



# Timber Resource Statistics for Oregon

Sally Campbell, Paul Dunham, and  
David Azuma

Resource Bulletin  
PNW-RB-242  
November 2004



United States  
Department of  
Agriculture



Forest  
Service



Pacific Northwest  
Research Station



The **Forest Service** of the 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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

USDA is committed to making its information materials accessible to all USDA customers and employees.

## **Authors**

**Sally Campbell** is a biological scientist, **Paul Dunham** is a forester, and **David Azuma** is a research forester, Forestry Sciences Laboratory, 620 SW Main, Suite 400, Portland, OR 97205.

## **Abstract**

**Campbell, Sally; Dunham, Paul; Azuma, David. 2004.** Timber resource statistics for Oregon. Resour. Bull. PNW-RB-242. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 67 p.

This report is a summary of timber resource statistics for all ownerships in Oregon. Data were collected as part of several statewide multiresource inventories, including those conducted by the Pacific Northwest Region (Region 6) on National Forest System lands in Oregon, by the Bureau of Land Management (BLM) on BLM lands in western Oregon, and by the Pacific Northwest Research Station Forest Inventory and Analysis (FIA) Program on BLM lands in eastern Oregon and state and private lands across Oregon. Statistical tables provide estimates of land area, timber volume, growth, mortality, and harvest for the state and half-state units (western and eastern Oregon).

Keywords: Forest inventory, statistics (forest), timber resources, timberland, resources (forest), Oregon, western Oregon, eastern Oregon.

## **Summary**

Oregon has an estimated 61 million acres of land. About 49 percent of this land is forested with 76 percent of the forested portion being nonreserved timberland. About 58 percent of the timberland is managed by national forests and other federal agencies, 4 percent is managed by state and local agencies, and 38 percent is privately owned. Douglas-fir is the most common forest type in western Oregon forests, and ponderosa pine is most common in eastern Oregon forests. Younger stands (0-60 years) predominate in western Oregon, and older stands (80-199 years) predominate in eastern Oregon. The net volume of growing stock on all timberland is 78 billion cubic feet, with 91 percent of this from softwoods (coniferous species). About 71 percent of the growing-stock volume is on public land, 19 percent on forest industry land, and 9 percent on other private land. Estimated net annual growth of sawtimber is 1,689 million cubic feet, estimated average annual mortality is 444 million cubic feet, and average annual removals are 1,045 million cubic feet (4,710 million board feet).

## **Contents**

1	<b>Introduction</b>
2	<b>Highlights</b>
2	Forested Area
2	Forest Land Ownership
3	Forest Type
3	Timberland Stand Age
5	Timberland Stand Size
5	Timberland Productivity
5	Timberland Volume
5	Timberland Growth, Mortality, and Removals
8	Reserved Area
9	<b>Inventory Procedures</b>
10	<b>Land and Water Area Updated</b>
10	<b>Changes in Ownership Definitions</b>
11	<b>Reliability of Inventory Data</b>
11	<b>Glossary</b>
15	<b>Names of Trees</b>
16	<b>Acknowledgments</b>
16	<b>Metric Equivalents</b>
16	<b>Literature Cited</b>
18	<b>Appendix 1—Oregon Department of Forestry—Forest Land Management Classifications</b>

## List of Tables

- Table 1—Estimated area, by county, land class, and administrative status, Oregon, 1999
- Table 2—Estimated area of forest land, by county and owner class, Oregon, 1999
- Table 3—Estimated area of forest land, by forest type and owner class, Oregon, 1999
- Table 4—Estimated area of forest land, by forest type and stand size class, Oregon, 1999
- Table 5—Estimated area of nonreserved timberland, by county and owner class, Oregon, 1999
- Table 6—Estimated area of nonreserved timberland, by forest type and owner class, Oregon, 1999
- Table 7—Estimated area of nonreserved timberland, by forest type and stand age class, Oregon, 1999
- Table 8—Estimated area of nonreserved timberland, by owner class and stand age class, Oregon, 1999
- Table 9—Estimated area of nonreserved timberland, by forest type and stand size class, Oregon, 1999
- Table 10—Estimated area of nonreserved timberland, by owner class and stand size class, Oregon, 1999
- Table 11—Estimated area of nonreserved timberland, by site class and owner class, Oregon, 1999
- Table 12—Estimated net and cull volume of timber on nonreserved timberland, by timber class, tree size class, and species group, Oregon, 1999
- Table 13—Estimated net volume of growing stock on nonreserved timberland, by forest type and stand size class, Oregon, 1999
- Table 14—Estimated net volume of growing stock on nonreserved timberland, by owner class and species group, Oregon, 1999
- Table 15—Estimated gross annual growth and average annual mortality of growing stock on nonreserved timberland, by forest type and owner class, Oregon, 1999
- Table 16—Estimated gross annual growth, average annual mortality and removals of sawtimber on nonreserved timberland, by owner class, Oregon, 1999
- Table 17—Estimated timber harvest volume, by year and owner class, Oregon, 1975–2002

Table 18—Estimated area of forest land, by reserve status, site class, and owner class, Oregon, 1999

Table 19—Estimated area of timberland, by reserve status and owner class, Oregon, 1999

Table 20—Estimated volume of timber on timberland, by reserve status and owner class, Oregon, 1999







## Introduction

This report summarizes the timber resource statistics for Oregon’s forests. It uses data from forest inventories conducted in Oregon in the 1990s: the 1998–99 Pacific Northwest Forest Inventory and Analysis (PNW-FIA) inventory of eastern Oregon, the 1994–98 PNW-FIA inventory of western Oregon, the 1993–96 Pacific Northwest Region (Oregon and Washington national forests) inventory, and the 1997 Bureau of Land Management (BLM) inventory of western Oregon. Other resources sampled but not included in this report include understory vegetation, crown cover, insects, diseases, coarse woody material, and snags. These data will be analyzed and reported in other publications.

The PNW-FIA unit has been reporting statistics for Oregon since the 1930s. Bolsinger and Berger (1975), Farrenkopf (1982), Gedney et al. (1989), and Azuma et al. (2004b) reported inventory statistics in the 1960s, 1970s, 1980s, and 1990s, respectively, for eastern Oregon. Hazard and Metcalf (1964, 1965), Metcalf and Hazard (1964), Bassett (1977), Jacobs (1978), Mei (1979), Gedney et al. (1986a, 1986b, 1987), and Azuma et al. (2004a) reported inventory statistics in the 1960s, 1970s, 1980s, and 1990s

for western Oregon. Inventory and reports from the 1970s on did not include BLM land in western Oregon or any Oregon national forests. The current sampling system is a systematic grid of plots, established in the early 1960s by PNW-FIA for areas outside of national forests and in the 1990s by Pacific Northwest Region (Region 6) and BLM for national forests and western Oregon BLM land, respectively. Azuma et al. (2004a, 2004b) used 1999 and 1998 PNW-FIA data sets to report the latest forest statistics for eastern and western Oregon, respectively.

This report contains statistical tables that provide current estimates of forest land and timberland area (see “Glossary”), timber volume, growth, mortality, and harvest. The national forest statistics include areas that are withdrawn from timber production but still meet the FIA definition of timberland. National forest land is not all equally available for timber production owing to various management decisions (see “Reserved Area,” p. 8). Estimates of change in volume and area of nonfederal land between the 1980s and the present inventory are reported in Azuma 2004a and 2004b.

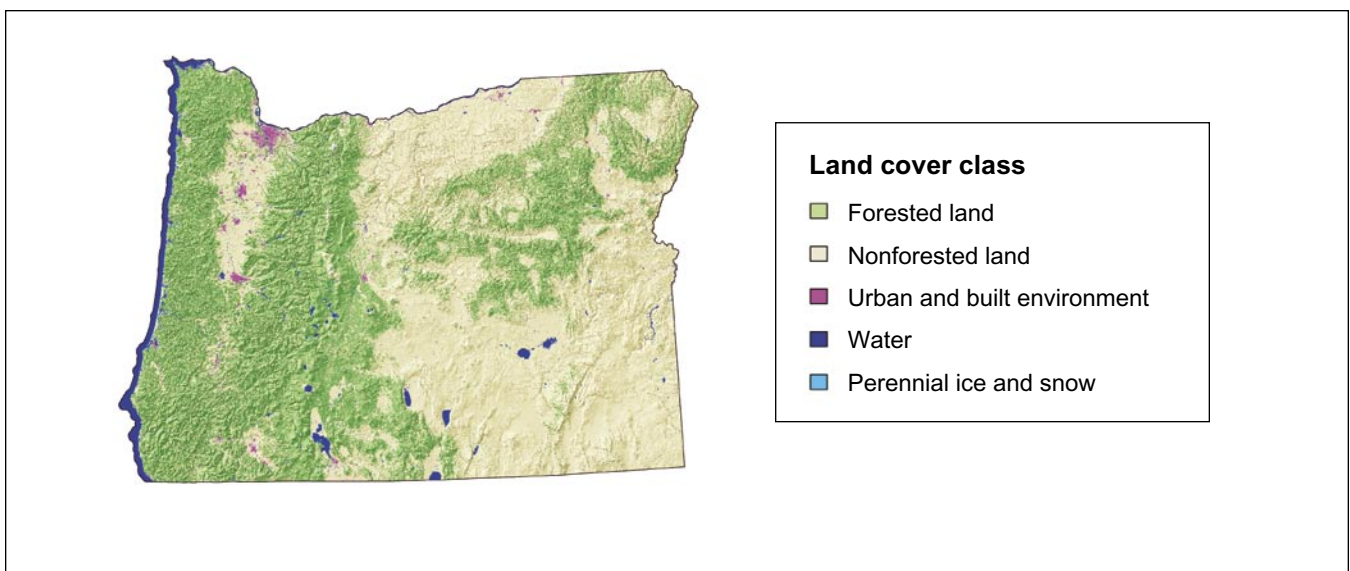


Figure 1—Forested land in Oregon. This map was developed by the USDA Forest Service, Pacific Northwest Research Station, Forest Inventory and Analysis Program (FIA), Portland, Oregon, by using U.S. Geological Survey (USGS) Multiresolution Land Characterization Consortium (MRLC) land cover classification data based on 1992 Landsat Thematic Mapper (TM) satellite imagery.

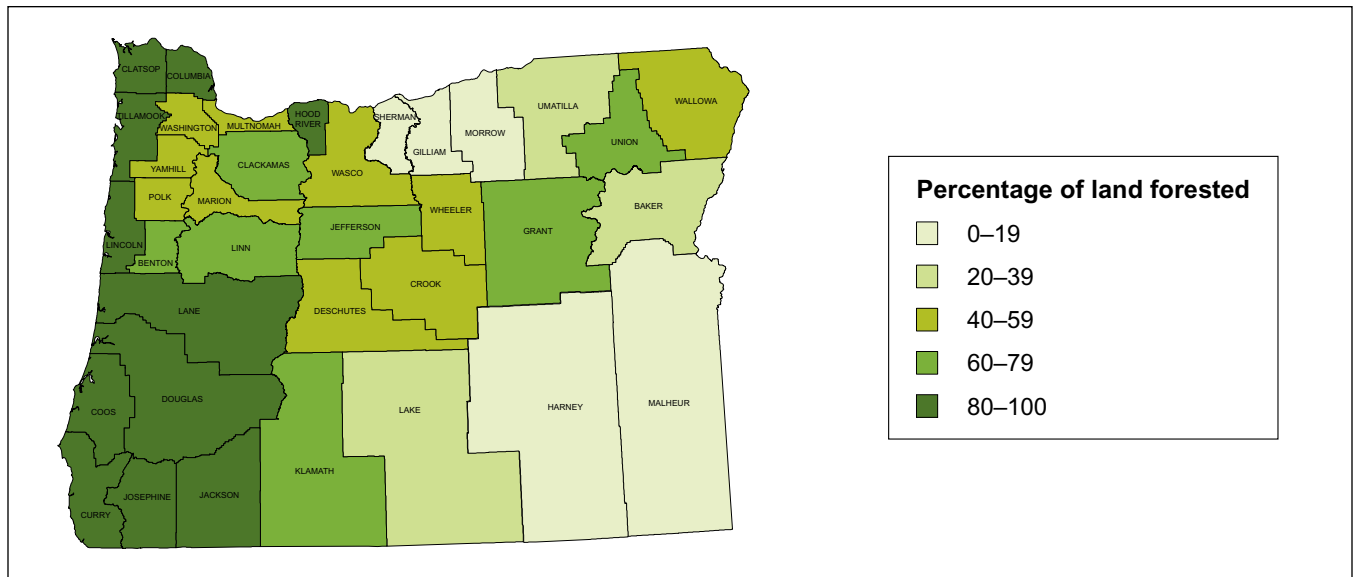


Figure 2—Percentage of land that is forested, by county, in Oregon. This map was developed by the USDA Forest Service, Pacific Northwest Research Station, Forest Inventory and Analysis Program (FIA), Portland, Oregon, by using area estimates from the 1993–99 inventories conducted by FIA, Region 6, and BLM.

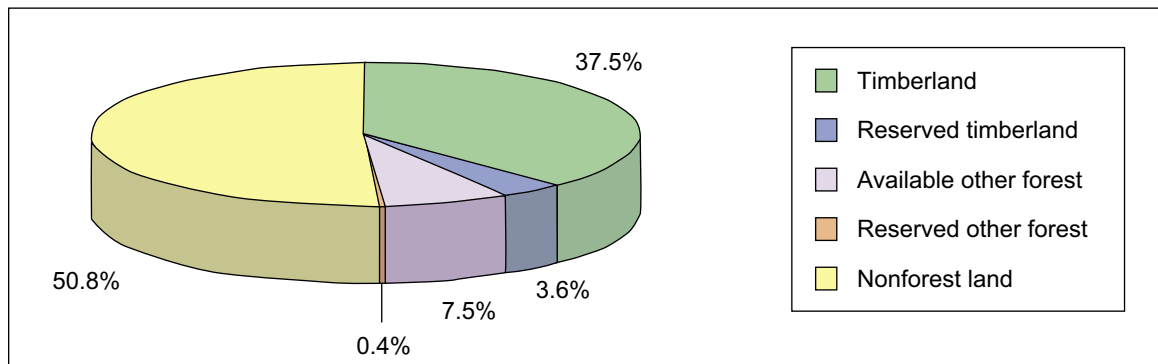


Figure 3—Land categories in Oregon, 1999.

## Highlights

### Forested Area

The state of Oregon encompasses over 61 million acres. About 49 percent of the area is forest land; of this, 76 percent is nonreserved timberland (figs. 1–3, app. table 1). Western Oregon (from the crest of the Cascade Range west to the Pacific Ocean) has 15.4 million acres of forest land with 87 percent of it classed as nonreserved timberland, and eastern Oregon (from the crest of the Cascade Range to the eastern border of the state) has 14.8 million acres with 65 percent nonreserved timberland. Eastern Oregon forest land

includes about 2 million acres of juniper forest land surveyed in the 1980s (Gedney et al. 1999)

### Forest Land Ownership

The National Forest System (NFS), the BLM, and other federal agencies manage about 59 percent of the forest land (58 percent of the timberland) in Oregon. Owners classed as forest industry manage about 21 percent of the forest land (25 percent of the timberland); nonindustrial private owners and other public owners manage about 16 and 4 percent of forest land (13 and 4 percent of timberland), respectively. See figures 4 and 5, and appendix tables 2, 3, and 5.

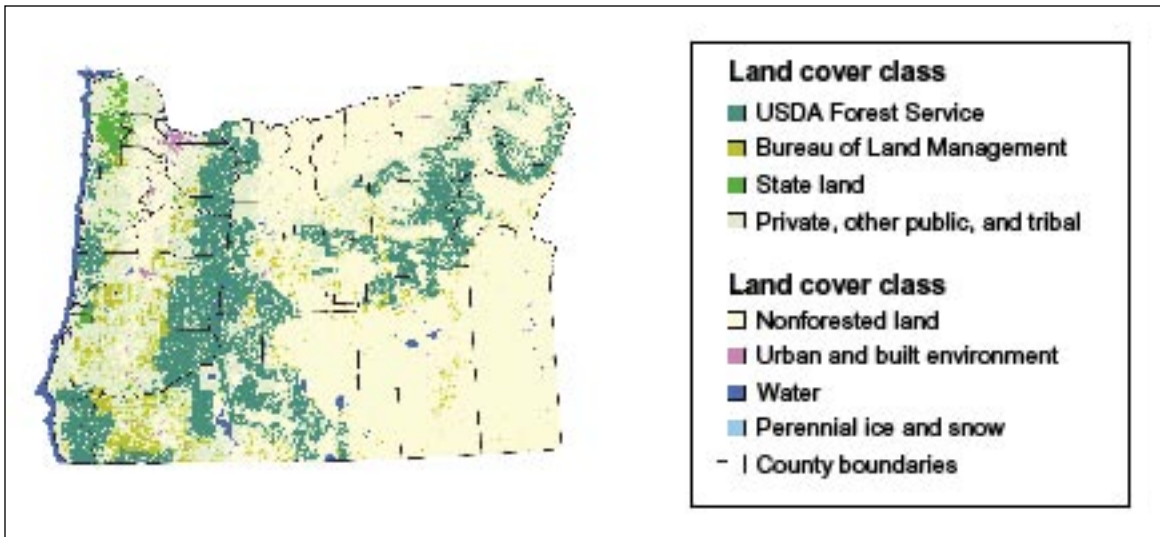


Figure 4—Ownership of forested land in Oregon. This map was developed by the USDA Forest Service, Pacific Northwest Research Station, Forest Inventory and Analysis Program (FIA), Portland, Oregon, by using U.S. Geological Survey (USGS) Multiresolution Land Characterization Consortium (MRLC) land cover classification data based on 1992 Landsat Thematic Mapper (TM) satellite imagery and land ownership information derived from the Gap Analysis Project (GAP).

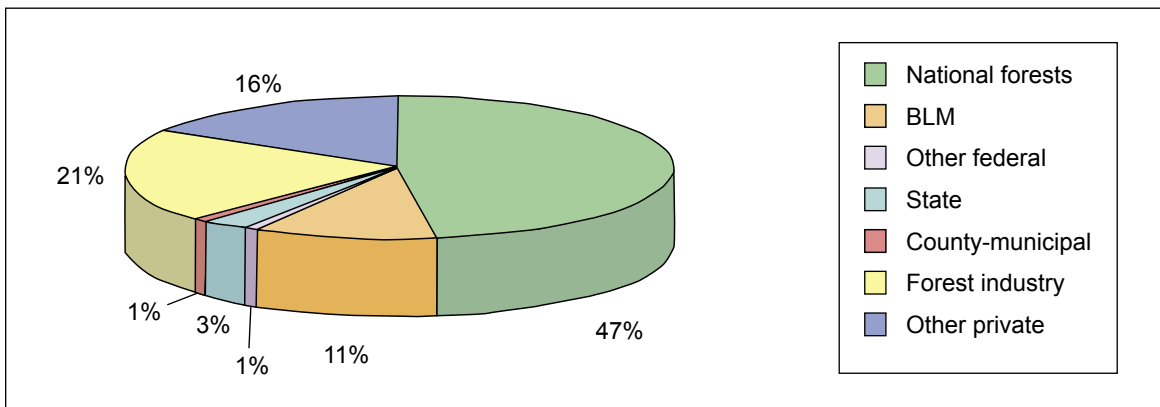


Figure 5—Forest land by owner, Oregon, 1999.

### Forest Type

Forest type refers to the dominant tree species in a stand. The majority of Oregon forest land (and timberland) is dominated by softwood forest types (83 percent), with Douglas-fir the most abundant type in western Oregon and ponderosa pine in eastern Oregon (fig. 6). Appendix tables 3 and 4 display forest land area by forest type and owner and stand size; tables 6, 7, and 9 display timberland area by forest type and owner, age, and stand size, respectively.

### Timberland Stand Age

Stand age classes are fairly evenly distributed on timberland across the state as a whole. However, age distributions in western and eastern Oregon are quite different, with younger stands (0–60 years) predominant in western Oregon and older stands (80–199 years) predominant in eastern Oregon (fig. 7). Appendix tables 7 and 8 display timberland area by stand age and forest type, and by stand age and owner, respectively.

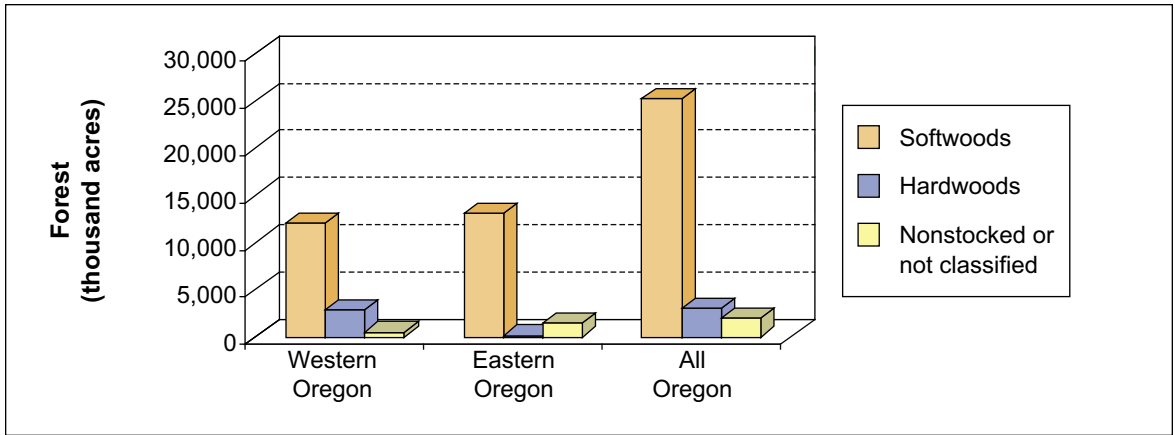


Figure 6—Forest land area by forest type groups, Oregon, 1999.

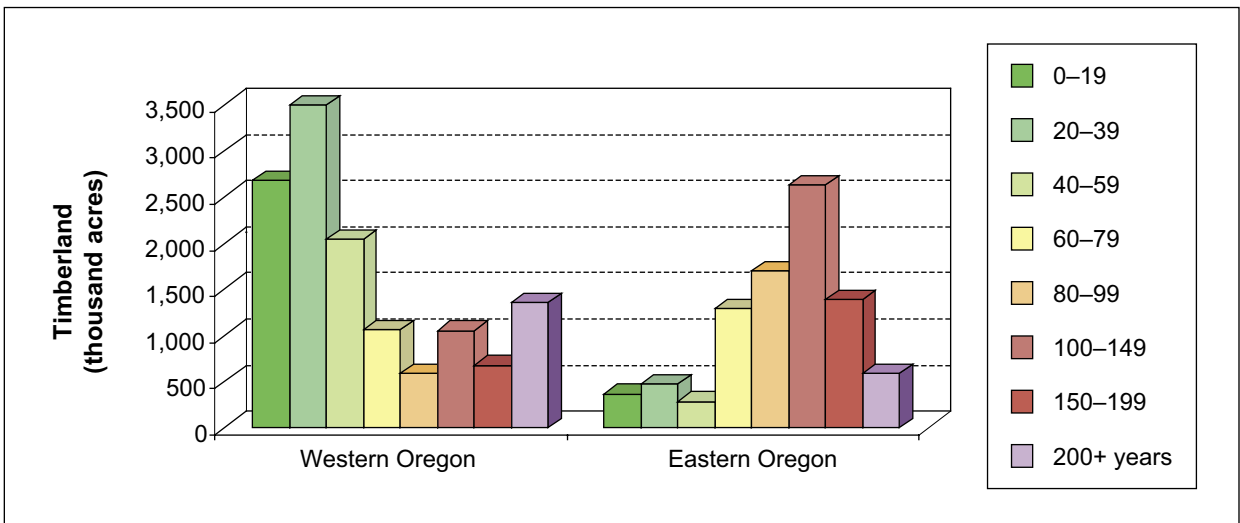


Figure 7—Timberland (nonreserved) area by stand age class, Oregon, 1999.

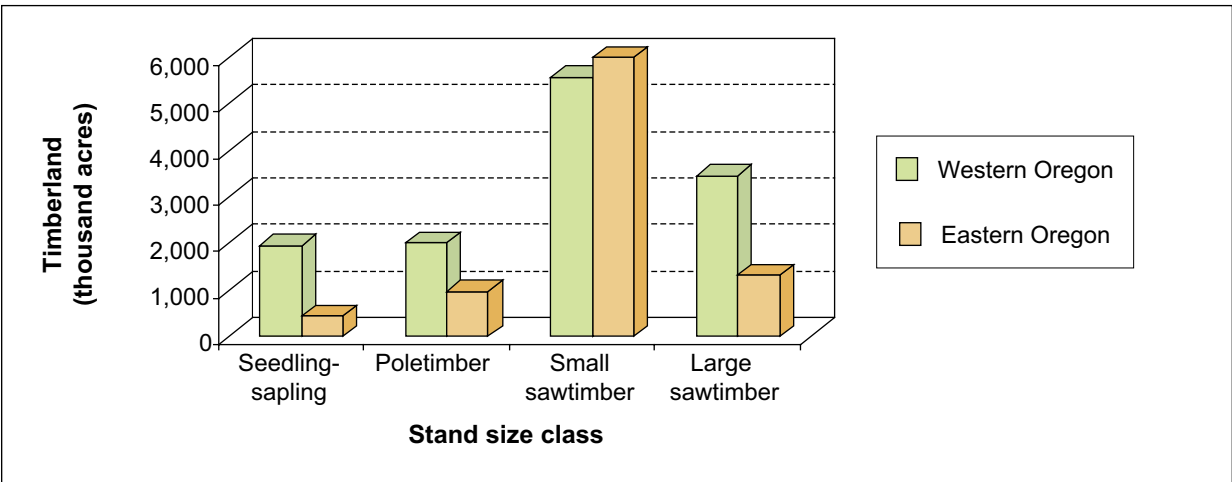


Figure 8—Timberland (nonreserved) area by stand size class, Oregon, 1999.



Figure 9—Timberland (nonreserved) area by stand size and owner class, Oregon, 1999.

### Timberland Stand Size

Statewide, the majority (71 percent) of timberland is in the small and large sawtimber classes (average stand diameter at breast height [d.b.h.] 9– 21 inches and greater than 21 inches, respectively) (fig. 8). Nonfederal timberland tends to be skewed to the small size classes and federal timberland to the larger size classes (Azuma et al. 2004a, 2004b) (fig. 9). Small sawtimber stands account for 62 percent of all sawtimber stands in western Oregon and 82 percent of sawtimber stands in eastern Oregon. Appendix tables 9 and 10 display timberland area by stand size class and forest type, and by stand size class and owner, respectively.

### Timberland Productivity

Potential productivity of forest land can be expressed as productivity site classes (app. table 11; figs. 10 and 11). Federal timberland has the greatest percentage of acres in lower site classes statewide. In western Oregon, state timberland has 91 percent in the higher classes (>120 cubic feet per acre per year) and private timberland has 75 percent. In eastern Oregon, most acres are in the lower productivity classes (<120 cubic feet per acre per year).

### Timberland Volume

Volume of poletimber (5–9 inches d.b.h. for softwoods and 11 inches d.b.h. for hardwoods) and sawtimber (over 9 inches

d.b.h. for softwoods and 11 inches d.b.h. for hardwoods) across all owners, statewide, and excluding cull volume, is over 77 billion cubic feet (fig. 12). Ninety-one percent of this volume is from softwoods and 9 percent from hardwoods. Cull volume is about 3 billion cubic feet. Appendix table 12 displays timber volume by timber class (sound or cull), tree size class, and species group, and table 13 displays timber volume by forest type and stand size class.

The majority of growing-stock volume on Oregon’s timberlands is on national forests (52 percent), followed by forest industry (19 percent), BLM (13 percent), other private forest land (10 percent), and other public land (6 percent) (fig. 13). Appendix table 14 displays timberland growing-stock volume by owner and species group.

### Timberland Growth, Mortality, and Removals

From the 1980s to the 1990s, growth exceeded mortality for all owners across all forest types, statewide, resulting in positive net growth for growing-stock trees (app. table 15). A few forest types, such as mountain and western hemlock, in eastern Oregon on some ownerships showed greater mortality than growth. For sawtimber, when removals are factored in, the volume of growth is greater than the volume of mortality plus harvest removals for public owners but not for private owners statewide (app. table 16, fig. 14). This is reflected in the ratio of current gross annual growth to the

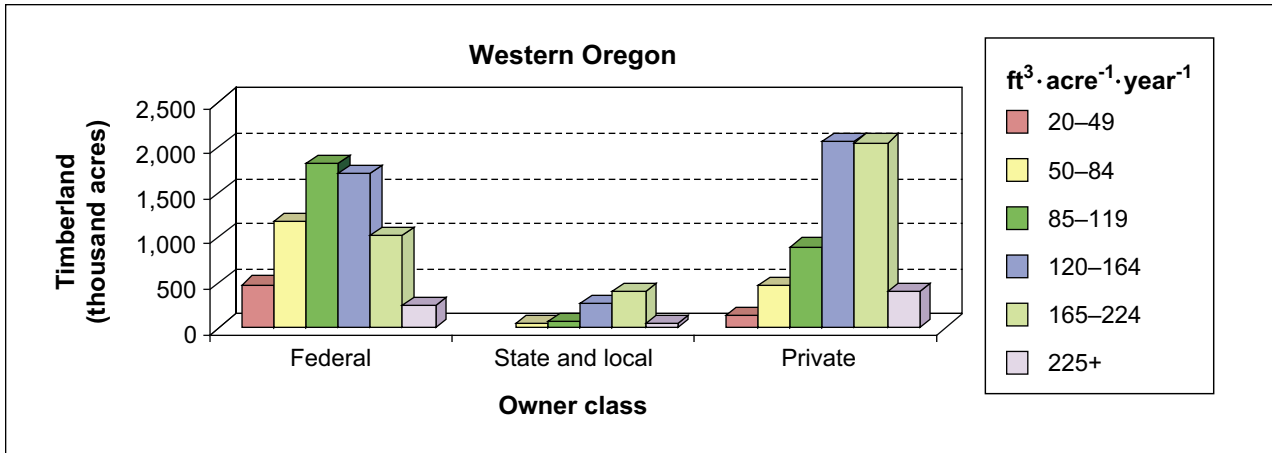


Figure 10—Timberland (nonreserved) area by site classes (mean annual increment), western Oregon, 1999.

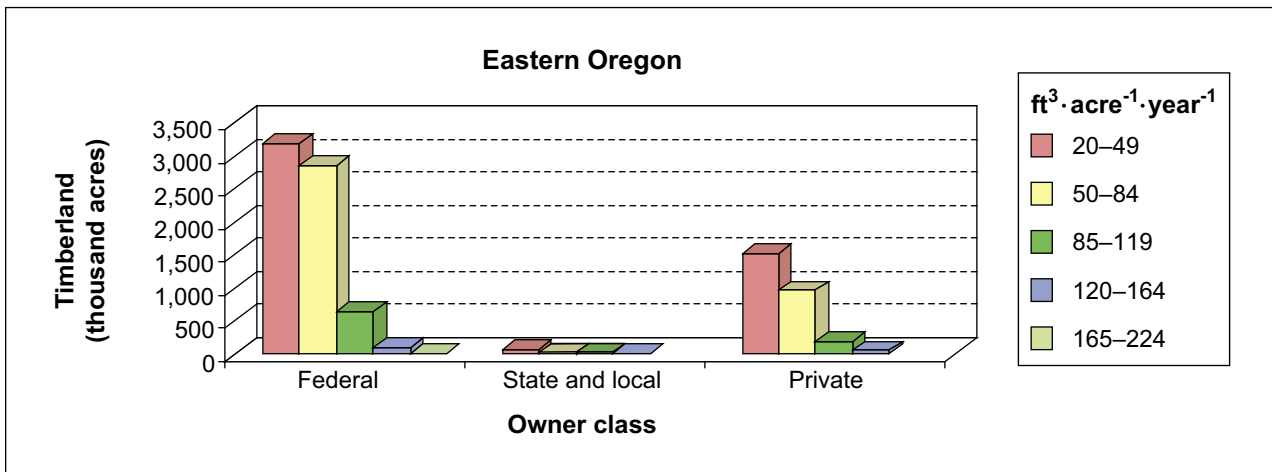


Figure 11—Timberland (nonreserved) area by site classes (mean annual increment), eastern Oregon, 1999.

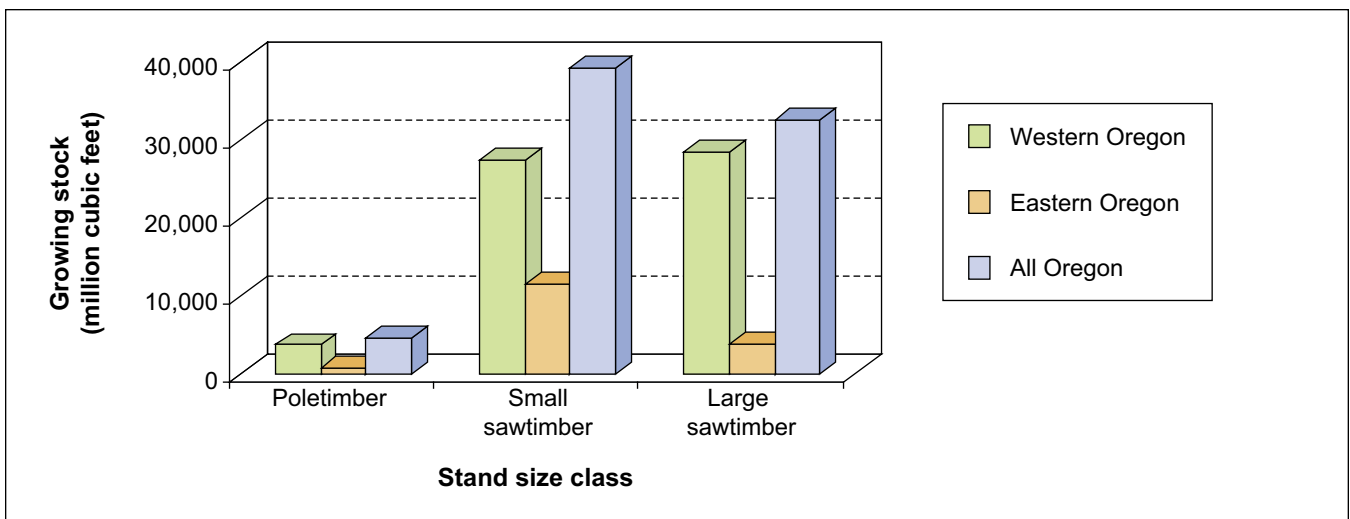


Figure 12—Volume of growing stock on nonreserved timberland by stand size class, Oregon, 1999.

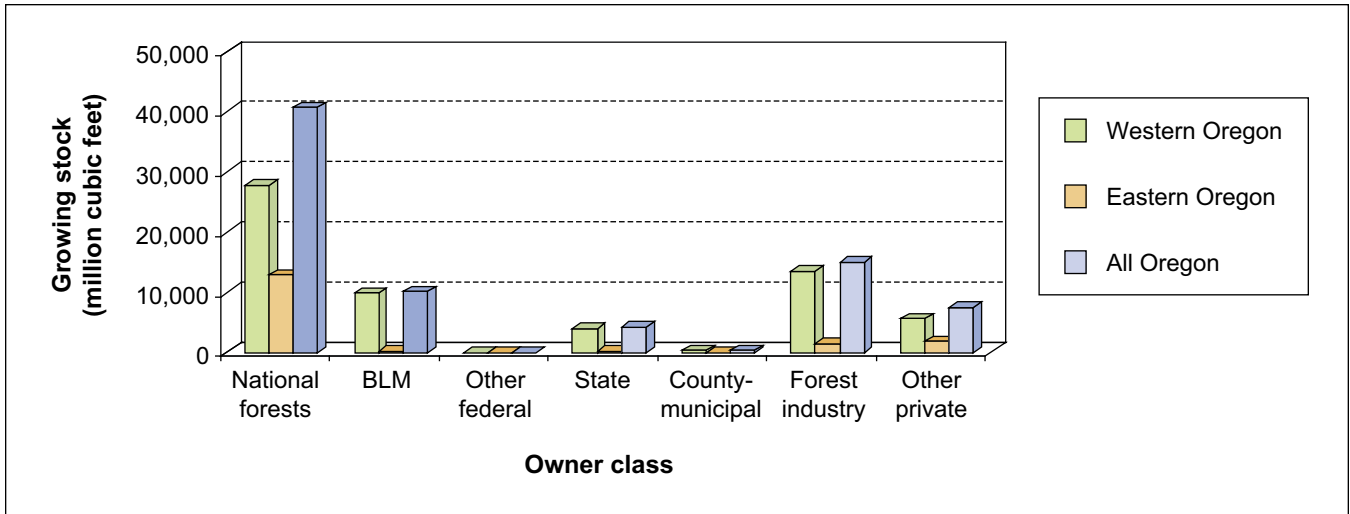


Figure 13—Volume of growing stock on nonreserved timberland by owner class, Oregon, 1999.

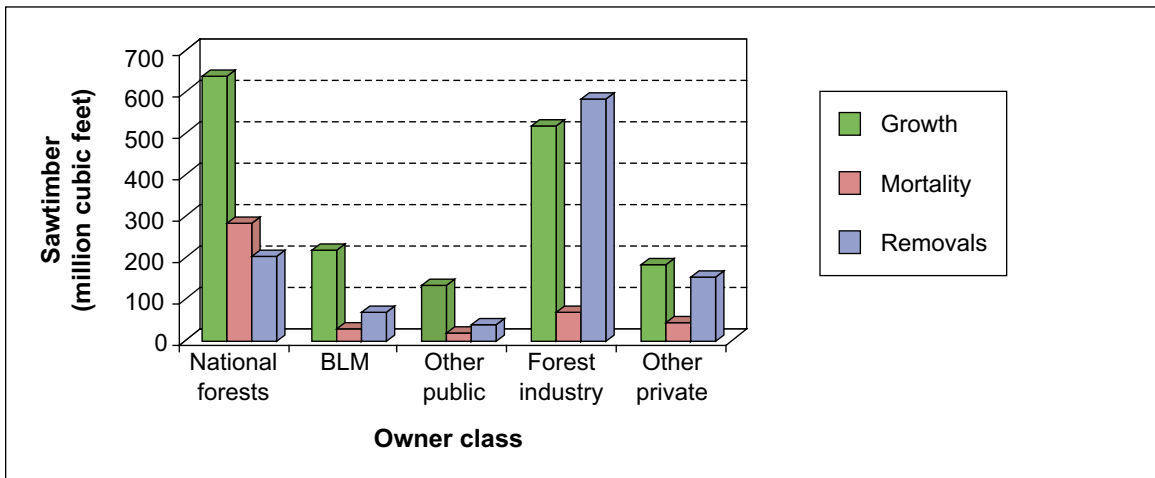


Figure 14—Sawtimber growth (current gross annual), mortality (average annual), and harvest (average annual) on nonreserved timberland by owner class, Oregon, 1990s.

sum of average annual mortality and average annual removals where values less than 1.0 indicate that mortality and removals exceed growth (fig. 15).

The production of timber has shifted away from federal land to state and privately owned land over the last three decades (fig. 16, app. table 17). In the 1980s, federal land in **western Oregon** had an annual average harvest of 2,667 million board feet. In the 1990s that number dropped to 685 million board feet per year. Other public and private land averaged 3,046 million board feet per year in the 1980s

and decreased 8 percent to 2,807 million board feet in the 1990s. The 74-percent reduction from federal land does not represent a change in land class, but is evidence of changing availability of land for timber production based on new management decisions. Federal land areas with reduced availability include, but are not limited to, riparian reserves, wildlife reserves, and access-limited areas.

**In eastern Oregon**, from 1980 to 1989, timber harvest volume from federal land averaged 1,205 million board feet per year. That number dropped to 530 million per year

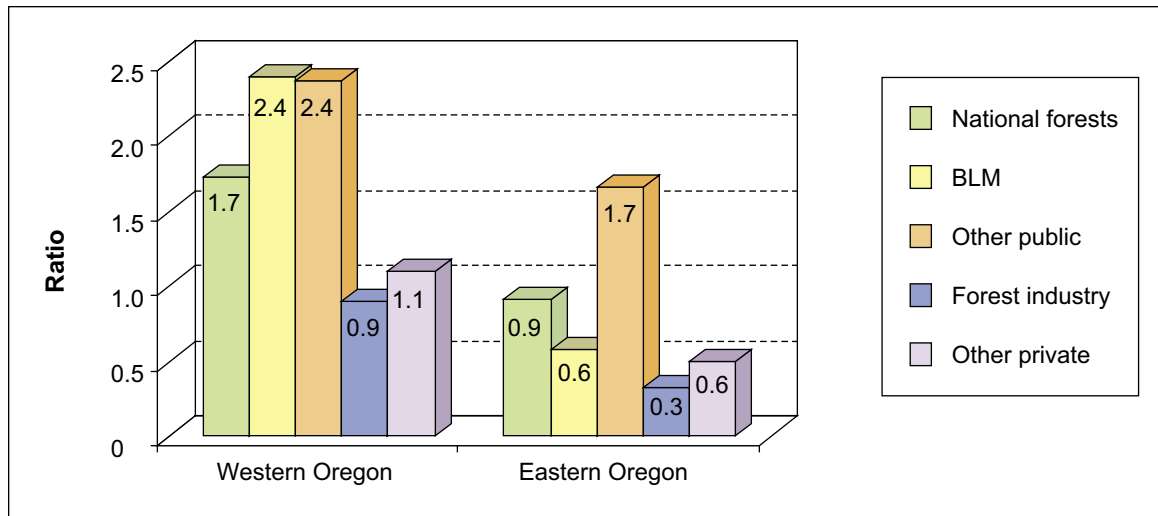


Figure 15—Ratio of growth (current gross annual) to the sum of mortality (average annual) and removals (average annual) for sawtimber on nonreserved timberland by owner class, Oregon, 1990s.

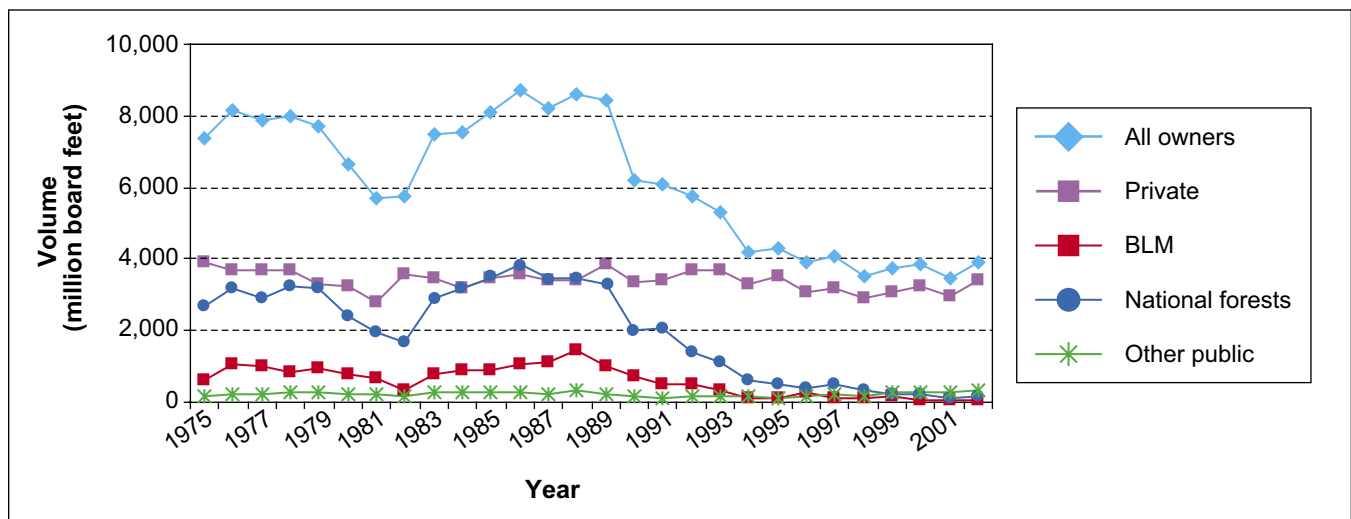


Figure 16—Harvest volume by owner class, Oregon, 1975–2002 (from Oregon Department of Forestry 2003).

between 1990 and 1999, a decrease of 56 percent from the 1980s. Other public and private land, composing only 29 percent of the timberland in eastern Oregon, produced on average, 33 percent of the harvest volume per year in the 1980s (604 million board feet), and 56 percent from 1990 to 2000 (688 million board feet).

### Reserved Area

Figures 17 and 18 show area of timberland and volume of timber on that land based on two different reserve classification systems: the FIA classification where reserved lands are

defined as those reserved through statute, ordinance, or administrative order; and the Oregon Department of Forestry (ODF) classification (Herstrom et al. 2003), which classifies forest land into reserved, multiresource (with restricted timber harvest), and active categories (see app. 1 for a description of these categories; see also tables 19 and 20).

In addition to land officially designated as reserved, another 12 percent of the forest land in Oregon is currently not available for timber harvest (Herstrom et al. 2003). This land includes state and county parks, Nature Conservancy land, and a number of categories on national forests such



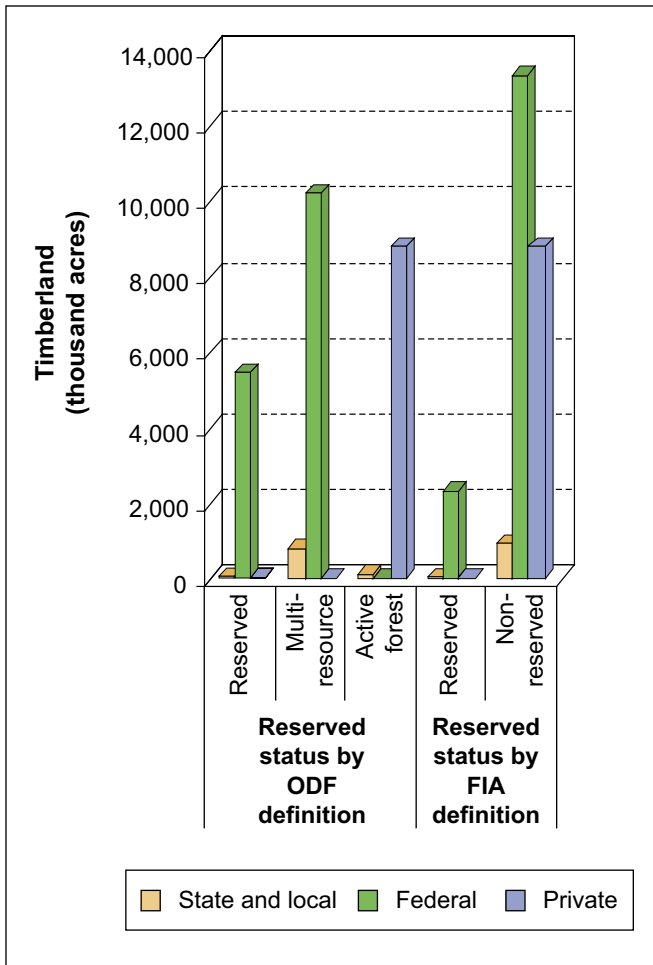


Figure 17—Estimated area of timberland, by reserve status and owner class, Oregon, 1999.

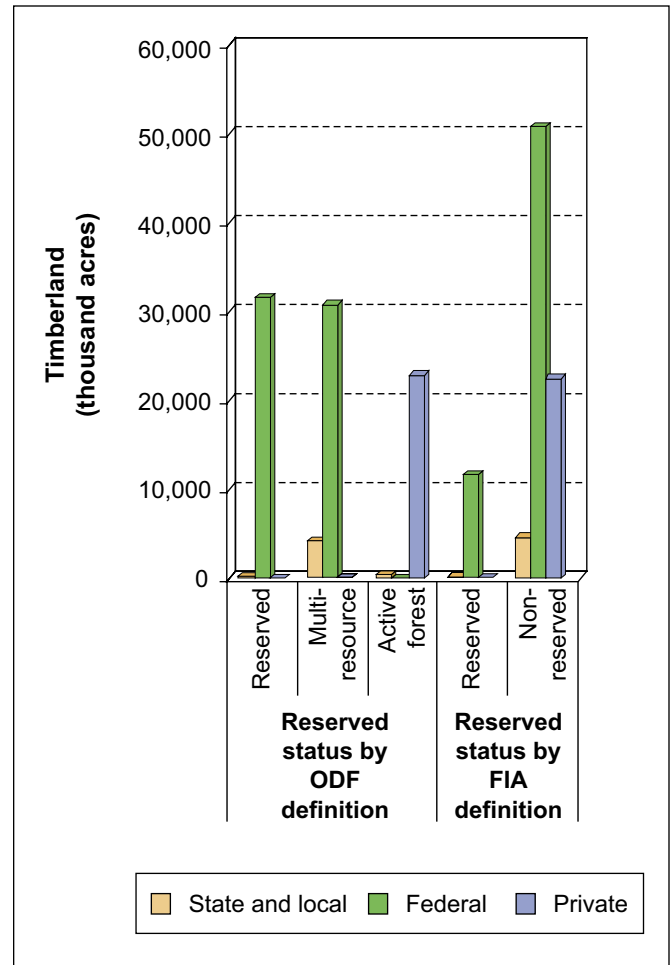


Figure 18—Estimated timber volume on timberland, by reserve status and owner class, Oregon, 1999.

as late-successional reserves, riparian areas, and research natural areas. Current regulations allow some timber harvesting on additional land (42 percent of forest land) but also include restrictions for wildlife habitat or other uses (Herstrom et al. 2003). Revisions of national forest plans, state laws, and other agency policies could result in changes in timber production locations and acres.

All of the reserved and multiresource area is managed by the Forest Service and other public entities (table 19). Site productivity tends to be higher on active forest land, with 25 percent in site classes of 165 or more cubic feet per acre per year compared to reserved and multiresource forest land with only 10 percent in the classes of 165 or more cubic feet per acre per year (app. table 18).

### Inventory Procedures

Oregon was inventoried by using double sampling for stratification (Cochran 1977) for the nonfederal lands and a simple stratified random sample for NFS and BLM lands. The sampling was implemented on a permanent systematic grid producing an even geographic distribution of secondary (field) plots across the state. The primary sample used on the nonfederal lands consists of photo plots placed at random inside each square of the grid.

The primary sample for nonfederal lands was a grid of nearly 70,000 points established in 1987 by using aerial photography from 1982 with some updates from 1994 for eastern Oregon and 24,000 points established in 1994 for western Oregon. Data collected on each point included, but

were not limited to, land use, owner, plant community, and stage of development. For coniferous stands, percentage of crown cover and a height code also were collected. The primary sample is used for the stratification of the secondary sample points to increase the precision of estimates.

The secondary sample consisted of 4,378 forest and nonforest field locations established in previous inventories and remeasured or reclassified in the 1998–99 period for eastern Oregon and 1,478 forest and nonforest field locations established in previous inventories and remeasured or reclassified in the 1994–98 period for western Oregon. This sample represents about a 1-in-16 subsample of the primary sample. The national forest plots were taken on a similar grid system with a different plot design (Max et al. 1996). The data were collected for these inventories between 1993 and 1996 and are in the 1997 Resources Planning Act (RPA) database.

The 1998 eastern Oregon PNW-FIA inventory also included reserved lands, which were excluded from previous PNW-FIA inventories. The major addition is from Crater Lake National Park with about 220,000 acres.

In the previous PNW-FIA inventories in the 1980s, a cluster of five subplots covering an area of about 8 acres was installed at timberland grid locations. At that time, the cluster of subplots sampled a single homogeneous condition, by moving subplots into the condition if necessary. At each subplot, variable-radius sampling was used to select trees over 5 inches d.b.h., and a fixed-radius plot was used to sample seedlings and saplings.

In the 1990s PNW-FIA inventories, the sampling design was modified to remove potential bias inherent in the 1980s procedures. The term “condition class” was defined for the modified design to identify different situations that could occur on a plot. A condition class, or “condition,” refers to an area with a distinct land class (timberland, woodland, nonforest, etc.) and vegetative condition (forest type, stand age, etc.). The modified design requires that all subplots for a cluster (the plot) remain fixed. For plots that straddle two or more conditions, we now sample all conditions by mapping the boundaries around each condition, essentially subdividing the plot. The information pertinent to each condition was recorded as condition class attributes. When

multiple conditions exist on a plot, all data in one condition are processed together. This can affect the amount of information available for classifying stand characteristics, such as forest type, stand size, and stand age. For example, on 7,014 secondary sample locations outside of national forest land in the 1990s Oregon PNW-FIA inventory, 7,524 condition classes were sampled, of which 1,951 were timberland conditions. On the 1,637 plots that contained a timberland condition, roads were the most common nonforest condition followed by grassland steppe or high desert shrub land.

Small differences in acreage and volume estimates in different publications summarizing data from these inventories (Oregon 1990s periodic inventories) are due to use of different versions of the inventory database. The tables in this report are compiled from the PNW-FIA integrated database version 1.4 (2004).

## Land and Water Area Updated

The Bureau of the Census compiles and publishes the area of land and water in the United States every 10 years. These area figures, available by state and county, are accepted and used by PNW-FIA in Portland as the gross number of acres to be inventoried in each county. The previous inventory was based on 1980 census data, and the current inventory uses 1990 census figures. Raster-scanned U.S. Geological Survey topographic maps and a geographic information system are now used by the Bureau of the Census to identify water bodies and landforms and to determine the size of areas much smaller than was possible previously. As a result, the definition of inland water was changed to reflect the finer resolution: streams with a minimum width of 200 feet are now recognized, compared to 660 feet in 1980, and small water bodies are now at least 4.5 acres, compared to 40 acres in the past.

## Changes in Ownership Definitions

Land owned by Native Americans is now classified as “other private.” In the 1980s inventories, these lands were defined as “other public.” Forest industry is no longer divided into two categories: “forest industry with mills” or “forest industry without mills;” instead both are now classed as forest industry.

## Reliability of Inventory Data

Inventories are designed to provide sampling errors consistent with national standards set by the USDA Forest Service. The target sampling errors for total timberland area is 3 percent for one million acres and 10 percent for one billion cubic feet of growing-stock volume. The sample design for this inventory provides the highest precision when estimates are aggregated for the entire state. As the sample is divided into smaller units, the confidence intervals (standard errors) increase as a proportion of the estimate. Confidence intervals are quantitative expressions of the variability inherent in the sampling and estimation procedures. Most of the tables in this report show standard errors for the major categories of displayed data.

## Glossary

**available other forest land**—Forest land available for harvest but incapable of growing 20 cubic feet per acre per year (mean annual increment at culmination in fully stocked, natural stands) of industrial wood because of adverse conditions such as sterile soils, dry climate, poor drainage, subalpine sites, steepness, or rockiness.

**condition class**—A mapped area on a plot with a distinct land class (e.g., timberland, oak woodland, nonforest) or a distinct vegetative condition (e.g., forest type, stand size). The condition identified at plot center is the only condition that is remeasured and used for the analysis of periodic change.

**cull trees**—Live trees of noncommercial species, and live trees of commercial species that are more than 75 percent defective. Noncommercial species are junipers, Pacific yew, Pacific dogwood, apple, and willow. Cull trees are not growing-stock trees.

**cull trees, rotten**—Cull trees with defect caused primarily by rot.

**cull trees, sound**—Trees of noncommercial species or cull trees of commercial species with defect caused primarily by poor form and roughness.

**diameter class**—A classification of trees based on diameter outside the bark measured at breast height, 4½ feet above

the ground. The common abbreviation for diameter at breast height is d.b.h. Trees are grouped into 2-inch classes up to 21 inches d.b.h., after which the class intervals become broader.

**forest industry land**—Land owned by companies that grow timber for industrial use. Includes companies both with and without wood processing plants.

**forest land**—Land at least 10 percent stocked with live trees, or land that had this minimum tree stocking in the past; is not currently developed for nonforest use; and is larger than one acre and at least 120 feet wide.

**forest types**—Stands are classified as pure softwood, pure hardwood, softwood-hardwood mix, or hardwood-softwood mix. Stands with 70 percent or more of the stocking in live softwood trees are classified as pure softwood types and are assigned the type name of the softwood species with the greatest stocking among all softwoods on the condition class plot. Stands with 70 percent or more of the stocking in live hardwood trees are classified as pure hardwood types and are assigned the type name of the hardwood species with the greatest stocking among all hardwoods on the condition class plot. Mixed species types are assigned if softwood stocking is from 31 to 69 percent total stocking on the plot: stands with 50 to 69 percent of the stocking in live softwood trees are classed as softwood-hardwood types and receive a type name that includes the softwood species with the greatest softwood stocking followed by the hardwood species with the greatest hardwood stocking; stands with 51 to 69 percent of the stocking in live hardwood trees are classed as hardwood-softwood types and receive a type name that includes the hardwood species with the greatest hardwood stocking followed by the softwood species with the greatest softwood stocking. For ease in reporting, the secondary forest type will be identified after a slash as “softwood” or “hardwood” in the summary tables.

**growing-stock growth, current net annual**—The increase in growing-stock volume on timberland during the last year of the period between the previous and current inventories. Components of current net annual growth for growing-stock volume include (a) the increment in net volume of poletimber

and sawtimber growing-stock trees alive at the beginning of the year and surviving to year end; plus (b) ingrowth, the net volume of growing-stock trees reaching poletimber or sawtimber size during the year; minus (c) mortality, the net volume of poletimber and sawtimber growing-stock trees that died during the year.

**growing-stock growth, periodic gross**—The increase in growing-stock volume between the previous and current inventories that is attributable to increasing tree size. Periodic gross growth includes (a) the increment in net volume of poletimber and sawtimber growing-stock trees alive at both the previous and current inventories; (b) the increment in net volume of poletimber and sawtimber growing-stock trees alive at the previous inventory and harvested between inventories; and (c) ingrowth, the net volume of growing-stock trees reaching poletimber or sawtimber size between inventories.

**growing-stock mortality, average annual**—The annual net volume of poletimber and sawtimber growing-stock trees that died between the previous and current inventories.

**growing-stock trees**—All live trees except cull trees (see “cull trees”).

**growing-stock volume**—Net volume in cubic feet of live sawtimber and poletimber growing-stock trees from the top of a stump 12 inches tall to a minimum 4-inch top (of central stem) inside the bark. Net volume is gross volume less deductions for rot and missing bole sections.

**hardwoods**—Nonconiferous trees, usually broadleaved. See “Names of Trees” for a list of hardwood species in this report.

**industrial wood**—All commercial roundwood products except fuelwood. Roundwood includes logs or bolts that are in straight sections at least 8 feet long for hardwoods and 12 feet long for softwoods.

**land area**—Area reported as land by the Bureau of the Census (U.S. Department of Commerce 1990). Total land area includes dry land and land temporarily or partially covered by water, such as marshes, swamps, and river flood

plains; streams, sloughs, and canals less than 200 feet wide; and lakes, reservoirs, and ponds smaller than 4.5 acres.

**land class**—A classification of land by major use. The minimum area for classification is 1 acre.

**mean annual increment (MAI) at culmination**—A measure of the productivity of forest land expressed as the average increase in timber volume (in cubic feet) per acre per year. For a given species and site index, the mean is based on the age at which the MAI culminates for fully stocked natural stands. The MAI is based on the site index of the plot.

**national forest land**—Federal land that has been designated by Executive order or statute as national forest or purchase units and other lands under the administration of the USDA Forest Service, including experimental areas and Bankhead-Jones Title III land.

**net volume**—Gross volume less deductions for sound and rotten defects. Growing-stock net volume is gross volume (in cubic feet) less deductions for rot and missing bole sections on poletimber and sawtimber growing-stock trees. Sawtimber net volume is gross volume (in board feet) less deductions for rot, sweep, crook, missing bole sections, and other defects that affect the use of sawtimber trees for lumber.

**noncommercial species**—A tree species not commonly used for industrial wood products: juniper, Pacific yew, Pacific dogwood, apple, and willow. Noncommercial species will not be included in growing-stock volume tables; however, if one or more of these species dominate on a plot, the forest type might be classified as a noncommercial species.

**nonforest land**—Land that has never supported forests or formerly was forested and currently is developed for nonforest uses. Included are lands used for agricultural crops, Christmas tree farms, cottonwood plantations, improved pasture, residential areas, city parks, constructed roads, operating railroads and their right-of-way clearings, powerline and pipeline clearings, streams more than 30 feet wide, and 1- to 40-acre areas of water classified by the USDC Bureau of the Census as land. If intermingled in forest areas, unimproved roads and other nonforest strips must be more than

120 feet wide, and clearings or other areas must be 1 acre or larger to qualify as nonforest land.

**nonstocked area**—Timberland less than 10 percent stocked with live trees. Recent clearcuts scheduled for planting are classified as nonstocked area.

**other private land**—Private land not owned by forest industry. Native American land, farmer-owned land, and miscellaneous private land are included.

**other public land**—Land administered by public agencies other than the USDA Forest Service and USDI Bureau of Land Management. Other public land does not include Native American land, which is included with other private land.

**poletimber stands**—Stands with a quadratic mean diameter (mean diameter weighted by basal area) from 5.0 to 9.0 inches at breast height if a softwood stand and from 5.0 to 11.0 inches at breast height if a hardwood stand.

**poletimber trees**—Live growing-stock trees of commercial species that are 5.0 inches in d.b.h. or larger but smaller than sawtimber trees.

**reserved other forest**—Forest land that is incapable of growing 20 cubic feet per acre per year (mean annual increment at culmination in fully stocked, natural stands) of industrial wood and has been dedicated to noncommodity use through statute, ordinance, or administrative order.

**reserved timberland**—Forest land that is capable of growing 20 cubic feet or more per acre per year (mean annual increment at culmination in fully stocked, natural stands) of industrial wood but has been dedicated to noncommodity use through statute, ordinance, or administrative order.

**sapling and seedling stands**—Stands with a quadratic mean diameter (mean diameter weighted by basal area) less than 5.0 inches at breast height.

**sapling and seedling trees**—Live trees of commercial species that are less than 5.0 inches in d.b.h. with a minimum height of 6.0 inches and that have no diseases, defects, or deformities likely to prevent their becoming poletimber trees. Saplings have a minimum diameter of 1.0 inch.

**sawtimber stands**—Stands with a quadratic mean diameter (mean diameter weighted by basal area) 9.0 inches and larger at breast height if a softwood stand and 11.0 inches and larger at breast height if a hardwood stand. Small sawtimber stands are sawtimber stands with a mean diameter (weighted by basal area) less than 21.0 inches at breast height. Large sawtimber stands are sawtimber stands that have a mean diameter 21.0 inches or larger at breast height. Different utilization standards (such as 7.0-inch diameter) would result in higher stand volumes.

**sawtimber trees**—Live softwood trees of commercial species at least 9.0 inches in d.b.h. and live hardwood trees of commercial species at least 11.0 inches in d.b.h. At least 25 percent of the board-foot volume in a sawtimber tree must be free from defect. Softwood trees must contain at least one 12-foot saw log with a top diameter of not less than 7 inches outside bark; hardwood trees must contain at least one 8-foot saw log with a top diameter of not less than 9 inches outside bark.

**sawtimber volume**—Net volume of sawtimber trees measured in board feet. Softwood volume is estimated from the top of a stump 12 inches tall up to a minimum 6-inch top diameter, inside bark, and hardwood volume is estimated from the top of a stump 12 inches tall up to a minimum 8-inch top diameter, inside bark. Net sawtimber volume equals gross volume less deduction for rot, sweep, crook, and other defects that affect use for lumber.

**Scribner rule**—The common board-foot log rule used locally to determine sawtimber volume. Scribner volume is estimated in terms of 32-foot logs in western Oregon and 16-foot logs in eastern Oregon for softwoods and hardwoods. See “sawtimber volume” for utilization limits.

**site class**—A classification of the potential productivity of forest land expressed as mean annual increment (MAI) of timber volume (in cubic feet) at culmination in fully stocked natural stands. Six classes in this report are based on a range of MAI values that were calculated on every plot.

**site index**—A measure of the productivity of forest land expressed as the average height of dominant and codominant trees at a specified age.

**softwoods**—Coniferous trees, usually evergreen, with needles or scalelike leaves. See “Names of Trees” for a list of softwood species in this report.

**stand age**—The 10-year age class that best characterizes the stand.

**stand-size class**—A classification of stands based on tree size. Stand-size classes are sawtimber, poletimber, and sapling-seedling stands.

**state land**—Land owned by states or administered by state agencies.

**stocking**—The degree of occupancy of land by trees, measured by basal area or number of trees by size and spacing, or both, compared to a stocking standard; that is, the basal area or number of trees, or both, required to fully use the growth potential of the land.

**timber class**—A classification of trees as growing stock, cull, and salvable dead. Growing-stock trees are divided into poletimber and sawtimber trees.

**timber harvest**—Volume of roundwood removed from forest land for products.

**timber volume**—Includes the net volume in cubic feet of poletimber and sawtimber trees and salvable dead sawtimber trees, and the net volume in cubic feet of cull trees of commercial species. Volume is measured from the top of a stump 12 inches tall to a minimum 4-inch top diameter, inside bark.

**timberland**—Forest land capable of growing 20 cubic feet or more per acre per year (mean annual increment at culmination in fully stocked, natural stands) of industrial wood; is not in a reserved status through removal of the area from timber use by statute, ordinance, or administrative order; is not in a withdrawn status where it is pending consideration for reserved status; and is not developed for nonforest uses. See also “reserved timberland.”

## Names of Trees

Common name	Scientific name <sup>1</sup>
Softwoods:	
Douglas-fir	<i>Pseudotsuga menziesii</i> (Mirb.) Franco
Engelmann spruce	<i>Picea engelmannii</i> Parry ex Engelm.
Grand fir	<i>Abies grandis</i> (Dougl. ex D. Don) Lindl.
Incense-cedar	<i>Calocedrus decurrens</i> (Torr.) Florin.
Jeffrey pine	<i>Pinus jeffreyi</i> Grev. & Balf.
Knobcone pine	<i>Pinus attenuata</i> Lemm.
Lodgepole pine	<i>Pinus contorta</i> Dougl. ex Loud.
Mountain hemlock	<i>Tsuga mertensiana</i> (Bong.) Carr.
Noble fir	<i>Abies procera</i> Rehd.
Pacific silver fir	<i>Abies amabilis</i> Dougl. ex Forbes.
Pacific yew	<i>Taxus brevifolia</i> Nutt.
Ponderosa pine	<i>Pinus ponderosa</i> Dougl. ex Laws.
Port-Orford-cedar	<i>Chamaecyparis lawsoniana</i> (A. Murr.) Parl.
Redwood	<i>Sequoia sempervirens</i> (D. Don) Endl.
Scotch pine	<i>Pinus sylvestris</i> L.
Shasta red fir	<i>Abies magnifica</i> A. Murr.
Sitka spruce	<i>Picea sitchensis</i> (Bong.) Carr.
Subalpine fir	<i>Abies lasiocarpa</i> (Hook.) Nutt.
Sugar pine	<i>Pinus lambertiana</i> Dougl.
Western hemlock	<i>Tsuga heterophylla</i> (Raf.) Sarg.
Western juniper	<i>Juniperus occidentalis</i> Hook.
Western larch	<i>Larix occidentalis</i> Nutt.
Western redcedar	<i>Thuja plicata</i> Donn ex D. Don
Western white pine	<i>Pinus monticola</i> Dougl. ex D. Don
White fir	<i>Abies concolor</i> (Gord. & Glend.) Lindl. ex Hildebr.
Whitebark pine	<i>Pinus albicaulis</i> Engelm.
Hardwoods:	
Apple	<i>Pyrus</i> spp.
Bigleaf maple	<i>Acer macrophyllum</i> Pursh
Black cottonwood	<i>Populus trichocarpa</i> Torr. & Gray
California black oak	<i>Quercus kelloggii</i> Newb.
California-laurel	<i>Umbellularia californica</i> (Hook. & Arn.) Nutt.
Canyon live oak	<i>Quercus chrysolepis</i> Liebm.
Cherry	<i>Prunus</i> spp.
Golden (giant) chinkapin	<i>Castanopsis chrysophylla</i> (Dougl.) A. DC.
Oregon ash	<i>Fraxinus latifolia</i> Benth.
Oregon white oak	<i>Quercus garryana</i> Dougl. ex Hook.
Pacific madrone	<i>Arbutus menziesii</i> Pursh
Quaking aspen	<i>Populus tremuloides</i> Michx.
Red alder	<i>Alnus rubra</i> Bong.
Tanoak	<i>Lithocarpus densiflorus</i> (Hook. & Arn.) Rehd.
White alder	<i>Alnus rhombifolia</i> Nutt.
Willow	<i>Salix</i> spp.

<sup>1</sup>Nomenclature per Little 1979.

## Acknowledgments

Many people were involved in the collection of data and the design of the inventories. Special thanks go to FIA, Region 6, and BLM data collection staffs as well as to the many landowners who allowed field crews on their land to visit plots. We also are indebted to those who developed the integrated database from which we extracted the tables for this report: Karen Waddell, Bruce Hiserote, Carol Apple, and Jim Alegria. Additional thanks to Dale Weyermann and John Chase for producing the maps displayed in this report and to Erica Hanson and Jennifer Gomoll for formatting the statistical tables. And lastly, we greatly appreciate our reviewers: Andy Gray, Gary Lettman, Olaf Kuegler, and Brad Smith.

## Metric Equivalents

1 foot = 0.3048 meter  
1 inch = 2.54 centimeters  
1 mile = 1.609 kilometers  
1 acre = 0.405 hectare  
1 board foot = 0.833 cubic feet  
1 cubic foot = 0.0283 cubic meters  
1 cubic foot per acre = 0.07 cubic meter per hectare

## Literature Cited

- Azuma, D.L.; Bednar, L.F.; Hiserote, B.A.; Veneklase, C.F. 2004a.** Timber resource statistics for western Oregon, 1997. Rev. Resour. Bull. PNW-RB-237. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 120 p.
- Azuma, D.L.; Dunham, P.A.; Hiserote, B.A.; Veneklase, C.F. 2004b.** Timber resource statistics for eastern Oregon, 1999. Rev. Resour. Bull. PNW-RB-238. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 42 p.
- Bassett, P.M. 1977.** Timber resources of southwest Oregon. Resour. Bull. PNW-72. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 29 p.
- Bolsinger, C.L.; Berger, J.M. 1975.** The timber resources of the Blue Mountain area, Oregon. Resour. Bull. PNW-57. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 62 p.
- Cochran, W.G. 1977.** Sampling techniques. 3<sup>rd</sup> ed. New York: John Wiley and Sons. 413 p.
- Farrenkopf, T.O. 1982.** Forest statistics for eastern Oregon, 1977. Resour. Bull. PNW-RB-94. Portland, OR: U.S. Department Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 28 p.
- Gedney, D.; Azuma, D.L.; Bolsinger, C.L.; McKay, N. 1999.** Western juniper in eastern Oregon. Gen. Tech. Rep. PNW-GTR-464. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 53 p.
- Gedney, D.R.; Bassett, P.M.; Mei, M.A. 1986a.** Timber resource statistics for nonfederal forest land in northwest Oregon. Resour. Bull. PNW-RB-140. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 26 p.
- Gedney, D.R.; Bassett, P.M.; Mei, M.A. 1986b.** Timber resource statistics for nonfederal forest land in southwest Oregon. Resour. Bull. PNW-138. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 26 p.
- Gedney, D.R.; Bassett, P.M.; Mei, M.A. 1987.** Timber resource statistics for nonfederal forest land in west-central Oregon. Resour. Bull. PNW-RB-143. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 26 p.
- Gedney, D.R.; Bassett P.M.; Mei, M.A. 1989.** Timber resource statistics for all forest land, except national forests in eastern Oregon. Resour. Bull. PNW-RB-164. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 25 p.



- Hazard, J.W.; Metcalf, M.E. 1964.** Forest statistics for southwest Oregon. Resour. Bull. PNW-8. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 32 p.
- Hazard, J.W.; Metcalf, M.E. 1965.** Forest statistics for west-central Oregon. Resour. Bull. PNW-10. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 35 p.
- Herstrom, A.; Birch, K.; Lettman, G. 2003.** Forest land management classifications. Unpublished document. On file with: Oregon Department of Forestry, 2600 State Street, Salem, OR.
- Jacobs, D.M. 1978.** Timber resources of west-central Oregon. Resour. Bull. PNW-76. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 30 p.
- Little, E.L., Jr. 1979.** Checklist of United States trees (native and naturalized). Agric. Handb. 541. Washington, DC: U.S. Department of Agriculture, Forest Service. 375 p.
- Max, T.A.; Schreuder, H.T.; Hazard, J.W.; Oswald, D.D.; Teply, J.; Alegria, J. 1996.** The Pacific Northwest Region vegetation and inventory monitoring system. Res. Pap. PNW-RP-493. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 22 p.
- Mei, M.A. 1979.** Timber resources of northwest Oregon. Resour. Bull. PNW-82. Portland, OR: U.S. Department of Agriculture, Pacific Northwest Forest and Range Experiment Station. 29 p.
- Metcalf, M.E.; Hazard, J.W. 1964.** Forest statistics for northwest Oregon. Resour. Bull. PNW-7. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 38 p.
- Oregon Department of Forestry. 2003.** Harvest report, 25-year history. [http://www.odf.state.or.us/DIVISIONS/resource\\_policy/resource\\_planning/Annual\\_Reports/rpt25YearHistory.asp](http://www.odf.state.or.us/DIVISIONS/resource_policy/resource_planning/Annual_Reports/rpt25YearHistory.asp). (10 December 2003).
- U.S. Department of Commerce, Bureau of the Census. 1990.** 1990 census of population. Volume 1: characteristics of the population. Part 1: United States summary. Washington, DC.

## Appendix 1—Oregon Department of Forestry—Forest Land Management Classifications (from Herstrom et al. 2003)

1. **Nonforest**—land with <10 percent crown closure that has not previously been in forest use and has not been converted from forest to another use (Note: recent timber harvest units are forest land).

2. **Reserved forest** (Forest reserved for conservation and recreation)—includes land reserved from regularly scheduled timber harvest by law, regulation, or forest plan requirement. The primary purpose of the designation is to reserve the land for production of nontimber values. Forest management is used to produce wildlife, esthetic, or other values, and limited harvests may only be conducted when it will benefit those values (i.e., safety, maintaining wildlife habitat, etc.).

The reserved forest class includes administratively withdrawn areas, congressionally reserved areas (such as national monuments, national parks, national wildlife refuges, Steens Mountain Cooperative Management and Protection Area, wild and scenic areas, wild and scenic rivers, and wilderness areas), late-successional reserves, state and county parks, riparian reserves (federal), special areas (such as areas of critical environmental concern, botanical areas, ecological emphasis areas, outstanding natural areas, and research natural areas), The Nature Conservancy land, and wildlife areas.

3. **Multiresource forest** (forest with restricted timber management)—includes land where restrictions on timber harvesting have been implemented through forest plans, state laws, or agency policies. This includes portions of land within management allocations where scheduled timber harvest may occur, but where restrictions for wildlife habitat or other uses will significantly reduce timber outputs.

4. **Active forest** (actively managed for timber production)—includes lands where scheduled timber harvest may occur and where sustainable supplies of timber are anticipated. These forest lands are regulated through the Oregon land use planning laws to maintain the land in forest uses by restricting development and through the Oregon Forest Practices Act to protect soil, air, water, and wildlife resources by regulating commercial forest operations. The active forest class includes private land and other public land.

## Federal Lands—Reserved and Multiresource (Restricted Timber Management) Categories

**Adaptive management areas**—landscape units designated to encourage the development and testing of innovative approaches to restoring and managing late-successional and old-growth forests.

**Administratively withdrawn areas**—land identified in forest or district plans that includes recreation and visual areas, back country, and other areas where management emphasis precludes scheduled timber harvests.

**Congressionally reserved areas**—normally preclude timber harvesting except where it is needed to preserve or enhance the values of the designations, which include national monuments, national parks, national wildlife refuges, Steens Mountain Cooperative Management and Protection Area, wild and scenic areas, wild and scenic rivers, and wilderness areas.

**East-side “screens”**—the interim management direction for east-side federal forests (i.e., late-successional and wildlife “screens”) designed to maintain future planning options concerning wildlife habitat associated with late and old structural stages, fish habitat, and old-forest abundance. The screens allow for some timber harvest, limited to thinnings or group or individual tree selection, in stands where old-forest conditions, either multistrata with large trees or single-stratum with large trees, are at or above historical range of variability and timber harvest is needed to maintain or enhance old-forest conditions.

**Experimental forests**—used predominantly for research on the management of watersheds, soils, and vegetation. In general, the forests are used to develop concepts and tools needed to predict effects of disturbance, land use, and climate change on ecosystem structure, function, and species.

**Key watersheds**—part of the aquatic strategy within the federal Northwest Forest Plan. The major focus of management within the watersheds is on maintenance and restoration of fish habitat. The land use designation is an overlay on all other allocations within the plan. It requires that no new roads be built within unroaded portions of the watersheds, that existing road system mileage be reduced, and that no timber harvesting be conducted without a watershed analysis.

**Late-successional reserves**—areas that have been designated in federal plans to protect and enhance conditions of late-successional and old-growth forest ecosystems. They are designed to serve as habitat for species that use these forests, such as the spotted owl. There is no timber harvest allowed in stands over 80 years of age. Thinning and other silvicultural activities are restricted to treatments that are beneficial to the creation of late-successional forest conditions.

**Matrix land (federal)**—federal land in western Oregon outside the other federally designated categories (congressionally reserved, late-successional reserves, adaptive management areas, administratively withdrawn, and riparian reserves). Most federal timber harvesting and other silvicultural activities will be conducted in the matrix subject to standards and guidelines that include protective buffers around certain wildlife habitats (e.g., spotted owl and marbled murrelet sites) and leave snags and green trees in harvest units. Green tree retention requirements include:

- In the Oregon Coast Range each 640-acre block is managed on a 150-year rotation. When an area within a block is cut, 12 to 18 green trees per acre (t.p.a.) are retained (16 to 25 t.p.a. on BLM lands south of Grants Pass). There must be 25 to 30 percent of each block in late-successional forest at any point in time.

- For all other lands in western Oregon at least 15 percent of the area associated with each cutting unit is retained with a goal of having 70 percent of the total leave area in aggregates of 0.2 to 1 hectare or more.

**National grassland**—the Crooked River National Grassland is managed to promote the development of grassland agriculture and sustained yield management of forage, fish, wildlife, timber, water, and recreation resources. Fuelwood cutting is allowed by permit only in juniper stands that are not designated as old growth.

**National recreation areas**—Vegetation is managed to promote the maintenance and restoration of native plant communities. Trees are cut only to meet nontimber management objectives including recreation and wildlife habitat maintenance.

**National scenic area (Columbia Gorge)**—protects and provides for the enhancement of the scenic, cultural, recreational, and natural resources of the Columbia River Gorge.

**Riparian reserves (federal lands)**—areas adjacent to both sides of a stream, lake, or wetland where timber harvesting is prohibited. The width of the reserves are as follows:

- Fish-bearing streams, lakes, and natural ponds—a distance equal to two site-potential trees or 300 feet (each side), whichever is greater.
- Permanently flowing non-fish-bearing streams, constructed ponds and reservoirs, and wetlands larger than 1 acre—a distance equal to one site-potential tree or 150 feet (each side), whichever is greater.
- Seasonally flowing or intermittent streams—a distance equal to 100 feet (each side).

**Special areas (includes areas of critical environmental concern, botanical areas, ecological emphasis areas, outstanding natural areas, and research natural areas)**—special area designation protects and provides interpretation of unique geological, biological, and cultural areas for education, scientific pursuits, and public enjoyment. These areas preserve, protect, or restore native species composition and ecological processes of biological communities. They are

available for short- or long-term scientific study, research, and education and serve as a baseline against which human impacts on natural systems can be measured. Uses are managed to prevent loss of outstanding values.

### **Private and Other Public Land—Multiresource (Restricted Timber Management) Categories**

**Habitat conservation plans**—Nonfederal landowners who wish to conduct activities on their land that might incidentally harm (or “take”) a species listed as threatened or endangered must first obtain an incidental take permit from the U.S. Fish and Wildlife Service. To obtain a permit, the applicant must develop a habitat conservation plan designed to offset any harmful effects the proposed activity might have on the species.

**Oregon scenic waterways program**—The Oregon Parks and Recreation Department must be notified of certain activities (including cutting trees) proposed within ¼ mile of the bank of Oregon’s designated scenic waterways. The proposed uses or activities may not be started until the written notification is approved, or until 1 year after the notice is accepted. Within that period, the Parks Department employs a variety of tools to maintain the scenic value of the river.

**Riparian management areas (RMA)**—areas on private and state lands in eastern Oregon adjacent to both sides of a stream or lake where timber harvesting is restricted. In general, coniferous trees in amounts similar to mature forests must be retained in riparian management areas along streams. The width of the riparian management area differs depending on the size of the stream and whether fish are present or the stream is used as a domestic water supply. Riparian management area widths for streams are generally as follows:

- Large streams (about 24 or more feet wide) with fish—100 feet
- Medium streams (about 5 to 24 feet wide) with fish—70 feet
- Small streams (up to about 5 feet wide) with fish—50 feet
- Small streams with domestic water use—20 feet

- Small streams without fish or domestic water use—no retention

Timber harvesting is restricted along streams on state forests in northwest Oregon generally as follows:

- Large and medium streams, and small streams with fish—170 feet
- Small perennial streams without fish—170 feet
- Small intermittent streams—100 feet.

Timber harvesting is restricted near streams on the Elliott State Forest in southwest Oregon generally as follows:

- Perennial streams with fish—100 feet
- Intermittent streams with fish—75 feet
- Perennial streams without fish—50 feet

**Significant wetlands**—In wetlands and estuaries larger than 8 acres, half of the trees, by species, in each size class must be left after harvesting. These trees must include trees that border the wetland, contribute to bank stability, or are used by predatory birds for nesting and perching.

**State forest plan restrictions**—State forests in different regions have different harvest restrictions including:

- Northwest Oregon State Forests Management Plan is based on an approach called structure-based management. Structure-based management is designed to produce and maintain an array of forest stand structures across the landscape in a functional arrangement that provides timber revenue, habitat for native species, and healthy aquatic systems. Structure-based management goals include maintaining a proportion of the forest in a mix of stand types over time: 5 to 15 percent in regeneration types (i.e., seedlings, saplings, and herbs and shrubs), 10 to 20 percent in closed single-canopy types, 15 to 35 percent in understory reinitiation types (i.e., gap in tree canopy allows understory of shrubs and herbs), 20 to 30 percent in layered types (i.e., tree canopy of two or more layers with trees of 18 inches d.b.h.), and older forest types (i.e., a minimum of eight trees per acre at least 32 inches d.b.h. and multiple canopy layers).

- Elliott State Forest Habitat Conservation Plan uses a landscape approach to provide and maintain habitat for the northern spotted owl and the marbled murrelet. The forest is divided into 17 management basins that use a mix of 80- to 240-year rotations. Over time, from 13 to 66 percent of each management basin will be managed as nesting, roosting, and foraging habitat. In addition, 19 percent of the forest is designated as reserves.
- Eastern Oregon region. Selective harvesting is used in most of the eastern Oregon region's forests to maintain or improve uneven-aged stand structure. Even-age management is limited to stands where ecological conditions, insects, or diseases make selective harvesting less attractive.

**State and county parks (includes state parks, state park land, city and county parks, and waysides)**—Goals for Oregon state parks include having existing and future recreational uses coexist and complement natural, scenic, and cultural resources within the park. State parks are assessed to identify discrete areas and determine the levels of suitability of resource areas for recreational use in conjunction with the need to protect important resources from disturbance. These resources include vegetation, wildlife habitat, protected species, water features and hazards, wetlands, and historical resources. Each of these resources is classified with respect to resource suitability based on criteria including current resource conditions, types, sensitivity, rareness, and extent of existing development or other intrusions. Areas with resources that are very sensitive or rare, even though they may be in good condition, have a very low tolerance for intensive, public, recreational uses and facilities development and typically are assigned a low suitability level for recreational development.

**State research forests**—The forests are used predominantly for teaching and research. They provide an array of education and research opportunities to advance societal awareness and participation in sound forest stewardship while providing sustainable financial resources to meet these needs. Forests are used for a variety of teaching and research

projects that include studies in silviculture, engineering, ecology, recreation, wildlife, cultural resources, and other subjects.

**The Nature Conservancy land**—The Nature Conservancy's mission is to preserve the plants, animals, and natural communities that represent the diversity of life on Earth by protecting the land and water they need to survive. The Nature Conservancy's vision is to conserve a set of places that, if managed appropriately, will ensure the long-term survival of all their native life and natural communities.

**State wildlife areas (game management areas, game reserves, wildlife areas, and osprey management areas)**—The State Wildlife Commission's goals are to:

- Maintain all species of wildlife at optimum levels.
- Develop and manage the land and water in a manner that will enhance the production and public enjoyment of wildlife.

Land is managed to prevent serious depletion of any indigenous species and to provide the optimum recreational and aesthetic benefits. Management practices affecting forage removal are established to protect the property and benefit wildlife resources.

Table 1—Estimated area, by county, land class, and administrative status, Oregon, 1999<sup>a</sup>

County	Forest land				Total	Nonforest land	All land <sup>c</sup>
	Available timberland	Reserved timberland	Available <sup>b</sup> other forest	Reserved other forest			
<i>Thousand acres</i>							
All Oregon:							
All counties	23,020	2,332	4,624	257	30,233	31,205	61,438
Western Oregon:							
Benton	305	—	3	—	307	126	433
Clackamas	763	131	33	—	927	269	1,196
Clatsop	421	—	28	4	452	77	529
Columbia	310	—	27	—	337	83	420
Coos	836	20	17	—	873	151	1,024
Curry	737	168	38	24	966	75	1,041
Douglas	2,600	113	137	9	2,859	365	3,224
Hood River	179	87	19	—	285	49	334
Jackson	1,186	76	231	14	1,507	275	1,782
Josephine	778	82	99	6	964	86	1,050
Lane	2,185	218	62	21	2,486	429	2,915
Lincoln	538	11	16	—	565	62	627
Linn	875	72	47	13	1,007	460	1,467
Marion	294	37	29	18	378	380	758
Multnomah	65	56	0	12	134	144	278
Polk	263	—	4	—	267	207	474
Tillamook	629	—	11	—	641	64	705
Washington	244	—	8	7	259	205	463
Yamhill	211	—	23	6	239	219	458
Total	13,418	1,071	832	132	15,454	3,725	19,179
Eastern Oregon:							
Baker	621	36	118	8	783	1,181	1,964
Crook	394	25	489	—	909	998	1,907
Deschutes	751	98	230	27	1,107	825	1,932
Gilliam	—	—	38	—	38	733	771
Grant	1,333	168	473	15	1,989	909	2,898
Harney	358	1	516	—	876	5,610	6,486
Jefferson	331	34	355	8	728	412	1,140
Klamath	2,084	323	525	27	2,959	845	3,804
Lake	1,152	15	350	6	1,523	3,684	5,207
Malheur	10	—	96	—	106	6,222	6,328
Morrow	189	—	28	—	217	1,084	1,301
Sherman	—	—	—	—	—	527	527
Umatilla	570	11	44	—	624	1,434	2,058
Union	654	79	67	—	801	502	1,303
Wallowa	524	460	45	26	1,055	958	2,013
Wasco	387	—	211	8	606	918	1,524
Wheeler	242	9	208	—	458	639	1,097
Total	9,601	1,261	3,792	125	14,779	27,481	42,260

— = less than 500 acres found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>Includes estimates for western juniper forest from Gedney et al. 1999.

<sup>c</sup>Source: U.S. Department of Commerce 1990.

Table 2—Estimated area of forest land, by county and owner class, Oregon, 1999<sup>a</sup>

County	Public					Private				All owners
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total public	Forest industry	Other private	Total private	
All Oregon:	14,416	3,344	189	962	210	19,122	6,222	4,890	11,112	30,233
All counties										
<i>Thousand acres</i>										
Western Oregon:										
Benton	13	58	—	28	—	99	159	49	208	307
Clackamas	543	62	—	6	6	617	134	176	310	927
Clatsop	—	—	14	125	6	145	258	50	308	452
Columbia	—	11	—	—	7	29	219	89	307	337
Coos	72	158	—	72	9	311	403	159	562	873
Curry	594	68	—	5	—	667	224	75	299	966
Douglas	966	653	—	49	15	1,682	788	389	1,177	2,859
Hood River	205	—	—	—	25	231	39	16	54	285
Jackson	430	408	5	11	16	870	374	263	637	1,507
Josephine	408	312	—	12	35	768	60	136	197	964
Lane	1,342	290	5	49	6	1,692	576	218	794	2,486
Lincoln	168	20	—	22	—	209	277	78	355	565
Linn	413	88	—	7	—	508	390	109	499	1,007
Marion	187	21	—	43	—	250	53	74	127	378
Multnomah	68	4	—	—	12	84	15	34	50	134
Polk	2	41	—	—	—	42	142	83	225	267
Tillamook	89	50	—	302	18	459	135	48	183	641
Washington	—	12	—	88	7	106	44	108	152	259
Yamhill	24	33	—	6	—	63	86	91	177	239
Total	5,523	2,288	35	825	163	8,833	4,377	2,244	6,621	15,454
Eastern Oregon:										
Baker	593	51	—	—	—	643	41	98	140	783
Crook	389	62	—	—	38	489	63	357	420	909
Deschutes	908	93	—	3	—	1,004	62	40	102	1,107
Gilliam	—	—	—	—	—	—	—	38	38	38
Grant	1,462	48	—	30	—	1,540	149	301	449	1,989
Harney	453	316	—	—	—	770	—	106	106	876
Jefferson	272	9	—	—	—	281	125	321	446	728
Klamath	1,662	200	150	37	—	2,049	632	278	910	2,959
Lake	963	222	—	—	—	1,185	248	90	338	1,523
Malheur	3	15	—	27	—	45	3	57	61	106
Morrow	140	—	4	—	—	145	48	24	73	217
Umatilla	408	4	—	7	—	419	84	122	205	624
Union	552	—	—	—	—	552	142	107	249	801
Wallowa	776	9	—	8	4	797	134	124	258	1,055
Wasco	161	—	—	25	5	191	31	384	415	606
Wheeler	152	27	—	—	—	178	83	196	280	458
Total	8,893	1,056	154	137	48	10,288	1,845	2,646	4,491	14,779

— = less than 500 acres found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

24 **Table 3—Estimated area of forest land, by forest type and owner class, Oregon, 1999<sup>a</sup>**

Forest type	Public					Private					Total	All owners	
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total	Forest industry	Native American <sup>b</sup>	Other private	Total			
<i>Thousand acres</i>													
All Oregon:													
Softwoods—													
Douglas-fir	4,588	1,581	5	572	68	6,815	3,172	168	1,164	4,504	11,319		
Engelmann spruce	168	—	—	—	4	172	17	8	9	34	206		
Grand fir	919	1	—	8	7	935	106	25	39	169	1,104		
Incense-cedar	36	13	—	—	—	49	57	8	39	103	152		
Jeffrey pine	29	7	—	—	—	36	—	—	2	2	38		
Knobcone pine	16	—	—	—	—	16	—	—	—	—	16		
Lodgepole pine	1,131	30	62	20	14	1,257	286	16	95	397	1,654		
Mountain hemlock	494	—	59	—	—	553	—	32	—	32	585		
Noble fir	81	—	—	—	6	87	18	—	—	18	105		
Pacific silver fir	227	—	—	—	—	227	16	—	—	16	243		
Ponderosa pine	3,194	109	—	50	5	3,358	784	124	530	1,438	4,797		
Port-Orford-cedar	21	8	—	2	—	31	8	—	11	19	50		
Redwood	—	—	—	—	—	—	2	—	—	2	2		
Scotch pine	—	—	—	—	—	—	—	—	2	2	2		
Shasta red fir	155	7	27	—	—	188	—	—	—	—	188		
Sitka spruce	22	—	—	23	4	49	56	—	41	97	146		
Subalpine fir	203	—	—	—	—	203	—	—	—	—	203		
Sugar pine	44	7	—	—	—	51	—	—	—	—	51		
Western hemlock	234	83	—	46	—	363	360	10	31	402	764		
Western juniper	152	823	—	41	38	1,054	118	20	1,156	1,293	2,347		
Western larch	148	—	—	—	—	148	21	2	8	30	178		
Western redcedar	44	7	—	—	3	55	24	—	28	52	107		
Western white pine	67	—	—	—	—	67	—	—	—	—	67		
White fir	549	57	—	—	—	606	231	—	27	258	864		
Whitebark pine	31	—	—	—	—	31	—	—	—	—	31		
<b>Total</b>	<b>12,552</b>	<b>2,734</b>	<b>153</b>	<b>763</b>	<b>149</b>	<b>16,351</b>	<b>5,275</b>	<b>414</b>	<b>3,181</b>	<b>8,870</b>	<b>25,221</b>		
Hardwoods—													
Apple	—	—	—	—	—	—	2	—	2	4	4		
Bigleaf maple	23	19	—	16	13	72	55	—	98	153	224		
Black cottonwood	5	—	4	6	—	16	11	—	11	22	38		
California black oak	5	35	—	—	—	40	20	—	43	63	103		
California-laurel	8	—	—	—	—	8	19	—	0	19	27		
Canyon live oak	58	25	—	—	—	83	41	—	—	41	124		
Chaparral	—	—	—	—	—	—	3	—	3	6	6		
Cherry	12	—	—	1	—	13	—	—	3	3	16		
Golden chinkapin	34	20	—	—	—	55	5	—	—	5	60		
Oregon ash	—	—	—	—	—	—	6	—	26	32	32		



Table 3—Estimated area of forest land, by forest type and owner class, Oregon, 1999<sup>a</sup> (continued)

Forest type	Public					Private					
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total	Forest industry	Native American <sup>b</sup>	Other private	Total	All owners
	<i>Thousand acres</i>										
Oregon white oak	9	50	—	21	11	91	64	14	368	446	537
Pacific madrone	35	150	—	8	27	219	81	—	157	238	458
Quaking aspen	15	—	—	—	—	15	8	—	15	23	38
Red alder	99	113	5	141	10	368	309	8	264	581	949
Tanoak	146	68	—	—	—	214	112	—	19	131	345
White alder	—	—	5	—	—	5	—	—	—	—	5
Willow	2	—	9	—	—	11	2	—	15	17	28
Total	452	481	23	194	61	1,210	740	21	1,024	1,785	2,995
Other—											
Nonstocked	1,410	106	2	6	1	1,525	147	8	166	320	1,845
Not assessed	2	23	11	—	—	35	60	8	68	136	172
All forest types	14,417	3,344	189	962	210	19,122	6,222	452	4,439	11,112	30,233
Western Oregon:											
Softwoods—											
Douglas-fir	3,523	1,555	5	557	68	5,709	2,884	—	1,006	3,891	9,600
Engelmann spruce	10	—	—	—	—	10	—	—	—	—	10
Grand fir	9	1	—	—	7	18	50	—	23	74	91
Incense-cedar	18	7	—	—	—	25	50	—	39	88	113
Jeffrey pine	29	7	—	—	—	36	—	—	2	2	38
Knobcone pine	16	—	—	—	—	16	—	—	—	—	16
Lodgepole pine	78	—	—	14	14	105	—	—	9	9	114
Mountain hemlock	278	—	—	—	—	278	—	—	—	—	278
Noble fir	64	—	—	—	6	70	18	—	—	18	88
Pacific silver fir	202	—	—	—	—	202	16	—	—	16	218
Ponderosa pine	35	24	—	—	—	59	3	—	17	20	79
Port-Orford-cedar	21	8	—	2	—	31	8	—	11	19	50
Redwood	—	—	—	—	—	0	2	—	—	2	2
Scotch pine	—	—	—	—	—	0	—	—	2	2	2
Shasta red fir	59	—	—	—	—	59	—	—	—	—	59
Sitka spruce	22	—	—	23	4	49	56	—	41	97	146
Subalpine fir	19	—	—	—	—	19	—	—	—	—	19
Sugar pine	27	7	—	—	—	34	—	—	—	—	34
Western hemlock	217	83	—	46	—	346	360	—	35	395	741
Western juniper	—	—	—	—	—	0	4	—	—	4	4
Western redcedar	42	7	—	—	3	53	24	—	28	52	105
Western white pine	58	—	—	—	—	58	—	—	—	—	58

Table 3—Estimated area of forest land, by forest type and owner class, Oregon, 1999<sup>a</sup> (continued)

Forest type	Public					Private					Total	All owners
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total	Forest industry	Native American <sup>b</sup>	Other private	Total		
<i>Thousand acres</i>												
White fir	146	37	—	—	—	183	55	—	2	58	240	
Whitebark pine	2	—	—	—	—	2	—	—	—	—	2	
Total	4,877	1,737	5	642	101	7,362	3,531	—	1,215	4,745	12,107	
Hardwoods—												
Apple						0	2	—	2	4	4	
Bigleaf maple	23	19	—	16	13	72	55	—	98	153	224	
Black cottonwood	2	—	—	6	—	8	11	—	9	20	28	
California black oak	5	35	—	—	—	40	20	—	43	63	103	
California-laurel	8	—	—	—	—	8	19	—	—	19	27	
Canyon live oak	58	25	—	—	—	83	41	—	—	41	124	
Chaparral	—	—	—	—	—	0	3	—	3	6	6	
Cherry	12	—	—	1	—	13	—	—	3	3	16	
Golden chinkapin	34	20	—	—	—	55	5	—	—	5	60	
Oregon ash	—	—	—	—	—	0	6	—	26	32	32	
Oregon white oak	7	50	—	5	11	73	64	—	270	334	407	
Pacific madrone	35	150	—	8	27	219	81	—	157	238	458	
Quaking aspen	2	—	—	—	—	2	—	—	—	—	2	
Red alder	99	113	5	141	10	368	309	—	272	581	949	
Tanoak	146	68	—	—	—	214	112	—	19	131	345	
White alder	—	—	5	—	—	5	—	—	—	—	5	
Willow	2	—	9	—	—	11	2	—	15	17	28	
Total	433	481	19	177	61	1,171	732	—	916	1,648	2,818	
Other—												
Nonstocked	213	71	—	6	1	290	54	—	75	129	419	
Not assessed	—	—	11	—	—	11	60	—	39	99	109	
All forest types	5,523	2,288	35	825	163	8,833	4,377	—	2,244	6,621	15,454	
Eastern Oregon:												
Softwoods—												
Douglas-fir	1,065	26	—	15	—	1,719	288	—	326	614	1,719	
Engelmann spruce	158	—	—	—	4	196	17	—	17	34	196	
Grand fir	909	—	—	8	—	1,013	55	—	41	96	1,013	
Incense-cedar	18	6	—	—	—	39	7	—	8	15	39	
Lodgepole pine	1,053	30	62	7	—	1,540	286	—	102	388	1,540	
Mountain hemlock	216	—	59	—	—	307	—	—	32	32	307	
Noble fir	17	—	—	—	—	17	—	—	—	—	17	
Pacific silver fir	25	—	—	—	—	25	—	—	—	—	25	

Table 3—Estimated area of forest land, by forest type and owner class, Oregon, 1999<sup>a</sup> (continued)

Forest type	Public					Private					
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total	Forest industry	Native American <sup>b</sup>	Other private	Total	All owners
	<i>Thousand acres</i>										
Ponderosa pine	3,159	85		50	5	4,717	781	—	637	1,418	4,717
Shasta red fir	96	7	27	—	—	129	—	—	—	—	129
Subalpine fir	184	—	—	—	—	184	—	—	—	—	184
Sugar pine	17	—	—	—	—	17	—	—	—	—	17
Western hemlock	17	—	—	—	—	23	—	—	7	7	23
Western juniper	152	823	-	41	38	1,054	114	—	1,176	1,290	2,344
Western larch	148	—	—	—	—	178	21	—	10	30	178
Western redcedar	2	—	—	—	—	2	—	—	—	—	2
Western white pine	9	—	—	—	—	9	—	—	—	—	9
White fir	403	21	—	—	—	624	176	—	25	201	624
Whitebark pine	29	—	—	—	—	29	—	—	—	—	29
Total	7,675	998	148	121	48	8,990	1,744	—	2,381	4,125	13,114
Hardwoods—											
Black cottonwood	4	—	4	—	—	10	—	—	2	2	10
Oregon white oak	2	—	—	16	—	18	—	—	112	112	130
Quaking aspen	13	—	—	—	—	36	8	—	15	23	36
Total	18	—	4	16	—	39	8	—	129	137	177
Other—											
Nonstocked	1,197	36	2	—	—	1,234	93	—	99	192	1,426
Not assessed	2	23	—	—	—	62	—	—	38	38	62
All forest types	8,893	1,056	154	137	48	10,288	1,845	—	2,646	4,491	14,779

— = less than 500 acres found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>For confidentiality reasons, Native American lands are included within the “Other private” group when summarizing at regional level.

Table 4—Estimated area of forest land, by forest type and stand size class, Oregon, 1999<sup>a</sup>

Forest type	Seedling-sapling	Poletimber	Small sawtimber	Large sawtimber	All stand sizes
<i>Thousand acres</i>					
All Oregon:					
Softwoods—					
Douglas-fir	1,466	1,139	5,357	3,358	11,319
Engelmann spruce	—	17	151	39	206
Grand fir	35	66	792	211	1,104
Incense-cedar	29	22	73	28	152
Jeffrey pine	—	4	26	9	38
Knobcone pine	—	10	3	3	16
Lodgepole pine	248	628	720	59	1,654
Mountain hemlock	—	9	490	86	585
Noble fir	12	13	43	37	105
Pacific silver fir	16	12	153	61	243
Ponderosa pine	128	379	3,373	916	4,797
Port-Orford-cedar	5	16	8	21	50
Redwood	—	—	2	—	2
Scotch pine	—	—	2	—	2
Shasta red fir	1	4	81	102	188
Sitka spruce	16	4	67	59	146
Subalpine fir	5	18	163	17	203
Sugar pine	—	6	23	22	51
Western hemlock	103	91	402	168	764
Western juniper	14	491	1,778	65	2,347
Western larch	14	9	142	13	178
Western redcedar	5	—	28	73	107
Western white pine	—	15	48	4	67
White fir	44	85	468	267	864
Whitebark pine	—	10	20	—	31
Total	2,142	3,049	14,412	5,618	25,221
Hardwoods—					
Apple	2	2	—	—	4
Bigleaf maple	42	62	89	31	224
Black cottonwood	11	1	14	12	38
California black oak	2	50	43	7	103
California-laurel	—	5	17	6	27
Canyon live oak	28	50	41	4	124
Chaparral	—	—	—	—	6
Cherry	3	7	—	6	16
Golden chinkapin	7	35	10	8	60
Oregon ash	15	—	13	4	32
Oregon white oak	127	291	106	13	537
Pacific madrone	97	219	112	30	458
Quaking aspen	16	12	6	4	38
Red alder	133	257	500	60	949
Tanoak	59	113	105	68	345
White alder	—	5	—	—	5
Willow	16	2	8	2	28
Total	558	1,113	1,064	254	2,995
Other—					
Nonstocked					1,845
Not assessed					172
All forest types	2,700	4,162	15,476	5,872	30,233

**Table 4—Estimated area of forest land, by forest type and stand size class, Oregon, 1999<sup>a</sup> (continued)**

Forest type	Seedling-sapling	Poletimber	Small sawtimber	Large sawtimber	All stand sizes
<i>Thousand acres</i>					
Western Oregon:					
Softwoods—					
Douglas-fir	1,398	1,052	4,039	3,111	9,600
Engelmann spruce	—	—	7	3	10
Grand fir	26	—	52	12	91
Incense-cedar	29	22	45	17	113
Jeffrey pine	—	4	26	9	38
Knobcone pine	—	10	3	3	16
Lodgepole pine	16	24	73	2	114
Mountain hemlock	—	9	229	40	278
Noble fir	12	13	35	28	88
Pacific silver fir	16	12	129	61	218
Ponderosa pine	8	4	61	7	79
Port-Orford-cedar	5	16	8	21	50
Redwood	—	—	2	—	2
Scotch pine	—	—	2	—	2
Shasta red fir	—	2	21	36	59
Sitka spruce	16	4	67	59	146
Subalpine fir	—	—	19	—	19
Sugar pine	—	6	12	16	34
Western hemlock	103	91	390	157	741
Western juniper	—	—	4	—	4
Western redcedar	5	—	26	73	105
Western white pine	—	14	41	3	58
White fir	22	7	83	128	240
Whitebark pine	—	2	—	—	2
Total	1,657	1,291	5,372	3,786	12,107
Hardwoods—					
Apple	2	2	—	—	4
Bigleaf maple	42	62	89	31	224
Black cottonwood	11	—	10	7	28
California black oak	2	50	43	7	103
California-laurel	—	5	17	6	27
Canyon live oak	28	50	41	4	124
Chaparral	—	—	—	—	6
Cherry	3	7	—	6	16
Golden chinkapin	7	35	10	8	60
Oregon ash	15	—	13	4	32
Oregon white oak	116	180	98	13	407
Pacific madrone	97	219	112	30	458
Quaking aspen	—	—	—	2	2
Red alder	133	257	500	60	949
Tanoak	59	113	105	68	345
White alder	—	5	—	—	5
Willow	16	2	8	2	28
Total	531	989	1,046	247	2,818
Other—					
Nonstocked	—	—	—	—	419
Not assessed	—	—	—	—	109
All forest types	2,188	2,280	6,418	4,033	15,454

**Table 4—Estimated area of forest land, by forest type and stand size class, Oregon, 1999<sup>a</sup> (continued)**

Forest type	Seedling-sapling	Poletimber	Small sawtimber	Large sawtimber	All stand sizes
<i>Thousand acres</i>					
Eastern Oregon:					
Softwoods—					
Douglas-fir	68	87	1,318	247	1,719
Engelmann spruce	—	17	143	36	196
Grand fir	9	66	740	199	1,013
Incense-cedar	—	—	28	11	39
Lodgepole pine	232	605	647	57	1,540
Mountain hemlock	—	—	261	46	307
Noble fir	—	—	7	9	17
Pacific silver fir	—	—	25	—	25
Ponderosa pine	120	376	3,313	909	4,717
Shasta red fir	1	2	60	66	129
Subalpine fir	5	18	144	17	184
Sugar pine	—	—	11	6	17
Western hemlock	—	—	12	11	23
Western juniper	14	491	1,774	65	2,344
Western larch	14	9	142	13	178
Western redcedar	—	—	2	—	2
Western white pine	—	1	7	1	9
White fir	22	78	385	139	624
Whitebark pine	—	8	20	0	29
Total	485	1,757	9,039	1,832	13,114
Hardwoods—					
Black cottonwood	—	1	4	5	10
Oregon white oak	11	112	8	—	130
Quaking aspen	16	12	6	2	36
Total	27	124	18	7	177
Other—					
Nonstocked					1,426
Not assessed					62
All forest types	512	1,882	9,058	1,839	14,779

— = less than 500 acres or none found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

**Table 5—Estimated area of nonreserved timberland, by county and owner class, Oregon, 1999<sup>a</sup>**

County	Public						Private			All owners		
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total standard error	Forest industry	Other private	Total	Total standard error	Total	Standard error
<i>Thousand acres</i>												
All Oregon:	10,983	2,326	7	828	109	14,251	5,783	2,985	8,768	116	23,020	128
All counties												
Western Oregon:												
Benton	13	58	—	28	—	99	159	46	205	19	305	11
Clackamas	403	62	—	6	6	477	130	156	286	18	763	28
Clatsop	—	—	—	112	6	118	258	45	303	23	421	18
Columbia	—	11	1	—	—	12	214	83	297	19	310	19
Coos	59	158	—	63	9	289	403	144	547	25	836	24
Curry	377	68	—	—	—	445	217	75	292	15	737	25
Douglas	836	646	—	42	7	1,531	747	322	1,069	30	2,600	41
Hood River	115	—	—	—	19	134	31	14	45	14	179	18
Jackson	386	358	—	11	11	767	308	111	419	34	1,186	40
Josephine	297	277	—	—	35	610	60	107	167	21	778	31
Lane	1,105	276	5	35	—	1,421	557	207	764	30	2,185	44
Lincoln	156	20	—	22	—	198	266	74	340	21	538	24
Linn	320	88	—	7	—	415	357	103	461	26	875	33
Marion	133	21	—	30	—	184	48	62	110	15	294	23
Multnomah	11	4	—	—	—	16	15	34	50	14	65	14
Polk	2	41	—	—	—	42	142	79	221	16	263	16
Tillamook	89	50	—	302	11	451	135	44	178	22	629	22
Washington	—	12	—	80	—	92	44	108	152	21	244	17
Yamhill	24	33	—	—	—	57	86	68	154	15	211	16
Total	4,327	2,182	7	739	105	7,359	4,177	1,882	6,059	87	13,418	89
Eastern Oregon:												
Baker	503	6	—	—	—	509	41	71	112	14	621	30
Crook	316	—	—	—	—	316	52	26	78	15	394	24
Deschutes	649	14	—	3	—	666	62	23	86	12	751	29
Gilliam	—	—	—	—	—	—	—	—	—	—	—	—
Grant	1,132	17	—	16	—	1,165	91	77	168	27	1,333	42
Harney	347	5	—	—	—	353	—	5	5	5	358	24
Jefferson	119	—	—	—	—	119	72	139	212	21	331	25
Klamath	1,227	71	—	37	—	1,335	598	151	749	33	2,084	45
Lake	868	7	—	—	—	876	225	51	276	21	1,152	36
Malheur	2	—	—	—	—	2	3	5	8	6	10	6
Morrow	125	—	—	—	—	125	45	20	65	12	189	19
Sherman	—	—	—	—	—	—	—	—	—	—	—	—

32 **Table 5—Estimated area of nonreserved timberland, by county and owner class, Oregon, 1999<sup>a</sup> (continued)**

County	Public						Private				All owners	
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total standard error	Forest industry	Other private	Total standard error	Total standard error	Total	Standard error
Umatilla	375	3	—	7	—	386	72	112	184	24	570	33
Union	442	—	—	—	—	442	127	86	213	23	654	35
Wallowa	271	9	—	8	4	292	127	105	232	23	524	30
Wasco	151	—	—	16	—	167	25	195	219	22	387	26
Wheeler	127	12	—	—	—	139	65	37	102	18	242	23
Total	6,656	144	—	88	4	6,892	1,606	1,104	2,709	76	9,601	95

*Thousand acres*

— = less than 500 acres found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.



**Table 6—Estimated area of nonreserved timberland, by forest type and owner class, Oregon, 1999<sup>a</sup>**

Forest type	Public						Private				All	
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total standard error	Forest industry	Native American <sup>b</sup>	Other private	Total standard error	All owners	All standard error
<i>Thousand acres</i>												
All Oregon:												
Softwoods—												
Douglas-fir	3,840	1,526	5	530	53	96	3,049	135	1,106	4,291	117	10,245
Engelmann spruce	118	—	—	—	4	15	17	8	8	32	16	155
Grand fir	752	1	—	8	—	35	94	25	39	158	34	920
Incense-cedar	18	13	—	—	—	11	48	—	39	86	25	117
Jeffrey pine	18	7	—	—	—	9	—	—	2	2	2	27
Knobcone pine	8	—	—	—	—	4	—	—	—	—	—	8
Lodgepole pine	741	30	—	7	—	37	271	16	85	371	46	1,149
Mountain hemlock	155	—	—	—	—	17	—	24	—	24	14	180
Noble fir	50	—	—	—	6	11	18	—	—	18	11	74
Pacific silver fir	87	—	—	—	—	12	8	—	—	8	8	95
Ponderosa pine	2,901	76	—	42	—	62	704	85	381	1,170	74	4,189
Port-Orford-cedar	11	8	—	—	—	10	8	—	11	19	12	39
Redwood	—	—	—	—	—	—	2	—	—	2	2	2
Shasta red fir	91	7	—	—	—	14	—	—	—	—	—	98
Sitka spruce	16	—	—	9	4	11	56	—	40	97	24	126
Subalpine fir	66	—	—	—	—	11	—	—	—	—	—	66
Sugar pine	24	7	—	—	—	10	—	—	—	—	—	31
Western hemlock	189	83	—	46	—	34	360	7	31	398	48	716
Western juniper	40	—	—	—	—	8	7	—	27	34	15	74
Western larch	108	—	—	—	—	14	21	2	8	30	14	138
Western redcedar	30	7	—	—	3	11	24	—	28	52	17	93
Western white pine	27	—	—	—	—	7	—	—	—	—	—	27
White fir	503	35	—	—	—	32	231	—	27	258	42	797
Whitebark pine	6	—	—	—	—	3	—	—	—	—	—	6
<b>Total</b>	<b>9,802</b>	<b>1,801</b>	<b>5</b>	<b>642</b>	<b>71</b>	<b>105</b>	<b>4,918</b>	<b>302</b>	<b>1,831</b>	<b>7,051</b>	<b>127</b>	<b>19,372</b>
Hardwoods—												
Apple	—	—	—	—	—	—	2	—	2	4	3	4
Bigleaf maple	13	19	—	12	—	13	50	—	96	145	30	190
Black cottonwood	5	—	—	—	—	3	6	—	7	13	8	17
California black oak	4	28	—	—	—	14	6	—	33	39	15	70
California-laurel	6	0	—	—	—	3	19	—	—	19	10	25
Canyon live oak	34	14	—	—	—	13	41	—	—	41	18	89
Cherry	12	—	—	1	—	5	—	—	3	3	3	16
Golden chinkapin	28	20	—	—	—	14	—	—	—	—	—	48
Oregon ash	—	—	—	—	—	—	6	—	19	25	13	25
Oregon white oak	7	43	—	21	—	21	54	—	101	155	30	226

Table 6—Estimated area of nonreserved timberland, by forest type and owner class, Oregon, 1999<sup>a</sup> (continued)

Forest type	Public						Private						All	
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total standard error	Forest industry	Native American <sup>b</sup>	Other private	Total	Total standard error	All owners	All standard error	
<i>Thousand acres</i>														
Pacific madrone	35	150	—	8	27	219	35	77	116	192	37	412	49	
Quaking aspen	10	—	—	—	—	10	4	8	14	21	12	32	13	
Red alder	94	113	1	138	10	357	40	309	256	573	54	930	66	
Tanoak	100	68	—	—	—	168	22	105	19	124	26	292	34	
Willow	2	—	—	—	—	2	2	2	12	13	8	15	9	
Total	349	455	1	180	37	1,023	63	685	677	1,370	80	2,393	100	
Other—														
Nonstocked	832	69	—	6	1	907	42	124	140	272	41	1,179	58	
Not assessed	—	—	—	—	—	—	—	56	20	75	24	75	24	
All forest types	10,983	2,326	7	828	109	14,251	93	5,783	2,668	8,768	116	23,020	128	
Western Oregon:														
Softwoods—														
Douglas-fir	3,004	1,513	5	514	53	5,090	90	2,792	947	3,740	103	8,830	130	
Engelmann spruce	10	—	—	—	—	10	4	—	—	—	—	10	4	
Grand fir	9	1	—	—	—	11	4	39	23	62	21	73	21	
Incense-cedar	10	7	—	—	—	17	8	41	39	79	24	97	25	
Jeffrey pine	18	7	—	—	—	25	9	—	2	2	2	27	9	
Knobcone pine	8	—	—	—	—	8	4	—	—	—	—	8	4	
Lodgepole pine	45	—	—	—	—	45	9	—	—	—	—	45	9	
Mountain hemlock	108	—	—	—	—	108	14	—	—	—	—	108	14	
Noble fir	41	—	—	—	6	47	10	18	—	18	11	65	15	
Pacific silver fir	82	—	—	—	—	82	12	8	—	8	8	90	14	
Ponderosa pine	34	21	—	—	—	54	14	3	17	20	8	75	16	
Port-Orford-cedar	11	8	—	—	—	20	10	8	11	19	12	39	15	
Redwood	—	—	—	—	—	—	—	2	—	2	2	2	2	
Shasta red fir	49	—	—	—	—	49	9	—	—	—	—	49	9	
Sitka spruce	16	—	—	9	4	29	11	56	40	97	24	126	27	
Subalpine fir	5	—	—	—	—	5	3	—	—	—	—	5	3	
Sugar pine	11	7	—	—	—	17	8	—	—	—	—	17	8	
Western hemlock	173	83	—	46	—	302	34	360	31	391	47	693	57	
Western redcedar	28	7	—	—	3	39	11	24	28	52	17	91	20	
Western white pine	19	—	—	—	—	19	6	—	—	—	—	19	6	
White fir	139	14	—	—	—	153	18	55	2	58	22	211	28	
Total	3,820	1,670	5	570	67	6,131	85	3,407	1,141	4,548	101	10,679	121	

**Table 6—Estimated area of nonreserved timberland, by forest type and owner class, Oregon, 1999<sup>a</sup> (continued)**

Forest type	Public						Private					All	
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total standard error	Forest industry	Native American <sup>b</sup>	Other private	Total	Total standard error	All owners	All standard error
<i>Thousand acres</i>													
Hardwoods—													
Apple	—	—	—	—	—	—	2	—	2	4	3	4	3
Bigleaf maple	13	19	—	12	—	45	50	—	96	145	30	190	33
Black cottonwood	2	—	—	—	—	2	6	—	7	13	8	15	8
California black oak	4	28	—	—	—	31	6	—	33	39	15	70	21
California-laurel	6	—	—	—	—	6	19	—	—	19	10	25	11
Canyon live oak	34	14	—	—	—	48	41	—	—	41	18	89	22
Cherry	12	—	—	1	—	13	—	—	3	3	3	16	6
Golden chinkapin	28	20	—	—	—	48	—	—	—	—	—	48	14
Oregon ash	—	—	—	—	—	—	6	—	19	25	13	25	13
Oregon white oak	5	43	—	5	—	53	54	—	93	147	28	200	33
Pacific madrone	35	150	—	8	27	219	77	—	116	192	37	412	49
Quaking aspen	2	—	—	—	—	2	—	—	—	—	—	2	2
Red alder	94	113	1	138	10	357	309	—	264	573	54	930	66
Tanoak	100	68	—	—	—	168	105	—	19	124	26	292	34
Willow	2	—	—	—	—	2	2	—	12	13	8	15	9
Total	336	455	1	164	37	993	678	—	663	1,341	79	2,334	98
Other—													
Nonstocked	172	57	—	6	1	235	37	—	58	95	22	330	34
Not assessed	—	—	—	—	—	—	56	—	20	75	24	75	24
All forest types	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	87	13,418	89
Eastern Oregon:													
Softwoods—													
Douglas-fir	836	13	—	15	—	864	37	—	294	551	55	1,415	66
Engelmann spruce	108	—	—	—	4	112	14	—	16	32	16	145	22
Grand fir	743	—	—	8	—	751	35	—	41	96	26	847	43
Incense-cedar	7	6	—	—	—	13	7	—	—	7	7	20	10
Lodgepole pine	696	30	—	7	—	733	36	—	100	371	46	1,104	59
Mountain hemlock	47	—	—	—	—	47	9	—	24	24	14	71	16
Noble fir	9	—	—	—	—	9	4	—	—	—	—	9	4
Pacific silver fir	6	—	—	—	—	6	3	—	—	—	—	6	3
Ponderosa pine	2,868	55	—	42	—	2,965	60	—	449	1,150	74	4,114	95
Shasta red fir	42	7	—	—	—	49	11	—	—	—	—	49	11
Subalpine fir	62	—	—	—	—	62	10	—	—	—	—	62	10
Sugar pine	13	—	—	—	—	13	5	—	—	—	—	13	5
Western hemlock	17	—	—	—	—	17	5	—	7	7	7	23	9

Table 6—Estimated area of nonreserved timberland, by forest type and owner class, Oregon, 1999<sup>a</sup> (continued)

Forest type	Public						Private						All	
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total standard error	Forest industry	Native American <sup>b</sup>	Other private	Total standard error	All owners	All standard error		
<i>Thousand acres</i>														
Western juniper	40	—	—	—	—	8	7	—	27	34	15	74	17	
Western larch	108	—	—	—	—	14	21	—	10	30	14	138	20	
Western redcedar	2	—	—	—	—	2	—	—	—	—	—	2	2	
Western white pine	8	—	—	—	—	4	—	—	—	—	—	8	4	
White fir	365	21	—	—	—	27	176	—	25	201	36	586	45	
Whitebark pine	6	—	—	—	—	6	—	—	—	—	—	6	3	
Total	5,983	132	—	72	4	6,190	1,511	—	992	2,503	78	8,693	98	
Hardwoods—														
Black cottonwood	3	—	—	—	—	3	—	—	—	—	—	3	2	
Oregon white oak	2	—	—	16	—	18	—	—	8	8	8	26	14	
Quaking aspen	9	—	—	—	—	9	8	—	14	21	12	30	13	
Total	13	—	—	16	—	30	8	—	22	29	15	59	19	
Other—														
Nonstocked	660	12	—	—	—	672	87	—	90	177	34	849	48	
All forest types	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	76	9,601	95	

— = less than 500 acres found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>For confidentiality reasons, Native American lands are included within the "Other private" group when summarizing at regional levels.

Table 7—Estimated area of nonreserved timberland, by forest type and stand age class, Oregon, 1999<sup>a</sup>

Forest type	Thousand acres										All stand ages	All stand ages standard error
	0-19 years	20-39 years	40-59 years	60-79 years	80-99 years	100-149 years	150-199 years	200+ years	All stand ages			
All Oregon:	1,958	2,370	1,393	925	660	1,204	626	1,083	10,245	146		
Softwoods—												
Douglas-fir	—	11	10	3	27	54	37	12	155	22		
Engelmann spruce	21	61	26	71	136	375	206	24	920	48		
Grand fir	23	18	32	29	—	7	5	4	117	27		
Incense-cedar	—	—	2	8	—	5	4	7	27	9		
Jeffrey pine	—	2	—	2	3	1	—	—	8	4		
Knobcone pine	191	92	28	169	220	355	69	19	1,149	59		
Lodgepole pine	—	—	—	1	4	40	54	81	180	21		
Mountain hemlock	13	18	—	6	4	17	5	11	74	15		
Noble fir	—	12	—	9	2	13	27	33	95	15		
Pacific silver fir	80	244	144	683	891	1,076	712	352	4,189	96		
Ponderosa pine	3	16	8	—	—	—	—	11	39	15		
Port-Orford-cedar	—	—	2	—	—	—	—	—	2	2		
Redwood	1	—	—	4	9	43	23	19	98	14		
Shasta red fir	15	42	50	5	6	9	—	—	126	27		
Sitka spruce	—	—	—	5	12	42	6	2	66	11		
Subalpine fir	—	2	—	—	7	7	5	10	31	10		
Sugar pine	105	264	128	32	24	29	26	107	716	58		
Western hemlock	—	22	1	20	8	8	11	5	74	17		
Western juniper	14	2	0	23	16	36	32	15	138	20		
Western larch	—	17	13	30	5	2	7	19	93	20		
Western redcedar	—	—	—	8	2	7	5	6	27	7		
Western white pine	11	52	12	110	140	217	167	80	797	53		
Whitebark pine	—	—	—	—	3	—	3	—	6	3		
Total	2,437	3,244	1,851	2,143	2,178	3,546	2,028	1,899	19,372	155		
Hardwoods—												
Apple	—	2	2	—	—	—	—	—	4	3		
Bigleaf maple	61	46	54	17	1	3	6	4	190	33		
Black cottonwood	7	6	2	—	—	3	—	—	17	8		
California black oak	7	24	2	14	7	16	—	—	70	21		
California-laurel	—	5	7	2	—	7	2	2	25	11		
Canyon live oak	20	25	2	7	6	16	7	5	89	22		
Cherry	—	8	—	—	2	—	—	2	16	6		
Golden chinkapin	12	16	—	11	—	4	4	2	48	14		
Oregon ash	6	9	6	4	—	—	—	—	25	13		
Oregon white oak	62	44	63	39	1	15	—	—	226	36		
Pacific madrone	158	80	92	24	35	15	2	6	412	49		

Table 7—Estimated area of nonreserved timberland, by forest type and stand age class, Oregon, 1999<sup>a</sup> (continued)

Forest type	Thousand acres										All stand ages	All stand ages standard error
	0-19 years	20-39 years	40-59 years	60-79 years	80-99 years	100-149 years	150-199 years	200+ years	All stand ages			
Quaking aspen	15	—	7	2	—	4	—	—	2	—	32	13
Red alder	185	375	220	58	40	38	4	—	10	—	930	66
Tanoak	75	83	26	23	21	21	18	—	24	—	292	34
Willow	6	4	—	5	—	—	—	—	—	—	15	9
Total	613	727	483	208	112	141	43	—	55	—	2,393	100
Other—												
Nonstocked											1,179	58
Not assessed											75	24
All forest types	3,049	3,971	2,334	2,351	2,290	3,687	2,071	—	1,954	—	23,020	128
Western Oregon:												
Softwoods—												
Douglas-fir	1,910	2,314	1,314	666	365	741	463	—	1,032	—	8,830	130
Engelmann spruce	—	—	—	—	2	4	3	—	2	—	10	4
Grand fir	14	25	17	9	6	—	2	—	1	—	73	21
Incense-cedar	23	18	32	14	—	7	—	—	4	—	97	25
Jeffrey pine	—	—	2	8	—	5	4	—	7	—	27	9
Knobcone pine	—	2	—	2	3	1	—	—	—	—	8	4
Lodgepole pine	—	2	—	9	12	18	—	—	2	—	45	9
Mountain hemlock	—	—	—	1	4	21	37	—	46	—	108	14
Noble fir	13	18	—	4	4	13	5	—	7	—	65	15
Pacific silver fir	—	12	—	9	2	10	25	—	33	—	90	14
Ponderosa pine	4	22	8	26	9	2	4	—	—	—	75	16
Port-Orford-cedar	3	16	8	—	—	—	—	—	11	—	39	15
Redwood	—	—	2	—	—	—	—	—	—	—	2	2
Shasta red fir	—	—	—	4	5	14	15	—	11	—	49	9
Sitka spruce	15	42	50	5	6	9	—	—	—	—	126	27
Subalpine fir	—	—	—	1	—	4	—	—	—	—	5	3
Sugar pine	—	2	—	—	7	—	1	—	8	—	17	8
Western hemlock	105	264	128	30	18	27	24	—	96	—	693	57
Western redcedar	—	17	13	30	5	—	6	—	19	—	91	20
Western white pine	—	—	—	6	2	4	3	—	4	—	19	6
White fir	11	13	—	31	33	44	49	—	23	—	211	28
Total	2,099	2,765	1,575	855	481	923	641	—	1,305	—	10,679	121
Hardwoods—												
Apple	—	2	2	—	—	—	—	—	—	—	4	3
Bigleaf maple	61	46	54	17	1	3	6	—	4	—	190	33
Black cottonwood	7	6	2	—	—	—	—	—	—	—	15	8
California black oak	7	24	2	14	7	16	—	—	—	—	70	21

Table 7—Estimated area of nonreserved timberland, by forest type and stand age class, Oregon, 1999<sup>a</sup> (continued)

Forest type	Thousand acres										All stand ages	All stand ages standard error
	0-19 years	20-39 years	40-59 years	60-79 years	80-99 years	100-149 years	150-199 years	200+ years	200+ years	200+ years		
California-laurel	—	5	7	2	—	7	2	2	2	25	11	
Canyon live oak	20	25	2	7	6	16	7	5	5	89	22	
Cherry	—	8	—	—	2	—	—	2	2	16	6	
Golden chinkapin	12	16	—	11	—	4	4	2	2	48	14	
Oregon ash	6	9	6	4	—	—	—	—	—	25	13	
Oregon white oak	46	44	55	39	1	13	—	—	—	200	33	
Pacific madrone	158	80	92	24	35	15	2	6	6	412	49	
Quaking aspen	—	—	—	—	—	2	—	—	—	2	2	
Red alder	185	375	220	58	40	38	4	10	10	930	66	
Tanoak	75	83	26	23	21	21	18	24	24	292	34	
Willow	6	4	—	5	—	—	—	—	—	15	9	
Total	582	727	468	206	112	135	43	53	53	2,334	98	
Other—												
Nonstocked										330	34	
Not assessed										75	24	
All forest types	2,680	3,492	2,043	1,062	593	1,058	683	1,359	1,359	13,418	89	
Eastern Oregon:												
Softwoods—												
Douglas-fir	47	57	79	260	295	463	163	51	51	1,415	66	
Engelmann spruce	—	11	10	3	25	51	35	10	10	145	22	
Grand fir	7	36	9	62	130	375	204	23	23	847	43	
Incense-cedar	—	—	—	15	—	—	5	—	—	20	10	
Lodgepole pine	191	90	28	159	208	337	69	18	18	1,104	59	
Mountain hemlock	—	—	—	—	—	19	18	34	34	71	16	
Noble fir	—	—	—	2	—	4	—	4	4	9	4	
Pacific silver fir	—	—	—	—	—	4	2	—	—	6	3	
Ponderosa pine	77	222	137	657	882	1,074	708	352	352	4,114	95	
Shasta red fir	1	—	—	—	3	28	8	8	8	49	11	
Subalpine fir	—	—	—	4	12	38	6	2	2	62	10	
Sugar pine	—	—	—	—	—	7	4	2	2	13	5	
Western hemlock	—	—	—	2	7	2	1	11	11	23	9	
Western juniper	—	22	1	20	8	8	11	5	5	74	17	
Western larch	14	2	—	23	16	36	32	15	15	138	20	
Western redcedar	—	—	—	—	—	1	—	—	—	2	2	
Western white pine	—	—	—	2	—	3	1	2	2	8	4	
White fir	—	39	12	79	107	173	119	57	57	586	45	
Whitebark pine	—	—	—	—	3	—	3	—	—	6	3	
Total	338	479	276	1,287	1,697	2,623	1,388	593	593	8,693	98	

40 **Table 7—Estimated area of nonreserved timberland, by forest type and stand age class, Oregon, 1999<sup>a</sup> (continued)**

Forest type	Thousand acres										All stand ages standard error
	0-19 years	20-39 years	40-59 years	60-79 years	80-99 years	100-149 years	150-199 years	200+ years	All stand ages		
Hardwoods—											
Black cottonwood	—	—	—	—	—	3	—	—	—	3	2
Oregon white oak	16	—	8	—	—	2	—	—	—	26	14
Quaking aspen	15	—	7	2	—	2	—	—	2	30	13
Total	31	—	15	2	—	7	—	—	2	59	19
Other—											
Nonstocked										849	48
All forest types	369	479	291	1,289	1,697	2,629	1,388	595	9,601	95	

— = less than 500 acres found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.



**Table 8—Estimated area of nonreserved timberland, by owner class and stand age class, Oregon, 1999<sup>a</sup>**

Stand age class	Public					Private				All owners																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total	Forest industry	Native American <sup>b</sup>	Other private	Total	Total	Standard error																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
<i>Thousand acres</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
All Oregon:													0–19 years	51	1,040	5	79	26	1,201	1,375	33	441	1,849	3,049	114	20–39 years	490	816	—	248	26	1,581	1,859	—	531	2,390	3,971	131	40–59 years	134	126	1	292	5	559	1,106	25	645	1,775	2,334	109	60–79 years	1,083	157	—	110	30	1,380	520	64	387	971	2,351	96	80–99 years	1,399	48	—	35	7	1,489	436	59	306	801	2,290	86	100–149 years	3,169	36	—	54	14	3,273	191	41	183	414	3,687	87	150–199 years	1,960	8	—	5	—	1,972	63	24	12	99	2,071	61	200+ years	1,833	—	—	—	—	1,833	55	65	2	122	1,954	58	Age not assessed	31	26	—	—	—	57	56	—	20	75	133	28	Nonstocked	832	69	—	6	1	907	124	8	140	272	1,179	58	All stand ages	10,983	2,326	7	828	109	14,251	5,783	318	2,668	8,768	23,020	128	Western Oregon:													0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95
0–19 years	51	1,040	5	79	26	1,201	1,375	33	441	1,849	3,049	114	20–39 years	490	816	—	248	26	1,581	1,859	—	531	2,390	3,971	131	40–59 years	134	126	1	292	5	559	1,106	25	645	1,775	2,334	109	60–79 years	1,083	157	—	110	30	1,380	520	64	387	971	2,351	96	80–99 years	1,399	48	—	35	7	1,489	436	59	306	801	2,290	86	100–149 years	3,169	36	—	54	14	3,273	191	41	183	414	3,687	87	150–199 years	1,960	8	—	5	—	1,972	63	24	12	99	2,071	61	200+ years	1,833	—	—	—	—	1,833	55	65	2	122	1,954	58	Age not assessed	31	26	—	—	—	57	56	—	20	75	133	28	Nonstocked	832	69	—	6	1	907	124	8	140	272	1,179	58	All stand ages	10,983	2,326	7	828	109	14,251	5,783	318	2,668	8,768	23,020	128	Western Oregon:													0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95													
20–39 years	490	816	—	248	26	1,581	1,859	—	531	2,390	3,971	131	40–59 years	134	126	1	292	5	559	1,106	25	645	1,775	2,334	109	60–79 years	1,083	157	—	110	30	1,380	520	64	387	971	2,351	96	80–99 years	1,399	48	—	35	7	1,489	436	59	306	801	2,290	86	100–149 years	3,169	36	—	54	14	3,273	191	41	183	414	3,687	87	150–199 years	1,960	8	—	5	—	1,972	63	24	12	99	2,071	61	200+ years	1,833	—	—	—	—	1,833	55	65	2	122	1,954	58	Age not assessed	31	26	—	—	—	57	56	—	20	75	133	28	Nonstocked	832	69	—	6	1	907	124	8	140	272	1,179	58	All stand ages	10,983	2,326	7	828	109	14,251	5,783	318	2,668	8,768	23,020	128	Western Oregon:													0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																										
40–59 years	134	126	1	292	5	559	1,106	25	645	1,775	2,334	109	60–79 years	1,083	157	—	110	30	1,380	520	64	387	971	2,351	96	80–99 years	1,399	48	—	35	7	1,489	436	59	306	801	2,290	86	100–149 years	3,169	36	—	54	14	3,273	191	41	183	414	3,687	87	150–199 years	1,960	8	—	5	—	1,972	63	24	12	99	2,071	61	200+ years	1,833	—	—	—	—	1,833	55	65	2	122	1,954	58	Age not assessed	31	26	—	—	—	57	56	—	20	75	133	28	Nonstocked	832	69	—	6	1	907	124	8	140	272	1,179	58	All stand ages	10,983	2,326	7	828	109	14,251	5,783	318	2,668	8,768	23,020	128	Western Oregon:													0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																							
60–79 years	1,083	157	—	110	30	1,380	520	64	387	971	2,351	96	80–99 years	1,399	48	—	35	7	1,489	436	59	306	801	2,290	86	100–149 years	3,169	36	—	54	14	3,273	191	41	183	414	3,687	87	150–199 years	1,960	8	—	5	—	1,972	63	24	12	99	2,071	61	200+ years	1,833	—	—	—	—	1,833	55	65	2	122	1,954	58	Age not assessed	31	26	—	—	—	57	56	—	20	75	133	28	Nonstocked	832	69	—	6	1	907	124	8	140	272	1,179	58	All stand ages	10,983	2,326	7	828	109	14,251	5,783	318	2,668	8,768	23,020	128	Western Oregon:													0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																				
80–99 years	1,399	48	—	35	7	1,489	436	59	306	801	2,290	86	100–149 years	3,169	36	—	54	14	3,273	191	41	183	414	3,687	87	150–199 years	1,960	8	—	5	—	1,972	63	24	12	99	2,071	61	200+ years	1,833	—	—	—	—	1,833	55	65	2	122	1,954	58	Age not assessed	31	26	—	—	—	57	56	—	20	75	133	28	Nonstocked	832	69	—	6	1	907	124	8	140	272	1,179	58	All stand ages	10,983	2,326	7	828	109	14,251	5,783	318	2,668	8,768	23,020	128	Western Oregon:													0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																	
100–149 years	3,169	36	—	54	14	3,273	191	41	183	414	3,687	87	150–199 years	1,960	8	—	5	—	1,972	63	24	12	99	2,071	61	200+ years	1,833	—	—	—	—	1,833	55	65	2	122	1,954	58	Age not assessed	31	26	—	—	—	57	56	—	20	75	133	28	Nonstocked	832	69	—	6	1	907	124	8	140	272	1,179	58	All stand ages	10,983	2,326	7	828	109	14,251	5,783	318	2,668	8,768	23,020	128	Western Oregon:													0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																														
150–199 years	1,960	8	—	5	—	1,972	63	24	12	99	2,071	61	200+ years	1,833	—	—	—	—	1,833	55	65	2	122	1,954	58	Age not assessed	31	26	—	—	—	57	56	—	20	75	133	28	Nonstocked	832	69	—	6	1	907	124	8	140	272	1,179	58	All stand ages	10,983	2,326	7	828	109	14,251	5,783	318	2,668	8,768	23,020	128	Western Oregon:													0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																											
200+ years	1,833	—	—	—	—	1,833	55	65	2	122	1,954	58	Age not assessed	31	26	—	—	—	57	56	—	20	75	133	28	Nonstocked	832	69	—	6	1	907	124	8	140	272	1,179	58	All stand ages	10,983	2,326	7	828	109	14,251	5,783	318	2,668	8,768	23,020	128	Western Oregon:													0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																								
Age not assessed	31	26	—	—	—	57	56	—	20	75	133	28	Nonstocked	832	69	—	6	1	907	124	8	140	272	1,179	58	All stand ages	10,983	2,326	7	828	109	14,251	5,783	318	2,668	8,768	23,020	128	Western Oregon:													0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																					
Nonstocked	832	69	—	6	1	907	124	8	140	272	1,179	58	All stand ages	10,983	2,326	7	828	109	14,251	5,783	318	2,668	8,768	23,020	128	Western Oregon:													0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																		
All stand ages	10,983	2,326	7	828	109	14,251	5,783	318	2,668	8,768	23,020	128	Western Oregon:													0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																															
Western Oregon:													0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																												
0–19 years	49	1,023	5	64	26	1,167	1,125	—	388	1,513	2,680	104	20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																									
20–39 years	418	806	—	248	26	1,499	1,565	—	427	1,993	3,492	121	40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																						
40–59 years	95	113	1	269	5	483	958	—	602	1,560	2,043	101	60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																			
60–79 years	357	137	—	77	30	600	235	—	226	462	1,062	69	80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																
80–99 years	381	14	—	24	7	427	89	—	78	167	593	44	100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																													
100–149 years	860	7	—	46	10	922	63	—	73	136	1,058	51	150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																										
150–199 years	665	—	—	5	—	670	6	—	7	13	683	33	200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																							
200+ years	1,314	—	—	—	—	1,314	43	—	2	45	1,359	44	Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																				
Age not assessed	17	26	—	—	—	43	56	—	20	75	118	28	Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																	
Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34	All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																														
All stand ages	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89	Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																																											
Eastern Oregon:													0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																																																								
0–19 years	2	17	—	15	—	34	249	—	86	335	369	48	20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																																																																					
20–39 years	72	10	—	—	—	82	294	—	104	397	479	50	40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																																																																																		
40–59 years	40	13	—	23	—	76	148	—	67	215	291	42	60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																																																																																															
60–79 years	726	21	—	33	—	780	285	—	225	510	1,289	67	80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																																																																																																												
80–99 years	1,018	34	—	10	—	1,063	347	—	287	634	1,697	74	100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																																																																																																																									
100–149 years	2,310	29	—	8	4	2,350	128	—	151	279	2,629	71	150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																																																																																																																																						
150–199 years	1,295	8	—	—	—	1,302	56	—	29	85	1,388	51	200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																																																																																																																																																			
200+ years	519	—	—	—	—	519	11	—	65	76	595	37	Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																																																																																																																																																																
Age not assessed	15	—	—	—	—	15	—	—	—	—	15	5	Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																																																																																																																																																																													
Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48	All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																																																																																																																																																																																										
All stand ages	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

— = less than 500 acres found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>For confidentiality reasons, Native American lands are included within the “Other private” group when summarizing at regional level.

Table 9—Estimated area of nonreserved timberland, by forest type and stand size class, Oregon 1999<sup>a</sup>

Forest type	Seedling-sapling	Poletimber	Small sawtimber	Large sawtimber	All stand sizes	
					Total	Standard error
<i>Thousand acres</i>						
All Oregon:						
Softwoods—						
Douglas-fir	1,369	1,114	4,863	2,899	10,245	146
Engelmann spruce	—	16	115	24	155	22
Grand fir	35	64	665	156	920	48
Incense-cedar	29	22	54	13	117	27
Jeffrey pine	—	2	18	7	27	9
Knobcone pine	—	2	3	3	8	4
Lodgepole pine	222	401	500	26	1,149	59
Mountain hemlock	—	4	145	31	180	21
Noble fir	12	10	27	26	74	15
Pacific silver fir	8	6	47	34	95	15
Ponderosa pine	109	301	3,008	771	4,189	96
Port-Orford-cedar	3	16	—	20	39	15
Redwood	—	—	2	—	2	2
Shasta red fir	1	4	48	45	98	14
Sitka spruce	16	4	58	48	126	27
Subalpine fir	—	6	56	4	66	11
Sugar pine	—	—	11	20	31	10
Western hemlock	100	87	394	136	716	58
Western juniper	7	8	49	10	74	17
Western larch	14	3	109	12	138	20
Western redcedar	5	—	28	59	93	20
Western white pine	—	2	22	4	27	7
White fir	44	85	451	216	797	53
Whitebark pine	—	—	6	—	6	3
Total	1,975	2,154	10,678	4,565	19,372	155
Hardwoods—						
Apple	2	2	—	—	4	3
Bigleaf maple	42	50	67	31	190	33
Black cottonwood	7	—	8	3	17	8
California black oak	—	36	28	7	70	21
California-laurel	—	5	15	6	25	11
Canyon live oak	28	47	9	4	89	22
Cherry	3	7	—	6	16	6
Golden chinkapin	2	35	4	8	48	14
Oregon ash	15	—	6	4	25	13
Oregon white oak	52	105	66	3	226	36
Pacific madrone	85	191	106	30	412	49
Quaking aspen	15	8	6	3	32	13
Red alder	132	251	488	60	930	66
Tanoak	52	103	85	52	292	34
Willow	6	2	5	2	15	9
Total	440	842	894	217	2,393	100
Other—						
Nonstocked					1,179	
Not assessed					75	
All forest types	2,416	2,996	11,571	4,782	23,020	128

**Table 9—Estimated area of nonreserved timberland, by forest type and stand size class, Oregon 1999<sup>a</sup>**  
(continued)

Forest type	Seedling-sapling	Poletimber	Small sawtimber	Large sawtimber	All stand sizes	
					Total	Standard error
<i>Thousand acres</i>						
Western Oregon:						
Softwoods—						
Douglas-fir	1,314	1,035	3,767	2,714	8,830	130
Engelmann spruce	—	—	7	3	10	4
Grand fir	26	—	35	12	73	21
Incense-cedar	29	22	34	13	97	25
Jeffrey pine	—	2	18	7	27	9
Knobcone pine	—	2	3	3	8	4
Lodgepole pine	—	9	34	2	45	9
Mountain hemlock	—	4	84	20	108	14
Noble fir	12	10	20	24	65	15
Pacific silver fir	8	6	42	34	90	14
Ponderosa pine	8	4	59	4	75	16
Port-Orford-cedar	3	16	—	20	39	15
Redwood	—	—	2	—	2	2
Shasta red fir	—	2	21	26	49	9
Sitka spruce	16	4	58	48	126	27
Subalpine fir	—	—	5	—	5	3
Sugar pine	—	—	2	16	17	8
Western hemlock	100	87	382	124	693	57
Western redcedar	5	—	26	59	91	20
Western white pine	—	2	14	3	19	6
White fir	22	7	74	107	211	28
Total	1,544	1,210	4,686	3,240	10,679	121
Hardwoods—						
Apple	2	2	—	—	4	3
Bigleaf maple	42	50	67	31	190	33
Black cottonwood	7	—	8	—	15	8
California black oak	—	36	28	7	70	21
California-laurel	—	5	15	6	25	11
Canyon live oak	28	47	9	4	89	22
Cherry	3	7	—	6	16	6
Golden chinkapin	2	35	4	8	48	14
Oregon ash	15	—	6	4	25	13
Oregon white oak	44	87	66	3	200	33
Pacific madrone	85	191	106	30	412	49
Quaking aspen	—	—	—	2	2	2
Red alder	132	251	488	60	930	66
Tanoak	52	103	85	52	292	34
Willow	6	2	5	2	15	9
Total	417	815	888	214	2,334	98
Other—						
Nonstocked					330	
Not assessed					75	
All forest types	1,961	2,025	5,573	3,453	13,418	89

**Table 9—Estimated area of nonreserved timberland, by forest type and stand size class, Oregon 1999<sup>a</sup>**  
(continued)

Forest type	Seedling-sapling	Poletimber	Small sawtimber	Large sawtimber	All stand sizes	
					Total	Standard error
<i>Thousand acres</i>						
Eastern Oregon:						
Softwoods—						
Douglas-fir	56	79	1,096	185	1,415	66
Engelmann spruce	—	16	108	22	145	22
Grand fir	9	64	630	144	847	43
Incense-cedar	—	—	20	—	20	10
Lodgepole pine	222	391	466	25	1,104	59
Mountain hemlock	—	—	60	11	71	16
Noble fir	—	—	7	2	9	4
Pacific silver fir	—	—	6	—	6	3
Ponderosa pine	101	297	2,949	767	4,114	95
Shasta red fir	1	2	27	19	49	11
Subalpine fir	—	6	51	4	62	10
Sugar pine	—	—	9	4	13	5
Western hemlock	—	—	12	11	23	9
Western juniper	7	8	49	10	74	17
Western larch	14	3	109	12	138	20
Western redcedar	—	—	2	—	2	2
Western white pine	—	—	7	1	8	4
White fir	22	78	377	109	586	45
Whitebark pine	—	—	6	—	6	3
Total	431	944	5,992	1,326	8,693	98
Hardwoods—						
Black cottonwood	—	—	—	3	3	2
Oregon white oak	8	18	—	—	26	14
Quaking aspen	15	8	6	1	30	13
Total	23	27	6	4	59	19
Other—						
Nonstocked					849	
Not assessed					—	
All forest types	454	971	5,998	1,329	9,601	95

— = less than 500 acres found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

**Table 10—Estimated area of nonreserved timberland, by owner class and stand size class, Oregon, 1999<sup>a</sup>**

Stand size	Public						Private				All owners	
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total	Forest industry	Native American <sup>b</sup>	Other private	Total	Total	Standard error
<i>Thousand acres</i>												
All Oregon:												
Seedling-sapling	11	20	5	99	26	161	1,655	33	566	2,254	2,416	106
Poletimber	1,008	532	—	95	9	1,644	966	9	377	1,351	2,996	114
Small sawtimber	5,518	950	1	544	69	7,083	2,838	220	1,430	4,488	11,571	167
Large sawtimber	3,613	755	—	84	4	4,456	144	48	134	327	4,782	99
Not assessed	—	—	—	—	—	—	56	—	20	75	75	24
Nonstocked	832	69	—	6	1	907	124	8	140	272	1,179	58
All stand sizes	10,983	2,326	7	828	109	14,251	5,783	318	2,668	8,768	23,020	128
Western Oregon:												
Seedling-sapling	8	—	5	92	26	131	1,341	—	489	1,830	1,961	92
Poletimber	445	525	—	79	9	1,058	682	—	285	967	2,025	98
Small sawtimber	1,348	853	1	479	65	2,747	1,931	—	896	2,827	5,573	131
Large sawtimber	2,354	747	—	84	4	3,189	130	—	135	265	3,453	87
Not assessed	—	—	—	—	—	—	56	—	20	75	75	24
Nonstocked	172	57	—	6	1	235	37	—	58	95	330	34
All stand sizes	4,327	2,182	7	739	105	7,359	4,177	—	1,882	6,059	13,418	89
Eastern Oregon:												
Seedling-sapling	4	20	—	7	—	30	314	—	110	424	454	52
Poletimber	563	7	—	16	—	586	284	—	101	385	971	59
Small sawtimber	4,170	97	—	65	4	4,336	907	—	755	1,662	5,998	105
Large sawtimber	1,259	8	—	—	—	1,267	14	—	48	62	1,329	48
Not assessed	—	—	—	—	—	—	—	—	—	—	—	—
Nonstocked	660	12	—	—	—	672	87	—	90	177	849	48
All stand sizes	6,656	144	—	88	4	6,892	1,606	—	1,104	2,709	9,601	95

— = less than 500 acres found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>For confidentiality reasons, Native American lands are included within the "Other private" group when summarizing at regional level.

Table 11—Estimated area of nonreserved timberland, by site class and owner class, Oregon, 1999<sup>a</sup>

Site class <sup>b</sup>	Public						Private				All	
	National forest	Bureau of Land Management	Other federal	State	County-municipal	Total standard error	Forest industry	Other private	Total	Total standard error	Total	Standard error
<i>Thousand acres</i>												
All Oregon:												
20-49	3,427	249	—	55	—	3,730	941	727	1,668	85	5,399	112
50-84	3,599	437	—	38	30	4,104	845	588	1,434	90	5,537	124
85-119	1,956	525	—	64	25	2,571	672	410	1,082	84	3,653	114
120-164	1,347	473	5	246	36	2,106	81	1,387	2,125	103	4,230	130
165-224	517	522	1	389	10	1,439	69	1,628	2,061	100	3,500	119
225+	137	121	—	36	7	301	36	89	399	47	700	58
All site classes	10,983	2,326	7	828	109	14,251	5,783	2,985	8,768	116	23,020	128
Western Oregon:												
20-49	317	168	—	—	—	484	47	91	138	27	622	48
50-84	795	389	—	22	30	1,237	254	224	478	55	1,715	82
85-119	1,318	516	—	54	21	1,910	568	336	904	77	2,814	104
120-164	1,247	473	5	237	36	1,998	80	708	2,079	102	4,077	127
165-224	513	515	1	389	10	1,429	69	433	2,061	100	3,490	119
225+	137	121	—	36	7	301	36	89	399	47	700	58
All site classes	4,327	2,182	7	739	105	7,359	4,177	1,882	6,059	87	13,418	89
Eastern Oregon:												
20-49	3,111	81	—	55	—	3,246	894	636	1,530	80	4,777	102
50-84	2,804	48	—	15	—	2,867	591	365	956	71	3,823	93
85-119	638	9	—	10	4	661	104	73	177	35	838	49
120-164	100	—	—	8	—	108	17	29	46	19	154	24
165-224	3	7	—	—	—	10	—	—	—	—	10	7
All site classes	6,656	144	—	88	4	6,892	1,606	1,104	2,709	76	9,601	95

— = less than 500 acres found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>Site class is the mean annual increment growth in cubic feet per acre at culmination in fully stocked, natural stands.

**Table 12—Estimated net and cull volume of timber on nonreserved timberland, by timber class, tree size class, and species group, Oregon, 1999<sup>a,b</sup>**

Class of trees	Softwoods		Hardwoods		All species	
	Total	Standard error	Total	Standard error	All species	Standard error
<i>Million cubic feet</i>						
All Oregon:						
Net growing-stock trees—						
Poletimber	4,660	89	2,306	101	6,967	135
Sawtimber	66,254	884	4,583	178	70,838	911
All sizes	70,915	898	6,890	228	77,804	935
Cull trees—						
Growing stock	1,832	52	157	10	1,989	53
Rotten cull	429	32	234	29	663	44
Sound cull	239	21	129	15	368	26
All cull volume	2,500	72	520	37	3,020	82
Gross volume	73,414	931	7,410	245	80,824	971
Western Oregon:						
Net growing-stock trees—						
Poletimber	2,927	80	2,288	101	5,215	129
Sawtimber	51,312	849	4,546	178	55,858	877
All sizes	54,239	859	6,834	227	61,073	897
Cull trees—						
Growing stock	1,411	50	156	10	1,567	51
Rotten cull	303	29	231	29	534	42
Sound cull	108	19	128	15	236	24
All cull volume	1,822	68	515	37	2,337	78
Gross volume	56,061	890	7,349	244	63,410	932
Eastern Oregon:						
Net growing-stock trees—						
Poletimber	1,733	40	19	6	1,752	40
Sawtimber	14,942	262	38	9	14,980	262
All sizes	16,675	279	56	12	16,731	279
Cull trees—						
Growing stock	421	15	1	—	422	15
Rotten cull	125	13	3	2	128	13
Sound cull	132	9	—	—	132	9
All cull volume	678	25	5	2	683	25
Gross volume	17,353	290	61	13	17,414	291

— = less than 500,000 cubic feet found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>Includes growing-stock trees 5.0 inches in diameter at breast height and larger.

48 **Table 13—Estimated net volume of growing stock on nonreserved timberland, by forest type and stand size class, Oregon, 1999<sup>a,b</sup>**

Forest type	Seedling-sapling		Poletimber		Small sawtimber		Large sawtimber		All stand sizes	
	Total	Standard error	Total	Standard error	Total	Standard error	Total	Standard error	Total	Standard error
<i>Million cubic feet</i>										
All Oregon:										
Softwoods—										
Douglas-fir	421	59	1,471	143	21,236	724	23,926	767	47,054	936
Engelmann spruce	—	—	18	13	421	77	124	38	564	87
Grand fir	59	31	36	9	1,737	121	687	103	2,520	160
Incense-cedar	19	14	70	37	105	43	46	25	240	63
Jeffrey pine	—	—	1	1	23	12	12	7	36	14
Knobcone pine	—	—	2	2	9	7	12	9	23	16
Lodgepole pine	51	13	377	34	1,034	96	26	14	1,488	103
Mountain hemlock	—	—	6	5	670	100	239	61	916	117
Noble fir	1	1	9	8	100	32	268	75	377	82
Pacific silver fir	3	3	2	1	278	59	314	77	596	97
Ponderosa pine	23	9	206	35	4,606	164	1,808	99	6,643	187
Port-Orford-cedar	—	—	24	18	—	—	74	37	98	41
Redwood	—	—	—	—	38	38	—	—	38	38
Shasta red fir	—	—	6	4	219	49	286	70	511	85
Sitka spruce	3	3	9	9	308	120	440	185	760	219
Subalpine fir	—	—	9	6	178	35	10	5	197	36
Sugar pine	—	—	—	—	21	9	91	34	112	36
Western hemlock	45	16	151	57	2,572	357	1,311	212	4,078	415
Western juniper	—	—	—	—	21	6	4	2	26	6
Western larch	4	4	2	2	295	53	43	16	344	55
Western redcedar	3	3	—	—	142	63	446	118	591	133
Western white pine	—	—	1	1	38	16	9	6	48	18
White fir	21	11	75	20	1,076	100	1,275	129	2,446	163
Whitebark pine	—	—	—	—	8	5	—	—	8	5
Total	653	72	2,477	168	35,136	790	31,449	824	69,715	974
Hardwoods—										
Apple	2	2	3	3	—	—	—	—	5	4
Bigleaf maple	16	13	105	51	293	83	196	83	610	128
Black cottonwood	7	6	—	—	27	19	13	12	47	23
California black oak	—	—	57	28	83	41	28	28	168	56
California-laurel	—	—	16	16	107	79	29	19	151	83
Canyon live oak	9	9	64	24	39	19	2	2	114	32
Cherry	3	3	7	4	—	—	4	3	13	6
Golden chinkapin	12	12	53	22	15	13	13	11	93	30
Oregon ash	9	9	—	—	3	3	11	11	23	14
Oregon white oak	41	20	126	33	273	91	1	1	441	98



Table 13—Estimated net volume of growing stock on nonreserved timberland, by forest type and stand size class, Oregon, 1999<sup>a,b</sup> (continued)

Forest type	Seedling-sapling		Poletimber		Small sawtimber		Large sawtimber		All stand sizes	
	Total	Standard error	Total	Standard error	Total	Standard error	Total	Standard error	Total	Standard error
	<i>Million cubic feet</i>									
Pacific madrone	54	26	580	127	303	79	131	69	1,067	166
Quaking aspen	—	—	8	8	4	3	12	12	25	15
Red alder	76	24	766	139	2,431	281	311	76	3,583	312
Tanoak	21	12	280	69	416	100	266	64	983	127
Willow	3	3	—	—	—	—	2	2	5	3
Total	254	48	2,063	209	3,994	332	1,019	151	7,330	399
Other—										
Nonstocked									406	38
Not assessed									353	134
All forest types	907	85	4,540	261	39,130	808	32,469	828	77,804	935
Western Oregon:										
Softwoods—										
Douglas-fir	407	59	1,396	142	18,928	708	23,356	764	44,087	923
Engelmann spruce	—	—	—	—	44	23	19	18	63	29
Grand fir	59	31	—	—	135	54	105	74	299	96
Incense-cedar	19	14	70	37	76	41	46	25	211	61
Jeffrey pine	—	—	1	1	23	12	12	7	36	14
Knobcone pine	—	—	2	2	9	7	12	9	23	16
Lodgepole pine	—	—	20	10	102	27	—	—	123	29
Mountain hemlock	—	—	6	5	403	64	176	55	585	84
Noble fir	1	1	9	8	61	24	261	75	331	79
Pacific silver fir	3	3	2	1	256	58	314	77	575	96
Ponderosa pine	6	4	2	2	153	43	14	11	175	45
Port-Orford-cedar	—	—	24	18	—	—	74	37	98	41
Redwood	—	—	—	—	38	38	—	—	38	38
Shasta red fir	—	—	2	2	94	32	215	64	311	70
Sitka spruce	3	3	9	9	308	120	440	185	760	219
Subalpine fir	—	—	—	—	19	12	—	—	19	12
Sugar pine	—	—	—	—	3	3	75	33	78	33
Western hemlock	45	16	151	57	2,513	355	1,226	209	3,935	412
Western redbcedar	3	3	—	—	130	62	446	118	580	133
Western white pine	—	—	1	1	14	6	5	5	20	8
White fir	8	6	3	2	200	49	719	101	930	111
Total	554	70	1,699	158	23,509	748	27,514	807	53,277	937

50 Table 13—Estimated net volume of growing stock on nonreserved timberland, by forest type and stand size class, Oregon, 1999<sup>a,b</sup> (continued)

Forest type	Seedling-sapling		Poletimber		Small sawtimber		Large sawtimber		All stand sizes	
	Total	Standard error	Total	Standard error	Total	Standard error	Total	Standard error	Total	Standard error
<i>Million cubic feet</i>										
Hardwoods—										
Apple	2	2	3	3	—	—	—	—	5	4
Bigleaf maple	16	13	105	51	293	83	196	83	610	128
Black cottonwood	7	6	—	—	27	19	—	—	34	20
California black oak	—	—	57	28	83	41	28	28	168	56
California-laurel	—	—	16	16	107	79	29	19	151	83
Canyon live oak	9	9	64	24	39	19	2	2	114	32
Cherry	3	3	7	4	—	—	4	3	13	6
Golden chinkapin	12	12	53	22	15	13	13	11	93	30
Oregon ash	9	9	—	—	3	3	11	11	23	14
Oregon white oak	40	20	113	31	273	91	1	1	427	98
Pacific madrone	54	26	580	127	303	79	131	69	1,067	166
Quaking aspen	—	—	—	—	—	—	12	12	12	12
Red alder	76	24	766	139	2,431	281	311	76	3,583	312
Tanoak	21	12	280	69	416	100	266	64	983	127
Willow	3	3	—	—	—	—	2	2	5	3
Total	252	48	2,042	209	3,989	332	1,006	150	7,290	399
Other—										
Nonstocked									153	33
Not assessed									353	134
All forest types	807	83	3,741	255	27,499	766	28,520	811	61,073	897
Eastern Oregon:										
Softwoods—										
Douglas-fir	14	6	75	20	2,308	152	570	73	2,967	168
Engelmann spruce	—	—	18	13	377	74	104	33	500	82
Grand fir	—	—	36	9	1,602	108	582	72	2,220	127
Incense-cedar	—	—	—	—	28	13	—	—	28	13
Lodgepole pine	51	13	357	33	932	92	26	14	1,366	99
Mountain hemlock	—	—	—	—	267	78	64	26	330	82
Noble fir	—	—	—	—	39	22	7	7	46	23
Pacific silver fir	—	—	—	—	21	13	—	—	21	13
Ponderosa pine	17	7	204	35	4,453	158	1,794	98	6,468	181
Shasta red fir	—	—	4	4	125	38	71	30	200	49
Subalpine fir	—	—	9	6	159	33	10	5	179	34
Sugar pine	—	—	—	—	19	9	16	11	35	14
Western hemlock	—	—	—	—	59	39	84	37	143	54
Western juniper	—	—	—	—	21	6	4	2	26	6
Western larch	4	4	2	2	295	53	43	16	344	55

Table 13—Estimated net volume of growing stock on nonreserved timberland, by forest type and stand size class, Oregon, 1999<sup>a,b</sup> (continued)

Forest type	Seedling-sapling		Poletimber		Small sawtimber		Large sawtimber		All stand sizes	
	Total	Standard error	Total	Standard error	Total	Standard error	Total	Standard error	Total	Standard error
	<i>Million cubic feet</i>									
Western redcedar	—	—	—	—	11	9	—	—	11	9
Western white pine	—	—	—	—	24	15	3	3	27	17
White fir	13	9	72	20	876	87	556	80	1,517	119
Whitebark pine	—	—	—	—	8	5	—	—	8	5
Total	99	18	778	57	11,627	260	3,935	173	16,438	282
Hardwoods—										
Black cottonwood	—	—	—	—	—	—	13	12	13	12
Oregon white oak	1	1	14	10	—	—	—	—	14	10
Quaking aspen	—	—	8	8	4	3	—	—	13	8
Total	1	1	22	13	4	3	13	12	41	18
Other—										
Nonstocked	—	—	—	—	—	—	—	—	253	19
Not assessed	—	—	—	—	—	—	—	—	—	—
All forest types	100	18	800	58	11,631	260	3,948	173	16,731	279

— = less than 500,000 cubic feet found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>Includes growing-stock trees 5.0 inches in diameter at breast height and larger.

**Table 14—Estimated net volume of growing stock on nonreserved timberland, by owner class and species group, Oregon, 1999<sup>a,b</sup>**

Owner class	Softwoods		Hardwoods		All species	
	Total	Standard error	Total	Standard error	Total	Standard error
<i>Million cubic feet</i>						
All Oregon:						
National forest	39,298	486	1,309	57	40,607	488
Bureau of Land Management	8,954	446	1,179	82	10,133	462
Other federal	2	1	8	6	10	8
State	3,593	336	644	93	4,237	359
County-municipal	267	108	58	26	325	118
Total public	52,113	740	3,198	138	55,312	762
Forest industry	12,952	512	2,036	156	14,988	564
Native American <sup>c</sup>	801	111	19	14	820	113
Other private	5,048	301	1,636	130	6,684	354
Total private	18,801	562	3,691	189	22,492	613
All owners	70,915	898	6,890	228	77,804	935
Western Oregon:						
National forest	26,431	449	1,283	57	27,714	451
Bureau of Land Management	8,708	443	1,179	82	9,887	460
Other federal	1	1	8	6	10	8
State	3,423	331	637	93	4,060	354
County-municipal	260	108	58	26	318	118
Total public	38,824	713	3,165	138	41,989	735
Forest industry	11,408	503	2,029	156	13,437	555
Other private	4,007	283	1,640	131	5,646	340
Total private	15,415	533	3,669	189	19,084	586
All owners	54,239	859	6,834	227	61,073	897
Eastern Oregon:						
National forest	12,867	208	26	7	12,893	209
Bureau of Land Management	246	47	—	—	246	47
Other federal	—	—	—	—	—	—
State	169	62	8	6	177	62
County-municipal	7	7	—	—	7	7
Total public	13,289	222	34	9	13,323	223
Forest industry	1,544	98	7	4	1,551	99
Other private	1,842	150	15	7	1,858	150
Total private	3,386	178	23	8	3,409	179
All owners	16,675	279	56	12	16,731	279

— = less than 500,000 cubic feet found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>Includes growing-stock trees 5.0 inches in diameter at breast height and larger.

<sup>c</sup>For confidentiality reasons, Native American lands are included within the “Other private” group when summarizing at regional level.

**Table 15—Estimated gross annual growth and average annual mortality of growing stock on nonreserved timberland, by forest type and owner class, Oregon, 1999<sup>a,b</sup>**

Forest type	National forest			Bureau of Land Management			Other public			Forest industry			Other private			All owners		
	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality		
<i>Thousand cubic feet</i>																		
All Oregon:	416,595	142,945	218,634	24,179	114,135	13,985	428,521	39,249	126,992	22,374	1,304,880	242,731	9,030	6,240	—	—	—	
Softwoods—	44,793	37,458	1,129	283	—	—	7,254	2,338	5,825	1,696	58,645	41,737	4,552	3,622	—	—	—	
Douglas-fir	846	374	211	59	—	—	4,341	387	2,089	398	8,404	1,441	1,988	696	—	—	—	
Engelmann spruce	455	166	—	—	—	—	—	—	39	1	705	225	4,228	3,282	—	—	—	
Grand fir	722	199	—	—	—	—	—	—	—	—	722	199	2,200	775	—	—	—	
Incense-cedar	32,210	12,682	528	239	—	—	4,669	2,709	3,786	3,129	41,192	18,759	5,546	4,521	—	—	—	
Jeffrey pine	9,960	7,298	—	—	—	—	1,047	10	941	2,058	10,901	9,356	1,988	696	—	—	—	
Knobcone pine	6,372	2,624	—	—	985	15	528	6	—	—	8,404	2,649	20,773	9,361	—	—	—	
Lodgepole pine	9,483	4,888	—	—	—	—	27,220	6,903	—	—	10,011	4,894	462	153	—	—	—	
Mountain hemlock	124,858	47,617	3,737	1,056	3,944	1,182	27,220	6,903	21,440	7,119	181,198	63,877	5,462	4,521	—	—	—	
Noble fir	467	303	1,033	109	—	—	1,301	35	267	57	3,068	504	1,988	696	—	—	—	
Pacific silver fir	—	—	—	—	—	—	1,038	302	—	—	1,038	302	—	—	—	—	—	
Ponderosa pine	9,397	4,726	235	411	—	—	14,866	2,414	4,561	1,212	25,505	4,092	20,773	9,361	—	—	—	
Port-Orford-cedar	4,552	3,622	—	—	1,526	103	14,866	2,414	—	—	4,228	3,282	4,228	3,282	—	—	—	
Redwood	4,228	3,282	212	80	—	—	—	—	—	—	4,228	3,282	1,988	696	—	—	—	
Shasta red fir	1,988	696	212	80	—	—	—	—	—	—	2,200	775	20,773	9,361	—	—	—	
Sitka spruce	20,773	9,361	15,156	2,247	13,031	1,709	84,152	9,737	4,238	941	137,350	23,995	462	153	—	—	—	
Subalpine fir	462	153	—	—	—	—	108	25	70	43	640	221	5,546	4,521	—	—	—	
Sugar pine	5,546	4,521	—	—	—	—	1,035	480	472	336	7,053	5,337	5,546	4,521	—	—	—	
Western hemlock	3,262	1,568	1,030	286	424	152	4,332	666	3,066	909	12,113	3,580	3,262	1,568	—	—	—	
Western juniper	950	476	—	—	—	—	—	—	—	—	950	476	950	476	—	—	—	
Western larch	43,697	24,943	1,757	1,181	—	—	9,029	3,830	1,077	1,009	55,561	30,963	43,697	24,943	—	—	—	
Western redcedar	200	114	—	—	—	—	—	—	—	—	200	114	200	114	—	—	—	
White fir	750,845	312,995	243,866	30,165	134,766	17,441	590,437	69,442	176,268	42,478	1,896,180	472,522	750,845	312,995	—	—	—	
Whitebark pine	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total	750,845	312,995	243,866	30,165	134,766	17,441	590,437	69,442	176,268	42,478	1,896,180	472,522	750,845	312,995	—	—	—	
Hardwoods—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Apple	1,691	264	3,036	356	1,882	458	7,385	738	6,843	1,767	20,836	3,582	1,691	264	—	—	—	
Bigleaf maple	616	168	—	—	—	—	519	65	352	40	1,488	272	616	168	—	—	—	
Black cottonwood	201	30	2,636	247	—	—	190	12	2,210	591	5,237	881	201	30	—	—	—	
California black oak	708	91	—	—	—	—	3,940	561	—	—	4,648	652	708	91	—	—	—	
California-laurel	2,724	270	1,175	115	—	—	569	83	—	—	4,467	468	2,724	270	—	—	—	
Canyon live oak	232	36	—	—	202	8	—	—	148	9	582	53	232	36	—	—	—	
Cherry	2,199	362	2,729	151	—	—	—	—	—	—	4,928	513	2,199	362	—	—	—	
Golden chinkapin	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

**Table 15—Estimated gross annual growth and average annual mortality of growing stock on nonreserved timberland, by forest type and owner class, Oregon, 1999<sup>ab</sup> (continued)**

Forest type	Bureau of Land Management													
	National forest			Other public			Forest industry			Other private			All owners	
	Current gross annual growth	Average annual mortality	Average annual mortality	Current gross annual growth	Average annual mortality	Average annual mortality	Current gross annual growth	Average annual mortality	Average annual mortality	Current gross annual growth	Average annual mortality	Average annual mortality	Current gross annual growth	Average annual mortality
	<i>Thousand cubic feet</i>													
Oregon ash	—	—	—	—	—	—	—	—	—	—	—	—	566	127
Oregon white oak	238	29	181	421	176	1,403	4,529	1,403	566	127	1,403	4,529	12,893	2,697
Pacific madrone	5,470	533	1,772	1,037	344	1,800	5,885	1,800	6,594	1,221	1,800	5,885	37,894	5,670
Quaking aspen	304	113	—	—	—	15	272	15	261	108	15	272	837	236
Red alder	10,922	1,296	1,781	26,513	5,751	10,377	48,207	10,377	36,606	6,888	10,377	48,207	144,961	26,093
Tanoak	15,788	1,536	841	—	—	981	10,945	981	2,394	395	981	10,945	39,501	3,752
Willow	18	13	—	—	—	—	—	—	280	4	—	—	298	17
Total	41,111	4,739	5,444	30,055	6,737	16,039	82,617	16,039	61,796	12,067	16,039	82,617	279,363	45,027
Other—														
Nonstocked	9,246	3,111	27	3	4	254	745	254	2,141	600	254	745	12,262	3,996
Not assessed	—	—	—	—	—	1,381	13,818	1,381	1,611	465	1,381	13,818	15,429	1,846
All forest types	801,202	320,845	35,636	164,821	24,178	87,116	687,617	87,116	241,815	55,610	87,116	687,617	2,203,230	523,390
Western Oregon:														
Softwoods—														
Douglas-fir	375,857	114,641	23,597	113,726	13,573	34,897	417,417	34,897	112,033	15,353	34,897	417,417	1,236,920	202,062
Engelmann spruce	1,118	471	—	—	—	—	—	—	—	—	—	—	1,118	471
Grand fir	1,251	459	36	—	—	1,163	5,359	1,163	4,000	502	1,163	5,359	10,814	2,160
Incense-cedar	578	256	174	—	—	316	4,057	316	2,089	398	316	4,057	7,656	1,143
Jeffrey pine	455	166	59	—	—	—	—	—	39	1	—	—	705	225
Knobcone pine	722	199	—	—	—	—	—	—	—	—	—	—	722	199
Lodgepole pine	3,023	1,101	—	—	—	—	—	—	—	—	—	—	3,023	1,101
Mountain hemlock	7,579	4,959	—	—	—	—	—	—	—	—	—	—	7,579	4,959
Noble fir	5,376	2,329	—	985	15	10	1,047	10	—	—	10	1,047	7,407	2,354
Pacific silver fir	9,027	4,683	—	—	—	6	528	6	—	—	6	528	9,554	4,689
Ponderosa pine	4,414	730	121	—	—	106	282	106	2,216	270	106	282	7,892	1,227
Port-Orford-cedar	467	303	109	—	—	35	1,301	35	267	57	35	1,301	3,068	504
Redwood	—	—	—	—	—	302	1,038	302	—	—	302	1,038	1,038	302
Shasta red fir	5,777	2,446	—	—	—	—	—	—	—	—	—	—	5,777	2,446
Sitka spruce	4,552	362	—	1,526	103	2,414	14,866	2,414	4,561	1,212	2,414	14,866	25,505	4,092
Subalpine fir	447	151	—	—	—	—	—	—	—	—	—	—	447	151
Sugar pine	1,009	428	80	—	—	—	—	—	—	—	—	—	1,221	508
Western hemlock	19,642	8,644	2,247	13,031	1,709	9,737	84,152	9,737	3,539	237	9,737	84,152	135,520	22,574

**Table 15—Estimated gross annual growth and average annual mortality of growing stock on nonreserved timberland, by forest type and owner class, Oregon, 1999<sup>ab</sup> (continued)**

Forest type	National forest			Bureau of Land Management			Other public			Forest industry			Other private			All owners		
	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality		
Western redcedar	3,029	1,492	1,030	286	424	152	666	3,066	909	11,880	3,505							
Western white pine	457	166	—	—	—	—	—	—	—	457	166							
White fir	16,890	5,648	523	114	—	—	1,946	201	53	19,560	6,064							
Total	461,671	149,634	238,165	26,823	129,692	15,552	49,900	132,010	18,992	1,497,860	260,902							
<i>Thousand cubic feet</i>																		
Hardwoods—																		
Apple	—	—	—	—	—	—	4	51	9	228	13							
Bigleaf maple	1,691	264	3,036	356	1,882	458	738	6,843	1,767	20,836	3,582							
Black cottonwood	456	88	—	—	—	—	65	352	40	1,328	193							
California black oak	201	30	2,636	247	—	—	12	2,210	591	5,237	881							
California-laurel	708	91	—	—	—	—	561	—	—	4,648	652							
Canyon live oak	2,724	270	1,175	115	—	—	83	—	—	4,467	468							
Cherry	232	36	—	—	202	8	—	148	9	582	53							
Golden chinkapin	2,199	362	2,729	151	—	—	—	—	—	4,928	513							
Oregon ash	—	—	—	—	—	—	—	—	—	—	—							
Oregon white oak	194	22	2,213	181	—	—	—	566	127	566	127							
Pacific madrone	5,470	533	18,909	1,772	1,037	344	1,403	5,479	897	12,415	2,504							
Quaking aspen	172	52	—	—	—	—	1,800	6,594	1,221	37,894	5,670							
Red alder	10,922	1,296	22,714	1,781	26,513	5,751	10,377	36,606	6,888	144,961	26,093							
Tanoak	15,788	1,536	10,374	841	—	—	981	2,394	395	39,501	3,752							
Willow	18	13	—	—	—	—	—	280	4	298	17							
Total	40,774	4,593	63,785	5,444	29,634	6,561	16,024	61,523	11,948	278,060	44,570							
Other—																		
Nonstocked	1,860	533	92	12	—	—	74	1,374	303	3,611	923							
Not assessed	—	—	—	—	—	—	1,381	1,611	465	15,429	1,846							
All forest types	504,305	154,760	302,043	32,279	159,326	22,113	67,379	196,518	31,708	1,794,960	308,241							
Eastern Oregon:																		
Softwoods—																		
Douglas-fir	40,738	28,303	752	581	409	412	4,352	14,959	7,021	67,963	40,669							
Engelmann spruce	7,911	5,769	—	—	153	85	352	1,406	1,197	10,468	7,403							
Grand fir	43,542	37,000	—	—	569	208	1,175	1,824	1,194	47,831	39,577							
Incense-cedar	268	118	197	109	—	—	71	—	—	748	298							
Lodgepole pine	29,187	11,581	528	239	—	—	2,709	3,786	3,129	38,169	17,658							
Mountain hemlock	2,381	2,339	—	—	—	—	—	941	2,058	3,322	4,397							

**Table 15—Estimated gross annual growth and average annual mortality of growing stock on nonreserved timberland, by forest type and owner class, Oregon, 1999<sup>ab</sup> (continued)**

Forest type	National forest			Bureau of Land Management			Other public			Forest industry			Other private			All owners		
	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality	Current gross annual growth	Average annual mortality		
	<i>Thousand cubic feet</i>																	
Noble fir	996	295	—	—	—	—	—	—	—	—	—	—	—	—	996	295		
Pacific silver fir	457	205	—	—	—	—	—	—	—	—	—	—	—	457	205			
Ponderosa pine	120,444	46,888	2,756	935	3,944	1,182	6,797	19,224	6,848	—	—	—	—	173,306	62,650			
Shasta red fir	3,619	2,280	235	411	—	—	—	—	—	—	—	—	—	3,854	2,691			
Subalpine fir	3,781	3,131	—	—	—	—	—	—	—	—	—	—	—	3,781	3,131			
Sugar pine	979	267	—	—	—	—	—	—	—	—	—	—	—	979	267			
Western hemlock	1,131	718	—	—	—	—	—	699	704	—	—	—	—	1,830	1,421			
Western juniper	462	153	—	—	—	—	108	70	43	—	—	—	—	640	221			
Western larch	5,546	4,521	—	—	—	—	1,035	472	336	—	—	—	—	7,053	5,337			
Western redcedar	233	75	—	—	—	—	—	—	—	—	—	—	—	233	75			
Western white pine	492	310	—	—	—	—	—	—	—	—	—	—	—	492	310			
White fir	26,807	19,294	1,234	1,067	—	—	7,083	876	956	—	—	—	—	36,000	24,899			
Whitebark pine	200	114	—	—	—	—	—	—	—	—	—	—	—	200	114			
Total	289,174	163,360	5,701	3,343	5,075	1,888	54,114	44,258	23,486	—	—	—	—	398,321	211,618			
Hardwoods—																		
Black cottonwood	160	79	—	—	—	—	—	—	—	—	—	—	—	160	79			
Oregon white oak	45	6	—	—	421	176	—	12	11	—	—	—	—	478	193			
Quaking aspen	132	61	—	—	—	—	272	261	108	—	—	—	—	666	184			
Total	337	146	—	—	421	176	272	273	119	—	—	—	—	1,303	457			
Other—																		
Nonstocked	7,386	2,578	42	15	—	4	460	767	297	—	—	—	—	8,651	3,073			
All forest types	296,897	166,085	5,742	3,357	5,496	2,068	54,846	45,297	23,902	—	—	—	—	408,276	215,149			

— = less than 500 cubic feet found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>Includes growing-stock trees 5.0 inches in diameter at breast height and larger.



**Table 16—Estimated gross annual growth, average annual mortality, and removals of sawtimber on nonreserved timberland, by owner class, Oregon, 1999<sup>abcd</sup>**

Owner group	Current gross annual growth		Average annual mortality		Average annual removals	Average annual removals	Average annual removals
	Total	Standard error	Total	Standard error			
-----Thousand cubic feet-----							
All Oregon:							
National forest	635,117	7,119	283,709	3,877	204,609	918,869	918,869
Bureau of Land Management	217,119	9,663	28,884	1,613	67,542	296,197	296,197
Other federal	298	219	59	41	—	—	—
State	127,225	9,837	17,574	1,725	30,989	139,551	139,551
County-municipal	6,793	2,316	1,587	590	7,188	32,491	32,491
Total public	986,552	15,531	331,812	4,551	310,329	1,387,107	1,387,107
Forest industry	518,801	19,844	66,936	3,248	580,194	2,624,448	2,624,448
Native American <sup>e</sup>	12,650	1,979	10,080	1,606	18,054	81,839	81,839
Other private	171,125	9,392	35,551	2,210	135,994	616,753	616,753
Total private	702,575	20,507	112,567	4,080	734,241	3,323,041	3,323,041
All owners	1,689,130	24,256	444,378	5,943	1,044,570	4,710,148	4,710,148
Western Oregon:							
National forest	400,908	6,418	141,216	2,532	90,755	411,724	411,724
Bureau of Land Management	212,414	9,611	25,942	1,470	62,314	273,505	273,505
Other federal	297	219	55	41	—	—	—
State	122,678	9,669	15,896	1,611	30,073	135,394	135,394
County-municipal	6,640	2,311	1,502	584	7,055	31,888	31,888
Total public	742,937	15,081	184,610	3,355	190,197	852,511	852,511
Forest industry	478,146	19,652	50,981	2,986	475,869	2,152,087	2,152,087
Other private <sup>e</sup>	146,864	9,050	24,862	1,870	107,580	487,726	487,726
Total private	625,010	20,081	75,842	3,331	583,449	2,639,813	2,639,813
All owners	1,367,950	23,642	260,452	4,554	773,647	3,492,324	3,492,324
Eastern Oregon:							
National forest	234,209	3,362	142,493	2,976	113,855	507,145	507,145
Bureau of Land Management	4,705	998	2,941	665	5,228	22,692	22,692
Other federal	1	1	4	4	—	—	—
State	4,547	1,810	1,678	619	916	4,157	4,157
County-municipal	153	153	85	85	133	603	603
Total public	243,615	3,948	147,202	3,113	120,132	534,596	534,596

**Table 16—Estimated gross annual growth, average annual mortality, and removals of sawtimber on nonreserved timberland, by owner class, Oregon, 1999<sup>a,b,c,d</sup> (continued)**

Owner group	Current gross annual growth		Average annual mortality		Average annual removals	Average annual removals
	Total	Standard error	Total	Standard error		
Forest industry	40,655	2,750	15,955	1,278	104,324	472,361
Other private <sup>e</sup>	36,910	3,167	20,769	1,968	46,467	210,867
Total private	77,565	4,159	36,724	2,356	150,791	683,228
All owners	321,180	5,585	183,926	3,850	270,923	1,217,824

-----Thousand cubic feet-----  
 Thousand board feet

— = less than 500 cubic feet, or the equivalent in board feet, found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>Includes softwood trees 9.0 inches in diameter at breast height and larger and hardwood trees 11.0 inches in diameter at breast height and larger.

<sup>c</sup>Removals calculated from removal data between 1990 and 1999. Source: Oregon timber harvest reports, Oregon Department of Forestry (ODF).

<sup>d</sup>Removals measured in board feet Scribner log scale; used ODF conversion factors to convert to cubic feet.

<sup>e</sup>For confidentiality reasons, Native American lands are included within the “Other private” group when summarizing at regional level.

**Table 17—Estimated timber harvest volume, by year and owner class, Oregon, 1975–2002**

Year	Public				Private				All owners	
	National forest	Bureau of Land Management	State	County-municipal	Total	Forest industry	Native American <sup>a</sup>	Other private		Total
<i>Thousand board feet, Scribner rule</i>										
All Oregon:										
1975	2,660,681	626,116	159,865	19,990	3,466,652	3,418,737	122,622	362,714	3,904,073	7,370,725
1976	3,167,974	1,081,916	203,441	25,210	4,478,541	3,147,154	107,558	414,258	3,668,970	8,147,511
1977	2,912,687	1,020,595	227,914	10,576	4,171,772	3,136,657	114,741	453,218	3,704,616	7,876,388
1978	3,232,231	837,468	234,667	21,650	4,326,016	3,162,788	121,175	386,697	3,670,660	7,996,676
1979	3,167,043	955,832	223,431	28,640	4,374,946	2,953,381	110,546	255,466	3,319,393	7,694,339
1980	2,398,708	797,271	185,699	18,928	3,400,606	2,929,545	104,802	204,496	3,238,843	6,639,449
1981	1,981,073	677,020	215,843	24,283	2,898,219	2,522,166	94,697	180,073	2,796,936	5,695,155
1982	1,687,634	312,105	174,562	17,217	2,191,518	3,220,731	126,393	219,260	3,566,384	5,757,902
1983	2,901,693	788,781	256,923	31,110	3,978,507	3,124,366	111,795	249,320	3,485,481	7,463,988
1984	3,163,564	919,545	249,131	37,563	4,369,803	2,768,391	101,453	310,116	3,179,960	7,549,763
1985	3,480,205	891,330	268,218	34,368	4,674,121	3,008,925	121,032	323,177	3,453,134	8,127,255
1986	3,850,238	1,041,557	225,291	28,104	5,145,190	3,065,863	103,865	427,706	3,597,434	8,742,624
1987	3,451,337	1,115,126	199,286	51,982	4,817,731	2,790,627	117,107	489,820	3,397,554	8,215,285
1988	3,487,457	1,438,615	269,743	38,662	5,234,477	2,673,035	121,407	586,136	3,380,578	8,615,055
1989	3,307,046	1,025,814	197,774	43,900	4,574,534	3,027,194	124,477	693,693	3,845,364	8,419,898
1990	2,013,753	704,055	136,848	37,110	2,891,766	2,628,443	97,742	600,663	3,326,848	6,218,614
1991	2,068,426	486,054	90,725	35,865	2,681,070	2,817,411	87,349	494,426	3,399,186	6,080,256
1992	1,403,043	483,089	135,206	29,458	2,050,796	2,750,937	110,764	829,864	3,691,565	5,742,361
1993	1,102,004	361,270	115,949	30,815	1,610,038	2,699,657	75,437	908,835	3,683,929	5,293,967
1994	596,373	91,600	129,946	25,435	843,354	2,470,788	79,629	773,395	3,323,812	4,167,166
1995	515,460	139,010	109,104	29,686	793,260	2,735,942	79,195	695,761	3,510,898	4,304,158
1996	401,097	288,821	114,379	28,598	832,895	2,463,367	71,125	554,912	3,089,404	3,922,299
1997	522,668	136,268	176,065	34,546	869,547	2,653,095	78,675	480,098	3,211,868	4,081,415
1998	332,901	121,873	141,186	24,656	620,616	2,469,906	70,912	370,469	2,911,287	3,531,903
1999	232,962	149,929	246,098	48,740	677,729	2,554,934	67,565	459,110	3,081,609	3,759,338
2000	244,772	82,990	254,857	41,603	624,222	2,711,811	62,289	455,192	3,229,292	3,853,514
2001	135,385	38,074	268,389	30,496	472,344	2,623,839	62,747	280,864	2,967,450	3,439,794
2002	166,495	55,136	268,922	42,062	532,615	2,985,389	71,225	333,129	3,389,743	3,922,358
Western Oregon:										
1975	1,509,173	609,454	159,865	19,990	2,298,482	2,815,982		252,698	3,068,680	5,367,162
1976	1,910,866	1,052,513	195,385	25,210	3,183,974	2,677,147		312,351	2,989,498	6,173,472
1977	1,788,847	981,535	221,248	10,576	3,002,206	2,753,326		309,907	3,063,233	6,065,439
1978	2,040,835	812,808	230,664	21,650	3,105,957	2,796,239		267,914	3,064,153	6,170,110
1979	2,168,621	923,242	218,956	28,265	3,339,084	2,584,951		188,866	2,773,817	6,112,901
1980	1,562,313	781,453	181,270	18,420	2,543,456	2,437,705		123,426	2,561,131	5,104,587
1981	1,185,197	662,418	210,927	23,350	2,081,892	2,110,276		115,693	2,225,969	4,307,861
1982	950,757	299,863	167,202	16,995	1,434,817	2,679,213		171,711	2,850,924	4,285,741
1983	1,699,479	750,760	242,243	30,348	2,722,830	2,612,252		201,369	2,813,621	5,536,451
1984	1,879,568	879,704	243,318	37,517	3,040,107	2,599,205		251,217	2,850,422	5,890,529

Table 17—Estimated timber harvest volume, by year and owner class, Oregon, 1975–2002 (continued)

Year	Public				Private				All owners	
	National forest	Bureau of Land Management	State	County-municipal	Total	Forest industry	Native American <sup>a</sup>	Other private		Total
	<i>Thousand board feet, Scribner rule</i>									
1985	2,078,332	875,121	266,175	31,663	3,251,291	2,659,988		278,953	2,938,941	6,190,232
1986	2,321,819	1,016,923	210,036	27,752	3,576,530	2,745,235		334,061	3,079,296	6,655,826
1987	2,085,180	1,069,962	188,503	51,474	3,395,119	2,452,428		356,227	2,808,655	6,203,774
1988	2,237,581	1,398,767	269,049	38,662	3,944,059	2,305,905		472,161	2,778,066	6,722,125
1989	1,938,334	988,006	184,770	41,514	3,152,624	2,510,508		569,069	3,079,577	6,232,201
1990	1,012,450	654,249	129,995	37,101	1,833,795	2,210,796		481,744	2,692,540	4,526,335
1991	999,821	431,595	87,128	34,338	1,552,882	2,270,236		400,201	2,670,437	4,223,319
1992	617,125	469,987	134,039	29,458	1,250,609	2,182,911		583,994	2,766,905	4,017,514
1993	416,174	338,713	110,720	29,278	894,885	2,154,609		701,666	2,856,275	3,751,160
1994	256,299	82,980	124,756	25,421	489,456	1,956,360		629,550	2,585,910	3,075,366
1995	197,895	124,655	100,879	29,083	452,512	2,313,245		597,254	2,910,499	3,363,011
1996	189,543	253,967	110,926	28,297	582,733	2,071,842		436,399	2,508,241	3,090,974
1997	203,961	127,305	175,359	33,819	540,444	2,241,330		388,998	2,630,328	3,170,772
1998	132,974	111,130	138,646	24,456	407,206	2,026,687		267,117	2,293,804	2,701,010
1999	90,998	140,473	241,489	47,626	520,586	2,092,856		390,334	2,483,190	3,003,776
2000	104,689	79,700	244,250	40,324	468,963	2,381,862		355,926	2,737,788	3,206,751
2001	27,771	36,283	258,163	30,243	352,460	2,252,482		237,274	2,489,756	2,842,216
2002	48,441	44,311	255,036	41,446	389,234	2,592,598		274,688	2,867,286	3,256,520
Eastern Oregon:										
1975	1,151,508	16,662	0	0	1,168,170	602,755		232,638	835,393	2,003,563
1976	1,257,108	29,403	8,056	0	1,294,567	470,007		209,465	679,472	1,974,039
1977	1,123,840	39,060	6,666	0	1,169,566	383,331		258,052	641,383	1,810,949
1978	1,191,396	24,660	4,003	0	1,220,059	366,549		239,958	606,507	1,826,566
1979	998,422	32,590	4,475	375	1,035,862	368,430		177,146	545,576	1,581,438
1980	836,395	15,818	4,429	508	857,150	491,840		185,872	677,712	1,534,862
1981	795,876	14,602	4,916	933	816,327	411,890		159,077	570,967	1,387,294
1982	736,877	12,242	7,360	222	756,701	541,518		173,942	715,460	1,472,161
1983	1,202,214	38,021	14,680	762	1,255,677	512,114		159,746	671,860	1,927,537
1984	1,283,996	39,841	5,813	46	1,329,696	169,186		160,352	329,538	1,659,234
1985	1,401,873	16,209	2,043	2,705	1,422,830	348,937		165,256	514,193	1,937,023
1986	1,528,419	24,634	15,255	352	1,568,660	320,628		197,510	518,138	2,086,798
1987	1,366,157	45,164	10,783	508	1,422,612	338,199		250,700	588,899	2,011,511
1988	1,249,876	39,848	694	0	1,290,418	367,130		235,382	602,512	1,892,930
1989	1,368,712	37,808	13,004	2,386	1,421,910	516,686		249,101	765,787	2,187,697
1990	1,001,303	49,806	6,853	9	1,057,971	417,647		216,661	634,308	1,692,279
1991	1,068,605	54,459	3,597	1,527	1,128,188	547,175		181,574	728,749	1,856,937
1992	785,918	13,102	1,167	0	800,187	568,026		356,634	924,660	1,724,847
1993	685,830	22,557	5,229	1,537	715,153	545,048		282,606	827,654	1,542,807
1994	340,074	8,620	5,190	14	353,898	514,428		223,474	737,902	1,091,800

Table 17—Estimated timber harvest volume, by year and owner class, Oregon, 1975–2002 (continued)

Year	Public				Private				All owners	
	National forest	Bureau of Land Management	State	County-municipal	Total	Forest industry	Native American <sup>a</sup>	Other private		Total
	<i>Thousand board feet, Scribner rule</i>									
1995	317,565	14,355	8,225	603	340,748	422,697		177,702	600,399	941,147
1996	211,554	34,854	3,453	301	250,162	391,525		189,638	581,163	831,325
1997	318,707	8,963	706	727	329,103	411,765		169,775	581,540	910,643
1998	199,927	10,743	2,540	200	213,410	443,219		174,264	617,483	830,893
1999	141,964	9,456	4,609	1,114	157,143	462,078		136,341	598,419	755,562
2000	140,083	3,290	10,607	1,279	155,259	329,949		161,555	491,504	646,763
2001	107,614	1,791	10,226	253	119,884	371,357		106,337	477,694	597,578
2002	118,054	10,825	13,886	616	143,381	392,791		129,666	522,457	665,838

<sup>a</sup>For confidentiality reasons, Native American lands are included within the "Other private" group when summarizing at regional level. Source: Oregon timber harvest reports, Oregon Department of Forestry.

Table 18—Estimated area of forest land, by reserve status, site class, and owner class, Oregon, 1999<sup>ab</sup>

Site class	All forest land	FIA <sup>c</sup> definition		ODF <sup>d</sup> definition			
		Nonreserved	Reserved	Active forest	Multiresource	Reserved	
<i>Cubic feet per acre</i>		----- <i>Thousand acres</i> -----					
All Oregon:							
All public owners—							
<20	2,067	1,845	222	25	1,538	503	
20–49	4,464	3,790	674	8	3,587	868	
50–84	4,913	4,105	808	30	3,503	1,379	
85–119	3,084	2,571	513	25	1,725	1,333	
120–164	2,355	2,106	249	36	1,213	1,106	
165–224	1,507	1,439	68	10	905	592	
225+	325	301	24	7	104	214	
Not assessed	407	376	30	33	215	159	
Total	19,122	16,533	2,589	175	12,791	6,156	
All private owners—							
<20	2,013	2,013	—	1,978	35	—	
20–49	1,676	1,676	—	1,676	—	—	
50–84	1,441	1,441	—	1,441	—	—	
85–119	1,082	1,082	—	1,082	—	—	
120–164	2,125	2,125	—	2,125	—	—	
165–224	2,061	2,061	—	2,061	—	—	
225+	399	399	—	399	—	—	
Not assessed	315	315	—	315	—	—	
Total	11,112	11,111	—	11,077	35	—	
All owners—							
<20	4,081	3,858	222	2,004	1,573	504	
20–49	6,139	5,465	674	1,684	3,587	868	
50–84	6,354	5,546	808	1,472	3,503	1,379	
85–119	4,165	3,653	513	1,107	1,725	1,333	
120–164	4,480	4,230	249	2,160	1,213	1,106	
165–224	3,568	3,500	68	2,071	905	592	
225+	724	700	24	406	104	214	
Not assessed	722	691	30	348	215	159	
Total	30,233	27,644	2,589	11,252	12,825	6,156	
Western Oregon:							
All public owners—							
<20	337	216	121	20	79	239	
20–49	681	484	196	—	286	395	
50–84	1,476	1,237	239	30	672	774	
85–119	2,248	1,910	338	21	1,145	1,082	
120–164	2,204	1,998	205	36	1,120	1,047	
165–224	1,497	1,429	68	10	896	591	
225+	325	301	24	7	104	214	
Not assessed	66	55	11	33	—	33	
Total	8,833	7,630	1,203	157	4,301	4,375	
All private owners—							
<20	286	285	—	285	—	—	
20–49	138	138	—	138	—	—	
50–84	479	479	—	479	—	—	
85–119	904	904	—	904	—	—	
120–164	2,079	2,079	—	2,079	—	—	
165–224	2,061	2,061	—	2,061	—	—	

**Table 18—Estimated area of forest land, by reserve status, site class, and owner class, Oregon, 1999<sup>a,b</sup> (continued)**

Site class	All forest land	FIA <sup>c</sup> definition		ODF <sup>d</sup> definition		
		Nonreserved	Reserved	Active forest	Multiresource	Reserved
<i>Cubic feet per acre</i>		<i>----- Thousand acres -----</i>				
225+	399	399	—	399	—	—
Not assessed	274	274	—	274	—	—
<b>Total</b>	<b>6,621</b>	<b>6,620</b>	<b>—</b>	<b>6,620</b>	<b>—</b>	<b>—</b>
All owners—						
<20	623	502	121	305	79	239
20–49	819	622	196	138	286	395
50–84	1,956	1,716	239	510	672	774
85–119	3,152	2,814	338	926	1,145	1,082
120–164	4,282	4,077	205	2,115	1,120	1,047
165–224	3,558	3,490	68	2,071	896	591
225+	724	700	24	406	104	214
Not assessed	340	329	11	307	—	33
<b>Total</b>	<b>15,454</b>	<b>14,251</b>	<b>1,203</b>	<b>6,777</b>	<b>4,301</b>	<b>4,375</b>
Eastern Oregon:						
All public owners—						
<20	1,730	1,629	101	6	1,460	265
20–49	3,783	3,305	478	8	3,301	474
50–84	3,437	2,868	569	—	2,832	605
85–119	836	661	175	4	580	252
120–164	152	108	44	—	93	59
165–224	10	10	—	—	9	1
Not assessed	340	321	19	—	215	126
<b>Total</b>	<b>10,288</b>	<b>8,902</b>	<b>1,386</b>	<b>18</b>	<b>8,489</b>	<b>1,781</b>
All private owners—						
<20	1,728	1,728	—	1,693	35	—
20–49	1,537	1,537	—	1,537	—	—
50–84	962	962	—	962	—	—
85–119	177	177	—	177	—	—
120–164	46	46	—	46	—	—
Not assessed	41	41	—	41	—	—
<b>Total</b>	<b>4,491</b>	<b>4,491</b>	<b>—</b>	<b>4,456</b>	<b>35</b>	<b>—</b>
All owners—						
<20	3,458	3,357	101	1,699	1,494	265
20–49	5,321	4,843	478	1,546	3,301	474
50–84	4,399	3,830	569	962	2,832	605
85–119	1,013	838	175	181	580	252
120–164	198	154	44	46	93	59
165–224	10	10	—	—	9	1
Not assessed	381	362	19	41	215	126
<b>Total</b>	<b>14,779</b>	<b>13,394</b>	<b>1,386</b>	<b>4,474</b>	<b>8,524</b>	<b>1,781</b>

— = less than 500 acres found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>Site class is the mean annual increment cubic-foot growth per acre at culmination in fully stocked, natural stands.

<sup>c</sup>Forest Inventory and Analysis Program.

<sup>d</sup>Oregon Department of Forestry.





Table 19—Estimated area of timberland, by reserve status and owner class, Oregon, 1999<sup>a</sup> (continued)

Owner class	FIA <sup>b</sup> definition				ODF <sup>c</sup> definition							
	All timberland		Nonreserved		Reserved		Active forest		Multiresource		Reserved	
	Total	Standard error	Total	Standard error	Total	Standard error	Total	Standard error	Total	Standard error	Total	Standard error
	<i>Thousand acres</i>											
Forest industry	1,606	76	1,606	76	—	—	1,606	76	—	—	—	—
Other private	1,104	72	1,104	72	—	—	1,104	72	—	—	—	—
Total private	2,709	76	2,709	76	—	—	2,709	76	—	—	—	—
All owners	10,862	100	9,601	95	1,261	46	2,721	76	6,755	61	1,386	50

— = less than 500 acres found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>Forest Inventory and Analysis program.

<sup>c</sup>Oregon Department of Forestry.



Table 20—Estimated volume of timber on timberland, by reserve status and owner class, Oregon 1999<sup>a</sup> (continued)

Owner group	Total volume			FIA <sup>b</sup> definition			ODF <sup>c</sup> definition						
				Nonreserved		Reserved		Active forest		Multiresource		Reserved	
	Total	Standard error		Total	Standard error	Total	Standard error	Total	Standard error	Total	Standard error	Total	Standard error
Forest industry	1,551	99		1,551	99	—	—	1,551	99	—	—	—	—
Other private	1,858	150		1,858	150	—	—	1,858	150	—	—	—	—
Total private owners	3,409	179		3,409	179	—	—	3,409	179	—	—	—	—
All owners	21,196	385		16,731	279	4,464	273	3,418	179	12,664	221	5,113	283

*Million cubic feet*

— = less than 500,000 cubic feet found.

<sup>a</sup>Totals may be off because of rounding; data subject to sampling error.

<sup>b</sup>Forest Inventory and Analysis Program.

<sup>c</sup>Oregon Department of Forestry.







**Pacific Northwest Research Station**

<b>Web site</b>	<a href="http://www.fs.fed.us/pnw">http://www.fs.fed.us/pnw</a>
<b>Telephone</b>	(503) 808-2592
<b>Publication requests</b>	(503) 808-2138
<b>FAX</b>	(503) 808-2130
<b>E-mail</b>	<a href="mailto:pnw_pnwpubs@fs.fed.us">pnw_pnwpubs@fs.fed.us</a>
<b>Mailing address</b>	Publications Distribution Pacific Northwest Research Station P.O. Box 3890 Portland, OR 97208-3890

---

U.S. Department of Agriculture  
Pacific Northwest Research Station  
333 SW First Avenue  
P.O. Box 3890  
Portland, OR 97208-3890

---

Official Business  
Penalty for Private Use, \$300