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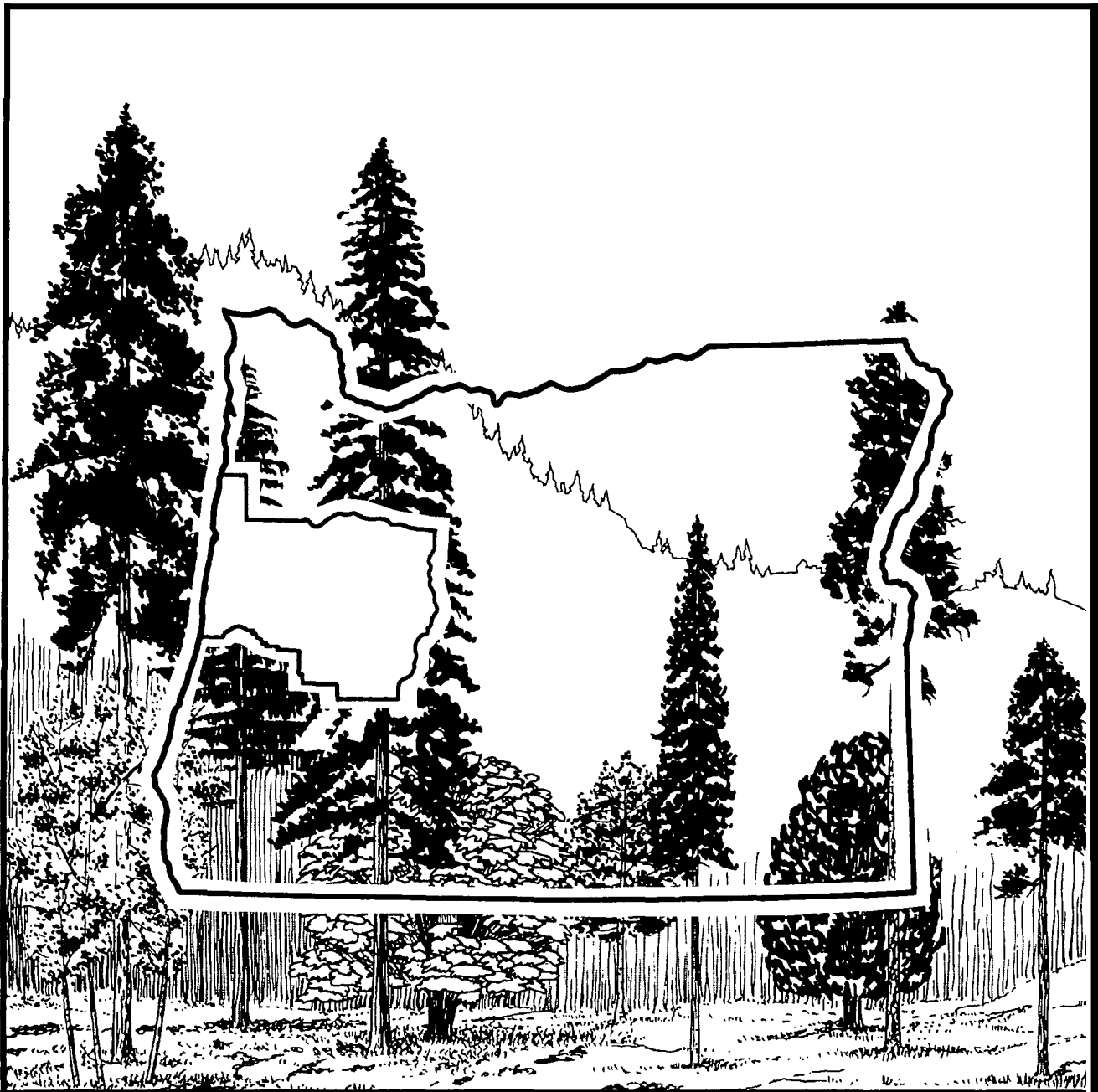
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Timber Resource Statistics for Non- Federal Forest Land in WestCentral Oregon

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ABSTRACT

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This report **summarizes** a 1985-86 timber resource inventory of the non-Federal forest land in the four counties (Benton, Lane, Lincoln, and Linn) in west-central Oregon. Detailed tables of forest area, timber volume, growth, mortality, and harvest are presented.

KEYWORDS: Forest surveys, statistics (forest), timber resources, resources (forest), Oregon (west-central).

SUMMARY

The west-central Oregon resource area totals 5,504,000 acres, of which non-Federal forest land totals 1,869,000 acres. An estimated 1,827,000 acres are classified as non-Federal timberland. The non-Federal timberland has an estimated 5.6 billion cubic feet of standing timber, and 62 percent of this volume is owned by forest industry.

PREFACE

Forest Inventory and Analysis (formerly Forest Survey) is a nationwide project of the USDA Forest Service authorized by the Forest and Rangeland Renewable Resources Research Act of 1978. Work units of the project, located at Forest Service research and experiment stations, conduct forest resource inventories throughout the 50 States. The Pacific Northwest Research Station at Portland, Oregon, is responsible for inventories in Alaska, California, Hawaii, Oregon, and Washington.

CONTENTS

- 1 Introduction
- 1 Inventory Procedures
- 2 Reliability of Inventory Data
- 4 Terminology
- 8 Names of Trees
- 9 Tables
- 26 Acknowledgments
- 26 Metric Equivalents
- 26 Literature Cited

TABLES

Table 1--Area of non-Federal land by land class and county, west-central Oregon, January 1, 1987

Table 2--Area of non-Federal timberland by owner and county, west-central Oregon, January 1, 1987

Table 3--Area of non-Federal stockable timberland by site class and owner, west-central Oregon, January 1, 1987

Table 4--Area of non-Federal timberland by stand-size class and owner, west-central Oregon, January 1, 1987 /

Table 5--Area of non-Federal timberland by forest type and owner, west-central Oregon, January 1, 1987

Table 6--Area of non-Federal reserved timberland and other forest land by land class, forest type, and owner, west-central Oregon, January 1, 1987

Table 7--Volume of timber on non-Federal timberland by class of timber and by softwoods and hardwoods, west-central Oregon, January 1, 1987

Table 8--Volume of growing stock and sawtimber on non-Federal timberland by owner and by softwoods and hardwoods, west-central Oregon, January 1, 1987

Table 9--Volume of growing stock and sawtimber on non-Federal timberland by owner and county, west-central Oregon, January 1, 1987

Table 10--Volume of growing stock on non-Federal timberland by species and owner, west-central Oregon, January 1, 1987

Table 11--Volume of sawtimber on non-Federal timberland by species and owner, west-central Oregon, January 1, 1987

Table 12--Volume of growing stock on non-Federal timberland by species and diameter class, west-central Oregon, January 1, 1987

Table 13--Volume of sawtimber on non-Federal timberland by species and diameter class, west-central Oregon, January 1, 1987

Table 14--Gross annual growth of growing stock on non-Federal timberland by owner and by softwoods and hardwoods, west-central Oregon, 1986

Table 15--Gross annual growth of growing stock on non-Federal timberland by species and owner, west-central Oregon, 1986

Table 16--Average annual mortality of growing stock on non-Federal timberland by species and owner, west-central Oregon, 1986

Table 17--Timber harvest by owner, west-central Oregon, 1962-85

INTRODUCTION

This report presents statistics from the latest inventory of non-Federal timber resources for the four counties (Benton, Lane, Lincoln, and Linn) in west-central Oregon. The west-central Oregon area was first inventoried in 1930-32; subsequent inventories were taken in 1940-43, 1961-62, and 1975.

Field data for all non-Federal forest lands were collected in the summers of 1985-86 by the Forest Inventory and Analysis Work Unit (FIA) of the Pacific Northwest Research Station. Data for the Federal timber resources--National Forest (U.S. Department of Agriculture, Forest Service) and Bureau of Land Management (U.S. Department of the Interior)--will be presented, with the non-Federal data, in a later report.

Scientific names of trees (Little 1979) are listed on page 8 of this report. See "Terminology" for definitions of terms used in this report.

INVENTORY PROCEDURES

For all non-Federal lands, the sampling design was double sampling for stratification (Cochran 1963). Owner group, major land classes (timberland, other forest, nonforest), and forest condition classes (stage of development, major type, broad stocking class) were identified on 6,171 photo points. This photo sample was subsampled with a grid of 384 field plots established in 1961-62 and remeasured in 1975. In these inventories, a cluster of 10 variable radius points distributed over about 1 acre was established at each timberland location.

In 1983, a sample of these 10-point plots was remeasured to provide data on growth and mortality. These data were used to project tree diameters and heights on 24 undisturbed hardwood plots that were not remeasured for the current inventory. All other timberland locations were revisited in 1985-86, and a new cluster of five points sampling about 8 acres was established. The field plots were the basis for estimates of timber volume, growth, mortality, and area attributes such as forest type, site class, and stand-size class.

RELIABILITY OF INVENTORY DATA

All area and volume statistics for non-Federal forested areas are based on sampling and are subject to sampling error. Confidence intervals (68-percent probability) for the estimated timberland area, cubic-foot volume, and gross annual cubic-foot growth by owner class are as follows:

<u>Owner</u>	<u>Timberland area</u> (Thousand acres)	<u>Net volume</u> (Million cubic feet)	<u>Gross annual growth</u>
Other public	109 ± 7	710 ± 172	16 ± 3
Forest industry	1,270 ± 26	3,487 ± 218	173 ± 10
Farmer and miscellaneous private	449 ± 17	1,426 ± 136	57 ± 6
All owners	1,827 ± 28	5,623 ± 305	246 ± 11

Confidence intervals are quantitative expressions of the reliability of the timberland area, volume, and growth statistics. The above tabulation, for instance, indicates a two-in-three (68-percent) chance that the timberland area for all owners is within the range of 1,827,000 ± 28,000 (1,799,000 to 1,855,000) acres.

Confidence intervals vary by both the size of the estimate and the variance of the item being estimated. If variance is assumed constant, confidence intervals can be approximated for estimates of various sizes. The confidence interval guides that follow are based on the assumption that an average relation exists between variance and the size of the estimates, and thus they provide only an approximation of the reliability of individual estimates.

The following tabulations approximate confidence bounds for table cells of various sizes in this report.

<u>Timberland area</u> (Thousand acres)	<u>Confidence interval</u>	
	<u>By owner</u>	<u>By type or class</u>
1,000	+25	+65
800	+22	+59
600	+19	+52
400	+15	+43
200	+10	+31
100	+7	+23
50	+5	+17
25	+3	+12
15	+2	+10
10	+2	+8

<u>Growing stock volume and confidence interval</u> (Million cubic feet)	<u>Gross growth and confidence interval</u> (Thousand cubic feet)
4,000 + 229	200,000 + 11,033
2,000 + 174	100,000 + 8,261
1,000 + 128	50,000 + 6,186
800 + 112	25,000 + 4,187
600 + 95	15,000 + 3,028
400 + 75	10,000 + 2,341
200 + 50	5,000 + 1,508
100 + 33	1,000 + 543
50 + 22	500 + 350
25 + 15	100 ± 100
15 + 11	
10 + 9	
5 + 5	

Actual confidence intervals have been calculated for the tabular data in this report; they are available on request from the Forest Inventory and Analysis Research Work Unit, Forestry Sciences Laboratory, P.O. Box 3890, Portland, Oregon 97208.

TERMINOLOGY

Bureau of Land Management lands--Federal lands administered by the Bureau of Land Management, U.S. Department of the Interior.

Class of timber--A classification of trees as growing stock, cull, and salvable dead. Growing-stock trees are divided into pole timber and saw timber trees.

County and municipal lands--Lands owned by county and other local public agencies.

Cull trees--Live trees of noncommercial species, or live trees of commercial species that are more than 75 percent defective and are unlikely to become growing stock.

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, 4-1/2 feet above the ground. D.b.h. is the common abbreviation for "diameter at breast height."

Farmer--Lands owned by an individual or corporate owner who produces agricultural products but does not meet the definition of a forest industry.

Forest industry lands--

With mills: lands owned by companies or individuals that operate wood-using plants.

Without mills: lands owned by companies or individuals that manage forests for timber production but do not operate mills.

Forest land--Land at least 10 percent stocked by live trees or land formerly having such tree cover and not currently developed for nonforest use.

Forest land, reserved--Forest land withdrawn from timber production through statute or ordinance. Included are National, State, and county parks; and other reserved lands.

Forest types--Stands with 50-percent or more stocking in live conifer trees classed as softwood types; stands with a majority of stocking in live hardwood trees classed as hardwood types. The individual forest type is determined by plurality of stocking by species of live softwood or hardwood trees.

Gross annual growth--The increase in volume of trees during a specified year. Components of gross annual growth of trees: (a) the increment in sound volume of trees alive at the beginning of a specified year and surviving to the year's end, plus (b) the sound volume of trees reaching sawtimber or poletimber size during the year.

Growing-stock trees--All live trees except cull trees.

Growing-stock volume--Net volume in cubic feet of live sawtimber and poletimber growing-stock trees from stump to a minimum 4-inch top (of central stem) outside the bark. Net volume equals gross volume less deduction for rot and missing bole sections.

Hardwoods--Trees that are angiosperms, usually broad leaved and deciduous.

Land area--Area reported as land by the Bureau of the Census. 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 one-eighth mile wide; and lakes, reservoirs, and ponds less than 40 acres in area.

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

Mean annual increment--A measure of the productivity of forest land in terms of the average increase in cubic-foot volume per acre per year. For a given species and site index, the average is based on the age at which the mean annual increment culminates for fully stocked stands. When productivity is calculated, nonforest inclusions of less than 1 acre are excluded.

Miscellaneous Federal lands--Federal lands other than lands administered by the Forest Service or the Bureau of Land Management.

Miscellaneous private owners--All private owners not otherwise classified.

Mortality--Volume of sound wood in trees dying from natural causes during a specified period.

National Forest lands--Federal lands that have been designated by Executive Order or statute as National Forest or purchase units and other lands under the administration of the Forest Service, U.S. Department of Agriculture, including experimental areas and Bankhead-Jones Title III lands.

Noncommercial species--A tree species not suitable for industrial wood products.

Non-Federal lands--Includes all land except lands owned or managed by the Forest Service, U.S. Department of Agriculture, and by the Bureau of Land Management, U.S. Department of the Interior. Includes miscellaneous Federal lands.

Nonforest land--Land that has never supported forests or was formerly forested and is currently developed for nonforest uses. Included are lands used for agricultural crops, Christmas tree farms, 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 Bureau of the Census, U.S. Department of Commerce, 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 areas--Timberland less than 10 percent stocked with growing-stock trees.

Other forest land--Forest land incapable of producing 20 cubic feet per acre per year of industrial wood because of adverse site conditions such as sterile soils, dry climate, poor drainage, high elevation, steepness, or rockiness.

Other public lands--Lands administered by public agencies other than the Forest Service, U.S. Department of Agriculture, or the Bureau of Land Management, U.S. Department of the Interior.

Poletimber stands--Stands with a mean diameter (weighted by basal area) from 5.0 to 9.0 inches if softwood and from 5.0 to 11.0 inches if hardwood.

Poletimber trees--Live trees of commercial species at least 5.0 inches in d.b.h. but smaller than sawtimber size, and of good form and vigor.

Roundwood--Logs, bolts, or other round sections cut from trees.

Salvable dead trees--Standing or down trees of commercial species, at least 9.0 inches in d.b.h. for softwoods and at least 11.0 inches in d.b.h. for hardwoods, containing 25 percent or more sound wood volume and at least one merchantable 12-foot log if softwood or one merchantable 8-foot log if hardwood.

Sapling and seedling stands--Stands with a mean diameter (weighted by basal area) less than 5.0 inches.

Sapling and seedling trees--Live trees of commercial species less than 5.0 inches in d.b.h., with no diseases, defects, or deformities likely to prevent their becoming poletimber trees.

Saw-log portion--The bole of sawtimber trees between the stump and the saw-log top.

Sawtimber stands--Stands with a mean diameter (weighted by basal area) at least 9.0 inches if softwood and at least 11.0 inches if hardwood.

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 6 inches inside bark; hardwood trees must contain at least one 8-foot saw log with a top diameter of not less than 8 inches inside bark.

Sawtimber volume--Net volume of sawtimber trees measured in board feet. Net 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 in determining volume of sawtimber. Scribner volume is estimated in terms of 32-foot logs for conifers and 16-foot logs for hardwoods.

Site class--A classification of the potential productivity of forest land in terms of mean annual increment.

Site index--A measure of the productivity of forest land in terms of the average height of dominant and codominant trees at a specified age.

Softwoods--Coniferous trees, usually evergreen, with needles or scalelike leaves.

State lands--Lands owned by States or administered by State agencies.

Timber harvest--Volume of roundwood removed from forest land for products.

Timber volume--Includes the net volume in cubic feet of pole timber and sawtimber trees and salvable dead sawtimber trees of all species, the net volume in cubic feet of cull trees of commercial species, and gross volume of noncommercial species. Volume is measured from stump to a minimum 4-inch top outside the bark.

Timberland--Forest land capable of producing 20 cubic feet or more per acre per year of industrial wood, and not withdrawn from timber utilization.

Timberland, reserved--Private or public land withdrawn from timber utilization through statute, ordinance, or administrative order but which otherwise qualifies as timberland.

Upper-stem portion--The bole of sawtimber trees above the saw-log top--7.0 inches outside the bark for softwoods and 9.0 inches outside the bark for hardwoods--to a minimum top diameter of 4.0 inches outside the bark, or to the point where the central stem breaks into limbs.

NAMES OF TREES

Common name

Scientific name

Softwoods :

Douglas-fir	<u>Pseudotsuga menziesii</u> (Mirb.) Franco
Grand fir	<u>Abies grandis</u> (Dougl. ex D. Don.) Lindl.
Incense-cedar	<u>Libocedrus decurrens</u> Torr.
Lodgepole pine	<u>Pinus contorta</u> Dougl. ex Loud. var. <u>latifolia</u> Engelm.
Noble fir	<u>Abies procera</u> Rehd.
Pacific silver fir	<u>Abies amabilis</u> Dougl. ex Forbes
Ponderosa pine	<u>Pinus ponderosa</u> Dougl. ex Laws.
Port-Orford-cedar	<u>Chamaecyparis lawsoniana</u> (A. Murr.) Parl.
Sitka spruce	<u>Picea sitchensis</u> (Bong.) Carr.
Western hemlock	<u>Tsuga heterophylla</u> (Raf.) Sarg.
Western redcedar	<u>Thuja plicata</u> Donn ex D. Don
Western white pine	<u>Pinus monticola</u> Dougl. ex D. Don

Hardwoods :

Bigleaf maple	<u>Acer macrophyllum</u> Pursh
Bitter cherry	<u>Prunus emarginata</u> Dougl. ex Eaton
Black cottonwood	<u>Populus trichocarpa</u> Torr. & Gray
California black oak	<u>Quercus kelloggii</u> Newb.
Giant chinkapin	<u>Castanopsis chrysophylla</u> (Dougl.) A. DC.
Oregon ash	<u>Fraxinus latifolia</u> Benth.
Oregon white oak	<u>Quercus garryana</u> Dougl. ex Hook.
Pacific madrone	<u>Arbutus menziesii</u> Pursh
Red alder	<u>Alnus rubra</u> Bong.

TABLE 1--AREA OF NON-FEDERAL LAND BY LAND CLASS AND COUNTY,
WEST-CENTRAL OREGON, JANUARY 1, 1987 ^{1/} ^{2/}

LAND CLASS	BENTON	LANE	LINCOLN	LINN	ALL COUNTIES
<u>THOUSAND ACRES</u>					
FOREST LAND:					
TIMBERLAND	187	821	343	477	1,827
RESERVED TIMBERLAND	--	3	1	1	5
OTHER FOREST	3	15	9	9	36
TOTAL	190	839	353	487	1,869
NONFOREST LAND ^{3/}	169	380	81	425	1,055
ALL CLASSES ^{4/}	359	1,219	434	912	2,924

-- = none found or less than 500 acres.

^{1/}Subject to sampling error.

^{2/}Totals may be off because of rounding.

^{3/}Includes cropland, pasture and range, swampland, industrial and urban areas, powerline clearings, railroads, and all improved roads and highways; and water as classified by Forest Inventory and Analysis standards but defined by the Bureau of the Census as land.

^{4/}Source: United States Bureau of the Census, Land and Water of the United States, 1980.

TABLE 2--AREA OF NON-FEDERAL TIMBERLAND BY OWNER AND COUNTY, WEST-CENTRAL OREGON, JANUARY 1, 1987 ^{1/} _{2/}

OWNER	BENTON	LANE	LINCOLN	LINN	ALL COUNTIES
<u>THOUSAND ACRES</u>					
OTHER PUBLIC:					
OTHER FEDERAL	3	2	--	4	9
STATE	23	24	24	22	93
COUNTY AND MUNICIPAL	3	1	1	2	7
TOTAL	29	27	25	28	109
PRIVATE:					
FOREST INDUSTRY--					
WITH MILL	84	480	216	293	1,074
WITHOUT MILL	18	88	37	54	196
OTHER PRIVATE--					
FARMER	15	52	14	59	140
MISCELLANEOUS	41	174	51	44	310
TOTAL	158	794	318	450	1,720
ALL OWNERS	187	821	343	477	1,827

-- = none found or less than 500 acres.

1/Subject to sampling error.

2/Totals may be off because of rounding.

TABLE 3--AREA OF NOM-FEDERAL STOCKABLE TIMBERLAND BY SITE CLASS AND OWNER,
WEST-CENTRAL OREGON, JANUARY 1, 1987 ^{1/} ^{2/}

SITE CLASS ^{3/}	OTHER PUBLIC	FOREST INDUSTRY		FARMER AND MISCELLANEOUS PRIVATE	ALL OWNERS
		WITH MILLS	WITHOUT MILLS		
<u>CUBIC FEET</u>			<u>THOUSAND ACRES</u>		
225 OR MORE	--	44	11	5	60
165 TO 224	72	309	38	124	543
120 TO 164	27	520	124	195	866
85 TO 119	9	162	23	94	288
50 TO 84	--	30	--	28	59
20 TO 49	--	--	--	--	--
ALL CLASSES	109	1,065	196	446	1,815

-- = none found or less than 500 acres.

^{1/}Subject to sampling error.

^{2/}Totals may be off because of rounding.

^{3/}Capacity for cubic-foot annual growth per acre at culmination of mean annual growth in fully stocked natural stands. The areas shown here exclude 12,000 acres of included nonforest land less than 1 acre.

TABLE 4--AREA OF NON-FEDERAL TIMBERLAND BY STAND-SIZE CLASS AND OWNER ,
WEST-CENTRAL OREGON, JANUARY 1, 1987 ^{1/} ^{2/}

STAND-SIZE CLASS	OTHER PUBLIC	FOREST INDUSTRY		FARMER AND MISCELLANEOUS PRIVATE	ALL OWNERS
		WITH MILLS	WITHOUT MILLS		
<u>THOUSAND ACRES</u>					
SAWTIMBER STANDS:					
LARGE SAITIMBER ^{3/}	48	63	8	30	149
SMALL SAITIMBER ^{4/}	40	421	125	276	862
TOTAL	88	484	133	306	1,011
POLETIMBER STANDS	--	172	7	60	239
SAPLING AND SEEDLING STANDS	21	403	40	59	523
NONSTOCKED AREAS	--	15	16	25	55
ALL CLASSES	109	1,074	196	449	1,827

-- = none found or less than 500 acres.

^{1/}Subject to sampling error.

^{2/}Totals may be off because of rounding.

^{3/}Includes trees 21.0-inch d.b.h. and larger.

^{4/}Includes softwood trees 9.0- to 20.9-inch d.b.h. and hardwood trees 11.0- to 20.9-inch d.b.h.

TABLE 5--AREA OF NON-FEDERAL TIMBERLAND BY FOREST TYPE AND OWNER , WEST-CENTRAL OREGON, JANUARY 1, 1987 ^{1/} ^{2/}

FOREST TYPE	OTHER PUBLIC	FOREST INDUSTRY		FARMER AND MISCELLANEOUS PRIVATE	ALL OWNERS
		WITH MILLS	WITHOUT MILLS		
<u>THOUSAND ACRES</u>					
DOUGLAS-FIR	95	761	112	264	1,231
WESTERN HEMLOCK	--	116	14	16	146
SITKA SPRUCE	--	7	--	14	21
WESTERN REDCEDAR	--	7	7	5	19
GRAND FIR	--	7	7	--	14
PACIFIC SILVER FIR	--	7	--	--	7
NOBLE FIR	--	7	--	--	7
PONDEROSA PINE	--	7	--	--	7
RED ALDER	13	116	33	54	216
BIGLEAF MAPLE	--	23	7	37	67
OREGON WHITE OAK	--	--	--	22	22
CALIFORNIA BLACK OAK	--	--	--	7	7
OREGON ASH	--	--	--	6	6
NONSTOCKED	--	15	16	25	55
ALL TYPES	109	1,074	196	449	1,827

-- = none found or less than 500 acres.

^{1/}Subject to sampling error.

^{2/}Totals may be off because of rounding.

TABLE 6--AREA OF NON-FEDERAL RESERVED TIMBERLAND AND OTHER FOREST LAND BY LAND CLASS, FOREST TYPE, AND OWNER, WEST-CENTRAL OREGON, JANUARY 1, 1987 ^{1/} ~~2/~~

LAND CLASS AND FOREST TYPE	OTHER PUBLIC	FOREST INDUSTRY		FARMER AND MISCELLANEOUS PRIVATE	ALL OWNERS
		WITH MILLS	WITHOUT MILLS		
<u>THOUSAND ACRES</u>					
TIMBERLAND, RESERVED:					
DOUGLAS-FIR	4	--	--	--	4
SITKA SPRUCE	1	--	--	--	1
RED ALDER	1	--	--	--	1
ALL TIMBERLAND, RESERVED	6	--	--	--	6
OTHER FOREST LAND:					
DOUGLAS-FIR	--	7	--	--	7
OREGON WHITE OAK	--	11	--	--	11
UNCLASSIFIED	--	7	--	10	17
ALL OTHER FOREST LAND	--	25	--	10	35

-- = none found or less than 500 acres.

^{1/}Subject to sampling error.

^{2/}Totals **may** be off because of rounding.

TABLE 7--VOLUME OF TIMBER ON NON-FEDERAL TIMBERLAND BY CLASS OF
TIMBER AND BY SOFTWOODS AND HARDWOODS, WEST-CENTRAL OREGON,
JANUARY 1, 1987 1/ 2/

CLASS OF TIMBER	SOFTWOODS	HARDWOODS	ALL SPECIES
	<u>MILLION CUBIC FEET</u>		
SAWTIMBER TREES:			
SAW-LOG PORTION	4,085	525	4,611
UPPER-STEM PORTION	130	194	324
TOTAL	4,215	720	4,935
POLETIMBER TREES	377	311	688
ALL GROWING STOCK	4,592	1,031	5,623
SOUND CULL TREES	22	58	80
ROTTEN CULL TREES	6	52	58
SALVABLE DEAD TREES	83	3	86
ALL TIMBER	4,703	1,144	5,847

1/Subject to sampling error.

2/Totals may be off because of rounding.

TABLE 8--VOLUME OF GROWING STOCK AND SAWTIMBER ON NON-FEDERAL TIMBERLAND BY OWNER AND BY SOFTWOODS AND HARDWOODS, WEST-CENTRAL OREGON, JANUARY 1, 1987 ^{1/} ^{2/}

CLASS OF TIMBER AND OWNER	AVERAGE VOLUME	SOFTWOODS	HARDWOODS	ALL SPECIES
	<u>CUBIC FEET PER ACRE</u>	<u>MILLION CUBIC FEET</u>		
GROWING STOCK: ^{3/}				
OTHER PUBLIC	6,514	634	76	710
FOREST INDUSTRY--				
WITH MILLS	2,637	2,483	348	2,832
WITHOUT MILLS	3,342	493	163	655
FARMER AND MISCELLANEOUS				
PRIVATE	3.1 76	983	444	1.426
ALL OWNERS	3,078	4,592	1,031	5,623
	<u>BOARD FEET PER ACRE</u>	<u>MILLION BOARD FEET</u>		
SAWTIMBER (SCRIBNER RULE): ^{4/}				
OTHER PUBLIC	30,165	3,012	276	3,288
FOREST INDUSTRY--				
WITH MILLS	9,349	9,248	793	10,041
WITHOUT MILLS	11,821	1,831	486	2,317
FARMER AND MISCELLANEOUS				
PRIVATE	10,474	3,722	981	4,703
ALL OWNERS	11,138	17,813	2,536	20,349

^{1/}Subject to sampling error.

^{2/}Totals may be off because of rounding.

^{3/}Includes trees 5.0-inch d.b.h. and larger.

^{4/}Includes softwood trees 9.0-inch d.b.h. and larger and hardwood trees 11.0-inch d.b.h. and larger.

TABLE 9--VOLUME OF GROWING STOCK AND SAWTIMBER ON NON-FEDERAL TIMBERLAND BY OWNER AND COUNTY , WEST-CENTRAL OREGON, JANUARY 1 , 1987 1/ 2/

OWNER	BENTON	LANE	LINCOLN	LINN	ALL COUNTIES
<u>MILLION CUBIC FEET</u>					
GROWING STOCK: <u>3/</u>					
OTHER PUBLIC	188	162	154	206	710
FOREST INDUSTRY--					
WITH MILL	260	1,258	525	788	2,832
WITHOUT MILL	62	292	130	170	655
FARMER AND MISCELLANEOUS					
PRIVATE	177	679	226	344	1,426
ALL OWNERS	687	2,392	1,035	1,509	5,623
<u>MILLION BOARD FEET</u>					
SAWTIMBER (SCRIBNER RULE) : <u>4/</u>					
OTHER PUBLIC	869	753	707	960	3,288
FOREST INDUSTRY--					
WITH MILL	915	4,425	1,801	2,901	10,041
WITHOUT MILL	214	1,013	459	631	2,317
FARMER AND MISCELLANEOUS					
PRIVATE	595	2,274	699	1,135	4,703
ALL OWNERS	2,592	8,465	3,666	5,627	20,349

1/Subject to sampling error.

2/Totals **may** be off because of rounding.

3/Includes trees 5.0-inch d.b.h. and larger.

4/Includes softwoods trees 9.0-inch d.b.h. and larger and hardwood trees 7.0-inch d.b.h. and larger.

TABLE 10--VOLUME OF GROWING STOCK ON NON-FEDERAL TIMBERLAND BY SPECIES AND OWNER, WEST-CENTRAL OREGON, JANUARY 1, 1987 ^{1/} _{2/}

SPECIES	OTHER PUBLIC	FOREST INDUSTRY		FARMER AND MISCELLANEOUS PRIVATE	ALL OWNERS
		WITH MILLS	MITHOUT MILLS		
<u>MILLION CUBIC FEET</u>					
SOFTWOODS :					
DOUGLAS-FIR	623	1,779	344	704	3,450
WESTERN HEMLOCK	11	51 ²	72	92	693
SITKA SPRUCE	--	78	21	103	202
WESTERN REDCEDAR	--	66	29	18	113
GRAND FIR	--	32	26	53	110
INCENSE-CEGAR	--	6	--	1	6
PONDEROSA PINE	--	3	--	3	6
LODGEPOLE PINE	--	--	--	4	4
PORT-ORFORD-CEGAR	--	1	--	2	3
NOBLE FIR	--	2	--	--	2
PACIFIC SILVER FIR	--	1	--	1	1
HESTERN WHITE PINE	--	--	--	1	1
TOTAL	534	2,483	493	983	4,592
HARDWOODS :					
RED ALDER	40	244	104	172	561
BIGLEAF MAPLE	30	65	51	104	249
OREGON WHITE OAK	--	7	1	119	127
OREGON ASH	--	3	--	17	21
CALIFORNIA BLACK OAK	--	--	--	21	21
GIANT CHALKPINE	6	11	4	--	20
PACIFIC MADRONE	--	10	--	4	13
BLACK COTTONWOOD	--	6	--	4	10
BITTER CHERRY	--	2	3	3	8
TOTAL	76	343	163	444	1,031
ALL SPECIES	710	2,832	655	1,426	5,623

-- = none found or less than 500,000 cubic feet.

^{1/}Subject to sampling error.

^{2/}Totals may be off because of rounding.

TABLE 11--VOLUME OF SAWTIMBER ON NON-FEDERAL TIMBERLAND BY SPECIES AND OWNER,
WEST-CENTRAL OREGON, JANUARY 1, 1987 ^{1/} 2/

SPECIES	OTHER PUBLIC	FOREST INDUSTRY		FARMER AND MISCELLANEOUS PRIVATE	ALL OWNERS
		WITH MILLS	WITHOUT MILLS		
<u>MILLION BOARD FEET. SCRIBNER RULE</u>					
SOFTWOODS:					
DOUGLAS-FIR	2,987	6,770	1,302	2,590	13,649
WESTERN HEHLOCK	25	1,818	244	321	2,410
SITKA SPRUCE	--	339	76	518	934
WESTERN REDCEDAR	--	205	98	60	363
GRAND FIR	--	20	109	206	396
KINCENSE-CEDAR	--	14	--	2	16
PONDEROSA PINE	--	8	--	8	17
LOGEPOLE PINE	--	--	--	9	9
PORT-ORFORD-CEDAR	--	2	--	2	4
NOBLE FIR	--	10	--	--	10
PACIFIC SILVER FIR	--	2	--	--	2
WESTERN WHITE PINE	--	--	--	5	5
TOTAL	3,012	9,248	1,831	3,722	17,813
HARDWOODS:					
RED ALDER	165	558	345	470	1,537
BIGLEAF MAPLE	111	168	131	272	682
OREGON WHITE <i>OM</i>	--	11	--	139	150
OREGON ASH	--	--	--	22	22
CALIFORNIA BLACK OAK	--	--	--	40	40
GIANT CHINKAPIIN	--	21	5	--	27
PACIFIC MADRONE	--	13	--	--	14
BLACK COTTONWOOD	--	21	--	23	44
BITTER CHERRY	--	--	5	15	20
TOTAL	276	793	486	981	2,536
ALL SPECIES	3,288	10,041	2,317	4,703	20,349

-- = none found or less than 500,000 board feet.

1/Subject to sampling error.

2/Totals may be off because of rounding.

TABLE 12--VOLUME OF GROWING STOCK ON NON-FEDERAL TIMBERLAND BY SPECIES AND DIAMETER CLASS, NEST-CENTRAL OREGON,
JANUARY 1, 1987 ^{1/} _{2/}

SPECIES	DIAMETER CLASS (INCHES AT BREAST HEIGHT)										
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 AND LARGER	ALL CLASSES
	<u>MILLION CUBIC FEET</u>										
SOFTWOODS:											
DOUGLAS-FIR	95	180	238	263	295	291	298	285	662	843	3,450
WESTERN HEMLOCK	24	53	94	104	76	57	74	35	107	68	693
SITKA SPRUCE	1	--	5	7	4	11	11	8	21	134	202
WESTERN REDCEDAR	3	4	5	8	9	7	8	14	23	32	113
GRAND FIR	2	9	11	20	12	9	6	15	18	10	110
INCENSE-CEDAR	--	--	--	1	--	1	--	--	1	2	6
PONDEROSA PINE	1	--	1	--	--	--	--	1	2	1	6
LODGEPOLE PINE	1	1	--	1	2	--	--	--	--	--	4
PORT-ORFORD-CEDAR	--	1	1	--	--	--	--	--	1	--	3
NOBLE FIR	--	--	--	--	--	--	--	--	--	2	2
PACIFIC SILVER FIR	1	--	1	--	--	--	--	--	--	--	1
WESTERN WHITE PINE	--	--	--	--	--	1	--	--	--	--	1
TOTAL	128	249	356	404	397	377	397	357	834	1,094	4,592
HARDWOODS:											
RED ALDER	33	94	88	104	60	54	42	31	48	7	561
BIGLEAF MAPLE	13	11	14	31	33	22	26	12	48	38	249
OREGON WHITE OAK	1	9	11	22	13	11	13	9	22	16	127
OREGON ASH	3	--	--	1	1	2	--	3	9	--	21
CALIFORNIA BLACK OAK	--	3	2	1	3	4	1	2	5	--	21
GIANT CHIIKAPIN	2	6	6	--	3	1	1	--	1	--	20
PACIFIC MADRONE	3	6	1	--	2	--	--	--	3	--	13
BLACK COTTONWOOD	--	--	2	--	2	2	--	--	--	4	10
BITTER CHERRY	--	1	2	1	1	--	--	2	--	--	8
TOTAL	56	130	125	160	117	92	84	59	137	65	1,031
ALL SPECIES	184	379	481	565	515	475	480	416	971	1,158	5,623

-- = none found or less than 500,000 cubic feet.

1/Subject to sampling error.

2/Totals may be off because of rounding.

TABLE 13--VOLUME OF SAWTIMBER ON NON-FEDERAL TIMBERLAND BY SPECIES AND DIAMETER CLASS, WEST-CENTRAL OREGON,
JANUARY 1, 1987 1/ 2/

SPECIES	DIAMETER CLASS (INCHES AT BREAST HEIGHT)								
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 AND LARGER	ALL CLASSES
<u>MILLION BOARD FEET, SCRIBNER RULE</u>									
SOFTWOODS:									
DOUGLAS-FIR	586	822	1,073	1,149	1,241	1,241	3,116	4,421	13,649
WESTERN HEMLOCK	244	342	286	234	321	157	498	327	2,410
SITKA SPRUCE	13	21	12	35	36	26	77	714	934
WESTERN REDCEDAR	11	20	27	24	26	53	84	119	363
GRAND FIR	28	66	46	34	25	63	97	47	396
INCENSE-CEDAR	--	2	--	3	--	--	2	9	16
POHDEROSA PINE	1	--	--	--	--	3	8	4	17
LODGEPOLE PINE	--	3	5	--	--	--	--	--	9
PORT-ORFORD-CEDAR	2	--	--	--	--	--	2	--	4
NOBLE FIR	--	--	--	--	--	--	--	10	10
PACIFIC SILVER FIR	2	--	--	--	--	--	--	--	2
WESTERN WHITE PINE	--	--	--	5	--	--	--	--	5
TOTAL	887	1,276	1,449	1,483	1,649	1,544	3,874	5,650	17,813
HARDWOODS:									
RED ALDER	--	397	264	255	201	145	243	33	1,537
BIGLEAF MAPLE	--	108	121	77	90	40	147	99	682
OREGON WHITE OAK	--	30	20	19	18	a	27	28	150
OREGON ASH	--	1	1	2	--	3	14	--	22
CALIFORNIA BLACK OAK	--	2	5	9	4	5	15	--	40
GIANT CHINKAPIN	--	--	9	6	6	--	5	--	27
PACIFIC MADRONE	--	--	6	--	--	--	7	--	14
BLACK COTTONWOOD	--	--	10	11	--	--	--	23	44
BITTER CHERRY	--	3	5	--	--	12	--	--	20
TOTAL	--	541	443	379	319	213	458	182	2,536
ALL SPECIES	887	1,817	1,893	1,862	1,963	1,757	4,332	5,833	20,349

-- = none found or less than 500,000 board feet.

1/Subject to sampling error.

2/Totals may be off because of rounding.

TABLE 14--GROSS ANNUAL GROWTH OF GROWING STOCK ON NON-FEDERAL TIMBERLAND BY OWNER AND BY SOFTWOODS AND HARDWOODS, WEST-CENTRAL OREGON, 1986 ^{1/} ~~2/~~

OWNER	AVERAGE VOLUME	SOFTWOODS	HARDWOODS	ALL SPECIES
	<u>CUBIC FEET PER ACRE</u>	<u>THOUSAND CUBIC FEET</u>		
OTHER PUBLIC FOREST INDUSTRY:	146	14,230	1,701	15,931
WITH MILLS	134	127,810	15,731	143,542
WITHOUT MILLS	151	24,714	4,811	29,525
FARMER AND MISCELLANEOUS PRIVATE	127	43,165	13,770	56,935
ALL OWNERS	135	209,920	36,013	245,933

^{1/}Subject to sampling error.

~~2/~~Totals may be off because of rounding.

TABLE 15--GROSS ANNUAL GROWTH OF GROWING STOCK ON NON-FEDERAL TIMBERLAND BY SPECIES AND OWNER, WEST-CENTRAL OREGON, 1986 ^{1/} _{2/}

SPECIES	OTHER PUBLIC	FOREST INDUSTRY		FARMER AND MISCELLANEOUS PRIVATE	ALL OWNERS
		WITH MILLS	WITHOUT MILLS		
<u>THOUSAND CUBIC FEET</u>					
SOFTWOODS:					
DOUGLAS-FIR	13,502	88,878	17,521	32,597	152,489
WESTERN HEMLOCK	728	30,519	4,021	4,549	39,817
SITKA SPRUCE	--	3,288	1,318	2,136	6,742
WESTERN REDCEDAR	--	2,752	967	723	4,442
GRAND FIR	--	1,802	887	2,581	5,271
KIWI-CEDAR	--	189	--	21	210
PONDEROSA PINE	--	177	--	151	328
LODGEPOLE PINE	--	--	--	229	229
PORT-ORFORD-CEDAR	--	33	--	86	119
NOBLE FIR	--	86	--	--	86
PACIFIC SILVER FIR	--	86	--	60	146
WESTERN WHITE PINE	--	--	--	42	42
TOTAL	14,230	127,810	24,714	43,165	209,920
HARDWOODS:					
RED ALDER	1,016	12,156	3,128	6,675	22,974
BIGLEAF MAPLE	524	1,966	1,301	3,466	7,255
OREGON WHITE OAK	--	100	72	2,404	2,575
OREGON ASH	--	199	--	451	650
CALIFORNIA BLACK OAK	--	--	--	462	462
GIANT CHINKAPIN	161	489	144	--	793
PACIFIC MADRONE	--	387	--	127	513
BLACK COTTONWOOD	--	355	--	77	433
BITTER CHERRY	--	81	167	108	355
TOTAL	1,701	15,731	4,811	13,770	36,013
ALL SPECIES	15,931	143,542	29,525	56,935	245,933

-- = none found or less than 500 cubic feet.

^{1/}Subject to sampling error.

_{2/}Totals may be off because of rounding.

TABLE 16--AVERAGE ANNUAL MORTALITY OF GROWING STOCK ON NON-FEDERAL TIMBERLAND BY SPECIES AND OWNER, WEST-CENTRAL OREGON, 1986 1/ 2/

SPECIES	OTHER PUBLIC	FOREST INDUSTRY		FARMER AND MISCELLANEOUS PRIVATE	ALL OWNERS
		WITH HILLS	WITHOUT MILLS		
<u>THOUSAND CUBIC FEET</u>					
SOFTWOODS:					
DOUGLAS-FIR	1,833	5,696	1,022	2,097	10,648
HESTERN HEMLOCK	42	1,562	229	309	2,142
SITKA SPRUCE	--	230	62	287	579
WESTERN REDCEDAR	--	208	78	52	339
GRAND FIR	--	86	88	152	327
INCENSE-CEDAR	--	17	--	2	19
POHDEROSA PINE	--	8	--	8	16
LOGEPOLE PINE	--	--	--	12	12
PORT-ORFORD-CEDAR	--	22	--	73	35
NOBLE FIR	--	5	--	--	5
PACIFIC SILVER FIR	--	2	--	2	4
WESTERN WHITE PINE	--	--	--	3	3
TOTAL	1,875	7,836	1,479	2,997	14,188
HARDWOODS:					
RED ALDER	323	1,955	834	1,374	4,487
BIGLEAF MAPLE	239	520	405	828	1,991
OREGON WHITE OAK	--	60	9	949	1,017
OREGON ASH	--	26	--	138	165
CALIFORNIA BLACK OAK	--	--	--	172	172
GIANT CHINKAPIN	46	88	29	--	163
PACIFIC MADRONE	--	76	--	31	107
BLACK COTTONWOOD	--	49	--	33	82
BITTER CHERRY	--	13	24	26	62
TOTAL	608	2,737	1,301	3,550	8,246
ALL SPECIES	2,484	10,623	2,780	6,547	22,434

-- = none found or less than 500 cubic feet.

1/ Subject to sampling error.

2/ Totals may be off because of rounding.

TABLE 17--TIMBER HARVEST BY OWNER, WEST-CENTRAL OREGON,
1962-85

YEAR	NATIONAL FOREST	OTHER PUBLIC ^{1/}	PRIVATE	ALL OWNERS
<u>THOUSAND BOARD FEET, SCRIBNER RULE</u>				
1962	1,126,000	253,890	1,393,768	2,773,658
1963	1,046,400	374,564	1,292,728	2,713,692
1964	1,052,500	489,012	1,300,874	2,842,386
1965	1,229,400	331,808	1,205,070	2,766,278
1966	993,900	299,424	1,318,737	2,612,061
1967	884,200	212,039	1,344,033	2,440,272
1968	1,097,238	295,123	1,413,058	2,805,419
1969	1,063,764	343,686	1,116,364	2,523,814
1970	845,337	239,599	1,134,695	2,219,631
1971	960,677	292,507	1,159,383	2,412,567
1972	1,189,473	405,588	1,142,425	2,737,486
1973	1,200,929	384,227	1,209,016	2,794,172
1974	926,782	331,128	1,054,447	2,312,357
1975	680,076	194,415	1,182,762	2,057,253
1976	933,300	286,127	1,110,348	2,329,775
1977	865,863	295,582	1,021,685	2,183,130
1978	967,128	329,696	991,032	2,287,856
1979	1,044,832	269,499	936,352	2,250,683
1980	732,494	237,887	876,792	1,847,173
1981	510,394	225,092	772,497	1,507,983
1982	504,793	163,870	1,072,712	1,741,375
1983	759,576	233,662	1,032,439	2,025,677
1984	891,787	286,134	1,058,278	2,236,199
1985	7,003,342	293,203	1,013,737	2,310,282

^{1/} Includes Bureau of Land Management (U.S. Department of the Interior).

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METRIC EQUIVALENTS

1,000 acres = 404.7 hectares
1,000 cubic feet = 28.3 cubic meters
1 cubic foot per acre = 0.07 cubic meter per hectare
1 foot = 0.3048 meter
1 inch = 2.54 centimeters
1 mile = 1.609 kilometers

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Research Station. 26 p.

This report summarizes a 1985-86 timber resource inventory of the
non-Federal forest land in the four counties (Benton, Lane, Lincoln,
and Linn) in west-central Oregon. Detailed tables of forest area,
timber volume, growth, mortality, and harvest are presented.

KEYWORDS: Forest surveys, statistics (forest), timber resources,
resources (forest), Oregon (west-central).

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