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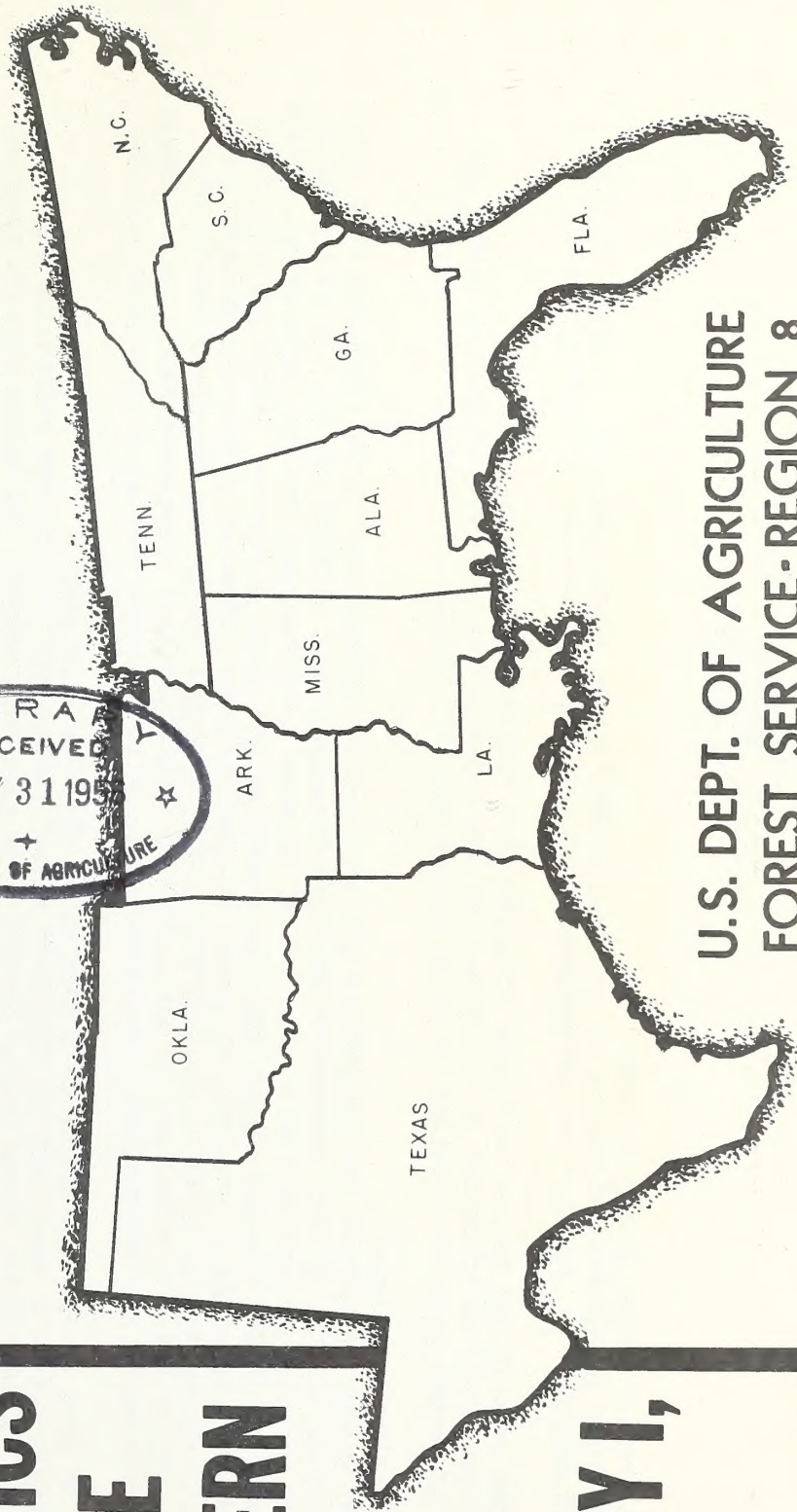
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**BASIC
TIMBER
RESOURCE
STATISTICS
FOR THE
SOUTHERN
REGION
AS OF
JANUARY I,
1953**

Includes data for Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and the Forested Section of Oklahoma and Texas



**U.S. DEPT. OF AGRICULTURE
FOREST SERVICE-REGION 8**

Headquarters - Atlanta, Georgia



PREFACE

The nationwide review of the timber resource has been completed and widely distributed to inform the American public. This factual review represents the most comprehensive survey of the timber situation ever undertaken by the United States Forest Service. In this undertaking, the Forest Service received invaluable assistance from other federal agencies, state, industrial, and private organizations. Appreciation of this timely assistance is acknowledged again at this time.

The growing, harvesting and manufacturing of timber products have become important enterprises in the South. As an aid to persons interested in the South, the more important statistics have been extracted from Chapter IX of the review draft of the national TIMBER RESOURCE REVIEW and published herein for eleven individual states, North Carolina to Texas, for the southern region of the Forest Service, and for the continental United States. These data are assembled for ready reference. While it would have been desirable to tabulate all data on a state basis, in some instances that was not permissible within allowable units of error. In such instances, data are presented on a regional basis. It is reasonable to assume that trends by regions are indicative for the states. Significant facts regarding each table are noted on the page opposite.

All of these extracted data are from the national TIMBER RESOURCE REVIEW statistics. Any deviation is either unintentional or explained in footnotes for the table concerned. Explanation of terms and classifications used in the review have been provided as a convenient reference.

Additional information, if desired, may be obtained from the Regional Forester in Atlanta, Georgia, or in your state, from the Forest Supervisor or District Ranger, U. S. Forest Service; or State Forester or District Forester, State Forest Service.



C. OTTO LINDH
Regional Forester

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Notes on Table 1

The Southern Region has 178 million acres or 36.8 percent of commercial forest area out of a total of 484 million acres in the United States, (excluding coastal Alaska).

Commercial forest area covers 58.6 percent of the total land area in the Southern Region, as compared to 25.4 percent nationwide. Another 1.1 percent of the land area in Region 8 is classified as non-commercial forest land, compared with 8.6 percent in the Continental United States.

The State of Georgia leads other southern states with nearly two-thirds of the land area in commercial forest land, while Tennessee has less than one-half of the total area in commercial forests.

Table 1 - Land Area by Major Classes of Land, in the States of the Southern Region and the United States, January 1, 1953

Item	Unit	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (East) 4/	South Carolina	Tennessee	Texas (East) 4/	South (Region 8)	Continental United States
Land Area 1/														
Total area	Thousand Acres	32,690	33,712	34,728	37,429	28,904	30,239	31,422	9,798	19,395	26,750	18,643	303,710	1,903,824
Ratio:state area to Region 8 area	%	10.8	11.1	11.4	12.3	9.5	10.0	10.4	3.2	6.4	8.8	6.1	100.0	.
Forest land														
Total area	Thousand Acres	20,771	19,346	23,047	24,057	15,990	16,473	19,513	6,027	11,943	12,588	11,708	181,433	647,686
Ratio:forest area to total land area	%	63.5	57.4	66.4	64.3	55.3	54.5	62.1	61.5	61.6	46.9	62.8	59.7	34.0
Commercial forest land														
Total area	Thousand Acres	20,756	19,292	21,519	23,969	15,899	16,440	18,976	5,257	11,891	12,301	11,703	178,003	484,340
Ratio:commercial forest area to total land area	%	63.5	57.2	62.0	64.1	55.0	54.4	60.4	53.6	61.3	46.0	62.8	58.6	25.4
Noncommercial forest land														
Total area	Thousand Acres	15	54	1,528	88	91	33	537	770	52	257	5	3,430	163,346
Ratio:noncommercial forest area to total land area	%	5/	0.2	4.4	0.2	0.3	0.1	1.7	7.9	0.3	0.9	5/	1.1	8.6
Cropland in farms 2/														
Total area	Thousand Acres	7,123	7,182	2,388	9,214	3,854	7,368	6,956	1,270	4,892	7,064	1,923	59,244	411,148
Ratio:cropland area to total land area	%	21.8	21.3	6.9	24.6	13.3	24.4	22.2	13.0	25.2	26.4	10.3	19.5	21.6
Pasture 3/														
Total area	Thousand Acres	3,305	4,057	4,863	2,458	3,956	3,884	1,790	1,828	984	4,513	3,787	35,425	693,246
Ratio:pasture area to total land area	%	10.1	12.0	14.0	6.6	13.7	12.8	5.7	18.7	5.0	16.9	20.3	11.7	36.4
Other 3/														
Total area	Thousand Acres	1,491	3,127	4,430	1,700	5,104	2,514	3,153	673	1,576	2,615	1,225	27,608	151,744
Ratio:other area to total land area	%	4.6	9.3	12.7	4.5	17.7	8.3	10.0	6.9	8.2	9.8	6.6	9.1	8.0

1/ Source: 1950 Bureau of Census.

2/ Source: 1950 Census of Agriculture

3/ Farmsteads, roads, power lines, urban, etc.

4/ Forested section only.

5/ Less than 0.05 percent.

Notes on Table 2

Private ownerships comprise 91.5 percent of the total commercial forest area in the region as compared to 74 percent nationwide. Farm owners represent the largest portion of the private holdings with 45.7 percent of the total private commercial forest area. Wood industries, including pulp, lumber and other wood using industries, own 18.1 percent of the private forests. Lumber manufacturers lead with ownership of 10 percent of the area. Another 27.7 percent is owned by other private owners.

Public ownership totals 8.5 percent in the Southern Region compared to 26 percent in the nation. The Southern National Forests include 5.1 percent of the region's commercial forest (3 percent of total land area). Another 2.1 percent is in other Federal ownerships. State, county and municipal ownerships represent the remaining 1.3 percent of public ownerships.

In the Continental United States, 16.8 percent of the nation's commercial timberlands are in national forests.

Table 2 - Total Land Area and Ownership of Commercial Forest Area in the States of the Southern Region, and the United States, January 1, 1953

Item	Unit	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (East) 1/	South Carolina	Tennessee	Texas (East) 1/	South (Region 8)	Continental United States
Total land area	Thousand Acres	32,690	33,712	34,728	37,429	28,904	30,239	31,422	9,798	19,395	26,750	18,643	303,710	1,903,824
Commercial forest area	Thousand Acres	20,756	19,292	21,519	23,969	15,899	16,440	18,976	5,277	11,891	12,301	11,703	179,003	484,340
Ratio-commercial forest area to total land area	%	63.5	57.2	62.0	64.0	55.0	54.4	60.4	53.6	61.3	46.0	62.8	58.6	25.4
<u>Commercial forest area by ownership</u>														
Federal														
Total area	Thousand Acres	789	2,802	1,813	1,557	667	1,245	1,304	270	763	833	736	12,779	98,874
Ratio-Federal to total commercial forest area	%	3.8	14.5	8.4	6.5	4.2	7.6	6.9	5.1	6.4	6.8	6.3	7.2	20.4
National forest land														
Total area	Thousand Acres	614	2,326	1,035	641	536	1,036	999	180	524	566	655	9,112	81,314
Ratio-national forest to total commercial forest area	%	3.0	12.0	4.8	2.7	3.4	6.3	5.3	3.4	4.4	4.6	5.6	5.1	16.8
Other federal land														
Total area	Thousand Acres	175	476	778	916	131	209	305	90	239	267	81	3,667	17,560
Ratio-other federal : and to total commercial forest area	%	0.8	2.5	3.6	3.8	0.8	1.3	1.6	1.7	2.0	2.2	0.7	2.1	3.6
State, county and municipal														
Total area	Thousand Acres	177	108	438	125	181	473	279	79	153	339	31	2,383	27,216
Ratio-state county and municipal to total commercial forest area	%	0.9	0.6	2.0	0.5	1.1	2.9	1.5	1.5	1.3	2.7	0.3	1.3	5.6
Private														
Total area	Thousand Acres	19,790	16,382	19,268	22,287	15,051	14,722	17,393	4,908	10,975	11,129	10,936	162,811	358,250
Ratio-private to total commercial forest area	%	95.3	84.9	89.6	93.0	94.7	89.5	91.6	93.4	92.3	90.5	93.4	91.5	74.0
Farm														
Total area	Thousand Acres	8,114	6,733	8,905	15,854	3,160	6,958	13,590	1,700*	7,530	6,126	2,625*	81,295	165,217
Ratio-farm to total commercial forest area	%	39.1	34.9	41.4	66.2	19.9	42.3	71.6	32.3	63.3	49.8	22.4	45.7	34.1
Lumber manufacturer 2/														
Total area	Thousand Acres	3,313	3,230	1,027*	1,462*	2,815	1,123*	1,317	944	585	711*	2,321	17,848	34,687
Ratio-lumber manufacturer to total commercial forest area	%	11.1	16.7	4.8	6.1	17.7	6.8	6.9	18.0	4.9	5.8	19.8	10.0	7.2
Pulp manufacturer 2/														
Total area	Thousand Acres	685	752	3,006	2,117	1,143	1,106*	1,101	..	967	2/	727	11,604	23,276
Ratio-pulp manufacturer to total commercial forest area	%	3.3	3.9	14.0	8.8	7.2	6.7	5.8	..	8.2	2/	6.2	6.5	4.8
Other wood using industries 2/														
Total area	Thousand Acres	140*	136*	336*	667*	323*	373*	166*	..	144*	377*	75*	2,737*	4,419
Ratio-other wood using industries to total commercial forest area	%	0.7	0.7	1.6	2.8	2.0	2.3	0.9	..	1.2	3.1	0.7	1.6	0.9
Other private														
Total area	Thousand Acres	8,538	5,531	5,994	2,187	7,610	5,162	1,219	2,264*	1,749	3,915	5,188	49,357	130,651
Ratio-other private to total commercial forest area	%	41.1	28.7	27.8	9.1	47.9	31.4	6.4	43.1	14.7	31.8	44.3	27.7	27.0

1/ Forested section only.

2/ Included in lumber to avoid possible disclosure.

3/ The estimated sampling error for this breakdown by states for lumber manufacturers, pulp manufacturers and other wood using industries which is a combination of lumber manufacturers, pulp manufacturers and other wood using industries, using industries Chapter IX A, TRR for wood using industries which is a combination of lumber manufacturers, pulp manufacturers and other wood using industries.

* Sampling area estimated to equal or exceed 25 percent.

Notes on Table 3

Over 81 million acres or nearly one-half of the commercial forest land in the Southern Region is owned by one and one-quarter million farm owners, as contrasted to 165 million acres and three and one-third million farm owners nationwide. Another forty-nine and one-third million acres are owned by other private owners. Together, farm and other private owners control 73.4 percent of the commercial forest area in the region.

The remainder of the private commercial forest land or 32 million acres is owned by nearly 11 thousand lumber, pulp and other wood-using industries. The lumber manufacturers lead with nearly 18 million acres of commercial forest land.

Combined private interests own almost 163 million acres or 91.5 percent of the 178 million acres of commercial forest land in the region.

Table 3 - Private Commercial Forest Area, by Type of Ownership, in the States of the Southern Region and the United States, January 1, 1952

Item	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma East 1/	South Carolina	Tennessee	Texas East 1/	South (Region 8)	Continental United States
Total Commercial Forest Area	20,766	19,292	21,519	23,469	15,899	16,440	18,976	5,257	11,891	12,301	11,703	178,003	481,340
Total Private Commercial Forest Area	19,790	16,382	19,268	22,287	15,051	14,722	17,393	4,908	10,975	11,129	10,936	162,841	358,250
Forest Area													
Number of Owners	8,114	6,733	8,905	15,854	3,160	6,958	13,590	1,700*	7,530	6,126	2,629*	81,295	165,217
Ratio - Area to total commercial forest land	131,017	123,184	52,821	172,214	96,088	100,712	222,110	41,452*	103,438	160,174	75,138	1,240,488	3,382,502
Ratio - Area to total private commercial forest land	39.1	34.9	41.4	64.1	39.9	42.3	71.6	32.3	63.3	49.8	22.4	45.7	34.1
	41.0	41.1	46.2	71.1	21.0	47.3	78.1	34.7	68.6	55.0	24.0	49.9	46.1
Lumber Manufacturers 1/													
Area	2,313	3,230	1,027*	1,462*	2,815	1,120*	1,317	944	585	711*	2,321	17,848	34,687
Number of Owners	1,501	750	286	1,390	301	570	1,941	15	724	289	2,048	9,914	9,914
Ratio - Area to total commercial forest land	11.1	16.7	4.8	6.1	17.7	6.8	6.9	18.0	4.9	5.8	19.8	10.0	7.2
Ratio - Area to total private commercial forest land	11.7	19.7	5.3	6.6	18.7	7.6	7.6	19.2	5.3	6.4	21.2	11.0	9.7
Pulp Manufacturers 1/													
Area	685	752	3,006	2,117	1,143	1,106*	1,101	..	967	2/	727	11,604	23,276
Number of Owners	5	5/	10	9	5/	8	8	..	5	2/	5/	54	3/
Ratio - Area to total commercial forest land	3.3	3.9	14.0	8.8	7.6	6.7	5.8	..	8.2	2/	6.2	6.5	4.8
Ratio - Area to total private commercial forest land	3.5	4.6	15.6	9.5	7.6	7.5	6.3	..	8.8	2/	6.7	7.1	6.5
Other Wood Using 1/													
Area	140*	136*	336*	667*	323*	373*	166*	..	144*	378*	78*	2,737*	4,419
Number of Owners	16*	8*	285*	35*	11*	10	10	..	1.2	13*	578*	966*	3/
Ratio - Area to total commercial forest land	0.7	0.7	1.6	2.9	2.0	2.3	0.9	..	1.2	3.1	0.7	1.6	0.9
Ratio - Area to total private commercial forest land	0.7	0.8	1.8	3.0	2.1	2.5	1.0	..	1.5	3.4	0.7	1.7	1.2
Other Private													
Area	8,558	5,521	5,994	2,187	7,610	5,162	1,219	2,264*	1,719	3,915	5,388	49,257	130,651
Number of Owners	37,242	37,013	40,181	22,917*	53,160	32,088	42,987	27,826*	12,045*	21,657	34,456	361,552	1,104,489
Ratio - Area to total commercial forest land	41.1	28.7	27.8	9.1	47.9	31.4	6.4	43.1	14.3	31.8	45.7	27.1	27.0
Ratio - Area to total private commercial forest land	43.1	33.8	31.1	9.8	50.6	35.1	7.0	46.1	16.0	35.2	47.4	30.5	36.5
All Private Types													
Area	19,790	16,382	19,268	22,287	15,051	14,722	17,393	4,908	10,975	11,129	10,936	162,841	358,250
Number of Owners	167,821	160,957	93,383	196,665	111,654	133,394	267,056	69,293	116,215	185,133	112,203	1,615,974	4,510,441
Ratio - Area to total commercial forest land	95.5	84.9	89.6	93.0	94.7	89.5	91.6	93.4	92.3	90.5	93.4	91.5	74.0

1/ Forested Section only.
 2/ Included in lumber to avoid possible disclosure.
 3/ Not available for breakdown by State.
 4/ The estimated sampling error for this breakdown by States for lumber manufacturers, pulp manufacturers and other wood using industries exceeds the sampling error established for the figures used in wood using industries Chapter IX A, Table 4, for wood using industries which is a combination of lumber manufacturers, pulp manufacturers and other wood using industries.
 5/ Omitted to avoid possible disclosure.
 * Sampling area estimated to equal or exceed 25 percent.

Notes on Table 4

Small owners

The Class 3 or small owner group own 115,869,000 acres or two-thirds of the total commercial forest land and 71 percent of the private commercial forest land in the Southern Region. These owners total nearly one and two-thirds million in number or 99.9 percent of the total private forest owners, in the region. Nearly one million owners fall in the 3 to 50 acres class, controlling one-fifth of the commercial forest land in the group. Nearly two-thirds or 72,482,000 acres out of the 115,869,000 acres in the Class 3 ownerships are owned by 314,904 owners with ownerships of 100-5,000 acres in commercial forest.

Medium and large owners

Class 1 and 2 private owners with commercial forest ownerships of 5,000 acres and over control 26.4 percent or nearly 47 million acres of the total commercial forest land in the region. Class 2 owners number 1,424, while Class 1 or large owners includes only 164 individual owners.

Table 4 - Private Commercial Forest Area by Size Classes in the States of the Southern Region and the United States, January 1, 1952

Item	Unit	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (East)	South Carolina	Tennessee	Texas (East)	South S. (Region 5)	Continental United States
Total commercial forest area	Thousand Acres	20,756	19,292	21,519	23,869	15,899	16,440	18,376	5,257	11,891	12,701	11,703	178,003	484,310
Total private commercial forest area	Thousand Acres	19,790	16,382	19,268	22,287	15,951	14,722	17,393	4,908	10,975	11,129	10,936	162,841	358,250
All Class 3 (Under 5,000 acres)														
Area	Thousand Acres	14,601	11,842	9,562	17,234	8,170	11,468	14,577	3,734	8,627	9,116	6,938	115,859	265,264
Number of owners	%	169,583	160,950	92,282	196,448	111,476	133,292	266,577	69,258	116,115	185,015	112,128	1,614,386	4,507,608
Ratio-area to total commercial forest area	%	70.3	61.4	44.4	71.9	51.4	69.7	76.8	71.0	72.5	74.1	59.3	65.1	54.8
Ratio-area to total private commercial forest area	%	73.8	72.3	49.6	77.3	54.3	77.9	83.8	76.1	78.6	81.9	63.5	71.1	74.0
Class 3 (3-50 acres)														
Area	Thousand Acres	2,538	2,176*	1,179*	2,398	1,640	1,714	3,660	1,378*	1,359	2,647	1,284*	22,000	2/
Number of owners	%	93,085	87,982	53,756	105,400	71,584	73,113	175,140	53,051	62,651	136,912	66,904	979,578	2/
Ratio-area to total commercial forest area	%	12.2	11.3	5.5	10.0	10.9	10.6	19.3	26.2	11.4	21.5	11.0	12.4	5/
Ratio-area to total private commercial forest area	%	12.8	13.3	6.1	10.7	10.9	11.9	21.1	28.1	12.4	23.8	11.8	13.5	7/
Class 3 (50-100 acres)														
Area	Thousand Acres	2,966	2,281*	924*	2,649	1,347	2,078	3,445	4,70*	1,758	1,971	1,495*	21,384	3/
Number of owners	%	39,118	36,318	13,439*	40,360	20,395*	30,331	55,425	6,657*	26,144	29,017	23,700	319,904	4/
Ratio-area to total commercial forest area	%	14.3	11.8	4.3	11.1	8.9	12.6	18.1	8.9	14.8	16.0	12.8	12.0	5/
Ratio-area to total private commercial forest area	%	15.0	13.9	4.8	11.9	8.9	14.1	19.8	9.6	16.0	17.7	13.7	13.1	6/
Class 3 (100-500 acres)														
Area	Thousand Acres	6,169	4,714	3,619	7,512	3,260	4,490	5,745	1,629*	3,599	2,955	3,219	47,371	6/
Number of owners	%	34,872	32,930	21,344*	47,136	17,914*	21,500	34,080*	9,281*	24,965	19,065	21,604	296,771	7/
Ratio-area to total commercial forest area	%	29.7	24.4	16.8	31.3	20.5	27.3	30.3	21.0	33.5	24.0	27.5	28.5	8/
Ratio-area to total private commercial forest area	%	31.2	28.8	18.8	33.7	21.7	30.5	35.0	33.2	36.1	26.5	29.4	29.0	9/
Class 3 (500-5,000 acres)														
Area	Thousand Acres	2,928	2,671*	3,810	4,475	1,923	3,156	1,727	287*	1,551	1,513	910*	25,211	16,378
Number of owners	%	21,508*	31,720*	4,743*	31,522*	15,893*	21,318*	1,981*	9,281*	23,355*	1,021*	720*	20,133	463,334
Ratio-area to total commercial forest area	%	14.1	13.9	17.8	19.5	12.1	19.2	9.1	4.9	13.0	12.6	8.0	14.2	9.6
Ratio-area to total private commercial forest area	%	14.8	16.3	15.9	21.0	12.8	21.4	9.9	5.2	14.1	13.9	8.6	15.5	12.9
All Class 2 (5,000-50,000 acres)														
Area	Thousand Acres	2,639	1,427	3,841	2,578	2,665	1,498	1,269	1,174	1,080	1,514	922	20,607	34,669
Number of owners	%	218	93	270	204	315	90	108	35	91	111	59	1,424	2,526
Ratio-area to total commercial forest area	%	12.7	7.4	17.9	10.8	16.8	9.1	6.7	22.4	9.1	12.3	7.8	11.6	7.2
Ratio-area to total private commercial forest area	%	13.3	8.7	19.9	11.6	17.7	10.2	7.3	23.9	9.8	13.6	8.4	12.7	9.7
All Class 1 (50,000 acres and larger)														
Area	Thousand Acres	2,550	3,113	5,865	2,475	4,216	1,756	1,547	2/	1,268	499	3,076	26,365	58,217
Number of owners	%	20	14	31	13	33	12	9	7	9	7	16	164	307
Ratio-area to total commercial forest area	%	12.3	16.1	27.3	10.3	26.5	10.7	8.1	2/	10.7	4.1	26.3	14.8	12.0
Ratio-area to total private commercial forest area	%	12.9	19.0	30.5	11.1	28.0	11.9	8.9	2/	11.6	4.5	28.1	16.2	16.3
All Private Classes (1, 2 & 3)														
Area	Thousand Acres	19,790	16,382	19,268	22,287	15,051	14,722	17,393	4,908	10,975	11,129	10,936	162,841	358,250
Number of owners	%	169,821	160,957	93,583	196,665	111,654	133,394	267,056	69,293	116,215	185,133	112,203	1,615,974	4,510,441
Ratio-area to total commercial forest area	%	95.3	84.9	89.6	93.0	94.7	89.5	91.6	93.4	92.3	90.5	93.4	91.5	74.0

1/ Forested section only.
 2/ Included in the 5,000 to 50,000 acre size class in order to avoid possible disclosure of individual owners.
 3/ Data not available except total acreage for holdings under 100 acres equals 121,013,000 in continental United States.
 4/ Data not available except total owners for holdings under 100 acres equals 3,874,847 in continental United States.
 5/ The determination of size class of ownership was based on the total commercial forest land in the ownership within the state.
 6/ Data not available except total area under 100 acres. Ratio to total commercial forest area - 25.0%.
 7/ Data not available except total area under 100 acres. Ratio to total private forest area - 31.8%.
 * Sampling area estimated to equal or exceed 25 percent.

Notes on Table 5

The average private holding in the Southern Region covers 101 acres. The small or Class 3 owner averages 72 acres, as compared to 59 acres nationwide. The State of Florida has the largest average Class 3 holding with 103 acres, while Tennessee has the smallest average holding of 49 acres.

The large or Class 1 owner averages 160,762 acres, while the medium or Class 2 owner averages 14,471 acres.

Table 5 - Private Commercial Forest Land Area, By Size Class of Owner, and Number of Owners, and Average Size of Holding, in the States of the Southern Region, and the United States, 1953

Item	Unit	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (East)	South Carolina	Tennessee	Texas (East)	South (Region 8)	Continental United States
All private ownerships (Classes 1, 2 & 3) 1/														
Total commercial forest area	Thousand Acres	19,700	16,382	19,248	22,287	15,051	14,722	17,393	4,908	10,975	11,129	10,936	162,841	358,250
Number of owners	Acres	169,821	160,977	93,583	196,665	111,654	133,394	267,056	69,293	116,215	185,133	112,203	1,615,974	4,510,441
Average size of holding		117	102	206	115	155	110	65	71	94	60	97	101	79
Class 1 (50,000 acres and larger)														
Total commercial forest area	Thousand Acres	2,550	3,113	5,865	2,475	4,216	1,756	1,547	2/	1,268	499	3,076	26,365	58,317
Number of owners	Acres	20	14	31	13	23	12	9	2/	9	7	16	164	307
Average size of holding		127,500	222,357	189,194	190,385	127,758	146,333	171,889	2/	141,000	71,286	192,250	160,762	189,958
Class 2 (5000-50,000 acres)														
Total commercial forest area	Thousand Acres	2,639	1,427	3,841	2,578	2,665	1,498	1,269	1,174	1,080	1,514	922	20,607	34,669
Number of owners	Acres	218	93	270	204	115	90	108	33	91	111	59	1,424	2,526
Average size of holding		12,106	15,344	14,226	12,637	18,379	16,644	17,500	33,543	11,868	36,396	15,627	14,471	13,725
Class 3 - all small ownerships														
Total commercial forest area	Thousand Acres	14,601	11,842	9,562	17,234	8,170	11,468	14,577	3,734	8,627	9,116	6,938	115,869	265,264
Number of owners	Acres	169,583	160,850	93,282	196,468	111,476	133,292	266,939	69,258	116,115	185,015	112,128	1,614,586	4,507,608
Average size of holding		86	74	103	88	73	86	55	54	74	49	62	72	59
Class 3 (3-50 acres)														
Total commercial forest area	Thousand Acres	2,538	2,176*	1,179*	2,398	1,640	1,744	3,660	1,378*	1,359	2,647	1,284*	22,003	2/
Number of owners	Acres	93,085	87,982	53,756	105,400	71,584	73,113	175,140	53,051	62,651	136,912	66,904	979,578	2/
Average size of holding		27	25	22	23	23	24	21	26	22	19	19	22	2/
Class 3 (50-100 acres)														
Total commercial forest area	Thousand Acres	2,966	2,281*	924*	2,649	1,347	2,078	3,445	470*	1,758	1,971	1,495*	21,384	3/
Number of owners	Acres	39,118	36,318	13,439*	40,360	20,395*	30,331	56,425	6,657*	26,144	28,017	22,700	319,904	2/
Average size of holding		76	63	69	66	66	69	61	71	67	70	66	67	2/
Class 3 (100-500 acres)														
Total commercial forest area	Thousand Acres	6,169	4,714	3,619	7,512	3,260	4,490	5,745	1,629*	3,959	2,955	3,219	47,271	97,873
Number of owners	Acres	34,872	32,830	21,344*	47,136	17,914*	27,500	34,080*	9,261*	24,965	19,065	21,804	290,771	586,127
Average size of holding		177	144	170	159	182	163	169	176	159	155	148	163	167
Class 3 (500-5000 acres)														
Total commercial forest area	Thousand Acres	2,928	2,671*	3,840	4,675	1,923	3,156	1,727	257*	1,551	1,543	940*	25,211	46,378
Number of owners	Acres	2,568*	3,720*	4,743*	3,552*	1,583*	2,348*	1,294*	289*	2,355*	1,021*	720*	24,133	46,334
Average size of holding		1,167	718	810	1,316	1,215	1,344	1,335	869	659	1,511	1,306	1,045	1,001

1/ The determination of size class of ownership was based on the total commercial forest land in the ownership, in the state.

2/ Included in 5,000 to 50,000 acre size class in order to avoid disclosure of individual owners.

3/ Data not available except total acreage for holdings under 100 acres equals 121,013,000 in Continental United States.

4/ Data not available except total owners for holdings under 100 acres equals 3,874,847 in Continental United States.

5/ Average size of holding is 31 acres for holdings under 100 acres in Continental United States.

* Sampling area estimated to equal or exceed 25 percent.

Notes on Table 6

The area classified as commercial forest land in the Southern Region increased from 1945 to 1953 by 4.4 percent or nearly seven and one-half million acres, as compared to 5.4 percent or nearly 25 million acres nationwide.

The greatest increase of 22 percent occurred in the forested section of the State of Oklahoma, in part through the inclusion of post oak land. Georgia shows an increase of 13.6 percent, followed by Alabama and Texas with increases over 10 percent. Arkansas, Louisiana, Mississippi and South Carolina had slight decreases in commercial forest land area. Other southern states had small increases.

Variation in commercial forest acreage during the nine-year period is attributed to changes in land use and more accurate classification.

Table 6 - Total Land, and Change in Area Classified as Commercial Forest Land, from 1941 to 1953, in the States of the Southern Region, and the United States

Item	Total Land 1/	COMMERCIAL FOREST AREA							
		Thousand Acres		Percent Change		% of United States			
		1941	1953	During Period	1941	1953	Commercial Forest Area		
			Increase	Decrease	1941	1953			
Alabama	32,690	18,800	20,756	10.4	..	11.0	11.7	4.1	4.3
Arkansas	33,712	19,928	19,292	..	3.2	11.7	10.8	4.3	4.0
Florida	34,728	21,451 2/	21,519	0.3	..	12.6	12.1	4.7	4.4
Georgia	37,429	21,107	23,969	13.6	..	12.4	13.5	4.6	5.0
Louisiana	28,904	16,169	15,899	..	1.7	9.5	8.9	3.5	3.3
Mississippi	30,239	16,509 4/	16,440	..	0.4	9.7	9.2	3.6	3.4
North Carolina	31,422	17,997	18,976	5.4	..	10.5	10.7	3.9	3.9
Oklahoma (East) 2/	9,798	4,308	5,257	22.0	..	2.5	2.9	0.9	1.1
South Carolina	19,395	11,900 4/	11,891	..	0.1	7.0	6.7	2.6	2.5
Tennessee	26,750	11,850	12,301	3.8	..	6.9	6.9	2.6	2.5
Texas (East) 2/	18,643	10,548	11,703	10.9	..	6.2	6.6	2.3	2.4
Total Region 8	303,710	170,567	178,003	4.4	..	100	100	37.1	36.8
Total Continental United States	1,903,824	459,541	484,340	5.4	..	..	..	..	..

1/ Source: 1950 Bureau of Census.
2/ Forested Section only.
3/ Revised from 1949 Forest Survey.
4/ Revised from 1947 Forest Survey.
5/ Variation in commercial forest land acreage during nine year period is attributed to changes in land use, and more accurate classification.

Notes on Table 7

Net volume of growing stock in the Southern Region totals nearly one and one-half billion cords, which represents 21 percent of the net growing stock nationwide.

The volume of sawtimber material is nearly double the volume of poletimber material.

Hardwood volume exceeds softwood volume in the region by 10 percent. Softwood volume makes 44.7 percent of the total volume of growing stock in the region. Southern yellow pine species represent over 90 percent of the softwood volume. The State of Florida ranks high with 72.6 percent of its growing stock in softwood. Georgia has over 60 percent of its growing stock in softwood while South Carolina and Texas have over 50 percent.

The bulk of the hardwood volume consists of gums, poplar and oak species. The State of Tennessee ranks highest with 86.2 percent hardwood volume. Next in order, the states of Arkansas, Louisiana, Mississippi, and Oklahoma have over 65 percent of the total volume in hardwood species.

Table 7 - Net Volume of Growing Stock by Class of Material, and Softwoods and Hardwoods, and by Species Group, on Commercial Forest Land in the States of the Southern Region 3/1 January 1955

Item	Unit	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (East)	South Carolina	Tennessee	Texas (East)	South (Region B)
Forest trees													
Total net volume	Million cords	57.5	56.3	55.6	69.4	39.3	60.1	70.1	8.9	51.8	36.4	29.8	535.2
Softwood	Million cords	21.6	13.6	37.4	39.8	9.0	13.6	27.5	2.2	26.3	5.0	18.7	207.1
Hardwood	Million cords	35.9	42.7	18.2	29.6	30.3	46.5	42.6	6.7	25.5	31.4	11.0	328.1
Sawtimber trees													
Total net volume	Million cords	108.4	112.4	58.3	105.1	121.6	78.3	114.9	16.7	79.2	48.3	72.2	915.4
Softwood	Million cords	53.3	44.0	67.6	67.6	43.4	30.2	58.9	5.5	46.0	6.7	40.4	441.3
Hardwood	Million cords	55.1	68.4	13.0	37.5	78.2	48.1	56.0	11.2	33.2	41.6	31.8	474.1
Total net volume - poletimber and sawtimber trees													
Softwood	Million cords	165.9	168.7	113.9	174.5	160.9	138.4	186.4	25.6	131.0	84.7	102.0	1,450.6
Hardwood	Million cords	74.9	57.6	42.7	107.4	52.4	43.8	86.4	7.7	72.3	11.7	51.5	648.4
	Million cords	91.0	111.1	31.2	67.1	108.5	94.6	98.6	17.9	58.7	73.0	50.5	802.2
Ratio state total net volume to total net volume in Region 8	%	11.4	11.6	7.9	12.0	11.1	9.6	12.8	1.8	9.0	5.8	7.0	100
By softwood species													
White pine and red pine	Million cords	73.3	55.2	64.7	101.1	45.4	41.7	80.1	7.7	66.6	0.7	50.5	595.1
Southern yellow pine	Million cords	1.1	2.2	17.7	5.7	7.0	2.0	1.4	1.4	0.1	0.6	1.0	2.2
Spruce and balsam fir	Million cords	0.5	0.2	0.3	0.1	1.1	0.1	1.0	1.1	0.4	1.1	1.1	3.7
Hemlock	Million cords	74.9	57.6	42.7	107.4	52.4	43.8	86.4	7.7	72.3	11.7	51.5	648.4
Cypress	Million cords	45.1	34.1	72.6	61.5	32.6	31.6	46.7	30.1	55.2	13.8	50.5	44.7
Other softwoods	Million cords	5.2	4.0	5.7	7.4	3.6	3.0	6.0	0.5	5.0	0.8	3.5	9.6
Total softwoods	Million cords	74.9	57.6	82.7	107.4	52.4	43.8	86.4	7.7	72.3	11.7	51.5	648.4
Ratio softwoods to total net volume in state	%	45.1	34.1	72.6	61.5	32.6	31.6	46.7	30.1	55.2	13.8	50.5	44.7
Ratio state softwoods to total net volume in Region 8	%	5.2	4.0	5.7	7.4	3.6	3.0	6.0	0.5	5.0	0.8	3.5	9.6
Ratio southern region softwoods to total net volume in United States	%	..	..	..	..	..	..	..	..	..	..	..	..
By hardwood species													
Oak	Million cords	34.0	59.9	6.3	21.7	30.9	37.1	39.3	11.7	12.7	37.7	24.2	315.5
Beech yellow birch and red maple	Million cords	1.8	0.5	0.2	0.4	2.3	1.4	5.4	2.1	0.4	12.5	3.7	11.6
Hickory	Million cords	11.2	12.0	1.0	3.9	9.0	8.7	5.4	2.2	1.7	19.5	9.5	114.4
Sweetgum	Million cords	11.2	14.5	3.6	10.5	19.0	20.7	12.6	0.7	11.2	2.1	10.9	107.8
Tupelo and Blackgum	Million cords	12.5	5.8	10.1	15.7	16.3	7.8	16.0	0.7	11.2	4.4	4.1	33.2
Yellow poplar	Million cords	4.6	1.1	0.4	5.1	0.2	2.4	10.4	..	0.5	0.3	0.1	6.0
Cottonwood and aspen	Million cords	0.3	1.1	1.1	0.1	1.7	1.6	1.1	..	0.5	0.3	0.1	6.0
Other hardwoods	Million cords	13.0	17.0	9.6	9.8	29.1	15.5	13.5	2.1	10.5	10.9	7.7	138.7
Total hardwoods	Million cords	91.0	111.1	31.2	67.1	108.5	94.6	98.6	17.9	58.7	73.0	50.5	802.2
Ratio hardwoods to total net volume in state	%	54.9	65.9	27.4	38.5	67.4	68.4	53.3	69.9	44.4	86.2	49.5	55.3
Ratio state hardwoods to total net volume in Region 8	%	6.3	7.7	2.2	4.6	7.5	6.5	6.8	1.2	4.0	5.0	3.5	11.9
Ratio southern region hardwoods to total net volume in United States	%	..	..	..	..	..	..	..	..	..	..	..	..

1/ Less than 0.05 million cords.

2/ Percent based on cubic foot comparison.

3/ Data for United States omitted because not available in cords.

Notes on Table 8

The Southern Region has 327 billion board feet of sawtimber or 16.6 percent of the 1,968 billion board feet in the United States.

In the region, softwood has 53 percent of the sawtimber volumes. Southern pine species contain the bulk of the softwood volume, including 36,638 million board feet of longleaf and slash pine and 114,258 million board feet of shortleaf and loblolly pines. Hardwoods¹ make up 47 percent of sawtimber volume. The oaks, with 40 percent, and the gums with 29 percent, represent the bulk of the 154 million board feet of hardwood sawtimber volume in the region.

Sawtimber volume per acre of all species in all stands in the region averages 1,835 board feet in contrast to 4,063 board feet per acre nationwide. Volume per acre of all species in sawtimber stands in the region averages 4,533 board feet, as compared to 9,907 board feet in the United States.

¹/ Hardwood stands are characterized by a large over-burden of cull trees, many of them holdovers from previous cuttings. In the South alone, the net volume of hardwood cull trees exceeds one-third of the hardwood growing stock. This hardwood cull is not included in the hardwood sawtimber volume in Table 8.

Table 8 - Net Volume of Live Sawtimber in Sawtimber Stands, Separately, and by Species Group, Average Volume Per Acre, and Net Volume of Salvable Dead Sawtimber in the Southern Region and the United States, January 1, 1953

Item	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (Excl.)	South Carolina	Tennessee	Texas (East)	South (West of Tex.)	Continental United States
Net volume of live sawtimber in sawtimber stands	28,134	29,269	14,990	25,735	35,602	21,026	33,535	3,620	28,085	9,770	19,593	249,359	1,769,515
Net volume of live sawtimber in other stands	10,077	9,048	8,042	11,185	5,834	4,763	10,617	1,960	4,214	5,580	5,982	77,302	198,274
Net volume of live sawtimber - all in Region 8	38,211	38,317	23,032	36,920	41,436	25,789	44,152	5,580	32,299	15,350	25,575	326,661	1,967,789
Ratio - net state volume to total net volume in United States	11.7	11.7	7.1	11.3	12.7	7.9	13.5	1.7	9.9	4.7	7.8	10.0	..
By softwood species	1.9	2.0	1.2	1.9	2.1	1.3	2.2	0.3	1.6	0.8	1.3	16.6	..
White pine and red pine	..	..	..	121	..	..	257	..	15	210	..	603	17,330
Longleaf pine and slash pine	5,151	..	12,551	11,052	1,153	2,329	721	..	2,463	..	1,218	36,638	36,638
Shortleaf pine and loblolly pine	15,297	16,978	1,518	9,532	14,337	7,666	16,853	2,223	13,621	1,065	15,168	114,258	124,744
Spruce and balsam fir	..	..	..	..	..	..	10	..	..	..	..	10	19,084
Hemlock	19	..	..	49	..	..	711	..	29	224	..	1,032	1,032
Cypress	..	775	3,178	1,566	2,410	722	1,216	4	1,162	215	355	12,019	12,682
Other softwood	1,046	..	817	792	308	421	2,691	3	1,586	876	..	8,564	18,064
Western softwoods	..	..	..	..	..	..	..	..	..	..	..	..	1,316,728
Total softwoods	21,929	17,777	18,064	23,112	18,208	11,138	22,459	2,230	18,876	2,590	16,741	173,124	1,558,603
Ratio - softwoods to total net volume in the state	57.4	46.4	78.4	62.6	43.9	43.2	50.9	40.0	58.4	16.9	65.5	..	79.2
Ratio - state softwoods to total softwoods in Region 8	12.7	10.3	10.4	13.3	10.5	6.4	13.0	1.3	10.9	1.5	9.7	100	..
Ratio - state softwoods to total net volume in Region 8	6.7	5.4	5.5	7.1	5.6	3.4	6.9	0.7	5.8	0.8	5.1	53.0	..
Ratio - southern region softwoods to total net volume in United States	..	..	..	..	..	..	..	..	..	..	..	..	8.8
By hardwood species	1,449	2,144	110	838	904	988	2,473	282	460	1,770	681	12,319	35,432
Red oak ^{1/2}	1,244	1,244	44	499	431	514	1,463	198	166	1,166	487	5,412	23,023
Other oak	4,186	7,693	1,092	3,479	5,200	4,336	1,807	1,598	2,518	4,204	3,312	42,588	79,934
Yellow birch and sugar maple	528	227	237	539	801	471	1,038	33	788	513	144	5,330	34,931
Sort maple and beech	2,317	2,617	611	2,107	4,048	2,691	2,805	100	2,632	543	1,776	22,287	29,801
Sweetgum	2,168	1,288	1,976	2,919	3,250	1,091	4,190	139	3,661	449	887	21,784	27,750
Hickory and blackgum	1,935	1,957	186	864	2,103	1,541	1,295	536	634	1,595	622	13,258	23,896
Hickory	1,037	5	141	1,230	51	1,432	2,062	67	1,302	1,095	334	7,268	16,370
Yellow poplar	..	..	..	..	..	..	..	..	..	..	..	..	19,899
Ash, beech and black walnut	64	..	259	25	420	392	67	10	77	77	13	1,450	9,376
Other hardwood and aspen	1,347	2,457	792	982	4,302	1,899	957	291	660	1,043	793	15,523	50,533
Other hardwoods	..	..	..	..	..	..	..	..	..	..	..	..	27,979
Western hardwoods	..	..	..	..	..	..	..	..	..	..	..	..	..
Total hardwoods	16,282	20,540	4,968	13,808	23,228	14,651	21,693	3,250	13,423	12,760	8,834	153,537	409,186
Ratio - hardwoods to total net volume in the state	42.6	53.6	21.6	37.4	56.1	56.8	49.1	60.0	41.6	83.1	34.5	..	20.8
Ratio - state hardwoods to total hardwoods in Region 8	10.6	13.4	3.2	9.0	15.1	9.5	14.1	2.2	8.8	8.3	5.8	100	..
Ratio - state hardwoods to total net volume in Region 8	5.0	6.3	1.5	4.2	7.1	4.5	6.7	1.0	4.1	3.9	2.7	47.0	..
Ratio - southern region hardwoods to total net volume in United States	..	..	..	..	..	..	..	..	..	..	..	..	7.8
Average volume per acre	..	..	..	..	..	..	..	..	..	..	..	..	..
Sawtimber in sawtimber stands	6,091	6,604	3,223	6,355	7,176	5,920	6,337	1,204	4,999	2,916	4,080	55,005	178,616
Total sawtimber area	4,619	4,422	4,651	4,050	4,361	3,552	5,292	2,776	5,618	3,350	4,802	4,533	9,307
Average volume per acre all species	1,841	1,986	1,070	1,540	2,606	1,569	2,327	1,061	2,716	1,248	2,185	1,835	4,063
Average volume per acre by softwoods and hardwoods	1,057	891	839	964	1,145	678	1,184	424	1,587	211	1,430	973	3,218
Softwoods	784	1,065	231	576	1,461	891	1,143	637	1,129	1,057	755	862	845
Hardwoods	231	184	5	21 ^{1/2}	159	185	45 ^{1/2}	28	6	220	93	1,177	37,195
Net volume of salvable dead sawtimber - total	118	78	4	8	78	67	3	10	5	18	60	449	34,272
Softwood	113	106	1	13 ^{1/2}	81	118	42 ^{1/2}	18	1	202	55	728	2,923
Hardwood	..	..	..	..	..	..	..	..	..	..	..	..	..

^{1/2} Net volume in board feet log scale, International 1/4 - inch rule.
^{2/2} Quercus alba and Quercus prinus
^{3/2} Quercus borealis, Quercus falcata var. pagodaefolia, and Q. shumardii.

Notes on Table 9

Sawtimber

Private commercial forest areas contain 295 billion board feet or 90.4 percent of the 327 billion board feet of sawtimber in the Southern Region, as compared to 1,080 billion board feet on private lands or 54.9 percent of the 1,968 billion board feet of sawtimber volume in the nation.

National forests in the region have 21 billion board feet or 6.4 percent in comparison to 683 billion board feet or 34.7 percent of the total sawtimber volume in the United States. Other federal ownerships have seven billion board feet or 2.0 percent of the total sawtimber volume in the region.

Roughly, another four billion board feet or 1.2 percent of the region's total sawtimber volume is located on state, county, and municipal ownerships.

Growing Stock

The ownership of growing stock varies slightly from sawtimber in the Southern Region. Private ownerships have 94 billion cubic feet or 91.1 percent of the region's 103 billion cubic feet compared to 304 billion cubic feet in private lands or 60.9 percent of the nation's 498 billion cubic feet.

National forests have six billion cubic feet or 5.8 percent of the region's growing stock, in comparison to 146 billion cubic feet or 29.3 percent of the nation's growing stock. Other federal ownerships have two billion cubic feet or 1.9 percent of the region's total volume.

Another 1,289 million cubic feet or 1.2 percent of the region's growing stock volume is located on state, county, and municipal ownerships.

Table 9 - Net Volume of Live Sawtimber and Growing Stock on Commercial Forest Land by Ownership Class, in the States of the Southern Region, and the United States, January 1, 1953

Item	Unit	Southern Region										Continental United States		
		Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (East)	South Carolina	Tennessee		Texas (East)	South (Region 8)
Net Volume Live Sawtimber by Ownership Class														
All Ownerships														
Federal Ownerships														
Net volume	Million Board Feet	38,211	38,317	23,032	36,920	41,436	25,789	44,152	5,580	32,299	15,350	25,575	326,661	1,967,789
National Forests	Million Board Feet	1,793	5,513	2,121	3,965	1,096	3,036	3,123	468	1,930	1,665	2,925	27,635	811,760
Ratio-National Forests to total live sawtimber	%	4.0	12.2	5.8	4.3	2.1	10.1	5.8	6.8	4.3	7.6	11.1	6.4	34.7
Other Federal Ownerships 2/	Million Board Feet	281	858	777	2,388	225	429	557	88	530	495	83	6,711	128,909
Ratio-Other Federal Ownerships to total live sawtimber	%	0.7	2.2	3.4	6.5	0.6	1.7	1.3	1.6	1.6	3.2	0.3	2.0	6.5
State, County and Municipal 2/														
Net volume	Million Board Feet	250	194	383	275	515	963	473	77	278	426	24	3,858	76,052
Ratio-State, County and Municipal to total live sawtimber	%	0.7	0.5	1.7	0.7	1.2	3.7	1.1	1.4	0.9	2.8	0.1	1.2	3.9
All Private Ownerships														
Net volume	Million Board Feet	36,168	32,610	20,528	32,680	39,825	21,790	40,556	5,035	30,091	13,259	22,626	295,168	1,079,977
Ratio-Private Ownerships to total live sawtimber	%	94.6	85.1	89.1	88.5	96.1	84.5	91.8	90.2	93.2	86.4	88.5	90.4	54.9
Net Volume Growing Stock by Ownership Class														
All Ownerships														
Federal Ownerships														
Net volume	Million Cubic Feet	11,713	11,762	8,152	12,692	11,199	9,628	13,642	1,780	9,613	5,770	7,247	103,198	498,439
National Forests	Million Cubic Feet	492	1,602	810	1,045	327	800	876	119	628	519	712	7,930	172,861
Ratio-National Forests to total net volume	%	3.4	11.4	6.4	3.6	2.4	6.9	5.2	5.3	4.9	6.1	9.3	5.8	29.3
Other Federal Ownerships 2/	Million Cubic Feet	88	262	285	581	61	139	168	24	156	169	34	1,967	26,901
Ratio-Other Federal Ownerships to total net volume	%	0.8	2.2	3.5	4.6	0.5	1.4	1.2	1.4	1.6	2.9	0.5	1.9	5.4
State, County and Municipal 2/														
Net volume	Million Cubic Feet	84	59	137	88	138	365	128	22	95	167	6	1,289	21,912
Ratio-State, County and Municipal to total net volume	%	0.7	0.5	1.7	0.7	1.2	3.8	0.9	1.2	1.0	2.9	0.1	1.2	4.4
All Private Ownerships														
Net volume	Million Cubic Feet	11,137	10,101	7,205	11,559	10,734	8,463	12,638	1,639	8,890	5,084	6,529	93,979	303,666
Ratio-Private Ownerships to total net volume	%	95.1	85.9	88.4	91.1	95.9	87.9	92.7	92.1	92.5	88.1	90.1	91.1	60.9

1/ Net volume of live sawtimber in board feet log scale, International 1/4-inch rule, and of growing stock in cubic feet excluding bark.
 2/ Because of different definitions of commercial forest land, different cruising standards, specifications, and log rules adopted by the Forest Service and other public agencies, volume estimates for these ownerships may vary from actual published figures of the public agencies concerned.

Notes on Table 10

Sawtimber

Total live sawtimber cut in the Southern Region in 1952 amounted to 18 billion board feet or 37 percent of the 49 billion board feet cut nationwide.

Selected products and volumes cut from sawtimber in the region consisted of 12 billion board feet for sawlogs or 67.2 percent of the region's cut, two billion board feet or 9.8 percent for pulpwood, one billion board feet or 5.3 percent for veneer logs and bolts, and three billion board feet or 17.7 percent for all other products.

Growing Stock

The timber cut from growing stock in the Southern Region in 1952 totaled 4.6 billion cubic feet or 43.0 percent of the nation's total cut of 11 billion cubic feet from growing stock.

In the region selected products and volumes cut from growing stock consisted of 2.5 billion cubic feet for sawlogs or 54.0 percent of the region's cut, one billion cubic feet or 19.3 percent for pulpwood, 0.2 billion cubic feet or 4.1 percent for veneer logs and bolts, and one billion cubic feet or 22.6 percent for all other products.

Table 10.—Timber Cut From Live Sawtimbers and From Growing Stocks on Commercial Forest Land by Selected Products, and Softwoods and Hardwoods and Timber Products Output, by Selected Products, and Softwoods and Hardwoods, in the States of the Southern Region, and the United States, 1952-57

Item	Unit	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (East)	South Carolina	Tennessee	Texas (East)	South (Region 8)	Continental United States
Timber Cut From Live Sawtimber														
All Products	Thousand Board Feet	2,377,047	1,551,784	930,546	2,699,327	1,595,472	2,211,431	2,381,496	141,549	1,410,637	992,835	1,546,406	18,038,530	48,753,737
Softwood	Thousand Board Feet	1,497,633	684,512	807,643	2,198,796	749,438	986,159	1,541,970	52,104	952,658	233,889	1,150,323	10,855,125	36,459,770
Hardwood	Thousand Board Feet	879,414	867,272	122,903	700,531	846,034	1,225,272	839,526	89,445	457,979	758,946	396,083	7,183,405	12,293,967
Sawlogs (For Lumber, etc.)	Thousand Board Feet	1,685,899	975,221	486,011	2,162,173	947,443	1,259,323	1,678,136	61,101	977,097	557,761	1,129,394	12,119,549	36,553,274
Softwood	Thousand Board Feet	1,137,135	559,327	452,846	1,655,400	497,071	699,402	1,248,703	41,828	693,274	169,100	938,696	8,093,182	28,807,616
Hardwood	Thousand Board Feet	548,764	415,884	351,165	506,773	450,372	559,921	429,433	19,273	283,823	388,661	190,698	4,026,367	7,745,658
Pulpwood	Thousand Board Feet	144,742	61,243	265,575	444,336	120,758	205,205	213,827	3,118	208,366	29,519	106,918	1,773,781	4,693,432
Softwood	Thousand Board Feet	144,037	47,255	265,476	403,462	88,660	123,588	187,007	3,118	191,207	17,537	97,537	1,567,252	4,203,942
Hardwood	Thousand Board Feet	3,140	3,140	119	12,874	22,078	61,617	20,820	..	175,359	19,277	9,381	208,529	444,490
Veneer Logs and Bolts	Thousand Board Feet	68,559	65,383	92,280	149,025	65,045	115,655	133,579	505	140,197	13,867	87,251	951,313	2,803,090
Softwood	Thousand Board Feet	354	354	1,198	1,895	568	8,336	11,280	505	1,365,359	3,112	5,112	41,041	1,375,624
Hardwood	Thousand Board Feet	88,205	65,383	82,082	147,140	63,172	107,266	122,299	..	1,365,359	13,692	82,143	910,272	1,227,466
All Other Products	Thousand Board Feet	457,847	449,947	86,710	173,819	462,226	631,251	155,954	76,825	84,777	391,688	242,843	3,193,887	4,705,911
Softwood	Thousand Board Feet	218,505	77,830	79,143	139,686	151,814	154,785	94,880	7,158	64,539	54,332	110,978	1,153,650	1,906,498
Hardwood	Thousand Board Feet	239,342	372,117	7,567	34,133	310,412	476,466	61,074	69,667	20,238	337,356	111,865	2,040,237	2,879,553
Timber Cut From Growing Stock														
All Products	Thousand Cubic Feet	881,812	380,386	251,793	749,662	405,140	569,748	646,803	39,077	380,165	252,444	368,243	4,625,243	10,744,401
Softwood	Thousand Cubic Feet	370,657	164,617	224,483	573,051	198,565	257,544	45,470	13,351	261,598	53,448	274,568	2,807,322	7,474,719
Hardwood	Thousand Cubic Feet	211,155	215,769	27,310	176,611	206,575	312,204	231,333	25,726	118,567	199,026	93,675	1,817,951	3,269,682
Sawlogs (For Lumber, etc.)	Thousand Cubic Feet	336,161	195,849	103,837	459,833	192,371	254,371	398,308	12,168	207,477	116,256	220,891	2,498,904	6,808,566
Softwood	Thousand Cubic Feet	217,732	107,097	96,933	354,420	97,476	123,917	267,289	8,009	148,298	32,379	179,736	1,641,096	5,201,736
Hardwood	Thousand Cubic Feet	118,429	89,752	6,904	105,403	97,195	120,456	131,019	4,159	59,079	83,877	41,155	857,808	1,606,830
Pulpwood	Thousand Cubic Feet	103,518	40,428	105,925	166,866	81,137	126,044	88,692	2,248	85,388	16,111	70,519	890,326	1,727,231
Softwood	Thousand Cubic Feet	102,114	34,141	105,863	160,086	71,143	89,099	74,578	2,248	76,253	7,385	70,319	793,229	1,459,790
Hardwood	Thousand Cubic Feet	1,404	6,287	62	6,780	9,994	36,945	14,114	..	9,135	8,726	4,246	97,693	267,441
Veneer Logs and Bolts	Thousand Cubic Feet	16,184	11,946	20,054	32,199	11,896	21,185	28,994	93	30,317	2,534	15,962	191,364	491,644
Softwood	Thousand Cubic Feet	68	68	2,354	437	2,629	1,594	843	..	8,914	592	592	8,914	250,424
Hardwood	Thousand Cubic Feet	16,116	11,946	17,700	31,762	11,540	19,591	26,365	93	29,474	2,483	15,370	182,450	241,220
All Other Products	Thousand Cubic Feet	125,949	131,163	21,977	90,784	119,736	167,766	130,809	24,568	56,983	117,543	56,825	1,044,083	1,716,960
Softwood	Thousand Cubic Feet	50,743	23,379	19,333	58,098	31,890	32,934	70,974	3,094	36,104	13,613	23,921	364,083	566,769
Hardwood	Thousand Cubic Feet	75,206	107,784	2,644	32,686	87,846	134,832	59,835	21,474	20,879	103,930	32,904	680,000	1,154,191
Total - Output														
Sawlogs (For Lumber, etc.)	Thousand Board Feet	1,710,000	985,000	568,533	2,420,533	955,000	1,271,000	2,068,598	62,000	1,081,001	557,000	1,153,000	12,824,665	39,436,357
Softwood	Thousand Board Feet	1,469,000	575,000	525,954	1,923,113	511,000	719,000	1,459,204	43,000	805,336	173,800	950,000	8,660,397	31,433,231
Hardwood	Thousand Board Feet	541,000	410,000	32,579	497,420	444,000	552,000	618,394	19,000	275,665	383,160	188,000	3,964,268	8,003,126
Pulpwood	Number Cords	1,608,681	620,156	1,598,210	2,534,753	1,237,264	1,365,266	1,309,326	34,870	1,309,326	248,438	1,152,210	13,597,307	25,064,933
Softwood	Number Cords	1,583,704	533,938	1,584,952	2,443,959	1,103,976	1,385,005	1,119,088	34,870	1,153,245	148,514	1,020,462	12,140,944	21,407,807
Hardwood	Number Cords	24,977	86,218	13,258	120,794	133,288	482,261	247,043	..	156,081	153,924	60,748	1,180,366	3,657,126
Veneer Logs and Bolts	Thousand Board Feet	60,864	44,865	67,917	111,479	45,126	81,558	98,746	348	104,643	9,569	60,690	685,805	2,467,311
Softwood	Thousand Board Feet	348	348	1,826	1,826	9,419	8,173	9,419	..	3,081	206	3,043	36,089	1,346,198
Hardwood	Thousand Board Feet	60,516	44,865	59,551	109,882	43,300	73,385	89,327	348	101,562	9,363	57,647	649,746	917,115
All Other Products	Thousand Cubic Feet	196,061	199,625	66,834	240,894	197,192	268,070	334,028	38,350	156,235	193,526	130,774	2,021,589	4,514,568
Softwood	Thousand Cubic Feet	93,432	57,781	50,265	149,580	70,922	69,302	178,317	8,095	92,730	80,735	60,083	2,021,589	4,183,816
Hardwood	Thousand Cubic Feet	102,929	141,844	16,569	91,314	126,270	198,768	155,711	30,255	63,505	165,346	49,939	1,442,450	2,330,752

1/ Estimates of timber products output include both roundwood and plant residues. The output from roundwood is according to States where the logs, bolts, and other round timbers, cut for various products, originated and not necessarily where they were processed into lumber, pulp, veneer, or other manufactured products or used in round form as poles, piling, posts, etc. The volume of plant residues such as used for fuelwood or chipped for pulp is, however, according to States where used. The output of fuelwood, although second to sawlogs on a cubic-volume basis, is included with the "all other products" group because estimates are likely to be considerably in error for individual States. Other products including cooperage logs and bolts, poles and piling, posts, hewn ties, mine timbers, excelsior bolts, turnery, dimension and handle stock, chemical wood, etc., are grouped because their combined output represent only a comparatively small fraction of total timber products output. Volumes are in units of measure commonly used by the Bureau of the Census, the trade, or other agencies reporting volume of output, i. e., sawlogs for lumber, timbers, sawn ties, etc., in board feet lumber tally, pulpwood in standard cords (128 cu. ft.), including bark, and veneer logs and bolts in board feet log scale. Volumes for other products are shown in cubic feet excluding bark.

2/ Estimates of timber cut include logging residues as well as sawlog material removed as timber products. Timber cut for fuelwood, although third in volume next to pulpwood, is included with the "all other products" group because estimates are likely to be considerably in error for individual States. Other products including cooperage logs and bolts, poles and piling, posts, hewn ties, mine timbers, and various miscellaneous products like box and shingle bolts, excelsior bolts, turnery, dimension and handle stock, chemical wood, etc., are grouped because their combined cut is only a comparatively small fraction of the total for all products. Volumes refer to live sawtimber inventory and are in net board feet log scale, International 1/4-inch rule.

Notes on Table 11

Growth

The Southern Region is growing 88.6 million cords or 43.7 percent of the growing stock of the nation. The Southern Region is growing 22 billion board feet of sawtimber or 46.4 percent of the total being grown for the nation.

In the region the softwood sawtimber growth of nearly 14 billion board feet exceeds hardwood sawtimber growth by over five billion board feet.

The Southern Region is growing 49 percent of the nation's softwood sawtimber growth and 43 percent of the nation's hardwood sawtimber growth. Annual growth per acre equals 123 board feet.

Table 11—Net Annual Growth of Growing Stock and Live Sawtimber by Softwoods and Hardwoods on Commercial Forest Land in States of the Southern Region and the United States, January 1, 1953

Item	Unit	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (East)	South Carolina	Tennessee	Texas (East)	South (Region 8)	Continental United States
Annual Growth - Growing Stock 1/														
Softwood														
Net growth	Million Cords	5.7	3.6	5.1	8.6	3.9	3.7	6.0	0.5*	4.6	0.7	3.8	46.2	6,981 2/
Ratio - softwood volume to R-8 softwood volume	%	12.3	7.8	11.0	18.6	8.5	8.0	13.0	1.1	10.0	1.5	8.2	100	4911
Hardwood														
Net growth	Million Cords	5.1	4.6	1.3	4.0	5.9	6.5	5.8	0.9*	2.4	2.9	3.0	42.4	7,230 2/
Ratio - hardwood volume to R-8 hardwood volume	%	12.0	10.9	3.1	9.4	13.9	15.3	13.7	2.1	5.7	6.8	7.1	100	50.9
All Species														
Net growth	Million Cords	10.8	8.2	6.4	12.6	9.8	10.2	11.8	1.4*	7.0	3.6	6.8	88.6	14,211 2/
Ratio - total volume to R-8 total volume	%	12.2	9.2	7.2	14.2	11.1	11.5	13.3	1.6	7.9	4.1	7.7	100	..
Ratio - southern region volume to U. S. total volume	%	..	..	..	..	..	..	..	..	..	..	..	43.7 3/	..
Annual Growth - Live Sawtimber 1/														
Softwood														
Net growth	Million Board Feet	1,864	1,220	1,389	2,370	1,445	887	1,606	145*	1,195	169	1,336	13,626	27,884
Ratio - softwood volume to R-8 softwood volume	%	13.7	8.9	10.2	17.4	10.6	6.5	11.8	1.1	8.8	1.2	9.8	100	59.0
Hardwood														
Net growth	Million Board Feet	906	1,033	236	804	1,246	741	1,345	141*	656	669	536*	8,313	19,385
Ratio - hardwood volume to R-8 hardwood volume	%	10.9	12.4	2.8	9.7	15.0	8.9	16.2	1.7	7.9	8.0	6.5	100	41.0
All Species														
Net growth	Million Board Feet	2,770	2,253	1,625	3,174	2,691	1,628	2,951	286*	1,851	838	1,872	21,939	47,269
Ratio - total volume to R-8 total volume	%	12.6	10.3	7.4	14.5	12.3	7.4	13.5	1.3	8.4	3.8	8.5	100	..
Ratio - southern region volume to U. S. total volume	%	..	..	..	..	..	..	..	..	..	..	..	46.4	..

1/ Net after deduction for losses including losses from weather, animals, stand suppression, etc.
 2/ Data available in cubic feet only. Percentages compare growth of growing stock and sawtimber with total annual growth in the United States. Data shown in million cubic feet.
 3/ Percent based on cubic foot comparison, Region 8 total net growth to total net growth in the United States.
 * Sampling area estimated to equal or exceed 25 percent.

Notes on Table 12

Annual mortality in the Southern Region totals 1,726 million board feet of sawtimber, as compared to 12,130 million board feet nationwide. Loss in growing stock amounts to 608 million cubic feet, as compared to a total loss of 3,389 million cubic feet in the United States.

A comparison of causes of mortality in sawtimber in the region shows that "other" causes top the list with heaviest losses, followed in order by fire, insects and disease. Losses from "other" causes in growing stock shows 51 percent of the total losses in the region. Fire is second with 20.1 percent, insects are third with 17.7 percent and disease is fourth with 11.2 percent of the total loss in the region.

Many southern states have greatly reduced losses from fire. This reduction is attributed to concentrated efforts to prevent woods fires, and to trained specialized personnel and more efficient equipment used to combat fires. Greater vigilance and more effective control measures have been initiated in most states to keep insect infestations under control.

Table 12 - Annual Mortality of Growing Stock and Live Sawtimber by Cause on Commercial Forest in the States of the Southern Region and the United States, 1952 2/

Item	Unit	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (East)	South Carolina	Tennessee	Texas (East)	South (Region B)	Continental United States
Growing Stock														
Volume loss - Total	Million Cubic Feet	82	82	40	80	76	70	35	12	39	42	50	608	3,389
Softwood	Million Cubic Feet	39	29	30	51	26	23	23	4	30	6	26	287	2,113
Hardwood	Million Cubic Feet	43	53	10	29	50	47	12	8	9	36	24	321	1,246
Mortality Cause														
Fire														
Volume loss	Million Cubic Feet	10	16	11	23	14	14	6	2	6	13	7	122	235
Ratio-volume to total volume loss	%	12.2	19.5	27.5	28.8	18.4	20.0	17.2	16.7	15.4	31.0	14.0	20.1	6.9
Insects														
Volume loss	Million Cubic Feet	13	13	5	11	15	10	9	2	10	3	17	108	943
Ratio-volume to total volume loss	%	15.9	15.9	12.5	13.7	19.7	14.3	25.7	16.7	25.6	7.1	34.0	17.7	27.8
Disease														
Volume loss	Million Cubic Feet	12	5	7	15	5	4	7	1	8	2	2	68	724
Ratio-volume to total volume loss	%	14.6	6.1	17.5	18.7	6.6	5.7	20.0	8.3	20.5	4.8	4.0	11.2	21.4
Other 1/														
Volume loss	Million Cubic Feet	47	48	17	31	42	42	13	7	15	24	24	310	1,487
Ratio-volume to total volume loss	%	57.5	58.5	42.5	38.8	55.5	60.0	37.1	58.3	38.5	57.1	48.0	51.0	43.9
Live Sawtimber														
Volume loss - Total	Million Board Feet	229	226	117	242	248	159	98	33	127	94	153	1,726	12,130
Softwood	Million Board Feet	131	104	88	152	109	88	68	13	101	16	100	990	9,702
Hardwood	Million Board Feet	98	122	29	90	139	91	30	20	26	78	53	776	2,428
Mortality Cause														
Fire														
Volume loss	Million Board Feet	19	36	22	66	40	25	17	3	23	22	14	287	779
Ratio-volume to total sawtimber volume loss	%	8.3	15.9	18.8	27.3	16.1	15.7	17.4	9.1	18.1	23.4	9.2	16.6	6.4
Insects														
Volume loss	Million Board Feet	56	48	22	38	61	32	26	9	37	8	66	403	4,735
Ratio-volume to total sawtimber volume loss	%	24.4	21.3	18.8	15.7	24.6	20.1	26.5	27.3	29.1	8.5	43.1	23.3	39.0
Disease														
Volume loss	Million Board Feet	32	15	23	51	19	11	25	2	32	7	5	222	2,075
Ratio-volume to total sawtimber volume loss	%	14.0	6.6	19.7	21.1	7.7	6.9	25.5	6.0	25.2	7.5	3.3	12.9	17.1
Other 2/														
Volume loss	Million Board Feet	122	127	50	87	128	91	30	19	35	57	68	814	4,541
Ratio-volume to total sawtimber volume loss	%	53.3	56.2	42.7	35.9	51.6	57.3	30.6	57.6	27.6	60.6	44.4	47.2	37.5

1/ Weather, animals, stand suppression, etc.

2/ Mortality of live sawtimber in board feet log scale, International 1/4-rule, and of growing stock in cubic feet excluding bark. Estimates represent the current level of mortality indicated by trends over a long period of years as determined in 1952.

Notes on Table 13

Of the 181,433,000 acres needing fire protection in the Southern Region, 82.6 percent or 149,864,000 acres are under protection, as compared to 87 percent nationwide. Another 17.4 percent or 31,569,000 acres of commercial and noncommercial forest land are still unprotected, as compared to 13 percent in the nation.

Fifty-seven percent of the protected lands in the region fall into Class 2 status of protection. Less than one percent of the lands have Class 1 status, as compared to 15 percent nationwide. Nearly 25 percent of the protected lands have low or Class 3 status of protection, as contrasted to 13 percent in the United States.

Table 12-- Commercial and Noncommercial Forest Area Requiring Fire Protection by Status of Protection, and by Ownership Class, in the States of the Southern Region, and the United States, 1952 5/

Item	Unit	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (East)	South Carolina	Tennessee	Texas (East)	South (Region E)	Continental United States
		Thousand Acres	Thousand Acres	Thousand Acres	Thousand Acres	Thousand Acres	Thousand Acres	Thousand Acres	Thousand Acres	Thousand Acres	Thousand Acres	Thousand Acres	Thousand Acres	Thousand Acres
All Ownership														
Total area	%	20,771	19,346	23,047	24,057	15,990	16,473	19,513	6,027	11,943	12,558	11,708	181,433	656,837
Protected	%	100	80	71	80	76	78	90	66	100	82	78	82.6	15
Class 1 2/	%	33	79	63	2	5	46	32	32	53	25	3	0.8	52
Class 2 3/	%	67	1	8	2	28	32	11	34	47	57	15	24.8	20
Class 3 4/	%	33	20	29	2	24	22	10	34	..	18	22	17.4	15
Unprotected	%
Federal														
Total area	%	794	2,840	2,053	1,639	746	1,264	1,710	283	768	1,085	738	13,920	198,482
Protected	%	99	97	97	100	99	99	100	96	100	100	99	98.6	99
Class 1	%	89	91	88	85	84	90	87	67	86	88	87	87.7	17
Class 2	%	10	6	9	15	15	9	11	28	13	9	7	10.1	66
Class 3	%	1	3	3	..	1	1	..	4	..	..	1	1.4	10
Unprotected	%
State, County, Municipal														
Total area	%	177	120	560	126	187	482	348	99	198	345	35	2,677	33,523
Protected	%	100	100	86	100	100	81	100	100	100	100	100	93.6	93
Class 1	%	70	72	43	76	74	47	79	..	51	25	66	0.1	34
Class 2	%	22	26	34	21	100	49	75	34	49.6	42
Class 3	%	34	..	..	19	..	..	..	..	..	43.9	17
Unprotected	%	6.4	7
Private														
Total area	%	19,800	16,386	20,434	22,292	15,057	14,727	17,455	5,645	10,977	11,128	10,935	164,836	424,632
Protected	%	100	77	68	79	74	77	89	64	100	80	77	81.1	81
Class 1	%	31	77	61	3	5	43	78	..	51	19	62	0.8	12
Class 2	%	69	..	7	75	41	34	..	31	49	61	15	54.6	47
Class 3	%	..	23	32	21	26	23	11	36	..	20	23	25.7	22
Unprotected	%	18.9	19

1/ Less than 0.5 percent.
 2/ Protection adequate to meet the fire situation in worst years and under serious peak load conditions.
 3/ Protection adequate to meet the average fire situation but failures likely in the worst years and under peak load conditions.
 4/ Protection adequate to meet fire situation in the easy years and failures frequent - average or worse years.
 5/ Includes noncommercial forest areas which require fire protection.

Notes on Table 14

In the Southern Region, 75.8 percent of the commercial forest land or nearly 135 million acres are well and medium stocked, compared to 66.9 percent nationwide. Over 15 percent of the area or over 27 million acres are poorly stocked. Another nine percent of the area or 16 million acres are nonstocked.

Nearly 63 percent of the young sawtimber and poletimber stands are well and medium stocked. Another 13 percent in seedling and sapling stands is well and medium stocked.

Table 14 - Stand-Size Class and Degree of Stocking on Commercial Forest Area in the States of the Southern Region and the United States, January 1, 1952 5/

Item	Unit	States of the Southern Region										Texas (East)	South (Region 8)	Continental United States
		Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (East)	South Carolina	Tennessee			
Total commercial area	Thousand Acres	20,756	19,292	21,519	23,969	15,899	16,440	18,976	5,257	11,891	12,301	11,703	178,003	484,340
Young Sawtimber														
Total area	Thousand Acres	6,091	6,604	3,223	6,355	7,176	5,920	6,337	1,304	4,999	2,916	4,080	55,005	132,561
Well and medium stocked 1/	Thousand Acres	6,004	6,492	2,524	5,966	6,943	5,380	6,205	1,274*	4,055	2,892	4,026*	51,761	110,611
Ratio to total commercial area in state	%	28.9	33.7	11.7	24.9	43.7	31.7	32.7	34.2	34.1	23.5	34.4	29.1	24.1
Poorly stocked 2/	Thousand Acres	87	112	699	389	233	540	132	30*	944	24	54*	3,224	15,950
Ratio to total commercial area in state	%	0.4	0.6	3.2	1.6	1.5	3.3	0.7	0.6	7.9	0.2	0.5	1.8	3.3
Polelimber Stands														
Total area	Thousand Acres	10,912	9,364	3,541	8,814	4,814	6,380	7,111	2,774	3,065	7,554	6,011	70,370	169,408
Well and medium stocked	Thousand Acres	10,317	9,486	1,844	7,464	3,963	4,496	6,248	2,304	2,045	7,070	5,885	59,922	139,920
Ratio to total commercial area in state	%	49.7	44.0	8.6	31.1	44.9	27.4	33.4	43.8	17.2	57.5	47.7	33.7	28.9
Poorly stocked	Thousand Acres	595	878	1,697	1,350	851	1,884	793	470	1,020	484	426	10,448	29,488
Ratio to total commercial area in state	%	2.9	4.5	7.9	5.6	5.3	11.5	4.2	8.9	8.6	3.9	3.6	5.9	6.1
Seedling & Sapling Stands														
Total area	Thousand Acres	3,503	3,043	5,603	7,200	2,120	3,117	4,876	1,098	3,092	1,674	1,349	36,035	94,709
Well and medium stocked	Thousand Acres	2,505	2,346	1,201	4,658	1,026	2,536	3,846	438	2,899	1,174	757	23,170	67,445
Ratio to total commercial area in state	%	12.1	12.6	5.6	20.3	13.0	15.6	20.6	8.5	24.4	9.5	6.5	13.0	15.9
Poorly stocked	Thousand Acres	998	797	4,402	2,542	1,094	879	978	660	1,193	500	992	13,452	27,264
Ratio to total commercial area in state	%	4.8	4.1	20.5	9.9	6.9	5.3	5.2	1.6	1.6	4.1	5.1	7.5	5.6
Nonstocked and Other Areas 3/														
Total area	Thousand Acres	250	281	9,152	1,600	1,789	1,033	672	81	735	157	263	16,003	41,607
Ratio to total commercial area in state	%	1.2	1.5	42.5	6.7	11.2	6.2	3.5	1.6	6.2	1.3	2.2	9.0	8.6
Summary of all stands by degree of stocking 4/														
Well and medium	%	90.7	89.3	25.9	76.2	75.1	73.7	86.4	76.3	75.7	90.5	88.6	75.8	66.9
Poorly stocked	%	8.1	9.2	31.6	17.1	13.7	20.1	10.1	22.1	18.1	8.2	9.2	15.2	15.0
Nonstocked	%	1.2	1.5	42.5	6.7	11.2	6.2	3.5	1.6	6.2	1.3	2.2	9.0	8.6

1/ 10 percent or more stocked.
 2/ 10-39 percent stocked.
 3/ Less than 10 percent stocked.

4/ Because of scattered occurrence and very limited area, no estimates were made of old growth sawtimber in the southern region.
 5/ The estimated sampling error for the breakdown by states for young sawtimber stands, polelimber stands, seedling and sapling stands and nonstocked and other areas exceeds the sampling error established for the figures used by TRR Regions in Table 20, Chapter IX - A, TRR.

* Sampling area estimated to equal or exceed 25 percent.

Notes on Table 15

Class 3 or small private ownerships, representing a large number of owners and large acreages, show low percentage in the upper or high productivity class.

In the south small private ownerships have upper productivity ratings of 27 percent of ownerships under 100 acres, 35 percent for ownerships from 100 to 500 acres, and 39 percent for ownerships from 500 to 5,000 acres.

Public and private medium and large ownerships have relatively high productivity ratings. Public ownerships show 86 percent in the upper class. Class 1 or large owners show 81 percent while Class 2 or medium ownerships show 63 percent in the upper class.

Table 15 - Productivity of Recently Out Commercial Forest Land by Type of Ownership, and Size Class of Private Ownership, in the FTR Regions of the South, and the United States, 1953

Item	Unit	South Atlantic 3/	Southeast 4/	West Gulf 5/	South	Continental United States
ALL OWNERSHIPS						
Total operating area	Thousand Acres	17,964	46,944	22,509	87,417	230,653
All Public						
Operating area	Thousand Acres	3,316	5,473	2,942	11,731	91,533
Productivity - High	%	91	90	73	86	79
Medium	%	7	8	24	12	17
Low	%	2	2	3	2	4
National Forest						
Operating area	Thousand Acres	2,544	3,407	2,603	8,554	62,194
Productivity - High	%	94	95	76	89	81
Medium	%	6	3	24	10	16
Low	%	..	2	..	1	3
Bureau of Land Management						
Operating area	Thousand Acres	..	..	13	13	3,824
Productivity - High	%	..	..	100	100	76
Medium	%	..	..	..	..	18
Low	%	..	..	..	..	6
Indian						
Operating area	Thousand Acres	45	..	..	45	5,015
Productivity - High	%	100	..	..	100	74
Medium	%	..	..	..	..	25
Low	%	..	..	..	..	1
Other Federal						
Operating area	Thousand Acres	410	1,307	207	1,924	2,365
Productivity - High	%	73	90	59	83	80
Medium	%	15	10	37	14	16
Low	%	12	..	4	5	4
State, County, and Municipal						
Operating area	Thousand Acres	317	759	119	1,195	18,135
Productivity - High	%	92	70	12	70	77
Medium	%	7	29	28	25	19
Low	%	1	1	60	7	4
All Private Classes (Class 1, 2, and 3)						
Operating area	Thousand Acres	14,648	44,471	19,867	75,686	139,130 2/
Productivity - High	%	58	53	47	56	56
Medium	%	30	25	31	29	29
Low	%	12	22	22	20	15
Class 3 (3-100 acres)						
Operating area	Thousand Acres	3,683	6,049	3,495	13,232	24,130
Productivity - High	%	41	25	19	27	38
Medium	%	41	32	47	39	37
Low	%	18	43	34	34	25
Class 3 (100-500 acres)						
Operating area	Thousand Acres	4,650	10,352	4,575	19,577	31,713
Productivity - High	%	45	37	21	35	40
Medium	%	36	29	46	35	36
Low	%	19	34	33	30	24
Class 3 (500-5,000 acres)						
Operating area	Thousand Acres	1,538	7,792	1,479	10,809	18,331
Productivity - High	%	46	41	21	39	44
Medium	%	50	38	37	40	35
Low	%	6	21	42	21	21
All Class 2 (5,000 - 50,000 acres)						
Operating area	Thousand Acres	2,056	7,412	3,266	12,734	22,599
Productivity - High	%	84	63	48	63	64
Medium	%	15	24	37	26	26
Low	%	1	13	15	11	10
All Class 1 (50,000 acres & larger)						
Operating area	Thousand Acres	2,716	9,860	6,752	19,334	42,347
Productivity - High	%	89	86	70	81	78
Medium	%	7	8	21	13	18
Low	%	4	6	9	6	4

1/ The determination of size class of private ownership, was based on the total commercial forest land area in the ownership. The operating area of an individual ownership is the combined area of the forest types, within the ownership, in which some cutting was done since January 1, 1947. The operating area of any size class or type of ownership is the sum of the operating areas on individual ownerships in that size class or type of ownership. Productivity is expressed as a percentage of operating area found to be in a high, medium, or low productivity class.

2/ Excludes North Carolina, South Carolina and Virginia.

3/ Includes Alabama, Florida, Georgia, Mississippi and Tennessee.

4/ Includes Arkansas, Louisiana, Oklahoma (East) and Texas (East).

5/ Includes Arkansas, Louisiana, Oklahoma (East) and Texas (East).

Notes on Table 16

Wood-using industries in the south have attained relatively high productivity ratings.

Pulp manufacturers lead with 96 percent in the upper productivity class, while lumber manufacturers show 69 percent.

Other private ownerships have less than 44 percent in the upper class.

Table 16 - Productivity of Recently Cut Private Commercial Forest Land by Type of Private Owner, in the Three Regions of the South and the United States, 1951

Item	Unit	South Atlantic ^{2/}	Southeast ^{6/}	West Gulf ^{7/}	South	Continental United States
All Private Ownerships						
Operating area - High	Thousand Acres	14,648	41,471	19,567	75,686	139,120 ^{1/}
Productivity - High	%	88	53	42	51	56
Medium	%	20	25	56	29	29
Low	%	12	22	22	20	15
Farm						
Operating area	Thousand Acres	7,958	18,824	5,784	32,566	52,978
Productivity - High	%	45	35	18	34	41
Medium	%	38	34	51	37	37
Low	%	17	31	31	28	22
Lumber Manufacturer ^{2/}						
Operating area	Thousand Acres	1,871	4,213	5,665	11,749	24,058
Productivity - High	%	..	..	..	69	73
Medium	%	..	..	..	23	21
Low	%	..	..	..	8	6
Pulp Manufacturer						
Operating area	Thousand Acres	1,895	5,392	1,633	8,920	17,402
Productivity - High	%	98	99	82	96	86
Medium	%	..	1	18	4	15
Low	%	..	..	2/	2/	1
All Wood-Using Industries ^{4/}						
Operating area	Thousand Acres	4,023	11,207	7,593	22,823	44,573
Productivity - High	%	81	88	69	81	77
Medium	%	15	9	24	15	19
Low	%	4	3	7	4	4
Other Private						
Operating area	Thousand Acres	2,667	11,440	6,190	20,297	41,569
Productivity - High	%	60	46	32	44	52
Medium	%	32	28	34	30	28
Low	%	8	26	34	26	20

^{1/} Excludes 1537 thousand acres of commercial forest land in large private ownerships on which access was denied. The proportion of this area in operating status is not known.

^{2/} Productivity estimates are omitted on a regional basis because sampling of small ownerships, which make up a large share of the total, was not adequate to provide valid estimates for region breakdowns.

^{3/} Less than 0.5 percent.

^{4/} Includes lumber, pulp and all other wood-using industries combined.

^{5/} Includes North Carolina, South Carolina and Virginia.

^{6/} Includes Alabama, Florida, Georgia, Mississippi and Tennessee.

^{7/} Includes Arkansas, Louisiana, Oklahoma (East) and Texas (East).

Notes on Table 17

Acceptable Plantations

The Southern Region has nearly two million acres of acceptable plantations out of the nation's total of nearly five and one-fourth million acres.

In the region private ownerships have 73.9 percent of the acceptable plantations or 1,435,700 acres, as compared to 47.5 percent in the United States. Acceptable plantations on national forests total 325,900 acres or 16.8 percent of the total planted area in the region. Other federal ownerships have 119,600 acres or 6.1 percent of the total area.

State ownerships total 52,700 acres or 2.7 percent of the total acceptable plantations. Another 9,700 acres or 0.5 percent of the total area are located on county and municipal ownerships.

Plantable Areas

The Southern Region has over 20 million acres or 39 percent of the nation's 52 million acres of plantable area.

Nearly 19 million acres of private land in the region need to be planted. A total of 476,000 acres of national forest land need planting. Other federal ownerships have 412,000 acres of plantable area.

State ownerships have 224,000 acres in need of planting while some 166,000 acres are located on county and municipal ownerships.

Table 17—Area of Acceptable Plantations, and Plantable Area, on Commercial Forest Area, by Ownership, Class, in the States of the Southern Region and the United States, 1952 2/

Item	Unit	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (East)	South Carolina	Tennessee	Texas (East)	South (Region 8)	Continental United States 2/
AREA OF ACCEPTABLE PLANTATIONS, JUNE 30, 1952														
All ownerships														
Total area	Thousand Acres	156.8	76.6	227.0	344.4	271.1	256.3	80.9	6.9	186.4	197.0	120.2	1,943.6	5,210.1
Ratio:total area in state to Region 8 total area	%	8.1	3.9	11.7	17.7	15.0	13.2	4.2	0.3	9.6	10.1	6.2	100	..
Federal														
Total area	Thousand Acres	57.9	13.4	21.8	8.5	80.3	134.6	12.6	3.6	27.9	47.6	37.3	445.5	1,586.1
Ratio:area to total area in state and in Region 8 to United States	%	36.9	17.5	9.6	2.5	27.6	52.5	15.6	52.2	15.0	24.2	31.0	22.9	30.4
National forest														
Total area	Thousand Acres	36.3	9.6	9.0	3.4	76.9	129.2	5.9	..	15.8	3.3	36.5	325.9	1,419.2
Ratio:area to total area in state and in Region 8 to United States	%	23.1	12.5	4.0	1.0	26.4	50.4	7.3	..	8.5	1.7	30.4	16.8	27.2
Other Federal														
Total area	Thousand Acres	21.6	3.8	12.8	5.1	3.4	5.4	6.7	3.6	12.1	44.3	0.8	119.6	166.8
Ratio:area to total area in state and in Region 8 to United States	%	13.8	5.0	5.6	1.5	1.2	2.1	8.3	52.2	6.5	22.5	0.6	6.1	3.2
State														
Total area	Thousand Acres	2.7	0.1	4.0	3.7	3.9	2.2	2.8	..	11.8	20.4	0.8	52.7	899.8
Ratio:area to total area in state and in Region 8 to United States	%	1.7	0.1	1.7	1.0	1.3	0.9	3.4	4.3	6.3	10.3	0.7	2.7	17.3
County, municipal														
Total area	Thousand Acres	0.2	0.4	0.6	2.0	2.1	0.2	0.7	1/	1.0	0.6	1.9	9.7	290.2
Ratio:area to total area in state and in Region 8 to United States	%	0.2	0.5	0.3	0.6	0.7	0.1	0.9	..	0.5	0.5	1.6	0.5	4.8
Private														
Total area	Thousand Acres	96.0	62.7	200.6	330.2	204.8	119.3	64.8	3.0	145.7	128.4	80.2	1,435.7	2,474.0
Ratio:area to total area in state and in Region 8 to United States	%	61.2	81.9	88.4	95.9	70.4	46.5	80.1	43.5	78.2	65.2	66.7	73.9	47.5
PLANTABLE AREA JANUARY 1, 1953														
All ownerships														
Total area	Thousand Acres	1,734	1,525	5,070	1,574	1,224	4,343	970	433	1,311	1,493	500	20,147	51,948
Ratio:total area in state to Region 8 total area	%	8.6	7.5	25.2	7.8	6.1	21.6	4.8	2.0	6.5	7.4	2.5	100	..
Federal														
Total area	Thousand Acres	59	107	211	8	85	156	72	8	142	28	12	888	5,617
Ratio:area to total area in state and in Region 8 to United States	%	3.4	7.1	4.2	0.5	6.9	3.6	7.4	1.9	10.8	1.9	2.4	4.4	10.8
National forest														
Total area	Thousand Acres	46	73	110	3	70	101	58	1	9	3	2	476	4,567
Ratio:area to total area in state and in Region 8 to United States	%	2.7	4.8	2.2	0.2	5.7	2.3	6.0	0.2	0.7	0.2	0.4	2.4	8.8
Other Federal														
Total area	Thousand Acres	13	34	101	5	15	55	14	7	133	25	10	412	1,050
Ratio:area to total area in state and in Region 8 to United States	%	0.7	2.3	2.0	0.3	1.2	1.3	1.4	1.7	10.1	1.7	2.0	2.0	2.0
State														
Total area	Thousand Acres	4.5	..	22	3	..	24	40	..	63	25	2	224	2,276
Ratio:area to total area in state and in Region 8 to United States	%	2.6	..	0.4	0.2	..	0.6	4.1	..	4.8	1.7	0.4	1.1	4.4
County, municipal														
Total area	Thousand Acres	..	3	5	..	25	127	5	..	..	..	1	166	1,009
Ratio:area to total area in state and in Region 8 to United States	%	..	0.2	0.1	..	2.1	2.9	0.5	..	..	..	0.2	0.8	1.9
Private														
Total area	Thousand Acres	1,630	1,405	4,832	1,563	1,114	4,036	853	405	1,106	1,440	485	18,869	43,046
Ratio:area to total plantable in state and in Region 8 to United States	%	94.0	92.7	95.3	99.3	91.0	92.9	88.0	98.1	84.4	96.4	97.0	93.7	82.9

1/ Less than 0.05 thousand acres.

2/ Percent of acceptable plantations and plantable area by ownerships in the United States.

3/ To qualify as acceptable, plantations must have at the end of the fifth year after planting 400 planted trees per plantation acre.

Notes on Table 18

Some significant facts as of January 1, 1953 relative to the future of the timber resource in the Southern Region are highlighted as follows:

1. The Southern Region contains 37 percent of the nation's commercial forest area.
2. Commercial forest area covers 59 percent of the total land area in the region.
3. The majority of the future timber products in the region will continue to be cut from private holdings, represented by nearly 1,616,000 owners, who own 91.5 percent of the total commercial forest area. Over 1,614,000 of these owners, with holdings less than 5,000 acres in size, control 65 percent of the total commercial forest area in the region.
4. The Southern Region has 16.6 percent of the sawtimber volume and 20.7 percent of the growing stock in the United States.
5. Over 46 percent of the annual growth of sawtimber and about 44 percent of the annual growth of growing stock in the United States occur in the southern states. Based on increase in sawtimber growth in all stands from the present average of 123 board feet per acre to future estimated realizable growth of 235 board feet per acre, commercial forest lands of the region could produce nearly double the present output in the foreseeable future.
6. Annual mortality from all causes in the region totals 1,726,000,000 board feet of sawtimber. Growing stock losses amount to 608,000,000 cubic feet.
7. In the Southern Region 31,569,000 acres of commercial and noncommercial forest land are still unprotected.
8. Over 27,000,000 acres in the region are poorly stocked. Another 16,000,000 acres are nonstocked.

Table 18 - Summary of Significant Basic Statistics, in the States of the Southern Region, and the United States

Reference Number	Item	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	North Carolina	Oklahoma (East)	South Carolina	Tennessee	Texas (East)	South (Region 8)	Continental United States	Reference Number
1	Total Land Area	32,690	33,712	34,728	37,429	28,904	30,239	31,422	9,798	19,395	26,750	18,643	303,710	1,903,824	1
2	Commercial Forest Area	20,756	19,292	21,519	23,969	15,899	16,440	18,976	5,257	11,891	14,301	11,703	178,003	484,340	2
3	Ratio: Commercial Forest Area to Total Land Area	63.4	57.2	62.0	64.0	55.0	54.4	60.4	53.6	61.3	46.0	62.8	58.6	25.4	3
4	Ratio: Federal Commercial Forest Area	789	2,802	1,813	1,557	667	1,245	1,304	270	763	833	736	12,779	98,874	4
5	Ratio: National Forest Area to Total Commercial Forest Area	3.8	3.4	4.4	6.5	4.2	7.6	6.9	5.1	6.4	6.8	6.3	7.2	20.4	5
6	Ratio: National Forest Area to Total Commercial Forest Area	6.4	2,326	1,035	641	536	1,036	999	180	524	566	655	9,112	81,314	6
7	Ratio: National Forest Area to Total Commercial Forest Area	3.0	12.0	4.8	2.7	3.4	6.3	3.4	3.4	4.6	5.6	5.1	16.8	7	
8	Total State, County and Municipal Commercial Forest Area	177	108	428	125	181	473	279	153	339	31	2,383	27,216	8	
9	Total Private Commercial Forest Area (Class 1, 2, and 3)	19,790	16,382	19,268	22,287	15,051	14,722	17,939	4,908	10,975	11,129	10,936	162,841	358,250	9
10	Ratio: Private Area to Total Commercial Forest Area	95.3	84.9	89.6	93.0	84.7	89.5	91.6	93.4	92.3	90.5	93.4	91.5	74.0	10
11	Private Ownership by Size-Class of Ownership	2,450	3,113	5,865	2,475	4,216	1,736	1,347	1,347	2	1,268	499	3,076	26,355	11
12	Area - Private Owners - Class 1 (50,000 & Larger)	20	14	31	31	33	12	12	12	9	7	9	16	307	12
13	Ratio: Class 1 - Area to Total Commercial Forest Area	12.3	16.1	27.3	10.3	26.5	10.7	8.1	8.1	26.3	10.7	26.3	10.7	12.0	13
14	Area - Private Owners - Class 2 (5,000 to 50,000 Acres)	2,639	1,427	3,841	2,578	2,665	1,498	1,269	1,174	1,080	1,514	922	20,607	34,669	14
15	Ratio: Class 2 - Area to Total Commercial Forest Area	21.8	93	270	204	145	91	108	35	14.5	111	59	1,424	2,526	15
16	Total Owners - Class 2	12.7	7.4	17.9	10.8	16.8	9.1	6.7	22.4	7.8	12.3	7.8	11.4	15	
17	Area - Private Owners - Class 3 (3 - 5,000 Acres)	14,601	11,842	9,562	17,234	11,700	11,468	14,577	3,734	8,627	9,116	6,938	115,869	265,264	16
18	Ratio: Class 3 - Area to Total Commercial Forest Area	169,583	160,850	93,282	196,448	111,476	133,292	266,358	69,258	116,115	185,215	112,128	1,614,388	4,507,608	17
19	Ratio: Class 3 - Area to Total Commercial Forest Area	70.3	61.4	44.4	71.9	51.4	69.7	76.8	71.0	72.5	74.1	59.3	65.1	54.8	18
20	Average Size of Holding - Class 3	86	74	103	88	73	86	55	54	74	49	62	72	59	19
21	Class 3 Ownerships by Size-Class	2,538	2,176*	1,179*	2,398	1,640	1,744	3,660	1,378*	1,359	2,647	1,284*	22,003	2	21
22	Total Owners-Class 3 (3-50 Acres)	93,085	87,982	53,756	103,400	71,584	73,113	175,140	53,051	63,051	136,512	66,904	979,578	1,588,603	22
23	Ratio: Area to Total Commercial Forest Area	12.2	11.3	5.5	10.0	10.6	10.6	19.3	26.2	11.4	21.5	15.4	21.4	57	23
24	Area - Class 3 (50 - 100 Acres)	2,968	2,281*	2,649	1,347	2,078	2,078	3,445	470*	1,758	1,571	1,495*	21,424	24	
25	Total Owners - Class 3 (50 - 100 Acres)	39,118	36,318	13,459*	40,580	20,395*	30,151	50,425	6,697*	26,144	28,017	24,318	317,004	1,503	24
26	Ratio: Area to Total Commercial Forest Area	14.3	11.8	4.3	11.1	8.5	12.6	18.1	8.1	16	20.1	12.8	17.0	17	
27	Area - Class 3 (100 - 500 Acres)	6,169	4,774	3,619	7,312	3,268	4,490	5,743	1,624*	3,335	2,955	3,219	47,271	97,872	27
28	Total Owners - Class 3 (100 - 500 Acres)	34,872	32,690	21,344*	47,156	17,914*	27,500	34,083*	9,243*	24,763	19,665	21,804	290,771	565,227	28
29	Ratio: Area to Total Commercial Forest Area	28.7	24.4	16.8	31.3	23.5	37.1	30.3	33.3	37.5	24.3	30.0*	25.21	20.2	29
30	Area - Class 3 (500 - 5,000 Acres)	2,928	2,671*	3,840	4,671*	2,013	3,613	3,073	2,576*	1,553	1,823	910*	25,213	46,378	30
31	Total Owners - Class 3 (500 - 5,000 Acres)	2,908*	3,728*	4,743*	3,52*	1,963*	3,168*	1,981*	1,594*	858*	1,023*	720*	24,133	46,334	31
32	Ratio: Area to Total Commercial Forest Area	14.1	13.9	17.8	13.5	12.1	19.2	9.1	13.5	13.0	12.6	8.0	14.2	9.6	32
33	Total Volume Sawtimber - All Stands	38,211	38,317	33,032	36,923	41,436	25,789	64,152	5,890	34,299	15,350	25,575	326,661	1,867,789	33
34	Softwood Volume	24,299	27,777	18,064	23,113	18,228	11,138	23,159	22,330	22,300	2,590	16,741	173,124	1,588,603	34
35	Hardwood Volume	13,912	20,540	14,968	13,810	23,208	14,651	21,693	3,350	13,262	12,760	8,834	153,537	1,409,186	35
36	Average Sawtimber Volume Per Acre - All Stands	11,811	11,986	10,770	11,900	12,626	11,569	13,227	1,081	1,716	1,248	1,185	1,865	4,063	36
37	Volume Growing Stock - All Stands	11,713	11,763	8,152	12,692	11,139	9,628	13,642	1,780	9,613	5,770	7,247	103,188	498,439	37
38	Cut - All Products and All Stands	769	380	252	760	405	647	802	39	380	244	368	4,855	10,744	38
39	Growth - All Stands	92.1	90.8	68.7	73.8	71.6	71.6	80.2	97	509	486	62.0	62.0	14,211	39
40	Comparison Growth to Cut - 1952	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	40
41	Cut - Softwood Sawtimber	1,498	684	808	2,199	749	966	1,542	52	953	234	1,150	10,855	36,460	41
42	Growth - Softwood Sawtimber	1,864	1,220	1,389	2,370	1,445	887	1,606	1,645*	1,195	1,69	1,336	13,626	27,884	42
43	Comparison Growth to Cut - 1952	2.4	78.4	71.9	78.9	92.9	10.0	10.0	178.8	25.4	27.8	16.2	25.5	25.5	43
44	Cut - Hardwood Sawtimber	879	867	123	704	846	1,225	840	89	458	759	396	7,183	12,294	44
45	Growth - Hardwood Sawtimber	906	1,033	236	804	1,246	741	1,345	141*	656	656	8,313	19,385	19,385	45
46	Comparison Growth to Cut - 1952	3.1	19.1	91.9	104.7	147.3	39.5	60.1	58.4	43.2	11.9	35.4	15.7	15.7	46
47	DECEASED STOCKING														47
47	Early and Medium	90.7	89.3	25.9	76.2	75.1	73.7	86.4	76.3	75.7	90.5	88.6	75.8	66.9	47
48	Poorly	8.1	9.2	31.6	17.1	13.7	20.1	10.1	22.1	18.1	8.2	9.2	15.2	15.0	48
49	Non-Stocked	1.2	1.5	42.5	6.7	11.2	0.2	3.5	1.6	6.2	1.3	2.2	9.0	8.6	49
50	STATUS OF FIBER PROTECTION														50
50	Total Area - All Ownerships	20,771	19,346	23,047	24,057	15,990	16,473	19,513	6,027	11,943	12,588	11,708	181,433	656,837	50
51	Protected - (Includes Protection Classes 1, 2, & 3)	100	20	29	20	24	22	10	34	60	100	82	17.4	13	51
52	Unprotected	6													52
53	Plantable Area - All Ownerships	1,734	1,545	5,070	1,574	1,224	4,343	970	413	1,311	1,493	500	30,147	5,948	53

1/ Forested Section only.
 2/ Included in the 5,000 to 50,000 acre size class, in order to avoid possible disclosure of individual owners.
 3/ Data not available except total acreage for holdings under 100 acres equals 121,013,000 in Continental United States.
 4/ Data not available except total area for holdings under 100 acres equals 3,874,847 in Continental United States.
 5/ Data not available except total area under 100 acres. Ratio to total Commercial Forest Area = 25.0%.
 6/ Less than 0.5 percent.
 * Sampling area estimated to equal or exceed 25 percent.

Chart 1 - Projection of population increase by the Bureau of Census, based on trends during the first half of the century, indicates the nation's population of 210 million in 1975 and 275 million in 2000, as contrasted to an estimated 165 million in 1955.

Projection of the gross national product, which is the total national output of all goods and services, shows nearly 100 percent increase during the 1950-1975 period, to a total in 1975 of 630 billion dollars (in terms of 1953 dollars). (Figure 1, Page 10, Chapter I - TIMBER RESOURCE REVIEW)

Chart 2 - From 1900 to about 1935 consumption of industrial timber products declined in relation to the consumption of all physical structure raw materials. However, as technological improvements in use of wood developed, this decline leveled off and during recent years the consumption of industrial timber products has increased in relation to consumption of other physical structure raw materials. Past and present trends of new industries, accelerated housing projects, plant extensions, and new uses of basic raw materials, indicate increases in consumption of all materials in the foreseeable future. (Figure 4, Page 13, Chapter I - TIMBER RESOURCE REVIEW)

Chart 3 - During the first half of the twentieth century, raw material requirements in the nation increased considerably faster than population. This trend can be observed by comparing periods in Charts 1 and 3. (Figure 3, Page 11, Chapter I - TIMBER RESOURCE REVIEW)

Chart 4 - Consumption of industrial wood is shown for the years 1900 through 1950 with two projections of estimated requirements.

The lower level estimates reflect a relatively smaller demand for timber products and continued increase in the real price. In contrast, the upper level estimates are based on the assumption that industrial timber products will occupy the same position relative to consumption of all physical structure materials as they did in 1952 (see Chart 2).

The decline in consumption of industrial wood during the early decades of this century corresponds to the decline in relative consumption (see Chart 2). However, as relative consumption stabilized in the 1930's absolute consumption as shown in Chart 4 increased with population growth and increases in gross national product. (Figure 7, Page 27, Chapter I - TIMBER RESOURCE REVIEW)

POPULATION & GROSS NATIONAL PRODUCT

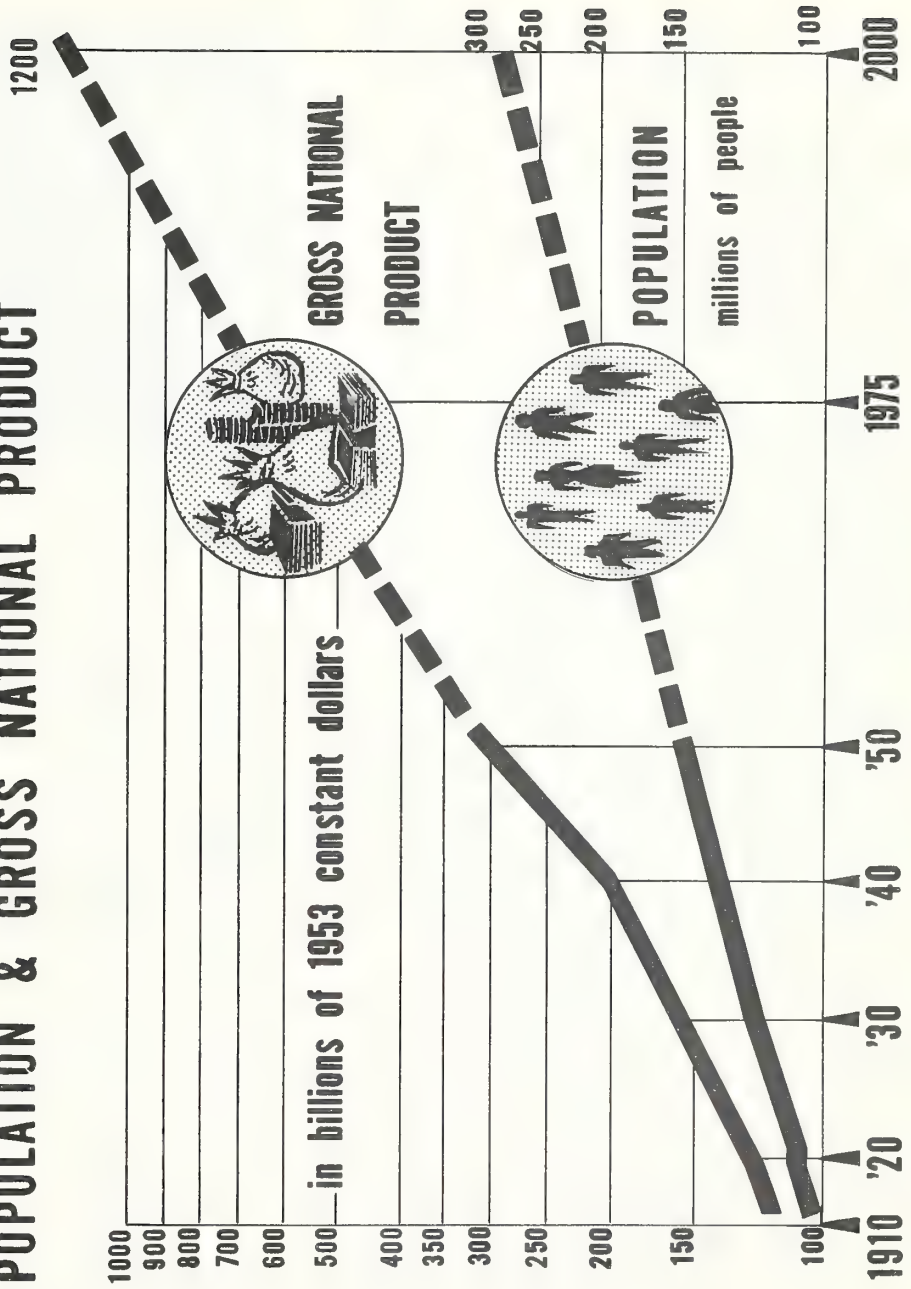
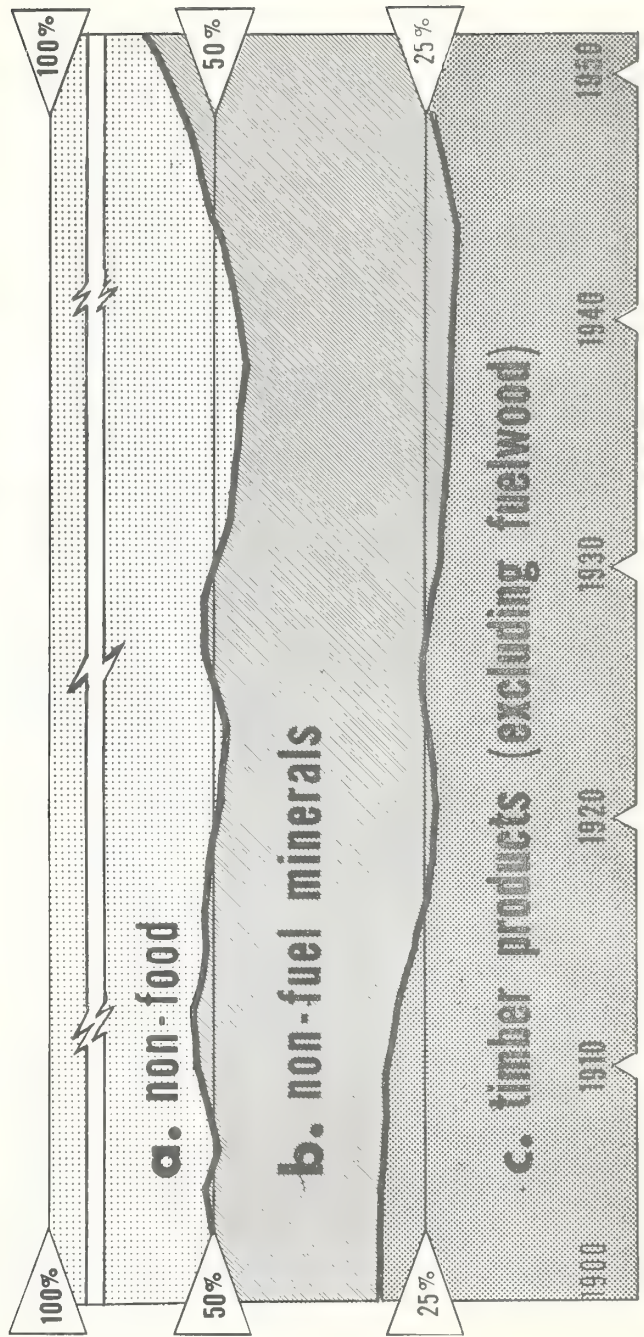
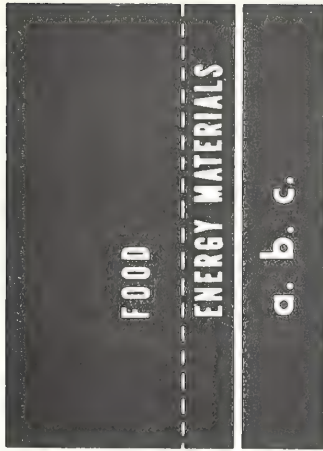


CHART 1



BASIC RAW MATERIALS

PHYSICAL STRUCTURE RAW MATERIALS





CONSUMPTION PHYSICAL STRUCTURE RAW MATERIALS

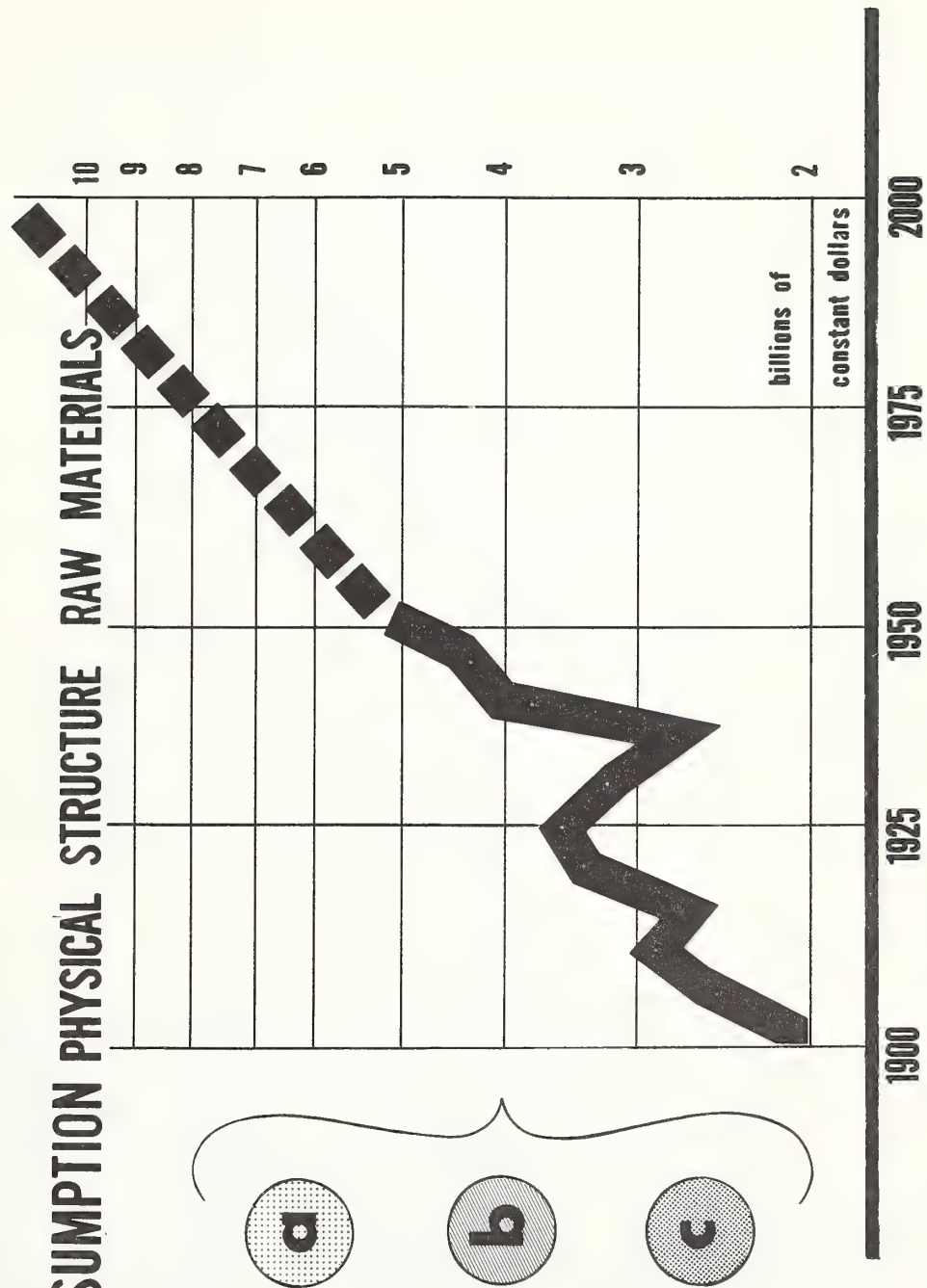


CHART 3

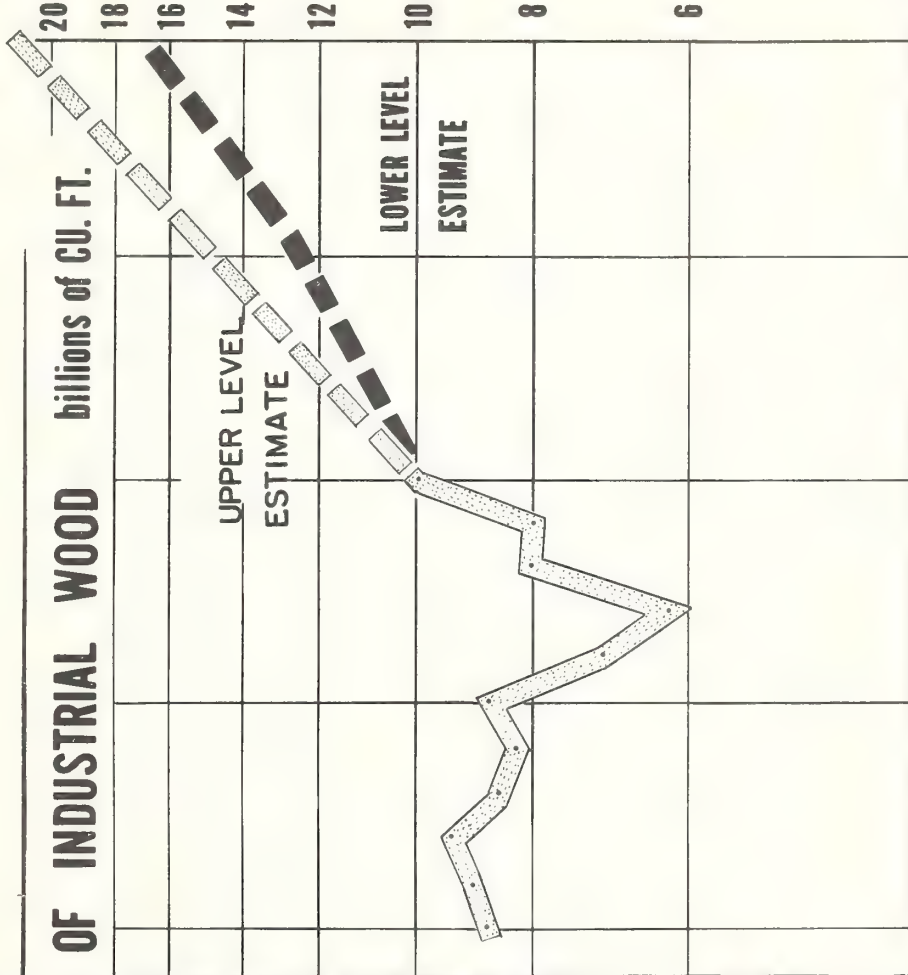






CONSUMPTION OF INDUSTRIAL WOOD

billions of CU. FT.



1900 1925 1950 1975 2000

CHART 4





EXPLANATION OF TERMS

Commercial forest land area. See "forest land area."

Commercial species. Tree species considered in determining stocking and growing stock. Includes species presently or prospectively usable for commercial timber products; excludes so-called weed species such as sassafras, hawthorn, and ironwood.

Fire protection status. A classification of commercial and noncommercial forest lands requiring protection from fire according to the degree of protection given them.

Protected.

Class 1. Protection adequate to meet the fire situation in worst years and under serious peak load conditions.

Class 2. Protection adequate to meet the average fire situation but failures likely in worst years and under peak load conditions.

Class 3. Protection adequate to meet the fire situation in easy years but failures frequent in average or worse years.

Unprotected. No protection given.

Forest land area. Includes (a) lands which are at least 10 percent stocked by trees of any size and capable of producing timber or other wood products, or of exerting an influence on the climate or on the water regime; (b) land from which the trees described in (a) have been removed to less than 10 percent stocking and which have not been developed for other use; (c) afforested areas; and (d) chaparral areas. Does not include orchard land. The minimum area that qualifies as forest land is one acre in the East and 10 acres in the West. Roadside, streamside, and shelterbelt strips of timber, in addition to meeting the above requirements, must be at least 120 feet wide to qualify as forest land.

Forest land area. (continued)

Commercial forest land area. Forest land which (a) is producing, or physically capable of producing, usable crops of wood (usually sawtimber), (b) economically available now or prospectively, and (c) not withdrawn from timber utilization.

Noncommercial forest land area. Forest land (a) withdrawn from timber utilization through statute, ordinance, or administrative order but which otherwise qualifies as commercial forest land, or (b) incapable of yielding usable wood products (usually sawtimber) because of adverse site conditions, or so physically inaccessible as to be unavailable economically in the foreseeable future.

Growth.

Net annual growth of sawtimber. The change during a specified year in net board-foot volume of live sawtimber resulting from natural causes exclusive of catastrophic losses.

Net annual growth of growing stock. The change during a specified year in net cubic-foot volume of growing stock resulting from natural causes exclusive of catastrophic losses. Also given in standard cords.

Needed growth. The net annual growth of timber on commercial forest land which would meet a specified future level of wood requirements plus a margin for catastrophic losses, national emergencies, and new forms of wood use.

Realizable growth. The net annual growth of timber on an area of commercial forest land which it would be practical to attain if all the land is managed as intensively as is justified under specified assumptions as to future prices and other economic conditions.

Growth impact. Mortality plus growth loss.

Mortality. The net board-foot volume removed from live sawtimber, or the net cubic-foot volume removed from growing stock, during a specified year through death from natural causes, exclusive of catastrophic losses.

Growth impact. (continued)

Growth loss. Growth deficiency plus loss of accumulated growth.

Growth deficiency. Timber loss due to (a) delay in restocking or deficiencies in stocking resulting from causes such as attack by insects, disease or animals or fire or adverse weather effects, and (b) the reduction in growth due to changes in timber type, defoliation, reduction of tree vigor, increase in cull percent, or deterioration of site due to such destructive agents.

Loss of accumulated growth. The effect on present and prospective yields of live sawtimber of growing stock due to mortality (caused by such agents as fire, insects, disease, animals and adverse weather) of poletimber trees, saplings and seedlings in the case of sawtimber yields, and saplings and seedlings in the case of growing stock yields.

Hardwoods. In the United States and Coastal Alaska, dicotyledonous (usually broadleaved and deciduous) trees of commercial species.

Industrial and other private ownership. Private ownership other than farm. Includes ownerships of the primary wood manufacturing industries.

Land area. Includes dry land and land temporarily or partially covered by water, such as marsh lands, swamps, and river flood plains (omitting tidal flats); streams, sloughs, estuaries, and canals less than one-eighth of a statute mile in width; and lakes, reservoirs, and ponds having less than 40 acres of area.

Forest land. See "forest land area."

Cropland in farms. Includes cropland harvested, cropland not harvested and cropland not pastured.

Pasture in farms. Includes cropland used only for pasture and other pasture defined in the 1950 Census of Agriculture.

Other land. This item includes all house lots, barn lots, lanes, roads, ditches, power lines, etc. It includes all nonforest land which is not included in any of the other specified land-use classes.

Logging residues.

Logging residues from live sawtimber. The net board-foot volume of live sawtimber trees cut or killed by logging and not converted to timber products.

Logging residues from growing stock. The net cubic-foot volume of live sawtimber and poletimber trees cut or killed by logging and not converted to timber products. Also given in standard cords.

Mortality, annual.

Annual mortality of sawtimber. The average annual net board-foot volume removed from live sawtimber during a specified period through death from natural causes, exclusive of catastrophic losses.

Annual mortality of growing stock. The average annual net cubic-foot volume, removed from growing stock during a specified period through death from natural causes, exclusive of catastrophic losses. Also given in standard cords.

Net volume.

Net volume in board feet. Gross volume in terms of the International 1/4-inch log rule less deductions for rot, sweep, and other defects affecting use for lumber.

Net volume in cubic feet. Gross volume in cubic feet less deductions for rot. Also reported in standard cords of 128 cubic feet, including bark.

Nonforest land area. Land that does not qualify as forest land. The minimum area recognized as nonforest land is one acre in the East and 10 acres in the West. Unimproved roads, streams, canals, rights-of-way, clearings, and treeless strips must be at least 120 feet wide to qualify as nonforest land. Improved roads, regardless of width, will be classified as nonforest land. Includes land which has never supported forest growth; land which is less than 10 percent stocked with forest trees and which has been developed for other use, such as grazing, agricultural, residential, or industrial; all land in thickly populated urban and suburban areas, and water classified by the Bureau of the Census as land. See "land area" and "Forest land area."

Old-growth sawtimber stands. Sawtimber stands in which over 50 percent of the net board-foot volume is in old-growth sawtimber trees.

Operating area. (1) The operating area of an individual ownership is the combined area of the forest types, within the ownership, in which some cutting was done between January 1, 1947, and date of examination, 1952-1954. (2) The operating area of any size-class or type of ownership is the sum of the operating areas on individual ownerships in that size-class or type of ownership.

Owner. The person or group of persons in whom is vested the title of a particular property.

Ownership. The property owned by one owner, regardless of the number of parcels that it may consist of, in a specified area such as a state, region, or section, or in the United States and Coastal Alaska as a whole.

Ownership classes. A classification of property based on the following types of ownership:

Federal ownership or trusteeship. Property owned or administered by the Federal government. Includes the following types of ownership:

National forest. Federal property which, by executive order or statute, has been designated as a national forest, purchase unit, or experimental area or Federal property administered in conjunction with the national forests.

Indian. Indian tribal property or trust allotments, i.e., real estate held in fee by the Federal government but administered and managed for Indian tribal groups, or allotted in trust to individual Indians.

Bureau of Land Management. Federal property administered by the Bureau of Land Management in the U. S. Department of the Interior.

Other Federal. Other property owned or administered by the Federal government.

State ownership. Property in State ownership or under lease to a State for 50 years or more.

County and municipal ownership. Property in county, municipal or other local public ownership.

Private ownership. Property in one of the following types of private ownership:

Farm. Land in farms as defined by the Census of Agriculture, with these exceptions: (a) Indian reservation farms (classified as land in Federal ownership or trusteeship), (b) public institutional, experiment station, and other public land in farms (classified as land in specified public ownership), (c) certain large acreages of grazing lands in the West, leased from railroads or other non-farmers without transfer of timber cutting rights to the lessee (classified as land in forest industry or other private ownership).

In the 1950 Census of Agriculture, a farm was a place of three or more acres producing agricultural products in 1949, exclusive of home gardens, valued at \$150 or more. The agricultural products could have been either for home use or for sale. Places of less than three acres were counted as farms only if the value of sales of agricultural products in 1949 amounted to \$150 or more. Places operated in 1949 for which the value of agricultural products in 1949 was less than these minima because of crop failure or other unusual situation, and places operated in 1950 for the first time were counted as farms if normally they could be expected to produce these minimum quantities of farm products.

All the land under the control of one person or partnership, through ownership, lease, rental or cropping arrangement, was included as one farm ownership.

Commercial forest land in farms is not the same as woodland in farms as reported by the Census. Part of the difference is due to the exceptions to land in farms, stated above. However, the major part of the difference arises because some of the woodland in farms is noncommercial forest land. In some cases, lands that qualify as commercial forest land were classed as pasture or waste lands by the Census.

Forest industries. (Also termed primary wood manufacturing industries or wood using industries). Property of forest owners who operate primary wood processing plants and who apparently obtain more of their income from the sale of wood products than from any other single source, or who operate wood processing subsidiary corporations that derive income chiefly from the sale of wood products. Includes industries comprised of the following kinds of manufacturers:

Private ownership classes (continued)

Lumber manufacturer. A forest owner who manufactures lumber and who uses a greater cubic volume of timber from his land for this purpose than in any other type of primary wood-processing plant that he may operate.

Pulp manufacturer. A forest owner who manufactures pulp and who uses a greater cubic volume of timber from his land for this purpose than in any other type of primary wood-processing plant that he may operate.

Other wood manufacturer. A forest owner who manufactures veneer, cooperage or other wood products except pulp and lumber.

Other private ownership. Private property, other than that classified as farm or forest industry ownership, such as property owned by business and professional persons, wage earners, housewives, retired persons, nonforest industries, estates, and dealers in forest land.

Ownership size classes. A classification of private commercial forest land based on the acreage of commercial forest land in an ownership, regardless of the number of tracts that comprise it. Synonymous with "size class of owner" or "owner size class."

Class 3 - Small. An ownership of less than 5,000 acres of commercial forest land. Ownerships of less than 3 acres in the East and of less than 10 acres in the West were not enumerated, nor was the productivity of their cutover lands determined, though their acreage is included in the commercial forest area of small ownerships.

Class 2 - Medium. An ownership of 5,000 to 50,000 acres of commercial forest land.

Class 1 - Large. An ownership of 50,000 or more acres of commercial forest land.

Physical-structure raw materials. All raw materials other than foods, gold, and energy materials.

Plant residues. Slabs, edgings, trimmings, miscuts, cull pieces, veneer cores, sawdust, shavings, wood substance lost in barking, chipper rejects and screenings at pulp mills, veneer clippings and other residues developed from logs, bolts and other round timber in the primary manufacturing process, excluding lignin and various dissolved wood substances incurred in pulp manufacture.

Plantable area. Nonstocked or poorly stocked forest land or nonforest land on which (a) the establishment or interplanting of forest tree cover is desirable and practical, and on which (b) forest tree regeneration will not occur naturally in desirable density within a reasonable period of time.

Total plantable area. Plantable area at a specified time plus area of acceptable plantations established prior to that time.

Plantation. An area on which forest tree cover has been established by planting.

Acceptable plantation. A plantation that has at least 400 trees of planted forest trees per plantation acre at the end of the fifth year after planting. (Eastern and Southern species.)

Planting. The establishment of tree cover by setting nursery stock in the ground or by direct seeding.

Productivity of recently cut land. A concept used to evaluate the conditions affecting present and prospective timber growth, on lands logged for commercial timber products between January 1, 1947 and date of examination, 1952-1954, in relation to standards of stocking, species composition, and felling age adjudged currently attainable and practical under local conditions.

Salvable dead trees. Standing or down dead trees which are considered merchantable by regional standards.

Sawtimber volume.

Live sawtimber volume. Net volume in board feet, International 1/4-inch rule, of live sawtimber trees of commercial species.

Salvable dead sawtimber volume. Net volume in board feet, International 1/4-inch rule, of salvable dead sawtimber trees of commercial species.

Softwoods, In the United States and Coastal Alaska, coniferous, evergreen (except larches and baldcypress) trees of commercial species.

Stand improvement practices. Measures, such as pruning, release cutting, girdling, weeding, or poisoning of cull trees, applied with purposeful intent to improve growing conditions in either natural or planted stands, but which do not result in the production of commercial timber products.

Stand size class.

Sawtimber stands. Stands of sawtimber trees having a minimum net volume per acre of 1,500 board feet, International 1/4 inch-rule.

Poletimber stands. Stands failing to meet the sawtimber stand specifications, but at least 10 percent stocked with poletimber and larger trees and with at least half this minimum stocking in poletimber trees.

Seedling and Sapling stands. Stands not qualifying as sawtimber or poletimber stands, but at least 10 percent stocked with trees and with at least half this minimum stocking in seedlings or saplings.

Nonstocked and other areas. Areas not qualifying as sawtimber, poletimber, or seedling and sapling stands.

Standard error. The range about a sample estimated average or total, within which the odds are 2 to 1 that the average or total based on complete coverage (100 percent sample) would fall.

Stocking. Stocking is the extent to which growing space is effectively utilized by present or potential growing stock trees of commercial species. Degree of stocking is synonymous with "percent of growing space occupied" and means the ratio of actual stocking to full stocking for comparable sites and stands. Stocking may be measured in terms of number of trees, volume, basal area, cover canopy, or other criterion, or combination of criteria.

Non-stocked areas. Areas that are 0 to 10 percent stocked with present or potential growing stock trees.

Poorly stocked stands. Stands that are 10-39 percent stocked with present or potential growing stock trees.

Well and medium stocked stands. Stands that are 40 percent or more stocked with present or potential growing stock trees.

Timber cut.

Timber cut from live sawtimber. The net board-foot volume of live sawtimber trees cut or killed by logging during a specified year.

Timber cut from growing stock. The net cubic-foot volume of live sawtimber and poletimber trees cut or killed by logging during a specified year. Also given in standard cords.

Timber products output. The volume of timber products cut from growing stock on commercial forest land and from other sources such as cull trees, salvageable dead trees, limbs, saplings, material less than 4 inches in diameter, timber on noncommercial and nonforest lands, and plant residues. Timber products include sawlogs, veneer logs and bolts, cooperage logs and bolts, pulpwood, fuelwood, piling, poles, posts, hewn ties, mine timbers, and various other round, split or hewn products.

Tree size class. Any one of the following tree classes in which the trees are grouped chiefly according to diameter at breast height (4-1/2 feet above the ground), outside bark:

Sawtimber trees. Trees of commercial species that contain at least one merchantable sawlog as defined by regional practice and which are of the following minimum diameters at breast height:

Eastern regions: Softwoods 9.0 inches.
Hardwoods 11.0 inches.

Poletimber trees. Trees of commercial species which meet regional specifications of soundness and form, and which are of the following diameters at breast height:

Eastern regions: Softwoods 5.0 to 9.0 inches.
Hardwoods 5.0 to 11.0 inches.

Seedling and sapling trees. Live trees of commercial species, less than 5.0 inches in diameter at breast height, and of good form and vigor.

Young-growth sawtimber stands. Sawtimber stands in which 50 percent or more of the net board-foot volume is in young-growth sawtimber trees.



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