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Forest Statistics For Arkansas Ouachita Counties

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These tables were derived from data obtained during a 1978 inventory of 10 counties comprising the Ouachita Unit of Arkansas (fig. 1). Forest area was estimated from aerial photos with an adjustment of ground truth at selected locations. Sample plots were systematically established at three-mile intervals using a grid orientated roughly N-S and E-W. At each location, prism sample points were distributed over approximately 1 acre. Volume estimates were based on measurement of trees selected at these sample points.

The sampling methods were developed to provide suitable state estimates. Estimates for smaller areas are presented, but sampling error increases as the area considered declines. Sampling errors given in table 1 are based on one standard deviation or a probability of two chances out of three. To estimate the sampling error for a combination of counties one can use the following:

$$SE_G = \frac{SE_T \sqrt{X_T}}{\sqrt{X_G}}$$

where:

SE = Sampling error
X = variable of interest (area, volume)
G = group of counties to be combined
T = total for the unit

Sampling errors for estimates of the principal timber species are shown in table 2.

Because of differences in standards of tree measurements, direct comparisons between these data and the 1969 inventory are invalid. In table 3, changes between the two surveys are summarized in terms of current 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Commercial forest land.—Forest land producing or capable of producing crops of industrial wood and not withdrawn from timber utilization.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.

Table 1.--*Sampling errors*[1] *for forest land and timber volume, 1978*

County	Commercial forest land	Growing stock	Saw-timber
	Percent		
Garland	2	10	12
Logan	4	14	19
Montgomery	2	8	10
Perry	2	10	12
Polk	2	10	14
Pulaski	2	12	15
Saline	1	9	11
Scott	1	6	8
Sebastian	3	16	26
Yell	2	7	11
All counties	0.7	3.0	4.0

[1]By random-sampling formula

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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.

Table 2.--*Sampling errors for timber volume by species, 1973*

Species	Growing stock	Sawtimber
	- - - - - *Percent* - - - - -	
Softwood:		
Shortleaf pine	4	5
Loblolly pine	24	28
Redcedar	24	41
Cypress	71	70
All softwoods	4.3	4.9
Hardwoods:		
Select white oaks	7	11
Select red oaks	11	15
Other white oaks	8	12
Other red oaks	11	14
Pecan	100	...
Water hickory	78	73
Other hickories	8	15
Persimmon	100	...
Hard maple	73	...
Soft maple	25	74
Boxelder	72	100
Sweetgum	13	18
Blackgum	13	17
Other gums	100	...
White ash	40	65
Other ashes	27	37
Sycamore	38	44
Cottonwood	100	100
Basswood	54	100
Willow	100	100
Black walnut	100	100
Black cherry	37	53
American elm	24	46
Other elms	14	34
River birch	48	53
Hackberry	40	58
Black locust	100	...
Other locusts	100	...
Other hardwoods	100	100
All hardwoods	4.5	7.3
All species	3.0	4.0

Noncommercial species.—Tree species of typically small size, poor form, or inferior quality which normally do not develop into trees suitable for industrial wood products.

Physiographic site.—A classification of forest land according to its suitability for growing certain species groups—pine, upland hardwood, or bottomland hardwood.

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

Rotten trees.—Live trees of commercial species that do not contain at least one 12-foot saw log, now or prospectively, primarily because of rot.

Rough trees.—Live trees of commercial species that do not contain at least one 12-foot saw log, now or prospectively, primarily because of roughness or poor form. (Includes all live trees of noncommercial species.)

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 1/4-inch rule.

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

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

Table 3.--*Change*[1] *in forest resource since 1969*

Item	Change
	------ *Percent* ------
Commercial forest land	- 4
Growing-stock volume:	
Softwood	+ 4
Hardwood	+10
All species	+ 6
Sawtimber volume:	
Softwood	+13
Hardwood	+ 9
All species	+12

[1]Based on current measurement standards.

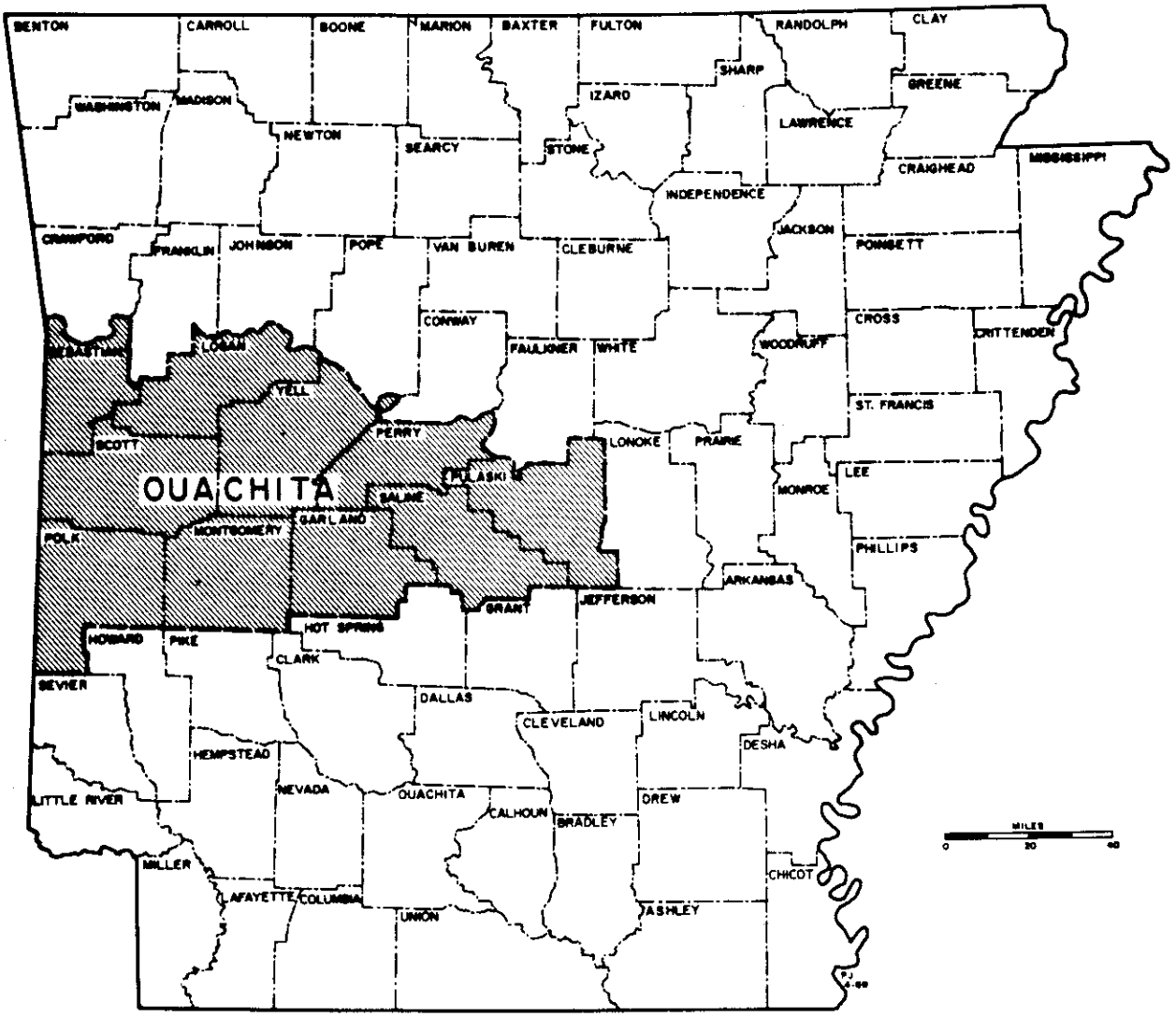

Figure 1.—*The Ouachita forest survey region of Arkansas.*

Table 4.--*Total area, commercial forest land, and proportion of total area, 1978*

County	Total area[1]	Commercial forest	
		Area	Proportion
	- *Thousand acres* -		- *Percent* -
Garland	470.4	313.2	67
Logan	468.5	212.4	45
Montgomery	512.6	410.4	80
Perry	359.0	277.3	77
Polk	550.4	418.9	76
Pulaski	515.2	221.4	43
Saline	466.6	355.1	76
Scott	574.7	477.9	83
Sebastian	343.7	120.0	35
Yell	606.7	390.5	64
All counties	4,867.8	3,197.1	66

[1]United States Bureau of the Census, Land and Water Area of the United States.

Table 5.--*Commercial forest land by ownership class, 1978*

County	All Ownerships	National forest	Other public	Forest industry	Farmer	Misc. private
	- - - - - - - - - - - - *Thousand acres* - - - - - - - - - - - - -					
Garland	313.2	105.3	...	124.2	...	83.7
Logan	212.4	81.0	7.9	11.8	24.1	87.6
Montgomery	410.4	293.3	...	51.3	17.4	48.4
Perry	277.3	93.0	3.3	141.6	24.1	15.3
Polk	418.9	171.0	.3	100.3	60.2	87.1
Pulaski	221.4	...	31.0	32.4	49.6	108.4
Saline	355.1	51.7	.3	164.3	32.4	106.4
Scott	477.9	350.3	.1	23.6	6.0	97.9
Sebastian	120.0	5.6	1.6	...	24.5	88.3
Yell	390.5	218.7	22.7	82.5	56.1	10.5
All counties	3,197.1	1,369.9	67.2	732.0	294.4	733.6

Table 6.--*Commercial forest land by forest type, 1978*

County	All types	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood
	Thousand acres					
Garland	313.2	113.4	102.6	97.2	...	...
Logan	212.4	64.9	59.0	76.7	11.8	...
Montgomery	410.4	182.4	114.0	114.0	...	...
Perry	277.3	129.8	94.4	41.3	11.8	...
Polk	418.9	129.8	153.4	135.7	...	...
Pulaski	221.4	37.8	48.6	86.4	43.2	5.4
Saline	355.1	111.3	95.4	106.0	42.4	...
Scott	477.9	259.6	94.4	118.0	5.9	...
Sebastian	120.0	...	18.0	84.0	12.0	6.0
Yell	390.5	165.0	82.5	82.5	55.0	5.5
All counties	3,197.1	1,194.0	862.3	941.8	182.1	16.9

Table 7.--*Commercial forest land by stand-size class, 1978*

County	All classes	Sawtimber	Poletimber	Sapling and seedling	Nonstocked areas
	Thousand acres				
Garland	313.2	102.6	97.2	113.4	...
Logan	212.4	76.7	64.9	70.8	...
Montgomery	410.4	199.5	153.9	57.0	...
Perry	277.3	112.1	94.4	70.8	...
Polk	418.9	159.3	153.4	100.3	5.9
Pulaski	221.4	64.8	75.6	75.6	5.4
Saline	355.1	137.8	137.8	79.5	...
Scott	477.9	253.7	171.1	53.1	...
Sebastian	120.0	6.0	42.0	72.0	...
Yell	390.5	176.0	148.5	66.0	...
All counties	3,197.1	1,288.5	1,138.8	758.5	11.3

Table 8.--*Commercial forest land by site class, 1978*

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.
	Thousand acres					
Garland	313.2	...	...	37.8	216.0	59.4
Logan	212.4	5.9	5.9	17.7	100.3	82.6
Montgomery	410.4	...	...	114.0	210.9	85.5
Perry	277.3	...	...	35.4	206.5	35.4
Polk	418.9	...	...	94.4	247.8	76.7
Pulaski	221.4	...	...	10.8	135.0	75.6
Saline	355.1	...	5.3	90.1	212.0	47.7
Scott	477.9	...	...	35.4	354.0	88.5
Sebastian	120.0	...	...	...	36.0	84.0
Yell	390.5	...	5.5	55.0	220.0	110.0
All counties	3,197.1	5.9	16.7	490.6	1,938.5	745.4

Table 9.--*Commercial forest land by physiographic site class, 1978*

County	All sites	Pine	Upland hardwood	Bottomland hardwood
	Thousand acres			
Garland	313.2	313.2	...	...
Logan	212.4	194.7	5.9	11.8
Montgomery	410.4	410.4	...	...
Perry	277.3	265.5	...	11.8
Polk	418.9	418.9	...	...
Pulaski	221.4	162.0	5.4	54.0
Saline	355.1	312.7	...	42.4
Scott	477.9	466.1	5.9	5.9
Sebastian	120.0	60.0	42.0	18.0
Yell	390.5	330.0	...	60.5
All counties	3,197.1	2,933.5	59,2	204.4

Table 10.--*Cordage of growing stock on commercial forest land by species group, 1978*

County	All species	Softwood			Hardwood			
		Total	Pine	Other	Total	Oak	Gum	Other
	Thousand cords							
Garland	4,520	2,945	2,942	3	1,575	1,118	188	269
Logan	2,516	1,519	1,499	20	997	674	113	210
Montgomery	8,280	5,879	5,876	3	2,401	1,756	209	436
Perry	3,674	2,605	2,597	8	1,069	794	160	115
Polk	5,696	3,869	3,836	33	1,827	1,273	262	292
Pulaski	1,931	971	775	196	960	639	140	181
Saline	5,529	3,064	3,060	4	2,465	1,452	497	516
Scott	8,485	6,305	6,253	52	2,180	1,589	249	342
Sebastian	623	127	112	15	496	366	...	130
Yell	5,870	3,561	3,471	90	2,309	1,175	634	500
All counties	47,124	30,845	30,421	424	16,279	10,836	2,452	2,991

Table 11.-- *Growing-stock volume on commercial forest land by species group, 1978*

County	All species	Softwood			Hardwood			
		Total	Pine	Other	Total	Oak	Gum	Other
	Million cubic feet							
Garland	326.4	220.9	220.7	.2	105.5	74.9	12.6	18.0
Logan	180.7	113.9	112.4	1.5	66.8	45.1	7.6	14.1
Montgomery	601.8	440.9	440.7	.2	160.9	117.7	14.0	29.2
Perry	267.0	195.4	194.8	.6	71.6	53.2	10.7	7.7
Polk	412.6	290.2	287.7	2.5	122.4	85.3	17.5	19.6
Pulaski	137.1	72.8	58.1	14.7	64.3	42.8	9.4	12.1
Saline	395.0	229.8	229.5	.3	165.2	97.3	33.3	34.6
Scott	619.0	472.9	469.0	3.9	146.1	106.5	16.7	22.9
Sebastian	42.7	9.5	8.4	1.1	33.2	24.5	...	8.7
Yell	421.8	267.1	260.3	6.8	154.7	78.7	42.5	33.5
All counties	3,404.1	2,313.4	2,281.6	31.8	1,090.7	726.0	164.3	200.4

Table 12.--*Sawtimber volume on commercial forest land by species group, 1978*

County	All species	Softwood			Hardwood			
		Total	Pine	Other	Total	Oak	Gum	Other
	Million board feet							
Garland	1,088.6	898.4	898.4	...	190.2	139.9	28.9	21.4
Logan	599.2	427.0	427.0	...	172.2	131.4	14.5	26.3
Montgomery	2,092.5	1,834.0	1,834.0	...	258.5	209.1	20.1	29.3
Perry	883.6	752.6	752.6	...	131.0	78.6	43.8	8.6
Polk	1,396.5	1,201.6	1,200.5	1.1	194.9	134.2	35.2	25.5
Pulaski	374.7	267.3	214.4	52.9	107.4	71.6	16.6	19.2
Saline	1,193.1	791.3	791.3	...	401.8	240.2	74.7	86.9
Scott	2,015.5	1,760.2	1,751.8	8.4	255.3	183.4	47.4	24.5
Sebastian	86.0	28.1	23.3	4.8	57.9	47.2	...	10.7
Yell	1,348.4	971.8	961.2	10.6	376.6	204.6	122.0	50.0
All counties	11,078.1	8,932.3	8,854.5	77.8	2,145.8	1,440.2	403.2	302.4

Table 13.--*Sawtimber volume on commercial forest land by species group and diameter class, 1978*

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						
Garland	1,088.6	898.4	652.6	245.8	190.2	127.5	62.7
Logan	599.2	427.0	351.6	75.4	172.2	87.9	84.3
Montgomery	2,092.5	1,834.0	1,322.4	511.6	258.5	123.4	135.1
Perry	883.6	752.6	577.2	175.4	131.0	62.5	68.5
Polk	1,396.5	1,201.6	956.3	245.3	194.9	132.4	62.5
Pulaski	374.7	267.3	189.0	78.3	107.4	58.0	49.4
Saline	1,193.1	791.3	649.3	142.0	401.8	207.9	193.9
Scott	2,015.5	1,760.2	1,418.1	342.1	255.3	154.7	100.6
Sebastian	86.0	28.1	21.8	6.3	57.9	37.0	20.9
Yell	1,348.4	971.8	759.8	212.0	376.6	157.6	219.0
All counties	11,078.1	8,932.3	6,898.1	2,034.2	2,145.8	1,148.9	996.9

Table 14.--*Growing-stock volume of softwoods on commercial forest land by forest type, 1978*

County	All types	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood
	Million cubic feet					
Garland	220.9	151.7	58.1	11.1	...	...
Logan	113.9	84.6	23.0	6.3	...	...
Montgomery	440.9	339.8	79.0	22.1	...	...
Perry	195.4	132.9	58.1	4.0	.4	...
Polk	290.2	176.8	97.2	16.2	...	...
Pulaski	72.8	28.5	22.9	6.9	14.5	...
Saline	229.8	146.6	54.6	24.4	4.2	...
Scott	472.9	395.2	54.7	22.5	.5	...
Sebastian	9.5	...	6.1	3.4	...	...
Yell	267.1	213.1	47.8	6.2	...	...
All counties	2,313.4	1,669.2	501.5	123.1	19.6	...

Table 15.--*Growing-stock volume of hardwoods on commercial forest land by forest type, 1978*

County	All types	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood
	Million cubic feet					
Garland	105.5	22.9	29.9	52.7	...	...
Logan	66.8	10.4	10.9	34.3	11.2	...
Montgomery	160.9	41.2	50.4	69.3	...	...
Perry	71.6	13.3	27.2	18.8	12.3	...
Polk	122.4	26.6	47.1	48.7	...	...
Pulaski	64.3	1.6	17.0	31.0	14.7	...
Saline	165.2	13.8	40.0	60.2	51.2	...
Scott	146.1	31.5	32.5	70.9	11.2	...
Sebastian	33.2	...	1.9	28.8	1.5	1.0
Yell	154.7	27.3	22.6	40.8	62.5	1.5
All counties	1,090.7	188.6	279.5	455.5	164.6	2.5

Table 16.--*Sawtimber volume of softwoods on commercial forest land by forest type, 1978*

County	All types	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood
	Million board feet					
Garland	898.4	569.8	275.2	53.4	...	...
Logan	427.0	332.1	82.7	12.2	...	...
Montgomery	1,834.0	1,412.4	332.8	88.8	...	...
Perry	752.6	496.9	239.2	16.2	.3	...
Polk	1,201.6	761.4	368.2	72.0	...	...
Pulaski	267.3	106.7	91.8	16.2	52.6	...
Saline	791.3	491.9	189.3	93.6	16.5	...
Scott	1,760.2	1,452.5	216.8	88.8	2.1	...
Sebastian	28.1	...	15.2	12.9	...	...
Yell	971.8	791.9	163.0	16.9	...	...
All counties	8,932.3	6,415.6	1,974.2	471.0	71.5	...

Table 17.--*Sawtimber volume of hardwoods on commercial forest land by forest type, 1978*

County	All types	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood
	Million board feet					
Garland	190.2	22.4	60.4	107.4	...	...
Logan	172.2	23.0	18.4	95.3	35.5	...
Montgomery	258.5	70.0	83.9	104.6	...	...
Perry	131.0	24.4	23.7	38.4	44.5	...
Polk	194.9	36.6	90.0	68.3	...	...
Pulaski	107.4	3.7	24.9	56.1	22.7	...
Saline	401.8	35.8	98.9	119.3	147.8	...
Scott	255.3	43.3	44.6	140.5	26.9	...
Sebastian	57.9	...	2.3	52.7	2.9	...
Yell	376.6	38.4	32.3	95.0	207.9	3.0
All counties	2,145.8	297.6	479.4	877.6	488.2	3.0

Table 18.--*Growing-stock volume of softwoods on commercial forest land by stand-size class, 1978*

County	All classes	Sawtimber	Poletimber	Sapling and seedling	Nonstocked areas
	Million cubic feet				
Garland	220.9	126.3	76.7	17.9	...
Logan	113.9	78.9	28.0	7.0	...
Montgomery	440.9	326.2	97.6	17.1	...
Perry	195.4	129.2	60.6	5.6	...
Polk	290.2	205.4	70.5	14.3	...
Pulaski	72.8	46.0	18.7	8.1	...
Saline	229.8	166.1	52.3	11.4	...
Scott	472.9	357.8	103.8	11.3	...
Sebastian	9.5	.8	6.5	2.2	...
Yell	267.1	179.8	79.0	8.3	...
All counties	2,313.4	1,616.5	593.7	103.2	...

Table 19.--*Growing-stock volume of hardwoods on commercial forest land by stand-size class, 1978*

County	All classes	Sawtimber	Poletimber	Sapling and seedling	Nonstocked areas
	Million cubic feet				
Garland	105.5	41.7	52.8	11.0	...
Logan	66.8	40.1	21.4	5.3	...
Montgomery	160.9	79.3	73.6	8.0	...
Perry	71.6	33.8	33.2	4.6	...
Polk	122.4	49.2	63.9	9.3	...
Pulaski	64.3	16.1	41.7	6.5	...
Saline	165.2	74.9	79.5	10.8	...
Scott	146.1	68.3	72.1	5.7	...
Sebastian	33.2	2.8	18.6	11.8	...
Yell	154.7	80.0	67.9	6.8	...
All counties	1,090.7	486.2	524.7	79.8	...

Table 20.--*Sawtimber volume of softwoods on commercial forest land by stand-size class, 1978*

County	All classes	Sawtimber	Poletimber	Sapling and seedling	Nonstocked areas
	Million board feet				
Garland	898.4	601.7	239.1	57.6	...
Logan	427.0	355.0	51.8	20.2	...
Montgomery	1,834.0	1,477.3	282.9	73.8	...
Perry	752.6	559.9	180.2	12.5	...
Polk	1,201.6	945.7	207.8	48.1	...
Pulaski	267.3	168.7	63.0	35.6	...
Saline	791.3	621.3	135.2	34.8	...
Scott	1,760.2	1,448.7	293.7	17.8	...
Sebastian	28.1	3.7	15.2	9.2	...
Yell	971.8	774.8	168.8	28.2	...
All counties	8,932.3	6,956.8	1,637.7	337.8	...

Table 21.--*Sawtimber volume of hardwoods on commercial forest land by stand-size class, 1978*

County	All classes	Sawtimber	Poletimber	Sapling and seedling	Nonstocked areas
	Million board feet				
Garland	190.2	90.7	72.2	27.3	...
Logan	172.2	126.9	32.0	13.3	...
Montgomery	258.5	178.9	66.6	13.0	...
Perry	131.0	83.0	42.8	5.2	...
Polk	194.9	95.7	92.5	6.7	...
Pulaski	107.4	54.7	47.6	5.1	...
Saline	401.8	226.1	146.4	29.3	...
Scott	255.3	154.0	95.6	5.7	...
Sebastian	57.9	6.5	36.1	15.3	...
Yell	376.6	253.0	115.7	7.9	...
All counties	2,145.8	1,269.5	747.5	128.8	...

Table 22.--*Growing-stock volume on commercial forest land by physiographic site class and species group, 1978*

County	All sites	Pine		Upland hardwood		Bottomland hardwood	
		Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
	Million cubic feet						
Garland	326.4	220.9	105.5	...	...	...	...
Logan	180.7	113.9	47.4	...	8.2	...	11.2
Montgomery	601.8	440.9	160.9	...	...	...	...
Perry	267.0	195.0	59.3	...	...	.4	12.3
Polk	412.6	290.2	122.4	...	...	...	...
Pulaski	137.1	57.1	44.7	...	3.6	15.7	16.0
Saline	395.0	225.6	114.0	...	...	4.2	51.2
Scott	619.0	471.2	134.0	1.2	.9	.5	11.2
Sebastian	42.7	9.2	15.2	.3	15.5	...	2.5
Yell	421.8	267.1	90.7	...	...	...	64.0
All counties	3,404.1	2,291.1	894.1	1.5	28.2	20.8	168.4

Table 23.--*Growing-stock volume of softwoods on commercial forest land by class of timber and tree section, 1978*

County	All classes	Poletimber	Sawtimber		
			Total	Sawlog	Upper stem
	Million cubic feet				
Garland	220.9	54.9	166.0	152.7	13.3
Logan	113.9	31.1	82.8	75.8	7.0
Montgomery	440.9	103.3	337.6	310.2	27.4
Perry	195.4	48.5	146.9	135.5	11.4
Polk	290.2	68.6	221.6	203.8	17.8
Pulaski	72.8	17.2	55.6	49.4	6.2
Saline	229.8	69.1	160.7	143.2	17.5
Scott	472.9	129.4	343.5	309.8	33.7
Sebastian	9.5	3.7	5.8	5.1	.7
Yell	267.1	74.3	192.8	173.4	19.4
All counties	2,313.4	600.1	1,713.3	1,558.9	154.4

Table 24.--*Growing-stock volume of hardwoods on commercial forest land by class of timber and tree section, 1978*

County	All classes	Poletimber	Sawtimber		
			Total	Sawlog	Upper stem
	Million cubic feet				
Garland	105.5	65.0	40.5	32.3	8.2
Logan	66.8	34.8	32.0	29.5	2.5
Montgomery	160.9	103.2	57.7	43.2	14.5
Perry	71.6	44.5	27.1	23.5	3.6
Polk	122.4	81.0	41.4	32.9	8.5
Pulaski	64.3	41.7	22.6	18.4	4.2
Saline	165.2	80.8	84.4	69.4	15.0
Scott	146.1	90.1	56.0	43.6	12.4
Sebastian	33.2	20.8	12.4	9.1	3.3
Yell	154.7	74.5	80.2	64.3	15.9
All counties	1,090.7	636.4	454.3	366.2	88.1

Table 25.--*Volume of timber on commercial forest land by class of timber and species group, 1978*

County	All classes	Growing stock		Rough		Rotten	
		Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
	Million cubic feet						
Garland	348.9	220.9	105.5	2.1	12.5	.1	7.8
Logan	202.3	113.9	66.8	1.9	16.5	...	3.2
Montgomery	646.9	440.9	160.9	3.7	26.4	.6	14.4
Perry	281.6	195.4	71.6	2.4	9.7	.1	2.4
Polk	463.2	290.2	122.4	5.0	31.3	...	14.3
Pulaski	168.1	72.8	64.3	2.5	23.8	.8	3.9
Saline	432.8	229.8	165.2	2.9	24.5	.4	10.0
Scott	661.1	472.9	146.1	4.7	26.5	1.0	9.9
Sebastian	56.1	9.5	33.2	...	11.8	...	1.6
Yell	459.4	267.1	154.7	3.2	22.9	...	11.5
All counties	3,720.4	2,313.4	1,090.7	28.4	205.9	3.0	79.0

Table 26.-- *Number of growing stock trees by species and diameter class, 1978*[1]

Species	All classes	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 and larger
	Diameter class (inches at breast height)										
	Thousand trees										
Softwood:											
Shortleaf pine	205,982	65,876	55,584	40,846	24,386	12,019	4,562	1,911	561	237	...
Loblolly pine	11,365	4,622	3,242	1,553	930	513	346	113	19	27	...
Redcedar	4,524	3,017	994	142	231	99	15	26	...	...	...
Cypress	1,148	...	412	437	192	42	13	...	28	24	...
Total	223,019	73,515	60,232	42,978	25,739	12,673	4,936	2,050	608	288	...
Hardwood:											
Select white oaks[2]	51,072	27,267	13,848	5,234	2,143	1,354	636	405	127	58	...
Select red oaks[3]	14,036	6,366	3,443	2,418	1,047	282	251	121	58	46	4
Other white oaks	38,170	20,813	8,313	4,812	1,821	1,389	564	237	98	123	...
Other red oaks	21,646	9,131	5,585	2,996	1,535	1,054	653	279	235	171	7
Pecan	55	...	55	...	...	...	...	...	...	...	...
Water hickory	31	...	...	...	...	...	...	11	20	...	...
Other hickories	27,142	16,323	5,965	2,900	1,163	447	247	77	20	...	...
Persimmon	84	84	...	...	...	...	...	...	...	...	...
Hard maple	191	191	...	...	...	...	...	...	...	...	...
Soft maple	2,372	1,579	609	115	24	19	14	12	...	...	...
Boxelder	65	...	...	33	...	20	...	12	...	...	...
Sweetgum	17,317	7,979	3,760	2,712	1,336	876	416	149	70	15	4
Blackgum	4,924	2,429	1,184	435	340	256	178	63	31	8	...
Other gums	39	...	...	39	...	...	...	...	...	...	...
White ash	374	229	...	81	54	...	...	10	...	...	...
Other ashes	2,606	901	950	497	130	75	32	12	9	...	...
Sycamore	170	...	51	40	...	19	...	12	19	29	...
Cottonwood	6	...	...	...	...	...	...	...	...	6	...
Basswood	366	241	54	49	22	...	...	...	...	...	...
Willow	47	...	...	33	...	...	14	...	...	...	...
Black walnut	18	...	...	...	...	...	18	...	...	...	...
Black cherry	1,198	347	431	282	59	65	...	14	...	...	...
American elm	1,214	339	458	298	24	57	31	...	...	7	...
Other elms	8,054	5,900	1,434	498	172	21	29	...	...	...	...
River birch	355	92	48	75	82	21	14	...	8	15	...
Hackberry	863	349	248	89	105	...	32	22	18	...	...
Black locust	117	117	...	...	...	...	...	...	...	...	...
Other locusts	68	...	68	...	...	...	...	...	...	...	...
Other hardwoods	23	...	...	...	...	23	...	...	...	...	...
Total	192,623	100,677	46,504	23,636	10,057	5,978	3,129	1,436	713	478	15
All species	415,642	174,192	106,736	66,614	35,796	18,651	8,065	3,486	1,321	766	15

[1]Detailed county statistics available upon request.
[2]Includes white, swamp chestnut, chinkapin, and bur oaks.
[3]Includes northern red, Shumard, and cherrybark oaks.

Table 27.--*Growing-stock volume on commercial forest land by species and diameter class, 1978*[1]

Species	All classes	diameter class (inches at breast height) 5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 and larger
		Million cubic feet									
Softwood:											
Shortleaf pine	1,187.6	186.3	370.0	514.8	462.9	329.2	173.7	97.0	33.8	19.9	...
Loblolly pine	94.0	12.1	17.9	16.1	15.5	12.8	10.6	5.5	1.3	2.2	...
Redcedar	17.7	6.5	4.7	1.2	2.6	1.6	.4	.7	...	...	...
Cypress	14.1	...	2.6	4.6	2.7	.6	.3	...	1.2	2.1	...
Total	2,313.4	204.9	395.2	536.7	483.7	344.2	185.0	103.2	36.3	24.2	...
Hardwood:											
Select white oaks	279.7	64.0	72.3	47.3	32.5	27.1	16.6	12.4	5.0	2.5	...
Select red oaks	87.2	14.0	16.6	20.5	14.2	5.7	6.6	4.1	2.9	2.3	.3
Other white oaks	192.9	41.8	35.8	37.2	23.2	24.0	13.1	7.4	4.5	5.9	...
Other red oaks	166.2	18.4	28.7	27.3	22.8	21.2	16.7	10.4	10.2	9.9	.6
Pecan	.2	...	.2	...	...	...	...	...	...	...	...
Water hickory	1.1	...	...	...	...	...	...	.4	.7	...	...
Other hickories	106.6	27.0	24.3	22.4	14.6	8.6	6.2	2.3	1.2	...	...
Persimmon	.3	.3	...	...	...	...	...	...	...	...	...
Hard maple	.8	.8	...	...	...	...	...	...	...	...	...
Soft maple	8.6	3.7	2.5	.9	.4	.4	.3	.4	...	...	...
Boxelder	1.0	...	...	.4	...	.3	...	.3	...	...	...
Sweetgum	130.8	15.5	19.7	27.0	23.6	19.7	13.7	6.3	3.5	1.2	.6
Blackgum	33.2	5.2	5.5	3.6	5.1	4.7	5.3	2.3	1.2	.3	...
Other gums	.3	...	...	.3	...	...	...	...	...	...	...
White ash	2.6	.6	...	.6	.8	...	...	.6	...	...	...
Other ashes	17.6	2.5	4.8	4.8	2.2	1.6	.9	.4	.4	...	...
Sycamore	4.9	...	.3	.5	...	.5	...	.5	.9	2.2	...
Cottonwood	.6	...	...	...	...	...	...	...	...	.6	...
Basswood	1.5	.4	.3	.4	.4	...	...	...	...	...	...
Willow	.9	...	...	.5	...	...	.4	...	...	...	...
Black walnut	.4	...	...	...	...	...	.4	...	...	...	...
Black cherry	8.1	.5	2.1	2.8	1.0	1.1	...	.6	...	...	...
American elm	7.9	.8	1.8	2.5	.3	1.3	.7	...	...	.5	...
Other elms	26.0	11.8	6.7	4.4	2.0	.4	.7	...	...	...	...
River birch	4.2	.3	.4	.7	1.0	.3	.4	...	.4	.7	...
Hackberry	6.4	.5	1.1	.7	1.4	...	.7	.9	1.1	...	...
Black locust	.2	.2	...	...	...	...	...	...	...	...	...
Other locusts	.2	...	.2	...	...	...	...	...	...	...	...
Other hardwoods	.3	...	...	...	...	.3	...	...	...	...	...
Total	1,090.7	208.3	223.3	204.8	145.5	117.2	82.7	49.3	32.0	26.1	1.5
All species	3,404.1	413.2	618.5	741.5	629.2	461.4	267.7	152.5	68.3	50.3	1.5

[1]Detailed county statistics available upon request.

Table 28.--*Sawtimber volume on commercial forest land by species and diameter class, 1978*[1]

Species	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
	Diameter class (inches at breast height)								
	Million board feet								
Softwood:									
Shortleaf pine	8,541.5	2,388.0	2,418.7	1,832.9	1,001.2	580.0	197.9	122.8	...
Loblolly pine	313.0	66.4	74.4	66.6	54.9	31.1	7.9	11.7	...
Redcedar	27.5	4.8	11.1	6.6	1.6	3.4	...	...	...
Cypress	50.3	14.9	11.2	2.5	2.2	...	6.3	13.2	...
Total	8,932.3	2,474.1	2,515.4	1,908.6	1,059.9	614.5	212.1	147.7	...
Hardwood:									
Select white oaks	466.2	...	141.5	130.4	87.8	63.8	27.6	15.1	...
Select red oaks	172.1	...	58.8	26.4	32.7	21.6	15.3	14.7	2.6
Other white oaks	363.3	...	93.5	111.2	64.3	40.1	22.4	31.8	...
Other red oaks	438.6	...	96.6	95.1	79.5	55.4	55.1	53.4	3.5
Water hickory	5.3	...	...	...	...	1.6	3.7	...	...
Other hickories	157.3	...	60.5	43.9	33.2	13.5	6.2	...	...
Soft maple	7.1	...	2.5	1.5	1.0	2.1	...	...	...
Boxelder	2.8	...	...	1.2	...	1.6	...	...	...
Sweetgum	317.1	...	94.5	88.9	71.6	34.4	18.0	6.8	2.9
Blackgum	86.1	...	19.6	22.1	23.1	13.0	6.4	1.9	...
White ash	5.8	...	2.5	...	...	3.3	...	...	...
Other ashes	23.9	...	8.9	7.0	3.8	1.5	2.7	...	...
Sycamore	20.4	...	...	2.4	...	2.1	5.0	10.9	...
Cottonwood	2.9	...	...	...	...	...	...	2.9	...
Basswood	1.7	...	1.7	...	...	...	...	...	...
Willow	2.0	...	...	...	2.0	...	...	...	...
Black walnut	1.9	...	...	...	1.9	...	...	...	...
Black cherry	12.7	...	5.4	4.2	...	3.1	...	...	...
American elm	13.2	...	1.1	5.5	3.4	...	...	3.2	...
Other elms	13.3	...	8.8	1.4	3.1	...	...	...	...
River birch	13.4	...	4.5	1.3	1.6	...	1.9	4.1	...
Hackberry	17.5	...	4.8	...	2.7	4.1	5.9	...	...
Other hardwoods	1.2	...	...	1.2	...	...	...	...	...
Total	2,145.8	...	605.2	543.7	411.7	261.2	170.2	144.8	9.0
All species	11,078.1	2,474.1	3,120.6	2,452.3	1,471.6	875.7	382.3	292.5	9.0

[1]Detailed forest statistics available upon request.

Table 29.--*Growing-stock volume in the saw-log portion of sawtimber trees on commercial forest land by diameter class and species, 1978*

Species	All classes	Diameter class (inches at breast height)							
		9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 and larger
	Million cubic feet								
Softwood:									
Shortleaf pine	1,487.4	442.8	426.2	311.5	164.8	91.7	32.0	18.4	...
Loblolly pine	57.4	13.0	13.9	11.9	10.0	5.3	1.3	2.0	...
Redcedar	5.1	1.0	2.2	1.1	.3	.5	...	...	...
Cypress	9.0	3.3	2.2	.5	.3	...	.9	1.8	...
Total	1,558.9	460.1	444.5	325.0	175.4	97.5	34.2	22.2	...
Hardwood:									
Select white oaks	77.8	...	25.4	21.9	14.4	9.9	4.2	2.1	...
Select red oaks	29.1	...	11.2	4.5	5.2	3.3	2.4	2.2	.3
Other white oaks	63.1	...	17.8	19.9	10.7	6.4	3.6	4.7	...
Other red oaks	74.1	...	17.6	17.3	13.2	8.9	8.3	8.4	.4
Water hickory	.7	...	...	...	...	.2	.5	...	...
Other hickories	26.7	...	11.3	7.2	5.2	2.0	1.0	...	...
Persimmon	...	...	...	...	...	...	...	...	...
Hard maple	...	...	...	...	...	...	...	...	...
Soft maple	1.2	...	.4	.3	.2	.3	...	...	...
Boxelder	.4	...	...	.2	...	.2	...	...	...
Sweetgum	55.8	...	17.3	15.9	12.3	5.6	3.1	1.2	.4
Blackgum	15.0	...	3.8	3.8	4.0	2.1	1.0	.3	...
Other gums	...	...	...	...	...	...	...	...	...
White ash	1.0	...	.5	...	...	.5	...	...	...
Other ashes	4.3	...	1.7	1.3	.6	.3	.4	...	...
Sycamore	3.5	...	...	.4	...	.4	.8	1.9	...
Cottonwood	.4	...	...	...	...	...	...	.4	...
Basswood	.3	...	.3	...	...	...	...	...	...
Willow	.4	...	...	...	.4	...	...	...	...
Black walnut	.3	...	...	...	.3	...	...	...	...
Black cherry	2.2	...	.9	.7	...	.5	...	...	...
American elm	2.1	...	.2	.9	.5	...	...	.5	...
Other elms	2.2	...	1.5	.2	.5	...	...	...	...
River birch	2.2	...	.8	.3	.3	...	.3	.5	...
Hackberry	3.2	...	1.1	...	.5	.7	.9	...	...
Black locust	...	...	...	...	...	...	...	...	...
Other locusts	...	...	...	...	...	...	...	...	...
Other hardwoods	.2	...	...	.2	...	...	...	...	...
Total	366.2	...	111.8	95.0	68.3	41.3	26.5	22.2	1.1
All species	1,925.1	460.1	556.3	420.0	243.7	138.8	60.7	44.4	1.1

Table 30.-- *Growing-stock volume on commercial forest land by species, class of timber and tree section, 1978*

Species	All classes	Poletimber	Sawtimber		
			Total	Sawlog	Upper stem
	Million cubic feet				
Softwood:					
Shortleaf pine	2,187.6	556.3	1,631.3	1,487.4	143.9
Loblolly pine	94.0	30.0	64.0	57.4	6.6
Redcedar	17.7	11.2	6.5	5.1	1.4
Cypress	14.1	2.6	11.5	9.0	2.5
Total	2,313.4	600.1	1,713.3	1,558.9	154.4
Hardwood:					
Select white oaks	279.7	183.6	96.1	77.8	18.3
Select red oaks	87.2	51.1	36.1	29.1	7.0
Other white oaks	192.9	114.8	78.1	63.1	15.0
Other red oaks	166.2	74.4	91.8	74.1	17.7
Sweet pecan	.2	.2	...	...	...
Water hickory	1.1	...	1.1	.7	.4
Other hickories	106.6	73.7	32.9	26.7	6.2
Persimmon	.3	.3	...	...	...
Hard maple	.8	.8	...	...	...
Soft maple	8.6	7.1	1.5	1.2	.3
Boxelder	1.0	.4	.6	.4	.2
Sweetgum	130.8	62.2	68.6	55.8	12.8
Blackgum	33.2	14.3	18.9	15.0	3.9
Other gums	.3	.3	...	...	...
White ash	2.6	1.2	1.4	1.0	.4
Other ashes	17.6	12.1	5.5	4.3	1.2
Sycamore	4.9	.8	4.1	3.5	.6
Cottonwood	.6	...	.6	.4	.2
Basswood	1.5	1.1	.4	.3	.1
Willow	.9	.5	.4	.4	...
Black walnut	.4	...	.4	.3	.1
Black cherry	8.1	5.4	2.7	2.2	.5
American elm	7.9	5.1	2.8	2.1	.7
Other elms	26.0	22.9	3.1	2.2	.9
River birch	4.2	1.4	2.8	2.2	.6
Hackberry	6.4	2.3	4.1	3.2	.9
Black locust	.2	.2	...	...	...
Other locusts	.2	.2	...	...	...
Other hardwoods	.3	...	.3	.2	.1
Total	1,090.7	636.4	454.3	366.2	88.1
All species	3,404.1	1,236.5	2,167.6	1,925.1	242.5

Table 31.--*Volume of timber on commercial forest land by species and class of timber, 1978*

Species	All live	Growing stock	Rough	Rotten
	- - - - - *Million cubic feet* - - - - -			
Softwood:				
Shortleaf pine	2,214.3	2,187.6	24.8	1.9
Loblolly pine	94.7	94.0	.7	...
Redcedar	19.4	17.7	1.4	.3
Cypress	16.4	14.1	1.5	.8
Total	2,344.8	2,313.4	28.4	3.0
Hardwood:				
Select white oaks	331.3	279.7	36.0	15.6
Select red oaks	110.3	87.2	17.4	5.7
Other white oaks	243.2	192.9	37.5	12.8
Other red oaks	202.2	166.2	23.8	12.2
Sweet pecan	1.0	.2	.8	...
Water hickory	1.1	1.1	...	...
Other hickories	132.8	106.6	20.1	6.1
Persimmon	.7	.3	.2	.2
Hard maple	.9	.8	...	.1
Soft maple	12.8	8.6	2.7	1.5
Boxelder	2.4	1.0	.9	.5
Sweetgum	152.1	130.8	11.6	9.7
Blackgum	47.6	33.2	5.1	9.3
Other gums	1.2	.3	.7	.2
White ash	3.8	2.6	.6	.6
Other ashes	21.5	17.6	3.5	.4
Sycamore	5.8	4.9	.7	.2
Cottonwood	.6	.6	...	...
Basswood	2.3	1.5	.8	...
Willow	2.8	.9	1.7	.2
Black walnut	.4	.4	...	...
Black cherry	12.6	8.1	3.8	.7
American elm	14.8	7.9	6.4	.5
Other elms	31.4	26.0	4.6	.8
River birch	4.5	4.2	.3	...
Hackberry	10.2	6.4	2.6	1.2
Black locust	.4	.2	.1	.1
Other locusts	1.4	.2	1.2	...
Sassafras	.1	...	.1	...
Dogwood	.2	...	.2	...
Holly	.5	...	.2	.3
Other commercial	.5	.3	.1	.1
Noncommercial	22.2	...	22.2	...
Total	1,375.6	1,090.7	205.9	79.0
All species	3,720.4	3,404.1	234.3	82.0

Table 32.--*Average volume per acre of growing stock and sawtimber on commercial forest land by species group and ownership class, 1978*

Ownership class	Growing stock			Sawtimber		
	All species	Softwood	Hardwood	All species	Softwood	Hardwood
	Cubic feet			*Board feet*		
National forest	1,285	979	306	4,308	3,812	496
Other public	626	144	482	1,868	533	1,335
Forest industry	1,037	801	236	3,646	3,246	400
Farmer	827	357	470	2,361	1,190	1,171
Misc. private	816	369	447	2,298	1,292	1,006
All ownerships	1,065	724	341	3,465	2,794	671

Table 33.--*Average volume per acre of growing stock and sawtimber on commercial forest land by forest type and species group, 1978*

Forest type	Growing stock			Sawtimber		
	All species	Softwood	Hardwood	All species	Softwood	Hardwood
	Cubic feet			*Board feet*		
Loblolly-shortleaf pine	1,556	1,398	158	5,622	5,373	249
Oak-pine	906	582	324	2,845	2,289	556
Oak-hickory	615	131	484	1,432	500	932
Oak-gum-cypress	1,012	108	904	3,074	393	2,681
Elm-ash-cottonwood	148	...	148	178	...	178
All types	1,065	724	341	3,465	2,794	671

Table 34.--*Metric area of commercial forest land by ownership class, 1978*

County	All ownerships	National forest	Other public	Forest industry	Farmer	Misc. private
	Thousand hectares					
Garland	126.7	42.6	...	50.2	...	33.9
Logan	86.0	32.8	3.2	4.8	9.8	35.4
Montgomery	166.1	118.7	...	20.8	7.0	19.6
Perry	112.2	37.6	1.3	57.3	9.8	6.2
Polk	169.5	69.2	.1	40.6	24.3	35.3
Pulaski	89.6	...	12.6	13.1	20.1	43.8
Saline	143.7	20.9	.1	66.5	13.1	43.1
Scott	193.4	141.8	...	9.6	2.4	39.6
Sebastian	48.6	2.3	.7	...	9.9	35.7
Yell	158.0	88.5	9.2	33.3	22.7	4.3
All counties	1,293.8	554.4	27.2	296.2	119.1	296.9

Table 35.- *Metric volume of growing stock on commercial forest land by species group, 1978*

County	All species	Softwood			Hardwood			
		Total	Pine	Other	Total	Oak	Gum	Other
	Thousand cubic meters							
Garland	9,243	6,256	6,250	6	2,987	2,121	357	509
Logan	5,116	3,225	3,183	42	1,891	1,277	215	399
Montgomery	17,041	12,485	12,479	6	4,556	3,333	396	827
Perry	7,560	5,533	5,516	17	2,027	1,506	303	218
Polk	11,684	8,218	8,147	71	3,466	2,415	496	555
Pulaski	3,882	2,061	1,645	416	1,821	1,212	266	343
Saline	11,185	6,507	6,499	8	4,678	2,755	943	980
Scott	17,529	13,392	13,281	111	4,137	3,016	473	648
Sebastian	1,209	269	238	31	940	694	...	246
Yell	11,944	7,563	7,370	193	4,381	2,228	1,204	949
All counties	96,393	65,509	64,608	901	30,884	20,557	4,653	5,674

Table 36.--*Average volume per hectare of growing stock on commercial forest land by species group and ownership class, 1978*

Ownership class	Growing stock		
	All species	Softwood	Hardwood
	Cubic meters		
National forest	90	69	21
Other public	44	10	34
Forest industry	73	56	17
Farmer	58	25	33
Misc. private	57	26	31
All ownerships	75	51	24

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Additional Keywords: Area, volume, forest type, stand-size, ownership.

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