yellow birch	1,083	31.1	1,645	27.1	2,994	20.6	3,495	41.9	4,422	37.8	12,303	22.0
Sweet birch	22	100.0	193	54.6	54	71.8	0	.0	1,104	60.4	147	100.0
Paper birch	426	35.4	1,119	28.6	375	53.0	392	57.9	4,243	28.3	880	75.8
Hickory	0	.0	237	60.2	0	.0	0	.0	90	100.0	0	.0
American beech	2,252	23.9	5,716	17.1	2,732	20.8	7,654	28.0	11,013	28.6	8,095	25.4
White ash	149	60.4	1,655	25.9	364	38.6	252	100.0	4,268	35.7	827	56.8
Aspen	1,081	30.5	1,873	29.0	1,161	49.8	2,156	51.5	8,935	27.7	4,324	55.6
Black cherry	21	75.4	900	33.1	150	53.1	0	.0	2,417	42.5	641	57.8
Select white oaks	29	100.0	28	*	31	100.0	141	100.0	75	*	0	.0
Chestnut oak	55	100.0	109	66.3	172	100.0	99	100.0	172	95.0	72	100.0
Northern red oak	190	36.9	3,103	20.7	773	30.9	396	56.8	11,452	23.1	2,940	34.4
Other oaks	0	.0	45	81.5	33	100.0	0	.0	161	100.0	0	.0
Basswood	211	46.3	887	32.8	138	59.7	927	50.2	3,929	41.4	540	71.3
Elm	468	40.0	-293	64.4	254	67.8	1,068	55.5	-1,068	55.5	694	100.0
Other hardwoods	135	53.8	107	86.7	22	100.0	564	58.8	-427	76.3	0	.0
Total hardwoods	8,232	10.4	30,621	6.5	15,377	13.5	21,538	15.5	100,075	7.9	55,682	16.4
All species	13,916	8.8	51,547	5.3	28,083	11.7	35,459	12.1	187,934	5.8	109,755	13.0

^a Mortality is a component of net growth.

* Sampling error is greater than 100 percent.

CAPITOL DISTRICT UNIT TABLES

Table 114.--Area of timberland by forest type, forest-type group, and stand-size class, Capitol District Unit, New York, 1980

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	.0	6.2	6.4	.0	12.7	70.7
White pine	105.5	44.8	18.6	.0	168.9	17.2
White pine/hemlock	63.7	6.4	.0	.0	70.1	29.4
Hemlock	58.8	12.6	.0	.0	71.5	28.4
Scotch pine	.0	.0	5.8	.0	5.8	100.0
White/red pine group	228.0	70.1	30.8	.0	328.9	11.3
Norway spruce	.0	6.2	.0	.0	6.2	100.0
Larch plantation	.0	.0	5.6	.0	5.6	100.0
Spruce/fir group	.0	6.2	5.6	.0	11.8	70.8
Eastern redcedar	.0	.0	5.9	.0	5.9	100.0
Loblolly/shortleaf group	.0	.0	5.9	.0	5.9	100.0
Wh. pine/no. red oak/wh. ash	38.6	28.4	5.8	.0	72.8	28.7
Eastern redcedar/hardwood	.0	6.6	.0	.0	6.6	100.0
Oak/pine group	38.6	35.0	5.8	.0	79.4	27.6
Chestnut oak	12.5	6.6	6.6	.0	25.7	48.5
White oak/red oak/hickory	19.2	6.5	12.9	.0	38.6	39.9
Northern red oak	30.9	19.4	6.2	.0	56.5	32.0
Hawthorn/reverting field	.0	.0	12.7	.0	12.7	70.7
Mixed central hardwoods	48.4	77.3	19.1	.0	144.8	19.9
Oak/hickory group	110.9	109.9	57.5	.0	278.3	13.2
Black ash/Amer. elm/red maple	.0	24.7	43.6	.0	68.3	28.4
Red maple(lowland)	.0	24.1	.0	.0	24.1	48.0
Cottonwood	5.6	.0	.0	.0	5.6	100.0
Willow	6.3	.0	12.3	.0	18.6	57.8
Elm/ash/red maple group	11.9	48.8	55.9	.0	116.6	20.1
Sugar maple/beech/yellow birch	126.9	74.9	42.4	.0	244.2	14.3
Black cherry	18.4	6.6	6.0	.0	31.0	44.1
Red maple/northern hardwoods	19.7	18.0	25.3	.0	63.0	30.8
Pin cherry/reverting field	.0	6.9	12.2	.0	19.1	57.9
Mixed northern hardwoods	69.0	25.9	78.2	.0	173.1	18.1
Northern hardwoods group	234.0	132.3	164.2	.0	530.5	8.7
Aspen	6.2	25.4	24.3	.0	55.9	33.1
Paper birch	.0	.0	5.8	.0	5.8	100.0
Gray birch	.0	10.8	5.8	.0	16.6	48.3
Aspen/birch group	6.2	36.2	35.8	.0	78.3	26.0
All forest types	629.7	438.4	361.6	.0	1,429.7	2.2
SE	6.6	9.3	11.3	.0	2.2	

Table 115.--Area of timberland by forest type, forest-type group, and stand-size class, Capitol District Unit, New York, 1993

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	10.2	10.2	.0	.0	20.5	51.2
White pine	155.3	20.3	28.2	.0	203.7	13.7
White pine/hemlock	31.7	10.6	.0	.0	42.3	35.0
Hemlock	54.4	5.7	.0	.0	60.0	29.7
Scotch pine	.0	6.7	.0	.0	6.7	100.0
White/red pine group	251.6	53.5	28.2	.0	333.3	10.2
Red spruce	4.6	.0	.0	.0	4.6	100.0
White spruce	.0	5.8	.0	.0	5.8	100.0
Tamarack	4.9	.0	.0	.0	4.9	100.0
Larch plantation	5.5	.0	.0	.0	5.5	100.0
Spruce/fir group	15.0	5.8	.0	.0	20.8	50.2
Pitch pine	5.5	.0	.0	.0	5.5	100.0
Loblolly/shortleaf group	5.5	.0	.0	.0	5.5	100.0
Wh. pine/no. red oak/wh. ash	35.2	22.1	.0	.0	57.4	30.1
Oak/pine group	35.2	22.1	.0	.0	57.4	30.1
Chestnut oak	.0	10.3	.0	.0	10.3	70.8
White oak/red oak/hickory	23.2	.0	.0	.0	23.2	50.2
White oak	.0	.0	5.2	.0	5.2	100.0
Northern red oak	31.2	16.2	.0	.0	47.4	30.4
Black walnut	5.3	.0	.0	.0	5.3	100.0
Red maple/central hardwoods	.0	.0	4.9	.0	4.9	100.0
Mixed central hardwoods	82.6	97.6	5.0	.0	185.2	16.1
Oak/hickory group	142.2	124.1	15.1	.0	281.5	12.7
Black ash/Amer. elm/red maple	5.5	16.2	10.8	5.5	38.1	36.8
Red maple(lowland)	.0	8.4	.0	.0	8.4	71.7
Red maple(upland)	10.8	5.8	.0	.0	16.5	57.8
Cottonwood	11.1	.0	5.8	.0	16.9	57.8
Willow	22.0	5.8	.0	.0	27.8	44.8
Sycamore/pecan/American elm	4.0	.0	.0	.0	4.0	100.0
Elm/ash/red maple group	53.3	36.2	16.6	5.5	111.7	18.9
Sugar maple/beech/yellow birch	171.9	63.8	5.7	.0	241.4	13.4
Black cherry	10.8	10.3	5.0	.0	26.1	42.8
Red maple/northern hardwoods	36.6	62.1	5.2	.0	104.0	22.1
Pin cherry/reverting field	.0	.0	26.7	.0	26.7	44.8
Mixed northern hardwoods	73.6	46.1	21.5	.0	141.2	18.8
Northern hardwoods group	292.8	182.3	64.2	.0	539.3	7.9
Aspen	.0	28.5	38.2	.0	66.7	28.4
Paper birch	.0	.0	3.5	.0	3.5	100.0
Gray birch	.0	.0	5.0	.0	5.0	100.0
Aspen/birch group	.0	28.5	46.7	.0	75.2	26.5
All forest types	795.7	452.6	170.8	5.5	1,424.7	2.7
SE	5.6	9.1	15.0	100.0	2.7	

Area of timberland by stand-size class,
Capitol District Unit, New York, 1980 and 1993

Area of timberland by forest-type group,
Capitol District Unit, New York, 1993

Table 116.---Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Capitol District Unit, New York, 1993

(In thousands of trees)

Species	Diameter class (inches at breast height)										All classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Balsam fir	487	0	80	28	0	16	0	0	0	0	611	83.1
Spruces	1,821	1,037	203	267	45	0	0	0	0	0	3,373	51.9
Red pine	1,049	2,631	993	508	146	40	0	0	0	0	5,367	48.0
White pine	6,988	5,191	3,754	3,156	2,237	2,058	1,153	521	613	153	25,826	12.7
Eastern hemlock	8,506	5,434	3,510	2,343	1,736	1,351	500	253	119	13	23,766	13.5
Other softwoods	2,047	1,246	1,204	669	553	181	35	0	0	0	5,935	34.6
Total softwoods	20,898	15,539	9,744	6,973	4,717	3,646	1,689	774	732	166	64,879	8.2
Red maple	11,847	8,735	5,110	2,793	1,455	641	460	100	149	11	31,303	9.0
Sugar maple	8,498	5,087	3,332	2,895	1,270	1,084	384	324	322	39	23,237	10.3
Yellow birch	3,231	1,456	775	341	116	67	63	0	0	0	6,049	22.4
Sweet birch	2,712	1,659	1,175	542	255	126	77	29	0	5	6,579	17.3
Paper birch	842	1,227	859	477	88	55	51	0	0	0	3,599	16.5
Hickory	1,577	1,322	1,199	439	320	165	61	0	0	0	5,084	20.5
American beech	2,689	1,669	1,241	776	413	100	97	28	37	0	7,050	16.6
White ash	5,129	2,083	1,651	1,071	305	186	64	105	0	5	10,600	12.9
Aspen	4,563	3,088	1,751	770	477	366	62	131	55	24	11,288	17.5
Black cherry	2,252	1,527	1,451	913	543	150	96	10	14	0	6,957	17.1
Select white oaks	863	805	402	279	205	183	99	0	21	3	2,862	21.8
Chestnut oak	1,029	1,399	1,575	642	420	178	56	0	6	0	5,305	30.2
Northern red oak	2,441	2,565	2,537	2,059	1,407	1,048	662	331	246	28	13,326	12.1
Other oaks	540	151	208	92	123	12	42	18	24	5	1,215	39.9
Basswood	1,027	748	600	306	282	193	35	44	0	0	3,234	20.6
Elm	2,390	1,207	610	458	180	109	56	38	0	0	5,048	20.0
Other hardwoods	845	1,188	720	506	305	214	91	50	43	18	3,981	28.6
Total hardwoods	52,476	35,920	25,196	15,361	8,163	4,878	2,457	1,209	918	139	146,719	4.1
All species	73,374	51,460	34,940	22,334	12,881	8,525	4,147	1,983	1,650	305	211,598	3.6
SE	5.1	5.3	5.0	5.0	5.8	7.5	9.0	11.2	13.9	26.4	3.6	

Table 117.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Capitol District Unit, New York, 1993

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Balsam fir	9	3	0	0	12	58.3
Common juniper	0	1	5	0	6	82.7
Eastern redcedar	3	3	0	0	5	67.1
Spruce species	5	10	1	0	15	40.8
Red pine	1	1	0	0	3	71.0
Pitch pine	0	0	0	0	0	100.0
Eastern white pine	95	28	5	0	128	29.8
Scotch pine	0	1	1	0	2	71.1
Canada yew	0	18	2	0	20	63.8
Northern white-cedar	0	1	0	0	1	100.0
Eastern hemlock	104	29	0	0	132	21.4
Boxelder	10	0	0	0	10	62.7
Striped maple	159	93	0	0	252	18.5
Red maple	270	123	35	0	428	15.9
Silver maple	0	0	0	0	0	100.0
Sugar maple	419	186	74	0	679	16.0
Mountain maple	4	0	0	0	4	91.9
Ailanthus species	4	0	0	0	4	79.9
Alder species	29	51	54	0	133	37.6
Serviceberry	109	104	8	0	221	21.8
Barberry	12	0	27	0	39	71.1
Yellow birch	76	34	0	0	110	27.4
Sweet birch	106	32	7	0	146	26.9
Paper birch	17	39	1	0	57	45.4
Gray birch	6	13	17	0	37	43.1
American hornbeam	95	85	10	0	191	22.8
Hickory species	36	16	4	0	55	18.5
Bitternut hickory	0	0	0	0	0	100.0
Shagbark hickory	1	1	0	0	2	55.5
American chestnut	3	0	0	0	3	67.0
Sweetfern	21	0	40	0	60	73.3
Flowering dogwood	0	1	0	0	1	79.3
Alternate-leaved dogwood	11	2	0	0	13	56.1
Silky dogwood	3	28	2	0	33	84.7
Round-leaved dogwood	2	2	20	0	25	83.4
Panicked dogwood	364	349	1,096	105	1,914	17.1
Red-osier dogwood	15	48	57	12	132	28.9
Hawthorn species	4	3	31	0	39	40.3
American hazelnut	46	21	0	0	67	44.4
Beaked hazelnut	7	21	0	0	29	60.3
American beech	246	114	1	0	361	16.5
White ash	614	245	199	1	1,059	11.9
Black ash	0	4	0	0	4	61.7
Green ash	0	4	0	0	4	100.0
Honeylocust	6	0	0	0	6	94.3
Witch-hazel	107	98	0	0	205	20.6
Winterberry holly	1	0	0	0	1	100.0
Black walnut	0	0	1	0	2	66.6
Common spicebush	71	47	0	0	118	46.1
Bush honeysuckle	105	150	91	0	347	27.6
Apple species	18	11	20	0	49	31.6
Mountain holly	0	0	3	0	3	100.0
Eastern hophornbeam	191	199	18	0	408	16.0
Balsam poplar	0	1	0	0	1	100.0
Bigtooth aspen	1	2	1	0	5	45.2
Quaking aspen	21	54	40	0	115	20.3
Cherry species	1	0	0	0	1	100.0
Pin cherry	2	5	0	0	7	63.8
Black cherry	224	125	73	0	422	14.3
Chokecherry	81	8	24	0	112	32.8
White oak	15	21	3	0	39	35.6

Table 117.-continued

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Swamp white oak	0	0	1	0	1	100.0
Scrub, bear oak	13	0	0	0	13	100.0
Chestnut oak	18	10	0	0	28	46.7
Northern red oak	60	91	3	0	155	18.8
Black oak	4	8	4	0	16	40.6
Buckthorn species	15	12	8	0	35	34.7
Smooth sumac	1	0	7	0	8	88.3
Staghorn sumac	14	4	41	0	59	59.2
Currant species	4	0	3	0	7	63.6
Black locust	9	4	0	0	13	68.1
Rose species	35	26	0	0	61	58.8
Rubus species	732	393	220	0	1,345	13.0
Willow species	3	7	11	0	21	52.9
Black willow	1	0	0	0	1	100.0
American elderberry	2	0	13	0	15	87.1
Red-berried alder	2	5	0	0	7	74.9
Sassafras	0	0	0	0	0	100.0
American mountain-ash	0	15	0	0	15	100.0
Spiraea species	76	149	46	0	271	34.1
American basswood	12	14	2	0	28	28.3
American elm	20	18	25	0	63	20.9
Slippery elm	0	0	4	0	4	100.0
Rock elm	1	0	0	0	1	100.0
American bladdernut	0	0	1	0	1	100.0
Blueberry	161	92	18	0	271	23.8
Viburnum species	60	171	31	0	262	32.0
Maple-leaved viburnum	248	197	21	0	466	18.9
Hobblebush viburnum	155	23	0	0	179	38.3
Wild raisin	13	12	30	0	55	36.4
Arrowwood	79	56	147	0	282	31.3
Nannyberry	50	38	19	0	107	29.5
Common prickly ash	7	19	0	0	26	56.5
Unknown deciduous shrub	1	35	0	0	36	53.7
Unknown evergreen shrub	0	20	0	0	20	73.7
Unknown tree	8	0	0	0	8	77.5
All species	5,557	3,857	2,628	118	12,160	5.0
SE	8.3	11.1	17.6	100.0	5.0	

Table 118. --Number of standing trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, Capitol District Unit, New York, 1993

Species	Live trees				Dead trees				Total all trees
	One or more small	One or more large	Multiple or small	Total live	One or more small	One or more large	Multiple or small	Total dead	
Red pine	26	25	50	101	235	0	105	340	441
White pine	381	137	210	728	624	201	264	1,088	1,816
Eastern hemlock	268	160	154	582	447	52	167	666	1,248
Other softwoods	81	24	0	105	50	0	0	50	155
Total softwoods	756	346	414	1,517	1,356	253	535	2,144	3,661
Red maple	2,209	725	506	3,440	382	168	444	994	4,435
sugar maple	1,225	721	372	2,317	154	231	274	660	2,977
Yellow birch	346	132	26	503	226	26	193	445	949
Sweet birch	262	34	42	338	79	0	105	183	521
Paper birch	100	26	77	203	119	0	82	201	404
Hickory	26	116	120	263	0	0	27	27	290
American beech	1,112	217	279	1,608	26	85	380	491	2,099
White ash	43	143	69	255	169	23	10	202	457
Aspen	262	98	110	470	206	26	40	273	743
Black cherry	370	114	103	587	726	30	184	940	1,527
Select white oaks	89	8	0	97	113	0	55	169	265
Chestnut oak	121	147	4	273	147	69	82	298	571
Northern red oak	421	536	97	1,053	124	62	168	354	1,407
Other oaks	84	5	0	89	0	0	20	20	109
Basswood	157	98	83	337	0	36	54	90	427
Elm	27	27	0	54	415	120	236	770	825
Other commercial hardwoods	583	219	41	843	120	10	81	211	1,054
Noncommercial hardwoods	627	280	201	1,109	160	79	73	311	1,420
Total hardwoods	8,065	3,649	2,129	13,843	3,166	965	2,508	6,639	20,482
All species	8,821	3,995	2,543	15,359	4,522	1,217	3,043	8,783	24,143

Table 119.--Net volume of all trees on timberland by class of timber and species group, Capitol District Unit, New York, 1993

(In millions of cubic feet)

Class of timber	Species group				All groups	SE
	Pines	Other softwoods	Soft hardwoods	Hard hardwoods		
Sawtimber trees:						
Sawlog portion	344.5	213.7	254.9	388.6	1,201.7	5.2
Upper stem	39.4	27.3	64.1	93.3	224.0	4.5
Total sawtimber trees	383.9	241.0	319.0	481.8	1,425.7	5.1
Poletimber trees	77.9	77.0	324.7	315.6	795.2	4.2
Total growing-stock trees	461.8	318.0	643.7	797.4	2,221.0	3.9
Rough trees:						
Sawtimber size	11.1	4.2	16.4	11.2	42.9	18.0
Poletimber size	1.1	2.6	12.8	23.1	39.6	11.1
Total rough trees	12.2	6.8	29.2	34.2	82.5	11.7
Rotten trees:						
Sawtimber size	.5	.7	3.8	6.0	10.9	20.7
Poletimber size	.2	.0	4.7	3.3	8.3	16.8
Total rotten trees	.7	.7	8.6	9.3	19.2	13.7
Salvable dead ^a trees:						
Sawtimber size	.3	2.2	3.9	.9	7.3	23.4
Poletimber size	.8	2.3	7.2	1.4	11.7	15.9
Total salvable dead trees	1.1	4.5	11.2	2.2	19.0	13.6
All classes	475.8	330.1	692.6	843.1	2,341.6	3.7
SE	11.9	14.5	5.9	6.2	3.7	

^a Includes noncommercial species.

Table 120.--Net volume of growing-stock trees on timberland by species and diameter class, Capitol District Unit, New York, 1980
(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- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9		
Balsam fir	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	100.0
Spruces	4.7	6.7	5.0	3.1	.0	.0	.0	.0	.0	.0	.0	.0	19.5	61.3
Red pine	2.8	5.5	1.3	.0	.9	.0	.0	.0	.0	.0	.0	.0	10.5	65.1
White pine	24.2	36.0	45.5	40.1	43.7	32.4	18.2	13.0	20.7	3.2	277.0	13.0	277.0	13.0
Eastern hemlock	24.7	35.9	39.0	50.0	35.5	36.9	19.1	8.7	10.4	.5	260.6	13.7	260.6	13.7
Other softwoods	4.8	1.9	1.3	.5	.6	.5	.0	.0	.0	.0	.0	.0	9.5	35.2
Total softwoods	61.1	86.5	92.1	93.8	80.6	69.8	37.3	21.7	31.0	3.6	577.5	8.6	577.5	8.6
Red maple	34.6	37.1	48.3	23.3	20.3	11.6	7.7	2.1	3.9	1.8	190.7	11.1	190.7	11.1
Sugar maple	25.9	27.2	32.2	29.9	31.4	23.7	11.8	7.7	4.6	.0	194.3	13.5	194.3	13.5
Yellow birch	3.3	4.2	5.7	7.3	2.5	2.0	.0	.6	.0	.0	25.5	22.4	25.5	22.4
Sweet birch	8.0	7.3	6.2	6.9	5.3	3.6	2.1	.5	.5	.0	40.3	22.0	40.3	22.0
Paper birch	7.9	9.8	5.4	7.1	3.5	2.7	.0	.0	.0	.0	36.3	19.2	36.3	19.2
Hickory	4.0	7.6	11.0	6.1	3.4	1.0	.5	.0	1.1	.0	34.8	19.7	34.8	19.7
American beech	2.8	6.8	8.0	8.3	5.9	2.5	4.4	.4	1.1	.0	40.2	19.7	40.2	19.7
White ash	10.0	15.7	16.9	8.0	8.2	2.6	3.2	1.0	1.6	.0	67.3	16.8	67.3	16.8
Aspen	14.5	21.0	24.6	8.0	5.9	3.1	.5	.0	.0	.0	77.6	17.4	77.6	17.4
Black cherry	6.0	8.1	13.5	8.2	6.3	3.8	1.1	.0	.9	.0	47.8	22.9	47.8	22.9
Select white oaks	1.9	3.1	3.5	2.1	2.2	4.5	.5	.8	1.6	1.6	21.9	25.3	21.9	25.3
Chestnut oak	8.5	15.0	16.7	11.1	5.2	2.8	.5	.7	1.4	.0	61.7	26.2	61.7	26.2
Northern red oak	8.0	22.6	26.2	30.6	36.3	26.6	18.0	8.2	14.1	2.2	192.8	13.2	192.8	13.2
Other oaks	1.8	2.3	2.5	2.2	1.4	1.4	1.0	.5	1.4	.5	14.8	27.6	14.8	27.6
Basswood	1.1	3.8	2.3	1.9	1.4	2.6	.5	.0	.0	.0	13.5	23.3	13.5	23.3
Elm	4.4	12.1	9.8	7.2	4.5	2.8	1.5	1.1	.9	.0	44.3	16.2	44.3	16.2
Other hardwoods	2.4	4.6	7.4	4.2	4.2	1.9	2.3	1.4	.7	.5	29.6	30.6	29.6	30.6
Total hardwoods	145.1	208.3	240.0	172.3	148.0	98.9	55.6	25.0	33.8	6.5	1,133.5	4.3	1,133.5	4.3
All species	206.2	294.8	332.1	266.1	228.6	168.7	92.9	46.7	64.8	10.2	1,711.0	3.7	1,711.0	3.7
SE	5.9	5.5	5.2	6.0	7.0	8.6	11.0	12.7	13.7	28.0	3.7			

Table 121.---Net volume of growing-stock trees on timberland by species and diameter class, Capitol District Unit, New York, 1993

Species	(In millions of cubic feet)												All classes	SE
	Diameter class (inches at breast height)													
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+				
Balsam fir	1.4	.0	.8	.4	.0	.3	.0	.0	.0	.0	.0	.0	2.8	78.8
Spruces	5.6	7.6	2.6	5.4	1.2	.0	.0	.0	.0	.0	.0	.0	22.2	55.8
Red pine	3.8	19.3	12.6	8.9	3.7	1.1	.0	.0	.0	.0	.0	.0	49.3	51.7
White pine	19.8	31.1	39.5	51.8	54.2	66.9	45.9	24.1	43.8	18.2	18.2	18.2	395.4	12.8
Eastern hemlock	22.6	31.1	37.3	37.7	39.4	41.8	20.5	11.6	7.9	1.4	1.4	1.4	251.2	15.1
Other softwoods	5.2	7.5	13.6	12.2	13.2	5.7	1.5	.0	.0	.0	.0	.0	59.0	46.0
Total softwoods	58.4	96.5	106.3	116.3	111.7	115.7	67.9	35.7	51.7	19.6	19.6	19.6	779.9	8.6
Red maple	30.1	53.1	56.4	44.5	33.2	18.2	16.3	4.1	7.1	2.0	2.0	2.0	265.1	9.2
Sugar maple	25.8	32.3	37.7	50.0	30.9	33.8	15.5	14.4	21.7	5.4	5.4	5.4	267.5	11.7
Yellow birch	9.7	9.5	8.4	5.8	2.3	1.7	1.8	.0	.0	.0	.0	.0	39.2	21.3
Sweet birch	8.2	10.2	12.3	8.7	5.2	4.1	3.6	1.4	.0	.5	.5	.5	54.2	18.9
Paper birch	2.9	8.1	10.3	8.2	2.5	1.9	1.9	.0	.0	.0	.0	.0	35.8	17.1
Hickory	4.1	7.2	13.5	7.1	7.1	4.6	2.6	.0	.0	.0	.0	.0	46.3	20.5
American beech	7.8	11.1	14.3	12.0	8.2	2.6	4.1	.9	2.7	.0	.0	.0	63.8	17.5
White ash	14.1	13.4	19.1	18.1	7.1	6.1	2.6	5.9	.0	.3	.3	.3	86.6	12.3
Aspen	12.1	20.3	21.6	12.9	11.4	12.1	2.9	5.9	4.3	3.9	3.9	3.9	107.5	15.1
Black cherry	6.0	9.3	15.7	14.9	13.6	5.2	3.8	.5	.8	.0	.0	.0	69.8	21.3
Select white oaks	2.4	4.4	3.6	4.4	4.3	5.1	3.7	.0	1.2	.2	.2	.2	29.3	18.3
Chestnut oak	3.2	7.9	15.7	9.6	8.0	4.9	1.7	.0	.5	.0	.0	.0	51.6	27.1
Northern red oak	6.8	16.6	26.7	33.6	30.5	29.8	23.6	14.2	15.7	3.1	3.1	3.1	200.6	11.6
Other oaks	1.4	.8	2.0	1.6	2.7	.5	1.8	.7	1.9	.3	.3	.3	13.7	34.7
Basswood	2.3	5.0	7.0	4.8	6.3	6.1	1.2	2.0	.0	.0	.0	.0	34.6	19.9
Elm	4.9	5.6	4.9	5.9	3.7	3.5	1.7	1.0	.0	.0	.0	.0	31.1	21.7
Other hardwoods	1.9	6.2	6.3	7.2	6.4	5.6	3.2	2.4	2.5	2.8	2.8	2.8	44.5	28.3
Total hardwoods	143.6	221.1	275.6	249.4	183.4	145.8	92.0	53.4	58.4	18.5	18.5	18.5	1,441.1	4.2
All species	202.1	317.6	381.9	365.6	295.1	261.5	159.9	89.1	110.1	38.0	38.0	38.0	2,221.0	3.9
SE	5.3	5.7	5.3	5.1	6.1	8.0	9.5	12.2	15.5	28.0	28.0	28.0	3.9	

Table 122.--Net volume of sawtimber trees on timberland by species and diameter class, Capitol District Unit, New York, 1980

(In millions of board feet)

Species	Diameter class (inches at breast height)										All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	27.0- 28.9		
Spruces	18.3	13.0	.0	.0	.0	.0	.0	.0	.0	.0	31.3	50.8
Red pine	5.0	.0	4.1	.0	.0	.0	.0	.0	.0	.0	9.2	77.9
White pine	172.9	170.0	205.0	158.4	91.8	66.0	110.9	18.3	13.3	993.3	13.3	13.3
Eastern hemlock	135.8	204.0	155.4	170.7	93.1	42.8	52.2	2.5	15.2	856.5	15.2	15.2
Other softwoods	4.0	2.0	2.4	2.2	.0	.0	.0	.0	64.3	10.6	10.6	64.3
Total softwoods	336.1	388.9	366.9	331.3	184.9	108.8	163.1	20.8	1,900.8	9.6	9.6	9.6
Red maple	-	100.9	95.6	54.4	38.9	11.0	21.8	11.0	333.6	15.5	15.5	15.5
Sugar maple	-	134.5	148.6	116.1	63.1	40.3	25.4	.0	527.9	18.3	18.3	18.3
Yellow birch	-	32.4	11.5	9.4	.0	3.2	.0	.0	56.6	28.4	28.4	28.4
Sweet birch	-	30.9	25.1	17.1	10.1	2.5	2.5	.0	88.2	28.9	28.9	28.9
Paper birch	-	31.9	16.4	12.6	.0	.0	.0	.0	60.9	25.6	25.6	25.6
Hickory	-	26.2	16.6	4.5	3.0	.0	5.9	.0	56.2	25.6	25.6	25.6
American beech	-	39.1	31.9	13.1	25.0	1.8	6.5	.0	117.5	24.3	24.3	24.3
White ash	-	36.9	39.6	13.0	17.0	4.9	8.2	.0	119.6	19.7	19.7	19.7
Aspen	-	37.2	28.6	15.5	2.5	.0	.0	.0	83.9	30.5	30.5	30.5
Black cherry	-	37.4	29.8	19.6	5.5	.0	5.1	.0	97.5	31.6	31.6	31.6
Select white oaks	-	9.2	10.2	21.7	2.9	4.1	8.9	9.2	66.1	30.5	30.5	30.5
Chestnut oak	-	46.4	22.0	11.6	2.2	3.2	7.4	.0	93.0	33.8	33.8	33.8
Northern red oak	-	129.3	165.9	123.7	86.3	39.5	69.4	11.4	625.6	14.8	14.8	14.8
Other oaks	-	9.1	6.5	6.4	4.9	2.7	6.5	2.6	38.8	30.7	30.7	30.7
Basswood	-	8.2	7.2	13.3	2.5	.0	.0	.0	31.2	35.5	35.5	35.5
Elm	-	31.1	20.7	13.6	7.7	5.5	4.6	.0	83.1	21.9	21.9	21.9
Other hardwoods	-	18.7	19.4	9.0	11.9	7.2	3.9	2.5	72.6	35.9	35.9	35.9
Total hardwoods	-	759.5	695.8	474.7	283.6	125.9	176.1	36.7	2,552.2	6.6	6.6	6.6
All species	336.1	1,148.3	1,062.7	806.0	468.5	234.7	339.2	57.5	4,453.0	5.4	5.4	5.4
SE	11.8	6.0	7.0	8.5	10.9	12.7	13.7	28.1	5.4	5.4	5.4	5.4

Table 123.--Net volume of sawtimber trees on timberland by species and diameter class, Capitol District Unit, New York, 1993

Species	(In millions of board feet)										All classes	SE
	Diameter class (inches at breast height)											
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+				
Balsam fir	3.2	2.0	.0	1.6	.0	.0	.0	.0	.0	6.8	76.3	
Spruces	9.0	23.1	5.8	.0	.0	.0	.0	.0	.0	37.8	55.2	
Red pine	51.3	39.7	17.8	5.0	.0	.0	.0	.0	.0	113.9	61.8	
White pine	143.0	221.5	257.2	326.6	232.2	120.5	239.2	98.2	98.2	1,638.5	14.1	
Eastern hemlock	133.0	155.2	174.7	193.7	100.0	56.1	40.5	6.3	6.3	859.5	16.0	
Other softwoods	51.2	50.5	57.4	26.1	7.0	.0	.0	.0	.0	192.2	51.0	
Total softwoods	390.6	492.0	512.9	553.1	339.3	176.6	279.7	104.5	104.5	2,848.7	9.7	
Red maple	-	194.5	151.6	86.2	79.9	19.5	38.3	11.3	11.3	581.3	12.1	
Sugar maple	-	222.2	144.4	166.2	81.3	71.4	115.8	32.7	32.7	834.0	15.1	
Yellow birch	-	28.1	9.9	8.4	5.8	.0	.0	.0	.0	52.2	29.1	
Sweet birch	-	38.7	24.5	20.9	19.2	7.1	.0	2.7	2.7	113.1	25.5	
Paper birch	-	34.9	13.1	8.6	9.0	.0	.0	.0	.0	65.5	28.2	
Hickory	-	31.1	35.2	22.6	14.8	.0	.0	.0	.0	103.7	28.4	
American beech	-	57.1	43.0	13.7	23.3	5.0	14.4	.0	.0	156.5	22.0	
White ash	-	84.0	32.8	29.8	12.6	28.5	.0	1.8	1.8	189.6	17.4	
Aspen	-	56.5	56.0	59.2	14.9	30.5	23.2	21.2	21.2	261.5	21.9	
Black cherry	-	67.6	63.0	26.6	19.6	2.1	4.5	.0	.0	183.3	28.3	
Select white oaks	-	20.5	20.0	25.2	18.4	.0	6.9	1.5	1.5	92.5	23.3	
Chestnut oak	-	39.9	35.6	21.6	8.7	.0	2.4	.0	.0	108.3	30.3	
Northern red oak	-	141.6	136.1	138.0	113.3	68.6	77.2	17.2	17.2	692.0	13.0	
Other oaks	-	6.1	11.3	2.0	8.1	3.5	9.6	1.9	1.9	42.6	36.6	
Basswood	-	20.9	31.4	28.9	6.3	11.9	.0	.0	.0	99.4	23.8	
Elm	-	25.1	17.5	16.8	9.1	5.2	.0	.0	.0	73.7	27.7	
Other hardwoods	-	30.3	30.0	27.9	17.0	11.5	13.2	18.0	18.0	147.9	32.0	
Total hardwoods	-	1,099.0	855.3	702.7	461.2	264.8	305.6	108.4	108.4	3,797.0	5.9	
All species	390.6	1,591.0	1,368.2	1,255.7	800.5	441.4	585.3	212.9	212.9	6,645.7	5.2	
SE	14.0	5.1	6.1	8.1	9.4	12.8	15.6	27.2	27.2	5.2		

**Net volume of growing-stock trees on timberland,
top five species,
Capitol District Unit, New York, 1980 and 1993**

**Net volume of sawtimber trees on timberland,
top five species,
Capitol District Unit, New York, 1980 and 1993**

Table 124.--Net volume of sawtimber trees on timberland by species, size class, and tree grade, Capitol District Unit, New York, 1993

(In millions of board feet)

Species	>15" Diameter at breast height					All size classes						
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades
Balsam fir	.0	-	-	-	1.6	1.6	5.2	-	-	-	1.6	6.8
Spruces	.0	-	-	-	.0	.0	35.4	-	-	-	2.5	37.8
Red pine	.0	.0	5.0	-	.0	.0	.0	.0	113.4	-	.4	113.9
White pine	82.2	233.5	251.5	88.7	360.7	1,016.7	110.3	447.3	489.0	135.2	456.7	1,638.5
Eastern hemlock	280.3	-	-	-	116.3	396.6	671.6	-	-	-	187.9	859.5
Other softwoods	23.6	.0	9.5	-	.0	33.2	141.8	2.3	43.0	-	5.2	192.2
Total softwoods	386.2	233.5	266.1	88.7	478.7	1,453.1	964.2	449.6	645.4	135.2	654.2	2,848.7
Red maple	12.7	46.8	47.8	24.2	103.7	235.2	12.7	81.2	263.1	62.0	162.4	581.3
Sugar maple	76.0	144.1	129.6	16.1	101.7	467.5	76.0	195.2	401.5	35.9	125.4	834.0
Yellow birch	5.6	.0	3.2	2.0	3.4	14.2	5.6	6.8	29.7	2.0	8.1	52.2
Sweet birch	14.4	15.5	16.5	.0	3.4	49.8	14.4	20.1	68.5	5.2	4.9	113.1
Paper birch	.0	5.8	8.6	3.2	.0	17.6	.0	15.3	40.6	9.6	.0	65.5
Hickory	3.9	23.3	6.7	.0	3.5	37.4	3.9	29.5	64.8	.0	5.5	103.7
American beech	3.7	15.4	21.2	4.5	11.6	56.4	3.7	21.9	54.6	54.6	21.7	156.5
White ash	34.5	28.7	3.7	.0	5.7	72.7	34.5	48.7	88.3	6.7	11.3	189.6
Aspen	25.5	80.5	17.9	16.8	8.3	149.0	25.5	93.4	100.9	29.4	12.3	261.5
Black cherry	6.1	22.0	6.3	.0	18.4	52.8	6.1	36.7	108.6	1.5	30.4	183.3
Select white oaks	20.6	13.0	13.7	.7	4.1	52.0	20.6	24.7	38.5	3.0	5.7	92.5
Chestnut oak	4.0	22.7	2.3	.0	3.8	32.7	4.0	45.7	50.8	1.9	5.9	108.3
Northern red oak	178.9	115.6	70.6	13.8	35.4	414.3	178.9	179.9	270.7	18.4	44.0	692.0
Other oaks	13.5	8.2	.0	1.5	1.9	25.2	13.5	12.1	11.2	2.7	3.1	42.6
Basswood	7.9	11.6	17.6	2.4	7.7	47.1	7.9	19.2	55.1	3.7	13.5	99.4
Elm	.0	13.7	14.2	.0	3.2	31.1	.0	15.3	54.3	.0	4.1	73.7
Other hardwoods	2.2	25.0	17.4	5.1	38.0	87.6	2.2	25.0	65.5	12.1	43.1	147.9
Total hardwoods	409.7	591.8	397.4	90.2	353.7	1,842.7	409.7	870.7	1,766.7	248.6	501.3	3,797.0
All species	795.8	825.3	663.5	178.9	832.4	3,295.9	1,373.9	1,320.3	2,412.1	383.9	1,155.5	6,645.7

Table 125.--Average annual mortality^a, average annual net growth, and average annual removals of growing-stock and sawtimber volume on timberland by species, Capitol District Unit, New York, 1979-92

(In thousands of feet)

Species	Growing stock (cu. ft.)				Sawtimber (bd. ft.)							
	Mortality	SE	Net growth	SE	Removals	SE	Mortality	SE	Net growth	SE	Removals	SE
Balsam fir	31	100.0	139	*	0		0		290	83.2	0	
Spruces	83	55.6	797	68.1	108		135	100.0	1,238	92.0	348	100.0
Red pine	397	81.4	1,224	61.1	0		285	100.0	2,976	46.1	0	
White pine	789	26.2	11,803	12.3	2,172		1,994	34.0	53,455	12.7	10,588	34.2
Eastern hemlock	942	30.6	5,795	14.7	2,216		3,487	30.5	22,432	17.0	9,255	32.5
Other softwoods	157	53.3	1,486	47.3	20		267	100.0	6,422	57.3	0	
Total softwoods	2,398	20.7	21,243	8.9	4,516		6,167	22.2	86,815	9.3	20,191	24.0
Red maple	525	23.5	7,677	11.8	1,229		854	46.4	25,330	13.3	3,329	35.4
sugar maple	647	27.0	6,300	12.9	1,935		1,574	40.3	26,103	15.5	7,221	35.4
Yellow birch	89	61.9	1,311	21.0	213		359	71.2	2,450	30.9	824	72.1
sweet birch	130	45.9	1,577	21.8	135		173	100.0	4,267	24.8	381	71.8
Paper birch	595	31.5	55	*	74		985	45.2	972	65.8	354	71.0
Hickory	9	67.4	1,134	22.3	170		0		3,292	27.9	340	71.1
American beech	110	45.8	2,566	20.0	343		148	100.0	8,245	28.6	1,515	62.2
White ash	778	22.8	2,800	22.2	1,517		1,166	39.4	8,794	19.8	3,855	33.3
Aspen	1,368	32.3	3,218	20.5	823		3,178	62.3	9,839	23.6	949	62.9
Black cherry	178	40.1	2,402	20.9	981		328	71.0	9,105	30.5	3,571	58.5
Select white oaks	229	37.7	631	32.2	321		672	52.3	2,399	34.8	1,213	48.3
Chestnut oak	631	38.0	-6	*	104		1,329	49.0	1,147	71.4	233	70.8
Northern red oak	486	35.5	4,109	13.2	3,493		375	57.7	20,798	13.3	16,245	22.7
Other oaks	232	74.8	355	75.9	249		283	71.1	1,906	45.3	535	60.1
Basswood	79	58.7	1,029	24.6	127		101	100.0	3,830	26.4	489	74.1
Elm	1,074	18.5	89	*	231		1,883	32.5	1,454	79.6	311	71.0
Other hardwoods	271	57.1	1,679	30.2	523		1,016	63.3	5,649	34.4	779	61.5
Total hardwoods	7,433	10.5	36,928	6.0	12,469		14,425	16.7	135,583	6.4	42,146	15.7
All species	9,831	9.2	58,171	4.8	16,985		20,593	13.2	222,398	5.1	62,337	14.9

^a Mortality is a component of net growth.

* Sampling error is greater than 100 percent.

CATSKILL/LOWER HUDSON UNIT TABLES

Table 126.--Area of timberland by forest type, forest-type group, and stand-size class, Catskill/Lower Hudson Unit, New York, 1980

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	5.4	11.3	.0	.0	16.7	57.8
White pine	128.8	5.6	33.4	.0	167.8	17.8
White pine/hemlock	24.0	11.3	5.6	.0	40.8	38.0
Hemlock	62.9	12.2	.0	.0	75.1	28.1
Scotch pine	7.2	.0	5.6	.0	12.8	71.3
White/red pine group	228.3	40.4	44.6	.0	313.3	12.7
Red spruce	.0	.0	6.7	.0	6.7	100.0
Norway spruce	7.0	.0	.0	.0	7.0	100.0
Spruce/fir group	7.0	.0	6.7	.0	13.7	70.7
Eastern redcedar	5.5	5.4	16.4	.0	27.3	44.7
Pitch pine	.0	6.9	19.8	.0	26.7	49.7
Loblolly/shortleaf group	5.5	12.3	36.2	.0	54.0	33.4
Wh. pine/no. red oak/wh. ash	40.7	17.0	.0	.0	57.7	30.6
Eastern redcedar/hardwood	5.5	.0	17.9	.0	23.4	50.2
Other oak/pine	6.6	6.9	6.7	.0	20.2	57.7
Oak/pine group	52.8	23.8	24.6	.0	101.2	23.7
Post, black, or bear oak	5.2	.0	7.2	.0	12.5	71.6
Chestnut oak	13.1	43.5	20.2	.0	76.8	28.0
White oak/red oak/hickory	49.0	49.0	28.7	.0	126.7	20.7
White oak	13.3	6.6	.0	.0	19.9	56.4
Northern red oak	54.2	28.6	.0	.0	82.8	26.5
Y. poplar/wh. oak/no. red oak	16.7	.0	.0	.0	16.7	57.7
Black locust	.0	11.6	5.9	.0	17.5	57.8
Hawthorn/reverting field	.0	.0	12.4	.0	12.4	71.3
Scarlet oak	.0	12.9	10.7	.0	23.6	50.4
Red maple/central hardwoods	5.5	5.6	7.0	.0	18.1	58.1
Mixed central hardwoods	193.1	154.0	41.9	.0	388.9	11.6
Oak/hickory group	350.1	311.7	134.0	.0	795.8	6.9
Black ash/Amer. elm/red maple	25.7	13.7	56.6	.0	95.9	25.3
Red maple(lowland)	10.9	13.0	5.6	.0	29.5	44.9
Red maple(upland)	12.1	.0	.0	.0	12.1	71.0
Elm/ash/red maple group	48.7	26.7	62.2	.0	137.5	20.8
Sugar maple/beech/yellow birch	255.2	74.3	18.0	.0	347.5	11.4
Black cherry	.0	7.0	11.2	.0	18.2	58.1
Red maple/northern hardwoods	94.3	69.1	34.7	.0	198.1	16.5
Pin cherry/reverting field	.0	.0	23.1	5.7	28.8	41.0
Mixed northern hardwoods	73.9	57.7	56.5	.0	188.2	16.0
Northern hardwoods group	423.5	208.1	143.5	5.7	780.8	7.0
Aspen	5.6	6.7	6.0	.0	18.3	57.9
Paper birch	.0	5.6	.0	.0	5.6	100.0
Gray birch	.0	.0	5.7	.0	5.7	100.0
Aspen/birch group	5.6	12.3	11.7	.0	29.6	44.8
All forest types	1,121.5	635.3	463.4	5.7	2,225.8	1.8
SE	4.9	8.2	9.0	100.0	1.8	

Table 127.--Area of timberland by forest type, forest-type group, and stand-size class, Catskill/Lower Hudson Unit, New York, 1993

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	10.7	5.2	.0	.0	15.9	57.7
White pine	129.9	20.3	4.8	.0	155.0	16.7
White pine/hemlock	20.2	10.3	.0	.0	30.4	40.9
Hemlock	83.2	4.4	4.5	.0	92.1	20.9
Scotch pine	.0	5.7	4.9	.0	10.5	70.9
White/red pine group	244.0	45.8	14.2	.0	304.0	10.2
Norway spruce	5.6	.0	.0	.0	5.6	100.0
Spruce/fir group	5.6	.0	.0	.0	5.6	100.0
Eastern redcedar	4.9	4.8	20.2	.0	29.9	39.8
Pitch pine	13.3	6.8	7.1	.0	27.1	46.9
Loblolly/shortleaf group	18.2	11.6	27.3	.0	57.1	30.6
Wh. pine/no. red oak/wh. ash	55.0	34.8	.0	.0	89.8	23.7
Eastern redcedar/hardwood	4.2	24.3	10.3	.0	38.7	34.6
Other oak/pine	.0	6.5	.0	.0	6.5	100.0
Oak/pine group	59.2	65.6	10.3	.0	135.0	19.2
Post, black, or bear oak	39.3	.0	.0	.0	39.3	37.0
Chestnut oak	30.3	26.0	16.2	.0	72.5	26.5
White oak/red oak/hickory	54.5	52.4	.0	.0	106.9	21.3
White oak	15.2	.0	4.9	.0	20.0	50.1
Northern red oak	50.5	29.4	.0	.0	79.9	24.5
Y. poplar/wh. oak/no. red oak	4.4	.0	.0	.0	4.4	100.0
Black locust	14.1	6.8	.0	.0	20.9	57.7
Scarlet oak	.0	6.4	18.4	.0	24.8	50.6
Red maple/central hardwoods	.0	.0	4.9	.0	4.9	100.0
Mixed central hardwoods	258.9	110.8	.0	.0	369.7	10.7
Oak/hickory group	467.1	231.8	44.4	.0	743.3	6.7
Black ash/Amer. elm/red maple	21.7	15.2	20.1	.0	56.9	30.4
Red maple(lowland)	14.5	5.2	.0	.0	19.7	48.2
Red maple(upland)	9.9	13.5	.0	.0	23.5	44.2
Cottonwood	8.3	.0	.0	.0	8.3	100.0
Elm/ash/red maple group	54.4	33.9	20.1	.0	108.4	21.8
Sugar maple/beech/yellow birch	278.7	63.6	16.0	.0	358.3	10.7
Black cherry	16.1	25.0	5.1	.0	46.2	33.1
Red maple/northern hardwoods	97.9	55.1	30.6	.0	183.6	15.7
Pin cherry/reverting field	5.2	9.4	30.3	10.6	55.4	26.2
Mixed northern hardwoods	98.4	67.4	.0	.0	165.7	16.8
Northern hardwoods group	496.2	220.4	82.0	10.6	809.2	6.5
Aspen	.0	9.0	.0	.0	9.0	71.4
Gray birch	.0	.0	9.9	.0	9.9	70.7
Aspen/birch group	.0	9.0	9.9	.0	18.9	50.3
All forest types	1,344.7	618.1	208.1	10.6	2,181.4	2.0
SE	3.9	7.8	13.6	70.7	2.0	

**Area of timberland by stand-size class,
Catskill/Lower Hudson Unit, New York, 1980 and 1993**

Million acres

**Area of timberland by forest-type group,
Catskill/Lower Hudson Unit, New York, 1993**

Table 128.---Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Catskill/Lower Hudson Unit, New York, 1993

Species	(In thousands of trees)											SE
	Diameter class (inches at breast height)											
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+	All classes	
Balsam fir	26	73	0	22	0	0	0	0	0	0	121	81.6
Spruces	1,144	863	466	267	131	63	24	9	0	0	2,968	42.6
Red pine	857	297	521	1,056	276	42	0	0	0	0	3,049	46.7
White pine	7,101	3,606	3,818	2,717	2,827	1,289	926	538	729	88	23,638	13.7
Eastern hemlock	9,249	6,673	3,995	3,349	1,824	1,209	951	275	815	6	28,348	12.3
Other softwoods	5,365	2,666	988	545	107	102	20	33	0	5	9,831	20.1
Total softwoods	23,741	14,179	9,788	7,957	5,165	2,706	1,921	856	1,544	99	67,954	6.7
Red maple	23,553	13,338	9,525	4,901	2,684	1,191	854	321	411	65	56,844	6.4
Sugar maple	12,751	7,951	5,644	3,372	2,427	1,524	1,030	516	417	126	35,759	8.5
Yellow birch	1,850	2,646	1,323	660	517	232	96	41	34	0	7,399	15.2
Sweet birch	3,613	4,590	2,613	1,726	1,067	374	170	49	18	0	14,221	11.3
Paper birch	1,217	605	299	130	87	0	24	0	0	0	2,362	26.4
Hickory	4,539	2,773	1,601	1,124	507	236	117	75	60	0	11,034	15.5
American beech	4,597	2,642	2,103	1,069	621	442	321	76	56	0	11,927	14.0
White ash	6,805	4,268	2,801	1,378	1,064	643	184	270	152	25	17,590	10.2
Aspen	2,032	1,853	1,277	695	264	120	78	46	38	0	6,405	19.8
Black cherry	1,896	2,749	1,817	1,098	526	381	198	116	20	0	8,802	16.0
Select white oaks	2,554	1,953	1,974	1,071	826	320	182	234	210	93	9,417	12.9
Chestnut oak	3,553	4,105	4,058	2,647	1,509	736	219	75	76	0	16,979	13.0
Northern red oak	5,222	5,088	3,797	3,146	2,305	1,569	652	410	597	61	22,847	10.6
Other oaks	2,893	2,113	1,971	1,304	896	816	432	282	371	112	11,190	13.9
Basswood	152	415	209	236	303	160	28	12	22	3	1,540	21.5
Elm	3,737	2,140	871	318	152	66	10	33	23	0	7,351	16.3
Other hardwoods	2,432	1,185	1,245	614	369	288	144	75	166	22	6,541	24.6
Total hardwoods	83,398	60,416	43,130	25,490	16,126	9,101	4,737	2,632	2,672	508	248,210	2.8
All species	107,138	74,594	52,918	33,447	21,291	11,807	6,658	3,488	4,216	607	316,164	2.6
SE	4.3	3.9	3.7	4.3	4.4	5.1	7.6	7.9	8.2	15.4	2.6	

Table 129.--Number of seedlings, saplings, and shrubs on timberland by species and stand-size class, Catskill/Lower Hudson Unit, New York, 1993

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Common juniper	0	0	44	0	44	100.0
Eastern redcedar	8	8	16	0	33	27.5
Spruce species	5	11	0	0	16	48.8
Red pine	0	2	0	0	2	67.3
Pitch pine	1	5	6	0	12	47.5
Eastern white pine	69	32	15	0	116	20.3
Scotch pine	0	3	1	0	3	84.2
Northern white-cedar	0	0	0	0	0	100.0
Eastern hemlock	61	17	1	0	79	18.7
Maple species	0	1	0	0	1	100.0
Boxelder	3	1	7	0	11	69.8
Striped maple	111	44	0	0	155	34.2
Red maple	245	137	75	0	456	12.7
Sugar maple	276	105	44	0	425	14.7
Mountain maple	1	0	0	0	1	79.6
Ailanthus species	1	0	0	0	2	66.8
Alder species	61	26	35	0	122	32.6
Serviceberry	75	69	0	0	144	22.2
Chokeberry species	8	1	0	0	9	87.3
Azalea species	0	16	0	0	16	78.3
Barberry	92	64	18	0	175	32.5
Yellow birch	59	14	0	0	74	30.7
Sweet birch	132	64	2	0	199	28.0
Paper birch	3	6	1	0	10	40.5
Gray birch	23	12	29	0	64	41.7
American hornbeam	97	38	17	0	152	21.7
Hickory species	49	33	0	0	82	21.2
Shagbark hickory	1	0	0	0	1	58.3
American chestnut	15	0	0	0	15	49.4
Hackberry	2	0	0	0	2	68.3
Sweetfern	0	7	0	0	7	100.0
Flowering dogwood	52	10	13	0	75	45.3
Alternate-leaved dogwood	1	9	0	0	10	68.5
Silky dogwood	2	0	0	0	2	100.0
Round-leaved dogwood	0	3	23	0	25	89.9
Panicked dogwood	408	266	625	38	1,337	19.3
Red-osier dogwood	60	89	101	19	269	30.9
Hawthorn species	7	28	3	0	38	40.4
American hazelnut	15	0	0	0	15	100.0
Beaked hazelnut	0	11	1	0	12	91.8
American beech	313	94	9	0	416	14.3
Russian olive	0	0	8	0	8	100.0
White ash	472	190	46	0	708	11.5
Black ash	2	0	0	0	2	100.0
Green ash	0	0	0	0	0	100.0
Witch-hazel	251	124	3	0	379	19.2
Winterberry holly	0	4	0	0	4	100.0
Sheep laurel	0	3	0	0	3	100.0
Mountain laurel	964	364	10	0	1,338	24.6
Common spicebush	297	46	3	0	346	18.2
Yellow-poplar	8	5	0	0	13	38.4
Bush honeysuckle	136	278	51	0	465	28.0
Apple species	6	5	5	0	17	36.9
Mountain holly	121	78	0	0	199	45.9
Blackgum	3	15	0	0	19	72.6
Eastern hophornbeam	161	80	5	0	246	14.2
Ninebark	0	0	3	0	3	100.0
Balsam poplar	0	1	0	0	1	100.0
Bigtooth aspen	4	2	10	0	16	67.2
Quaking aspen	7	6	55	0	68	66.1
Cherry species	0	0	0	0	0	100.0

Table 129.-continued

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Pin cherry	0	1	0	0	2	65.7
Black cherry	347	82	46	0	476	27.9
Chokecherry	12	3	1	0	16	76.7
White oak	77	49	9	0	135	28.3
Swamp white oak	8	0	0	0	8	84.1
Scarlet oak	30	26	23	0	79	32.4
Northern pin oak	0	4	0	0	4	100.0
Scrub, bear oak	93	3	170	0	266	39.6
Chinkapin oak	0	0	0	0	0	100.0
Pin oak	5	1	7	0	14	45.3
Chestnut oak	39	36	10	0	85	29.3
Northern red oak	89	72	13	0	174	23.0
Black oak	16	9	1	0	26	35.8
Buckthorn species	39	5	2	2	48	78.5
Rhododendron species	3	4	0	0	7	71.2
Staghorn sumac	5	4	3	0	12	58.7
Currant species	3	131	0	0	134	81.5
Black locust	6	3	0	0	9	52.9
Rose species	53	65	11	2	130	28.5
Rubus species	741	439	126	19	1,325	17.3
Willow species	26	5	2	0	33	79.4
Black willow	0	0	1	0	1	100.0
American elderberry	1	6	0	0	7	86.5
Red-berried alder	2	0	0	0	2	100.0
Sassafras	28	19	44	0	91	56.5
American mountain-ash	7	0	0	0	7	72.6
Spirea species	196	174	394	0	764	24.7
Sweetleaf	0	8	0	0	8	100.0
American basswood	3	1	4	0	8	53.1
American elm	29	26	9	1	65	19.4
Slippery elm	0	0	1	0	1	84.8
American bladdernut	0	19	0	0	19	100.0
Blueberry	2,436	1,880	1,780	0	6,096	16.7
Viburnum species	51	0	2	0	53	51.6
Maple-leaved viburnum	370	95	7	0	472	23.9
Hobblebush viburnum	3	0	0	0	3	100.0
Wild raisin	40	31	10	0	81	33.2
Arrowwood	167	62	43	15	287	21.1
Nannyberry	15	3	0	0	18	44.7
Blackhaw	0	11	0	0	11	100.0
Common prickly ash	74	25	0	0	99	52.5
Unknown deciduous shrub	101	97	4	0	202	32.1
Unknown evergreen shrub	79	0	17	0	96	63.1
Unknown tree	10	1	1	0	13	68.4
All species	9,897	5,832	4,028	97	19,855	6.6
SE	10.0	13.4	20.0	95.7	6.6	

Table 130.--Number of standing trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities, Catskill/Lower Hudson Unit, New York, 1993

(In thousands of trees)

Species	Live trees				Dead trees			
	One or more small	One or more large	Multiple or small	Total live	One or more small	One or more large	Multiple or small	Total all trees
Red pine	0	0	0	0	0	0	27	27
White pine	243	49	195	487	657	72	285	1,501
Eastern hemlock	188	91	173	452	135	38	90	716
Other softwoods	93	64	58	215	208	0	54	477
Total softwoods	525	203	426	1,154	1,000	111	456	2,721
Red maple	3,155	1,427	740	5,323	452	261	571	6,607
Sugar maple	1,074	1,274	512	2,861	373	349	187	3,770
Yellow birch	216	128	138	482	45	52	154	733
Sweet birch	570	446	191	1,208	150	121	104	1,582
Paper birch	166	11	11	189	68	0	22	279
Hickory	196	140	91	428	0	0	32	460
American beech	1,287	533	659	2,478	172	79	327	3,057
White ash	254	348	156	758	122	8	57	945
Aspen	188	129	75	392	89	0	101	581
Black cherry	401	112	50	563	295	35	35	928
Select white oaks	133	126	0	259	659	13	67	999
Chestnut oak	164	337	125	627	910	144	131	1,811
Northern red oak	509	372	348	1,229	412	22	148	1,810
Other oaks	321	192	85	598	51	32	112	793
Basswood	123	44	81	248	45	0	65	358
Elm	38	22	22	83	266	57	96	501
Other commercial hardwoods	434	193	91	718	239	22	66	1,045
Noncommercial hardwoods	536	96	158	790	181	91	110	1,172
Total hardwoods	9,767	5,933	3,535	19,235	4,527	1,286	2,385	27,432
All species	10,291	6,136	3,962	20,389	5,528	1,396	2,840	30,153

Table 131.--Net volume of all trees on timberland by class of timber and species group, Catskill/Lower Hudson Unit, New York, 1993

(In millions of cubic feet)

Class of timber	Species group				All groups	SE
	Pines	Other softwoods	Soft hardwoods	Hard hardwoods		
Sawtimber trees:						
Sawlog portion	332.0	253.6	416.2	831.7	1,833.5	3.8
Upper stem	38.6	29.5	99.6	193.9	361.6	3.5
Total sawtimber trees	370.6	283.1	515.8	1,025.6	2,195.1	3.7
Poletimber trees	53.3	81.3	424.1	562.8	1,121.4	3.2
Total growing-stock trees	423.8	364.4	939.9	1,588.4	3,316.5	2.8
Rough trees:						
Sawtimber size	13.6	13.8	38.4	44.0	109.7	8.7
Poletimber size	1.8	1.6	19.9	20.5	43.7	10.1
Total rough trees	15.3	15.4	58.3	64.4	153.5	7.2
Rotten trees:						
Sawtimber size	.2	.3	7.5	17.3	25.4	17.4
Poletimber size	.3	.1	4.5	2.7	7.6	17.6
Total rotten trees	.4	.5	12.0	20.0	32.9	14.1
Salvable dead ^a trees:						
Sawtimber size	1.7	5.7	3.5	8.4	19.3	26.6
Poletimber size	.3	1.6	5.1	4.4	11.5	19.1
Total salvable dead trees	2.0	7.3	8.7	12.8	30.8	20.1
All classes	441.6	387.5	1,018.9	1,685.7	3,533.7	2.7
SE	12.9	11.0	5.4	4.1	2.7	

^a Includes noncommercial species.

Table 132.--Net volume of growing-stock trees on timberland by species and diameter class, Catskill/Lower Hudson Unit, New York, 1980
(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+		
Spruces	1.2	4.0	6.7	4.1	4.6	.7	1.9	.0	.0	.0	23.1	48.1
Red pine	2.5	3.9	6.3	7.6	1.5	.0	.0	.0	.0	.0	21.7	51.8
White pine	16.9	30.8	36.7	47.5	30.3	27.7	17.0	15.0	31.4	4.5	257.7	15.9
Eastern hemlock	20.0	26.8	33.4	32.1	42.5	33.7	20.7	14.2	20.5	.8	244.6	16.6
Other softwoods	8.7	10.6	6.1	8.8	4.4	6.8	2.0	.5	.7	.0	48.6	23.2
Total softwoods	49.1	76.0	89.2	100.2	83.3	68.9	41.5	29.7	52.7	5.3	595.8	10.2
Red maple	46.8	74.9	74.2	64.0	35.6	30.2	17.4	10.3	13.2	2.8	369.4	7.9
Sugar maple	37.7	49.0	48.5	55.6	41.4	32.9	20.0	4.8	15.4	3.0	308.3	10.0
Yellow birch	7.1	8.6	9.9	10.2	5.2	3.9	2.3	1.5	.3	.0	49.0	17.4
Sweet birch	11.2	20.8	22.3	23.2	15.3	8.6	7.1	.5	.8	.0	109.7	13.3
Paper birch	2.9	6.0	3.5	3.0	.5	.4	.0	.0	.0	.0	16.2	24.8
Hickory	13.7	17.0	19.2	15.4	7.7	4.2	4.9	2.6	2.8	1.3	88.8	12.5
American beech	6.8	11.4	12.7	18.9	10.1	7.1	2.7	.5	.6	.4	71.0	16.4
White ash	17.2	19.9	28.5	20.1	22.9	18.4	11.3	7.9	6.5	1.0	153.8	11.5
Aspen	6.7	10.8	9.3	6.5	4.5	2.6	.0	.5	.0	.0	40.9	17.2
Black cherry	9.1	13.0	13.7	6.3	7.3	4.3	3.2	1.5	2.2	.5	61.1	19.2
Select white oaks	6.7	15.8	18.4	16.5	14.0	10.8	12.8	5.2	8.0	3.0	111.2	12.1
Chestnut oak	11.5	31.5	38.2	29.1	18.2	13.1	6.0	2.0	3.1	.0	152.8	13.4
Northern red oak	17.9	26.6	35.3	43.0	37.9	38.9	20.3	17.7	27.5	5.9	271.0	10.2
Other oaks	8.6	11.9	21.5	18.5	16.3	12.6	12.1	6.3	9.7	5.2	122.8	12.1
Basswood	.4	3.2	3.2	7.6	5.2	3.7	2.2	1.3	.5	.5	27.9	18.4
Elm	6.6	3.3	4.1	2.4	1.5	.0	.4	.0	.4	.0	18.7	24.2
Other hardwoods	4.7	6.6	8.6	8.1	3.5	4.3	4.8	5.3	8.0	4.5	58.2	19.9
Total hardwoods	215.7	330.4	371.2	348.3	247.1	195.9	127.4	67.8	98.9	28.2	2,031.0	3.2
All species	264.8	406.5	460.3	448.5	330.4	264.8	168.9	97.4	151.6	33.5	2,626.8	3.0
SE	4.6	4.3	4.5	4.4	5.8	6.5	7.4	8.7	9.0	16.0	3.0	

Table 133.--Net volume of growing-stock trees on timberland by species and diameter class, Catskill/Lower Hudson Unit, New York, 1993

(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+		
Balsam fir	.1	.2	.0	.4	.0	.0	.0	.0	.0	.0	.7	89.4
Spruces	3.2	4.9	4.5	5.0	3.5	2.0	1.1	.6	.0	.0	24.8	46.9
Red pine	2.1	2.4	6.7	23.5	8.0	1.7	.0	.0	.0	.0	44.5	60.3
White pine	19.0	20.3	40.6	43.8	62.4	38.0	34.7	26.6	54.1	11.2	350.6	14.2
Eastern hemlock	22.4	34.9	38.5	50.8	39.5	34.2	37.9	12.3	49.6	.6	320.7	12.6
Other softwoods	11.6	13.5	8.5	7.1	2.1	2.2	.5	1.3	.0	.3	47.1	23.9
Total softwoods	58.4	76.1	98.8	130.6	115.4	78.2	74.2	40.7	103.7	12.0	788.2	7.3
Red maple	55.1	74.9	95.6	76.7	57.9	33.6	32.3	15.9	25.4	10.5	477.9	7.7
Sugar maple	35.7	47.5	59.5	56.2	56.8	45.6	38.4	24.5	27.0	13.4	404.7	9.4
Yellow birch	4.9	14.3	11.7	9.8	10.2	6.1	3.5	1.9	1.4	.0	63.8	14.4
Sweet birch	10.0	27.9	29.4	29.9	25.1	11.5	5.7	2.1	.9	.0	142.4	12.3
Paper birch	3.4	3.7	3.4	2.2	1.7	.0	.7	.0	.0	.0	15.1	23.5
Hickory	12.9	17.0	17.8	18.4	12.3	7.3	4.7	3.8	3.8	.0	98.0	12.8
American beech	10.0	15.2	21.8	18.3	14.3	14.2	11.6	3.5	3.2	.0	112.0	15.7
White ash	18.8	25.6	29.8	24.2	26.0	19.6	6.5	12.9	10.4	3.1	176.9	10.9
Aspen	6.9	12.7	14.0	12.6	6.7	4.4	3.6	2.4	1.9	.0	65.3	17.9
Black cherry	5.2	16.6	19.6	17.8	11.9	11.2	7.9	5.3	1.2	.0	96.8	17.6
Select white oaks	6.2	10.3	18.4	14.5	14.7	7.2	5.9	10.0	12.3	9.8	109.3	12.4
Chestnut oak	8.1	20.8	33.7	34.7	29.5	19.1	7.4	2.5	3.9	.0	159.7	13.1
Northern red oak	12.8	29.6	37.7	47.8	49.3	45.0	23.5	19.3	37.8	7.5	310.3	8.5
Other oaks	7.5	12.2	19.5	20.2	18.1	23.8	16.2	12.8	21.7	10.6	162.6	13.2
Basswood	.3	2.2	2.4	4.2	7.3	6.3	1.0	.7	1.4	.4	26.3	21.4
Elm	7.6	9.0	6.4	4.3	2.4	1.7	.5	1.5	1.1	.0	34.6	18.3
Other hardwoods	5.0	6.3	9.8	8.0	8.5	8.0	6.2	4.5	13.1	3.3	72.7	17.8
Total hardwoods	210.4	345.8	430.7	399.6	352.8	264.5	175.6	123.7	166.5	58.7	2,528.3	3.1
All species	268.8	422.0	529.5	530.2	468.2	342.7	249.8	164.4	270.2	70.8	3,316.5	2.8
SE	4.4	4.0	3.8	4.9	4.6	5.2	8.0	8.4	8.7	16.2	2.8	

Table 134.--Net volume of sawtimber trees on timberland by species and diameter class, Catskill/Lower Hudson Unit, New York, 1980

(In millions of board feet)												
Species	Diameter class (inches at breast height)										All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 22.9	23.0- 24.9	25.0- 26.9	26.0+		
Spruces	23.2	16.3	20.3	3.4	9.2	.0	.0	.0	.0	.0	72.3	51.4
Red pine	21.8	32.1	6.6	.0	.0	.0	.0	.0	.0	.0	60.5	64.7
White pine	129.7	204.2	138.9	133.4	86.5	79.7	163.7	24.2	24.2	163.7	960.3	16.2
Eastern hemlock	115.2	126.4	178.5	152.3	97.0	68.7	101.4	4.2	4.2	101.4	843.7	18.3
Other softwoods	18.5	31.4	17.2	27.0	8.7	2.4	3.4	.0	.0	3.4	108.7	31.6
Total softwoods	308.5	410.3	361.4	316.0	201.5	150.8	268.5	28.4	28.4	268.5	2,045.5	11.1
Red maple	-	276.3	159.0	137.7	86.4	51.9	69.3	16.3	16.3	69.3	797.0	11.3
Sugar maple	-	235.6	183.0	154.0	91.7	24.3	74.1	15.2	15.2	74.1	777.9	12.4
Yellow birch	-	43.1	22.6	17.5	9.8	6.9	1.5	.0	.0	1.5	101.5	20.6
Sweet birch	-	99.1	67.6	38.9	32.2	2.3	3.5	.0	.0	3.5	243.7	16.0
Paper birch	-	12.6	2.1	1.7	.0	.0	.0	.0	.0	.0	16.4	36.9
Hickory	-	66.7	36.1	20.6	25.0	14.0	14.3	7.1	7.1	14.3	183.7	17.0
American beech	-	83.9	49.3	35.8	14.0	2.2	2.9	2.3	2.3	2.9	190.3	18.9
White ash	-	91.6	109.0	87.6	52.3	38.5	31.3	5.5	5.5	31.3	415.9	14.6
Aspen	-	29.2	20.7	12.3	.0	2.5	.0	.0	.0	.0	64.8	25.7
Black cherry	-	24.6	30.7	21.0	15.5	7.6	10.7	2.3	2.3	10.7	112.3	25.1
Select white oaks	-	70.6	65.1	50.6	59.3	25.4	40.2	15.1	15.1	40.2	326.3	13.7
Chestnut oak	-	119.0	77.9	61.1	27.8	8.6	15.1	.0	.0	15.1	309.4	16.7
Northern red oak	-	176.9	166.2	174.5	97.7	87.8	136.8	33.4	33.4	136.8	873.4	11.4
Other oaks	-	75.9	71.3	56.6	58.1	31.5	48.0	27.9	27.9	48.0	369.2	13.5
Basswood	-	33.0	23.7	18.3	12.8	6.6	3.1	3.4	3.4	3.1	100.8	18.7
Elm	-	9.8	7.1	.0	1.7	.0	1.9	.0	.0	1.9	20.5	32.0
Other hardwoods	-	33.1	16.5	21.9	25.7	28.2	45.3	26.2	26.2	45.3	197.0	25.9
Total hardwoods	-	1,481.0	1,108.0	910.2	610.0	338.2	498.2	154.8	154.8	498.2	5,100.3	4.7
All species	308.5	1,891.4	1,469.4	1,226.2	811.5	488.9	766.7	183.2	183.2	766.7	7,145.8	4.3
SE	14.8	4.4	5.8	6.4	7.5	8.8	9.1	16.2	16.2	9.1	4.3	

Table 135.--Net volume of sawtimber trees on timberland by species and diameter class, Catskill/Lower Hudson Unit, New York, 1993

(In millions of board feet)

Species	Diameter class (inches at breast height)							All classes	SE	
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9			29.0+
Balsam fir	.0	1.4	.0	.0	.0	.0	.0	.0	1.4	100.0
Spruces	15.9	19.2	14.1	8.1	5.1	3.1	.0	.0	65.3	56.0
Red pine	24.6	102.3	36.8	8.4	.0	.0	.0	.0	172.1	64.3
White pine	143.7	184.5	288.5	187.3	176.9	140.4	287.6	59.1	1,468.0	15.1
Eastern hemlock	133.4	205.0	169.7	158.1	180.3	59.4	252.7	3.2	1,161.7	13.5
Other softwoods	27.2	26.5	8.8	8.6	2.5	6.1	.0	.9	80.6	30.3
Total softwoods	344.7	538.9	517.9	370.4	364.8	208.9	540.3	63.2	2,949.1	8.5
Red maple	-	323.7	256.8	152.8	154.5	76.9	131.6	54.1	1,150.4	11.7
Sugar maple	-	237.7	252.3	212.8	175.7	121.9	125.5	65.8	1,191.7	11.7
Yellow birch	-	43.5	43.3	26.3	15.7	9.4	6.9	.0	145.1	19.1
Sweet birch	-	125.6	110.0	51.7	25.5	9.2	3.9	.0	325.8	15.9
Paper birch	-	8.7	8.1	.0	3.0	.0	.0	.0	19.7	32.9
Hickory	-	77.8	57.2	35.2	24.6	19.5	18.0	.0	232.3	15.2
American beech	-	82.3	72.6	70.0	62.1	14.6	16.7	.0	318.4	19.3
White ash	-	103.3	120.0	87.1	30.9	62.0	51.2	17.0	471.5	14.3
Aspen	-	57.2	31.8	22.6	17.6	10.8	9.8	.0	149.8	20.2
Black cherry	-	73.2	53.7	55.2	40.4	27.3	5.4	.0	255.3	22.0
Select white oaks	-	63.4	71.4	37.0	28.0	48.5	60.4	52.7	361.3	14.4
Chestnut oak	-	144.0	125.2	85.8	31.4	10.9	18.1	.0	415.4	15.4
Northern red oak	-	199.2	217.1	203.1	113.9	96.5	194.9	38.3	1,063.0	9.5
Other oaks	-	80.5	78.4	104.5	76.2	61.9	107.8	55.4	564.6	15.6
Basswood	-	17.5	34.1	30.5	6.0	3.7	7.5	1.5	100.7	22.9
Elm	-	17.6	10.2	6.3	1.9	7.2	5.2	.0	48.4	29.7
Other hardwoods	-	32.9	39.7	37.7	31.1	24.4	64.4	16.0	246.2	20.2
Total hardwoods	-	1,688.2	1,581.9	1,218.7	838.3	604.5	827.3	300.8	7,059.7	4.3
All species	344.7	2,227.0	2,099.8	1,589.2	1,203.1	813.4	1,367.6	364.0	10,008.8	3.8
SE	10.7	5.0	4.7	5.3	8.2	8.5	8.9	16.5	3.8	

**Net volume of growing-stock trees on timberland,
top five species,
Catskill/Lower Hudson Unit, New York, 1980 and 1993**

**Net volume of sawtimber trees on timberland,
top five species,
Catskill/Lower Hudson Unit, New York, 1980 and 1993**

Table 136.--Net volume of sawtimber trees on timberland by species, size class, and tree grade, Catskill/Lower Hudson Unit, New York, 1993

Species	(In millions of board feet)											
	>15" Diameter at breast height						All size classes					
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades
Balsam fir	.0	-	-	-	.0	.0	.0	-	-	-	-	1.4
Spruces	16.2	-	-	-	.0	16.2	61.9	-	-	-	-	3.4
Red pine	.0	.0	8.4	-	.0	8.4	88.3	2.3	77.5	-	-	3.9
White pine	78.1	166.8	267.3	131.8	207.4	851.4	100.5	378.6	481.8	211.4	295.8	1,468.0
Eastern hemlock	346.7	-	-	-	306.9	653.6	740.3	-	-	-	-	1,161.7
Other softwoods	.0	.0	16.2	-	1.9	18.1	7.3	1.5	66.7	-	-	80.6
Total softwoods	441.0	166.8	291.8	131.8	516.2	1,547.6	998.3	382.4	626.0	211.4	731.0	2,949.1
Red maple	97.8	118.6	114.2	77.7	161.5	569.9	97.8	172.0	535.9	131.3	213.4	1,150.4
sugar maple	190.8	197.9	134.2	50.9	127.8	701.6	190.8	284.7	464.5	80.7	171.0	1,191.7
Yellow birch	15.3	18.2	11.9	5.3	7.6	58.2	15.3	29.8	77.8	7.4	15.0	145.1
sweet birch	16.5	34.3	21.7	6.2	11.5	90.2	16.5	75.8	191.7	24.3	17.5	325.8
Paper birch	.0	.0	.0	1.9	1.0	3.0	.0	3.3	11.8	3.6	1.0	19.7
Hickory	24.8	30.2	25.2	2.9	14.1	97.3	24.8	58.9	111.2	17.9	19.5	232.3
American beech	17.9	26.2	38.2	42.7	38.6	163.5	17.9	31.3	131.4	90.5	47.4	318.4
White ash	95.1	77.6	31.4	5.8	38.3	248.1	95.1	155.2	174.1	6.6	40.6	471.5
Aspen	24.3	13.5	9.9	5.6	7.4	60.7	24.3	26.1	69.1	21.5	8.7	149.8
Black cherry	39.2	15.9	20.6	5.3	47.4	128.4	39.2	37.0	109.8	9.1	60.2	255.3
Select white oaks	89.2	45.9	34.4	15.4	41.6	226.5	89.2	81.5	123.5	21.3	45.7	361.3
Chestnut oak	38.3	75.1	17.4	6.3	9.1	146.2	38.3	136.7	213.0	16.8	10.6	415.4
Northern red oak	367.4	178.1	45.8	9.6	45.8	646.7	367.4	318.7	287.1	36.4	53.4	1,063.0
Other oaks	107.8	135.0	92.7	49.5	20.8	405.8	107.8	173.6	191.0	68.7	23.5	564.6
Basswood	22.9	17.1	3.7	2.2	3.1	49.1	22.9	35.0	34.2	4.7	4.0	100.7
Elm	7.2	1.4	3.3	5.2	3.6	20.7	7.2	1.4	24.9	7.9	7.1	48.4
Other hardwoods	78.2	30.4	26.2	5.9	32.9	173.6	78.2	49.3	60.9	19.7	38.0	246.2
Total hardwoods	1,232.6	1,015.6	630.7	298.3	612.4	3,789.6	1,232.6	1,670.5	2,811.7	568.3	776.6	7,059.7
All species	1,673.6	1,182.4	922.6	430.1	1,128.6	5,337.2	2,230.9	2,052.9	3,437.7	779.7	1,507.6	10,008.8

Table 137.--Average annual mortality^a, average annual net growth, and average annual removals of growing-stock and sawtimber volume on timberland by species, Catskill/Lower Hudson Unit, New York, 1979-92

(In thousands of feet)

Species	Growing stock (cu. ft.)				Sawtimber (bd. ft.)			
	Mortality	SE	Net growth	SE	Removals	SE	Mortality	SE
Balsam fir	0	.0	43	97.6	0	.0	.0	91
Spruces	81	94.3	615	39.6	111	55.4	224	100.0
Red pine	36	71.2	1,197	61.8	180	74.3	0	50.5
White pine	949	26.5	9,606	16.6	198	44.6	3,108	67.1
Eastern hemlock	950	35.9	6,508	15.3	493	39.1	3,410	17.8
Other softwoods	317	50.9	1,332	38.4	592	43.6	442	16.7
								45.3
								65.6
Total softwoods	2,334	19.8	19,301	9.3	1,575	23.2	7,185	10.6
								28.5
Red maple	1,589	17.6	12,170	8.4	3,278	21.8	3,074	12.0
Sugar maple	1,145	21.1	9,514	11.5	1,754	23.6	2,590	12.8
Yellow birch	186	40.4	1,584	18.9	103	36.6	2,298	22.7
Sweet birch	713	27.4	2,861	16.7	826	42.9	1,538	19.3
Paper birch	111	65.6	277	58.2	126	70.7	299	* 47.1
Hickory	497	55.1	1,330	24.8	1,114	34.3	1,717	22.6
American beech	309	39.4	3,561	18.4	531	51.5	880	23.5
White ash	1,039	29.3	4,257	14.7	2,012	26.7	2,304	18.3
Aspen	709	27.9	1,492	34.7	375	41.7	1,063	27.5
Black cherry	544	31.0	2,937	22.9	1,236	29.6	579	22.5
Select white oaks	1,308	25.5	440	89.3	1,882	22.4	4,418	61.7
Chestnut oak	2,891	21.4	-342	*	902	46.4	5,319	38.2
Northern red oak	1,211	23.2	6,173	11.3	4,960	19.3	3,248	11.5
Other oaks	689	23.6	3,423	20.0	2,780	21.1	1,737	19.7
Basswood	324	33.5	96	*	36	100.0	1,222	89.1
Elm	540	33.2	1,388	25.0	187	48.0	696	166
Other hardwoods	342	39.7	2,398	24.2	1,469	37.2	1,172	38.1
								100.0
								48.4
Total hardwoods	14,149	8.2	53,563	4.6	23,571	11.8	32,155	5.0
								14.0
All species	16,483	7.5	72,864	4.1	25,146	11.3	39,340	4.4
								13.4

^a Mortality is a component of net growth.

* Sampling error is greater than 100 percent.

COUNTY TABLES

Table 138.--Land area by county, geographic unit, and land class, New York, 1993

(In thousands of acres)

County and unit	Land class						All classes ^a
	Timberland	Urban forest	Other forest land	Reser prop ^b for . land	Reser oth for . land	Total f. land	
Erie	281.6	6.0	3.3	1.2	.0	292.1	376.5
Genesee	121.7	.0	.0	1.4	.0	123.1	193.1
Livingston	147.1	.0	.0	4.2	4.1	155.4	249.2
Madison	190.3	.0	.0	8.7	.1	199.1	220.7
Monroe	86.5	14.3	.0	7.3	.9	108.9	421.9
Niagara	91.9	.0	.0	.1	.1	92.1	242.6
Onondaga	224.5	10.9	.0	6.0	.3	241.7	499.4
Ontario	135.9	5.2	.0	.9	t	142.1	270.3
Orleans	66.8	.0	.0	1.6	.3	68.7	181.9
Oswego	424.1	.0	2.5	1.6	.1	428.2	610.1
Wayne	151.6	.0	.0	8.5	.0	160.1	226.6
Wyoming	148.7	.0	6.2	5.8	.4	161.1	218.4
Yates	110.9	.0	.0	.5	.0	111.4	105.1
Cayuga and Seneca	215.5	.0	.0	5.5	.1	221.1	430.5
Lake Plain	2,397.1	36.4	12.0	53.2	6.3	2,505.1	3,467.5
Allegany	430.9	3.0	.0	7.5	.0	441.4	218.0
Cattaraugus	510.1	.0	5.1	56.9	t	572.1	266.2
Chautauqua	315.5	.0	5.0	.2	.2	320.9	358.9
Steuben	479.9	.0	.0	1.2	.7	481.8	409.5
Southwest Highlands	1,736.5	3.0	10.1	65.8	.9	1,816.2	1,252.7
Broome	253.0	.0	.0	7.8	t	260.6	191.8
Chemung	176.2	.0	.0	1.1	.0	177.3	83.9
Chenango	343.0	.0	.0	1.1	.1	344.3	228.2
Cortland	167.0	.0	.0	1.1	t	168.1	151.7
Delaware	627.1	.0	.0	42.1	.0	669.2	256.5
Otsego	367.0	.0	.0	1.9	.0	368.9	273.0
Schuyler	118.6	.0	.0	6.2	.0	124.8	85.6
Tioga	184.2	.0	.0	.0	.0	184.2	147.8
Tompkins	157.2	.0	.0	12.1	.0	169.3	135.4
South-central Highlands	2,393.3	.0	.0	73.2	.2	2,466.7	1,553.8
Clinton	416.3	.0	5.6	55.5	3.0	480.4	184.8
Franklin	592.9	.0	.0	257.5	12.0	862.5	181.7
Jefferson	389.2	.0	.0	9.2	3.2	401.6	412.7
St. Lawrence	1,106.3	.0	38.8	128.0	1.2	1,274.2	444.6
St. Lawrence/N. Adirondack	2,504.6	.0	44.4	450.3	19.5	3,018.7	1,223.9
							4,242.6

Table 138.-continued

(In thousands of acres)

County and unit	Land class					Total f. land	Nonforest land	All classes ^a
	Timberland	Urban forest	Other forest land	Reser prop for. land	Reser oth for. land			
Fulton	159.4	.0	5.2	75.9	3.4	244.0	73.6	317.6
Herkimer	358.0	.0	5.5	322.5	.0	686.0	217.5	903.6
Lewis	556.2	.0	.0	45.4	15.6	617.1	199.2	816.4
Oneida	435.6	.0	10.5	9.4	.0	455.5	320.7	776.2
Western Adirondack	1,509.2	.0	21.3	453.3	18.9	2,002.7	811.0	2,813.7
Essex	573.5	.0	7.0	430.6	22.6	1,033.8	116.3	1,150.1
Hamilton	343.2	.0	.0	653.7	82.3	1,079.1	22.1	1,101.2
Warren	342.0	.0	.0	191.5	t	533.5	23.1	556.6
Eastern Adirondack	1,258.7	.0	7.0	1,275.8	104.9	2,646.4	161.5	2,807.9
Albany	164.8	.0	3.7	2.2	.0	170.8	164.4	335.2
Columbia	228.5	.0	11.1	11.4	.0	251.1	155.8	406.9
Montgomery	97.4	.0	.0	.0	.0	97.4	161.7	259.1
Rensselaer	248.4	.0	.0	7.3	.0	255.6	162.9	418.6
Saratoga	331.9	.0	.0	18.3	1.3	351.5	168.1	519.6
Schenectady	69.9	.0	.0	t	.0	69.9	62.0	131.9
Washington	283.8	.0	.0	20.5	.0	304.3	230.5	534.7
Capitol District	1,424.7	.0	14.8	59.7	1.3	1,500.5	1,105.6	2,606.1
Bronx	.0	.0	.0	.0	.0	.0	26.9	26.9
Dutchess	264.8	.0	.0	11.8	.3	276.9	236.1	513.1
Greene	253.5	.0	.0	74.8	.0	328.3	86.4	414.6
Kings	.0	.0	.0	.0	.0	.0	45.1	45.1
Nassau	.0	.0	.0	.0	.0	.0	183.5	183.5
New York	.0	.0	.0	.0	.0	.0	18.2	18.2
Orange	253.4	.0	.0	30.1	2.8	286.3	236.2	522.5
Putnam	90.6	.0	.0	12.3	.1	103.0	45.2	148.2
Queens	.0	.0	.0	.0	.0	.0	70.0	70.0
Richmond	.0	.0	.0	.0	.0	.0	37.5	37.5
Schoharie	266.7	.0	.0	.3	.0	267.0	131.0	398.0
Suffolk	90.1	50.5	.0	32.2	10.0	182.6	400.5	583.2
Sullivan	456.5	.0	5.3	24.5	.0	486.3	134.3	620.7
Ulster	400.6	.0	7.9	174.3	.0	582.8	138.2	721.0
Rockland and Westchester	105.3	9.7	.0	55.0	1.8	171.8	216.8	388.5
Catskill/Lower Hudson	2,181.4	60.2	13.3	415.3	14.9	2,685.1	2,005.9	4,691.0
All counties and units	15,405.5	99.6	122.8	2,846.5	166.9	18,641.4	11,581.9	30,223.3

^a Source: 1990 United States Department of Commerce, Bureau of Census.^b Includes an estimated 60,000 acres of Christmas tree plantations.^t Less than 50 acres.

Table 139.---Area of timberland by county, geographic unit, and ownership class, New York, 1993

(In thousands of acres)

County and unit	Owner class					All ownerships
	National Forest	Misc. federal	State	County and municipal	Forest industry	Other private
Erie	.0	.0	.5	3.7	.0	277.4
Genesee	.0	2.8	1.0	.6	.0	117.3
Livingston	.0	.0	7.5	.0	.0	139.5
Madison	.0	.0	23.3	.9	.0	166.0
Monroe	.0	.0	.1	.0	.0	86.4
Niagara	.0	.0	.2	.0	.0	91.7
Onondaga	.0	.0	10.1	.1	.0	214.4
Ontario	.0	.0	.8	t	.0	135.1
Orleans	.0	2.0	.0	.0	.0	64.8
Oswego	.0	t	35.7	4.1	5.3	378.9
Wayne	.0	.0	2.5	t	.0	149.1
Wyoming	.0	.0	.9	.9	.0	146.8
Yates	.0	.0	5.4	.3	.0	105.2
Cayuga and Seneca	.0	7.9	9.1	1.1	.0	197.4
Lake Plain	.0	12.7	97.2	11.9	5.3	2,270.0
Allegany	.0	.0	42.8	2.4	4.3	381.4
Cattaraugus	.0	.0	33.1	3.8	31.1	442.2
Chautauqua	.0	t	17.5	4.7	.0	293.2
Steuben	.0	.0	24.5	1.9	.0	453.5
Southwest Highlands	.0	t	117.8	12.8	35.4	1,570.4
Broome	.0	.0	8.2	.3	5.1	239.4
Chemung	.0	.0	1.3	.1	10.2	164.7
Chenango	.0	.0	70.8	1.7	5.0	265.4
Cortland	.0	.0	30.9	.2	5.1	130.8
Delaware	.0	.3	24.0	25.4	25.5	552.0
Otsego	.0	.0	20.9	5.1	.0	341.0
Schuyler	7.5	.0	15.6	.2	.0	95.3
Tioga	.0	.0	9.5	.6	4.9	169.2
Tompkins	.0	.0	25.9	.9	15.6	114.8
South-central Highlands	7.5	.3	207.1	34.5	71.4	2,072.5
Clinton	.0	.8	24.5	.8	111.6	278.6
Franklin	.0	.0	18.1	.3	142.6	431.9
Jefferson	.0	30.6	20.0	5.2	.0	333.4
St. Lawrence	.0	.0	65.6	4.1	281.0	755.5
St. Lawrence/N. Adirondack	.0	31.4	128.2	10.4	535.2	1,799.4
						2,504.6

Table 139.-continued

(In thousands of acres)

County and unit	Owner class						All ownerships
	National Forest	Misc. federal	State	County and municipal	Forest industry	Other private	
Fulton	.0	.0	5.6	5.7	10.0	138.2	159.4
Herkimer	.0	.0	4.1	18.5	43.1	292.3	358.0
Lewis	.0	7.7	72.1	7.7	118.1	350.6	556.2
Oneida	.0	1.6	37.4	11.5	.0	385.1	435.6
Western Adirondack	.0	9.2	119.2	43.3	171.2	1,166.2	1,509.2
Essex	.0	.0	18.9	1.9	193.9	358.7	573.5
Hamilton	.0	.0	.3	.1	137.8	205.0	343.2
Warren	.0	.0	2.8	7.5	11.5	320.2	342.0
Eastern Adirondack	.0	.0	22.0	9.5	343.2	883.9	1,258.7
Albany	.0	.0	10.9	4.6	.0	149.3	164.8
Columbia	.0	.0	2.2	.2	.0	226.1	228.5
Montgomery	.0	.0	6.4	.4	.0	90.64	97.4
Rensselaer	.0	.0	8.3	1.7	27.3	211.1	248.4
Saratoga	.0	3.5	5.4	11.1	30.6	281.3	331.9
Schenectady	.0	.0	.5	.3	.0	69.1	69.9
Washington	.0	t	3.5	2.6	.0	277.6	283.8
Capitol District	.0	3.5	37.2	21.0	57.9	1,305.1	1,424.7
Dutchess	.0	.0	3.7	.5	.0	260.7	264.8
Greene	.0	.2	3.8	1.1	.0	248.3	253.5
Orange	.0	11.5	1.1	4.2	.0	236.5	253.4
Putnam	.0	.0	2.1	.0	.0	88.5	90.6
Schoharie	.0	.0	33.2	2.3	.0	231.2	266.7
Suffolk	.0	.9	.0	.0	.0	89.2	90.1
Sullivan	.0	.0	12.7	7.0	.0	436.8	456.5
Ulster	.0	.0	.7	10.0	.0	389.9	400.6
Rockland and Westchester	.0	.1	.6	5.9	.0	98.7	105.3
Catskill/Lower Hudson	.0	12.7	58.0	30.9	.0	2,079.9	2,181.4
All counties and units	7.5	69.9	786.6	174.3	1,219.7	13,147.6	15,405.5

t Less than 50 acres.

Table 140.--Area of timberland by county, geographic unit, and forest-type group, New York, 1993

(In thousands of acres)

County and unit	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		
Erie	26.2	12.5	.0	.0	21.1	.0	39.8	170.0	12.0	281.6	6.0
Genesee	5.5	.0	.0	5.5	9.7	.0	37.1	48.8	15.1	121.7	8.7
Livingston	15.5	7.9	.0	10.0	53.9	.0	4.8	55.0	.0	147.1	10.2
Madison	14.9	22.9	.0	.0	4.2	.0	17.4	126.2	4.7	190.3	7.4
Monroe	5.5	.0	.0	.0	21.9	.0	8.8	50.3	.0	86.5	15.7
Niagara	5.7	.0	.0	.0	23.8	.0	53.2	9.2	.0	91.9	10.2
Onondaga	10.3	10.2	.0	4.9	26.4	.0	47.2	120.4	5.3	224.5	8.5
Ontario	4.9	.0	.0	5.4	55.7	.0	15.8	54.0	.0	135.9	9.6
Orleans	.0	.0	.0	.0	8.8	.0	25.0	29.2	3.8	66.8	11.8
Oswego	58.9	8.9	.0	.0	15.2	.0	34.1	287.2	19.9	424.1	3.2
Wayne	10.5	.0	.0	.0	.0	.0	33.0	100.0	8.1	151.6	8.1
Wyoming	4.0	.0	.0	.0	11.2	.0	25.3	94.4	13.9	148.7	9.3
Yates	10.7	3.1	.0	5.2	38.0	.0	4.3	49.7	.0	110.9	9.9
Cayuga and Seneca	.0	5.0	.0	.0	34.3	.0	62.4	103.6	10.2	215.5	6.3
Lake Plain	172.4	70.4	.0	31.0	324.2	.0	408.3	1,298.0	92.9	2,397.1	2.1
Allegany	21.9	10.4	.0	5.1	88.3	.0	15.3	264.7	25.1	430.9	2.9
Cattaraugus	48.8	24.0	.0	.0	65.1	.0	32.8	312.3	27.1	510.1	3.1
Chautauqua	38.0	.0	.0	.0	31.4	.0	25.1	188.9	32.2	315.5	6.3
Steuben	33.3	.0	.0	30.1	105.4	.0	42.5	258.3	10.4	479.9	3.7
Southwest Highlands	142.0	34.4	.0	35.2	290.2	.0	115.6	1,024.2	94.8	1,736.5	1.9
Broome	29.1	.0	.0	9.6	36.2	.0	10.3	151.9	15.8	253.0	6.0
Chemung	15.0	.0	5.5	11.0	37.2	.0	9.8	87.4	10.4	176.2	6.0
Chenango	79.5	18.9	.0	5.1	20.2	.0	25.7	182.6	10.9	343.0	4.9
Cortland	.0	5.1	.0	5.0	.0	.0	21.5	135.4	.0	167.0	7.8
Delaware	41.9	10.1	.0	11.1	41.9	.0	59.8	457.2	5.3	627.1	3.0
Otsego	55.9	16.1	.0	16.3	58.2	.0	16.0	190.6	13.8	367.0	4.8
Schuyler	5.4	5.1	.0	5.1	21.6	.0	.0	69.9	11.4	118.6	9.5
Tioga	32.0	4.9	.0	.0	20.9	.0	.0	121.0	5.3	184.2	7.5
Tompkins	10.4	4.9	.0	15.8	20.5	.0	18.5	87.0	.0	157.2	6.0
South-central Highlands	269.4	65.1	5.5	79.0	256.7	.0	161.7	1,483.0	72.8	2,393.3	1.8
Clinton	43.1	48.0	.0	5.4	16.2	5.6	10.4	219.3	68.3	416.3	4.4
Franklin	53.6	51.3	.0	5.1	14.9	.0	34.5	402.8	30.7	592.9	2.7
Jefferson	60.1	20.4	5.1	.0	21.1	.0	48.4	202.4	31.8	389.2	6.3
St. Lawrence	109.9	65.4	.0	5.7	39.1	.0	122.6	680.0	83.5	1,106.3	2.5
St. Lawrence/N. Adirondack	266.7	185.0	5.1	16.3	91.2	5.6	215.9	1,504.5	214.3	2,504.6	1.8

Table 140.-continued

County and unit	(In thousands of acres)										SE
	Forest-type group									All groups	
	White/red pine	Spruce/fir	Loblolly/shortleaf	Oak/pine	Oak/hickory	Oak/gum/cypress	Elm/ash/red maple	Northern hardwoods	Aspen/birch		
Fulton	49.6	.0	.0	.0	.0	.0	15.2	89.6	5.0	159.4	8.5
Herkimer	27.6	22.0	.0	.0	9.2	.0	5.4	271.5	22.2	358.0	5.1
Lewis	43.1	32.0	.0	5.2	.0	.0	16.2	448.0	11.7	556.2	2.8
Oneida	61.9	10.7	.0	5.3	21.7	.0	53.9	260.2	21.8	435.6	5.3
Western Adirondack	182.2	64.7	.0	10.5	31.0	.0	90.8	1,069.3	60.7	1,509.2	2.4
Essex	127.0	72.2	.0	32.4	68.9	.0	.0	253.4	19.7	573.5	2.8
Hamilton	27.4	34.9	.0	.0	.0	.0	13.3	261.0	6.6	343.2	2.5
Warren	130.0	22.8	.0	34.0	17.3	.0	.0	132.6	5.2	342.0	2.4
Eastern Adirondack	284.4	130.0	.0	66.4	86.2	.0	13.3	647.0	31.5	1,258.7	1.6
Albany	69.2	5.5	5.5	6.7	25.7	.0	5.5	41.1	5.5	164.8	6.6
Columbia	62.3	.0	.0	3.5	57.9	.0	34.5	61.4	8.9	228.5	7.5
Montgomery	19.8	.0	.0	.0	10.8	.0	17.4	38.1	11.2	97.4	12.1
Rensselaer	21.5	5.8	.0	11.3	66.4	.0	39.4	104.0	.0	248.4	5.5
Saratoga	85.9	9.5	.0	15.2	50.7	.0	14.8	145.2	10.7	331.9	5.3
Schenectady	21.7	.0	.0	5.3	10.6	.0	.0	32.4	.0	69.9	14.5
Washington	52.9	.0	.0	15.4	59.4	.0	.0	117.1	38.9	283.8	6.0
Capitol District	333.3	20.8	5.5	57.4	281.5	.0	111.7	539.3	75.2	1,424.7	2.7
Dutchess	9.9	.0	9.7	25.7	109.2	.0	30.9	79.4	.0	264.8	7.5
Greene	63.0	.0	9.7	14.1	52.2	.0	8.3	101.0	5.1	253.5	2.9
Orange	19.9	5.6	5.2	4.9	141.2	.0	23.2	53.3	.0	253.4	6.7
Putnam	.0	.0	.0	.0	49.4	.0	8.3	32.9	.0	90.6	12.5
Schoharie	73.9	.0	.0	11.1	38.3	.0	5.1	134.4	3.9	266.7	3.9
Suffolk	.0	.0	32.4	6.5	46.9	.0	.0	4.3	.0	90.1	22.1
Sullivan	86.8	.0	.0	25.5	114.7	.0	10.3	209.2	9.9	456.5	3.4
Ulster	50.4	.0	.0	47.3	135.4	.0	17.7	149.9	.0	400.6	2.8
Rockland and Westchester	.0	.0	.0	.0	56.0	.0	4.6	44.7	.0	105.3	14.2
Catskill/Lower Hudson	304.0	5.6	57.1	135.0	743.3	.0	108.4	809.2	18.9	2,181.4	2.0
All counties and units	1,954.4	576.0	73.2	430.7	2,104.3	5.6	1,225.6	8,374.6	661.1	15,405.5	.7
SE	4.6	9.3	27.0	11.0	4.4	100.0	6.1	1.7	8.7	.7	

Table 141.--Area of timberland by county, geographic unit, and stand-size class, New York, 1993

(In thousands of acres)

County and unit	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Erie	142.4	66.2	73.1	.0	281.6	6.0
Genesee	32.1	55.2	34.4	.0	121.7	8.7
Livingston	46.1	60.9	40.0	.0	147.1	10.2
Madison	84.1	55.4	50.8	.0	190.3	7.4
Monroe	38.3	21.0	27.2	.0	86.5	15.7
Niagara	42.5	14.0	35.4	.0	91.9	10.2
Onondaga	99.7	62.7	62.1	.0	224.5	8.5
Ontario	76.4	33.0	26.5	.0	135.9	9.6
Orleans	27.6	25.0	14.3	.0	66.8	11.8
Oswego	247.8	128.5	47.8	.0	424.1	3.2
Wayne	74.1	37.5	36.0	4.1	151.6	8.1
Wyoming	61.5	65.4	21.8	.0	148.7	9.3
Yates	38.4	30.3	38.0	4.3	110.9	9.9
Cayuga and Seneca	123.0	48.1	44.4	.0	215.5	6.3
Lake Plain	1,133.9	703.1	551.8	8.4	2,397.1	2.1
Allegany	175.6	173.6	81.8	.0	430.9	2.9
Cattaraugus	263.1	144.0	103.0	.0	510.1	3.1
Chautauqua	151.8	101.3	62.3	.0	315.5	6.3
Steuben	247.3	140.5	92.2	.0	479.9	3.7
Southwest Highlands	837.9	559.4	339.2	.0	1,736.5	1.9
Broome	122.3	70.5	60.1	.0	253.0	6.0
Chemung	68.0	58.0	50.3	.0	176.2	6.0
Chenango	219.6	75.1	48.2	.0	343.0	4.9
Cortland	84.8	30.1	52.0	.0	167.0	7.8
Delaware	417.4	140.5	69.2	.0	627.1	3.0
Otsego	203.3	92.5	71.3	.0	367.0	4.8
Schuyler	59.4	42.4	16.8	.0	118.6	9.5
Tioga	90.9	66.7	26.6	.0	184.2	7.5
Tompkins	80.1	48.0	29.1	.0	157.2	6.0
South-central Highlands	1,345.9	623.9	423.4	.0	2,393.3	1.8
Clinton	111.2	233.6	71.4	.0	416.3	4.4
Franklin	299.1	224.3	69.6	.0	592.9	2.7
Jefferson	123.0	92.3	173.9	.0	389.2	6.3
St. Lawrence	549.3	346.6	210.3	.0	1,106.3	2.5
St. Lawrence/N. Adirondack	1,082.7	896.8	525.2	.0	2,504.6	1.8

Table 141.-continued

(In thousands of acres)

County and unit	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Fulton	113.4	21.1	25.0	.0	159.4	8.5
Herkimer	185.7	106.1	66.2	.0	358.0	5.1
Lewis	333.7	145.9	76.6	.0	556.2	2.8
Oneida	248.1	111.9	70.3	5.5	435.6	5.3
Western Adirondack	880.8	384.9	238.0	5.5	1,509.2	2.4
Essex	372.8	152.3	48.5	.0	573.5	2.8
Hamilton	192.4	128.6	22.1	.0	343.2	2.5
Warren	204.8	125.4	11.8	.0	342.0	2.4
Eastern Adirondack	770.0	406.2	82.4	.0	1,258.7	1.6
Albany	107.6	35.2	16.4	5.5	164.8	6.6
Columbia	170.4	43.6	14.5	.0	228.5	7.5
Montgomery	41.4	27.6	28.4	.0	97.4	12.1
Rensselaer	122.5	116.0	9.9	.0	248.4	5.5
Saratoga	190.8	99.7	41.5	.0	331.9	5.3
Schenectady	29.8	15.8	24.3	.0	69.9	14.5
Washington	133.3	114.7	35.8	.0	283.8	6.0
Capitol District	795.7	452.6	170.8	5.5	1,424.7	2.7
Dutchess	173.5	71.3	20.0	.0	264.8	7.5
Greene	134.3	99.7	19.4	.0	253.5	2.9
Orange	148.8	73.3	26.0	5.2	253.4	6.7
Putnam	63.5	17.2	10.0	.0	90.6	12.5
Schoharie	151.7	79.1	30.6	5.3	266.7	3.9
Suffolk	37.4	32.6	20.1	.0	90.1	22.1
Sullivan	280.4	113.7	62.4	.0	456.5	3.4
Ulster	269.5	117.3	13.8	.0	400.6	2.8
Rockland and Westchester	85.5	14.0	5.8	.0	105.3	14.2
Catskill/Lower Hudson	1,344.7	618.1	208.1	10.6	2,181.4	2.0
All counties and units	8,191.5	4,645.1	2,539.0	30.0	15,405.5	.7
SE	1.7	2.8	3.9	41.1	.7	

Table 142.--Area of timberland by county, geographic unit, and cubic-foot stand-volume class, New York, 1993
(In thousands of acres)

County and unit	Stand-volume class (cubic feet per acre)					All classes	SE
	0-499	500-999	1000-1499	1500-1999	2000-2499	2500+	
Erie	101.1	31.0	33.4	41.8	31.5	42.8	281.6
Genesee	58.8	16.5	14.5	16.0	10.5	5.5	121.7
Livingston	46.2	20.7	22.6	23.8	14.5	19.2	147.1
Madison	60.9	13.1	26.8	24.2	27.5	37.8	190.3
Monroe	34.8	6.7	10.9	8.8	10.9	14.3	86.5
Niagara	66.2	5.5	4.3	7.1	4.3	4.3	91.9
Onondaga	93.7	25.1	10.0	42.4	16.3	36.9	224.5
Ontario	31.4	27.1	17.1	27.7	21.8	10.9	135.9
Orleans	31.1	14.3	7.1	3.6	3.6	7.1	66.8
Oswego	51.9	52.3	53.5	90.1	81.6	94.6	424.1
Wayne	40.9	26.0	23.5	24.4	25.6	11.2	151.6
Wyoming	28.1	25.8	33.1	39.6	22.1	-0	148.7
Yates	46.5	22.3	5.3	21.1	10.4	5.3	110.9
Cayuga and Seneca	60.2	16.9	41.2	50.0	10.4	36.9	215.5
Lake Plain	751.7	303.4	303.4	420.8	291.0	326.8	2,397.1
Allegany	91.9	71.1	77.6	98.3	39.9	52.2	430.9
Cattaraugus	134.2	94.8	79.1	88.0	40.1	73.8	510.1
Chautauqua	109.7	37.4	37.3	70.5	32.8	27.7	315.5
Steuben	112.6	111.2	85.2	85.8	42.9	42.2	479.9
Southwest Highlands	448.4	314.6	279.2	342.6	155.8	195.9	1,736.5
Broome	70.4	15.9	33.8	44.6	46.5	41.9	253.0
Chemung	55.3	37.3	26.8	30.9	5.4	20.4	176.2
Chenango	57.6	72.0	18.8	72.9	37.9	83.9	343.0
Cortland	56.2	22.8	12.2	18.0	43.6	14.1	167.0
Delaware	109.4	96.2	117.7	136.2	82.6	84.9	627.1
Otsego	76.5	41.7	71.1	41.7	64.0	72.0	367.0
Schuyler	32.6	22.0	21.1	10.2	16.3	16.3	118.6
Tioga	32.0	37.8	30.3	38.1	35.9	10.1	184.2
Tompkins	29.1	22.9	44.1	15.2	25.9	20.1	157.2
South-central Highlands	519.2	368.6	375.8	407.8	358.2	363.7	2,393.3
Clinton	102.3	43.6	106.1	90.1	47.6	26.7	416.3
Franklin	79.4	74.8	168.8	147.7	85.2	37.1	592.9
Jefferson	231.7	54.9	21.4	44.1	10.4	26.7	389.2
St. Lawrence	276.6	190.5	224.3	146.9	171.2	96.8	1,106.3
St. Lawrence/N. Adirondack	690.0	363.8	520.5	428.7	314.4	187.3	2,504.6
							1.8

Table 142.-continued

County and unit	(In thousands of acres)						SE	
	Stand-volume class (cubic feet per acre)							
	0-499	500-999	1000-1499	1500-1999	2000-2499	2500+		
Fulton	25.0	10.0	22.1	42.5	38.8	21.0	159.4	8.5
Herkimer	93.7	35.2	84.1	65.3	48.1	31.6	358.0	5.1
Lewis	103.5	80.9	130.8	140.3	47.8	52.9	556.2	2.8
Oneida	134.8	41.6	58.1	48.3	62.9	90.1	435.6	5.3
Western Adirondack	356.9	167.7	295.0	296.4	197.6	195.6	1,509.2	2.4
Essex	62.8	72.9	120.0	87.2	124.2	106.5	573.5	2.8
Hamilton	24.7	83.1	78.2	99.5	24.4	33.2	343.2	2.5
Warren	9.6	39.3	80.4	75.2	69.6	67.9	342.0	2.4
Eastern Adirondack	97.2	195.3	278.6	261.9	218.2	207.6	1,258.7	1.6
Albany	32.7	23.2	23.8	18.3	22.6	44.4	164.8	6.6
Columbia	20.0	39.3	53.4	50.8	33.2	31.9	228.5	7.5
Montgomery	39.2	10.8	22.6	19.8	5.0	.0	97.4	12.1
Rensselaer	37.1	28.6	61.5	38.6	38.9	43.7	248.4	5.5
Saratoga	46.5	30.8	57.3	52.0	66.8	78.5	331.9	5.3
Schenectady	28.6	15.8	5.3	14.9	.0	5.3	69.9	14.5
Washington	46.4	60.8	59.9	42.5	26.9	47.3	283.8	6.0
Capitol District	250.5	209.2	283.7	236.9	193.4	251.1	1,424.7	2.7
Dutchess	39.8	39.4	43.8	61.8	26.9	53.0	264.8	7.5
Greene	19.4	28.5	70.7	51.8	19.8	63.3	253.5	2.9
Orange	58.1	47.0	70.7	32.7	25.1	19.8	253.4	6.7
Putnam	13.1	8.9	22.8	19.5	17.5	8.9	90.6	12.5
Schoharie	56.5	35.4	51.5	41.5	18.3	63.6	266.7	3.9
Suffolk	33.9	43.0	13.1	.0	.0	.0	90.1	22.1
Sullivan	93.5	62.8	82.5	119.2	26.6	72.0	456.5	3.4
Ulster	31.2	66.2	69.3	102.6	50.7	80.5	400.6	2.8
Rockland and Westchester	5.8	8.5	34.2	33.7	11.7	11.4	105.3	14.2
Catskill/Lower Hudson	351.4	339.6	458.7	462.7	196.5	372.4	2,181.4	2.0
All counties and units	3,465.2	2,262.2	2,794.9	2,857.9	1,925.0	2,100.3	15,405.5	.7
SE	3.1	4.5	4.0	3.8	4.8	4.4	.7	

Table 143.--Area of timberland by county, geographic unit, and stocking class of growing-stock trees, New York, 1993

(In thousands of acres)

County and unit	Stocking class					All classes	SE
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Over-stocked		
Erie	8.4	63.5	70.4	48.1	91.2	281.6	6.0
Genesee	5.4	31.9	47.2	21.2	16.0	121.7	8.7
Livingston	4.8	18.2	50.9	33.1	40.0	147.1	10.2
Madison	10.6	32.3	44.2	56.4	46.7	190.3	7.4
Monroe	.0	23.9	19.7	23.1	19.7	86.5	15.7
Niagara	5.5	38.4	25.1	13.0	9.9	91.9	10.2
Onondaga	10.7	67.1	36.0	63.2	47.6	224.5	8.5
Ontario	5.4	31.4	27.9	38.5	32.6	135.9	9.6
Orleans	3.8	33.6	11.6	7.1	10.7	66.8	11.8
Oswego	3.4	31.8	92.9	112.8	183.2	424.1	3.2
Wayne	4.1	23.9	51.2	57.0	15.4	151.6	8.1
Wyoming	3.9	20.1	53.4	31.0	40.2	148.7	9.3
Yates	11.6	12.8	36.2	32.8	17.5	110.9	9.9
Cayuga and Seneca	12.3	31.4	52.8	70.9	48.1	215.5	6.3
Lake Plain	89.9	460.3	619.6	608.4	618.9	2,397.1	2.1
Allegany	16.1	56.3	119.8	153.5	85.2	430.9	2.9
Cattaraugus	9.8	52.0	157.8	153.5	136.9	510.1	3.1
Chautauqua	14.2	63.6	80.3	91.6	65.9	315.5	6.3
Steuben	.0	93.2	141.6	171.4	73.7	479.9	3.7
Southwest Highlands	40.1	265.1	499.5	570.1	361.7	1,736.5	1.9
Broome	11.1	10.3	45.8	86.9	98.9	253.0	6.0
Chemung	.0	25.7	58.8	45.9	45.8	176.2	6.0
Chenango	10.9	36.0	81.6	73.5	141.1	343.0	4.9
Cortland	.0	20.5	53.5	55.6	37.4	167.0	7.8
Delaware	5.5	103.8	166.2	213.3	138.4	627.1	3.0
Otsego	.0	43.4	99.6	120.2	103.9	367.0	4.8
Schuyler	5.4	21.9	15.7	42.8	32.8	118.6	9.5
Tioga	.0	10.3	54.1	57.1	62.7	184.2	7.5
Tompkins	5.5	17.2	45.1	54.2	35.2	157.2	6.0
South-central Highlands	38.3	289.0	620.3	749.6	696.1	2,393.3	1.8
Clinton	10.8	59.2	69.8	164.4	112.1	416.3	4.4
Franklin	.0	30.0	144.2	261.9	156.8	592.9	2.7
Jefferson	31.1	148.7	112.9	43.5	53.0	389.2	6.3
St. Lawrence	5.3	177.5	250.0	383.2	290.3	1,106.3	2.5
St. Lawrence/N. Adirondack	47.2	415.4	577.0	853.0	612.1	2,504.6	1.8

Table 143.-continued

(In thousands of acres)

County and unit	Stocking class					All classes	SE
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Over- stocked		
Fulton	.0	9.9	21.0	58.3	70.1	159.4	8.5
Herkimer	16.4	16.4	132.5	106.2	86.5	358.0	5.1
Lewis	5.1	56.0	123.2	217.8	154.0	556.2	2.8
Oneida	16.4	91.7	63.1	111.9	152.5	435.6	5.3
Western Adirondack	37.9	174.1	339.9	494.3	463.0	1,509.2	2.4
Essex	.0	41.6	160.8	154.5	216.7	573.5	2.8
Hamilton	.0	18.1	129.1	136.6	59.4	343.2	2.5
Warren	.0	15.6	46.0	137.8	142.6	342.0	2.4
Eastern Adirondack	.0	75.3	335.9	428.8	418.7	1,258.7	1.6
Albany	5.5	16.2	46.2	45.1	51.8	164.8	6.6
Columbia	.0	11.0	71.3	94.4	51.8	228.5	7.5
Montgomery	.0	28.0	26.9	27.6	14.9	97.4	12.1
Rensselaer	5.8	21.4	71.7	78.0	71.5	248.4	5.5
Saratoga	.0	5.0	89.0	86.2	151.7	331.9	5.3
Schenectady	.0	18.6	19.2	21.5	10.6	69.9	14.5
Washington	5.0	31.2	103.6	59.5	84.5	283.8	6.0
Capitol District	16.3	131.5	427.8	412.3	436.7	1,424.7	2.7
Dutchess	.0	34.8	62.0	103.7	64.3	264.8	7.5
Greene	.0	14.5	67.2	67.3	104.4	253.5	2.9
Orange	5.2	16.3	71.7	127.7	32.4	253.4	6.7
Putnam	.0	10.0	25.9	37.2	17.6	90.6	12.5
Schoharie	5.3	30.6	66.0	54.1	110.7	266.7	3.9
Suffolk	.0	37.0	32.0	6.5	14.5	90.1	22.1
Sullivan	4.9	47.3	118.9	150.4	135.1	456.5	3.4
Ulster	.0	22.3	114.3	105.1	158.9	400.6	2.8
Rockland and Westchester	.0	10.1	37.9	28.4	28.9	105.3	14.2
Catskill/Lower Hudson	15.4	223.0	595.9	680.2	666.9	2,181.4	2.0
All counties and units	285.2	2,033.8	4,015.9	4,796.5	4,274.1	15,405.5	.7
SE	13.2	4.6	3.2	2.8	2.8	.7	

Table 144.--Area of timberland by county, geographic unit, and site-productivity class, New York, 1993

(In thousands of acres)

County and unit	Productivity class(cu. ft./acre/yr)				All classes	SE
	Very good (120+)	Good (85-119)	Fair (50-84)	Poor (20-49)		
Erie	39.3	26.9	73.6	141.8	281.6	6.0
Genesee	3.8	20.7	27.2	70.1	121.7	8.7
Livingston	.0	12.9	26.9	107.3	147.1	10.2
Madison	26.9	18.4	62.5	82.5	190.3	7.4
Monroe	.0	3.4	10.9	72.2	86.5	15.7
Niagara	7.1	11.2	10.0	63.5	91.9	10.2
Onondaga	21.2	15.1	56.5	131.6	224.5	8.5
Ontario	.0	.0	27.2	108.7	135.9	9.6
Orleans	16.0	12.6	9.0	29.2	66.8	11.8
Oswego	40.5	65.5	138.8	179.3	424.1	3.2
Wayne	19.5	18.6	34.0	79.5	151.6	8.1
Wyoming	9.5	31.4	54.3	53.5	148.7	9.3
Yates	.0	5.2	15.8	90.0	110.9	9.9
Cayuga and Seneca	42.9	10.2	59.5	102.9	215.5	6.3
Lake Plain	226.7	252.1	606.3	1,312.1	2,397.1	2.1
Allegany	5.1	26.5	112.9	286.4	430.9	2.9
Cattaraugus	36.0	37.2	151.8	285.2	510.1	3.1
Chautauqua	21.3	10.4	102.6	181.2	315.5	6.3
Steuben	25.5	54.2	127.0	273.2	479.9	3.7
Southwest Highlands	88.0	128.3	494.3	1,026.0	1,736.5	1.9
Broome	16.1	10.7	73.5	152.7	253.0	6.0
Chemung	.0	26.2	56.6	93.4	176.2	6.0
Chenango	9.6	61.5	82.0	189.9	343.0	4.9
Cortland	.0	5.2	57.6	104.2	167.0	7.8
Delaware	14.8	56.2	157.9	398.2	627.1	3.0
Otsego	16.7	47.8	92.7	209.8	367.0	4.8
Schuyler	10.8	5.4	37.3	65.1	118.6	9.5
Tioga	22.0	37.0	35.3	89.9	184.2	7.5
Tompkins	13.0	26.2	20.7	97.3	157.2	6.0
South-central Highlands	103.0	276.3	613.6	1,400.4	2,393.3	1.8
Clinton	16.3	57.7	90.3	251.9	416.3	4.4
Franklin	14.8	66.3	90.0	421.8	592.9	2.7
Jefferson	21.5	42.7	97.5	227.4	389.2	6.3
St. Lawrence	44.4	132.3	286.0	643.5	1,106.3	2.5
St. Lawrence/N. Adirondack	97.1	299.0	563.8	1,544.6	2,504.6	1.8

Table 144.-continued

(In thousands of acres)						
County and unit	Productivity class(cu. ft./acre/yr)				All classes	SE
	Very good (120+)	Good (85-119)	Fair (50-84)	Poor (20-49)		
Fulton	10.5	15.0	23.3	110.5	159.4	8.5
Herkimer	16.7	25.9	78.6	236.9	358.0	5.1
Lewis	23.3	79.8	108.7	344.4	556.2	2.8
Oneida	32.5	54.5	127.0	221.7	435.6	5.3
Western Adirondack	82.9	175.2	337.6	913.5	1,509.2	2.4
Essex	5.9	53.5	125.9	388.2	573.5	2.8
Hamilton	6.6	22.6	80.2	233.8	343.2	2.5
Warren	11.9	46.5	73.2	210.4	342.0	2.4
Eastern Adirondack	24.4	122.6	279.2	832.4	1,258.7	1.6
Albany	10.9	33.4	49.4	71.1	164.8	6.6
Columbia	14.5	10.5	86.3	117.2	228.5	7.5
Montgomery	10.8	15.5	20.5	50.6	97.4	12.1
Rensselaer	10.7	5.8	67.2	164.6	248.4	5.5
Saratoga	15.0	30.1	107.0	179.9	331.9	5.3
Schenectady	4.3	9.6	30.7	25.2	69.9	14.5
Washington	11.0	33.1	47.5	192.1	283.8	6.0
Capitol District	77.3	138.0	408.7	800.7	1,424.7	2.7
Dutchess	19.5	19.8	84.3	141.2	264.8	7.5
Greene	5.4	8.0	96.6	143.5	253.5	2.9
Orange	11.1	54.6	48.4	139.4	253.4	6.7
Putnam	.0	4.4	25.8	60.5	90.6	12.5
Schoharie	.0	30.0	38.0	198.7	266.7	3.9
Suffolk	.0	.0	.0	90.1	90.1	22.1
Sullivan	42.2	45.5	47.2	321.6	456.5	3.4
Ulster	28.0	34.7	90.8	247.1	400.6	2.8
Rockland and Westchester	10.1	5.9	22.7	66.6	105.3	14.2
Catskill/Lower Hudson	116.4	202.8	453.7	1,408.6	2,181.4	2.0
All counties and units	815.8	1,594.4	3,757.1	9,238.2	15,405.5	.7
SE	7.7	5.4	3.3	1.7	.7	

Table 145.--Biomass of all trees and shrubs on all forest land (excluding Preserve land) by county, geographic unit, and component, New York, 1993

(In thousands of dry tons)

County and unit	Component							All trees, shrubs		SE
	Preferred/ acceptable	Cull	Total timber	Saplings	Seedlings	Live trees	Total	Shrubs	Salvable dead trees	
Erie	15,374	1,395	16,769	1,964	148	18,881	383	120	19,384	6.7
Genesee	4,586	585	5,171	884	67	6,123	183	74	6,380	11.7
Livingston	7,293	968	8,261	1,103	163	9,527	224	152	9,903	10.3
Madison	9,956	1,325	11,281	1,127	168	12,576	90	101	12,767	8.6
Monroe	5,158	361	5,519	605	64	6,187	164	110	6,462	14.9
Niagara	3,011	1,111	4,122	483	38	4,643	200	57	4,900	17.6
Onondaga	11,724	1,220	12,944	1,000	232	14,177	191	101	14,469	8.4
Ontario	7,871	907	8,778	872	132	9,782	239	51	10,072	10.8
Orleans	2,766	462	3,228	265	24	3,517	80	22	3,619	17.7
Oswego	28,095	2,452	30,547	2,886	273	33,706	277	297	34,280	4.9
Wayne	7,769	1,056	8,825	677	90	9,592	143	103	9,837	11.9
Wyoming	8,784	889	9,673	965	126	10,764	101	51	10,916	9.7
Yates	4,675	608	5,283	442	138	5,863	298	60	6,221	12.1
Cayuga and Seneca	13,241	975	14,215	1,360	184	15,759	310	96	16,165	9.7
Lake Plain	130,302	14,315	144,617	14,633	1,847	161,097	2,882	1,397	165,376	2.5
Allegany	24,189	2,743	26,932	2,652	413	29,997	264	159	30,420	4.3
Cattaraugus	31,609	3,504	35,113	3,681	507	39,302	223	362	39,887	4.4
Chautauqua	16,484	2,176	18,660	1,766	196	20,622	485	100	21,207	8.5
Steuben	24,923	2,087	27,011	2,803	496	30,309	788	249	31,347	5.2
Southwest Highlands	97,206	10,510	107,716	10,903	1,612	120,230	1,761	870	122,861	2.7
Broome	15,644	1,065	16,709	1,810	303	18,823	346	169	19,337	6.2
Chemung	7,575	463	8,038	797	175	9,010	331	133	9,473	8.1
Chenango	22,239	2,028	24,267	1,916	238	26,420	104	223	26,748	5.1
Cortland	8,745	665	9,410	867	157	10,434	43	104	10,581	8.7
Delaware	38,991	4,863	43,854	3,682	219	47,755	111	147	48,014	3.6
Otsego	22,950	2,628	25,578	2,077	319	27,973	104	115	28,193	5.4
Schuyler	6,287	369	6,656	770	154	7,579	301	9	7,889	9.7
Tioga	9,631	806	10,437	1,341	158	11,936	46	19	12,001	7.8
Tompkins	9,295	602	9,897	557	210	10,664	105	72	10,841	9.5
South-central Highlands	141,357	13,489	154,846	13,816	1,933	170,595	1,490	992	173,078	2.0
Clinton	20,506	2,623	23,129	3,797	510	27,436	194	164	27,794	5.5
Franklin	33,875	3,705	37,580	4,237	911	42,728	264	375	43,367	4.2
Jefferson	12,207	1,710	13,917	2,028	464	16,409	750	120	17,279	9.2
St. Lawrence	58,395	5,684	64,079	7,690	1,199	72,969	589	1,102	74,660	3.2
St. Lawrence/N. Adirondack	124,983	13,723	138,706	17,752	3,084	159,543	1,796	1,761	163,100	2.3

Table 145.-continued

County and unit	(In thousands of dry tons)							SE	
	Component								
	Preferred/ acceptable	Cull	Total timber	Saplings	Seedlings	Total live trees	Salvable dead trees		
Fulton	10,692	619	11,311	831	115	12,258	123	12,532	8.1
Herkimer	19,062	2,150	21,212	1,971	382	23,565	379	24,186	6.0
Lewis	31,965	4,308	36,274	3,722	761	40,757	506	41,918	4.5
Oneida	26,534	3,176	29,710	3,006	286	33,002	236	33,414	5.3
Western Adirondack	88,253	10,254	98,507	9,530	1,545	109,582	1,244	112,051	2.8
Essex	38,001	2,435	40,436	4,212	539	45,187	166	45,674	4.4
Hamilton	20,003	957	20,960	2,455	501	23,916	110	24,299	5.6
Warren	23,453	1,783	25,236	2,172	327	27,735	91	28,011	5.3
Eastern Adirondack	81,458	5,175	86,633	8,838	1,367	96,838	367	97,984	2.9
Albany	10,631	1,031	11,662	987	149	12,798	183	13,045	9.9
Columbia	15,006	1,228	16,234	1,075	193	17,502	276	17,943	8.1
Montgomery	3,799	555	4,355	567	49	4,971	135	5,164	10.1
Rensselaer	15,648	1,385	17,034	1,726	178	18,938	217	19,324	7.0
Saratoga	22,069	993	23,061	2,008	273	25,343	175	25,675	6.4
Schenectady	3,062	388	3,450	371	69	3,890	187	4,095	17.9
Washington	16,002	2,009	18,011	1,717	270	19,998	195	20,381	6.7
Capitol District	86,217	7,589	93,807	8,452	1,182	103,441	1,361	105,627	3.1
Dutchess	18,727	1,454	20,181	1,253	149	21,583	201	21,965	8.7
Greene	18,010	1,605	19,615	1,618	158	21,390	246	21,862	4.7
Orange	17,760	960	18,721	1,594	132	20,447	185	20,713	8.1
Putnam	6,679	279	6,959	539	33	7,531	53	7,637	15.9
Schoharie	16,924	1,966	18,890	1,629	143	20,662	210	20,931	5.8
Suffolk	4,005	1,037	5,042	1,225	274	6,541	21	6,593	14.3
Sullivan	28,594	3,737	32,330	2,605	192	35,127	92	35,515	4.8
Ulster	29,615	3,504	33,119	2,268	161	35,547	133	35,811	4.2
Rockland and Westchester	10,938	626	11,565	580	28	12,173	40	12,499	11.5
Catskill/Lower Hudson	151,253	15,167	166,421	13,313	1,269	181,002	1,181	183,526	2.3
All counties and units	901,030	90,223	991,253	97,237	13,839	1,102,329	12,064	1,123,603	.9
SE	1.0	2.5	1.0	1.7	1.9	.9	4.3	5.1	.9

Table 146.--Biomass of growing stock on timberland by county, geographic unit, and component, New York, 1993
(In thousands of dry tons)

County and unit	Growing stock			Total growing stock	SE
	Poletimber	Sawlog	Upper stem		
Erie	3,692	5,525	1,160	10,377	7.5
Genesee	1,534	1,285	277	3,097	14.3
Livingston	2,389	2,050	448	4,887	11.6
Madison	2,375	3,533	784	6,692	9.9
Monroe	1,144	1,612	351	3,107	19.8
Niagara	746	1,118	237	2,101	24.0
Onondaga	2,369	4,082	880	7,331	12.0
Ontario	1,665	2,947	671	5,283	11.5
Orleans	759	916	218	1,893	19.5
Oswego	6,818	9,959	2,063	18,840	5.7
Wayne	2,049	2,712	592	5,353	13.4
Wyoming	2,754	2,671	593	6,019	10.5
Yates	939	1,888	379	3,206	14.8
Cayuga and Seneca	2,774	5,195	1,087	9,057	11.6
Lake Plain	32,008	45,493	9,741	87,243	3.0
Allegany	7,417	7,296	1,631	16,344	5.2
Cattaraugus	7,527	9,918	2,175	19,619	5.6
Chautauqua	4,080	5,924	1,259	11,263	9.8
Steuben	7,519	7,732	1,726	16,977	6.2
Southwest Highlands	26,543	30,870	6,791	64,204	3.2
Broome	4,388	5,071	1,126	10,585	7.4
Chemung	2,418	2,170	484	5,072	9.1
Chenango	5,263	7,991	1,574	14,829	6.0
Cortland	2,297	2,977	697	5,972	10.0
Delaware	9,989	13,547	3,033	26,570	4.2
Otsego	5,289	8,405	1,736	15,430	5.7
Schuyler	1,971	1,853	408	4,233	11.5
Tioga	2,737	3,059	650	6,446	8.7
Tompkins	2,246	3,296	735	6,277	10.5
South-central Highlands	36,600	48,369	10,444	95,413	2.3
Clinton	7,801	4,640	1,070	13,511	6.4
Franklin	9,535	10,315	2,306	22,157	4.7
Jefferson	3,386	3,920	777	8,082	11.9
St. Lawrence	16,067	18,554	4,040	38,661	3.9
St. Lawrence/N. Adirondack	36,789	37,429	8,193	82,411	2.7

Table 146.-continued

(In thousands of dry tons)

County and unit	Growing stock			Total growing stock	SE
	Poletimber	Sawlog	Upper stem		
Fulton	2,555	3,499	711	6,766	9.9
Herkimer	5,217	6,338	1,342	12,897	7.0
Lewis	7,446	11,626	2,448	21,519	5.3
Oneida	6,029	9,745	1,937	17,712	6.3
Western Adirondack	21,247	31,209	6,438	58,894	3.3
Essex	8,853	13,273	2,618	24,744	5.8
Hamilton	5,414	6,612	1,366	13,392	6.5
Warren	6,140	7,599	1,479	15,219	6.2
Eastern Adirondack	20,407	27,485	5,463	53,355	3.6
Albany	2,390	3,747	660	6,797	11.5
Columbia	2,657	6,008	1,218	9,884	9.1
Montgomery	1,049	1,231	260	2,540	12.3
Rensselaer	4,388	5,101	1,083	10,572	8.4
Saratoga	5,213	7,828	1,529	14,570	6.8
Schenectady	880	983	216	2,079	23.8
Washington	4,018	5,497	1,133	10,648	7.5
Capitol District	20,596	30,395	6,099	57,090	3.6
Dutchess	3,568	7,839	1,695	13,103	9.2
Greene	5,069	5,838	1,147	12,054	5.5
Orange	3,539	5,984	1,241	10,764	9.1
Putnam	1,303	2,585	585	4,473	16.2
Schoharie	4,440	5,700	1,192	11,333	6.9
Suffolk	720	798	170	1,688	26.0
Sullivan	6,889	10,041	2,019	18,949	5.5
Ulster	6,444	11,001	2,260	19,705	4.7
Rockland and Westchester	1,343	3,709	754	5,806	14.7
Catskill/Lower Hudson	33,316	53,496	11,064	97,875	2.7
All counties and units	227,507	304,745	64,233	596,485	1.1
SE	1.2	1.5	1.4	1.1	

Table 147.--Biomass of all timber on timberland by county, geographic unit, class of timber, and component, New York, 1993

County and unit	(In thousands of dry tons)					Total timber	SE
	Growing stock trees						
	Growing stock	Branches	Foliage	Stump and roots	Cull trees		
Erie	10,377	1,279	443	3,069	1,327	16,496	7.0
Genesee	3,097	392	141	936	583	5,148	13.2
Livingston	4,887	608	207	1,471	958	8,132	11.0
Madison	6,692	871	334	2,043	1,323	11,263	9.3
Monroe	3,107	364	111	903	296	4,781	18.2
Niagara	2,101	239	66	604	1,110	4,120	20.1
Onondaga	7,331	906	309	2,184	1,198	11,927	10.7
Ontario	5,283	617	179	1,544	820	8,443	11.0
Orleans	1,893	225	67	561	459	3,205	18.4
Oswego	18,840	2,453	934	5,727	2,429	30,383	5.3
Wayne	5,353	636	193	1,575	1,054	8,811	12.8
Wyoming	6,019	723	222	1,785	902	9,650	9.9
Yates	3,206	390	133	935	607	5,272	13.5
Cayuga and Seneca	9,057	1,073	328	2,641	865	13,964	11.0
Lake Plain	87,243	10,778	3,667	25,976	13,931	141,595	2.8
Allegany	16,344	2,014	653	4,904	2,712	26,628	4.8
Cattaraugus	19,619	2,482	880	5,937	3,490	32,408	5.2
Chautauqua	11,263	1,388	467	3,356	2,144	18,619	9.4
Steuben	16,977	2,099	679	5,115	2,083	26,953	5.9
Southwest Highlands	64,204	7,983	2,679	19,313	10,428	104,607	3.0
Broome	10,585	1,335	467	3,195	1,061	16,643	6.8
Chemung	5,072	664	249	1,559	461	8,005	9.0
Chenango	14,829	1,997	836	4,527	2,024	24,213	5.4
Cortland	5,972	726	222	1,795	663	9,377	9.3
Delaware	26,570	3,307	1,084	8,014	4,861	43,836	3.8
Otsego	15,430	2,007	763	4,683	2,620	25,503	5.7
Schuyler	4,233	543	190	1,295	367	6,628	10.9
Tioga	6,446	860	347	1,978	806	10,437	8.3
Tompkins	6,277	791	281	1,891	598	9,839	10.0
South-central Highlands	95,413	12,230	4,439	28,937	13,462	154,481	2.2
Clinton	13,511	1,842	732	4,275	2,605	22,965	6.0
Franklin	22,157	2,991	1,088	7,093	3,651	36,980	4.6
Jefferson	8,082	1,058	405	2,470	1,704	13,720	11.1
St. Lawrence	38,661	4,985	1,781	11,862	5,590	62,879	3.7
St. Lawrence/N. Adirondack	82,411	10,876	4,007	25,701	13,549	136,544	2.6

Table 147.-continued

(In thousands of dry tons)

County and unit	Growing stock trees				Total timber	SE
	Growing stock	Branches	Foliage	Stump and roots		
Fulton	6,766	925	389	2,085	633	9.6
Herkimer	12,897	1,653	613	3,899	2,150	6.6
Lewis	21,519	2,753	1,000	6,518	4,285	5.0
Oneida	17,712	2,311	888	5,366	3,169	5.8
Western Adirondack	58,894	7,641	2,889	17,869	10,237	3.1
Essex	24,744	3,399	1,421	7,686	2,414	5.3
Hamilton	13,392	1,762	695	4,082	959	6.4
Warren	15,219	2,132	935	4,754	1,751	5.9
Eastern Adirondack	53,355	7,293	3,051	16,522	5,125	3.4
Albany	6,797	977	459	2,114	994	11.1
Columbia	9,884	1,284	481	3,000	1,195	8.7
Montgomery	2,540	341	141	777	555	11.5
Rensselaer	10,572	1,356	485	3,221	1,436	7.4
Saratoga	14,570	1,995	823	4,505	985	6.7
Schenectady	2,079	264	93	626	388	21.2
Washington	10,648	1,451	594	3,306	2,009	7.2
Capitol District	57,090	7,667	3,078	17,549	7,561	3.4
Dutchess	13,103	1,519	445	3,788	1,410	8.7
Greene	12,054	1,612	653	3,688	1,604	5.2
Orange	10,764	1,328	440	3,192	687	9.0
Putnam	4,473	517	143	1,304	249	15.9
Schoharie	11,333	1,505	604	3,468	1,965	6.4
Suffolk	1,688	223	91	514	654	27.1
Sullivan	18,949	2,523	973	5,807	3,684	5.2
Ulster	19,705	2,497	899	5,892	3,411	4.5
Rockland and Westchester	5,806	654	177	1,651	488	14.6
Catskill/Lower Hudson	97,875	12,378	4,425	29,306	14,152	2.5
All counties and units	596,485	76,847	28,233	181,174	88,446	1.0
SE	1.1	1.0	1.2	1.0	2.5	1.0

Table 148.--Biomass of all trees and shrubs on timberland by county, geographic unit, and class of material, New York, 1993

(In thousands of dry tons)

County and unit	Non-timber					Total trees and shrubs	SE
	Timber	Salvable dead trees	Saplings	Seedlings	Shrubs		
Erie	16,496	120	1,949	144	354	19,064	6.7
Genesee	5,148	74	880	67	182	6,352	11.7
Livingston	8,132	149	1,084	154	221	9,740	10.3
Madison	11,263	101	1,126	168	90	12,748	8.6
Monroe	4,781	108	545	56	113	5,603	17.0
Niagara	4,120	57	483	38	200	4,897	17.6
Onondaga	11,927	100	864	209	174	13,274	9.9
Ontario	8,443	51	783	131	238	9,647	10.6
Orleans	3,205	22	263	24	79	3,593	17.7
Oswego	30,383	297	2,867	270	276	34,093	4.9
Wayne	8,811	103	676	90	143	9,823	11.9
Wyoming	9,650	52	921	120	99	10,841	9.7
Yates	5,272	60	441	138	297	6,207	12.1
Cayuga and Seneca	13,964	101	1,329	186	318	15,898	10.3
Lake Plain	141,595	1,395	14,211	1,795	2,784	161,780	2.6
Allegany	26,628	157	2,622	408	261	30,076	4.3
Cattaraugus	32,408	311	3,441	460	174	36,795	4.7
Chautauqua	18,619	100	1,765	196	444	21,124	8.6
Steuben	26,953	248	2,797	495	787	31,279	5.2
Southwest Highlands	104,607	817	10,626	1,558	1,666	119,275	2.7
Broome	16,643	168	1,803	302	344	19,261	6.2
Chemung	8,005	132	793	175	329	9,434	8.1
Chenango	24,213	223	1,911	237	104	26,688	5.1
Cortland	9,377	104	865	156	42	10,543	8.7
Delaware	43,836	147	3,681	219	111	47,995	3.6
Otsego	25,503	114	2,071	318	104	28,111	5.4
Schuyler	6,628	9	766	153	299	7,857	9.7
Tioga	10,437	19	1,341	158	46	12,001	7.8
Tompkins	9,839	71	553	209	104	10,777	9.5
South-central Highlands	154,481	989	13,784	1,927	1,485	172,667	2.0
Clinton	22,965	163	3,764	506	123	27,521	5.5
Franklin	36,980	362	4,163	898	255	42,659	4.2
Jefferson	13,720	80	1,989	457	741	16,987	9.4
St. Lawrence	62,879	1,085	7,516	1,127	578	73,185	3.3
St. Lawrence/N. Adirondack	136,544	1,690	17,431	2,988	1,697	160,351	2.3

Table 148.-continued

(In thousands of dry tons)

County and unit	Non-timber					Total trees and shrubs	SE
	Timber	Salvable dead trees	Saplings	Seedlings	Shrubs		
Fulton	10,798	131	765	114	133	11,941	9.3
Herkimer	21,212	379	1,958	368	230	24,148	6.1
Lewis	36,075	503	3,702	757	650	41,688	4.5
Oneida	29,445	236	2,915	283	145	33,025	5.4
Western Adirondack	97,530	1,250	9,340	1,523	1,159	110,802	2.9
Essex	39,664	320	4,162	533	164	44,843	4.7
Hamilton	20,890	278	2,456	504	112	24,240	5.7
Warren	24,792	182	2,134	321	89	27,518	5.3
Eastern Adirondack	85,347	780	8,752	1,359	365	96,602	3.0
Albany	11,341	57	972	150	181	12,701	10.3
Columbia	15,844	152	1,050	187	246	17,480	8.4
Montgomery	4,355	58	567	49	135	5,164	10.1
Rensselaer	17,070	178	1,738	177	221	19,383	7.1
Saratoga	22,878	156	1,992	271	173	25,471	6.4
Schenectady	3,449	18	371	69	187	4,095	17.9
Washington	18,007	194	1,717	270	188	20,376	6.7
Capitol District	92,944	814	8,408	1,173	1,331	104,671	3.2
Dutchess	20,266	181	1,196	149	191	21,984	8.5
Greene	19,611	225	1,618	158	246	21,859	4.7
Orange	16,411	91	1,493	130	170	18,295	8.6
Putnam	6,685	37	467	33	50	7,272	15.6
Schoharie	18,875	59	1,628	143	209	20,914	5.8
Suffolk	3,169	33	540	85	17	3,843	25.8
Sullivan	31,937	292	2,552	178	90	35,049	4.9
Ulster	32,404	127	2,179	155	130	34,995	4.2
Rockland and Westchester	8,777	274	446	22	31	9,549	14.7
Catskill/Lower Hudson	158,136	1,320	12,119	1,053	1,135	173,762	2.4
All counties and units	971,185	9,056	94,671	13,377	11,622	1,099,911	.9
SE	1.0	5.2	1.8	1.9	4.3	.9	

Table 149.--Net volume of growing-stock trees on timberland by county, geographic unit, and forest-type group, New York, 1993

(In millions of cubic feet)

County and unit	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			
Erie	35.9	13.3	.0	.0	11.1	.0	10.5	275.6	15.0	361.4	7.8	
Genesee	16.0	.0	.0	5.6	4.1	.0	24.4	51.4	3.7	105.2	16.7	
Livingston	26.9	2.3	.0	4.6	65.6	.0	2.8	70.7	.0	172.8	11.6	
Madison	32.2	51.1	.0	.0	8.4	.0	5.1	162.4	4.5	263.7	10.0	
Monroe	8.2	.0	.0	.0	42.5	.0	7.8	47.8	.0	106.2	19.4	
Niagara	1.4	.0	.0	.0	21.6	.0	34.8	.0	.0	57.8	24.9	
Onondaga	27.4	9.0	.0	2.8	30.3	.0	75.0	130.0	.0	274.5	11.8	
Ontario	.9	.0	.0	12.8	83.8	.0	26.8	45.3	.0	169.6	11.7	
Orleans	.0	.0	.0	.0	6.1	.0	20.9	35.5	.7	63.2	25.0	
Oswego	147.2	21.2	.0	.0	33.6	.0	60.5	498.3	21.9	782.7	6.0	
Wayne	4.3	.0	.0	.0	.0	.0	43.3	129.1	6.3	183.0	13.0	
Wyoming	7.5	.0	.0	.0	16.8	.0	15.8	130.4	11.7	182.1	9.7	
Yates	19.0	.5	.0	8.0	50.5	.0	1.2	23.1	.0	102.4	12.9	
Cayuga and Seneca	.0	21.3	.0	.0	64.5	.0	94.5	130.1	10.6	320.9	11.0	
Lake Plain	326.9	118.7	.0	33.7	438.7	.0	423.5	1,729.6	74.4	3,145.6	3.0	
Allegany	25.4	9.4	.0	9.4	139.8	.0	13.4	333.2	32.0	562.6	5.6	
Cattaraugus	117.4	31.0	.0	.0	120.6	.0	18.5	406.9	11.2	705.6	6.3	
Chautauqua	45.7	.0	.0	.0	19.4	.0	13.7	276.6	23.2	378.6	9.8	
Steuben	51.6	.0	.0	47.9	106.0	.0	10.5	341.2	25.6	582.7	6.6	
Southwest Highlands	240.1	40.4	.0	57.3	385.7	.0	56.1	1,357.9	92.1	2,229.5	3.4	
Broome	60.0	.0	.0	7.0	70.5	.0	1.2	228.5	19.3	386.5	8.1	
Chemung	29.0	.0	5.1	20.1	46.9	.0	1.4	82.7	5.0	190.3	10.1	
Chenango	219.2	41.8	.0	4.5	37.6	.0	11.9	285.4	2.1	602.6	7.2	
Cortland	.0	.0	.0	9.7	.0	.0	8.4	198.8	.0	217.0	10.6	
Delaware	58.3	4.4	.0	15.5	66.4	.0	85.8	668.2	6.6	905.1	4.5	
Otsego	128.3	16.7	.0	31.1	91.9	.0	12.9	283.3	8.7	572.9	6.3	
Schuyler	12.5	5.7	.0	1.7	15.4	.0	.0	114.3	8.1	157.7	12.0	
Tioga	52.2	12.0	.0	.0	29.7	.0	.0	156.1	.1	250.2	9.5	
Tompkins	17.9	9.4	.0	28.3	41.1	.0	6.4	129.6	.0	232.8	10.6	
South-central Highlands	577.6	90.0	5.1	117.9	399.5	.0	127.9	2,146.8	50.1	3,514.9	2.6	
Clinton	66.4	89.3	.0	7.5	20.0	.1	9.9	275.7	60.6	529.4	6.9	
Franklin	93.8	65.6	.0	14.1	10.0	.0	31.6	585.1	36.6	836.8	4.7	
Jefferson	74.7	12.9	.3	.0	16.1	.0	35.1	142.1	14.1	295.3	13.4	
St. Lawrence	151.8	82.0	.0	5.1	40.0	.0	86.5	924.7	97.3	1,387.4	4.3	
St. Lawrence/N. Adirondack	386.7	249.7	.3	26.7	86.0	.1	163.1	1,927.6	208.6	3,048.9	2.9	

Table 149.-continued

(In millions of cubic feet)

County and unit	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			
Fulton	88.4	.0	.0	.0	.0	.0	.0	9.6	169.4	.4	267.8	10.6
Herkimer	37.4	28.3	.0	.0	5.0	.0	.0	5.8	361.3	24.3	462.1	7.4
Lewis	88.4	30.4	.0	23.0	.0	.0	.0	5.2	607.9	7.9	762.8	5.8
Oneida	165.0	22.3	.0	13.0	10.6	.0	.0	46.9	395.5	7.3	660.6	7.0
Western Adirondack	379.2	81.0	.0	36.0	15.6	.0	.0	67.5	1,534.1	39.9	2,153.3	3.6
Essex	249.8	110.5	.0	57.1	107.1	.0	.0	.0	443.4	34.6	1,002.5	5.9
Hamilton	36.6	63.9	.0	.0	.0	.0	.0	9.8	371.0	13.8	495.1	7.2
Warren	260.9	40.8	.0	57.6	26.4	.0	.0	.0	241.6	9.6	636.9	6.5
Eastern Adirondack	547.3	215.2	.0	114.7	133.5	.0	.0	9.8	1,056.0	57.9	2,134.5	3.8
Albany	145.6	23.1	6.1	14.4	44.7	.0	.0	.3	45.5	.9	280.8	11.9
Columbia	162.8	.0	.0	5.2	78.6	.0	.0	26.7	100.2	.7	374.3	10.3
Montgomery	29.6	.0	.0	.0	9.3	.0	.0	2.0	44.5	.9	86.2	12.8
Rensselaer	32.0	3.2	.0	23.9	110.1	.0	.0	35.8	185.1	.0	390.2	8.6
Saratoga	197.2	33.3	.0	22.3	103.9	.0	.0	10.2	238.3	3.0	608.3	7.1
Schenectady	9.5	.0	.0	4.5	20.9	.0	.0	.0	28.0	.0	62.9	27.3
Washington	114.1	.0	.0	44.5	69.4	.0	.0	.0	159.0	31.2	418.3	8.9
Capitol District	690.9	59.6	6.1	114.8	437.0	.0	.0	75.0	800.7	36.8	2,221.0	3.9
Dutchess	18.4	.0	4.0	13.7	191.8	.0	.0	50.9	128.3	.0	407.3	8.9
Greene	175.5	.0	3.1	16.8	77.2	.0	.0	9.1	169.1	7.9	458.7	6.0
Orange	56.3	12.6	.3	6.8	168.7	.0	.0	17.3	55.1	.0	317.0	10.1
Putnam	.0	.0	.0	.0	81.2	.0	.0	6.5	51.6	.0	139.3	16.3
Schoharie	145.6	.0	.0	16.7	48.5	.0	.0	.0	191.4	5.4	407.7	7.7
Suffolk	.0	.0	15.6	3.9	30.7	.0	.0	.0	2.4	.0	52.7	26.5
Sullivan	186.0	.0	.0	53.2	125.6	.0	.0	19.3	285.5	.2	669.8	6.1
Ulster	146.1	.0	.0	63.7	209.9	.0	.0	22.1	258.3	.0	700.2	5.2
Rockland and Westchester	.0	.0	.0	.0	90.0	.0	.0	8.5	65.5	.0	164.0	14.5
Catskill/Lower Hudson	727.9	12.6	23.0	174.8	1,023.6	.0	.0	133.8	1,207.3	13.5	3,316.5	2.8
All counties and units	3,876.6	867.3	34.6	675.9	2,919.7	.1	1,056.7	11,760.0	573.3	21,764.2		1.1
SE	5.3	11.7	37.8	12.9	5.2	100.0	8.8	2.2	12.4		1.1	

Table 150.--Net volume of growing-stock trees on timberland by county, geographic unit, and stand-size class, New York, 1993

(In millions of cubic feet)

County and unit	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Erie	302.6	46.3	12.5	.0	361.4	7.8
Genesee	50.5	49.4	5.3	.0	105.2	16.7
Livingston	98.9	69.4	4.5	.0	172.8	11.6
Madison	187.1	72.3	4.3	.0	263.7	10.0
Monroe	79.3	25.3	1.6	.0	106.2	19.4
Niagara	48.1	6.3	3.5	.0	57.8	24.9
Onondaga	199.9	67.4	7.1	.0	274.5	11.8
Ontario	131.3	37.3	1.0	.0	169.6	11.7
Orleans	44.5	17.2	1.4	.0	63.2	25.0
Oswego	598.3	172.1	12.3	.0	782.7	6.0
Wayne	126.2	49.3	7.3	.3	183.0	13.0
Wyoming	96.2	82.9	3.1	.0	182.1	9.7
Yates	60.4	38.6	3.3	.0	102.4	12.9
Cayuga and Seneca	266.8	47.2	6.9	.0	320.9	11.0
Lake Plain	2,290.0	781.1	74.1	.3	3,145.6	3.0
Allegany	323.9	225.1	13.6	.0	562.6	5.6
Cattaraugus	525.8	154.5	25.3	.0	705.6	6.3
Chautauqua	264.4	109.6	4.6	.0	378.6	9.8
Steuben	386.3	176.8	19.6	.0	582.7	6.6
Southwest Highlands	1,500.4	666.0	63.1	.0	2,229.5	3.4
Broome	286.0	91.9	8.7	.0	386.5	8.1
Chemung	115.8	69.1	5.4	.0	190.3	10.1
Chenango	514.1	81.9	6.6	.0	602.6	7.2
Cortland	152.7	53.4	10.9	.0	217.0	10.6
Delaware	739.5	153.2	12.4	.0	905.1	4.5
Otsego	464.6	103.4	4.9	.0	572.9	6.3
Schuyler	106.7	46.1	5.0	.0	157.7	12.0
Tioga	154.6	93.0	2.6	.0	250.2	9.5
Tompkins	167.4	63.7	1.7	.0	232.8	10.6
South-central Highlands	2,701.2	755.6	58.1	.0	3,514.9	2.6
Clinton	196.4	322.7	10.3	.0	529.4	6.9
Franklin	541.2	277.7	17.9	.0	836.8	4.7
Jefferson	211.8	68.4	15.1	.0	295.3	13.4
St. Lawrence	982.0	361.6	43.7	.0	1,387.4	4.3
St. Lawrence/N. Adirondack	1,931.4	1,030.4	87.0	.0	3,048.9	2.9

Table 150.-continued

(In millions of cubic feet)

County and unit	Stand-size class				All classes	SE
	Saw- timber	Pole- timber	Sapling and seedling	Non- stocked		
Fulton	244.2	22.3	1.3	.0	267.8	10.6
Herkimer	347.9	111.4	2.7	.0	462.1	7.4
Lewis	592.9	156.4	13.5	.0	762.8	5.8
Oneida	574.0	78.7	7.8	.0	660.6	7.0
Western Adirondack	1,759.0	368.8	25.4	.0	2,153.3	3.6
Essex	776.8	210.2	15.5	.0	1,002.5	5.9
Hamilton	328.1	153.4	13.6	.0	495.1	7.2
Warren	442.9	188.7	5.3	.0	636.9	6.5
Eastern Adirondack	1,547.8	552.3	34.4	.0	2,134.5	3.8
Albany	233.0	45.4	2.0	.3	280.8	11.9
Columbia	324.3	48.0	2.0	.0	374.3	10.3
Montgomery	57.4	26.9	1.9	.0	86.2	12.8
Rensselaer	236.1	154.0	.1	.0	390.2	8.6
Saratoga	444.2	155.0	9.1	.0	608.3	7.1
Schenectady	49.7	11.5	1.7	.0	62.9	27.3
Washington	272.8	143.5	2.0	.0	418.3	8.9
Capitol District	1,617.4	584.4	18.8	.3	2,221.0	3.9
Dutchess	339.0	66.9	1.4	.0	407.3	8.9
Greene	322.4	133.6	2.6	.0	458.7	6.0
Orange	254.1	59.4	3.6	.0	317.0	10.1
Putnam	115.9	21.9	1.4	.0	139.3	16.3
Schoharie	312.5	94.9	.1	.1	407.7	7.7
Suffolk	30.4	21.9	.3	.0	52.7	26.5
Sullivan	536.6	122.6	10.5	.0	669.8	6.1
Ulster	574.9	120.0	5.3	.0	700.2	5.2
Rockland and Westchester	149.9	12.9	1.1	.0	164.0	14.5
Catskill/Lower Hudson	2,635.8	654.2	26.4	.1	3,316.5	2.8
All counties and units	15,983.1	5,393.0	387.3	.7	21,764.2	1.1
SE	1.9	3.3	7.2	66.1	1.1	

Table 151.--Net volume of growing-stock and sawtimber trees on timberland by county, geographic unit, and species group, New York, 1993

County and unit	(In millions of feet)					Sawtimber (bd. ft.)				
	Growing stock (cu. ft.)									
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	Total	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	Total
Erie	29.7	44.3	143.5	143.9	361.4	111.3	145.3	402.6	456.1	1,115.4
Genesee	22.4	.0	57.4	25.5	105.2	68.5	.0	110.0	72.3	250.7
Livingston	8.3	14.3	66.6	83.6	172.8	17.6	35.9	159.7	185.5	398.7
Madison	21.9	50.9	90.2	100.7	263.7	47.3	140.4	250.0	297.0	734.7
Monroe	7.1	.4	45.0	53.8	106.2	2.7	.0	125.6	176.4	304.8
Niagara	1.0	34.0	22.8	22.8	57.8	.0	.0	94.3	55.3	149.5
Onondaga	26.2	17.8	126.0	104.4	274.5	68.4	53.3	424.8	322.8	869.4
Ontario	7.9	.3	60.7	100.7	169.6	25.4	1.2	170.9	299.1	496.6
Orleans	.0	2.2	45.1	16.0	63.2	.0	6.3	126.5	44.1	176.9
Oswego	61.5	143.4	429.1	148.6	782.7	247.6	448.7	1,139.9	404.2	2,240.4
Wayne	4.7	7.2	105.0	66.1	183.0	10.2	16.1	295.1	176.3	497.7
Wyoming	2.3	11.9	97.4	70.5	182.1	6.3	37.1	221.0	179.9	444.3
Yates	13.0	11.0	22.3	56.1	102.4	36.9	41.7	51.7	178.9	309.3
Cayuga and Seneca	6.2	29.4	184.1	101.2	320.9	25.1	113.8	638.8	303.0	1,080.7
Lake Plain	212.1	333.1	1,506.2	1,094.1	3,145.6	667.3	1,040.0	4,211.0	3,150.9	9,069.2
Allegany	39.3	18.3	271.0	234.1	562.6	135.4	52.4	531.2	570.6	1,289.6
Cattaraugus	48.5	87.7	246.4	323.0	705.6	174.3	228.0	720.3	862.6	1,985.2
Chautauqua	13.4	46.6	183.7	134.9	378.6	51.0	139.9	516.0	396.5	1,103.4
Steuben	43.7	18.1	247.8	273.0	582.7	127.3	57.7	558.2	636.2	1,379.4
Southwest Highlands	144.9	170.7	948.9	965.0	2,229.5	488.0	478.0	2,325.7	2,465.9	5,757.6
Broome	9.1	57.2	190.8	129.3	386.5	21.8	192.8	498.5	313.2	1,026.4
Chemung	26.8	14.3	72.4	76.9	190.3	96.2	41.1	116.5	172.3	426.1
Chenango	79.2	153.5	204.6	165.3	602.6	317.6	470.4	539.0	493.3	1,820.4
Cortland	5.3	8.2	105.1	98.4	217.0	15.4	22.1	286.5	307.7	631.7
Delaware	42.3	72.5	440.1	350.2	905.1	168.6	248.3	1,392.2	934.9	2,744.0
Otsego	68.0	94.8	214.7	195.3	572.9	254.3	281.7	492.5	608.8	1,637.4
Schuyler	14.7	15.2	65.0	62.8	157.7	59.6	51.7	104.1	171.9	387.3
Tioga	42.4	32.7	106.3	68.8	250.2	130.6	95.5	259.3	173.3	658.7
Tompkins	32.8	15.0	91.0	94.0	232.8	94.1	45.2	223.4	299.9	662.6
South-central Highlands	320.6	463.4	1,489.9	1,240.9	3,514.9	1,158.3	1,448.7	3,912.0	3,475.4	9,994.6
Clinton	34.1	118.0	215.1	162.2	529.4	124.3	279.3	287.7	298.5	989.7
Franklin	47.6	147.6	307.5	334.2	836.8	178.6	403.0	719.8	850.5	2,151.9
Jefferson	53.0	32.6	114.1	95.5	295.3	205.2	75.1	285.3	252.9	818.5
St. Lawrence	90.1	207.6	629.5	460.2	1,387.4	373.6	517.6	1,648.8	1,183.9	3,723.9
St. Lawrence/N. Adirondack	224.8	505.8	1,266.2	1,052.1	3,048.9	881.7	1,274.9	2,941.6	2,585.8	7,684.0

Table 151.-continued

(In millions of feet)

County and unit	Growing stock (cu. ft.)				Sawtimber (bd. ft.)					
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	Total	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	Total
Fulton	29.2	71.1	103.4	64.1	267.8	121.3	222.1	255.8	155.1	754.3
Herkimer	24.1	87.1	166.1	184.8	462.1	72.1	265.0	410.1	484.1	1,231.3
Lewis	94.0	94.1	276.7	298.0	762.8	366.7	213.2	744.0	951.2	2,275.2
Oneida	109.6	99.4	278.0	173.5	660.6	428.7	328.2	776.4	532.9	2,066.2
Western Adirondack	256.9	351.8	824.2	720.4	2,153.3	988.8	1,028.5	2,186.4	2,123.3	6,326.9
Essex	181.5	230.9	197.0	393.1	1,002.5	779.7	687.0	479.3	1,147.0	3,093.0
Hamilton	26.4	131.2	105.4	232.1	495.1	107.9	362.5	280.7	601.5	1,352.6
Warren	146.1	128.6	144.3	217.8	636.9	570.5	371.1	299.0	566.6	1,807.2
Eastern Adirondack	354.0	490.8	446.6	843.0	2,134.5	1,458.1	1,420.6	1,059.0	2,315.1	6,252.8
Albany	103.5	46.4	54.3	76.6	280.8	360.8	158.4	117.9	205.6	842.6
Columbia	78.0	38.3	104.6	153.5	374.3	291.7	141.9	304.8	528.9	1,267.3
Montgomery	16.6	15.1	26.3	28.2	86.2	49.8	45.7	45.2	87.6	228.2
Rensselaer	37.0	44.1	151.4	157.8	390.2	152.4	122.9	392.1	395.9	1,063.2
Saratoga	127.2	104.6	167.3	209.1	608.3	573.0	335.3	371.2	577.4	1,856.8
Schenectady	12.6	2.5	26.0	21.7	62.9	50.6	4.1	48.1	70.8	173.6
Washington	86.9	67.0	113.8	150.5	418.3	328.6	233.5	234.0	417.8	1,213.9
Capitol District	461.8	318.0	643.7	797.4	2,221.0	1,806.8	1,041.9	1,513.1	2,283.9	6,645.7
Dutchess	4.2	21.1	168.4	213.7	407.3	17.6	48.3	509.4	781.5	1,356.8
Greene	108.0	54.9	88.2	207.6	458.7	412.1	176.7	177.5	474.0	1,240.3
Orange	15.8	44.2	73.9	183.1	317.0	74.6	175.1	162.8	591.6	1,004.0
Putnam	.0	2.3	38.0	99.0	139.3	.0	7.3	109.4	305.9	422.6
Schoharie	81.8	59.6	87.3	178.9	407.7	289.7	181.0	202.7	492.1	1,165.6
Suffolk	16.1	.0	3.3	33.3	52.7	38.1	.0	6.6	67.8	112.5
Sullivan	81.1	116.8	214.4	257.4	669.8	380.8	414.6	481.4	689.3	1,966.0
Ulster	114.8	61.1	210.8	313.4	700.2	492.1	216.3	543.2	923.9	2,175.6
Rockland and Westchester	2.0	4.5	55.5	101.9	164.0	7.6	17.3	181.8	358.6	565.3
Catskill/Lower Hudson	423.8	364.4	939.9	1,588.4	3,316.5	1,712.5	1,236.6	2,374.8	4,684.9	10,008.8
All counties and units	2,399.1	2,998.0	8,065.6	8,301.4	21,764.2	9,161.6	8,969.3	20,523.5	23,085.1	61,739.5

Table 152.--Net volume of sawtimber trees on timberland by county, geographic unit, and forest-type group, New York, 1993
(In millions of board feet)

County and unit	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
Erie	131.9	53.3	.0	.0	27.2	.0	12.1	853.7	37.1	1,115.4	11.9
Genesee	57.3	.0	.0	11.2	10.0	.0	46.1	125.6	.6	250.7	26.0
Livingston	63.2	2.0	.0	7.4	124.9	.0	6.0	195.1	.0	398.7	19.6
Madison	80.1	130.6	.0	.0	25.1	.0	15.5	480.2	3.2	734.7	13.3
Monroe	2.7	.0	.0	.0	130.1	.0	21.6	150.3	.0	304.8	28.9
Niagara	.0	.0	.0	.0	66.1	.0	83.4	.0	.0	149.5	29.4
Onondaga	67.4	14.2	.0	2.9	117.3	.0	266.3	401.3	.0	869.4	18.8
Ontario	4.0	.0	.0	33.6	242.9	.0	87.8	128.3	.0	496.6	15.6
Orleans	.0	.0	.0	.0	14.6	.0	61.9	100.5	.0	176.9	26.9
Oswego	485.8	63.3	.0	.0	121.4	.0	197.0	1,345.2	27.7	2,240.4	8.2
Wayne	12.0	.0	.0	.0	.0	.0	125.2	357.0	3.5	497.7	15.5
Wyoming	19.8	.0	.0	.0	30.0	.0	41.4	341.1	12.0	444.3	11.4
Yates	58.1	.0	.0	23.9	165.8	.0	7.0	54.5	.0	309.3	20.8
Cayuga and Seneca	.0	89.6	.0	.0	205.6	.0	319.6	457.2	8.8	1,080.7	14.2
Lake Plain	982.3	353.1	.0	79.1	1,281.1	.0	1,290.8	4,989.9	92.9	9,069.2	4.3
Allegany	97.5	16.9	.0	25.9	305.2	.0	20.4	780.7	43.0	1,289.6	8.2
Cattaraugus	402.0	39.2	.0	.0	322.9	.0	68.2	1,141.4	11.5	1,985.2	9.0
Chautauqua	123.8	.0	.0	.0	60.1	.0	41.7	842.0	35.7	1,103.4	12.1
Steuben	129.5	.0	.0	101.9	242.1	.0	18.3	825.9	61.7	1,379.4	10.0
Southwest Highlands	752.9	56.1	.0	127.9	930.3	.0	148.6	3,590.0	151.8	5,757.6	4.9
Broome	194.3	.0	.0	14.3	187.7	.0	.0	580.5	49.6	1,026.4	12.0
Chemung	70.7	.0	11.5	38.2	95.3	.0	.0	209.2	1.2	426.1	15.1
Chenango	810.0	71.3	.0	.0	8.1	.0	23.9	806.4	1.3	1,820.4	9.7
Cortland	.0	.0	.0	24.8	.0	.0	15.6	591.3	.0	631.7	13.6
Delaware	208.6	2.8	.0	19.9	180.2	.0	252.3	2,065.1	15.0	2,744.0	6.2
Otsego	395.6	55.9	.0	58.9	251.9	.0	33.9	816.9	24.3	1,637.4	8.9
Schuyler	29.4	16.3	.0	.9	39.4	.0	.0	301.3	.0	387.3	16.5
Tioga	159.0	34.7	.0	.0	48.1	.0	.0	416.9	.0	658.7	15.1
Tompkins	22.6	30.0	.0	53.9	112.8	.0	23.5	419.8	.0	662.6	15.5
South-central Highlands	1,890.2	211.1	11.5	219.0	1,014.7	.0	349.2	6,207.4	91.4	9,994.6	3.6
Clinton	190.7	202.7	.0	13.4	45.1	.0	9.6	464.0	64.3	989.7	11.7
Franklin	280.7	140.3	.0	53.0	24.7	.0	63.2	1,524.2	65.8	2,151.9	7.1
Jefferson	244.6	17.5	.0	.0	42.7	.0	119.7	360.7	33.3	818.5	19.2
St. Lawrence	491.7	172.5	.0	14.8	86.5	.0	157.3	2,559.6	241.5	3,723.9	5.8
St. Lawrence/N. Adirondack	1,207.7	533.1	.0	81.1	198.9	.0	349.7	4,908.5	405.0	7,684.0	4.3

Table 152.-continued

(In millions of board feet)

County and unit	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	
Fulton	283.4	.0	.0	.0	.0	.0	21.4	448.6	.8	754.3
Herkimer	100.1	75.7	.0	.0	15.1	.0	3.6	962.3	74.4	1,231.3
Lewis	306.3	40.8	.0	89.9	.0	.0	14.3	1,813.9	10.0	2,275.2
Oneida	585.2	63.1	.0	46.7	22.0	.0	108.4	1,229.9	10.9	2,066.2
Western Adirondack	1,275.0	179.6	.0	136.7	37.1	.0	147.7	4,454.7	96.1	6,326.9
Essex	907.2	265.7	.0	182.4	317.0	.0	.0	1,321.1	99.7	3,093.0
Hamilton	119.6	149.0	.0	.0	.0	.0	25.6	1,024.1	34.2	1,352.6
Warren	807.3	81.4	.0	161.1	74.9	.0	.0	657.5	25.0	1,807.2
Eastern Adirondack	1,834.2	496.1	.0	343.5	391.9	.0	25.6	3,002.7	158.9	6,252.8
Albany	450.6	70.9	14.2	23.8	139.2	.0	.0	142.2	1.7	842.6
Columbia	556.1	.0	.0	15.8	240.2	.0	94.5	360.7	.0	1,267.3
Montgomery	88.1	.0	.0	.0	27.0	.0	8.0	105.1	.0	228.2
Rensselaer	111.0	.0	.0	84.0	259.5	.0	101.3	507.5	.0	1,063.2
Saratoga	752.8	100.3	.0	77.9	278.9	.0	35.6	608.9	2.4	1,856.8
Schenectady	28.8	.0	.0	.0	76.0	.0	.0	68.8	.0	173.6
Washington	383.9	.0	.0	140.3	195.7	.0	.0	437.4	56.7	1,213.9
Capitol District	2,371.3	171.2	14.2	341.7	1,216.4	.0	239.5	2,230.6	60.8	6,645.7
Dutchess	66.2	.0	7.7	18.2	667.8	.0	167.9	429.0	.0	1,356.8
Greene	581.8	.0	.8	36.3	129.6	.0	41.7	444.4	5.8	1,240.3
Orange	238.9	40.8	.0	21.1	516.2	.0	58.2	128.8	.0	1,004.0
Putnam	.0	.0	.0	.0	245.9	.0	14.6	162.1	.0	422.6
Schoharie	453.8	.0	.0	32.0	84.3	.0	.0	588.8	6.8	1,165.6
Suffolk	.0	.0	31.7	6.4	67.8	.0	.0	6.6	.0	112.5
Sullivan	649.4	.0	.0	155.6	307.2	.0	50.9	803.0	.0	1,966.0
Ulster	578.9	.0	.0	158.1	585.4	.0	70.3	782.9	.0	2,175.6
Rockland and Westchester	.0	.0	.0	.0	320.6	.0	32.0	212.7	.0	565.3
Catskill/Lower Hudson	2,568.9	40.8	40.1	427.8	2,924.8	.0	435.7	3,558.2	12.6	10,008.8
All counties and units	12,882.5	2,041.0	65.8	1,756.7	7,995.3	.0	2,986.9	32,942.0	1,069.4	61,739.5
SE	5.9	13.7	42.3	15.0	6.0	.0	10.8	2.6	16.3	1.6

Table 153.--Net volume of sawtimber trees on timberland by county, geographic unit,
and stand-size class, New York, 1993

(In millions of board feet)

County and unit	Stand-size class				All classes	SE
	Saw- timber	Pole- timber	Sapling and seedling	Non- stocked		
Erie	1,040.6	52.3	22.5	.0	1,115.4	11.9
Genesee	171.2	71.6	7.9	.0	250.7	26.0
Livingston	322.9	72.1	3.7	.0	398.7	19.6
Madison	612.7	117.5	4.5	.0	734.7	13.3
Monroe	270.7	34.0	.0	.0	304.8	28.9
Niagara	139.6	4.3	5.6	.0	149.5	29.4
Onondaga	773.7	75.4	20.3	.0	869.4	18.8
Ontario	439.9	52.7	4.0	.0	496.6	15.6
Orleans	139.5	36.6	.8	.0	176.9	26.9
Oswego	1,948.8	275.7	15.9	.0	2,240.4	8.2
Wayne	401.5	81.6	13.4	1.1	497.7	15.5
Wyoming	307.0	134.1	3.1	.0	444.3	11.4
Yates	232.4	71.6	5.3	.0	309.3	20.8
Cayuga and Seneca	1,012.9	51.3	16.5	.0	1,080.7	14.2
Lake Plain	7,813.5	1,130.8	123.7	1.1	9,069.2	4.3
Allegany	945.6	320.9	23.1	.0	1,289.6	8.2
Cattaraugus	1,715.8	220.2	49.2	.0	1,985.2	9.0
Chautauqua	913.8	182.2	7.4	.0	1,103.4	12.1
Steuben	1,101.6	236.4	41.4	.0	1,379.4	10.0
Southwest Highlands	4,676.8	959.7	121.1	.0	5,757.6	4.9
Broome	874.2	143.1	9.0	.0	1,026.4	12.0
Chemung	328.8	89.1	8.3	.0	426.1	15.1
Chenango	1,687.1	122.6	10.6	.0	1,820.4	9.7
Cortland	520.3	94.8	16.6	.0	631.7	13.6
Delaware	2,484.5	231.0	28.4	.0	2,744.0	6.2
Otsego	1,489.6	139.4	8.4	.0	1,637.4	8.9
Schuyler	318.5	67.5	1.3	.0	387.3	16.5
Tioga	500.7	152.8	5.2	.0	658.7	15.1
Tompkins	555.4	104.4	2.9	.0	662.6	15.5
South-central Highlands	8,759.1	1,144.8	90.6	.0	9,994.6	3.6
Clinton	578.7	406.2	4.8	.0	989.7	11.7
Franklin	1,697.3	423.6	31.0	.0	2,151.9	7.1
Jefferson	716.6	75.3	26.7	.0	818.5	19.2
St. Lawrence	3,098.3	549.0	76.6	.0	3,723.9	5.8
St. Lawrence/N. Adirondack	6,090.9	1,454.0	139.1	.0	7,684.0	4.3

Table 153.-continued

(In millions of board feet)

County and unit	Stand-size class				All classes	SE
	Saw- timber	Pole- timber	Sapling and seedling	Non- stocked		
Fulton	718.1	35.4	.8	.0	754.3	12.1
Herkimer	1,045.5	185.8	.0	.0	1,231.3	9.1
Lewis	2,008.2	235.0	31.9	.0	2,275.2	7.7
Oneida	1,932.6	124.8	8.7	.0	2,066.2	9.5
Western Adirondack	5,704.3	581.1	41.5	.0	6,326.9	4.8
Essex	2,719.5	357.4	16.1	.0	3,093.0	8.5
Hamilton	1,019.7	285.9	47.0	.0	1,352.6	10.1
Warren	1,463.4	334.3	9.5	.0	1,807.2	10.4
Eastern Adirondack	5,202.6	977.6	72.6	.0	6,252.8	5.6
Albany	791.8	49.1	1.7	.0	842.6	15.9
Columbia	1,159.0	103.1	5.2	.0	1,267.3	11.3
Montgomery	171.9	54.5	1.8	.0	228.2	16.4
Rensselaer	786.8	276.4	.0	.0	1,063.2	11.4
Saratoga	1,564.8	280.2	11.7	.0	1,856.8	10.1
Schenectady	164.6	9.0	.0	.0	173.6	42.8
Washington	955.5	258.4	.0	.0	1,213.9	12.7
Capitol District	5,594.4	1,030.8	20.5	.0	6,645.7	5.2
Dutchess	1,232.7	124.2	.0	.0	1,356.8	11.5
Greene	1,052.5	183.0	4.9	.0	1,240.3	11.0
Orange	896.7	100.1	7.2	.0	1,004.0	13.2
Putnam	378.6	43.0	.9	.0	422.6	19.2
Schoharie	1,021.8	143.8	.0	.0	1,165.6	11.7
Suffolk	85.7	26.7	.0	.0	112.5	31.2
Sullivan	1,754.5	187.5	24.0	.0	1,966.0	8.5
Ulster	1,988.4	179.3	7.9	.0	2,175.6	7.0
Rockland and Westchester	541.5	23.8	.0	.0	565.3	16.0
Catskill/Lower Hudson	8,952.5	1,011.3	45.0	.0	10,008.8	3.8
All counties and units	52,794.1	8,290.1	654.1	1.1	61,739.5	1.6
SE	2.1	3.8	11.1	100.0	1.6	

Table 154.--Average annual net growth of growing-stock and sawtimber volume on
timberland by county, geographic unit, and species group,
New York, 1979-92

(In thousands of feet)

County and unit	Growing stock (cu. ft.)			Sawtimber (bd. ft.)		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Erie	1,979	8,314	10,294	8,953	29,773	38,726
Genesee	524	3,774	4,298	1,125	9,269	10,395
Livingston	1,329	5,307	6,636	4,148	13,257	17,406
Madison	1,774	5,390	7,164	8,675	22,783	31,458
Monroe	283	2,830	3,112	285	11,135	11,420
Niagara	180	2,503	2,682	0	5,195	5,195
Onondaga	1,555	6,831	8,387	3,208	35,199	38,408
Ontario	144	3,815	3,959	882	19,531	20,414
Orleans	107	2,790	2,897	308	9,151	9,459
Oswego	4,481	17,699	22,179	18,773	61,916	80,689
Wayne	602	5,901	6,502	1,670	19,855	21,525
Wyoming	636	6,243	6,880	2,735	13,651	16,386
Yates	1,159	2,289	3,448	4,044	7,722	11,766
Cayuga and Seneca	1,068	7,799	8,868	5,224	26,169	31,393
Lake Plain	15,821	81,486	97,307	60,032	284,607	344,639
Allegany	1,045	16,055	17,101	3,151	38,835	41,986
Cattaraugus	4,017	17,096	21,112	12,745	63,945	76,690
Chautauqua	1,239	8,580	9,819	5,496	27,609	33,105
Steuben	1,910	16,159	18,069	7,943	52,372	60,314
Southwest Highlands	8,211	57,890	66,102	29,334	182,760	212,095
Broome	2,421	8,669	11,091	8,995	28,873	37,868
Chemung	1,199	3,158	4,357	5,783	8,366	14,150
Chenango	6,659	12,310	18,969	26,111	41,010	67,121
Cortland	420	6,791	7,211	1,492	24,153	25,645
Delaware	3,456	17,185	20,642	11,963	72,383	84,345
Otsego	4,902	14,353	19,255	19,174	49,413	68,587
Schuyler	384	3,819	4,203	1,675	10,428	12,103
Tioga	2,136	3,925	6,061	7,457	15,162	22,619
Tompkins	1,034	4,294	5,327	5,030	16,170	21,201
South-central Highlands	22,611	74,505	97,116	87,681	265,958	353,639
Clinton	4,266	7,046	11,313	13,700	19,789	33,489
Franklin	3,854	12,840	16,694	16,743	46,136	62,879
Jefferson	1,871	4,862	6,733	8,273	9,885	18,158
St. Lawrence	8,485	31,964	40,448	29,369	102,920	132,289
St. Lawrence/N. Adirondack	18,476	56,712	75,188	68,085	178,731	246,816

Table 154.-continued

(In thousands of feet)

County and unit	Growing stock (cu. ft.)			Sawtimber (bd. ft.)		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Fulton	3,743	4,226	7,969	15,219	15,038	30,257
Herkimer	3,551	12,563	16,115	13,519	37,272	50,791
Lewis	7,086	16,838	23,924	25,699	61,527	87,226
Oneida	4,116	15,443	19,559	15,714	52,099	67,813
Western Adirondack	18,497	49,070	67,567	70,151	165,936	236,087
Essex	9,379	12,290	21,669	40,684	41,470	82,154
Hamilton	4,539	10,280	14,819	18,877	33,352	52,229
Warren	7,008	8,051	15,059	28,299	25,253	53,552
Eastern Adirondack	20,926	30,621	51,547	87,859	100,075	187,934
Albany	4,569	2,919	7,488	16,255	8,429	24,684
Columbia	1,680	4,974	6,653	10,162	23,439	33,601
Montgomery	779	1,583	2,362	2,479	5,863	8,342
Rensselaer	2,261	6,990	9,251	7,464	24,695	32,159
Saratoga	7,203	11,822	19,025	32,534	40,829	73,363
Schenectady	690	1,518	2,208	2,331	5,691	8,022
Washington	4,062	7,122	11,185	15,590	26,635	42,225
Capitol District	21,243	36,928	58,171	86,815	135,583	222,398
Dutchess	1,127	7,451	8,578	3,835	33,296	37,131
Greene	4,809	6,304	11,113	20,959	22,069	43,028
Orange	1,115	6,371	7,486	4,774	20,597	25,371
Putnam	-26	2,485	2,459	306	11,740	12,046
Schoharie	4,577	6,739	11,316	18,396	22,554	40,950
Suffolk	497	753	1,250	1,612	2,390	4,002
Sullivan	3,994	9,188	13,181	17,663	36,480	54,143
Ulster	3,432	10,900	14,332	17,569	42,715	60,284
Rockland and Westchester	-224	3,372	3,148	-831	13,454	12,623
Catskill/Lower Hudson	19,301	53,563	72,864	84,283	205,295	289,579
All counties and units	145,087	440,774	585,861	574,241	1,518,945	2,093,186

Table 155.--Average annual removals of growing-stock and sawtimber volume on timberland by county, geographic unit, and species group, New York, 1979-92

(In thousands of feet)

County and unit	Growing stock (cu. ft.)			Sawtimber (bd. ft.)		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Erie	323	2,037	2,360	1,381	6,760	8,141
Genesee	0	662	662	0	2,691	2,691
Livingston	906	1,527	2,433	3,873	4,165	8,038
Madison	601	733	1,335	1,306	2,729	4,036
Monroe	88	1,000	1,088	0	2,790	2,790
Niagara	0	337	337	0	1,222	1,222
Onondaga	0	1,694	1,694	0	8,180	8,180
Ontario	27	1,582	1,609	0	3,048	3,048
Orleans	0	712	712	0	1,664	1,664
Oswego	600	4,852	5,452	2,261	18,618	20,879
Wayne	94	2,833	2,927	234	13,488	13,722
Wyoming	58	569	627	97	2,426	2,523
Yates	263	821	1,084	1,257	3,430	4,687
Cayuga and Seneca	37	651	688	189	2,943	3,132
Lake Plain	2,998	20,010	23,008	10,599	74,155	84,755
Allegany	0	3,027	3,027	0	11,604	11,604
Cattaraugus	0	6,753	6,753	0	26,260	26,260
Chautauqua	659	4,860	5,518	2,072	18,574	20,646
Steuben	118	5,840	5,959	507	20,823	21,330
Southwest Highlands	777	20,479	21,256	2,579	77,261	79,840
Broome	139	2,574	2,714	438	8,603	9,041
Chemung	319	1,343	1,662	1,483	4,232	5,716
Chenango	1,891	2,560	4,451	6,894	9,679	16,573
Cortland	74	2,452	2,526	205	9,616	9,820
Delaware	1,191	4,896	6,088	4,788	18,294	23,081
Otsego	1,167	1,807	2,974	4,587	6,790	11,378
Schuyler	0	261	261	0	1,028	1,028
Tioga	147	2,147	2,294	360	6,285	6,645
Tompkins	175	2,396	2,570	113	8,431	8,544
South-central Highlands	5,103	20,437	25,540	18,868	72,958	91,826
Clinton	619	2,245	2,864	2,571	6,084	8,655
Franklin	4,036	11,614	15,650	9,370	38,039	47,409
Jefferson	464	2,507	2,972	1,914	6,291	8,205
St. Lawrence	2,949	10,924	13,874	9,141	35,863	45,004
St. Lawrence/N. Adirondack	8,069	27,290	35,359	22,995	86,277	109,273

Table 155.-continued

(In thousands of feet)

County and unit	Growing stock (cu. ft.)			Sawtimber (bd. ft.)		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Fulton	621	1,285	1,907	2,793	3,826	6,619
Herkimer	3,656	3,411	7,066	10,790	10,619	21,408
Lewis	1,951	5,080	7,032	3,697	17,031	20,727
Oneida	999	2,325	3,323	2,850	6,903	9,753
Western Adirondack	7,227	12,101	19,328	20,130	38,378	58,508
Essex	1,977	5,180	7,156	9,099	15,156	24,255
Hamilton	3,836	6,312	10,148	15,673	25,247	40,920
Warren	6,893	3,885	10,779	29,301	15,279	44,580
Eastern Adirondack	12,706	15,377	28,083	54,072	55,682	109,755
Albany	105	651	756	407	3,003	3,410
Columbia	311	2,496	2,807	1,413	7,351	8,765
Montgomery	570	243	813	2,473	877	3,350
Rensselaer	1,207	3,233	4,439	5,636	12,379	18,015
Saratoga	2,056	3,744	5,800	8,963	11,062	20,024
Schenectady	0	432	432	0	1,397	1,397
Washington	267	1,670	1,937	1,298	6,076	7,375
Capitol District	4,516	12,469	16,985	20,191	42,146	62,337
Dutchess	108	3,814	3,922	130	10,431	10,562
Greene	144	1,314	1,458	429	3,299	3,728
Orange	107	4,186	4,293	409	14,063	14,472
Putnam	0	1,252	1,252	0	3,739	3,739
Schoharie	96	1,309	1,405	384	4,931	5,315
Suffolk	272	1,727	1,999	378	988	1,367
Sullivan	533	3,291	3,824	1,525	12,206	13,730
Ulster	315	3,956	4,271	923	12,475	13,397
Rockland and Westchester	0	2,721	2,721	0	10,356	10,356
Catskill/Lower Hudson	1,575	23,571	25,146	4,178	72,489	76,667
All counties and units	42,970	151,735	194,705	153,613	519,347	672,960

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Area tables--available at State, Unit, and County levels

- 0001. Land area by land class (excludes reserved)
- 0002. Land area by land class (excludes reserved)
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- 1013. Number of all growing-stock trees on timberland by species and diameter class
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- 2013. Net volume of growing-stock trees on timberland by species and diameter class
- 2014. Net volume of growing-stock trees on timberland by expanded species and diameter class
- 2018. Gross volume of all trees on timberland by species and tree class
- 2019. Sound volume of all trees on timberland by species and tree class
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- 2021. Net volume of growing-stock trees on timberland by forest type and species
- 2025. Net volume of all live trees on timberland by class of timber and species group
- 2026. Net volume of growing-stock trees on timberland by forest type and stand-size class
- 2027. Net volume of growing-stock trees on timberland by forest-type group and ownership class
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- 2228. Net volume of growing-stock trees on timberland by stand-size class, forest-type group, and basal-area class (all live trees)
- 2030. Net volume of growing-stock trees on timberland by species and stand-size class
- 2031. Net volume of growing-stock trees on timberland by species and cubic-foot stand-volume class
- 2032. Net volume of growing-stock trees on timberland by sawtimber/poletimber and species group
- 2033. Net volume of growing-stock trees on timberland by forest type and physiographic class
- 2034. Volume suitable for pulpwood on timberland by species, tree type and size
- 2035. Net volume of growing-stock trees on timberland by forest type and elevation class
- 2121. Net volume of growing-stock trees on timberland by species and forest-type group
- 2126. Net volume of growing-stock trees on timberland by forest-type group and stand-size class
- 2127. Net volume of all trees on timberland by class of timber and species group
- 2128. Net volume of all live, growing-stock, and sawtimber trees on timberland by species group and ownership class
- 2129. Net volume of growing stock in the sawlog portion of sawtimber trees on timberland by species and diameter class

Board-foot volume tables--available at State, Unit, and County levels

- 3013. Net volume of sawtimber trees on timberland by species and diameter class
- 3014. Net volume of sawtimber trees on timberland by expanded species and diameter class
- 3026. Net volume of sawtimber trees on timberland by forest type and stand-size class
- 3027. Net volume of sawtimber trees on timberland by forest-type group and ownership class
- 3045. Net volume of sawtimber trees on timberland by species, size class, and tree grade

Wildlife tables--available at State, Unit, and County levels

- 5001. Number of all live nut- and fruit-producing trees on timberland by species and diameter class
- 5002. Number of shrubs and saplings on timberland by stand-size class, type of stem, and mast type
- 5003. Number of standing dead trees (5.0+ inches d.b.h.) on timberland by species, condition class, and diameter group
- 5004. Number of standing trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and condition class
- 5005. Number of seedlings, saplings, and shrubs on timberland by species and stand-size class
- 5006. Number of seedlings, saplings, and shrubs on timberland by species and forest-type group
- 5007. Number of seedlings, saplings, and shrubs on timberland by species and browse-utilization class
- 5008. Number of standing trees (5.0+ inches d.b.h.) with observed cavities on timberland by species and presence of cavities
- 5009. Number of snags (5.0+ inches d.b.h.) on timberland by expanded species and diameter class
- 5010. Number of standing trees (5.0+ inches d.b.h.) with observed cavities on timberland by expanded species and diameter class

List of Available Tables (continued)

Growth tables--available at State and Unit levels

- 8120. Average annual mortality, average annual net growth, and average annual removals of growing-stock and sawtimber volume on timberland by species
- 9200. Average annual net change of growing-stock volume on timberland by species and component of change
- 9201. Average annual net growth of growing-stock volume on timberland by species and component of growth
- 9202. Average annual net change of growing-stock volume on timberland by species and component of change
- 9203. Total net growth of growing-stock volume on timberland by species and component of growth
- 9204. Total net change of growing-stock volume on timberland by species and component of change
- 9213. Current (1989) net volume of growing-stock trees on timberland by species and diameter class
- 9214. Previous (1978) net volume of growing-stock trees on timberland by species and diameter class
- 9301. Average annual net growth of sawtimber volume on timberland by species and component of growth
- 9302. Average annual net change of sawtimber volume on timberland by species and component of change
- 9303. Total net growth of sawtimber volume on timberland by species and component of growth
- 9304. Total net change of sawtimber volume on timberland by species and component of change
- 9313. Current (1989) net volume of sawtimber trees on timberland by species and diameter class
- 9314. Previous (1978) net volume of sawtimber trees on timberland by species and diameter class

Core tables--available at State and Unit levels

- C001. Land area by county and land class
- C002. Area of timberland by county and ownership class
- C003. Area of timberland by county and forest-type group
- C004. Area of timberland by county and stand-size class
- C005. Area of timberland by county and site-productivity class
- C006. Area of timberland by county and stocking class of growing-stock trees
- C007. Area of timberland by forest-type group and ownership class
- C008. Area of timberland by ownership class and stocking class of growing-stock trees
- C009. Area of timberland by forest-type group and stand-size class
- C010. Number of live trees (1.0+ inches d.b.h.) on timberland by species and diameter class
- C011. Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class
- C012. Net volume of growing-stock trees on timberland by species and diameter class
- C013. Net volume of growing stock in the sawlog portion of sawtimber trees on timberland by species and diameter class
- C014. Net volume of sawtimber trees on timberland by species and diameter class
- C015. Net volume of growing-stock and sawtimber trees on timberland by county and species group
- C016. Net volume of all trees on timberland by class of timber and species group
- C017. Net volume of live and growing-stock trees on timberland by ownership class and species group
- C018. Average annual net growth of growing-stock and sawtimber volume on timberland by county and species group
- C019. Average annual removals of growing-stock and sawtimber volume on timberland by county and species group
- C020. Average annual net growth and average annual removals of growing-stock volume on timberland by species
- C021. Average annual net growth and average annual removals of sawtimber volume on timberland by species
- C022. Average annual mortality of growing-stock and sawtimber volume on timberland by species
- C023. Average annual net growth and average annual removals of growing-stock volume on timberland by ownership class and species group
- C024. Average annual net growth and average annual removals of sawtimber volume on timberland by ownership class and species group
- C025. Net volume of sawtimber trees on timberland by species, size class, and tree grade

List of Available Tables (continued)

County tables--available at State level

- 8001. Net land area by county, geographic unit, and land class (excludes productive and unproductive reserved land)
- 8002. Area of timberland by county, geographic unit, and ownership class
- 8020. Area of timberland by county, geographic unit, and stand-size class
- 8021. Area of timberland by county, geographic unit, and forest-type group
- 8025. Area of timberland by county, geographic unit, and cubic-foot stand-volume class
- 8027. Area of timberland by county, geographic unit, and dry-ton stand-volume class
- 8029. Area of timberland by county, geographic unit, and stocking class of growing-stock trees
- 8050. Area of timberland by county, geographic unit, and expanded ownership class
- 8051. Area of timberland by county, geographic unit, and ownership class
- 8052. Area of timberland by county, geographic unit, and site-productivity class
- 8220. Net volume of all live trees on timberland by county, geographic unit, and species
- 8227. Net volume of growing-stock trees on timberland by county, geographic unit, and forest-type group
- 8230. Net volume of growing-stock trees on timberland by county, geographic unit, and stand-size class
- 8232. Net volume of growing-stock and sawtimber trees on timberland by county, geographic unit, and species group
- 8313. Net volume of sawtimber trees on timberland by county, geographic unit, and species
- 8326. Net volume of sawtimber trees on timberland by county, geographic unit, and stand-size class
- 8327. Net volume of sawtimber trees on timberland by county, geographic unit, and forest-type group

Biomass tables--available at State level

- 4001. Volume of growing stock on timberland, by county and component
- 4002. Biomass of growing stock on timberland, by county and component, green-weight basis
- 4003. Biomass of growing stock on timberland, by county and component, dry-weight basis
- 4004. Biomass of evergreen timber on timberland, by county, class of timber, and component
- 4005. Biomass of deciduous timber on timberland, by county, class of timber, and component
- 4006. Biomass of all timber on timberland, by county, class of timber, and component
- 4007. Biomass of evergreen trees and shrubs on timberland, by county and class of material
- 4008. Biomass of deciduous trees and shrubs on timberland, by county and class of material
- 4009. Biomass of all trees and shrubs on timberland, by county and class of material
- 4010. Biomass and Area of trees and shrubs on Other Forest Land, by county and geographic unit

Alerich, Carol L.; Drake, David A. 1995. **Forest Statistics for New York: 1980 and 1993**. Resour. Bull. NE-132. Radnor, PA: U.S. Department of Agriculture, Forest Service, Northeastern Experiment Station. 249 p.

A statistical report on the fourth forest inventory of New York (1991-1994). Findings are displayed in 155 tables containing estimates of forest area, numbers of trees, wildlife habitat, timber volume, growth, change, and biomass. Data are presented at three levels: state, geographic unit, and county.

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

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