

cancel Preliminary Timber Resource
STATISTICS for
Humboldt County, California,
January 1, 1967⁷

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PACIFIC NORTHWEST
FOREST & RANGE EXPERIMENT STATION
U. S. DEPARTMENT OF AGRICULTURE . FOREST SERVICE

PREFACE

This report presents the preliminary findings of an inventory of Humboldt County's timber resources completed in 1966. Analysis and interpretation of the findings are underway, and the results of this analysis, with more detailed statistics, will be published in the near future.

This inventory is part of the nationwide Forest Survey, authorized by the McSweeney-McNary Forest Research Act of 1928, amended June 25, 1949. The Forest Survey periodically inventories the extent and condition of the forest lands and their timber resources to determine the resource base, rates of forest growth and use, and trends in supply of raw materials for the wood products industries. Such information is needed in formulation of forest policies and programs.

The Forest Survey is conducted by the Experiment Stations of the Forest Service. In the Pacific Coast States, it is an activity of the Pacific Northwest Forest and Range Experiment Station, with headquarters at Portland, Oregon.

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THE TIMBER RESOURCE BASE

In 1967, the forested area of Humboldt County totaled 1,850,000 acres, or approximately 81 percent of the county's total land area. Of the total forest land area, 1,701,000 acres, or 92 percent, is commercial forest land; 47,000 acres is productive-reserved forest land in State parks; and 102,000 acres is unproductive forest land.

Over 75 percent, or 1,283,000 acres, of the commercial forest land area is in private ownership with the remaining area in National Forest, Indian, and Bureau of Land Management ownership in order of decreasing magnitude. In terms of volume, the proportion shifts slightly with 66 percent of the sawtimber volume in private ownership and with National Forests owning the greater proportion of timber on public lands.

An earlier inventory of Humboldt County's forest resource was completed in 1948 and published in 1952. The report included information on area and ownership but not volume. Between 1948 and 1967, commercial forest area decreased by 39,000 acres. This 2-percent decline is due to conversions to nonforest uses and withdrawals into productive-reserved status resulting from forest land purchases for expansion of parks, campgrounds, memorial groves, and similar areas.

Direct comparison of area by forest cover type between the 1948 and present inventory cannot be made without conversion of the data because of differences in sampling methods and type definitions. The early cover type definitions recognized only commercially valuable conifer species and assigned unequal weights among these species in the determination of forest cover type for a given area. Redwood was the favored species, and its occurrence as 20 percent or more of the commercial conifer cover resulted in an area being classified as redwood type. Unstocked areas and areas covered with hardwoods were assigned to a conifer type based upon an evaluation of potential species composition.

Under the present Forest Survey definitions, as used in the current Humboldt County inventory, forest cover type is determined on the basis of the species plurality of stocking by all live trees considering both size and spacing. This definition treats all species, including hardwoods, equally, regardless of relative economic values. As a result, the forest cover type information presented in this report reflects the species that actually occupy the forest lands of Humboldt County.

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HUMBOLDT COUNTY
1967
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To assess changes in area by forest cover types between inventories, we have recast the 1948 data in terms of current type definitions. In terms of the 1967 definition, the redwood-type acreage on commercial forest land in Humboldt County decreased 30 percent between 1948 and 1967; Douglas-fir- and Sitka spruce-type acreages combined increased 13 percent; other softwood-type acreages combined increased 20 percent; and hardwood-type and nonstocked acreages combined increased about 3 percent.

Most of the decrease in acreage of redwood type is accounted for in the increases in acreage of Douglas-fir and hardwood types. Often, following harvest in redwood-type areas, Douglas-fir or hardwood becomes the dominant stand component. In addition, part of the decrease in acreage of redwood type is due to withdrawals from commercial forest land for inclusion in parks and similar areas.

Estimates of forest land area and timber volume for Humboldt County were based upon sampling and, therefore, have sampling errors.

The estimated sampling errors--expressed as a percent of the total estimates at the 68-percent probability level--are as follows:

<u>Item</u>	<u>Estimated total</u>	<u>Sampling error</u> (Percent)
Commercial forest land	1,701,000 acres	± 1.4
Growing-stock volume	6,285 MM cu. ft.	± 6.1

The percent sampling error for any breakdown of the total area or volume estimates will be greater than those shown for the totals.

Table 1.--Area by land classes, Humboldt County,

California, January 1, 1967

(In thousand acres)

Land class	Area
Commercial forest	1,701
Productive-reserved forest	47
Unproductive forest	102
Total forest	1,850
Nonforest	437
Total area ^{1/}	2,287

^{1/} From U.S. Bureau of the Census, Land and Water Area of the United States, 1960.

Table 2.--Area of commercial forest land, by ownership classes,

Humboldt County, California, January 1, 1967

(In thousand acres)

Ownership class	Area
National Forest	292
Other public: ^{1/}	
Bureau of Land Management	53
Indian	72
State, county, and municipal	1
Total other public	126
Private:	
Forest industry	531
Farmer owned	389
Miscellaneous private	363
Total private	1,283
All ownerships	1,701

^{1/} Estimates of commercial forest land in specific ownerships are derived by sampling methods. Consequently, they may not agree with the official estimates of the individual agencies.

Table 3.--Area of commercial forest land, by stand-size and ownership classes,

Humboldt County, California, January 1, 1967

(In thousand acres)

Stand-size class ^{1/}	All ownerships	National Forest	Other public	Forest industry	Farmer and miscel- laneous private
Sawtimber stands:					
21.0 inches and larger	896	220	81	296	299
11.0 - 20.9 inches	369	35	20	115	199
Total sawtimber stands	1,265	255	101	411	498
Poletimber stands	66	10	4	5	47
Sapling and seedling stands	276	21	15	82	158
Nonstocked areas	94	6	6	33	49
All classes	1,701	292	126	531	752

^{1/} A classification of forest land based upon the predominant size class of growing-stock trees on the area:

Sawtimber stand: Stand at least 16.7 percent stocked with growing-stock trees, with half or more of the stocking in sawtimber trees (11.0+ inches d.b.h) or poletimber trees (5.0-10.9 inches d.b.h.), with sawtimber stocking equal to or exceeding poletimber stocking.

Poletimber stand: Stand at least 16.7 percent stocked with growing-stock trees, with half or more of the stocking in poletimber or sawtimber trees, with poletimber stocking greater than sawtimber.

Sapling and seedling stand: Stand at least 16.7 percent stocked with growing-stock trees, with more than half the stocking in trees less than 5.0 inches d.b.h.

Nonstocked: Area less than 16.7 percent stocked by live growing-stock trees.

Table 4.--Area of commercial forest land, by forest type and ownership classes, Humboldt County, California, January 1, 1967

(In thousand acres)

Cover type	All ownerships	National Forest	Other public	Forest industry	Farmer and miscel- laneous private
Douglas-fir	469	155	48	87	179
Redwood	312	--	1	249	62
True firs	70	51	3	5	11
Pines	19	14	--	5	--
Sitka spruce	16	--	--	5	11
Tanoak	458	48	44	111	255
Pacific madrone	76	11	--	5	60
Other hardwoods	187	7	24	31	125
Nonstocked	94	6	6	33	49
All types	1,701	292	126	531	752

Table 5.--Volume of growing stock and sawtimber on commercial forest land, by ownership classes and by softwoods and hardwoods, Humboldt County, California, January 1, 1967

Timber and ownership classes	All species	Softwoods	Hardwoods
- - - - <u>Million cubic feet</u> - - - -			
Growing stock: ^{1/}			
National Forest	1,464	1,346	118
Other public	504	396	108
Forest industry	2,691	2,534	157
Farmer and miscellaneous private	1,626	1,116	510
All ownerships	6,285	5,392	893
- - - - <u>Million board feet</u> ^{2/} - - - -			
Sawtimber: ^{3/}			
National Forest	8,499	8,318	181
Other public	2,696	2,473	223
Forest industry	14,117	13,805	312
Farmer and miscellaneous private	7,249	6,142	1,107
All ownerships	32,561	30,738	1,823

^{1/} Includes all live trees meeting specified standards of quality or vigor 5.0 inches d.b.h. or larger to a top diameter of 4.0 inches outside bark.

^{2/} International 1/4-inch rule. The equivalent Scribner volume can be approximated by multiplying the International 1/4-inch volumes by 0.947.

^{3/} Includes all live trees meeting specified standards of quality or vigor 11.0 inches d.b.h. or larger to a variable top diameter not less than 7.0 inches outside bark.

Table 6.--Volume of sawtimber on commercial forest land, by species and ownership classes, Humboldt County, California, January 1, 1967

(In million board feet, International 1/4-inch rule)

Species	All ownerships	National Forest	Other public	Forest industry	Farmer and miscel- laneous private
Softwoods:					
Douglas-fir	16,555	5,814	2,318	3,701	4,722
Redwood	10,317	--	2	9,320	995
White fir	1,893	1,647	90	62	94
Grand fir	582	--	--	328	254
Red fir	259	259	--	--	--
Sugar pine	478	417	61	--	--
Ponderosa and Jeffrey pines ^{1/}	125	101	--	11	13
Sitka spruce	208	--	--	154	54
Western hemlock	208	--	--	208	--
Cedars ^{2/}	113	80	2	21	10
Total	30,738	8,318	2,473	13,805	6,142
Hardwoods:					
Tanoak	939	89	100	182	568
Pacific madrone	406	42	65	47	252
Other hardwoods	478	50	58	83	287
Total	1,823	181	223	312	1,107
Total, all species	32,561	8,499	2,696	14,117	7,249

^{1/} Includes small amount of knobcone pine.

^{2/} Primarily incense-cedar.

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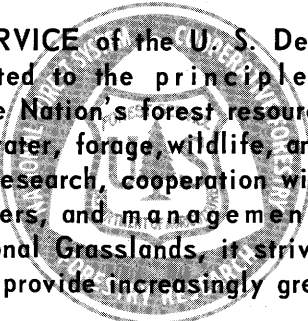
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Headquarters for the PACIFIC NORTHWEST FOREST AND RANGE EXPERIMENT STATION is in Portland, Oregon. The area of research encompasses Alaska, Washington, and Oregon, with some projects including California, the Western States, or the Nation. Project headquarters are at:

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