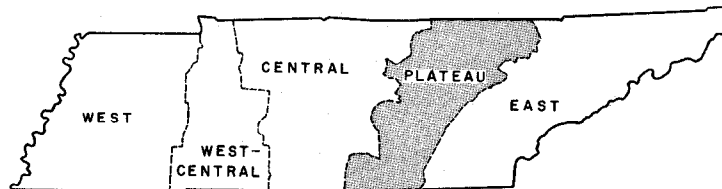


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Forest Statistics
for
Tennessee Plateau Counties

Arnold Hedlund
and
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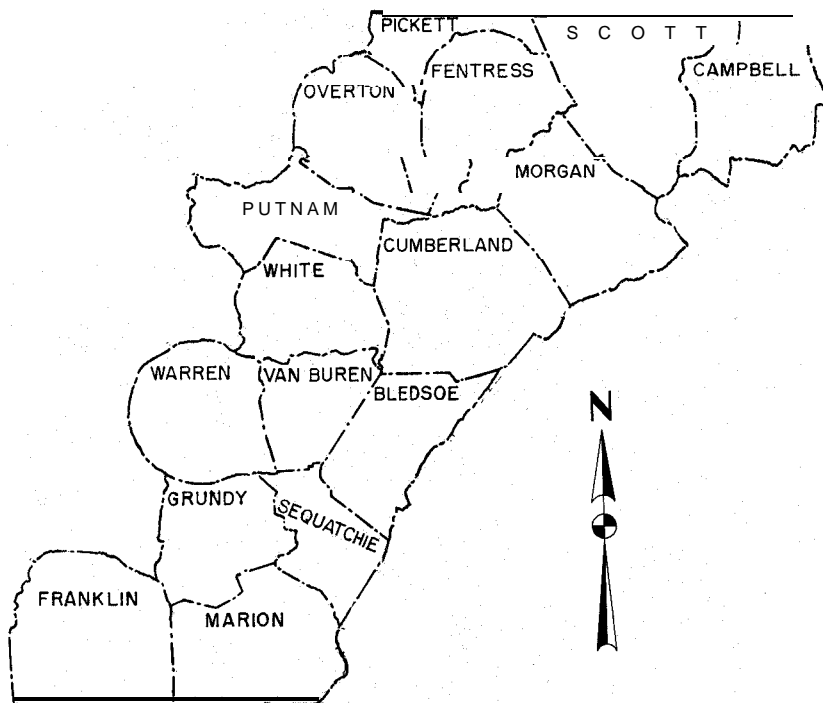


Southern Forest Experiment Station
New Orleans, Louisiana
Forest Service, U. S. Department of Agriculture

1971

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Forest Statistics for Tennessee. Plateau Counties

Arnold Hedlund and J. M. Earles

This report tabulates information from a new forest inventory of counties in the Cumberland Plateau region of Tennessee. The inventory was completed in 1971 by the Southern Forest Experiment Station. The tables are intended for use as source data in compiling estimates for groups of counties. Because the sampling procedure is intended primarily to furnish data for the State as a whole, estimates for individual counties have limited and variable accuracy.

The data on forest acreage and timber volume were secured by a systematic sampling method involving a forest-nonforest classification on aerial photographs and on-the-ground measurements of trees at sample locations. The sample locations were at the intersections of a grid of lines spaced 3 miles apart. At each forested location, 10 small plots were uniformly distributed on an area of about 1 acre:

The sampling errors to which the county area and volume totals are liable (on a probability of two chances out of three) are shown in table 1.

An approximation of sampling errors for groups of counties may be obtained by using the formula :

$$e = \frac{(SE) \sqrt{\text{specified volume or area}}}{\text{volume or area total in question}}$$

Where e = Estimated sampling error of the volume or area total in question

SE = Specified sampling error for the region.

Table 1. Sampling errors ¹ for forest land and timber volume, 1971

County	Commercial forest land	Growing stock	Sawtimber
Bledsoe	4	14	21
Campbell	3	9	13
Cumberland	2	9	12
Fentress	2	11	18
Franklin	3	11	16
Grundy	1	12	19
Marion	2	11	14
Morgan	2	10	14
Overton	3	12	18
Pickett	2	21	20
Putnam	3	12	19
Scott	3	6	10
Sequatchie	5	16	24
Van Buren	4	16	22
Warren	2	10	17
White	4	16	23
All counties	.7	2.8	4.2

¹ By random-sampling formula.

When data for two or more counties are grouped the error decreases. Conversely, as data for individual counties are broken down by various subdivisions, the possibility of error increases and is greatest for the smallest items. Sampling errors associated with the estimates of the principal timber species are shown in table 2.

Table *errors¹ for timber volume by species, 1971*

Species	Growing stock	Sawtimber
- Percent -		
Softwood:		
Shortleaf pine	15	20
Virginia pine	14	19
Other southern pines	41	50
White pine	26	27
Hemlock	30	32
Redcedar	24	37
All softwoods	<u>6.5</u>	<u>9.3</u>
Hardwood:		
White oak (<i>Quercus alba</i>)	8	10
Other white oaks	9	11
Northern red oak	10	12
Other red oaks	6	8
Hickory	7	9
Hard maple	17	24
Soft maple	12	16
Beech	21	22
Sweetgum	24	34
Blackgum	11	14
White ash	19	24
Other ashes	22	32
Sycamore	42	(²)
Basswood	29	37
Yellow-poplar	11	15
Magnolia (<i>Magnolia</i> spp.)	30	35
Black walnut	34	42
Black cherry	27	36
Elms	43	(²)
Locust	26	41
Other hardwoods	22	44
All hardwoods	3.1	<u>4.7</u>
All species	2.8	<u>4.2</u>

¹ By random-sampling formula.

² Exceeds 50 percent.

Because of differences in standards of tree measurement, meaningful comparisons cannot be made between the estimates in this report and those contained in earlier publications on Tennessee. In table 3, changes between the two surveys are summarized in terms of 1971 measurement standards.

It is anticipated that data for other counties of Tennessee will be published as field work progresses. A Statewide interpretive report will be issued when all counties have been inventoried; it will include an evaluation of

timber trends since the previous survey of 1961.

In the tables that follow, sawtimber volume is shown in International 1/4-inch rule except when Doyle or Scribner rule is indicated.

Table 3. *Change in forest resource since 1961*

Item	Change ¹ Percent
Commercial forest land	-3.2
Growing-stock volume:	
Softwood	+ 7
Hardwood	+ 7
All species	+ 7
Sawtimber volume:	
Softwood	+ 24
Hardwood	+ 12
All species	+ 14

¹ Based on 1971 measurement standards.

DEFINITIONS OF TERMS

Acceptable trees.—Growing-stock trees of commercial species that meet specified standards of size and quality but do not qualify as desirable trees.

Commercial forest land.—Forest land producing or capable of producing crops of industrial wood and not withdrawn from timber utilization.

Desirable trees.—Growing-stock trees that are of commercial species, have no defects in quality for timber products, are of relatively high vigor, and contain no pathogens that may result in death or serious deterioration before rotation age.

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

Growing-stock trees.—Live trees that are of commercial species and qualify as desirable or acceptable trees.

Growing-stock volume.—Net volume in cubic feet of growing-stock trees at least 5.0 inches in diameter at breast height, from a 1-foot stump to a minimum 4.0-inch top diameter outside bark of the central stem, or to the

point where the central stem breaks into limbs.

Poletimber trees.—Growing-stock trees of commercial species at least 5.0 inches in diameter at breast height, but smaller than sawtimber size.

Sawtimber trees.—Live trees that are of commercial species, contain at least a 12-foot saw log, and meet regional specifications for freedom from defect. Softwoods must be at least 9.0 inches in diameter at breast height and hardwoods at least 11.0 inches.

Sawtimber volume.—Net volume of the saw-log portion of live sawtimber in board feet, International ¼-inch rule, unless otherwise indicated.

Site class.—A classification of forest land in terms of inherent capacity to grow crops of industrial wood.

Stand-he class.—A classification of forest land based on the size class of growing-stock trees on the area; that is, sawtimber, pole-timber, or seedling and saplings.

Table 4. *Commercial forest land by ownership class, 1971*

County	All ownerships	National forest	Other public	Forest industry	Farmer	Misc. private
----- <i>Thousand acres</i> -----						
Bledsoe	173.6	...	5.8	47.4	35.5	84.9
Campbell	225.5	...	12.9	33.7	16.9	162.0
Cumberland	324.5	...	49.9	39.3	106.8	128.5
Fentress	246.4	...	3.8	74.4	34.3	133.9
Franklin	187.0	...	13.8	5.6	50.6	117.0
Grundy	186.0	...	.7	19.0	19.0	147.3
Marion	247.5	...	34.9	28.1	28.1	156.4
Morgan	291.6	...	44.3	11.0	82.7	153.6
Overton	174.2	...	9.1	6.8	89.0	69.3
Pickett	67.0	...	14.5	...	13.7	38.8
Putnam	140.3	...	1.1	6.2	37.4	95.6
Scott	308.0	...	5.5	17.2	91.5	193.8
Sequatchie	140.0	...	.1	28.6	5.7	105.6
Van Buren	124.2	...	.4	93.8	11.0	19.0
Warren	114.0	...	...	...	58.2	55.8
White	127.2	...	1.2	32.5	32.5	61.0
All counties	3,077.0	...	198.0	443.6	712.9	1,722.5

Table 5. *Commercial forest land by forest type, 1971*

County	All types	White pine	Loblolly-shortleaf pine	Oak-pine	Cedar	Oak-hickory	Maple-beech-birch	Elm-ash-cottonwooa
- - - - - Thousand acres - - - - -								
Bledsoe	173.6	...	23.1	17.4	...	133.1	...	...
Campbell	225.5	...	38.5	16.5	...	170.5	...	...
Cumberland	324.5	...	27.5	71.5	...	225.5	...	...
Fentress	246.4	...	39.2	50.4	5.6	145.6	5.6	...
Franklin	187.0	...	...	...	5.5	176.0	5.5	...
Grundy	186.0	...	12.4	24.8	...	148.8	...	...
Marion	247.5	...	5.5	55.0	...	176.0	5.5	5.5
Morgan	291.6	...	10.8	48.6	...	232.2	...	...
Overton	174.2	...	6.7	13.4	...	154.1	...	...
Pickett	67.0	...	6.7	6.7	...	53.6	...	...
Putnam	140.3	...	...	6.1	6.1	122.0	6.1	...
Scott	308.0	11.2	28.0	28.0	...	224.0	16.8	...
Sequatchie	140.0	...	16.8	44.8	...	78.4	...	...
Van Buren	124.2	...	10.8	32.4	...	81.0	...	...
Warren	114.0	...	5.7	...	5.7	102.6	...	...
White	127.2	...	15.9	...	5.3	100.7	...	5.3
All counties	3,077.0	11.2	247.6	415.6	28.2	2,324.1	39.5	10.8

Table 6. *Commercial forest land by stand-size class, 1971*

County	All classes	Sawtimber	Poletimber	Sapling and seedling	Nonstocked areas
- - - - - <i>Thousand acres</i> - - - - -					
Bledsoe	173.6	5.8	57.8	110.0	...
Campbell	225.5	88.0	110.0	27.5	...
Cumberland	324.5	93.5	126.5	104.5	...
Fentress	246.4	78.4	78.4	89.6	...
Franklin	187.0	82.5	60.5	44.0	...
Grundy	186.0	49.6	49.6	86.8	...
Marion	247.5	77.0	71.5	99.0	...
Morgan	291.6	102.6	75.6	113.4	...
Overton	174.2	40.2	87.1	46.9	...
Pickett	67.0	13.4	33.5	20.1	...
Putnam	140.3	48.8	61.0	30.5	...
Scott	308.0	89.6	123.2	95.2	...
Sequatchie	140.0	22.4	50.4	67.2	...
Van Buren	124.2	21.6	32.4	70.2	...
Warren	114.0	22.8	51.3	39.9	...
White	127.2	42.4	42.4	42.4	...
<u>All counties</u>	<u>3,077.0</u>	<u>878.6</u>	<u>1,111.2</u>	<u>1,087.2</u>	<u>...</u>

Table 7. *Commercial forest land by site class, 1971*

County	All classes	165 cu.ft. or more	120-165 cu.ft.	85-120 cu.ft.	50-85 cu.ft.	Less than 50 cu.ft.
- - - - - <i>Thousand acres</i> - - - - -						
Bledsoe	173.6	...	...	11.6	98.3	63.7
Campbell	225.5	11.0	11.0	77.0	110.0	16.5
Cumberland	324.5	...	5.5	22.0	148.5	148.5
Fentress	246.4	5.6	5.6	67.2	128.8	39.2
Franklin	187.0	...	...	16.5	77.0	93.5
Grundy	186.0	...	...	31.0	86.8	68.2
Marion	247.5	...	11.0	11.0	154.0	71.5
Morgan	291.6	...	...	75.6	167.4	48.6
Overton	174.2	...	...	20.1	127.3	26.8
Pickett	67.0	...	6.7	33.5	13.4	13.4
Putnam	140.3	...	...	12.2	103.7	24.4
Scott	308.0	...	11.2	84.0	168.0	44.8
Sequatchie	140.0	...	...	11.2	112.0	56.8
Van Buren	124.2	...	...	27.0	64.8	32.4
Warren	114.0	...	...	28.5	51.3	34.2
White	127.2	...	5.3	10.6	84.8	26.5
<u>All counties</u>	<u>3,077.0</u>	<u>16.6</u>	<u>56.3</u>	<u>539.0</u>	<u>1,696.1</u>	<u>769.0</u>

Table 8. *Cordage of growing stock on commercial forest land by species group, 1971*

County	All species	Softwood			Hardwood			
		Total	Southern pine	Other	Total	Oak	Gum	Other
- - - - - <i>Thousand cords</i> - - - - -								
Bledsoe	1,018	208	197	11	810	613	10	187
Campbell	3,578	829	803	26	2,749	1,375	110	1,264
Cumberland	3,585	884	763	121	2,701	1,770	151	780
Fentress	2,854	1,012	889	123	1,842	1,136	57	649
Franklin	2,571	59	12	47	2,512	1,594	25	893
Grundy	1,879	197	189	8	1,682	782	81	819
Marion	2,756	332	272	60	2,424	1,375	64	985
Morgan	3,040	503	387	116	2,537	1,394	85	1,058
Overton	2,594	276	260	16	2,318	767	67	1,484
Pickett	778	62	47	15	716	251	12	453
Putnam	1,991	113	103	10	1,878	561	62	1,255
Scott	4,668	1,049	914	135	3,619	1,890		1,644
Sequatchie	1,314	384	345	39	930	543	66	321
Van Buren	1,063	221	149	72	842	358	55	429
Warren	1,386	80	60	20	1,306	455	49	802
White	1,846	25	16	9	1,821	625	23	1,103
All counties	36,921	6,234	5,406	828	30,687	15,489	1,072	14,126

Table 9. *Growing-stock volume on commercial forest land by species group, 1971*

County	All species	Softwood			Hardwood			
		Total	Southern pine	Other	Total	Oak	Gum	Other
- - - - - Million cubic feet - - - - -								
<i>Bledsoe</i>	69.9	15.6	14.8	0.8	54.3	41.1	0.7	12.5
Campbell	246.4	62.2	60.2	2.0	184.2	92.1	7.4	84.7
Cumberland	247.3	66.3	57.2	9.1	181.0	118.6	10.7	52.3
Fentress	199.3	75.9	66.7	9.2	123.4	76.1	3.8	43.5
Franklin	172.7	4.4	.9	3.5	168.3	106.8	1.7	59.8
Grundy	127.	14.8	14.2	.6	112.7	52.4	5.4	54.9
Marion	187.3	24.9	20.4	4.5	162.4	92.1	4.3	66.0
Morgan	207.7	37.7	29.0	8.7	170.0	93.4	5.7	70.9
Overton	176.0	20.7	19.5	1.2	155.3	51.4	4.5	99.4
Pickett	52.6	4.6	3.5	1.1	48.0	16.8	.8	30.4
Putnam	134.3	8.5	7.7	.8	125.8	37.6	4.1	84.1
Scott	321.1	78.6	68.5	10.1	242.5	126.6	5.7	110.2
Sequatchie	91.1	28.8	25.9	2.9	62.3	36.4	4.4	21.5
Van Buren	73.0	16.6	11.2	5.4	56.4	24.0	3.7	28.7
Warren	93.5	6.0	4.5	1.5	87.5	30.5	3.3	53.7
White	123.9	1.9	1.2	.7	122.0	41.9	6.2	73.9
<u>All counties</u>	<u>2,523.6</u>	<u>467.5</u>	<u>405.4</u>	<u>62.1</u>	<u>2,056.1</u>	<u>1,037.8</u>	<u>71.8</u>	<u>946.5</u>

Table 10. *Sawtimber volume on commercial forest land by species group, 1971*

County	All species	Softwood			Hardwood			
		Total	Southern pine	Other	Total	Oak	Gum	Other
----- <i>Million board feet</i> -----								
Bledsoe	125.9	34.6	33.0	1.6	91.3	67.6	1.0	22.7
Campbell	716.9	169.4	166.4	3.0	547.5	280.6	27.7	239.2
Cumberland	595.9	203.4	169.6	33.8	392.5	263.5	15.6	113.4
Fentress	540.2	225.8	188.9	36.9	314.4	180.4	15.8	118.2
Franklin	509.7	1.4	...	1.4	508.3	344.9	4.4	159.0
Grundy	333.6	33.3	31.5	1.8	300.3	115.1	14.9	170.3
Marion	553.8	83.8	59.5	24.3	470.0	263.5	11.7	194.8
Morgan	552.8	122.0	86.7	35.3	430.8	235.6	13.0	182.2
Overton	441.7	88.8	86.7	2.1	352.9	133.6	8.4	210.9
Pickett	129.4	3.1	2.6	.5	126.3	57.3	1.3	67.7
Putnam	313.2	25.1	25.1	...	288.1	81.3	9.3	197.5
Scott	854.9	230.7	191.4	39.3	624.2	349.4	14.5	260.3
Sequatchie	247.5	92.8	79.2	13.6	154.7	93.0	11.2	50.5
Van Buren	195.2	41.3	17.2	24.1	153.9	64.3	6.7	82.9
Warren	205.7	7.1	5.3	1.8	198.6	72.9	8.0	117.7
White	340.5	.8	.5	.3	339.7	118.7	13.7	207.3
All counties	6,656.9	1,363.4	1,143.6	219.8	5,293.5	2,721.7	177.2	2,394.6

Table 11. *Sawtimber volume on commercial forest land by species group and diameter class, 1971*

County	All species	Softwood			Hardwood		
		Total	9.0-14.9 inches	15.0 inches and up	Total	11.0-14.9 inches	15.0 inches and up
- - - - - Million board feet - - - - -							
Bledsoe	125.9	34.6	32.9	1.7	91.3	65.8	25.5
Campbell	716.9	169.4	140.4	29.0	547.5	249.5	298.0
Cumberland	595.9	203.4	154.3	49.1	392.5	213.5	179.0
Fentress	540.2	225.8	175.2	50.6	314.4	170.6	143.8
Franklin	509.7	1.4	1.4	...	508.3	260.2	248.1
Grundy	333.6	33.3	29.2	4.1	300.3	140.3	160.0
Marion	553.8	83.8	57.1	26.7	470.0	255.4	214.6
Morgan	552.8	122.0	103.0	19.0	430.8	227.9	202.9
Overton	441.7	88.8	69.9	18.9	352.9	228.3	124.6
Pickett	129.4	3.1	3.1	...	126.3	56.5	69.8
Putnam	313.2	25.1	19.4	5.7	288.1	145.9	142.2
Scott	854.9	230.7	207.4	23.3	624.2	365.9	258.3
Sequatchie	247.5	92.8	78.6	14.2	154.7	84.0	70.7
Van Buren	195.2	41.3	34.2	7.1	153.9	90.5	63.4
Warren	205.7	7.1	7.1	...	198.6	90.9	107.7
White	340.5	.8	.3	.5	339.7	150.4	189.3
<u>All counties</u>	<u>6,656.9</u>	<u>1,363.4</u>	<u>1,113.5</u>	<u>249.9</u>	<u>5,293.5</u>	<u>2,795.6</u>	<u>2,497.9</u>

Table 12. *Sawtimber volume in Scribner rule on commercial forest land by species group, 1971*

County	All species	Softwood			Hardwood			
		Total	Southern pine	Other	Total	Oak	Gum	Other
----- Million board feet -----								
Bledsoe	103.5	26.4	25.3	1.1	77.1	56.9	0.8	19.4
Campbell	631.9	142.2	139.6	2.6	489.7	251.5	25.2	213.0
Cumberland	507.3	166.9	138.1	28.8	340.4	227.4	13.1	99.9
Fentress	469.9	190.0	159.4	30.6	279.9	160.3	13.9	105.7
Franklin	448.5	1.1	...	1.1	447.4	302.1	3.8	141.5
Grundy	292.5	27.4	26.0	1.4	265.1	100.6	13.3	151.2
Marion	483.4	69.7	48.6	21.1	413.7	232.7	9.9	171.1
Morgan	479.5	100.3	70.3	30.0	379.2	208.1	11.4	159.7
Overton	381.5	74.0	72.3	1.7	307.5	116.7	6.7	184.1
Pickett	114.7	2.7	2.2	.5	112.0	50.7	1.0	60.3
Putnam	273.5	21.2	21.2	...	252.3	70.7	8.0	173.6
Scott	745.7	190.7	157.7	33.0	555.0	310.4	13.0	231.6
Sequatchie	212.9	77.0	65.8	11.2	135.9	82.1	9.1	44.7
Van Buren	167.7	33.9	13.6	20.3	133.8	55.6	6.0	72.2
Warren	177.5	5.6	4.1	1.5	171.9	63.5	6.9	101.5
White	300.9	.7	.4	.3	300.2	105.9	11.5	182.8
All counties	5,790.9	1,129.8	944.6	185.2	4,661.1	2,395.2	153.6	2,112.3

Table 13. *Sawtimber volume in Scribner rule on commercial forest land by species group and diameter class, 1971*

County	All species	Softwood			Hardwood		
		Total	9.0-14.9 inches	15.0 inches and up	Total	11.0-14.9 inches	15.0 inches and up
- - - - B - B - - <i>Million board feet</i> - - - - -							
Bledsoe	103.5	26.4	25.1	1.3	77.1	54.3	22.8
Campbell	631.9	142.2	116.5	25.7	489.7	217.2	272.5
Cumberland	507.3	166.9	124.0	42.9	340.4	179.2	161.2
Fentress	469.9	190.0	144.7	45.3	279.9	149.1	130.8
Franklin	448.5	1.1	1.1	...	447.4	224.0	223.4
Grundy	292.5	27.4	23.9	3.5	265.1	119.3	145.8
Marion	483.4	69.7	45.9	23.8	413.7	220.3	193.4
Morgan	479.5	100.3	83.7	16.6	379.2	196.0	183.2
Overton	381.5	74.0	57.4	16.6	307.5	195.8	111.7
Pickett	114.7	2.7	2.7	...	112.0	48.2	63.8
Putnam	273.5	21.2	16.2	5.0	252.3	123.5	128.8
Scott	745.7	190.7	170.5	20.2	555.0	319.2	235.8
Sequatchie	212.9	77.0	64.5	12.5	135.9	71.5	64.4
Van Buren	167.7	33.9	27.7	6.2	133.8	77.1	56.7
Warren	177.5	5.6	5.6	...	171.9	76.2	95.7
White	300.9	.7	.3	.4	300.2	129.0	171.2
<u>All counties</u>	<u>5,790.9</u>	<u>2,299.8</u>	<u>909.8</u>	<u>220.0</u>	<u>4,661.1</u>	<u>2,399.9</u>	<u>2,261.2</u>

Table 14. *Sawtimber volume in Doyle rule on commercial forest land by species group, 1971*

county	All species	Softwood			Hardwood			
		Total	Southern pine	Other	Total	Oak	Gum	Other
- - - - - Million board feet - - - - -								
Bledsoe	68.7	18.5	17.4	1.1	50.2	37.2	0.5	12.5
Campbell	488.7	105.8	103.6	2.2	382.9	196.8	21.3	164.8
Cumberland	361.6	119.0	99.3	19.7	242.6	160.1	7.7	74.8
Fentress	358.4	143.2	120.5	22.7	215.2	122.0	10.7	82.5
Franklin	335.0	1.1	...	1.1	333.9	222.1	2.7	109.1
Grundy	219.7	20.5	19.5	1.0	199.2	74.8	10.1	114.3
Marion	357.4	52.8	36.0	16.8	304.6	172.4	6.4	125.8
Morgan	353.5	70.4	48.3	22.1	283.1	157.5	8.1	117.5
Overton	271.8	52.2	51.0	1.2	ag.6	84.4	3.5	131.7
Pickett	87.1	2.5	2.0	.5	84.6	38.0	.5	46.1
Putnam	199.4	15.7	15.7	...	183.7	51.5	5.2	127.0
Scott	561.9	137.5	114.1	23.4	424.4	237.9	10.3	176.2
Sequatchie	153.5	56.0	48.9	7.1	97.5	59.6	4.9	33.0
Van Buren	120.4	24.5	10.4	14.1	95.9	40.2	4.5	51.2
Warren	126.4	3.9	3.1	.8	122.5	47.0	4.8	70.7
White	226.1	.6	.3	.3	225.5	83.3	7.3	134.9
All counties	4,289.6	824.2	690.1	134.1	3,465.4	1,784.8	108.5	1,572.1

Table 15. *Sawtimber volume in Doyle rule on commercial forest land by species group and diameter class, 1971*

County	All species	Softwood			Hardwood		
		Total	9.0-14.9 inches	15.0 inches and up	Total	11.0-14.9 inches	15.0 inches and up
- - - - - Million board feet - - - - -							
Bledsoe	68.7	18.5	17.8	0.7	50.2	33.4	16.8
Campbell	488.7	105.8	86.0	19.8	382.9	153.6	229.3
Cumberland	361.6	119.0	88.4	30.6	242.6	114.4	128.2
Fentress	358.4	143.2	106.7	36.5	215.2	106.6	108.6
Franklin	335.0	1.1	1.1	...	333.9	151.9	182.0
Grundy	219.7	20.5	18.1	2.4	199.2	79.7	119.5
Marion	357.4	52.8	34.0	18.8	304.6	149.9	154.7
Morgan	353.5	70.4	57.4	13.0	283.1	133.6	149.5
Overton	271.8	52.2	39.5	12.7	219.6	132.1	87.5
Pickett	87.1	2.5	2.5	...	84.6	31.5	53.1
Putnam	199.4	15.7	11.8	3.9	183.7	79.5	104.2
Scott	561.9	137.5	122.5	15.0	424.4	228.6	195.8
Sequatchie	153.5	56.0	46.7	9.3	97.5	45.9	51.6
Van Buren	120.4	24.5	20.1	4.4	95.9	51.1	44.8
Warren	126.4	3.9	3.9	...	122.5	51.0	71.5
White	226.1	.6	.3	.3	225.5	85.4	140.1
<u>All counties</u>	<u>4,289.6</u>	<u>824.2</u>	<u>656.8</u>	<u>167.4</u>	<u>3,465.4</u>	<u>1,628.2</u>	<u>1,837.2</u>

Table 16. **Growing-stock volume of softwoods and hardwoods on commercial forest land by forest type, 1971**

County	All species	Softwood					Hardwood				
		Total	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Other types ^{1/}	Total	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Other types ^{1/}
----- Million cubic feet -----											
Bledsoe	69.9	15.6	10.7	1.7	3.2	...	54.3	0.6	3.4	50.3	...
Campbell	246.4	62.2	50.8	8.2	3.2	...	184.2	8.5	4.2	171.5	...
Cumberland	247.3	66.3	18.2	37.5	10.6	...	181.0	3.5	36.3	141.2	...
Fentress	199.3	75.9	34.5	26.8	12.5	2.1	123.4	6.8	14.7	99.8	2.1
Franklin	172.7	4.4	...	...	2.5	1.9	168.3	...	...	160.8	7.5
Grundy	127.5	14.8	2.5	9.2	3.1	...	112.7	2.2	4.3	106.2	...
Marion	187.3	24.9	...	18.8	6.1	...	162.4	...	20.1	135.0	7.3
Morgan	207.7	37.7	.3	17.0	20.4	...	170.0	...	20.8	149.2	...
Overton	176.0	20.7	12.7	5.8	2.2	...	155.3	1.5	7.4	146.4	...
Pickett	52.6	4.6	.3	3.2	1.1	...	48.0	1.8	2.0	44.2	...
Putnam	134.3	8.5	...	2.4	5.3	.8	125.8	...	1.8	110.8	13.2
Scott	321.1	78.6	38.6	11.8	23.7	4.5	242.5	6.3	11.5	207.7	17.0
Sequatchie	91.1	28.8	7.5	16.2	5.1	...	62.3	1.1	9.4	51.8	...
Van Buren	73.0	16.6	2.8	9.0	4.8	...	56.4	.8	6.3	49.3	...
Warren	93.5	6.0	3.6	...	1.5	.9	87.5	...	...	85.5	2.0
White	123.9	1.9	.1	...	1.2	.6	122.0	.4	...	121.0	.6
All counties	2,523.6	467.5	182.6	167.6	106.5	10.8	2,056.1	33.5	142.2	1,830.7	49.7

^{1/} Includes the following minor types: white pine, cedar, maple-beech-birch and elm-ash-cottonwood.

Table 17. Sawtimber volume of softwoods and hardwoods on commercial forest land by forest type, 1971

County	All species	Softwood					Hardwood				
		Total	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Other types ^{1/}	Total	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Other types ^{1/}
----- Million board feet -----											
Bledsoe	125.9	34.6	22.7	3.3	8.6	...	91.3	1.1	0.9	89.3	...
Campbell	716.9	169.4	122.6	34.2	12.6	...	547.5	17.9	11.5	518.1	...
Cumberland	595.9	203.4	51.5	113.5	38.4	...	392.5	3.9	80.2	308.4	...
Fentress	540.2	225.8	114.6	66.1	34.6	10.5	314.4	16.1	26.3	265.3	6.7
Franklin	509.7	1.4	...	...	1.4	...	508.3	...	...	484.8	23.5
Grundy	333.6	33.3	1.3	20.4	11.6	...	300.3	1.3	13.0	286.0	...
Marion	553.8	83.8	...	65.9	17.9	...	470.0	...	64.6	379.7	25.7
Morgan	552.8	122.0	.8	59.3	61.9	...	430.8	...	40.3	390.5	...
Overton	441.7	88.8	56.8	29.0	3.0	...	352.9	3.1	6.5	343.3	...
Pickett	129.4	3.1	...	2.6	.5	...	126.3	...	5.3	113.4	...
Putnam	313.2	25.1	...	8.1	17.0	...	288.1	7.6	4.8	243.4	39.9
Scott	854.9	230.7	127.4	19.8	70.1	13.4	624.2	16.9	23.6	546.6	37.1
Sequatchie	247.5	92.8	24.9	52.3	15.6	...	154.7	2.8	16.2	135.7	...
Van Buren	195.2	41.3	11.0	27.4	2.9	...	153.9	2.3	15.5	136.1	...
Warren	205.7	7.1	5.3	...	1.8	...	198.6	...	...	195.3	3.3
White	340.5	.8	...	...	.3	.5	339.7	...	...	339.7	...
All counties	6,656.9	1,363.4	538.9	501.9	298.2	24.4	5,293.5	73.0	308.7	4,775.6	136.2

^{1/} Includes the following minor types: white pine, cedar, maple-beech-birch and elm-ash-cottonwood.

Table 18. *Growing-stock volume of softwoods and hardwoods on commercial forest land by stand-size class, 1971*

county	All species	Softwood				Hardwood			
		Total	Sawtimber	Poletimber	Sapling and seedling	Total	Sawtimber	Poletimber	Sapling and seedling
- - - - - Million cubic feet - - - - -									
Bledsoe	69.9	15.6	1.6	9.1	4.9	54.3	4.9	26.2	23.2
Campbell	246.4	62.2	26.0	36.2	...	184.2	99.7	75.9	8.6
Cumberland	247.3	66.3	31.2	26.8	8.3	181.0	72.1	84.3	24.6
Fentress	199.3	75.9	33.1	25.8	17.0	123.4	68.6	36.6	18.2
Franklin	172.7	4.4	1.3	2.5	.6	168.3	96.1	57.7	14.5
Grundy	127.5	14.8	4.9	3.8	6.1	112.7	53.3	38.2	21.2
Marión	187.3	24.9	16.0	4.8	4.1	162.4	80.8	56.3	25.3
Morgan	207.7	37.7	19.9	12.8	5.0	170.0	94.1	49.8	26.1
Overton	176.0	20.7	12.9	7.8	...	155.3	49.0	90.0	16.3
Pickett	52.6	4.6	.2	4.1	.3	48.0	10.3	31.3	6.4
Putnam	134.3	8.5	5.4	3.0	.1	125.8	67.1	48.0	10.7
Scott	321.1	78.6	38.3	25.6	14.7	242.5	92.2	105.3	45.0
Sequatchie	91.1	28.8	10.1	9.3	9.4	62.3	19.4	29.3	13.6
Van Buren	73.0	16.6	5.1	3.6	7.9	56.4	19.0	27.0	10.4
Warren	93.5	6 . 0	.4	. 1.1	4.5	87.5	26.0	47.0	14.5
White	123.9	1.9	.5	.4	1.0	122.0	71.0	44.1	6.9
All counties	2,523.6	467.5	206.9	176.7	83.9	2,056.1	923.6	847.0	285.5

Table 19. *Sawtimber volume of softwoods and hardwoods on commercial forest land by stand-size class, 1971*

County	All species	Softwood				Hardwood			
		Total	Sawtimber	Poletimber	Sapling and seedling	Total	Sawtimber	Poletimber	Sapling and seedling
----- Million board feet -----									
Bledsoe	125.9	34.6	6.8	15.1	12.7	91.3	15.1	41.2	35.0
Campbell	716.9	169.4	118.0	51.4	...	547.5	378.9	152.1	16.5
Cumberland	595.9	203.4	114.9	66.3	22.2	392.5	201.3	132.6	58.6
Fentress	540.2	225.8	136.5	52.7	36.6	314.4	232.9	53.6	27.9
Franklin	509.7	1.4	...	1.4	...	508.3	329.1	143.3	35.9
Grundy	333.6	33.3	15.7	4.8	12.8	300.3	182.9	75.6	41.8
Marion	553.8	83.8	60.0	13.3	10.5	470.0	292.4	105.5	72.1
Morgan	552.8	122.0	87.5	28.4	6.1	430.8	291.7	91.3	47.8
Overton	441.7	88.8	56.8	32.0	...	352.9	156.9	171.7	24.3
Pickett	129.4	3.1	.5	2.6	...	126.3	27.8	75.2	23.3
Putnam	313.2	25.1	20.6	4.5	...	288.1	203.0	65.1	20.0
Scott	854.9	230.7	143.1	56.7	30.9	624.2	312.4	204.4	107.4
Sequatchie	247.5	92.8	34.9	32.3	25.6	154.7	73.9	55.9	24.9
Van Buren	195.2	41.3	23.1	1.8	16.4	153.9	73.6	59.1	21.2
Warren	205.7	7.1	1.8	...	5.3	198.6	89.7	79.9	29.0
White	340.5	.a	.3	...	.5	339.7	257.1	70.0	12.6
All counties	6,656.9	1,363.4	820.5	363.3	179.6	5,293.5	3,118.7	1,576.5	598.3

Table 20. Growing-stock volume on commercial forest land by species and diameter class, 1971 ^{1/}

Species	Diameter class (inches at breast height)										
	All classes	5.0-6.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 and larger	
- - - - - Million cubic feet - - - - -											
Softwood:											
Shortleaf pine	202.0	32.7	53.0	57.0	33.3	13.0	11.1	1.9	...	...
Virginia pine	191.9	32.2	35.2	51.0	32.5	24.3	7.3	2.0	0.6	0.4	
Other southern pines	11.5	.2	.9	2.4	4.7	2.5	2.3	.7	...	...
White pine	23.5	.2				3.9					
Hemlock	27.5	.8	2.7	11.5	3.3	11.5	4.8	2.5	11.3	11.1	
Redcedar	11.1	4.2	4.2	2.0	.7	...	...	...	...	...
Total	<u>467.5</u>	<u>70.3</u>	<u>98.8</u>	<u>119.6</u>	<u>83.4</u>	<u>46.9</u>	<u>29.4</u>	<u>7.9</u>	<u>6.4</u>	<u>4.2</u>	<u>.6</u>
Hardwood:											
White oak (<i>Quercus alba</i>)	309.5	35.8	51.4	62.4	50.4	46.1	24.5	23.7	6.0	8.8	
Other white oaks	278.5	26.8	43.3	47.9	54.3	43.3	27.4	15.5	7.4	11.4	
Northern red oak	114.7	5.7	6.5	15.7	19.8	20.9	24.2	5.7	4.5	10.3	
Other red oaks	335.1	32.9	40.4	52.5	61.7	61.9	44.4	20.9	12.1	8.3	
Hickory	340.7	27.7	56.7	66.9	59.0	51.1	34.8	15.7	13.4	13.2	
Hard maple	86.2	7.8	16.3	14.9	15.3	10.3	5.9	6.3	3.4	5.0	
Soft maple	71.0	11.6	14.2	16.4	9.9		6.9	2.3	2.5	.9	
Beech	38.5	2.3	2.5			5.5	5.4	4.0	5.5	9.4	
Sweetgum	15.8	2.1	2.9	3.1	11.1	1.3	.6	2.7	...	...
Blackgum	56.0	7.0	8.5	5.8	11.0	7.8	5.7	5.6	2.9	1.7	
White ash	26.1	2.1	5.2	2.8	4.7	5.2	3.5		.5	.8	
Other ashes	18.7	1.9	4.2					1.8	1.3	1.1	
Sycamore	3.0	...	.7	3.0	5.0	1.6	2.5	.3	...	...
Basswood	22.7	1.0	3.6	42.4	48.5	34.2	29.4	1.9	.6	2.4	
Yellow-poplar	241.8	25.6	29.9	...	...	...		10.0	13.6	7.5
Magnolia (<i>Magnolia</i> spp.)	14.0	.9	.9	1.6	3.8	1.8	1.9	.7	.5	1.9	
Black walnut	7.0	.4	.9		2.3		.6	...	.5	...
Black cherry	10.0	.5	3.0	1.8	4.0	1.3	1.2	...	...	...
Elms	10.5	2.1	2.2				.5	...	...	...
Black locust	16.2	3.1	3.7	3.1	2.8	3.0	.7	...	...	...
Other hardwoods	40.1	11.2	8.3	7.0	3.2	5.7	3.7	1.0	...	...
Total	<u>2,056.1</u>	<u>208.5</u>	<u>305.3</u>	<u>355.2</u>	<u>366.5</u>	<u>309.9</u>	<u>227.1</u>	<u>118.4</u>	<u>74.7</u>	<u>82.7</u>	<u>7.8</u>
All species	<u>2,523.6</u>	<u>278.8</u>	<u>404.1</u>	<u>474.8</u>	<u>449.9</u>	<u>356.8</u>	<u>256.5</u>	<u>126.3</u>	<u>81.1</u>	<u>86.9</u>	<u>8.4</u>

^{1/} Detailed county statistics by species and diameter class are available upon request.

Table 21. *Sawtimber volume on commercial forest land by species and diameter class, 1971^{1/}*

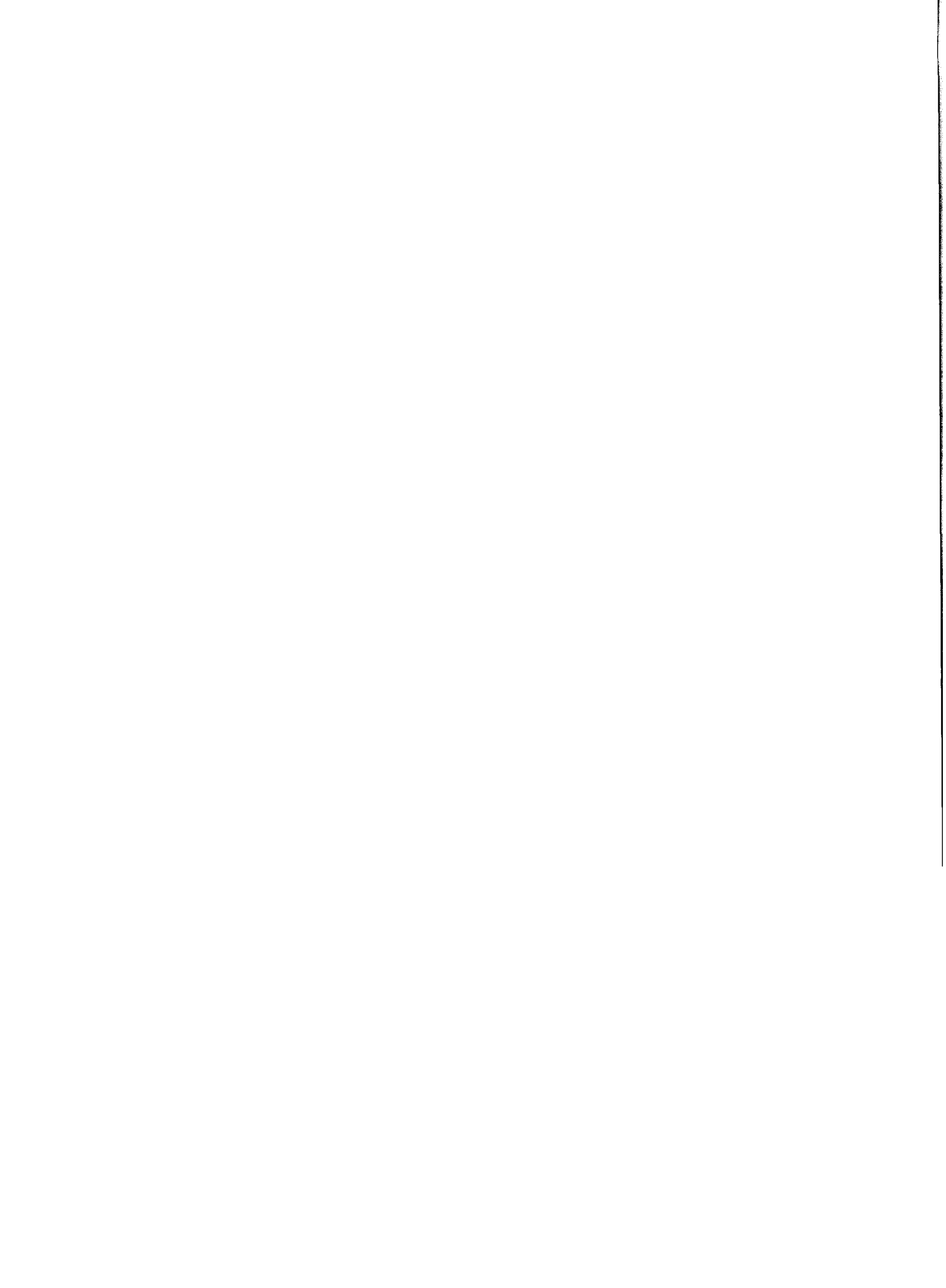
Species	Diameter class (inches at breast height)												
	All classes	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 and larger				
- - - - - Million board feet - - - - -													
Softwood:													
Shortleaf pine	539.9												
Virginia pine	556.0	237.2	196.3	160.2	182.7	1270.3	62.0	36.6	10.7	10.2	16...
Other southern pines	47.7	8.3	11.9	12.1	11.5	3.9	...	1.9			
White pine	93.6	8.2	21.8	9.5	19.1	10.7	9.6	11.7	3.0				
Hemlock	117.6	21.1	15.1	26.0	23.4	4.2	21.8	6.0	...				
Redcedar	8.6	5.8	2.8	...	...	...	...	...	...
Total	<u>1,363.4</u>	<u>476.9</u>	<u>394.5</u>	<u>242.1</u>	<u>152.6</u>	<u>39.7</u>	<u>35.0</u>	<u>19.6</u>	<u>3.0</u>				
Hardwood:													
White oak (<i>Quercus alba</i>)	699.9	...	197.7	203.9	112.4	115.7	25.8	41.6	2.8				
Other white oaks	687.0	...	...	...	...	...	...	...	5.3
Northern red oak	404.9	...	200.6	196.0	123.2	24.4	63.6	56.5	8.5				
Other red oaks	929.9	...	223.7	279.2	212.9	105.1	74.2	45.4	...				
Hickory	911.8	...	244.3	243.9	181.3	81.9	...	74.1	12.1				
Hard maple	211.7	...	58.5	45.9	28.5	30.9	17.1	25.2	5.6				
Soft maple	118.5	...	34.9	22.6	29.7	9.9	12.1	3.9	5.4				
Beech	143.8	...	10.1	18.8	25.6	22.5	30.1	36.7	...				
Sweetgum	28.2	...	30.4	32.4	22.2	26.6	...	...	...	
Blackgum	149.0	...	...	...	...	6.7	13.0	9.7	...
White ash	73.9	...	18.1	26.1	16.4	4.3	2.6	11.0	...				
Other ashes	41.6	...	6.4	6.8	13.3	...	2.9	5.1	...				
Sycamore	5.9	...	18.5	12.3	11.9	1.3	65.5	12.5	...				
Basswood	70.3	...	...	...	...	9.3	...	...	...	
Yellow-poplar	616.9	...	181.5	158.0	135.6	44.8	...	35.4	2.8				
Magnolia (<i>Magnolia</i> spp.)	50.2	...	18.2	4.1	8.6	3.3	2.9	9.2	...				
Black walnut	17.0	...	7.7	...	2.8	...	2.4	...	...		
Black cherry	22.0	...	15.7	...	6.3	...	...	...	...
Elms	21.4	...	12.9	4.8	...	...	...	...	1.5
Black locust	28.4	...	...	...	...	...	...	...	...
Other hardwoods	61.2	...	10.68	23.2	12.2	4.9	...	...	...	
Total	<u>5,293.5</u>	<u>...</u>	<u>1,401.2</u>	<u>1,394.4</u>	<u>1,082.1</u>	<u>581.3</u>	<u>377.5</u>	<u>413.0</u>	<u>44.0</u>				
All species	<u>6,656.9</u>	<u>476.9</u>	<u>1,795.7</u>	<u>1,636.5</u>	<u>1,234.7</u>	<u>621.0</u>	<u>412.5</u>	<u>432.6</u>	<u>47.0</u>				

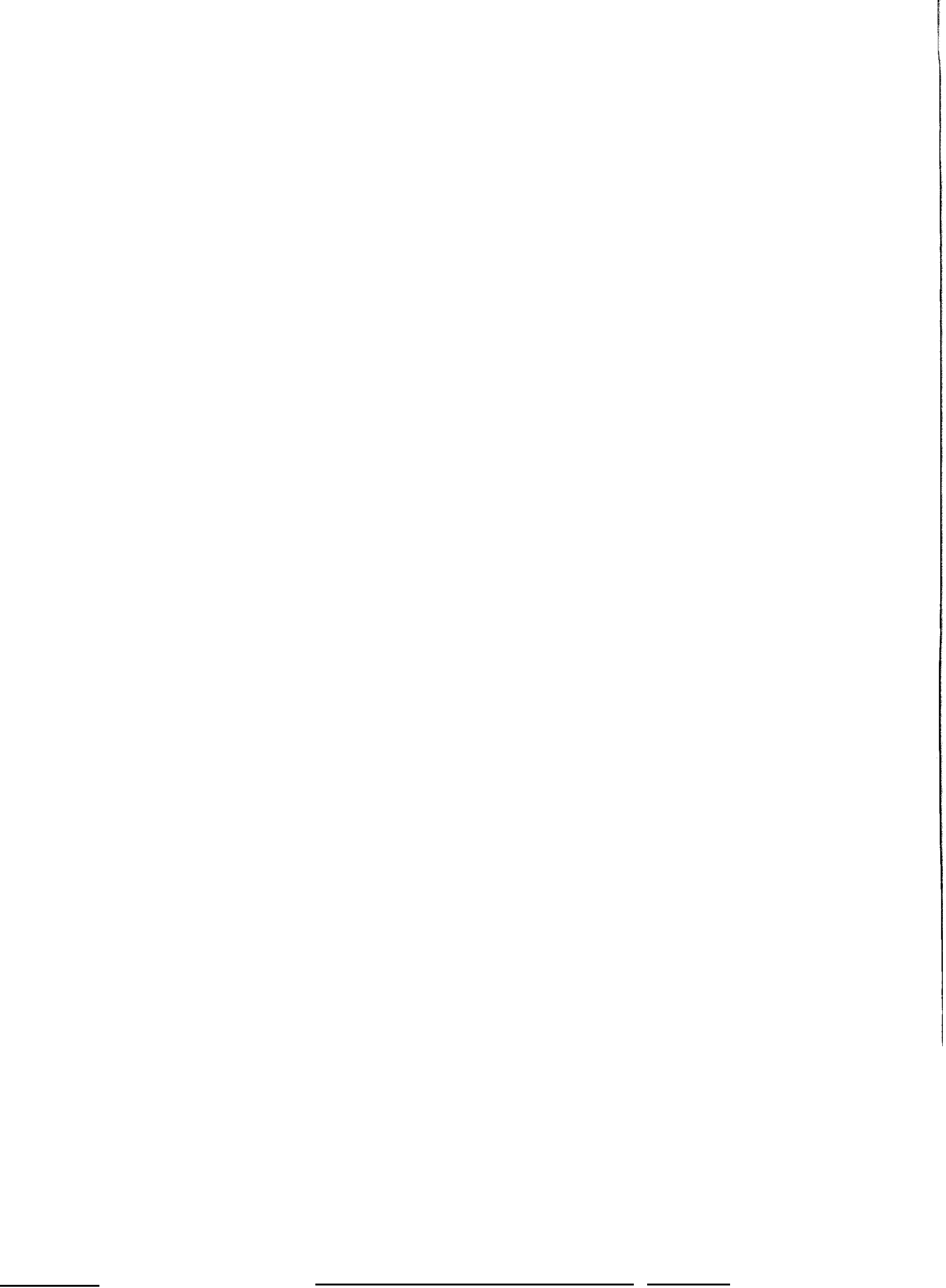
^{1/} Detailed county statistics by species and diameter class are available upon request.

Table 22, *Average volume per acre of growing stock and sawtimber on commercial forest land by species group and ownership class, 1971*

Ownership class	Growing stock			Sawtimber		
	All species	Softwood	Hardwood	All species	Softwood	Hardwood
	- - - Cubic feet - - -			- - - Board feet - - -		
National forest	...	...	...	...	...	...
Other public	1,015	342	673	2,711	1,025	1,686
Forest industry	661	179	482	1,848	552	1,296
Farmer	920	189	731	2,290	624	1,666
Misc. private	798	108	690	2,129	273	1,856
All ownerships	820	152	668	2,163	443	1,720







Hedlund, Arnold, and Earles, J. M.

1971. Forest statistics for Tennessee Plateau counties. South. Forest Exp. Sta., New Orleans, La. 21 p. (USDA Forest Serv. Resour. Bull. SO-27)

Commercial forest area and timber inventory as of 1971.