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Forest Statistics for Northwest Florida, 1994

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Foreword

This report highlights the principal findings of the seventh forest survey of Northwest Florida. Field work began in June 1993 and was completed in April 1994. Six previous surveys, completed in 1934, 1949, 1959, 1969, 1979, and 1967, provide statistics for measuring changes and trends over the past 60 years. The primary emphasis in this report is on the changes and trends since 1967.

Periodic surveys of forest resources are authorized by the Forest and Rangeland Renewable Resources Research Act of 1978. These surveys are a continuing, nationwide undertaking by the Regional Experiment Stations of the USDA Forest Service. in Florida, Georgia, North Carolina, South Carolina, and Virginia, these surveys are administered by the Forest Inventory and Analysis (Forest Survey) Research Unit at the Southeastern Forest Experiment Station, with headquarters in Asheville, NC. The primary objective of the survey is to periodically inventory and evaluate all forest and related resources. These multiresource data help provide a basis for formulating forest policies and programs and for the orderly development and use of the resources. This report deals only with the extent and condition of forest land, associated timber volumes, and rates of timber growth, mortality, and removals.

Additional information concerning any aspect of-this survey may be obtained from:

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Acknowledgments

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[1] All tables in this report are available in Lotus 1-2-3® worksheet files. These files will be supplied, upon request, on 3½- or 5¼-inch diskettes.

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Introduction

This report summarizes results from a 1994 inventory of the forest resources of Northwest Florida. Current estimates of the forest area, related attributes, and timber volumes are compared with earlier inventory findings. Timber volumes reported in earlier bulletins have been adjusted for valid comparisons with current assessments. Changes in average annual rates of growth, removals, and mortality since the previous inventory are reported.

Highlights

Since 1987 in Northwest Florida-

@ araa of timberland increased by 147,000 acres, or 3 percent, to almost 5.5 million. acres. This represents nearly 76 percent of the land area in the 16-county region. Tree planting on agricultural land was a major contributor to the increase. Some 269,000 acres were added to the timberland base from other land uses, while 122,000 acres were diverted to nonforest land uses. Urban and related land uses were the most predominant causes of timberland diversions, accounting for nearly 53 percent of the acreage lost. Agricultural uses made up an additional 35 percent of the diverted timberland.

- *area of timberland held by nonindustrial private forest (NIPF) owners increased 19 percent to 2.3 million acres.* Within this group, timberland owned by farmers decreased by almost 4 percent to 436,000 acres, while timberland owned by other individuals increased by almost 9 percent to just over 1 .O million acres. Corporate-owned timberland increased 59 percent to 820,000 acres. Much of this increase resulted from the transfer of forest industry properties to timberland investment management organizations. These organizations offer various timberland investment services to institutional investors. Consequently, forest industry acreage dropped by 14 percent to 1.7 million acres. Timberland managed by USDA Forest Service increased slightly (3 percent) to 528,000 acres, whereas timberland managed by other public agencies increased by 5 percent to 883,000 acres. Currently, NIPF owners control 42 percent of the timberland; forest industry controls 32 percent; and public agencies administer the remaining 26 percent.

- *area of timberland classified as a pine forest type increased 5 percent to over 3.1 million acres, while hardwood types dropped 8 percent to 1.7 million acres.* Mixed stands classified as oak-pine increased by 26 percent to 652,000 acres. Slash pine remains the most prevalent forest type at 1.8 million acres, up 5 percent since 1987. Loblolly pine and sand pine acreage rose significantly, up by 50 and 19 percent, respectively. Like-slash pine, loblolly pine and sand pine are frequently planted. At 1.9 million acres, planted pine stands comprise more than three-fifths of all pine stands in the region. Acreage classified as longleaf pine dropped by 23 percent to just over 434,000 acres.

- *average basal area of live trees 5.0 inches d.b.h. and larger increased slightly from 5 1 to 54 square feet per acre.* The area of stands classified as fully stocked remained stable at 1.5 million acres, while medium-stocked stands increased by 15 percent to 2.4 million acres. Poorly stocked and nonstocked stands are down 9 percent to 1.6 million acres, which is almost one-third of the current regional timberland. Merchantable net volume of all live trees averaged 1,097 cubic feet per acre.

- *area harvested annually and retained in timberland averaged almost 99,000 acres, down by 19 percent since the previous survey.* About 43,000 acres of pine plantations and 38,000 acres of natural pine stands were harvested each year, constituting over 82 percent of the annual acreage harvested. By ownership, 46 percent of the annual harvest occurred on NIPF land, 46 percent on forest industry land, and 8 percent on publicly owned lands. Natural damaging agents such as weather, insects, and disease affected 30,000 acres annually.

- *an average of 148,000 acres were artificially (planting) and naturally regenerated each year.* This rate is 30 percent higher than the rate in the previous period. About 117,000 acres were regenerated to new pine stands annually, an area 45 percent larger than the pine acreage harvested annually. More than 116,000 acres of all regenerated areas were established by artificial means, up 52 percent since 1987. By ownership,

51 percent of the artificial regeneration took place on forest industry land, 42 percent on NIPF land, and 7 percent on public land. Natural regeneration occurred on over 32,000 acres per year, almost three-fourths occurring on NIPF lands.

• *volume of softwood growing stock increased by 7 percent to nearly 3.3 billion cubic feet,* Slash pine, the predominant species, increased 14 percent to 1.4 billion cubic feet; loblolly pine jumped 37 percent to 473 million cubic feet; and sand pine increased by 18 percent to 181 million cubic feet. In contrast, longleaf pine volume decreased by 8 percent to 887 million cubic feet. Softwood inventories increased by 12 percent on NIPF land to almost 1.2 billion cubic feet and by 10 percent on public land to over 1.2 billion cubic feet. In contrast, softwood inventories on forest industry land decreased by 2 percent to 854 million cubic feet. Almost three-fourths of the increase in softwood volume occurred in the 6- and 8-inch diameter classes. Volume in these two diameter classes has increased by 23 percent since 1987. Volume of softwood growing stock was down by 4 percent in the IO- and 1 P-inch diameter classes, but up by 9 percent in the 14- through the 20-inch diameter classes combined. Volume of softwood sawtimber increased 3 percent to 10.7 billion board feet.

• *volume of hardwood growing stock increased by 10 percent to 2.2 billion cubic feet.* The tupelo and blackgum species group continues to account for one-third of the hardwood volume. Since 1987, volume in this species group increased by 4 percent to almost 711 million cubic feet. The second most abundant hardwood group is the oaks with 629 million cubic feet, up almost 10 percent. Hardwood inventories increased by 12 percent to over 1 .O billion cubic feet on NIPF land and by 21 percent to almost 633 million cubic feet on public land. In contrast, hardwood inventories on forest industry land decreased by 5 percent to 509 million cubic feet. Hardwood volume increased across almost all diameter classes. The current inventory of hardwood growing stock includes almost 6.3 billion board feet of sawtimber, an increase of 13 percent.

• *net annual growth of softwood growing stock increased from 143 to 186 million cubic feet.* The increase in net annual growth of softwoods can be attributed to developing pine plantations, where net annual growth amounted to 115 million cubic feet, an increase of 63 percent. Pine plantations now account for 62 percent of softwood net annual growth. More than 87 percent of the increase in softwood growth occurred on NIPF land where net annual growth soared from 46 to 85 million cubic feet. Net annual growth of softwood on forest industry land rose nearly 9 percent to just over 69 million cubic feet. Softwood growth on public land decreased by 5 percent to 32 million cubic feet per year. Across all ownerships, annual softwood growth exceeded annual removals by more than 21 percent, or 33 million cubic feet. Softwood growth exceeded removals for all major ownership categories. Net annual growth of hardwood jumped by 36 percent, from 45 to 61 million cubic feet. Like softwood growth, most of the increase in hardwood growth occurred on NIPF land. Hardwood growth exceeded hardwood removals across all ownerships by 88 percent, or almost 29 million cubic feet. Net annual growth for all species included almost 662 million board feet of sawtimber.

• *annual removals of softwood growing stock increased 8 percent from 141 to 153 million cubic feet.* Almost one-half of all softwood removals came from pine plantations. Most of the trees cut in pine plantations are relatively small. Consequently, nearly two-thirds of the softwood removals were from the 6-, 8-, and lo-inch diameter classes. NIPF owners accounted for 50 percent of softwood removals, forest industry 36 percent, and public land 14 percent. Softwood removals on NIPF land increased by 49 percent, whereas softwood removals from -forest industry-controlled lands decreased by 20 percent to just under 56 million cubic feet annually. Average annual removal of hardwood growing stock increased nearly 52 percent to over 32 million cubic feet. Hardwood removal was up in both public and private ownerships, but down sharply on forest industry-controlled lands.

• *annual mortality of growing stock averaged 29 million cubic feet, down 26percent.* Volume of softwood and hardwood mortality was relatively equal. The leading identifiable cause of natural mortality among hardwood growing stock was weather, at 32 percent. For softwood growing stock, both weather and insects were major causes of mortality, at 23 and 21 percent, respectively. Annual mortality of growing stock included almost 98 million board feet of sawtimber, down nearly 30 percent since the previous survey. Mortality reduced gross growth by 11 percent.

How the Inventory is Made

Procedures used in the seventh inventory of the forest resources in Northwest Florida included several basic steps.

1. Initial estimates of forest and nonforest areas were based on the classification of 36,761 sample clusters systematically spaced on the latest aerial photographs available. A subsample of 2,817 of the 16-point clusters was ground checked, and a linear regression was fitted to the data to develop the relationship between the photo and ground classification of the subsample. This procedure provides a means for adjusting the initial estimates of area for change in land use since date of photography and for photo misclassification.

2. Estimates of timber volume and forest classification were based on measurements recorded at 2,013 ground sample locations systematically distributed on timberland. The plofdesign at each location was based on a cluster of 10 points. In most cases, variable plots, established by using a basal-area factor of 37.5 square feet per acre, were systematically spaced within a single forest condition at 5 of the 10 cluster points. Trees less than 5 inches d.b.h. were tallied on a fixed-radius plot around each point center.

3. Equations prepared from detailed measurements collected on standing trees in this Survey Unit, and similar measurements taken throughout the Southeast, were used to compute the volume of individual tally trees. A mirror caliper and sectional aluminum poles were used to obtain the additional measurements required to construct volume equations. Forest biomass estimates were made from equations developed by the Utilization of Southern Timber Research Work Unit, Southeastern Forest Experiment Station, Athens, GA.

4. Felled trees were measured at 18 active cutting operations. These data will supplement the standing-tree volume data and be used to generate utilization factors for product and species groups.

5. Estimates of growth, removals, and mortality were determined from the remeasurement of 2,051 permanent sample plots established in the sixth survey.

6. Ownership information was collected from correspondence, public records, and local contacts. In counties where the sample missed a particular ownership class, temporary sample plots were added.

7. All field data were sent to Asheville for editing and were entered into disk and magnetic-tape storage for processing. Final estimates were based on statistical summaries of the data.

Statistical Reliability

FIA inventories employ sampling methods designed to achieve reliable statistics at the Survey Unit and State levels. A measure of reliability of inventory statistics is provided by sampling errors. These sampling errors mean that the chances are two out of three that the true population value is within the limits indicated by a confidence interval. Sampling errors (in percent) and associated confidence intervals around the sample estimates for timberland area, inventory volumes, and components of change are presented in the following table.

Item	Sample estimate and confidence interval	Sampling error (percent)
Timberland *(1,000* acres)	5,493.4 ± 19.2	0.35
Growing stock *(M ft³)*		
Inventory	5,485.5 ± 146.5	2.67
Net annual growth	246.8 ± 6.8	2.74
Annual removals	185.5 ± 11.2	6.06
Annual mortality	29.3 ± 2.1	7.19
Sawtimber *(M fbm)*		
Inventory	17,036.8 ± 592.9	3.48
Net annual growth	662.3 ± 23.2	3.50
Annual removals	508.6 ± 39.5	7.77
Annual mortality	97.6 ± 9.3	9.53

Sampling error increases as the area or volume considered decreases in magnitude. Sampling errors and associated confidence intervals are often unacceptably high for small components of the total resource. Statistical confidence may be computed for any subdivision of Survey Unit or State totals using the following formula. Sampling errors obtained from this method are only approximations of reliability because this process assumes constant variance across all subdivisions of totals.

$$SE_s = SE_t \frac{\sqrt{X_t}}{\sqrt{X_s}},$$

where

SE_s = sampling error for subdivision of Survey Unit or State total,

SE_t = sampling error for Survey Unit or State total,

X_s = sum of values for the variable of interest (area or volume) for subdivision of Survey Unit or State,

X_t = total area or volume for Survey Unit or State.

For example, the estimate of sampling error for growing-stock volume on public timberland is computed as:

$$SE_s = 2.67 \frac{\sqrt{5,485.5}}{\sqrt{1,891.8}} = 4.55.$$

Thus, the sampling error is 4.55 percent, and the resulting confidence interval (two times out of three) for growing-stock inventory on public timberland is 1,891.8 ± 86.1 million cubic feet.

County statistics are provided, but users are cautioned that the accuracy of individual county data is highly variable. Individual county statistics are provided so that any combination of counties may be added together until the totals are large enough to meet the desired degree of reliability. Sampling errors for key resource items for individual counties are provided in the following table.

Sampling errors for county and unit totals, in terms of one standard error, Northwest Florida, 1994

County	Timberland area	Cubic-foot volume of growing stock		
		Inventory	Growth	Removals
		Sampling error[1]		
Bay	*0.93*	*13.77*	*10.36*	*16.14*
Calhoun	1.27	11.38	11.59	22.31
Escambia	1.94	10.12	9.48	23.70
Franklin	0.76	11.51	11.01	32.35
Gadsden	1.63	11.81	10.30	31.06
Gulf	1.61	17.17	15.60	26.82
Holmes	2.60	15.08	14.91	35.18
Jackson	2.11	12.90	11.47	17.91
Jefferson	1.42	10.47	11.21	23.85
Leon	1.73	8.74	10.56	27.09
Liberty	0.35	7.67	10.24	22.41
Okaloosa	1.48	8.59	9.41	27.97
Santa Rosa	0.99	8.30	7.81	17.20
Wakulla	1.04	10.68	14.21	27.32
Walton	1.31	8.60	9.12	22.35
Washington	1.43	11.87	11.16	30.51
Total	0.35	2.67	2.74	6.06

[1] By random-sampling formula (in percent).

Definitions

Basal area. The area in square feet of the cross section at breast height of a single tree or of all the trees in a stand, usually expressed in square feet per acre.

Biomass. The aboveground green weight of solid wood and bark in live trees 1 .O inch d.b.h. and larger from the ground to the tip of the tree. All foliage is excluded. The weight of wood and bark in lateral limbs, secondary limbs, and twigs under 0.5 inch in diameter at the point of occurrence on sapling-size trees is included but is excluded on poletimber and sawtimber-size trees.

Bole. That portion of a tree between a l-foot stump and a 4-inch top diameter outside bark (d.o.b.) in trees 5.0 inches d.b.h. and larger.

Broad management class. A classification of timberland based on forest type and stand origin.

Pine plantation. Stands that have been artificially regenerated by planting or direct seeding and with a southern yellow pine, white pine-hemlock, or other softwood forest type.

Naturalpine. Stands that have not been artificially regenerated and with a southern yellow pine, white pine-hemlock, or other softwood forest type.

Oak-pine. Stands with a forest type of oak-pine.

Upland hardwood. Stands with a forest type of oak-hickory, chestnut oak, southern scrub oak, or maple-beech-birch.

Lowland hardwood. Stands with a forest type of oak-gum-cypress, elm-ash-cottonwood, palm, or other tropical.

Census water. Streams, sloughs, estuaries, canals, and other moving bodies of water 200 feet wide and greater, and lakes, reservoirs, ponds, and other permanent bodies of water 4.5 acres in area and greater.

Commercial forest land. (see: Timberland).

Commercial species. Tree species currently or potentially suitable for industrial wood products. Noncommercial species are excluded.

Cropland. Land under cultivation within the past 24 months, including orchards and land in soil-improving crops but excluding land cultivated in developing improved pasture. Also includes idle farmland.

D.b.h. Tree diameter in inches (outside bark) at breast height (4.5 feet above the ground).

Diameter class. A classification of trees based on tree d.b.h. Two-inch diameter classes are commonly used by Forest Inventory and Analysis, with the even inch as the approximate midpoint for a class. For example, the 6-inch class includes trees 5.0-6.9 inches d.b.h.

Farm. Land on which agricultural operations are being conducted and sale of agricultural products totaled $1,000 or more during the year.

Farm operator. A person who operates a farm, either doing the work or directly supervising the work.

Farmer-owned land. (see: Other private land).

Forest industry land. Land owned by companies or individuals operating primary wood-using plants.

Forest industry-leased land. Land leased or under management contracts to forest industry from other owners for periods of one forest rotation or longer. Land under cutting contracts is not included.

Forest land. Land at least 16.7 percent stocked by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use.

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

White pine-hemlock. Forests in which eastern white pine, red pine, or jack pine, singly or in combination, constitute a plurality of the stocking. (Common associates include hemlock, birch, and maple.)

Spruce-fir. Forests in which spruce or true firs, singly or in combination, constitute a plurality of the stocking. (Common associates include maple, birch, and hemlock.)

Longleaf-slash pine. Forests in which longleaf or slash pine, singly or in combination, constitute a plurality of the stocking. (Common associates include oak, hickory, and gum.)

Loblolly–shortleaf pine. Forests in which loblolly pine, shot-deaf pine, or other southern yellow pines, except longleaf or slash pine, singly or in combination, constitute a plurality of the stocking. (Common associates include oak, hickory, and gum.)

Oak–pine. Forests in which hardwoods (usually upland oaks) constitute a plurality of the stocking but in which pines account for 25 to 50 percent of the stocking. (Common associates include gum, hickory, and yellow-poplar.)

Oak-hickory. Forests in which upland oaks or hickory, singly or in combination, constitute a plurality of the stocking, except where pines account for 25 to 50 percent, in which case the stand would be classified oak-pine. (Common associates include yellow-poplar, elm, maple, and black walnut.)

Oak-gum-cypress. Bottom-land forests in which tupelo, blackgum, sweetgum, oaks, or southern cypress, singly or in combination, constitute a plurality of the stocking, except where pines account for 25 to 50 percent, in which case the stand would be classified oak-pine. (Common associates include cottonwood, willow, ash, elm, hackberry, and maple.)

Elm-ash-cottonwood. Forests in which elm, ash, or cottonwood, singly or in combination, constitute a plurality of the stocking. (Common associates include willow, sycamore, beech, and maple.)

Maple-beech-birch. Forests in which maple, beech, or yellow birch, singly or in combination, constitute a plurality of the stocking. (Common associates include hemlock, elm, basswood, and white pine.)

Palm, other tropicals. Forests in which palms and other tropicafs constitute a plurality of the stocking.

Gross growth. Annual increase in merchantable volume of trees in the absence of cutting and mortality. (Gross growth includes survivor growth, ingrowth, growth on ingrowth, growth on removals prior to removal, and growth on mortality prior to death.)

Growing-stock trees. Live sawtimber-size trees of commercial species containing at least a 1 P-foot log, or two noncontiguous saw logs each 8 feet or longer, meeting minimum grade requirements (hardwoods must qualify as a log grade of either 3 or 4; softwoods must qualify as a fog grade 3) with at feast one-third of the gross board-foot volume (International 1 /4-inch rule) between a l-foot stump and the minimum saw-log top being sound, or a live tree below sawtimber size that will prospectively qualify under the above standards.

Growing-stock volume. Volume (cubic feet) of solid wood in growing-stock trees 5.0 inches d.b.h. and larger, from a l-foot stump to a minimum 4.0-inch top diameter, outside bark, on the central stem. Volume of solid wood in primary forks from the point of occurrence to a minimum 4.0-inch top diameter outside bark is included.

Hardwoods. Angiosperms; dicotyledonous trees (including all palm species which are monocotyledonous), usually broadleaf and deciduous.

Soft hardwoods. Soft-textured hardwoods such as boxelder, red and silver maples, hackberry, loblolly-bay, sweetgum, yellow-poplar, magnolia, sweetbay, water tupelo, blackgum, sycamore, cottonwood, black cherry, willow, basswood, and elm.

Hard hardwoods. Hard-textured hardwoods such as sugar maple, birch, hickory, dogwood, persimmon (forest grown), black locust, beech, ash, honeylocust, holly, black walnut, mulberry, and all commercial oaks.

Idle farmland. Cropland, orchard, improved pasture, and farm sites not tended within the past 2 years, and currently less than 16.7 percent stocked with live trees.

Improved pasture. Land currently improved for grazing by cultivation, seeding, irrigation, or clearing of trees or brush.

Industrial wood. All roundwood products except fuelwood.

Ingrowth. The number or net volume of trees that grow large enough during a specified year to qualify as saplings, poletimber, or sawtimber.

Land area. The area of dry land and land temporarily or partly covered by water such as marshes, swamps, and river floodplains (omitting tidal flats below mean high tide), streams, sloughs, estuaries, and canals less than 200 feet wide, and lakes, reservoirs, and ponds less than 4.5 acres in area.

Live trees. All trees 1 .O inch d.b.h. and larger which are not dead at the time of inventory.

Live-tree volume. Volume (cubic feet) of wood above the ground line in five trees 1 .O inch d.b.h. and larger. The volume in twigs and lateral limbs smaller than 0.5 inch in diameter at the point of occurrence on sapling-size trees is included but is excluded on poletimber and sawtimber-size trees.

Log grade. A classification of logs based on external characteristics as indicators of quality or value.

Logging residues. The unused merchantable portion of growing-stock trees cut or destroyed during logging operations.

Manageable stand. Timberland at least 60 percent stocked with growing-stock trees that can be featured together under a management scheme.

Merchantable portion. That portion of live trees 5.0 inches d.b.h. and larger between a l-foot stump and a minimum 4.0-inch top diameter outside bark on the central stem. That portion of primary forks from the point of occurrence to a minimum 4.0-inch top diameter outside bark is included.

Merchantable volume. Solid-wood volume in merchantable portion of live trees.

Miscellaneous Federal land. Federal land other than National forests, land administered by the Bureau of Land Management, and land administered by the Bureau of Indian Affairs.

Miscellaneous private land. (see: Other private land).

Mortality. The merchantable volume in trees that have died from natural causes during a specified period.

National forest land. Federal land that has been legally designated as national forests or purchase units, and other land under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III land.

Net annual growth. The net change in merchantable volume for a specific year in the absence of cutting (gross growth minus mortality for that specified year).

Net volume. Gross volume of wood less deductions for rot, sweep, or other defect affecting use for timber products.

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

Nonforest land. Land that has never supported forests and land formerly forested where timber production is precluded by development for other uses.

Nonindustrial private forest (NIPF) land. (see: Other private land).

Nonstocked forest land. Timberland less than 16.7 percent stocked with growing-stock trees.

Other private land. Privately owned land excluding forest industry land or forest industry-leased land. Also referred to as nonindustrial private forest (NIPF) land.

Farmer-owned land. Owned by farm operators, excluding incorporated farm ownerships.

Other individual land. Owned by individuals other than farm operators.

Other corporate land. Owned by corporations, including incorporated farm ownerships.

Other removals. The growing-stock volume of trees removed from the inventory by cultural operations such as timber stand improvement, land clearing, and other changes in land use that result in the removal of the trees from timberland.

Plant residues. Wood material generated in the production of timber products at primary manufacturing plants.

Coarse residues. Material, such as slabs, edgings, trim, veneer cores and ends, which is suitable for chipping.

Fine residues. Material, such as sawdust, shavings, and veneer chippings, which is not suitable for chipping.

Plant byproducts. Residues (coarse or fine) utilized in the further manufacture of industrial products or for consumer use, or utilized as fuel.

Unused plant residues. Residues (coarse or fine) that are not used for any product, including fuel.

Poletimber-size trees. Live trees at least 5.0 inches d.b.h. but smaller than sawtimber size.

Primary wood-using plants. Industries that receive roundwood or chips from roundwood for the manufacture of products such as veneer, pulp, and lumber.

Productive-reserved forest land. (see: Reserved timberland).

Rangeland. Land on which the natural vegetation is predominantly native grasses, grass-like plants, forbs, or shrubs valuable for forage, not qualifying as timberland and not developed for another land use. Rangeland includes natural grassland and Savannah.

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

Rotten trees. Live trees of commercial species that do not contain at least one 1 P-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of rot or missing sections, and with less than one-third of the gross board-foot tree volume in sound material.

Rough trees. Live trees of commercial species that do not contain at least one 1 P-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of roughness, poor form, splits, and cracks, and with less than one-third of the gross board-foot tree volume in sound material; and live trees of noncommercial species.

Roundwood (roundwood logs). Logs, bolts, or other round sections cut from trees for industrial or consumer uses.

Roundwood chipped. Any timber cut primarily for pulpwood, delivered to nonpulpmills, chipped, and then sold to pulpmills as residues, including chipped tops, jump sections, whole trees, and pulpwood sticks.

Roundwood products. Any primary product such as lumber, poles, pilings, pulp, or fuelwood which is produced from roundwood.

Salvable dead trees. Standing or down dead trees considered utilizable by Forest Inventory and Analysis standards.

Saplings. Live trees 1 .O to 5.0 inches d.b.h.

Saw log. A log meeting minimum standards of diameter, length, and defect, including logs at least 8 feet long, sound and straight, and with a minimum diameter inside bark for softwoods of 6 inches (8 inches for hardwoods).

Saw-log portion. That part of the bole of sawtimber trees between a l-foot stump and the saw-log top, including the portion of forks large enough to contain a saw log.

Saw-log top. The point on the bole of sawtimber trees above which a conventional saw log cannot be produced. The minimum saw-log top is 7.0 inches in diameter outside bark (d.o.b.) for softwoods and 9.0 inches (d.o.b.) for hardwoods.

Sawtimber-size trees. Softwoods 9.0 inches d.b.h. and larger and hardwoods 11 .O inches d.b.h. and larger.

Sawtimber volume. Growing-stock volume in the saw-log portion of sawtimber-size trees in board feet (International l/Cinch rule).

Seedlings. Trees less than 1 .O inch d.b.h. Only seedlings that are not overtopped and are more than 6 inches tall for softwoods and 1 foot tall for hardwoods are counted.

Site class. A classification of forest land in terms of inherent capacity to grow crops of industrial wood based on fully stocked natural stands, by annual production capacity.

Softwoods. Gymnosperms; in the order Coniferales, usually evergreen (includes the genus *Taxodium* which is deciduous), having needles or scalelike leaves.

Pines. Yellow pine species which include loblolly, longleaf, slash, pond, shortleaf, pitch, Virginia, sand, spruce, and Table Mountain pines.

Other softwoods. Cypress, eastern red-cedar, white cedar, eastern white pine, eastern hemlock, spruce, and fir.

Stand-size class. A classification of forest land based on the diameter class distribution of live trees in the stand.

Sawtimber stands. Stands at least 16.7 percent stocked with live trees, with half or more of total stocking in sawtimber and poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

Poletimber stands. Stands at least 16.7 percent stocked with live trees, of which half or more of total stocking is in poletimber and sawtimber trees, and with poletimber stocking exceeding that of sawtimber.

Sapling-seedling stands. Stands at least 16.7 percent stocked with live trees of which more than half of total stocking is saplings and seedlings.

State, county, and municipal land. Land owned by States, counties, and local public agencies or municipalities, or land leased to these governmental units for 50 years or more.

Stocking. The degree of occupancy of land by trees, measured by basal area or the number of trees in a stand and spacing in the stand, compared with a minimum standard, depending on tree size, required to fully utilize the growth potential of the land.

Fully stocked. 100 percent or more stocking.

Medium stocked. 60 to 99 percent stocking.

Poorly stocked. Less than 60 percent stocking.

Density of trees and basal area per acre required for full stocking

D.b.h. class	*Trees per acre for full stocking*	*Basal area per acre*
Seedlings	*600*	--
2	*5 6 0*	--
4	*460*	--
6	*340*	67
8	*240*	84
IO	*155*	85
12	*115*	90
14	*90*	96
16	*72*	101
18	*60*	106
20	*51*	111

Survivor growth. The merchantable volume increment on trees 5.0 inches d.b.h. and larger in the inventory at the beginning of the year and surviving to its end.

Timberland. Forest land that is capable of producing 20 cubic feet of industrial wood per acre per year and not withdrawn from timber utilization.

Timber products. Roundwood products and byproducts.

Timber removals. The merchantable volume of trees removed from the inventory by harvesting, cultural operations such as stand improvement, land clearing, or changes in land use.

Top. The portion of the main stem and forks from a 4.0-inch diameter outside bark to the tips of the main stem and forks, plus all other limbs above the 4.0-inch top at least 0.5 inch in diameter at their point of occurrence.

Treatment opportunity. A classification of the management or treatment that would most improve for timber production the existing condition of the stand being sampled.

Tree. Woody plants having one erect perennial stem or trunk at least 3 inches d.b.h., a more or less definitely formed crown of foliage, and a height of at least 13 feet.

Tree grade. A classification of sawtimber trees based on the log grade of the butt log in the tree.

Unproductive forest land. (see: Woodland).

Upper-stem portion. That part of the main stem or fork of sawtimber trees above the saw-log top to minimum top diameter 4.0 inches outside bark or to the point where the main stem or fork breaks into limbs.

Urban and other areas. Areas developed for residential, industrial, or recreational purposes, school yards, cemeteries, roads, railroads, airports, beaches, powerlines and other rights-of-way, or other nonforest land not included in any other specified land use class.

Woodland. Forest land incapable of producing 20 cubic feet per acre per year of industrial wood under natural conditions, because of adverse site conditions.

CONVERSION FACTORS

Cubic feet of wood per average cord (excluding bark)

D.b.h. class	All species	Pine	Other softwood	Hardwood
6	60.9	61.0	68.2	60.0
8	68.7	68.1	76.0	68.4
10	73.8	73.1	81.4	73.4
12	77.2	76.7	85.2	76.4
14	79.7	79.4	88.2	78.4.
16	81.4	81.6	90.4	79.8
18	82.7	83.3	92.3	80.8
20	83.7	84.8	93.8	81.5
22	84.2	86.0	95.1	82.1
24+	85.4	87.7	98.5	83.1
Average	74.1	72.6	84.5	74.2

Metric equivalents of units used in this report

1 acre = 4,046.86 square meters or 0.404686 hectare
1 cubic foot = 0.028317 cubic meter
1 inch = 2.54 centimeters or 0.0254 meter
Breast height (4.5 feet) = 1.4 meters above ground level
1 square foot = 929.03 square centimeters or 0.0929 square meter
1 square foot per acre basal area = 0.229568 square meter per hectare
1 pound = 0.454 kilogram
1 ton = 0.907 metric ton

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[1] Tables I-I 2, 27, 29-33, 35-38, 41, 42, and 44 are common to all Forest Inventory and Analysis forest resource statistical reports of the Eastern United States.

Table 1 -Area, by county and land class, Northwest Florida, 1994

County	All land[1]	Forest land				Nonforest land[2]
		Total	Timberland	Woodland	Reserved timberland	
	Acres					
Bay	488,794	399,595	396,365	2,030	1,200	89,199
Calhoun	363,130	302,590	302,590	--	--	60,540
Escambia	424,730	257,018	250,789	4,357	1,872	167,712
Franklin	341,747	302,064	301,493	300	271	39,683
Gadsden	330,342	253,880	253,400	--	480	76,462
Gulf	361,638	312,153	310,232	1,145	776	49,485
Holmes	308,832	211,102	210,742	--	360	97,730
Jackson	586,099	327,146	325,426	--	1,720	258,953
Jefferson	382,586	286,499	284,399	--	2,100	96,087
Leon	426,752	306,075	305,389	--	686	120,677
Liberty	534,995	513,260	503,233	--	10,027	21,735
Okaloosa	598,906	449,230	448,276	597	357	149,676
Santa Rosa	650,125	479,823	478,054	--	1,769	170,302
Wakulla	388,282	340,258	314,267	--	25,991	48,024
Walton	676,909	522,237	516,781	2,633	2,823	154,672
Washington	371,123	292,099	291,944	--	155	79,024
Total	7.234.990	5.555.029	5.493.380	11,062	50,587	1,679,961

[1] From the U.S. Bureau of the Census, 1990.

[2] Includes 9,667 acres of water according to Forest Inventory and Analysis standards of area classification, but defined by the Bureau of Census as land.

Table 2-Area of timberland, by county and ownership class, Northwest Florida, 1994

County	All ownerships	Ownership class							
		National forest	Miscellaneous Federal	State	County and municipal	Forest industry[1]	Other private		
							Farmer	Corporate	Individual
	Acres								
Bay	396,365	--	21,465	6,354	920	209,895	--	106,016	51,715
Calhoun	302,590	--	12	37	85	138,762	22,578	76,202	84,914
Escambia	250,789	--	2,950	5,314	90	102,287	11,212	61,665	67,271
Franklin	301,493	19,678	7,319	45,421	646	104,859	--	107.094	16,478
Gadsden	253,400	--	1	10,248	80	104,236	24,990	36,097	77,748
Gulf	310,232	--	755	35,123	55	252,459	1,680	6.720	13,440
Holmes	210,742	--	460	3,482	355	32,446	82,984	34,800	56,215
Jackson	325,426	--	5,436	9,217	165	25,100	92,285	66,330	126,893
Jefferson	284,399	--	--	14,031	30	163.420	25,157	25,157	56,604
Leon	305,389	103,735	20	8,126	1,928	54,450	11,428	62,851	62,851
Liberty	503,233	258,174	--	22,230	40	153,623	11,528	17,292	40,346
Okaloosa	448,276	--	211,310	59,766	748	55,134	22,747	15,165	83,406
Santa Rosa	478,054	--	56,300	130.375	809	165,986	21,156	11,753	91,675
Wakulla	314,267	146,082	28,385	147	1,213	54,094	5,817	11,634	66,895
Walton	516,781	--	137,233	36,102	209	103,406	57,559	62,356	119,916
Washington	291,944	--	--	17,269	441	26.490	47,071	118,917	81,756
Total	5,493,380	527,669	471,646	403,242	7,814	1,746,647	438,192	820.049	1,078,121

[1] Includes 36,432 acres of other private land under long-term lease.

Table 3—Area of timberland, by county and forest-type group, Northwest Florida. 1994

County	All type groups	Forest-type group					
		Longleaf-slash	Loblolly-shortleaf	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood
		Acres					
Bay	396,365	263,516	40,263	19,583	17,634	35,369	--
Calhoun	302,590	137,989	45,729	31,717	27,791	56,971	2,393
Escambia	250,789	117,544	42,239	33,090	19,511	38,405	--
Franklin	301,493	188,745	22,356	24,330	5,492	60,570	--
Gadsden	253,400	39,471	77,263	34,793	49,549	52,324	--
Gulf	310,232	177,937	4,836	15,983	6,515	103,281	1,680
Holmes	210,742	53,418	47,258	31,648	32,582	45,836	--
Jackson	325,426	64,093	75,033	29,981	77,864	75,571	2,884
Jefferson	284,399	78,921	54,871	22,868	33,146	94,793	--
Leon	305,389	93,532	64,562	56,860	48,208	42,229	--
Liberty	503,233	243,614	52,869	21,559	13,682	163,226	8,283
Okaloosa	448,276	183,061	55,055	94,648	62,165	53,347	--
Santa Rosa	478,054	202,709	38,453	105,475	47,797	83,620	--
Wekulla	314,267	-154,668	36,681	35,303	38,915	48,700	--
Walton	516,781	172,472	127,556	57,290	79,883	79,600	--
Washington	291,944	53,611	75,329	36,713	61,940	61,884	2,487
Total	5,493,380	2,245,301	860,353	851,641	822,652	1,095,726	17,707

Table 4-Area of timberland, by county and stand-size class, Northwest Florida, 1994

County	All stands	Stand-size class			Nonstocked areas
		Sawtimber	Poletimber	Sapling-seedling	
		Acres			
Bay	396,365	34,808	103,896	238,079	*19,582*
Calhoun	302,590	78,508	73,433	142,182	8,487
Escambia	250,789	104,111	64,227	82,451	--
Franklin	301,493	57,775	116,503	106,306	20,909
Gadsden	253,400	60,372	88,434	104,594	
Gulf	310,232	82,721	69,836	145,053	12,622
Holmes	210,742	48,393	39,702	122,647	
Jackson	325,426	80,260	58,657	186,509	--
Jefferson	284,399	120,534	55,095	104,969	3,801
Leon	305,389	122,740	59,500	117,699	5,450
Liberty	503,233	220,330	99,930	169,468	13,505
Okaloosa	448,276	149,682	128,383	167,467	2,744
Santa Rosa	478,054	170,947	113,472	193,635	--
Wakulla	314,267	124,927	62,071	117,135	10,134
Walton	516,781	149,269	113,492	251,243	2,777
Washington	291,944	73,371	83,650	132,445	2,478
Total	5,493,380	1,678,748	1,330,281	2,381,882	102,469

Table 5—Area of timberland, by county and site class, Northwest Florida, 1994

County ,	All classes	Site class (cubic feet per acre per year)				
		>164	120-l 64	65-l 19	50-84	20-49
				Acres		
Bay	396,365	--	--	2,956	255,197	138,212
Calhoun	302,590	--	7,178	43,682	204,357	47,373
Escambia	250,789	2,803	--	27,484	199,316	21,186
Franklin	301,493	--	--	8,876	108,965	183,652
Gadsden	253,400	--	2,049	63,000	161,015	27,336
Gulf	310,232	--	--	9,672	153,483	147,077
Holmes	210,742	--	5,354	63,294	115,461	26,633
Jackson	325,426	--	10,583	57,679	224,674	32,490
Jefferson	284,399	--	8,385	60,465	187,449	28,100
Leon	305,389	--	2,857	56,959	162,364	83,209
Liberty	503,233	--	--	43,845	277,282	182,106
Okaloosa	448,276	--	5,488	34,641	196,267	211,880
Santa Rosa	478,054	--	22,935	98,462	246,191	110,466
Wakulla	314,267	--	--	36,347	169,607	108,313
Walton	516,781	--	--	28,335	291,469	196,977
Washington	291.944		6,542	35,385	109,701	140,316
Total	5,493,380	2,803	71,371	671,082	3,062,798	1,685,326

Table 6-Area of timberland, by county and stocking class of growing-stock trees, Northwest Florida, 1994

Countv	All classes	Stocking class (percent)'				
		>130	100-l 30	60-99	16.7-59	< 16.7
				Acres		
Bay	396,365	5,913	123,420	160,826	*75,911*	30,295
Calhoun	302,590	5,215	62,611	150,386	54,623	29,755
Escambia	250,789	11,103	103,848	91,645	41,390	2,803
Franklin	301,493	3,659	82,369	135,181	49,457	30,827
Gadsden	253,400	9,501	76,457	127,459	39,983	--
Gulf	310,232	21,175	41,027	130,826	88,056	29,148
Holmes	210,742	12,908	55,305	94,360	45,032	3,137
Jackson	325,426	8,652	105,802	145,986	47,684	17,302
Jefferson	284,399	18,008	63,890	141,735	52,771	7,995
Leon	305,389	2,857	82,721	164,355	50,006	5,450
Liberty	503,233	26,367	78,138	222,629	154,218	21,881
Okaloosa	448,276	17,911	43,315	177,709	182,470	26,871
Santa Rosa	478,054	39,636	80,188	199,269	153,599	5,362
Wakulla	314,267	7,581	66,957	135,160	89,517	15,052
Walton	516,781	35,821	95,934	213,027	131,577	40,422
Washington	291,944	4,954	76,218	112,584	68,456	29,732
Total	5,493,380	231,261	1,238,200	2,403,137	1,324,750	296,032

' See stocking standards under "stocking" in definitions.

Table 7—**Volume** of growing stock and sawtimber on timberland, by county and species group, **Northwest Florida, 1994**

County	Growing stock					Sawtimber				
	All species	Pine	Other softwood	soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand cubic feet					Thousand *board feet*				
Bay	174,121	133,129	7,387	22,197	11,408	234,051	136,554	16,121	63,793	17,583
Calhoun	256,289	149,242	16,966	58,035	32,046	739,235	384,875	65,092	168,247	121,021
Escambia	330.664	212,751	5,358	83,585	28,970	1,087,781	698,577	16,118	277,315	95,771
Franklin	274,907	166,088	44,700	54,530	9,669	667,220	340.083	133,051	168,420	25,666
Gadsden	284.622	120,369	--	89,787	74,466	867,984	363,777	--	250,297	253,910
Gulf	246.731	73,493	57,821	97,372	18,045	700,273	173,614	176,370	288,927	61,362
Holmes	177,667	71,737	8,661	70,625	26,644	462,143	221,501	32,421	128,889	79,332
Jackson	282,002	82,827	22,676	107,695	68,804	767,468	248,974	73,667	224,233	220,594
Jefferson	366,552	79.107	41,315	157,951	108,179	1.294.155	301,192	168,960	438,190	385,813
Leon	348.281	188,447	7,363	82.045	70.426	1,238,548	725,702	16,337	253,651	242,858
Liberty	570.902	260,589	93,194	161,665	55,454	1,905,941	858,642	348.730	462,753	235,816
Okaloosa	46 1,460	333,168	19,225	73,391	35,676	1,627,650	1,281,224	89,642	134,888	121,896
Santa Rosa	601.331	349,239	64,424	135,954	51,714	2,034,492	1,301,478	255,483	328.070	149,461
Wakulla	335.315	198,949	9,643	72,196	54,527	1,145,598	733,811	36,271	195,435	180,081
Walton	494,654	323,226	13,265	117,458	40,705	1,635,546	1,127,003	56,416	345,964	108,163
Washington	259,917	87,906	33,049	87,136	51,824	628,665	222,867	141,345	121,768	142,685
Total	5,485,495	2,830,269	445.047	1,471,622	738,557	17,036,750	9,119,874	1,626,024	3,850,840	2440,012

Table 8-Average net annual growth of growing stock and sawtimber on timberland, by county and species group, Northwest Florida, 1887-I 883

County	Growing stock					Sawtimber				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	soft hardwood	Hard hardwood
	Thousandcubic feet					*Thousand board feet*				
Bay	18,094	*16,843*	*85*	*491*	695	*17,533*	*14,304*	*328*	*1,333*	*1,568*
Calhoun	17,332	15,018	*240*	*1.475*	599	*37,386*	*25,877*	*1,713*	*6,248*	*3,548*
Escambia	14,788	11,863	*289*	*1,357*	*1,279*	*46,333*	*38,363*	1,093	*4,471*	*4,406*
Franklin	17,148	15,169	*946*	*869*	*362*	*25,932*	*17,444*	3,993	*3,362*	*1,133*
Gadsden	18,405	10,169	--	*3,137*	*3,099*	*41,880*	*16,198*	--	*12,642*	*13,040*
Gulf	9,676	7,131	*984*	*1,117*	*444*	*25,890*	*12,257*	*4,642*	*7,082*	*1,909*
Holmes	10,514	6,908	*165*	1,832	*1.609*	*27,138*	*18,108*	*728*	*4,283*	*4.039*
Jackson	14,326	7,403	*913*	2,743	*3,287*	*43,867*	*20,529*	*2,776*	*7.306*	*13,256*
Jefferson	14,036	6,541	*401*	3,448	*3,646*	*45,483*	*16,403*	*3,013*	*13,666*	*12,401*
Leon	12,403	7,662	*24*	1,199	*3,518*	*48,075*	*27,423*	*60*	*5,241*	*15,351*
Liberty	16.034	10,823	*822*	3,078	*1,311*	*47,453*	*26,004*	*3,657*	*11,514*	*6,278*
Okaloosa	13,859	10,325	*188*	1,982	*1,164*	*46,143*	*38,205*	*1,327*	*3,975*	*4,838*
Santa Rosa	23,752	17,219	*1,321*	2,625	*2,587*	*83,830*	*62,496*	*5,976*	*8,126*	*7,232*
Wakulla	12,308	8,724	*375*	1,464	*1,745*	*29,840*	*17,866*	*957*	*4,137*	*8,880*
Walton	22,806	18,253	*262*	2,380	*1,911*	*66,321*	*50,668*	*1,228*	*9,328*	*5,097*
Washington	13,504	8,145	475	3,118	1,786	29,180	18,700	3,230	3,799	5,451
Total	248,783	178,196	7,470	32,115	29,002	682,284	414,845	34.721	106,493	108,225

Table 9—Average annual removals of growing stock and sawtimber on timberland, by county and species group, Northwest Florida, 1987-I 893

County	Growing stock					Sawtimber				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	soft hardwood	Hard hardwood
	Thousand cubic feet					*Thousand board feet*				
Bay	*18,143*	*18,088*	--	_	*55*	*24.401*	*24,401*	_	_	--
Calhoun	15,230	14,332	--	322	576	27,959	25,656	_	940	1,363
Escambia	13,618	10,139	--	2,420	1,259	42,636	33,337	_	6,334	2,967
Franklin	6,591	6,591	--	_	_	6,509	6,509	--	--	--
Gadsden	11,277	7,363	--	2.460	1,434	36,666	20,377	_	9,794	6,717
Gulf	4,664	4,664	--	_	_	6,516	6,516	_	_	--
Holmes	6,276	5,741	--	_	535	24,339	22,496	_	_	1,643
Jackson	22,731	13,400	195	3,352	5,764	67,541	52,635	1,062	11,046	22,576
Jefferson	9,053	7,516	106	323	1,106	36,251	32,401	195	1,150	2,505
Leon	10,518	5,663	--	1,526	3.307	39,492	23,980	_	3,096	12,416
Liberty	12,339	9,569	162	957	1,631	31,470	22.607	221	1,661	6,561
Okaloosa	6,576	6,495	--	44	37	23,735	23,735	_	_	--
Santa Rosa	19,964	16,719	--	149	1,096	49,366	47.023	_	521	1,622
Wakulla	6,711	6.023	--	703	1,965	30,135	21,460	--	2,641	6.034
Walton	11,933	11,565	--	34	314	24,461	24,461	_	_	--
Washington	5,495	4,390	61	470	574	14,669	11,656	_	1,571	1,440
Total	185,499	152,520	524	12,762	19.693	566,592	401,674	1,496	36,976	66,244

Table 1 O-Area of timberland, by forest type and ownership class, Northwest Florida, 1994

Forest type	All ownerships	Ownership class: National forest	Other public	Forest industry	Forest industry-leased	Other private
		Acres				
Softwood types						
Longleaf pine	434,285	117,087	176,046	41,766	--	99,386
Slash pine	1,811,016	222,469	172,630	757,499	24,217	634,201
Loblolly pine	519,999	7,138	17,481	198,342	6,113	290,925
Shortleaf pine	16,908	--	--	9,098	--	7,810
Virginia pine	--	--	--	--	--	--
Sand pine	291,335	--	77,708	128,177	--	85,450
Eastern redcedar	--	--	--	--	--	--
Pond pine	32,111	24,287	--	2,518	--	5,306
Spruce pine	--	--	--	--	--	--
Pitch pine	--	--	--		--	--
Table Mountain pine						
T o t a l	3,105,654	370,981	443,865	1,137,400	30,330	1,123,078
Hardwood types						
Oak-pine	651,641	40,501	150,984	148,340	6,102	305,714
Oak-hickory	434,256	5,351	26,579	51,235	--	351,091
Chestnut oak	--	--	--	--	--	--
Southern scrub oak	188,396	--	60,891	11,153	--	116,352
Oak-gum-cypress	1,095,726	110,836	197,916	357,175	--	429,799
Elm-ash-cottonwood	17,707	--	2,467	4,912	--	10,328
Total	2,387,726	156,688	438,837	572,815	6,102	1,213,284
All types	5,493,380	527,669	882,702	1,710,215	36,432	2,336,362

Table 11 -Area of timberland, by ownership and stocking classes of growing-stock trees, Northwest Florida, 1994

Ownershio class	All classes	Stocking class (percent)' >130	100-I 30	60-99	16.7-59	< 16.7
		Acres				
National forest	527,669	8,249	105,405	234,903	157,281	21,831
Other public	882,702	58,610	121,293	343,611	287,119	72,069
Forest industry	1,710,215	98,539	442,848	731,270	359,070	78,488
Forest industry-leased	36,432	2,426	6,113	27,893	--	--
Other private	2,336,362	63,437	562,541	1,065,460	521,280	123,644
All ownerships	5,493,380	231,261	1,238,200	2,403,137	1,324,750	296,032

' See stocking standards under "stocking" in definitions.

Table 1 P-Area of timberland, by forest type and stand-size class, Northwest Florida, 1994

Forest type	All stands	Stand-size class: Sawtimber	Poletimber	Sapling-seedling	Nonstocked areas
		Acres			
Softwood types					
Longleaf pine	434,285	273,573	33,104	122,429	5,179
Slash pine	1,811,016	309,331	611 ,a35	828,751	61,099
Loblolly pine	519,999	80,940	126,660	312,399	--
Shortleaf pine	16,908	7,810	2,693	6,405	--
Virginia pine	--	--	--	--	--
Sand pine	291,335	37,319	71,367	182,649	--
Eastern redcedar	--	--	--	--	--
Pond pine	32,111	10,775	1 8,589	2,747	--
Spruce pine	--	--	--	--	--
Pitch pine	--	--	--	--	--
Table Mountain pine	--	--	--	--	--
Total	3,105,654	719,748	864,248	1,455,380	66,278
Hardwood types					
Oak-pine	651,641	173,065	116,421	359,199	2,956
Oak-hickory	434,256	127,375	62,457	234,206	10,218
Chestnut oak	--	--	--	--	--
Southern scrub oak	188,396		17,471	168,103	2,822
Oak-gum-cypress	1,095,726	650,766	267,217	1 57,548	20,195
Elm-ash-cottonwood	17,707	7,794	2,467	7,446	--
Total	2,387,726	959,000	466,033	926,502	36,191
All types	5,493,380	1,678,748	1,330,281	2,381,882	102,469

Table 13—Area of timberland, by stand-age and broad management classes, all ownerships, Northwest Florida, 1994

Stand-age class (years)	All classes	Broad management class: Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
			Acres			
O-IO	1,353,023	*957,019*	105,451	1 28,025	131,496	31,032
1 I-20	782,295	532,103	1 08,573	63,175	47,491	30,953
21-30	458,047	293,529	72,027	34,114	32,678	25,699
31-40	257,868	85,000	81 ,569	26,110	7,632	57,557
41-50	374,147	14,182	164,414	48,923	37,339	1 09,289
51-60	352,215	4,791	1 85,077	34,521	25,563	102,263
61-70	313,192	--	1 09,282	34,340	22,548	147,022
71-80	171,727	2,579	29,492	7,976	a,243	123,437
81 +	227,906	--	26,302	24,852	4,587	172,165
No manageable stand	1.202.960	25.010	309.254	249.605	305.075	314,016
All classes	5,493,380	1,914,213	1,191,441	651,641	622,652	1,113,433

Table 14-Area of timberland, by stand-age and broad management classes, public ownerships, Northwest Florida, 1994

Stand-age class Wears)	All classes	Broad management class				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
			Acres			
O-10	114,058	59,259	24,331	19,202	8,520	2,746
1 l-20	116,530	67,967	32,320	5,213	11,030	--
21-30	85,503	56,208	22,164	4,740	--	2,391
31-40	55,164	18,208	29,843	2,963	--	4,150
41-50	104,006	9,688	74,918	12,706,	--	6,700
51-60	174,300	--	132,260	13,141	--	28,899
-61-70	142,626	--	79,854	15,219	--	47,553
71-80	82,157	--	26,965	--	--	55,192
81 +	121,109	--	23,723	5,171	2,491	89,724
No manageable stand	414,918	8,251	148,887	113,136	70,780	73,864
All classes	1,410,371	219,581	595,265	191,485	92,821	311,219

Table 15—Area of timberland, by stand-age and broad management classes, forest industry, ' Northwest Florida, 1994

Stand-age class (years)	All classes	Broad management class				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
			Acres			
0-10	577,296	488,302	19,935	39,568	20,330	9,161
1 l-20	348,700	290,858	17,377	21,141	--	19,324
21-30	155,753	127,927	11,503	10,775	2,392	3,156
31-40	64,397	31,176	17,343	3,156	--	12,722
41-50	70,739	--	34,018	5,755	3,363	27,603
51-60	64,117	2,393	21,925	11,211		28,588
61-70	71,724	--	19,074	5,782	3,800	43,068
71-80	40,836	2,579	--	3,203	--	35,054
81 +	70,365	--	2,579	8,911	--	58,875
No manageable stand	282,720	8,719	72,022	44,940	32,503	124,536
All classes	1,746,647	95 1,954	215,776	154,442	62,388	362,087

' Includes 36,432 acres of other private land under long-term lease.

Table 16—Area of timberland, by stand-age and broad management classes, other private ownerships, [1] Northwest Florida, 1994

Stand-age class (years)	All classes	Broad management class				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
		Acres				
O-10	661,669	409,458	61,185	69,255	102,646	19,125
1 l-20	317,065	173,278	58,876	36,821	36,461	11,629
21-30	216,791	109,394	38,360	18,599	30,286	20,152
31-40	138,307	35,616	34,383	19,991	7,632	40,685
41-50	199,402	4,494	55,478	30,468	33,976	74,986
51-60	113,798	2,398	30,892	10,169	25,563	44,776
61-70	98,842	--	10,354	13,339	18,748	56,401
71-80	48,734		2,527	4,773	8,243	33,191
81 +	36,432	--	--	10,770	2,096	23,566
No manageable stand	505,322	8,040	88,345	91,529	201,792	115,616
All classes	2,336,362	742,678	380,400	305,714	467,443	440,127

[1] Excludes 36,432 acres of other private land under long-term lease to forest industry.

Table 17 -Area of timberland, by broad management and stand-volume classes, Northwest Florida, 1994

Broad management class	All classes	Stand-volume class (cubic feet of growing stock per acre)				
		o-499	500-999	1000-l 499	1500-l 999	2000 +
		Acres				
Pine plantation	1,914,213	1,269,591	244,972	208,523	107,957	83,170
Natural pine	1,191,441	350,646	236,427	178,541	154,176	271,651
Oak-pine	651,641	332,061	119,327	79,963	32,681	87,609
Upland hardwood	622,652	411,683	70,686	52,141	38,228	49,914
Lowland hardwood	1,113,433	243,918	122,864	154,219	180,011	412,421
All classes	5,493,380	2,607,899	794,276	673,387	513,053	904,765

Table 18-Volume of growing stock on timberland, by broad management class, species group, and stand-age class, Northwest Florida, 1994

Broad management class and species group	All classes	No manageable stand	Stand-age class (years)								
			O-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81 +
			Thousand cubic feet								
Pine plantation											
Softwood	894,669	2,735	52,288	330,682	353,378	106,563	31,696	10,349	--	6,978	--
Hardwood	13,394	--	1,622	5,953	4,396	1,175	--	248	--	--	--
Total	908,063	2,735	53,910	336,635	357,774	107,738	31,696	10,597	--	6,978	--
Natural pine											
Softwood	1,433,460	129,609	32,170	60,737	74,148	139,198	294,576	360,650	216,612	63,552	62,208
Hardwood	108,446	5,074	7,440	2,652	490	10,501	18,971	35,453	19,526	1,637	6,702
Total	1,541,906	134,683	39,610	63,389	74,638	149,699	313,547	396,103	236,138	65,189	68,910
Oak-pine											
Softwood	397,064	87,330	16,165	19,809	19,272	18,761	52,398	60,316	58,454	9,456	55,163
Hardwood	2 10,063	17,227	5,691	10,938	8,868	16,579	39,772	38,798	30,647	8,846	32,697
Total	607,127	104,557	21,856	30,747	28,140	35,280	92,170	99,114	89,101	18,302	87,860
Upland hardwood											
Softwood	60,449	22,109	8,748	5,566	5,901	1,282	6,602	4,234	3,579	752	1,676
Hardwood	317,801	33,980	35,837	18,344	22,690	14,936	64,252	54,185	39,517	23,488	10,572
Total	378,250	56,089	44,585	23,910	28,591	16,218	70,854	58,419	43,096	24,240	12,248
Lowland hardwood											
Softwood	489,674	39,276	4,183	2,467	7,981	22,456	36,771	37,500	95,198	54,052	189,790
Hardwood	1,560,475	116,053	2,511	10,533	22,762	61,267	188,857	218,125	311 ,126	255,784	373,457
Total	2,050,149	155,329	6,694	13,000	30,743	83,723	225,628	255,625	406,324	309,836	563,247
All types											
Softwood	3‘275,316	281,059	113,554	419,261	460,680	288,200	422,043	473,049	373,843	134,790	308,837
Hardwood	2,210,179	172,334	53,101	48,420	59,206	104,458	311,852	346,809	400,816	289,755	423,428
Total	5‘485,495	453,393	166,655	467,681	519,886	392,658	733,895	819,858	774,659	424,545	732,265

Table 19—Average net annual growth of growing stock on timberland, by broad management class, species group, and stand-age class, Northwest Florida, 1987-l 993

Broad management class' and species group	All classes	No manageable stand	Stand-age class' (years)								
			O-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81 +
			Thousand cubic *feet*								
Pine plantation											
Softwood	115,153	375	38,484	48,857	21,569	4,901	871	--	96	--	--
Hardwood	1.546	--	144	781	470	114	37	--	--	--	--
Total	116,699	375	38,628	49,638	22,039	5,015	908	--	96	--	--
Natural pine											
Softwood	*46,961*	5,586	3,753	5,154	5,226	11,271	8,301	5,226	1,454	1,039	-49
Hardwood	5.811	765	593	110	397	872	2,034	673	205	162	--
Total	52,772	6,351	4,346	5,264	5,623	12,143	10,335	5,899	1,659	1,201	-49
Oak-pine											
Softwood	10,919	3,196	1,634	1,836	536	1,053,	1,747	465	28	229	195
Hardwood	5,721	1,102	301	630	388	1,156	1,235	280	432	16	181
Total	16,640	4,298	1,935	2,466	924	2,209	2,982	745	460	245	376
Upland hardwood											
Softwood	2,892	1,366	638	296	294	194	170	161	-155	-131	59
Hardwood	11,069	2,530	697	2,169	846	1,840	1,227	1,385	247	-89	217
Total	13,961	3,896	1,335	2,465	1,140	2,034	1,397	1,546	92	-220	276
Lowland hardwood											
Softwood	9,741	1,441	194	327	844	907	714	2,179	698	362	2,075
Hardwood	36,970	6,123	504	689	1,836	5,610	4,534	6,026	4,415	2,807	4,426
Total	46,711	7,564	698	1,016	2,680	6,517	5,248	8,205	5,113	3,169	6,501
All types											
Softwood	185,666	11,964	44,703	56,470	28,469	18,326	11,803	8,031	2,121	1,499	2,280
Hardwood	61,117	10,520	2,239	4,379	3,937	9,592	9,067	8,364	5,299	2,896	4,824
Total	246,783	22,484	46,942	60,849	32,406	27,918	20,870	16,395	7,420	4,395	7,104

' Classifications at the beginning of the remeasurement period.

Table 20-Average annual removals of growing stock on timberland, by broad management class, species group, and stand-age class, Northwest Florida, 1987-l 993

Broad management class' and species group	All classes	No manageable stand	Stand-age class' (years)								
			O-10	1 l-20	21-30	31-40	41-50	51-60	61-70	71-80	81 +
			Thousand cubic feet								
Pine plantation											
Softwood	73,905	423	852	15,722	44,529	10,169	2,210	--	--	--	--
Hardwood	1,153	--	--	48	939	110	56	--	--	--	--
Total	75,058	423	852	15,770	45,468	10,279	2,266	--	--	--	--
Natural pine											
Softwood	67,075	5,142	1,028	2,766	8,580	18,387	17,957	7,463	5,752	--	--
Hardwood	3,313	29	--	108	917	611	910	674	64	--	--
Total	70,388	5,171	1,028	2,874	9,497	18,998	18,867	8,137	5,816	--	--
Oak-pine											
Softwood	8,685	1,647	430	586	1,321	1,020	1,827	1,738	116	--	--
tfardwood	3,310	290	--	100	145	886	831	1,058	--	--	--
Total	11,995	1,937	430	686	1,466	1,906	2,658	2,796	116	--	--
Upland hardwood											
Softwood	1,251	425	--	350	--	107	--	102	--	--	267
Hardwood	6,121	865	700	1,347	--	850	37	1,231	--	--	1,091
Total	7,372	1,290	700	1,697	--	957	37	1,333	--	--	1,358
Lowland hardwood											
Softwood	2,128	310	--	--	--	170	165	1,257	226	--	--
Hardwood	18,558	1,072	201	506	537	719	1,124	7,657	5,108	145	1,489
Total	20,686	1,382	201	506	537	889	1,289	8,914	5,334	145	1,489
All types											
Softwood	153,044	7,947	2,310	19,424	54,430	29,853	22,159	10,560	6,094	--	267
Hardwood	32,455	2,256	901	2,109	2,538	3,176	2,958	10,620	5,172	145	2,580
Total	185,499	10,203	3,211	21,533	56,968	33,029	25,117	21,180	11,266	145	2,847

' *Classifications at the beginning of the remeasurement period.*

Table 21 --Merchantable volume of live trees and growing stock on timberland, by forest-type and species groups, Northwest Florida, 1994

Forest-tvoa aroup	Live trees					Growing stock				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand cubic feet									
Longleaf-slash pine	1.907.276	1.779'793	15,938	58,836	52,709	1,867,885	1.773.198	14,786	52,888	27,035
Loblolly-shortleaf pine	598,051	541,684	1,593	18,144	38,630	582,084	538,572	1,593	14,572	27,347
Oak-pine	669,592	352,608	47,918	132,221	136,845	607,127	350,756	46,308	116,101	93,962
Oak-hickory	463,887	61,475	_	84,983	317,449	378,250	60,449	_	78.085	239,716
Oak-gum-cypress	2,358,108	105,832	407.615	1.387.647	457.214	2,028,255	105,632	381,279	1,197,785	343,559
Elm-ash-cottonwood	26,865	1,662	1,101	14,204	9,898	21,894	1,862	1,101	12,193	6,938
All types	6.023.779	2,842,854	474,165	1,694,015	1,012,745	5.485.495	2.830.269	445,047	1,471,622	738,557

Table 22—Area of timberland treated or diiturbed annually and retained in timberland, by treatment or disturbance and ownership class, Northwest Florida, 1997 to 1994

Treatment or disturbance	All ownerships	Ownership class			
		Public	Forest industrv	Forest industry-leased	Other Drivate
		Acres'			
Final harvest	98,585	7,948	43,352	1,515	45,770
Partial harvest[2]	10,181	2,821	2,603	--	4,957
Commercial thinning	22,315	5,861	8,111	1,552	6,791
Other stand improvement	2,763	677	480	_	1,606
Site preparation	84,360	6,892	48,525	1,515	27,428
Artificial regeneration[3]	116,019	7,850	57,731	1,515	48,923
Natural regeneration[3]	32,128	3,077	6,091	_	22,960
Other treatment	23,515	7,018	4,345	--	12,152
Natural disturbance	30,228	4,819	7,618	_	17,791

[1] Since some acres experience more than one treatment or disturbance, there are no column totals.

[2] Includes high-grading and some selective cutting.

[3] Includes establishment of trees for timber production on forest and nonforest land.

Table 23-Area of timberland treated or disturbed annually and retained in timberland, by treatment or disturbance and broad management class, Northwest Florida, 1987 to 1994

Treatment or disturbance	All classes	Broad management class[1]				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
			Acres[2]			
Final harvest	98,585	42,640	38,389	5,968	3,858	7,730
Partial harvest[3]	10,181	--	6,488	2,916	--	777
Commercial thinning	22,315	15,571	6,416	328	--	--
Other stand improvement	2,763	729	1,142	--	480	412
Site preparation	84,360	30,639	29,245	6,079	10,250	8,147
Other treatment	23,515	433	11,858	3,925	4,023	3,376
Natural disturbance	30,228	12,216	8,059	2,286	754	6,913

[1] Classification before treatment or disturbance.

[2] Since some acres experience more than one treatment or disturbance, there are no column totals.

[3] Includes high-grading and some selective cutting.

Table 24-Area of timberland regenerated annually, by type of regeneration and broad management class, Northwest Florida, 1987 to 1994

Type of regeneration	All classes	Broad management class[1]				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
			Acres			
Artificial regeneration following harvest	53,297	46,133	--	5,908	1,256	--
Natural regeneration following harvest	14,561	--	3,282	1,667	7,623	1,989
Other artificial regeneration on forest land	42,851	40,131	--	2,720	--	--
Other natural regeneration on forest land	12,348	--	4,298	2,285	4,190	1,575
Artificial regeneration on nonforest land	19,871	19,871	--	--	--	--
Natural reversion of nonforest land	5,219	--	3,381	1,538	300	--
Total	148,147	106,135	10,961	14,118	13,369	3,564

[1] Classification after regeneration.

Table 25-Area of timberland, by treatment opportunity and broad management classes, Northwest Florida, 1994

Treatment opportunity class	All classes	Broad management class				
		Pine plantation	Natural pine	Oak-pine	Upland hardwood	Lowland hardwood
			Acres			
Salvage	31,035	7,828	15,704	--	--	7,503
Harvest	217,893	2,579	48,249	29,911	4,587	132,567
Commercial thinning	199,369	157,106	34,398	--	--	7,865
Other stand improvement	364,529	84,940	101,589	46,072	100,883	31,045
Stand conversion	49,066	12,767	--	12,391	18,625	5,283
Regeneration	1,148,611	25,010	300,606	249, 605	305,075	268,315
Stand in relatively good condition	3,231,804	1,623,983	682,247	311,271	193,482	420,821
Adverse sites[1]	251,073	--	8,648	2,391	--	240,034
All classes	5,493,380	1,914,213	1,191,441	651,641	622,652	1,1 13,433

[1] Areas where management opportunities are severely limited because of steep slopes or poor drainage.

Table 26-Area of timberland, by treatment opportunity and ownership classes, Northwest Florida, 1994

Treatment opportunity class	All ownerships	Ownership class			
		Public	Forest industry	Forest industry-leased	Other private
			Acres		
Salvage	31,035	7,426	15,364	--	8,245
Harvest	217,893	100,777	61,826	--	55,290
Commercial thinning.	199,369	15,179	96,126	5,042	83,022
Other stand improvement	364,529	73,907	81,028	--	209,594
Stand conversion	49,066	7,790	13,090	--	28,186
Regeneration	1,148,611	392,578	270,591	--	485,442
Stand in relatively good condition	3,231,804	705,043	1,1 00,863	31,390	1,394,508
Adverse sites[1]	251,073	107,871	71,327	--	72,075
All classes	5,493,380	1,410,371	1,710,215	36,432	2,336,362

[1] Areas where management opportunities are severely limited because of steep slopes or poor drainage.

Table 27--Merchantable volume of live trees and growing stock on timberland, by ownership class end species group, Northwest Florida, 1994

Ownersliip class	Live trees					Growing stock				
	All species	Pine	Other softwood	soft hardwood	Hard hardwood	All species	Pine	Other softwood	soft hardwood	Hard hardwood
	Thousand cubic feet									
National forest	665,550	393,379	87,209	149,795	35,167	820,014	391,917	77,511	125,823	24,763
Other public	1.440.479	693,560	105,460	398.302	243,157	1,271,803	689,902	99,718	338,336	143,847
Forest industry	1.435.296	686,949	161,359	419,531	167,457	1,344,290	683,921	152,319	373,585	134,465
Forest industry-leased	18.414	17,640	--	--	774	18,414	17,640	--	--	774
Other private	2,464,040	1,051,326	120,137	726,387	566,190	2,230,974	1.046.889	115,499	633,878	434,708
All ownerships	6,023,779	2.842.854	474,165	1,694,015	1,012,745	5,485,495	2,830,269	445,047	1,471,622	738,557

Table 29-Volume of sawtimber on timberland, by ownership class and species group, Northwest Florida, 1994

Ownership class	Small sawtimber'					Large sawtimber²				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	soft hardwood	Hard hardwood
	Thousand bawd fear									
National forest	1.310.173	1,020,851	136,627	124,424	28,271	749,705	441,441	83,835	162,630	81,799
Other public	2,310,072	1,625,566	186,013	366,194	132,299	2,567,394	1,278,742	253,326	664,615	370,711
Forest industry	1,761,679	961,804	256,222	438,667	104,988	1,818,607	504,464	292,808	633,774	387,561
Forest industry-leased	12,236	12,236	--	--	--	--	--	--	--	--
Other private	3,367,346	1,927,974	238,880	728,170	472,322	3,139,538	1,346,796	178,313	732,366	882,063
All ownerships	8,761,506	5.548.431	817,742	1.657.455	737,878	8,275,244	3,571,443	808,282	2,193,385	1,702,134

[1] Volume of sawtimber trees less than 15.0 inches et d.b.h.

[2] Volume of sawtimber trees 15.0 inches and larger at d.b.h.

Table 29—Average net annual growth and removals of growing stock on timberland, by ownership class and species group, Northwest Florida, 1987-l 993

Ownership class	Net annual growth					Annual timber removals				
	All species	Pine	Other softwood	Soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand cubic feet									
National forest	12,264	6,944	914	1,840	566	6,701	6,701	--	--	--
Other public	32,039	20,208	1,676	5,886	4,267	17,755	14,653	--	1,427	1,475
Forest industry	79,735	65,549	2,013	6,584	5,589	58,291	53,933	266	1,221	2,869
Forest industry-leased	1,798	1,740	--	--	58	1,517	1,436	--	--	81
Other private	120.947	81,755	2,865	17,805	18,522	101,235	75,597	256	10,114	15,268
All ownerships	246,783	176,196	7.470	32,115	29,002	185,499	152,520	524	12,762	19,693

Table 30—Average net annual growth and removals of sawtimber on timberland, by ownership class and species group, Northwest Florida, 1987-1993

Ownership class	Net annual growth					Annual timber removals				
	All species	Pine	Other softwood	soft hardwood	Hard hardwood	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand board feet									
Nstional forest	44,468	32,751	3,470	5,658	2,589	23,675	23,675	--	--	--
Other public	132,606	81,897	8,932	23,795	17,982	60,291	49,793	--	5,295	5,203
Forest industry	148,816	92,498	9,127	27,747	19,444	107,238	94,795	416	3,432	8,595
Forest industry-leased	2,997	2,946	--	--	51	3,674	3,286	--	--	388
Other private	333,397	204,753	13,192	49,293	66,159	313,714	230,325	1,062	30,249	52,058
All ownerships	662,284	414,845	34,721	106,493	106,225	508,592	401,874	1,498	38,976	66,244

Table 31 -Volume of timber on timberland, by class of timber and species group, Northwest Florida, 1994

Class-of timber	All species	Pine	Other softwood	Soft hardwood	Hard hardwood
	Thousand *cubic feet*				
Sawtimber trees					
Saw-log portion	3,168,048	1,652,101	317,553	755,446	442,948
Upper-stem portion'	409,324	149,064	35,046	153,161	72,053
Total	3,577,372	1,801,165	352,599	908,607	515,001
Poletimber trees	1,908,123	1,029,104	92,448	563,015	223,556
All growing-stock trees	5,485,495	2,830,269	445,047	1,471,622	738,557
Rough trees					
Sawtimber size	202,987	3,960	5,524	75,692	117,811
Poletimber size	255,876	7,895	6,263	102,256	139,462
Total	458,863	11,855	11,787	177,948	257,273
Rotten trees					
Sawtimber size	70,605	730	15,853	39,581	14,441
Poletimber size	8,816	--	1,478	4,864	2,474
Total	79,421	730	17,331	44,445	16,915
Salvable dead trees					
Sawtimber size	1,038	931	107	--	--
Poletimber size	424	391	33	--	--
Total	1,482	1,322	140	--	--
Total, all timber	6,025,241	2,844,176	474,305	1,694,015	1,012,745

' Includes cull sections in the saw-log portion.

Table 32-Number of live trees on timberland, by species and diameter class, Northwest Florida, 1994

Species	All classes	Diameter class (inches et breast height) 1.0-2.9	3.0-4.9	5.0-6.9	7.0-6.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-16.9	19.0-20.9	21.0-26.9	29.0 and larger
						Thousand trees							
Softwood													
Longleaf pine	112,687	47,944	21,026	10,151	7,382	8,873	8,641	5,729	2,479	511	124	27	--
Slash pine	611,873	166,361	204,918	133,001	54,795	16,662	7,455	4,501	2,239	1,177	390	343	11
Shortleaf pine	4,322	1,846	338	624	506	155	234	238	216	76	49	40	--
Loblolly pine	212,781	77,565	76,093	36,747	11,087	4,501	2,601	1,446	1,152	888	470	418	15
Pond pine	8,412	1,319	2,627	1,584	1,553	516	350	236	136	50	10	31	--
Virginia pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Pitch pine	--	--	--	--	--								
Table Mountain pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Spruce pine	4,562	2,980	494	211	415	75	104	93	63	82	39	22	4
Sand pine	133,605	63,983	42,997	18,284	6,062	2,189	1,185	477	343	58	19	8	--
Eastern white pine	--	--	--	--	--			--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--								
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--	--	--
Baldcypress	13,249	4.431	2,446	1,937	1,293	*916*	477	543	431	363	183	153	76
Pondcypress	84,782	38,080	18,862	11,089	6,513	3,781	2,760	1,923	884	349	318	207	16
Cedars	26,995	14,661	4,703	2,189	1,455	1,474	1,174	673	333	166	104	59	4
Total softwoods	1,213,488	439,190	374,504	213,817	91,061	39.142	24,981	15,859	8,276	3,518	1,706	1,308	126
Hardwood													
Select white oaks	5,992	2,314	1,657	777	539	1'95	179	100	89	74	48	16	4
Select red oaks	182	175	--	--	--	--	--	--	--	--	--	7	--
Chestnut oak	--	--	--	--	--	--	--	--	--	--	--	--	--
Other white oaks	43,649	25,294	8,196	3,666	2,008	1,179	754	710	524	389	299	501	129
Other red oaks	380,409	285,511	48,108	19,349	9,911	6,404	4,479	2,536	1,598	1,059	677	692	85
Hickory	10,722	6,233	1,150	1,349	656	495	184	237	250	85	46	37	--
Yellow birch	--	--	--	--	--	--	--	--	--	--	--	--	--
Hard maple	2,251	1,523	339	143	77	80	27	42	--	20	--	--	--
Soft maple	73,024	52,813	11,001	4,067	2,620	1,242	422	462	244	83	47	23	--
Beech	1,909	1,317	331	83	63	--	--	19	28	24	9	31	4
Sweetgum	80.478	52,684	11,728	6,750	2,717	2,345	1,859	1,159	623	246	208	163	--
Tupelo and blackgum	375,124	211,144	81,796	34,362	19,223	9,798	7,576	5,036	2,696	1,644	909	846	94
Ash	72,297	45,540	16,712	5,622	2,144	923	451	313	211	110	101	158	12
Cottonwood	260	183	--	--	71	--	--	--	--	--	--	6	--
Basswood	16	--	--	--	--	--	--	--	16	--	--	--	--
Yellow-poplar	12,929	5,390	2,827	1,442	787	1,068	417	343	233	184	134	96	8
Bay and magnolia	221,798	129,001	44,445	21,422	11,265	6,445	4,368	2,411	1,292	580	318	235	16
Black cherry	10,564	7,840	1,475	520	311	240	106	20	17	24	11	--	--
Black walnut	441	168	168	105	--	--	--	--	--	--	--	--	--
Sycamore	411	--	157	--	72	--	47	39	15	35	19	19	8
Black locust	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm	8,965	3,997	2,461	1,038	585	302	194	159	121	57	12	39	--
Other eastern hardwoods	431,600	314,530	79.048	26.214	7,237	2,406	995	338	294	214	169	120	35
Total hardwoods	1.733.021	1,145,657	311,599	126,909	60,286	33,122	22,058	13,920	8,251	4,828	3,007	2,989	395
All species	2,946,509	1,584,847	686,103	340,726	151,347	72,264	47,039	29,779	16,527	8,348	4.713	4,297	521

Table 33—Number of growing-stock trees on timberland, by species and diameter class, Northwest Florida, 1994

Species	All classes	Diameter class finches at breast height) 1.0-2.9	x0-4.9	5.0-6.9	7.0-6.9	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 and larger
						Thou&d *trees*							
Softwood													
Longleaf pine	109,906	45,410	20,861	9,942	7,382	8,873	8,587	5,710	2,479	511	124	27	--
Slash pine	601,555	180,321	202,616	131,276	54,602	16,662	7,432	4,501	2,224	1,177	390	343	11
Shortleaf pine	3,907	1,508	338	624	429	155	234	238	218	76	49	40	--
Loblolly pine	210,135	75,890	75,431	38,533	11,087	4,425	2,601	1,427	1,152	686	470	418	15
Pond pine	7,141	830	2,138	1,342	1,502	516	350	236	136	50	10	31	--
Virginia pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Spruce pine	3,753	2,151	494	211	415	75	104	93	63	82	39	22	4
Sand pine	126,194	57,831	42,214	16,086	5,895	2,108	1,155	477	343	58	19	8	--
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--	--	--
Baldcypress	10,901	2,359	2,277	1,937	1,293	916	477	522	416	363	183	137	21
Pondcypress	66,722	27,349	15,965	8,780	5,750	3,282	2,518	1,751	671	285	270	137	4
Cedars	24,673	13,595	3,897	2,045	1,273	1,438	1,104	673	317	166	104	59	4
Total softwoods	1,164,887	407,244	366,231	208,756	89,628	38,448	24,562	15,628	8,017	3,434	1,658	1,222	59
Hardwood													
Select white oaks	4,474	1,499	1,152	673	472	195	152	100	89	74	48	16	4
Select red oaks	7	--	--	--	--		--	--	--	--	--	7	--
Chestnut oak	--	--	--	--	--	--	--	--	--	--	--	--	--
Other white oaks	13,423	7,425	1,930	973	865	513	284	357	314	237	191	288	46
Other red oaks	266,897	184,973	40.106	16,937	8,895	5,940	4,318	2,300	1,393	965	600	608	64
Hickory	6,001	2,438	812	1,145	412	459	158	237	193	73	37	37	--
Yellow birch	--	--	--	--	--	--	--	--	--	--	--	--	--
Hard maple	804	321	--	143	77	43	--	--	--	20	--	--	--
Soft maple	24,766	14,100	5,210	2,284	1,495	771	291	349	135	71	37	23	--
Beech	1,041	652	175	83	63	--	--	19	--	24	9	12	4
Sweetgum	62,209	37,901	8,925	6,364	2,602	2.303	1,808	1,115	623	220	208	142	--
Tupelo and blackgum	180,994	85,568	50,303	25,965	15,590	8,221	6,250	4.260	2,245	1,316	693	544	39
Ash	17.003	9,546	3.604	1,409	886	494	346	253	151	110	92	112	--
Cottonwood	71	--	--	--	71	--	--	--	--	--	--	--	--
Basswood	16	--	--	--	--	--	--	--	16	--	--	--	--
Yellow-poplar	11,705	4,736	2,342	1,442	731	1,068	417	343	233	184	125	76	8
Bay and magnolia	143.149	75,221	30,121	15,616	8,954	5,611	3,762	1,989	959	508	230	167	11
Black cherry	4,681	2,661	984	391	311	192	81	20	17	13	11	--	--
Black walnut	--	--	--	--	--	--	--	--	--	--	--	--	--
Sycamore	411	--	157	--	72	--	47	39	15	35	19	19	8
Black locust	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm	2,796	498	980	258	404	189	114	138	121	45	12	39	--
Other eastern hardwoods	7,482	4,128	1,494	740	435	239	131	177	72	24	19	23	--
Total hardwoods	747,730	411,665	148,295	74,423	42,135	26,238	18,157	11,696	6,576	3,919	2,331	2,111	184
AH species	1.912.617	818,909	514,526	283,179	131,763	64,886	42,719	27,324	14,593	7,353	3,989	3,333	243

Table 34--Merchantable volume of live trees on timberland, by species and diameter class, Northwest Florida, 1994

Species	All classes	Diameter class (inches at breast height) 5.0-6.9	7.0-6.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-16.9	19.0-20.9	21 .a 28.9	29.0 and larger
					Thousand cubic *feet*						
Softwood											
Longleaf pine	666,615	30,204	54,346	116,065	160,362	170,625	99,516	25,620	7,446	2,207	--
Slash pine	1.406.926	342,540	340.106	205,196	154,311	136,629	96,019	65,033	27,467	35,513	2,090
Shortleaf pine	39,444	1,734	3,026	1,664	5,010	7,662	9,133	3,907	3,262	3,606	--
Loblolly pine	475,275	92,605	66,256	51,926	50,361	46,115	47,653	38,251	33,836	44,613	3,459
Pond pine	45,495	4,111	9,376	6,450	6,797	7,157	5,675	2,864	616	2,627	--
Virginia pine	--	--	--	--	--	--	--	--	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--	--	--
Spruce pine	23,910	982	3,105	917	1,978	3,252	3,362	4,676	2,541	2,248	649
Sand pine	163,189	48.077	40.329	24,835	20,455	12.770	12,426	2,830	1,034	633	--
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--
Baldcypress	119,151	6,991	9,716	11,372	6,313	14,939	16,114	16,500	11,394	12,870	10,942
Pondcypress	257,253	31,470	37,520	37,731	41,587	43,753	24,657	12,109	15,129	11,772	1,545
Cedars	97.761	5,983	8,509	15,411	19,217	17,566	11,668	7,652	5,949	5.210	-576
Total softwoods	3,317,019	564,897	572,291	473,767	468,391	462,706	326,225	179,262	108,696	121,299	19,461
Hardwood											
Select white oaks	25,135	2,117	2,430	2,318	3,363	2,627	3,721	3,738	3,271	1,006	524
Select red oaks	643	--	--	--	--	--	--	--		643	--
Chestnut oak		--	--	--	--	--	--	--	--	--	--
Other white oaks	157,990	9,329	9,596	10,109	10,385	13,923	15,432	15,399	16,525	37,495	19,797
Other red oaks	557,035	55,961	59,510	72,990	82,764	62,736	55,036	49,197	39,556	64,035	15,248
Hickory	42,595	3,635	3,736	5,769	3,452	6,634	9,077	4.166	3,120	2,986	--
Yellow birch		--	--	--	--	--	--	--	--	--	--
Hard maple	4,108	301	458	841	554	993	--	961	--	--	--
Soft maple	75,155	11,740	15,307	13,130	7,691	11,495	7,254	3,944	2,763	1,611	--
Beech	6,714	307	419	--	--	477	582	1,044	511	2,490	864
Sweetgum	203,001	16,168	16,786	29,960	36,537	32,672	24,137	13,333	14,345	15,063	--
Tupelo and blackgum	827,536	94,293	111,225	106,685	130,859	125,442	67,075	65,553	42,645	52,669	9,090
Ash	81,194	11,667	10,744	8,164	8,990	6,308	7,776	5,559	6,857	11,877	1,250
Cottonwood	585	--	283	--	--	--	--	--	--	302	--
Basswood	725	--	--	--	--	--	725	--	--	--	--
Yellow-poplar	80,057	5,232	6,043	12,687	6,382	9,016	10,089	9,625	8,492	9,111	1,180
Bay and magnolia	441,509	61,332	71,476	72,329	75,776	67,979	41,365	24,532	17,102	17,177	2,419
Black cherry	10,271	1,548	1,869	2,563	1,680	626	346	1,238	379	--	--
Black walnut	232	232	--	--	--	--	--	--	--	--	--
Sycamore	9,542		453	--	869	1,107	530	1,867	1,210	1,836	1,650
Black locust	--	--	--	--	--	--	--	--	--	--	--
Elm	28,612	2,029	3,662	3,375	3,002	4,204	4,841	2,467	1,085	3,727	--
Other eastern hardwoods	154,121	50,074	29,926	18,797	13,434	7,256	8,345	8,529	7,682	7,150	2,928
Total hardwoods	2,706,760	327,965	345,925	361,737	387,978	345,497	276,355	211,392	165,563	229,376	54,970
All species	6,023,779	892,662	918,216	835,524	876,369	606,205	602,580	390,654	274,261	350,677	74,431

Table 35—Volume of growing stock on timbedand, by species and diameter class, Northwest Florida, 1994

Species	All classes	Diameter class finches at breast height) 5.0-6.9	7.0-6.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-16.9	19.0-20.9	21.0-28,9	29.0 and larger
					Thousand cubic feet						
Softwood											
Longleaf pine	667,076	29,733	54,346	116,066	179,742	170,197	99,516	25,620	7,446	2,207	--
Slash pine	1,401,255	339,009	339,237	205,196	153,662	136,629	95,379	65,033	27,467	35,513	2,090
Shortleaf pine	39,139	1,734	2,721	1,664	5,010	7,662	9,133	3,907	3,262	3,606	--
Loblolly pine	473,532	92,343	66,256	51,477	50,361	45,263	47,653	36,251	33,636	44,613	3,459
Pond pine	44,741	3,573	9,160	6,450	6,797	7,157	5,675	2,664	616	2,627	--
Virginia pine	--	--	--	--	--	--		--	--		
Pitch pine	--	--	--	--	--	--			--		
Table Mountain pine	--	--	--	--	--	--	--	--	--		
Spruce pine	23,910	962	3,105	917	1,976	3,252	3,362	4,676	2,541	2,246	649
Sand pine	160,616	47,574	39,331	24.149	20,069	12,770	12,426	2,630	1,034	633	--
Eastern white pine	--	--	--	--	--	--	--		--		
Eastern hemlock	--	--	--	--	--	--	--	--	--		
Spruce and fir	--	--	--	--	--	--	--	--	--		
Baldcypress	111,251	6,991	9,716	11,372	6,313	14,555	15,696	16,500	11,394	12,246	4,266
Pondcypress	236,130	27,277	34,657	34,696	40,115	42.160	22,639	11,054	14,636	9,930	562
Cedars	95,666	5,630	7,777	15,075	16,724	17,566	11,267	7,652	5,949	5,210	576
Total softwoods	3.275.316	555,046	566,506	469,463	464,791	459,471	322,966	176,207	106,207	116,633	11,604
Hardwood											
Select white oaks	24,293	1,677	2,276	2,316	2,933	2,627	3,721	3,736	3,271	1,006	524
Select red oaks	643	--	--	--	--	--			--	643	--
Chestnut oak		--	--	--	--	--			--	--	--
Other white oaks	89,689	2,365	4,562	5,270	4,166	6,335	10.340	10,465	11,736	24,219	6,209
Other red oaks	514,035	50,610	53,347	66,523	61,097	59.037	50,323	45,605	36,395	57,432	11,266
Hickory	37,132	3,237	2,496	5,123	2,955	6,634	7,313	3,942	2,446	2,986	--
Yellow birch	--	--	--	--	--	--			--	--	
Hard maple	2,061	301	456	341	--	--	--	961	--	--	
Soft maple	52,593	6,666	9,690	6,966	5,247	9,673	4,665	3.409	2,222	1,811	--
Beech	4,673	307	419	--	--	477	--	1,044	511	1,231	664
Sweetgum	197,717	17,532	16,039	29,722	35,642	31,624	24,157	12,522	14,345	13,754	--
Tupelo and blackgum	710,882	73,619	93,722	95,759	114,565	112,429	78,084	56,962	37,000	41,249	5,273
Ash	58,378	4,022	5,524	5,054	7,462	7,545	6.340	5,559	6,506	10,344	--
Cottonwood	283	--	263	--	--	--	--	--	--	--	
Basswood	725	--	--	--	--	--	725	--	--	--	--
Yellow-poplar	78,265	5,232	5,569	12,667	6,362	9,016	10,089	9,825	6,249	8,036	1,180
Bay and magnolia	375,128	47,019	59,115	65,360	67,100	50,129	33,755	22,702	13,616	14,391	1,919
Black cherry	6,667	1,294	1,669	2,270	1,471	626	346	610	379	--	--
Black walnut	--	--	--		--	--	--	--	--		--
Sycamore	9,542	--	453		669	1,107	530	1,867	1,210	1,836	1,650
Black locust	--	--	--	--	--	--	--	--	--	--	--
Elm	22,604	350	2,737	2.045	1,756	3,735	4,841	2,328	1,065	3,727	--
Other eastern hardwoods	22,651	2,499	2,684	2,674	2,634	5,007	2,867	1,477	1,238	1,781	--
Total hardwoods	2.210.179	217,352	263,065	306,154	336,561	308,201	236,088	185,216	140,211	184,446	30,905
All species	5,485,495	772,398	629,571	775,837	821,352	767,872	561,036	363,423	248,418	303.279	42,709

Table 36-Volume of sawtimber on timberland, by species and diameter class, Northwest Florida, 1994

Species	All classes	Diameter class (inches at breast, height) 9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-16.9	19.0-20.9	21.0-26.9	29.0 and larger
				Thousand board feet					
Softwood									
Longleaf pine	3,053,441	460.908	866,535	914,356	573.340	156,247	47,193	14,662	--
Slash pine	3.566.007	756,355	705,116	726,002	546,600	396,979	175,670	241.411	15,474
Shortleaf pine	166,709	6,974	23,098	40,629	50,947	22,976	20,167	23,696	--
Loblolly pine	1,686,140	185,399	226,162	236,108	266,271	230,621	213,561	300,669	25,329
Pond pine	160,946	25,072	30,620	36,937	31,701	15,750	3,764	16,682	--
Virginia pine	--	--	--	--	--	--	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--
Spruce pine	111,397	3,760	9,462	17,299	16,612	27,143	15,309	14,142	5,650
Sand pine	353,234	93,723	94,240	67,436	71,396	15,641	6,473	4,125	--
Eastern white pine	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--
Baldcypress	450,500	34,322	31,176	64.210	76,714	64,252	61,478	70,767	27,559
Pondcypress	764,294	109,726	156,627	189,173	111,003	57,120	79,641	57,483	3,519
Cedars	411,230	57,562	64,675	90,047	61,701	43,996	35,826	33,320	3,881
Total softwoods	10,745,898	1,753,823	2,228,153	2,384,197	1,810,485	1.050.927	659,324	777,577	61,412
Hardwood									
Select white oaks	60,791		10,260	10,491	16,525	17,970	16,566	5,537	3,422
Select red oaks	3,446		--	--	--	--	--	3,446	--
Chestnut oak	--		--	--	--	--	--	--	--
Other white oaks	377,196		14,909	34.080	45,567	49‘423	57,993	126,613	46.391
Other red oaks	1.632.114		311,127	257,437	246,664	231,615	193,993	327,460	69,618
Hickory	118,555		10,199	27.044	33,176	19,016	12,754	16,366	--
Yellow birch	--		--	--	--	--	--	--	--
Hard maple	4,502		--	--	--	4,502	--	--	--
Soft maple	109,486		17,294	37,125	19,667	15,467	10,699	9,236	--
Beech	16,893		--	1,622	--	4,127	2,069	5,127	3.748
Sweetgum	608,703		126,051	135,964	116,387	65.984	79,792	62,525	--
Tupelo and blackgum	1,853,716		363,966	431,614	337,775	278,111	164,637	225,293	32,118
Ash	196,062		24,704	29,243	27,342	26,395	32.706	55,692	--
Cottonwood	--		--	--	--	--	--	--	--
Basswood	3,120		--	--	3,120	--	--	--	--
Yellow-poplar	276,760		30,802	38.422	49,677	52.720	47,106	49,913	6,120
Bay and magnolia	609,203		223,509	192,053	141,249	102,623	64,646	73,605	11,316
Black cherry	14,113		5.034	2,599	1,535	2,976	1,969	--	--
Black walnut	--		--	--	--	--	--	--	--
Sycamore	43,748		3,039	4,150	2,231	6,656	5,961	9,919	9,772
Black locust	--		--	--	--	--	--	--	--
Elm	75,641	--	5,964	14,671	20,611	10,694	5,066	16,615	--
Other eastern hardwoods	66,561	--	9,273	20,465	13,286	7,070	6,577	9,910	--
Total hardwoods	6,290,852	--	1,158,153	1,237,180	1,068,832	697,549	722,776	1,021,857	164,505
All species	17.036.750	1,753,823	3,386,306	3,621,377	2,879,317	1,948,476	1,382,100	1.799.434	265,917

Table 37—Volume of sawtimber on timberland, by species, size class, and tree grade, Northwest Florida, 1994

Species	All size classes					Trees 15.0 inches d.b.h. and larger				
	All grades	Tree grade				All grades	Tree grade			
		1	2	3	4		1	2	3	4
	Thousand board feet									
Softwood										
Yellow pines[1]	9,119,874	2.576.349	2,683,103	3.860.422	_	3,571,443	1,347,123	1.035.675	1,188,645	_
Eastern white pine[2]	_	_	_	_	_	_	_	_	_	_
Spruce and fir[2]	_	_	_	_	_	_	_	_	_	_
Cypress[3]	1,214,794	323,194	415,708	471,338	4,554	629,556	323,194	239,623	64,027	2,712
Other eastern softwoods[2]	411,230	97,913	142,834	146,933	23,550	178,726	66,701	63,876	44,921	3,228
Total	10,745,898	2,997,456	3,241,645	4,478,693	28,104	4,379,725	1.737.018	1.339.174	1,297,593	5,940
Hardwood[3]										
Select white and red oaks	84,237	11,392	31,786	34,888	6,171	63,466	11,392	31,786	17,181	3,107
Other white and red oaks	2,009,310	220,008	572,499	999,789	217,014	1,391,757	220,008	502,571	561,463	107,715
Hickory	118,555	11,426	47,864	51,128	8,137	61,312	11,426	38,751	22,998	8,137
Yellow birch	_	_	--	_	_	_	_	_	--	_
Hard maple	4,502	_	--	2,228	2,274	4,502	_	_	2,228	2,274
Sweetgum	608,703	78,028	232,282	267,036	31,357	344,688	78,028	167,171	83,647	15,842
Ash, walnut, and black cherry	210,195	14,713	82,711	106,644	6,127	148,615	14,713	71,236	61,131	1,535
Yellow-poplar	276,760	47,007	123,523	100,188	6,042	207,536	47,007	112,039	48,490	_
Other eastern hardwoods	2,978,590	277,640	1,030,659	1,590,881	79,410	1,653,643	277,640	760,605	573,670	41,728
Total	6,290,852	660,214	2.121.324	3,152,782	356,532	3,895,519	660,214	1,684,159	1,370,808	180,338
All species	17,036,750	3,657,670	5.362.969	7,631,475	384,636	8,275,244	2,397,232	3.023.333	2,668,401	186,278

[1] For yellow pines, tree grade is based on "Southern Pine Tree Grades for Yard and Structural Lumber," Research Paper SE-40, published by the Southeastern Forest Experiment Station, Asheville, NC, 1966. Tree grade 4 does not apply to yellow pine.

[2] For other softwoods (excluding cypress), tree grade is based on "Tree Grades for Eastern White Pine," Research Paper NE-214, published by the Northeastern Forest Experiment Station, Radnor, PA, 1971.

[3] For hardwoods and cypress, tree grades 1, 2, and 3 are based on "Hardwood Tree Grades for Factory Lumber," Research Paper NE-333, published by the Northeastern Forest Experiment Station, Radnor, PA, 1976. Grade 4 trees are sawtimber trees not qualifying as tree grades 1, 2, or 3. The butt log of these trees qualify as construction (tie and timber) logs based on "A Guide to Hardwood Log Grading (revised)," General Technical Report NE-I, published by the Northeastern Forest Experiment Station, Radnor, PA, 1971.

Table 38—Cubic volume in the merchantable saw-log portion of sawtimber trees on timbirland, by species and diameter class, Northwest Florida, 1994

Species	All classes	Diameter class finches at breast height) 9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-16.9	19.0-20.9	21.0-26.9	29.0 and larger
				Thousand cubic *feet*					
Softwood									
Longleaf pine	555,700	97,777	164,559	162,059	96,465	25,267	7,349	2,184	--
Slash pine	655,197	182,834	139,136	131,866	92,816	64,100	27,215	35,161	2,069
Shortleaf pine	33,127	1,494	4,564	7,511	8,893	3,846	3,228	3,569	--
Loblolly pine	293,221	40,163	45,160	42,960	46,190	37,624	33,493	44.167	3,424
Pond pine	29,789	5,367	6,192	6,836	5,536	2,645	612	2,801	--
Virginia pine	--	--	--	--	--	--	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--
Spruce pine	19,069	740	1,807	3,114	3,260	4,590	2,512	2,226	840
Sand pine	65,978	19,497	16,177	12,060	12,014'	2,568	1,016	626	--
Eastern white pine	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--
Baldcypress	65,054	8,126	6,969	13,099	14,702	15,474	10,606	11,737	4,141
Pondcypress	156,967	26,916	35,166	36.640	21,326	10,523	14,055	9,611	548
Cedars	75,512	12.087	16,863	16,642	10,862	7,462	5,851	5,155	570
Total softwoods	1,969,654	375,023	438,613	435,027	312,104	174,121	106,137	117.037	11,592
Hardwood									
Select white oaks	15,426	--	2,121	2,141	3,256	3,397	3,038	956	519
Select red oaks	600	--	--	--	--	--	--	600	--
Chestnut oak	--	--	--	--	--	--	--	--	--
Other white oaks	69,506	--	3,117	6,900	9,003	9,395	10.724	22,609	7,760
Other red oaks	290,200	--	59,499	48,626	43,777	41,041	33,199	53,373	10,665
Hickory	22,614	--	2,136	5,476	6,400	3,543	2,259	2,798	--
Yellow birch	--	--	--	--	--	--	--	--	--
Hard maple	670	--	--	--	--	870	--	--	--
Soft maple	21,963	--	3,624	7,718	3,957	2,999	2,003	1,662	--
Beech	3,699	--	--	392	--	909	457	1,125	618
Sweetgum	111,373	--	25,149	26,243	21,465	11,610	13,579	13,327	--
Tupelo and blackgum	371,252	--	81,171	91,704	67,776	53,022	33,921	38,614	5,044
Ash	37,903	--	5,298	6,153	5,519	5,062	6,053	9,818	--
Cottonwood	--	--	--	--	--	--	--	--	--
Basswood	632	--	--	--	632	--	--	--	--
Yellow-poplar	48,097	--	5,973	7,313	8,954	9,062	7,807	7,600	1,166
Bay and magnolia	167,095	--	48,609	41,200	29,773	20,866	12,818	13,910	1,699
Black cherry	2,772	--	1,064	520	298	544	346	--	--
Black walnut	--	--	--	--	--	--	--	--	--
Sycamore	7,917	--	621	842	441	1,637	1,093	1,711	1,572
Black locust	--	--	--	--	--	--	--	--	--
Elm	14,719	--	1,220	3,000	4,100	2,047	962	3,390	--
Other eastern hardwoods	11,752	--	1,747	3,865	2,270	1,276	1,034	1,558	--
Total hardwoods	1,198,394		239,351	252,093	207,821	167,322	129,293	173,251	29,463
All species	3,168,048	375,023	677,964	667,120	519,725	341,443	235,430	290,286	41,055

Table 39-Total volume of live trees on timberland, by species and diameter class, Northwest Florida, 1994

Species	All classes	Diameter class finches 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	17.0-18.9	19.0-20.9'	21.0-28.9	29.0 and larger
						Thousand cubic feet							
Softwood													
Longleaf pine	829,398	10,595	25,837	42,107	65,458	136,537	205,164	192,364	111,672	28,890	8,309	2,465	--
Slash pine	1,985,135	49,648	218,736	483,933	411,903	237,338	175,256	155,949	107.474	72,534	30,598	39,447	2,319
Shortleaf pine	45,667	227	195	2,365	3,669	2.187	5,714	8,924	10,297	4,394	3,659	4,036	--
Loblolly pine	666,873	18,093	75,439	133,503	80,996	60,593	57,639	52,245	53,738	42,967	37,923	49,876	3,861
Pond pine	56,923	351	2,933	5,684	11,300	7,506	7.817	8,166	6,453	3,043	700	2,970	--
Virginia pine			--	--	--	--	--	--	--	--	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Spruce pine	28,469	634	385	1,330	3,726	1,064	2,259	3,684	3,796	5,264	2,855	2,522	950
Sand pine	265,858	15,739	43,510	70,916	49.717	29,112	23,489	14,513'	14,030	2,961	1,161	710	
Eastern white pine		--	--	--	--	--	--	--	--	--	--	--	--
Eastern hemlock	--		--	--	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--	--	--
Baldcypress	153,051	1,032	3,505	10,304	12,472	14,101	10,138	18,081	19,423	19,828	13,640	15,473	15,054
Pondcypress	388,060	11,863	26,799	54,192	52,290	49,865	53,737	55,830	31,470	15,514	19,177	15,255	2,068
Cedars	125,982	4,041	6,155	8,175	10,411	18,234	22,520	20,450	13,563	8,870	6,890	6,018	665
Total softwoods	4,545,426	112,223	403,494	812,509	701,942	556,537	563,733	530,206	371,916	204,265	124,912	138,772	24,917
Hardwood													
Select white oaks	34,857	495	2,399	3,138	3,205	2,942	4.230	3,288	4,613	4,617	4.024	1,243	663
Select red oaks	817	30	--	--	--	--	--	--	--	--	--	787	--
Chestnut oak	--	--	--	--	--	--	--	--	--	--	--	--	--
Other white oaks	214,844	5,432	9,470	15,725	13,208	13,004	13,056	17.308	18,989	18,887	20,156	45,567	24,042
Other red oaks	638,740	57,431	57,685	87,090	80,141	93,885	104,577	79,094	68,958	61,350	49,279	79,932	19,318
Hickory	55,536	1,009	1,108	5,530	4,914	7,226	4,251	8,065	11,006	5,090	3.750	3,587	--
Yellow birch	--	--	--	--	--	--	--	--	--	--	--	--	--
Hard maple	5,892	331	319	540	606	1,043	676	1,200	--	1,177	--	--	--
Soft maple	123,917	13,038	16,435	16,864	19,367	16,091	9,256	13,924	8,795	4,687	3,302	2,158	--
Beech	9,324	240	441	428	552	--	--	591	746	1,286	648	3,311	1,081
Sweetgum	267,946	11,602	14,612	26,921	23,327	35,407	42,370	37,516	27,514	15,201	16,311	17,165	--
Tupelo and blackgum	1.240.433	60,420	115,997	142.871	145,239	136,527	162,426	154,767	107,632	81,783	53,504	67,017	12,250
Ash	128,286	11,329	18,928	16,651	13,182	9,789	10,453	9,631	8,941	6,343	7,841	13,689	1,499
Cottonwood	816	71	--	--	353	--	--	--	--	--	--	392	--
Basswood	828	--	--	--	--	--	--	--	828	--	--	--	--
Yellow-poplar	96,982	1,244	3,722	6,923	7,154	14,635	9,543	10,202	11,360	11,043	9,560	10.274	1,322
Bay and magnolia	645,920	32,699	62,799	89,601	90,262	88,178	90,870	69,128	49,385	29,172	20,358	20,630	2,838
Black cherry	17,022	2,719	1,797	2,082	2,055	3,095	2,228	736	409	1,450	451	--	--
Black walnut	481	18	145	318	--	--	--	--	--	--	--	--	--
Sycamore	11,563	--	471	--	562	--	1,037	1,289	615	2,170	1,400	2,119	1,900
Black locust	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm	39,070	997	3,341	3,010	4,822	4,073	3,569	4,979	5,682	2,972	1,267	4,358	--
Other eastern hardwoods	349,783	60,562	79,862	76,098	39,539	23,836	16,793	8,975	10,515	10,727	9,749	8,959	4,168
Total hardwoods	4,083,057	259,667	389,531	493,790	448,488	449,731	475,335	420.693	335,988	257,955	201,600	281,198	69,081
All species	8,628,483	371,890	793,025	1.306.299	1,150,430	1,006,268	1,039,068	950,899	707,904	462,220	326,512	419,970	93,998

Table 40—Green weight of forest biomass on timberland, by species and diameter class, Northwest Florida, 1994

Species	All classes	Diameter class (inches at breast height) 1.0-2.9	3.0-4.9	5.0-6.9	7.0-9.9	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 and larger
						Hundred thousand pounds							
Softwood													
Longleaf pine	*647,215*	*8,533*	21,964	29,206	49,197	*105,428*	*160,798*	151,983	88,467	22.977	6.675	1.987	--
Slash pine	1.534.226	37.032	202,853	348.169	314,639	182,545	134,848	129,160	82,639	55,837	23,519	30,204	1.781
Shortleaf pine	32,400	92	121	1,435	2,532	1,555	4,103	6,373	7,411	3,174	2,644	2,960	--
Loblolly pine	467,828	8,153	44,587	92,931	59,883	44,783	42,286	38,019	38,958	31,192	27,439	35,877	2.720
Pond pine	39,437	201	1,642	3,746	8,034	5,309	5,517	5,751	4,528	2,122	493	2,094	--
Virginia pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Pitch pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Table Mountain pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Spruce pine	19,725	481	358	725	2,423	726	1,608	2,580	2,617	3,731	2,034	1,779	663
Sand pine	184,951	11,485	35,935	43,835	33,706	20,325	16,581	10,037	9,730	2,045	802	470	--
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern hemlock	--	--	--	--	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--	--	--
Baldcypress	114,724	518	2,230	5,147	7,619	9,603	7,444	13,796	15,185	15,841	11,017	12,916	13,408
Pondcypress	243,936	6,411	16,843	23,545	29,007	30,452	35,797	39,210	22,919	11,538	14,591	11,938	1,685
Cedars	99,822	2,951	4,014	6,044	7,939	14,176	18,111	16,756	11,203	7,349	5,742	4,982	555
Total softwoods	3,384,264	76.857	330.547	554,783	514,979	'414.902	427.093	404,665	283,657	155.806	94,956	105,207	20,812
Hardwood													
Select white oaks	28.473	395	1.793	2,212	2,638	2,382	3,537	2,731	3,757	3,876	3,380	1,147	625
Select red oaks	722	25	--	--	--	--	--	--	--	--	--	697	--
Chestnut oak	--	--	--	--	--	--	--	--	--	--	--	--	--
Other white oaks	189.392	4,058	7,073	9,239	10,263	11,089	11,605	15,702	17,269	17,269	18,304	43,144	24,377
Other red oaks	670,314	50,291	44,130	63,992	64,648	75,329	84,002	64,506	56,215	49.810	39,823	62,542	15.026
Hickory	45.407	645	994	3,905	3,887	5,719	3,425	6,624	9,302	4,279	3,235	3,192	--
Yellow birch	--	--	--	--	--	--	--	--	--	--	--	--	--
Hard maple	4,929	269	277	310	462	904	563	1,073	--	1,071	--	--	--
Soft maple	91,233	9,898	11,702	11,636	14.977	12,251	6,843	10,155	6,515	3,370	2,370	1,516	--
Beech	7,809	192	365	310	411	--	--	523	776	1,096	549	2,728	859
Sweetgum	193,609	7,779	9,676	16,899	16,182	25,362	31,161	28,123	20,990	11,564	12,495	13,378	--
Tupelo and blackgum	828,411	39,534	77,628	71,192	88,310	87,404	109,454	108.928	78,380	61,732	41,841	53,842	10,166
Ash	83,442	6,869	12,062	13,909	10,392	6,845	6,368	5,765	5,174	3,635	4,275	7,375	773
Cottonwood	612	51	--	--	257	--	--	--	--	--	--	304	--
Basswood	548	--	--	--	--	--	--	--	548	--	--	--	--
Yellow-poplar	68,728	920	2,496	4,114	4,860	10,338	6,803	7,399	8,131	8,064	7,031	7,553	1,019
Bay and magnolia	402,068	20.047	39,375	48.304	55,030	54,900	57,998	45,234	32,582	19,362	13,619	13,721	1,896
Black cherry	10,896	1,341	1,194	1,236	1,370	2,056	1,518	501	310	1,028	342	--	--
Black walnut	429	11	127	291	--	--	--	--	--	--	--	--	--
Sycamore	8,590	--	310	--	323	--	756	913	459	1,615	1,072	1,656	1,486
Black locust	--	--	--	--	--	--	--	--	--	--	--	--	--
Elm	25,650	730	2,335	1,889	3,047	2,634	2,416	3,277	3,688	2,002	767	2,865	--
Other eastern hardwoods	295,758	54,098	77,714	66,565	34,801	19,515	11,544	6,540	6,451	6,140	5,480	5.062	1,848
Total hardwoods	2,957,020	197.353	289.251	316,003	311,858	316,728	337,993	307,994	250,547	195,913	154,583	220,722	58.075
All species	6,341,284	274,210	619,798	870.786	826,837	731,630	765,086	712,659	534,204	351,719	249,539	325,929	78,887

Table 41 -Average net annual growth and removals of live timber and growing stock on timberland, by species, Northwest Florida, 1987-1993

Species	Live timber'		Growing stock	
	Net annual growth	Annual timber removals	Net annual growth	Annual timber removals
	Thousand cubic feet			
Softwood				
Yellow pines	178,867	153,182	178,196	152,520
Eastern white pine	--	--	--	--
Spruce and fir	--	--	--	--
Cypress	5,386	281	5,196	216
Other eastern softwoods	2,271	341	2,274	308
Total softwoods	*186,524*	*153,804*	185,666	153,044
Hardwood				
Select white and red oaks	589	852	575	852
Other white and red oaks	26,772	18,108	25,540	16,736
Hickory	1,204	1,081	1,214	978
Yellow birch	--	--	--	--
Hard maple	17	88	120	88
Sweetgum	5,695	4,724	5,639	4,546
Ash, walnut, and black cherry	2,274	1,151	1,929	1,078
Yellow-poplar	3,154	1,029	3,104	918
Tupelo and blackgum	12,882	4,094	11,987	3,806
Bay and magnolia	9,041	2,609	8,535	2,374
Other eastern hardwoods	5,670	2,766	2,474	1,079
Total hardwoods	67,298	36,502	61,117	32,455
All species	253,822	190,306	246,783	185,499

' Merchantable portion only.

Table 42-Average net annual growth and removals of sawtimber on timberland, by species, Northwest Florida, 1987-I 993

Species	Net annual growth	Annual timber removals
	Thousand board feet	
Softwood		
Yellow pines	414,845	401,874
Eastern white pine	--	--
Spruce and fir	--	--
Cypress	*23,753*	*416*
Other eastern softwoods	10,966	1,062
Total softwoods	449,566	*403,372*
Hardwood		
Select white and red oaks	2,279	3,451
Other white and red oaks	93,941	54,105
Hickory	3,916	4,211
Yellow birch	--	--
Hard maple	49	398
Sweetgum	22,298	13,892
Ash, walnut, and black cherry	*6,736*	3,233
Yellow-poplar	11,003	2,351
Tupelo and blackgum	*42,615*	12,665
Bay and magnolia	*21,695*	7,854
Other eastern hardwoods	*8,186*	3.060
Total hardwoods	212,718	105,220
All species	662,284	508,592

Table 43-Average annual removals of growing stock on timberland, by species and diameter class, Northwest Florida, 1987-1993

Species	All classes	Diameter dass finches at breast height) 5.0-6.9	7.0-9.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-16.9	19.0-20.9	21.0-29.9	29.0 and larger
						Thousand cubic *feer*					
Softwood											
Yellow pines	152,520	30.262	36,514	29,373	20,143	13,762	9,158	5,452	2,499	3,036	301
Eastern white pine	--	--	--	--	--	--	--	--	--	--	--
Spruce and fir	--	--	--	--	--	--	--	--	--	--	--
Cypress	216	--	112	55	--	49	--	--	--	--	--
Other eastern softwoods	308	113	--	--	--	95	100	--	--	--	--
Total softwoods	153,044	30,395	38,626	29,428	20,143	13,906	9,258	5,452	2,499	3,036	301
Hardwood											
Select white and red oaks	852	--	89	51	146	100	75	--	76	170	145
Other white and red oaks	16,736	1,717	1.742	1,956	1,857	2,075	2,502	1,509	1,041	1,819	518
Hickory	978	--	--	--	158	398	167	154	--	101	--
Yellow birch	--	--	--	--	--	--	--	--	--	--	--
Hard maple	88	--	--	--	--	--	--	88	--	--	--
Sweetgum	4,546	274	240	1,052	783	4 7 7	1,016	217	--	382	105
Ash, walnut, and black cherry	1,078	124	113	86	368	--	100	--	103	184	--
Yellow-poplar	918	242	225	44	--	73	--	--	--	334	--
Tupelo and blackgum	3.806	141	243	471	518	783	624	145	631	250	--
Bay and magnolia	2,374	149	--	299	442	418	371	212	283	200	--
Other eastern hardwoods	1,079	38	122	163	166	246	--	58	190	96	--
Total hardwoods	32,455	2,685	2,774	4,122	4,438	4.570	4,855	2,383	2,324	3,536	768
All species	185,499	33,080	41,400	33,550	'24,581	18,476	14,113	7,835	4,823	6,572	1,069

Table 44-Average annual mortality of live timber, growing stock, and sawtimber on timberland, by species, Northwest Florida, 1987-l 993

Species	Live timber[1]	Growing stock	Sawtimber
	Thousand cubic feet		*Thousand board feet*
Softwood			
Yellow pines	13,599	13,355	50,865
Eastern white pine	--	--	--
Spruce and fir	--	--	--
Cypress	616	486	1,118
Other eastern softwoods	1,023	921	4,098
Total softwoods	15,238	14,762	56,081
Hardwood			
Select white and red oaks	346	346	1,114
Other white and red oaks	7,275	5,049	15,695
Hickory	456	273	1,400
Yellow birch	--	--	--
Hard maple	172	--	--
Sweetgum	1,862	1,621	5,551
Ash, walnut, and black cherry	882	292	461
Yellow-poplar	276	249	529
Tupelo and blackgum	4,409	2,764	5,417
Bay and magnolia	4,262	2,703	7,527
Other eastern hardwoods	4,627	1,230	3,819
Total hardwoods	24,567	14,527	41,513
All species	39,805	29,289	97,594

[1] Merchantable portion only.

Table 45-Change in number of live trees on timberland, by species group, survey completion date and diameter class, Northwest Florida

Species group and year	All classes	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 and larger
				Thousand trees					
Yellow pine									
1987	*900,681*	*324,904*	*269,212*	160,878	65,818	34,436	22,258	13,230	9,945
1994	1,088,462	382,018	348,493	198,602	81,800	32,971	20,570	12,720	11,288
Change	+ 187,781	+57,114	+79,281	+37,724	+15,982	-1.465	-1,688	-510	+ 1,343
Other softwood									
1987	129,085	62,016	25,466	15,096	9,589	6,022	3,949	2,628	4,319
1994	*125,026*	*57,172*	*26,011*	*15,215*	9,261	6,171	4,411	3,139	3,646
Change	-4,059	-4,844	+ 545	+119	-328	+149	+462	+511	-673
Hardwood									
1987	1,685,384	1,101,214	316,056	122,117	58,482	32,312	22,085	13,017	20,101
1994	1.733.021	1,145,657	311,599	126,909	60,286	33,122	22,058	13,920	19,470
Change	+47,637	+ 44,443	-4,457	+4,792	+ 1,804	+810	-27	+ 903	-631

Table 46-Land area, by land use class, major forest type, and survey completion date, Northwest Florida

Land use class	Survey completion date 1979	1987	1994	Change 1987-I 994
		Acres		
Forest land				
Timberland				
Pine and oak-pine types	3,639,018	3,468,140	3,757,295	+ 289,155
Hardwood types	1,873,043	1,878,318	1,736,085	-142,233
Total	5,512,061	5,346,458	5,493,380	+ 146,922
Reserved timberland	37,355	38,173	50,587	+12,414
Woodland	15,966	13,206	11,062	-2,144
Total forest land	5,565,382	5,397,837	5,555,029	+157,192
Nonforest land				
Cropland	809,635	825,936	617,576	-208,360
Pasture and range	331,956	274,088	251,448	-22,640
Other	569,168	774,903	801,270	+ 26,367
Total	1,710,759	1,874,927	1,670,294	*-204,633*
All land'	7,276,141	7,272,764	7,225,323	-47,441

' Excludes all water areas.

Table 47-Volume of sawtimber, growing stock, and live timber on timberland, by species group, survey completion date, and diameter class, Northwest Florida

Species group and year	All classes	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 and larger
					SAWTIMBER (in thousand board feet)					
Softwood										
1979	10,118,648	--	--	2,114,191	2,717,125	2,178,290	1,271,600	727,396	466,030	644,016
1987	10,428,157	--	--	1,803,915	2,307,891	2,257,554	1,531,047	914,939	603,366	1,009,445
1994	10,745,898	--	--	1,753,823	2,228,153	2,384,197	1,810,485	1,050,927	659,324	858,989
Hardwood										
1979	4,826,560	--	--	--	889,809	904,251	749,734	674,832	569,368	1,038,566
1987	5,549,739	--	--	--	962,578	988,774	929,585	703,943	628,680	1,336,179
1994	6,290,852	--	--	--	1,158,153	1,237,180	1,068,832	897,549	722,776	1,206,362
					GROWING STOCK (in thousand cubic feet)					
Softwood										
1979	3,038,895	379,582	509,655	567,997	602,881	43i ,722	235,726	128,779	79,307	103,246
1987	3,051,893	440,352	471,200	488,291	508,887	442,972	279,456	158,564	101,732	160,439
1994	3,275,316	555,046	566,506	469,483	484,791	459,471	322,968	178,207	108,207	130,637
Hardwood										
1979	1,833,594	168,186	205,481	241,972	296,925	253,586	188,263	154,614	122,594	201,973
1987	2,013,604	186,177	234,888	266,479	297,905	262,451	222,508	156,781	131,930	254,485
1994	2,210,179	217,352	263,065	306,154	336,561	308,201	238,068	185,216	140,211	215,351
					LIVE TIMBER' (in thousand cubic feet)					
Softwood										
1979	3,102,444	*391,361*	523,054	577,151	608,226	437,274	239,328	130,183	79,896	115,971
1987	3,101,736	446, I 17	479,677	496,121	512,719	446,906	283,661	161,645	102,533	172,357
1994	3,317,019	564,897	572,291	473,787	488,391	462,708	326,225	179,262	108,698	140,760
Hardwood										
1979	2,385,634	276,442	295,719	326,669	354,891	303,072	226,616	181,475	145,027	275,703
1987	2,546,782	288,729	311,974	330,428	358,337	306,676	256,552	187,859	153,970	352,257
1994	2,706,760	327,965	345,925	361,737	387,978	345,497	276,355	211,392	165,563	284,348

' Merchantable volume.

The Forest Service, U.S. Department of Agriculture, is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives-as directed by Congress- to provide increasingly greater service to a growing Nation.

Clark, Robert F., Jr.; Sheffield, Raymond M. 1994. Forest statistics for Northwest Florida, 1994. Resour. Bull. SE-148. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 45 p.

Since 1987, area of timberland in Northwest Florida has increased by 3 percent and now totals almost 5.5 million acres. Area of nonindustrial private forest land increased 19 percent to 2.3 million acres. Area in pine forest types increased 5 percent to 3.1 million acres Area harvested annually and retained in timberland averaged 99,000 acres, whereas 148,000 acres of timberland were regenerated annually. Artificial regeneration was up by 52 percent. Volume of softwood growing stock increased 7 percent to 3.3 billion cubic feet and hardwood growing stock increased by 10 percent to 2.2 billion cubic feet. Average net annual growth increased from 188 to 247 million cubic feet. Annual removals increased by 14 percent to 186 million cubic feet. Annual mortality decreased by 26 percent to 29 million cubic feet.

KEYWORDS: Timberland, forest ownership, timber volume, timber growth, timber removals.

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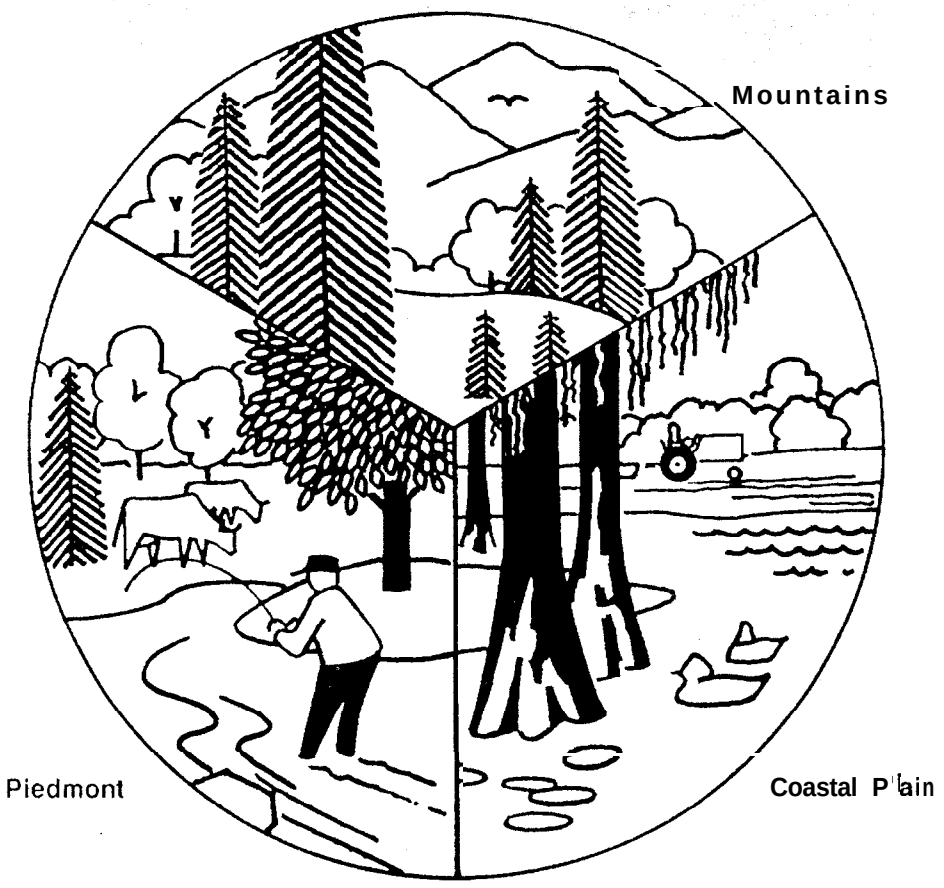

Southeastern Forest Experiment Station

Established 1921

The Southeastern Forest Experiment Station, headquartered in Asheville, North Carolina, is one of the eight regional Experiment Stations, and the Forest Products Laboratory, that make up the Forest Service research organization.

RESEARCH MISSION:

To acquire the knowledge, develop the technology, and disseminate the research findings required to manage the Southeast's forest resources in ways that satisfy demands of goods and services while maintaining a quality environment.

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