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Forest Service

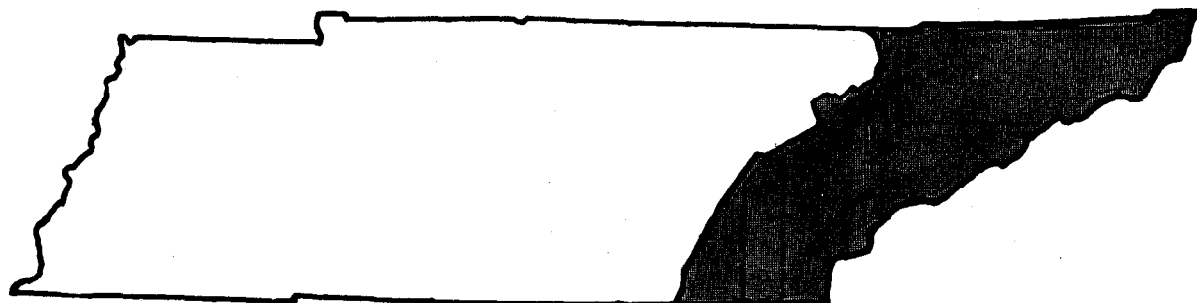
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Forest Statistics For



East Tennessee Counties

Staff: Renewable Resources Evaluation
Research Work Unit

FOREST STATISTICS FOR EAST TENNESSEE COUNTIES

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These tables were derived from data obtained during a 1980 inventory of 27 counties comprising the East Unit of Tennessee (fig. 1). 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 forest location, 10 BA 37.5 point samples were distributed on an area of about 1 acre.

The sampling methods were developed to provide suitable State estimates. Estimates for smaller areas are presented, but sampling error increases as the area considered decreases. 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:

$$SEG = \frac{SET \sqrt{X_T}}{\sqrt{X_G}}$$

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.

Table 1.--Sampling errors¹ for forest land and timber volume, 1980

County	Commercial forest land	Growing stock	Sawtimber
-----Percent-----			
Anderson	4	14	19
Blount	2	13	20
Bradley	6	12	16
Carter	3	10	15
Claiborne	4	15	22
Cocke	2	12	17
Grainger	3	17	24
Greene	2	10	15
Hamblen	5	40	62
Hamilton	3	10	14
Hancock	4	32	46
Hawkins	2	11	20
Jefferson	4	9	17
Johnson	4	12	20
Knox	3	17	26
Loudon	4	24	29
McMinn	4	13	21
Meigs	3	19	26
Monroe	1	11	14
Polk	3	13	17
Rhea	4	11	19
Roane	3	9	14
Sevier	4	13	21
Sullivan	4	14	19
Unicoi	4	13	22
Union	3	16	20
Washington	2	17	30
All counties	0.6	2.7	4.0

^{1/} By random-sampling formula.

Because of differences in standards of tree measurements, direct comparisons between these data and those from 1971 inventory are not valid. 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.

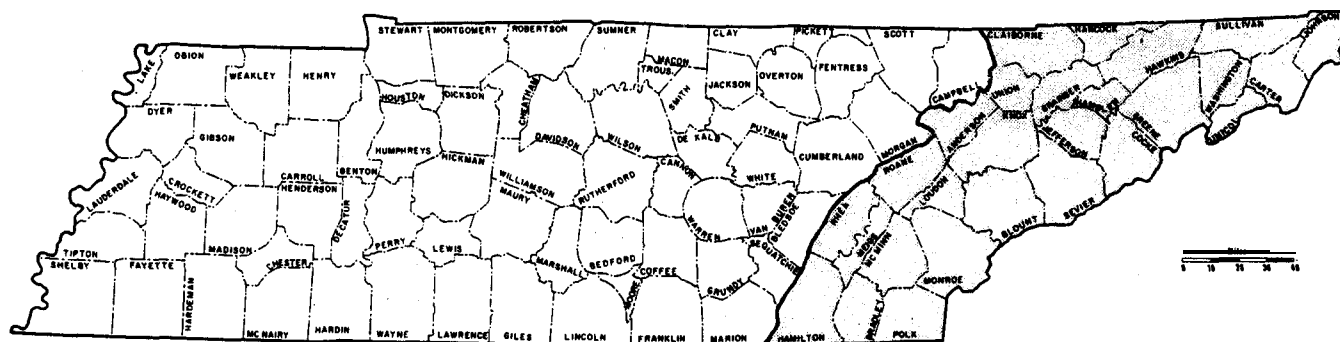


Figure 1.--The East forest survey region of Tennessee.

Table 2.--Sampling errors for timber volume by species, 1980

Species	Growing stock	Sawtimber
-----Percent-----		
Softwood:		
Shortleaf pine	13	14
Loblolly pine	29	35
Virginia pine	10	11
White pine	18	18
Pitch pine	23	24
Redcedar	20	32
Hemlock	33	38
Other pines	50	(1)
Total	6.1	7.0
Hardwood:		
Select white oaks	9	11
Select red oaks	10	12
Other white oaks	a	10
Other red oaks	7	10
Hickories	10	13
Persimmon	38	-
Hard maple	29	44
Soft maple	11	18
Boxelder	-	-
Beech	23	29
Sweetgum	22	40
Blackgum	14	22
Other gum	-	-
Whiteash	20	31
Other ashes	34	(1)
Sycamore	38	44
Basswood	(1)	(1)
Yellow-poplar	10	12
Magnolia	30	39
Black walnut	-	-
Black cherry	26	32
American elm	33	50
Other elms	33	41
River birch	28	39
Other birches	(1)	-
Hackberry	26	(1)
Black locust	(1)	(1)
Sassafras	21	39
Dogwood	30	(1)
Holly	33	-
Other hardwoods	39	49
Total	3.7	5.3
All species	2.7	4.0

1/ Exceeds 50 percent.

Table 3.--Change¹ in forest resource since, 1971

Item	Change
	Percent
Commercial forest land	+14
Growing-stock volume:	
Softwood	+13
Hardwood	+27
All species	+22
Sawtimber volume:	
Softwood	+28
Hardwood	+35
All species	+32

¹ Based on current measurement standards

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.

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 **sawlog** 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 4.--*Total area, commercial forest land, proportion of total area, 1980*

County	Total ¹ area	Commercial forest	
		Area	Proportion
	<i>Thousand acres</i>		<i>Percent</i>
Anderson	218.2	134.2	62
Blount	373.8	126.0	34
Brandley	216.3	96.6	45
Carter	227.2	151.2	67
Claiborne	291.2	179.4	62
Cocke	278.4	174.0	63
Grainger	199.7	100.7	50
Greene	396.1	135.2	34
Hamblen	111.4	30.4	27
Hamilton	375.7	203.0	54
Hancock	147.2	100.8	68
Hawkins	316.2	185.6	59
Jefferson	206.1	58.5	28
Johnson	191.4	130.0	68
Knox	337.9	102.0	30
Loudon	159.4	55.2	35
McMinn	278.4	129.8	47
Meigs	139.5	85.8	62
Monroe	424.9	290.7	68
Polk	281.0	208.0	74
Rhea	217.6	124.2	57
Roane	248.3	150.0	60
Sevier	387.2	137.7	36
Sullivan	273.9	99.0	36
Unicoi	118.4	96.9	82
Union	154.2	108.3	70
Washington	209.3	61.2	29
All counties	6,778.9	3,454.4	51

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

Table 5.--*Commercial forest land by ownership class, 1980.*

County	All ownerships	National forest	Other public	Forest Industry	Farmer	Misc. Private
<i>-----Thousand acres-----</i>						
Anderson	134.2	-	8.3	24.4	31.0	70.5
Blount	126.0	-	.1	18.0	91.5	16.4
Brandley	96.6	-	.2	16.1	16.4	63.9
Carter	151.2	78.1	-	-	-	73.1
Claiborne	179.4	-	6.4	-	87.3	85.7
Cocke	174.0	42.6	.2	-	91.5	39.7
Grainger	100.7	-	3.2	-	91.6	5.9
Greene	135.2	33.8	.2	-	63.5	37.7
Hamblen	30.4	-	1.9	-	28.5	-
Hamilton	203.0	-	14.4	-	49.8	138.8
Hancock	100.8	-	-	-	95.2	5.6
Hawkins	185.6	-	6.6	5.8	02.6	90.6
Jefferson	50.5	-	.9	-	52.9	4.7
Johnson	130.0	48.3	.2	-	15.9	65.6
Knox	102.0	-	1.8	-	34.6	65.6
Loudon	55.2	-	4.1	9.2	23.4	18.5
McMinn	129.8	1.8	.4	29.5	12.0	86.1
Meigs	85.8	-	1.6	19.8	33.6	30.8
Monroe	290.7	120.3	5.5	17.1	63.8	84.0
Polk	208.0	132.4	2.3	-	26.4	46.9
Rhea	124.2	-	1.3	43.2	60.4	19.3
Roane	150.0	-	18.9	10.0	55.9	65.2
Sevier	137.7	-	.4	-	51.9	85.4
Sullivan	99.0	35.7	.9	-	27.5	34.9
Unicoi	96.9	48.1	2.8	-	-	46.0
Union	108.3	-	28.5	-	29.0	50.8
Washington	61.2	16.1	1.0	-	20.7	23.4
All counties	3,454.4	557.2	112.1	193.1	1236.9	1,355.1

Table 6.--Commercial forest land by forest type, 1980

county	All types	White pine	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Oak-gum-cypress	Maple-beech-birch
-----Thousand acres-----							
Anderson	134.2		12.2	12.2	109.8		
Blount	126.0		18.0	60.0	48.0		
Grandley	96.6		64.4	-	32.2		
Carter	151.2		12.6	18.9	113.4		6.3
Claiborne	179.4		7.0	7.8	163.8		
Cocke	174.0		36.0	24.0	108.0	6.0	
Grainger	100.7		-	-	79.5		
Greene	135.2		42.6	111.4	109.2		
Hamblen	30.4		42.0	41.1	15.2		
Hamilton	203.0				119.0		
Hancock	100.8			7.2	93.6		-
Hawkins	185.6		17.4	17.4	145.0		5.8
Jefferson	58.5		13.0	13.0	32.5		
Johnson	130.0		5.2	20.8	104.0		
Knox	102.0		13.6	20.4	68.0		
Loudon	55.2		27.6	9.2	18.4		
McMinn	129.8		59.0	23.6	47.2		
Meigs	85.8		19.8	19.8	46.2		-
Monroe	290.7	-	119.7	51.3	114.0		5.7
Polk	208.0	5.2	62.4	52.0	88.4		
Rhea	124.2		10.8	21.6	91.8	-	
Roane	150.0		20.0	20.0	105.0	5.0	
Sevier	137.7		20.4	30.6	86.7		
Sullivan	99.0		13.5	9.0	76.5		-
Unicoi	96.9		5.7	11.4	68.4		11.4
Union	108.3		22.0	11.4	74.1		
Washington	61.2			15.3	45.9		
All counties	3,454.4	5.2	639.5	565.7	2,203.8	11.0	29.2

Table 7.--Commercial forest land by stand-size class, 1980

County	All classes	Sawtimber	Poletimber	Sapling and seedling	Nonstocked areas
-----Thousand acres-----					
Anderson	134.2	54.9	36.6	42.7	
Blount	126.0	72.0	36.0	18.0	
Brandley	96.6	16.1	80.5		
Carter	151.2	88.2	50.4	6.3	6.3
Claiborne	179.4	62.4	54.6	62.4	
Cocke	174.0	78.0	54.0	42.0	
Grainger	100.7	47.7	31.8	21.2	
Greene	135.2	62.4	57.2	15.6	
Hamblen	30.4	7.6	15.2	7.6	
Hamilton	203.0	98.0	77.0	28.0	
Hancock	100.8	21.6	28.0	50.4	
Hawkins	104.6	46.4	98.6	40.6	
Jefferson	58.5	45.5	-	13.0	
Johnson	130.0	46.8	52.0	31.2	
Knox	102.0	40.8	40.8	20.4	
Loudon	55.2	27.6	9.2	18.4	
McMinn	129.8	47.2	64.9	17.7	
Meigs	85.8	19.8	52.8	13.2	
Monroe	290.7	96.9	96.9	96.9	
Polk	208.0	67.6	78.0	62.4	
Rhea	125.2	43.2	54.0	27.0	
Roane	150.0	90.0	30.0	30.0	
Sevier	137.7	45.9	45.9	45.9	
Sullivan	99.0	36.0	36.0	27.0	
Unicoi	96.9	57.0	17.1	22.0	
Union	108.3	57.0	22.8	28.5	
Washington	61.2	20.4	35.7	5.1	
All counties	3,454.4	1,397.0	1,256.8	-794.3	6.3

Table 8.--Commercial forest land by site class, 1980

County	All classes	165 ft ³ or more	120-165 ft ³	85-120 ft ³	50-85 ft ³	Less than 50 ft ³
----- Thousand acres -----						
Anderson	134.2		12.2	24.4	79.3	18.3
Blount	126.0	6.0	12.0	36.0	60.0	12.0
Brandley	96.6			16.1	64.4	16.1
Carter	151.2	-		18.9	56.7	75.6
Claiborne	179.4	15.6		54.6	70.2	39.0
Cocke	174.0		6.0	42.0	96.0	30.0
Grainger	100.7	-		26.5	26.5	47.7
Greene	135.2	5.2		46.8	46.8	36.4
Hamblen	30.4			7.6	22.8	
Hamilton	203.0			49.0	105.0	49.0
Hancock	100.8			21.6	57.6	21.6
Hawkins	185.6			46.4	81.2	58.0
Jefferson	58.5			19.5	19.5	19.5
Johnson	130.0			20.8	78.0	31.2
Knox	102.0		13.6	34.0	47.6	6.8
Loudon	55.2		9.2	9.2	27.6	9.2
McMinn	129.8		5.9	35.4	76.7	11.8
Meigs	85.8	-	-	13.2	66.0	
Monroe	290.7	5.7	5.7	57.0	165.3	5.7
Polk	208.0		20.8	62.4	93.6	31.2
Rhea	124.2		-	21.6	75.6	21.6
Roane	150.0		15.0	40.0	90.0	5.0
Sevier	137.7		-	10.2	76.5	51.0
Sullivan	99.0		13.5	4.5	67.5	13.5
Unicoi	96.9		5.7	22.8	62.7	5.7
Union	108.3			34.2	51.3	22.8
Washington	61.2			15.3	30.6	15.3
All counties	3,454.4	32.5	119.6	790.0	1,795.0	717.3

Table 9.--Commercial forest land by physiographic site class, 1980

county	All sites	Pine	Upland hardwood	Bottomland hardwood
----- Thousand acres -----				
Anderson	134.2	61.0	73.2	
Blount	126.0	126.0		
Brandley	96.6	64.4	32.2	
Carter	151.2	50.4	100.8	
Claiborne	179.4	101.4	78.0	
Cocke	174.0	102.0	66.0	6.0
Grainger	103.7	90.1	10.6	
Greene	135.2	52.0	83.2	
Hamblen	30.4	15.2	15.2	
Hamilton	203.0	182.0	21.0	
Hancock	100.8	79.2	21.6	
Hawkins	185.6	139.2	46.4	
Jefferson	58.5	19.5	39.0	
Johnson	130.0	98.8	31.2	
Knox	102.0	68.0	34.0	
Loudon	55.2	55.2	-	
McMinn	129.8	123.9	5.9	
Meigs	85.8	85.8		
Monroe	290.7	250.8	39.9	
Polk	208.0	187.2	20.8	
Rhea	124.2	81.0	43.2	-
Roane	150.0	130.0	15.0	5.0
Sevier	137.7	117.3	20.4	
Sullivan	99.0	40.5	50.5	
Unicoi	96.9	57.0	39.9	
Union	108.3	102.6	5.7	
Washington	61.2	35.7	25.5	-
All counties	3,454.4	2,516.2	927.2	11.0

Table 10.--Cordage of growing stock on commercial forest land by species group, 1980

county	All species	Softwood			Hardwood			
		Total	Pine	Other	Total	Oak	Cum	Other
----- Thousand cords -----								
Anderson	2,246	421	285	136	1,825	803	79	943
Blount	2,769	1,212	1,127	55	1,557	958	54	545
Brantley	1,941	1,177	1,113	64	764	299	88	377
Carter	3,250	566	123	443	2,684	1,478	45	1,161
Claiborne	2,345	222	201	21	2,123	897	39	1,187
Cocke	2,997	644	483	161	2,353	1,143		1,203
Grainger	1,594	225	168		1,369	549	9	727
Greene	2,137	383	228	1	1,754	710	58	986
Hamblen	383	99	87	12	284	197		87
Hamilton	2,789	1,143	1,143		1,646	1,090	34	522
Hancock	1,134	33	25	8	1,101	240	25	836
Hawkins	2,586	268	251	17	2,318	1,209	45	1,064
Jefferson	972	247	188	59	725	336	27	362
Johnson	2,043	253	72	181	1,790	923	19	848
Knox	1,740	313	297	16	1,427	776	27	624
Loudon	941	399	379	20	542	396	19	127
McMinn	2,117	1,017	997	20	1,100	575	46	479
Meigs	1,414	702	659	43	712	422	69	221
Monroe	5,170	2,592	2,268	324	2,510	1,160	104	1,314
Polk	3,857	2,376	1,972	404	1,481	963	57	461
Rhea	1,667	463	387	76	1,204	767	64	373
Roane	2,455	545	488	57	1,910	1,265	60	585
Sevier	2,024	678	623	55	1,346	723	51	572
Sullivan	1,665	249	110	139	1,416	830	21	565
Unicoi	1,928	365	30	335	1,563	538	24	1,001
Union	1,698	319	231	88	1,379	610	33	736
Washington	1,055	252	112	140	803	503	22	278
All counties	56,917	17,163	14,047	3,116	39,754	20,360	1,210	18,184

Table 11.--Growing-stock volume on commercial forest land by species group, 1980

County	All species	Softwood			Hardwood			
		Total	Pine	Other	Total	Oak	Gum	Other
----- Million cubic feet -----								
Anderson	153.9	31.6	21.4	10.2	122.3	53.8	5.3	63.2
Blount	195.2	90.9	84.5	6.4	104.3	64.2	3.6	36.5
Brantley	139.5	88.3	83.5	4.8	51.2	20.0	5.9	25.3
Carter	222.2	42.4	9.2	33.2	179.8	99.0	3.0	77.8
Claiborne	158.9	16.7	15.1	1.6	142.2	60.1	2.6	79.5
Cocke	206.0	48.3	36.2	12.1	157.7	76.6	.5	80.6
Grainger	108.6	16.9	12.6	4.3	91.7	36.8	6.2	48.7
Greene	146.2	28.7	17.1	11.6	117.5	47.6	3.9	66.0
Hamblen	26.4	7.4	6.5	.9	19.0	13.2		5.8
Hamilton	196.0	85.7	85.7		110.3	73.0	2.3	35.0
Hancock	76.3	2.5	1.9	.6	73.8	16.1	1.7	56.0
Hawkins	175.4	20.1	18.8	1.3	155.3	81.0	3.0	71.3
Jefferson	67.1	18.5	14.1	4.4	48.6	22.5	1.8	24.3
Johnson	138.9	19.0	5.4	13.6	119.9	61.8	1.3	56.8
Knox	119.1	23.5	22.3	1.2	95.6	52.0	1.8	41.8
Loudon	66.2	29.9	28.4	1.5	36.3	26.5	1.3	8.5
McMinn	150.0	76.3	74.8	1.5	73.1	38.5	3.1	32.1
Meigs	100.3	52.6	49.4	3.2	47.7	28.3	4.6	14.8
Monroe	367.1	194.4	170.1	24.3	172.7	77.7	7.0	88.0
Polk	217.4	178.2	147.9	30.3	99.2	64.5	3.8	30.9
Rhea	115.4	34.7	29.0	5.7	80.7	51.4	4.3	25.0
Roane	168.9	40.9	36.6	4.3	128.0	84.8	4.0	39.2
Sevier	141.0	50.8	46.7	4.1	90.2	48.5	3.4	30.3
Sullivan	113.6	14.7	8.3	10.4	94.9	55.6	1.4	37.9
Unicoi	132.1	27.4	2.3	25.1	104.7	36.0	1.6	67.1
Union	116.3	23.9	17.3	6.6	92.4	40.9	2.2	49.3
Washington	72.7	18.9	8.4	10.5	53.8	33.7	1.5	18.6
All counties	3,950.7	1,287.2	1,053.5	233.7	2,663.5	1,364.1	81.1	1,218.3

Table 12.--Sawtimber volume on commercial forest land by species group, 1980

county	All species	Softwood			Hardwood			
		Total	Pine	Other	Total	Oak	Gum	Other
- - - - - Million board feet - - - - -								
Anderson	538.1	113.3	79.9	33.4	424.8	213.5	16.6	194.7
Blount	721.1	383.0	349.7	33.3	338.1	249.7		88.4
Brandley	353.0	221.5	210.1	11.4	131.5	56.4	-	75.1
Carter	733.9	184.8	18.2	166.6	549.1	318.1	13.8	217.2
Claiborne	526.8	64.6	64.6		462.2	220.2	3.6	238.4
Cocke	656.2	189.1	123.1	66.0	467.1	249.6	-	217.5
Grainger	332.4	39.3	31.3	8.0	293.1	125.0	13.8	154.3
Greene	478.3	80.4	45.7	34.7	397.9	166.2	19.1	212.6
Hamblen	107.4	12.1	12.1	-	95.3	75.2		20.1
Hamilton	686.3	301.6	301.6		384.7	258.0	4.8	121.9
Hancock	234.6	10.2	10.2		224.4	56.0	2.8	165.6
Hawkins	438.8	51.7	51.7		387.1	213.8	5.1	168.2
Jefferson	248.9	43.8	34.4	9.4	205.1	124.0	6.6	74.5
Johnson	380.6	73.1	22.3	50.8	307.5	148.7		158.8
Knox	456.8	60.4	57.5	2.9	396.4	240.5	9.9	146.0
Loudon	223.6	69.5	64.4	5.1	154.1	111.2	4.5	38.4
McMinn	425.5	199.6	199.6	-	225.9	132.9	4.0	89.0
Meigs	197.7	107.8	98.9	8.9	89.9	72.8		17.1
Monroe	1179.0	625.5	523.7	101.8	553.5	228.5	1.1	313.9
Polk	857.6	625.6	500.4	125.2	232.0	194.4		37.6
Rhea	285.8	79.2	57.6	21.6	206.6	125.0	11.9	69.1
Roane	479.7	127.9	119.3	8.6	351.8	227.3	9.4	115.1
Sevier	437.6	137.8	129.7	8.1	299.8	183.2	6.9	109.7
Sullivan	310.2	71.6	23.8	47.8	238.6	146.4		92.2
Unicoi	402.9	109.5	9.7	99.8	293.4	123.6	1.3	165.5
Union	374.6	44.6	40.5	4.1	330.0	167.6	1.5	153.9
Washington	229.7	69.2	15.1	53.5	160.5	97.6	4.7	58.2
All counties	12,297.1	4,096.7	3,195.7	901.0	8,200.4	4,525.4	161.4	3,513.6

Table 13.--Sawtimber volume on commercial forest land by species group and diameter class, 1980

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 -----							
Anderson	538.1	113.3	86.4	26.9	424.8	158.2	266.6
Blount	721.1	383.0	340.4	42.6	338.1	141.8	196.3
Brandley	353.0	221.5	221.5	-	131.5	58.4	73.1
Carter	733.9	184.8	60.9	123.9	549.1	211.1	338.0
Claiborne	526.8	64.6	59.3	5.3	462.2	264.4	197.8
Cocke	656.2	189.1	113.1	76.0	467.1	178.4	288.7
Grainger	332.4	39.3	34.2	5.1	293.1	118.9	174.2
Greene	478.3	80.4	47.4	33.0	391.9	120.2	217.7
Hamblen	107.4	12.1	12.1	-	95.3	24.2	71.1
Hamilton	686.3	301.6	268.4	33.2	384.7	143.9	240.8
Hancock	234.6	10.2	10.2	-	224.4	82.8	141.6
Hawkins	438.8	51.7	44.9	6.8	387.1	161.4	225.7
Jefferson	248.9	43.8	43.8	-	205.1	76.1	129.0
Johnson	380.6	73.1	60.5	12.6	307.5	143.5	164.0
Knox	456.8	60.4	48.1	12.3	396.4	53.8	342.6
Loudon	223.6	69.5	69.5	-	154.1	34.2	118.9
McMinn	425.5	199.6	181.8	17.8	225.9	87.3	138.6
Meigs	197.1	107.8	107.8	-	89.9	53.3	36.6
Monroe	1,179.0	625.5	505.8	119.7	553.5	224.7	328.8
Polk	857.6	625.6	430.1	195.5	232.0	98.9	134.1
Rhea	285.8	79.2	52.3	26.9	206.6	119.5	87.1
Roane	479.7	127.9	108.2	19.7	351.8	194.9	156.9
Sevier	437.6	137.8	102.2	35.6	299.8	124.6	175.2
Sullivan	310.2	71.6	32.5	39.1	238.6	115.1	123.5
Unicoi	402.9	109.5	52.3	57.2	293.4	95.2	198.2
Union	374.6	44.6	44.6	-	330.0	82.4	247.6
Washington	229.7	69.2	31.8	37.4	160.5	62.3	98.2
All counties	12,297.1	4,096.7	3,170.1	926.6	8,200.4	3,229.5	4,970.9

Table 14.--*Growing-stock volume of softwoods on commercial forest land by forest type, 1980*

county	All types	White pine	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Oak-gum-cypress
- - - - - Million cubic feet - - - - -						
Anderson	31.6		13.3	7.3	11.0	-
Blount	90.9		22.5	64.8	3.6	-
Brandley	88.3		84.7	-	3.6	-
Carter	42.4		13.3	15.8	13.3	-
Claiborne	16.7		1.6	5.0	10.1	-
Cocke	48.3		27.9	10.1	10.3	-
Grainger	16.9		-	11.6	5.3	-
Greene	28.7		12.6	10.2	5.9	-
Hamblen	7.4			7.4	-	-
Hamilton	85.7		51.6	18.3	12.8	-
Hancock	2.5			.6	1.9	-
Hawkins	20.1		8.5	3.8	7.8	-
Jefferson	18.5		11.4	7.1	-	-
Johnson	19.0		2.6	9.5	6.9	-
Knox	23.5		6.9	12.2	4.4	-
Loudon	29.9		24.0	5.2	.7	-
McMinn	76.3		51.7	16.3	8.3	-
Meigs	52.6		30.0	15.6	7.0	-
Monroe	194.4		145.4	30.8	18.2	-
Polk	170.2	8.3	105.7	50.1	14.1	-
Rhea	34.7		14.1	9.9	10.7	-
Roane	40.9		28.0	4.8	7.0	1.1
Sevier	50. a		21.0	17.2	12.6	-
Sullivan	18.7		13.7		3.9	-
Unicoi	27.4		5.0	1.0	8.9	-
Union	23.9		16.8	4.0	3.1	-
Washington	18.9	-		11.4	7.5	-
All counties	1,287.2	a.3	715.3	363.6	198.9	1.1

Table 15.--*Growing-stock volume of hardwoods on commercial forest land by forest type, 1980*

County	All types	White pine	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Oak-gum-cypress	Maple-beech-birch
- - - - - Million cubic feet - - - - -							
Anderson	122.3	-	1.9	7.8	112.6	-	-
Blount	104.3	-	.7	54.9	48.7	-	-
Brandley	51.2	-	11.2		40.0	-	-
Carter	179.8	-	3.4	21.2	143.3	-	11.9
Claiborne	142.2	-		.9	141.3	-	-
Cocke	157.7	-	6.7	7.6	137.8	5.6	-
Grainger	91.7	-		7.4	84.3	-	-
Greene	117.5	-	.6	a.2	108.7	-	-
Hamblen	19.0	-		1.0	18.0	-	-
Hamilton	110.3	-	8.3	12.5	89.5	-	-
Hancock	73.8	-		-	73.8	-	10.3
Hawkins	145.0	-	.7	4.3	140.0	-	-
Jefferson	145.0	-	4.8	3.0	40.8	-	-
Johnson	119.9	-	3.9	9.7	106.3	-	-
Knox	95.6	-	.a	6.5	88.3	-	-
Loudon	38.3	-	.6	4.5	31.2	-	-
McMinn	38.3	-	4.6	13.1	56.0	-	-
Meigs	47.7	-	1.7	19.4	26.6	-	-
Monroe	172.7	-	18.9	30.2	120.4	-	3.2
Polk	99.2	1.4	7.4	32.4	55.0	-	-
Rhea	80.7	-	2.2	7.7	70.8	-	-
Roane	128.0	-	.7	10.2	103.3	13.8	-
Sevier	90.2	-	3.7	17.5	69.0	-	-
Sullivan	94.9	-	3.2	7.2	84.5	-	-
Unicoi	104.7	-		10.7	82.1	-	11.9
Union	92.4	-	4.4	6.0	82.0	-	-
Washington	53.8	-		7.2	46.6	-	-
All counties	2,663.5	4.4	90.4	311.1	2,200.9	19.4	37.3

Table 16.--Sawtimber volume of softwoods on commercial forest land
by forest type, 1980

county	All types	White pine	Loblolly- shortleaf pine	Oak- pine	Oak- hickory	Oak- gum- cypress	Maple- beech- birch
- - - - - Million board feet - - - - -							
Anderson	113.3		41.5	24.3	47.5	•	
Blount	383.0		71.7	303.0	a.3	•	
Brandley	221.5		201.7		19.8	•	
Carter	184. a		52.1	60.0	72.7	•	
Claiborne	64.6			17.0	47.6	•	
Cocke	189.1		88.4	44.7	56.0	-	
Grainger	39.3		-	20.2	19.1	-	
Greene	80.4		24.0	43.1	13.3	•	
Hamblen	12.1		-	12.1	-	-	
Hamilton	301.6		204.4	41.8	55.4	-	
Hancock	10.2		-		10.2	•	
Hawkins	51.7		4.3	14.3	33.1	•	
Jefferson	43.8		34.6	9.2	-	-	
Johnson	73.1		5.3	41.4	26.4	-	
Knox	60.4		16.3	30. a	13.3	-	
Loudon	69.5		51.1	18.4	-	-	
McMinn	199.6		97.8	64.7	37.1	-	
Meigs	107.8		28.6	56.7	22.5	•	
Monroe	625.5		433.9	99.6	92.0	•	
Polk	625.6	40.3	333.5	180.7	71.1	•	
Rhea	79.2		16.2	31.7	31.3	-	-
Roane	127.9		89.9	14.6	17.6	5.8	-
Sevier	137.8		47.3	53.2	37.3	•	
Sullivan	71.6		61.5	7.6	-	•	
Unicoi	109.5		19.1	5:::	38.7	•	
Union	44.6		38.4		6.2	•	
Washington	69.2			38.5	30.7	•	
All counties	4,096.7	40.3	1,961.6	1,274.2	814.8	5.8	•

Table 17.--Sawtimber volume of hardwoods on commercial forest land
by forest type, 1980

County	All types	Loblolly- shortleaf pine	Oak- pine	Oak- hickory	Oak- gum- cypress	Maple- beech- birch
- - - - - Million board feet - - - - -						
Anderson	424.8	10.9	30.2	383.7	•	
Blount	338.1		182.9	155.2	•	
Brandley	131.5	6.3		125.2	•	
Carter	549.1	4.0	40.5	480.3	•	24.3
Claiborne	462.2			462.2	•	
Cocke	467.1	a.7	17.5	420.5	20.4	
Grainger	293.1	-	18.9	274.2	•	
Greene	397.9	3.2	15.4	379.3	•	
Hamblen	95.3	-	3.8	91.5	•	
Hamilton	384.7	23.6	41.4	319.7	•	
Hancock	224.4		-	224.4	-	
Hawkins	387.1	-	1.7	362.5	-	22.9
Jefferson	205.1	18.8	12.9	173.4	-	
Johnson	307.5	5.4	33.0	269.1	-	
Knox	396.4	3.2	6.1	387.1	-	
Loudon	154.1	3.5	8.8	141.8	•	
McMinn	225.9	1.2	43. a	180.9	•	
Meigs	89.9	-	34.0	65.9	•	
Monroe	553.5	27.0	62.2	459.8	•	
Polk	232.0	13.6	71.8	146.6	•	
Rhea	206.6	9.4	9.2	188.0		
Roane	351.8	-	39.7	271.2	41.9	
Sevier	299.8	4.7	57.1	238.0	•	
Sullivan	238.6	9.5	12.6	216.5	•	
Unicoi	293.4		10.6	263.1	•	
Union	330.0	10.6	24.9	294.5	•	
Washington	160.5		30.5	130.0	•	
All counties	8,200.4	163.6	808.5	7,094.6	62.3	71.4

Table 18. --Growing-stock volume of softwoods on commercial forest land
by stand-size class, 1980

County	All classes	Sawtimber	Poletimber	Sapling and seedling	Wonstocked areas
----- Million cubic feet -----					
Anderson	31.6	28.3	-	3.3	
Blount	90.9	73.6	13.1	4.2	
Brandley	88.3		08.3		
Carter	42.4	34.3	8.1	-	
Claiborne	16.7	6.8	.1	9.2	
Cocke	48.3	25.0	14.2	9.1	-
Grainger	16.9	8.3	5.8	2.8	-
Greene	28.7	10.1	18.6		
Hamblen	7.4		6.5	.9	
Hamilton	85.7	48.4	30.9	6.4	
Hancock	2.5	1.9	-	.6	
Hawkins	20.1	2.0	14.6	3.5	
Jefferson	18.5	11.4		7.1	
Johnson	19.0	9.8	4.5		
Knox	23.5	2.9	13.3	7.3	
Loudon	29.9	17.9	9.5	2.5	
McMinn	76.3	31.2	41.9	3.2	
Meigs	52.6	9.6	41.4	1.6	
Monroe	194.4	105.2	12.6	16.6	
Polk	178.2	99.6	73.8	4.8	
Rhea	34.1	9.6	22.9	2.2	
Roane	40.9	34.2	5.8	.9	
Sevier	50.8	22.2	23.0	1.1	
Sullivan	18.7	15.7	1.9	2.0	
Unicoi	27.4	24.9	.5		
Union	23.9	14.3	6.6	3.0	
Washington	18.9	9.6	9.3		
All counties	1,287.2	656.8	527.8	102.6	

Table 19. --Growing-stock volume of hardwoods on commercial forest land
by stand-size class, 1980

county	All classes	Sawtimber	Poletimber	Sapling and seedling	Wonstocked areas
----- Million cubic feet -----					
Anderson	122.3	68.9	42.5	10.9	
Blount	104.3	74.3	23.8	6.2	
Brandley	51.2	27.7	23.5	-	-
Carter	179.8	129.0	44.7	3.6	2.5
Claiborne	142.2	73.9	54.1	14.2	
Cocke	157.7	104.4	50.5	2.8	
Grainger	91.7	58.4	30.8	2.5	
Greene	117.5	75.0	35.5	7.0	
Hamblen	19.0	13.9	4.1	1.0	
Hamilton	110.3	74.1	33.1	2.5	
Hancock	73.8	41.6	19.0	13.2	
Hawkins	155.3	65.0	82.4	7.9	
Jefferson	48.6	45.6		3.0	
Johnson	119.9	55.7	59.1	5.1	
Knox	95.6	76.5	16.1	3.0	
Loudon	36.3	29.8	6.5		
McMinn	73.7	40.7	32.8	.2	
Meigs	47.7	19.8	24.9	3.0	
Monroe	172.7	93.3	56.9	22.5	
Polk	99.2	41.0	44.7	13.5	
Rhea	80.7	44.2	28.0	8.5	
Roane	128.0	91.8	22.8	13.4	
Sevier	90.2	54.5	23.0	12.7	
Sullivan	94.9	47.8	39.3	1.8	
Unicoi	104.7	71.5	22.0	11.2	
Union	92.4	73.6	16.8	2.0	
Washington	53.8	25.1	25.3	3.4	
All counties	2,663.5	1,617.7	862.2	181.1	2.5

Table 20.--Sawtimber volume of softwoods on commercial land
by stand-size class, 1980

County	All classes	Sawtimber	Poletimber	Sapling and seedling	Nonstocked areas
- - - - - Million board feet - - - - -					
Anderson	113.3	113.3			
Blount	383.0	356.9	26.1		
Brandley	221.5		221.5		
Carter	184.8	176.0	8.8		
Claiborne	64.6	35.0		29.6	-
Cocke	189.1	112.6	47.8	28.7	
Grainger	39.3	21.5	17.8		
Green	80.4	38.7	41.7		
Hamblen	12.1	-	12.1		-
Hamilton	301.6	202.1	86.4	13.1	
Hancock	10.2	10.2		-	
Hawkins	51.7	10.0	39.7	2.0	-
Jefferson	43.8	34.6		9.2	-
Johnson	73.1	43.8	10.0	19.3	-
Knox	60.4	7.5	21.8	31.1	
Loudon	69.5	45.5	17.4	6.6	
McMinn	199.6	120.8	71.0	7.8	-
Meigs	107.8	39.0	68.8	-	-
Monroe	625.5	307.9	200.4	37.2	
Polk	625.6	415.0	191.6	19.0	
Rhea	79.2	35.9	38.5	4.8	
Roane	127.9	112.2	10.7	5.0	
Sevier	137.8	72.6	48.0	17.2	
Sullivan	71.6	64.9	4.2	2.5	-
Unicoi	109.5	100.5	-	9.0	-
Union	44.6	40.5		4.1	
Washington	69.2	48.0	21.2		
All counties	4,096.7	2,645.0	1,205.5	246.2	

Table 21.--Sawtimber volume of hardwoods on commercial forest land
by stand-size class, 1980

County	All classes	Sawtimber	Poletimber	Sapling and seedling	Nonstocked areas
- - - - - Million board feet - - - - -					
Anderson	424.8	288.9	109.5	26.4	
Blount	338.1	288.8	30.1	19.2	
Brandley	131.5	101.7	29.8		
Carter	549.1	450.2	81.9	a.2	8.8
Claiborne	462.2	316.9	124.5	20.8	
Cocke	467.1			3.6	
Grainger	93.1	88.1	56.8	4.3	
Greene	397.9	313.4	60.7	23.8	
Hamblen	95.3	76.6	14.9	3.8	
Hamilton	384.7	312.4	67.8	4.5	
Hancock	224.4	163.8	17.6	43.0	
Hawkins	387.1	275.3	100.0	11.8	
Jefferson	205.1	192.2		12.9	
Johnson	307.5	217.9	79.4	10.2	
Knox	396.4	363.6	32.8		
Loudon	154.1	131.6	22.5		
McMinn	225.9	161.2	64.7		
Meigs	89.9	52.8	31.3	5.8	
Monroe	553.5	385.6	111.6	56.3	
Polk	232.0	125.7	73.7	32.6	
Rhea	206.6	157.2	41.6	7.8	
Roane	351.8	308.9	12.1	30.8	
Sevier	299.8	234.0	28.2	37.6	
Sullivan	238.6	148.5	71.5	18.6	
Unicoi	293.4	252.7	32.3	8.4	
Washington	380.8	219.1	83.6	4.8	
				12.8	
All counties	8,200.4	6,353.1	1,430.5	408.0	8.8

Table 22.--*Growing-stock volume on commercial forest land by physiographic site class and species group, 1980*

County	All sites	Pine		Upland hardwood		Bottomland hardwood	
		Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
----- Million cubic feet -----							
Anderson	153.9	24.4	54.6	7.2	67.7	-	-
Blount	195.2	90.9	104.3	-	-	-	-
Brandley	139.5	84.7	11.2	3.6	40.0	-	-
Carter	222.2	40.8	54.4	1.6	125.4	-	-
Claiborne	158.9	12.4	109.7	4.3	32.5	-	-
Cocke	206.0	48.3	64.2	•	87.9	-	5.6
Grainoer	108.6	16.9	67.5	•	24.2	-	-
Greene	146.2	27.7	-	1.0	78.9	-	-
Hamblen •	26.4	-	18.0	7.4	1.0	-	-
Hamilton	196.0	84.8	95.2	.9	15.1	-	-
Hancock	16.3	2.5	59.5	•	14.3	-	-
Hawkins	175.4	19.8	91.7	.3	63.6	-	-
Jefferson	67.1	15.2	3.7	3.3	44.9	-	-
Johnson	138.9	17.5	81.8	1.5	38.1	-	-
Knox	119.1	23.5	44.3	•	51.3	-	-
Loudon	66.2	29.9	36.3	•	-	-	-
McMinn	150.0	76.3	66.1	-	7.6	-	-
Meigs	100.3	52.6	47.1	-	-	-	-
Monroe	367.1	192.1	113.2	2.3	59.5	-	-
Polk	277.4	177.1	90.5	1.1	a.7	-	-
Rhea	115.4	32.8	38.4	1.9	42.3	-	-
Roane	168.9	35.7	98.1	4.1	16.1	1.1	13.8
Sevier	141.0	49.3	56.6	1.5	33.6	-	-
Sullivan	113.6	18.4	36.0	.3	58.9	-	-
Unicoi	132.1	25.4	53.2	2.0	51.5	-	-
Union	116.3	23.9	86.9	•	5.5	-	-
Washington	12.7	18.9	31.5	-	22.3	•	-
All counties	3,950.7	1,241.8	1,653.2	44.3	990.9	1.1	19.8

Table 23.--*Growing-stock volume of softwoods on commercial forest land by class of timber and tree section, 1980*

County	All classes	Poletimber	Sawtimber		
			Total	Sawlog	Upper stem
----- Million cubic feet -----					
Anderson	31.6	7.6	24.0	20.8	3.2
Blount	90.9	19.3	71.6	65.3	6.3
Grandley	88.3	41.9	46.4	40. a	5.6
Carter	42.4	a.9	33.5	31.2	2.3
Claiborne	16.7	3.3	13.4	11.3	2.1
Cocke	48.3	11.9	36.4	33.1	3.3
Grainger	16.9	a.9	8.0	7.0	
Greene	28.7	12.5	16.2	14.6	1.1
Hamblen	7.4	4.6	2.8	2.3	
Hamilton	85.7	24.2	61.5	54.3	7.2
Hancock	2.5	.6	1.9	1.8	.1
Hawkins	20.1	8.9	11.2	9.4	1.8
Jefferson	18.5	0.4	10.1	a.3	1.8
Johnson	19.0	2.6	16.4	13.9	2.5
Knox	23.5	10.9	12.6	11.5	1.1
Loudon	29.9	14.3	15.6	12.8	2.8
McMinn	76.3	35.1	41.2	36.0	5.2
Meigs	52.6	29.4	23.2	20.3	2.9
Monroe	194.4	71.5	122.9	107.4	15.5
Polk	178.2	61.2	117.0	105.1	11.9
Rhea	34.7	18.2	16.5	13.8	2.7
Roane	40.9	13.8	27.1		3.7
Sevier	50.8	21.9	28.9	23.4	3.4
Sullivan.	1a.7	3.9	14.8		1.7
Unicoi	27.4	3.8	23.6	19.8	3.8
Union	23.9	12.7	11.2	9.1	2.1
Washington	18.9	5.2	13.7	12.3	1.4
All counties	1,287.2	465.5	821.7	724.2	97.5

Table 24.--*Growing-stock volume of hardwoods on commercial forest land by class of timber and tree section, 1980*

county	All classes	Poletimber	Sawtimber		
			Total	Sawlog	Upper stem
----- Million cubic feet -----					
Anderson	122.3	43.6	70.7	69.2	9.5
Blount	104.3	43.0	61.3	51.9	9.4
Brandley	51.2	25.6	25.6	22.3	3.3
Carter	179.8	66.2	113.6	88.5	25.1
Claiborne	142.2	50.6	91.6	76.3	15.3
Cocke	157.7	66.6	91.1	73.7	17.4
Grainger	91.7	31.5	60.2	47.3	12.9
Greene	117.5	46.6	70.9	62.0	8.9
Hamblen	19.0	4.2	14.8	10.6	4.2
Hamilton	110.3	33.4	76.9	65.4	11.5
Hancock	73.8	30.9	42.9	35.1	7.8
Hawkins	155.3	82.5	72.8	61.1	11.7
Jefferson	48.6	12.6	36.0	30.1	5.9
Johnson	119.9	58.8	61.1	46.0	15.1
Knox	95.6	23.1	12.5	62.6	9.9
Loudon	36.3	6.7	29.6	23.8	5.8
McMinn	73.7	29.0	44.7	34.8	9.9
Neigs	47.7	26.8	20.9	15.1	5.8
Monroe	172.7	70.2	102.5	80.9	21.6
Polk	99.2	51.7	47.5	36.5	11.0
Rhea	80.7	39.4	41.3	33.0	8.3
Roane	128.0	55.9	72.1	60.3	11.8
Sevier	90.2	34.2	56.0	48.1	7.9
Sullivan	94.9	40.6	54.3	42.0	12.3
Unicoi	104.7	45.9	58.8	47.4	11.4
Union	92.4	26.8	65.6	51.7	13.9
Washington	53.8	21.1	32.7	25.6	7.1
All counties	2,663.5	1,067.5	1,596.0	1,301.3	294.7

Table 25.--*Volume of timber on commercial forest land by class of timber and species group, 1980*

County	All classes	Growing stock		Rough		Rotten	
		Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
----- Million cubic feet -----							
Anderson	169.8	31.6		-	8.9		7.0
Blount	208.4	90.9	102.3	2.7	8.3		2.2
Brandley	150.2	88.3	51.2	-	8.3		2.4
Carter	302.3	42.4	179.8	4.2	60.4	.9	14.6
Claiborne	179.4	16.7	142.2	2.1	13.6		4.8
Cocke	232.5	48.3	157.7	1.7	17.5		7.3
Grainger	117.1	16.9			5.5		3.0
Greene	167.6	28.7	191.5	.2	14.6		6.6
Hamblen	31.1	7.4	19.0		4.2		.5
Hamilton	221.5	85.7	110.3	-	14.7		10.8
Hancock	103.5	2.5	73.8		16.9		10.0
Hawkins	201.3	20.1	155.3	2.1	17.3	.3	6.2
Jefferson	77.7	18.5	48.6	.2	10.0		.4
Johnson	175.1	19.0	119.9	-	26.5		9.7
Knox	131.0	23.5	95.6	1.9	5.7		4.3
Loudon	72.4	29.9			3.5		1.5
McMinn	163.5	76.3	88.3	.2	11.3		2.2
Neigs	108.5	52.6	47.1		6.5		1.0
Monroe	399.7	194.4	172.7	2.1	21.4		8.9
Polk	301.0	178.2	99.2	1.2	19.5		2.9
Rhea	143.9	34.7	80.7	-	21.1		7.4
Roane	188.0	40.9	128.0	2.5	14.7		1.9
Sevier	160.8	50.8	90.2	1.3	12.4	.1	6.0
Sullivan	132.8	18.7	94.9	.4	14.3		4.5
Unicoi	152.3	27.4	104.7	2.8	11.5		5.9
Union	125.6	23.9	92.4	1.1	7.2		1.0
Washington	88.0	18.9	53.8	.5	9.7	.	5.1
All counties	4,505.0	1,287.2	2,663.5	29.4	385.5	1.3	138.1

Table 26. Number of growing stock trees by species and diameter class, 1980

Species	Diameter class (inches at breast height)										
	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 & larger
----- Thousand trees -----											
Softwood:											
Shortleaf pine	32,994	9,241	11,089	7,399	3,594	1,292	309	36	34	-	-
Loblolly pine	14,147	7,867	3,137	2,402	396	249	71	14	30	-	-
Virginia pine	74,548	32,480	22,025	11,657	5,493	1,922	804	137	23	-	-
Pitch pine	8,312	2,635	2,339	1,684	758	432	338	68	-	35	-
Table mountain pine	1,972	347	923	491	146	-	65	-	-	-	-
White pine	8,241	2,234	1,558	1,136	861	980	685	393	151	220	23
Redcedar	12,972	7,069	4,392	990	428	93	-	-	-	-	-
Hemlock	3,365	1,415	490	532	396	157	131	129	21	85	9
Total	156,551	63,288	45,953	26,291	12,072	5,125	2,403	777	270	340	32
Hardwood:											
Select white oaks ¹	20,034	6,289	5,748	2,864	1,524	1,229	1,004	638	324	404	10
Select red oaks ²	14,891	2,815	3,797	3,130	2,319	637	901	644	312	282	54
Other white oaks	49,385	17,263	11,137	8,476	4,132	3,442	2,116	1,358	718	-	58
Other red oaks	42,551	12,793	9,500	8,872	4,174	3,123	1,655	1,602	527	289	25
Hickories	33,565	13,898	7,963	5,652	2,849	1,583	793	410	229	178	10
Persimmon	3,042	2,897	145	-	-	-	-	-	-	-	-
Hard maple	3,267	1,413	774	413	257	158	59	75	18	100	-
Soft maple	25,565	12,953	6,683	3,558	1,255	609	281	82	50	94	-
Beech	4,044	958	1,160	1,070	224	210	129	124	40	129	-
Sweetgum	4,318	2,211	728	1,031	146	85	101	-	16	-	-
Blackgum	7,809	3,468	1,514	1,633	543	359	151	75	30	36	-
Whiteash	5,318	2,572	1,611	486	324	34	128	112	41	10	-
Other ashes	1,367	738	280	189	41	71	30	-	-	18	-
Sycamore	448	-	96	98	125	35	50	-	-	29	15
Basswood	823	-	117	191	291	121	57	46	-	29;	2
Yellow-poplar	28,353	10,058	4,498	4,644	3,096	2,737	1,550	927	530	-	-
Magnolia	2,809	1,567	616	188	369	40	-	29	-	-	-
Black walnut	3,021	1,480	309	589	310	283	27	-	23	-	-
Black cherry	1,536	492	430	307	219	-	88	-	-	-	-
American elm	2,254	1,082	826	132	170	-	18	-	13	13	-
Other elms	2,496	1,340	765	169	79	77	26	-	21	19	-
River birch	89	-	-	89	-	-	-	-	-	-	-
Other birches	6,966	3,714	2,508	593	-	82	-	23	-	39	7
Hackberry	437	224	-	56	35	122	-	-	-	-	-
Black locust	6,670	3,738	1,838	559	243	179	94	-	19	-	-
Sassafras	5,025	3,741	921	293	45	-	-	25	-	-	-
Dogwood	2,962	2,673	289	-	-	-	-	-	-	-	-
Other hardwoods	1,920	944	507	-	283	64	27	-	27	68	-
Total	280,965	111,321	67,100	37,000	18,000	10,120	5,100	2,900	2,900	2,900	2,900
All species	437,516	174,609	110,713	71,856	34,906	20,368	11,661	6,947	3,208	3,015	233

^{1/} Includes white, swamp chestnut, chinkapin and bar oaks.^{2/} Includes northern red, shumard, and cherrybark oaks.

Table 27. --Crowing-stock volume on commercial forest land by species and diameter class, 1980

Species	Diameter class (inches at breast height)										
	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 & larger
----- Million cubic feet -----											
Softwood:											
Shortleaf pine	303.7	27.1	68.4	87.6	70.7	34.3	12.4	1.6	1.6	-	-
Loblolly pine	84.3	17.7	19.2	29.1	7.9	6.5	2.6	.7	.6	-	-
Virginia pine	575.0	101.6	147.9	145.1	93.9	53.2	26.2	5.7	1.4	-	-
Pitch pine	75.8	7.1	14.5	14.9	12.1	10.0	10.6	3.7	.8	2.1	-
Table mountain pine	14.7	1.1	9.0	4.5	2.1	-	-	-	-	-	-
White pine	138.7	5.8	21.4	11.8	13.5	24.2	24.9	17.8	8.5	19.6	4.1
Red cedar	44.4	12.8	2.5	8.0	6.8	3.7	4.2	6.7	2.0	8.1	.6
Total	1,287.2	177.5	288.0	308.2	210.0	133.6	82.3	36.2	14.9	29.8	4.7
Hardwood:											
Select white oaks	224.4	15.3	33.0	31.2	23.1	26.8	30.7	23.3	13.8	26.0	1.2
Select red oaks	205.4	7.0	22.0	33.5	36.6	13.7	27.3	25.1	15.5	18.3	6.4
Other white oaks	477.2	40.7	59.4	73.3	59.4	68.2	55.1	49.6	29.2	35.8	6.5
Other red oaks	457.1	32.2	51.5	86.7	66.3	67.5	47.3	59.5	23.0	20.0	3.1
Hickories	290.2	30.6	40.7	57.5	48.0	37.2	26.9	19.5	13.4	15.3	1.1
Persimmon	7.1	6.4	-	-	-	-	-	-	-	-	-
Hard maple	36.6	3.4	6.0	3.9	3.7	4.0	1.4	3.8	1.3	9.0	-
Soft maple	162.7	32.0	35.6	38.4	20.9	15.6	7.4	3.6	2.3	6.9	-
Beech	46.3	2.0	6.1	12.1	3.0	3.6	4.0	4.4	2.5	8.6	-
Sweetgum	26.1	4.2	3.6	10.0	2.9	2.3	2.5	-	.6	-	-
Blackgum	55.0	6.4	7.3	14.2	8.4	7.3	3.7	3.1	1.4	3.2	-
Whiteash	39.2	4.4	7.5	5.5	4.9	.6	4.6	5.1	1.9	.7	-
Other ashes	10.6	1.9	1.6	2.1	.8	2.0	.9	-	-	1.3	-
Sycamore	10.2	-	.8	1.0	1.8	.7	1.3	-	-	2.3	1.3
Basswood	18.9	-	.4	2.4	7.1	3.8	2.6	2.6	-	-	-
Yellow-poplar	404.7	25.4	30.3	51.5	55.6	72.8	58.1	48.7	35.4	23.0	3.9
Magnolia	19.6	5.1	3.8	.9	7.2	1.2	-	1.4	-	-	-
Black walnut	23.0	4.2	2.1	5.4	4.2	5.5	.9	-	.7	-	-
Black cherry	11.9	1.4	1.8	2.4	2.9	-	3.4	-	-	-	-
American elm	11.2	1.9	4.3	.9	2.3	-	.4	-	.4	1.0	-
Other elms	12.8	2.0	3.1	1.5	1.2	1.9	1.0	-	.1	1.4	-
River birch	.4	-	-	.8	-	-	-	-	-	-	-
Other birches	39.4	10.9	15.9	5.8	-	1.5	-	1.6	-	2.8	.9
Hackberry	4.1	-	-	.4	.6	2.7	-	-	-	-	-
Black locust	34.0	9.0	7.4	5.1	3.8	4.6	2.9	-	.8	-	-
Sassafras	14.9	9.0	2.9	1.8	.5	-	-	.7	-	-	-
Dogwood	4.1	3.0	1.1	-	-	-	-	-	-	-	-
Other hardwoods	16.0	1.9	2.4	2.7	1.4	.5	-	-	2.0	5.1	-
Total	3,950.7	442.6	639.4	759.2	578.6	477.6	364.7	288.2	159.8	210.5	30.1
All species	3,950.7	442.6	639.4	759.2	578.6	477.6	364.7	288.2	159.8	210.5	30.1

Table 28.--Sawtimber volume on commercial forest land by species and diameter class, 1980

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 & large
----- Million board feet -----									
Softwood:									
Shortleaf pine	1,068.0	400.4	382.2	192.0	74.1	10.8	a.5	-	-
Loblolly pine	226.2	126.3	41.0	36.6	14.8	4.0	3.5	-	-
Virginia pine									
White pine	1,526.4	644.6	461.6	287.8	129.8	89.9	41.1	109.4	22.8
Pitch pine	272.0	60.5	61.9	53.6	54.9	21.5	6.1	13.5	-
Redcedar	62.3	31.7	22.9	7.7	-	-	-	-	-
Hemlock	210.3	33.5	30.3	18.7	20.5	38.5	12.1	53.8	2.9
Table mountain pine	33.1	16.0	8.0	-	9.1	-	-	-	-
Total	4,096.7	1,381.9	1,070.4	717.8	444.3	198.3	81.6	176.7	25.7
Hardwood:									
Select white oaks	766.8		105.5	130.7	162.1	122.8	74.5	162.4	8.8
Select red oaks	714.7		146.0	70.8	139.0	134.7	83.5	106.3	34.4
Other white oaks	1,581.7		258.9	326.6	307.7	269.7	168.8	210.7	39.3
Other red oaks	1,462.2		280.1	325.6	262.1	318.6	137.5	116.0	21.6
Hickories	831.6		205.4	186.3	146.4	117.9	76.6	93.9	5.1
Hard maple	119.7		13.8	20.2	7.8	19.1	7.5	51.3	-
Soft maple	267.3		89.0	70.3	38.7	18.6	11.2	39.5	-
Beech	143.1		15.8	16.8	20.7	23.0	16.1	50.7	-
Sweetgum	35.1		11.2	12.1	8.1		3.7		-
Blackgum	126.3		29.0	34.1	18.7	19.0	7.2	1a.3	-
Whiteash	93.0		21.7	2.6	26.4	29.6	9.0	3.7	-
Other ashes	25.8		4.0	9.8	3.8			8.2	-
Sycamore	41.4		6.7	3.0	7.4		-	13.8	10.5
Basswood	75.9		29.6	18.6	13.0	14.7	-		-
Yellow-poplar	1,562.8		238.0	356.3	310.9	277.5	211.8	142.5	25.8
Magnolia	40.0		26.6	6.5		6.9			-
Black walnut	52.9		17.7	25.8	4.5		4.9		-
Black cherry	36.2		16.3		19.9				-
American elm	19.8		9.4		1.7		2.2	6.5	-
Other elms	31.8		7.0	9.3	5.1		4.2	6.2	-
Other birches	41.9			7.9		9.3	-	1a.4	6.3
Hackberry	17.0		3.3	13.7					-
Black locust	52.6		13.7	22.1	12.6		4.2	-	-
Sassafras	4.7		2.3			2.4	-	-	-
Other hardwoods	56.1		6.9	2.5			13.2	33.5	-
Total	6,200.4	1,381.9	2,628.3	2,389.4	1,961.6	1,582.1	917.7	1,258.6	177.5
All species	12,297.1	1,381.9	2,628.3	2,389.4	1,961.6	1,582.1	917.7	1,258.6	177.5

Table 29.--*Growing-stock volume in the saw-log portion of sawtimber trees on commercial forest land by diameter class and species, 1980*

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 & larger
<i>Million cubic feet</i>									
Softwood:									
Shortleaf pine	185.5	74.1	64.8	31.7	11.8	1.6	1.5	.	
Loblolly pine	40.7	24.2	7.1	6.0	2.4	.5	.5	.	
Virginia pine	284.3	122.5	83.3	48.4	23.7	5.3	1.1	.	
Pitch pine	47.9	12.6	10.8	9.4	9.0	3.4	.8	1.9	.
			1.6	.	1.6	.	.		
White pine	116.5	86.5	33.1	21.7	23.0	16.2	7.8	19.0	3.3
Redcedar	12.8	5.9	4.7	1.6				.	.
Hemlock	34.7	.	.	5.8	3.3	3.9	6.0	1.9	7.3
Total	724.2	258.0	190.0	122.1	75.4	33.0	13.6	28.2	3.9
Hardwood:									
Select white oaks	119.7	.	18.1	21.8	25.7	18.9	11.1	22.9	1.2
Select red oaks	114.4	.	26.9	11.1	22.5	21.4	12.6	15.1	4.8
Other white oaks	246.5	.	45.7	55.3	45.3	41.2	24.0	29.4	5.6
Other red oaks	236.6	.	50.1	55.2	40.8	50.5	20.3	16.8	2.9
Hickories	131.2	.	36.0	30.1	22.7	17.3	11.2	13.1	.8
Hard maple	17.6	.	2.4	3.2	1.2	2.7	1.0	7.1	.
Soft maple	43.8	.	15.6	12.2	6.4	2.7		5.5	.
Beech				2.9	3.1	3.1	25.14	7.6	.
Sweetgum	26.6	.	5.6	2.0	2.0		.6	.	.
Blackgum	21.6	.	3.6	6.0	3.2	2.8			.
Whiteash	14.3	.		.5	3.8	4.5	13.13	27.6	.
Other ashes	4.1	.	.7	1.5	.6	.		1.3	.
Sycamore	6.6	.	1.2	.6	1.1	2.2		2.2	1.5
Basswood	12.0	.	4.8	3.0	2.0		.		
Yellow-poplar	249.3	.	40.8	60.7	50.5	41.8	31.0	20.9	3.6
Maynoia	6.9	.	4.6	1.1		1.2	.		
Black walnut	8.8	.	3.2	4.2	.7		.7		
Black cherry	5.1	.	2.4	.	2.7				
American elm	3.4	.	1.7	.	.3			1.0	.
Other elms	5.0	.	1.2	1.5	.8	.	.4		.
Other birches	5.9	.	.	1.3		1.3	.7	25.8	.8
Hackberry	2.7	.			.			.	.
Black locust	8.8	.	27.6	21.34	2.0		.7	.	.
Sassafras	.8	.	.4	.		.4	.	.	.
Other hardwoods	7.7	.	1.1	.4	.		1.8	4.4	.
Total	1,301.3		274.1	280.1	237.4	212.0	122.6	153.9	21.2
All species	2,025.5	258.0	464.1	402.2	312.8	245.0	136.2	182.1	25.1

Table 30.--*Growing-stock volume on commercial forest land by species, class of timber and tree section, 1980*

Species	All classes	Poletimber Total	Sawtimber		
				Sawlog	Upper stem
----- Million cubic feet -----					
Softwood:					
Shortleaf pine	303.7	95.5	208.2	185.5	22.7
Loblolly pine	84.3	36.9	47.4	40.7	6.7
Virginia pine	575.0	249.5	325.5	284.3	41.2
Pitch pine	75.8	21.6	54.2	47.9	6.3
Table mountain pin	14.7	6.2	a.5	6.5	2.0
White pine	138.7	14.8	123.9	111.8	12.1
Redcedar	50.6	35.7	14.9	12.8	2.1
hemlock	44.4	5.3	39.1	34.7	4.4
Total	<u>1,287.6</u>	<u>509.5</u>	<u>1,059.5</u>	<u>957.5</u>	<u>102.0</u>
Hardwood:					
Select white oaks	224.4	79.5	144.9	119.7	25.2
Select red oaks	205.4	62.5	142.9	114.4	28.5
Other white oaks	477.2	173.4	303.8	246.5	57.3
Other red oaks	457.1	170.4	286.7	236.6	50.1
Hickories	290.2	128.8	161.4	131.2	30.2
Persimmon	7.1	7.1	-	-	-
Hard maple	36.6	13.4	23.2	17.6	5.6
Soft maple	162.7	106.0	56.7	43.8	12.9
Beech	46.3	20.2	26.1	21.5	4.2
Sweetgum	26.1	17.8	8.3	6.6	1.7
Blackgum	55.0	27.9	27.1	21.6	5.5
Whiteash	39.2	21.4	17.8	14.3	3.5
Other ashes	10.6	5.6	5.0	4.1	.9
Sycamore	10.2	1.8	8.4	6.6	1.8
Basswood	18.9	2.8	16.1	12.0	4.1
Yellow-poplar	404.7	107.2	297.5	249.3	48.2
Magnolia	19.6	9.8	9.8	6.9	2.9
Black walnut	23.0	11.7	11.3	8.8	2.5
Black cherry	11.9	5.6	6.3	5.1	1.2
American elm	11.2	7.1	4.1	3.4	.7
Other elms	12.8	6.6	6.2	5.0	1.2
River birch		.8			
Other birches	39.2	32.6	6.8	5.9	.9
Hackberry	4.1	.8	3.3	2.7	.6
Black locust	34.0	21.9	12.1	8.8	3.3
Sassafras	14.9	13.1	1.2	.8	.4
Dogwood	4.1	4.1	-	-	-
Other hardwoods	16.0	7.0	9.0	7.7	1.3
Total	<u>2,663.5</u>	<u>1,067.5</u>	<u>1,596.0</u>	<u>1,285.0</u>	<u>311.0</u>
All species	3,950.7	1,533.0	2,417.7	2,025.5	392.2

Table 31.--*Volume of timber on commercial forest land by species and class of timber, 1980*

Species	All live	Growing stock	Rough	Rotten
----- Million cubic feet -----				
Softwood:				
Shortleaf pine	308.8	303.7	5.1	
Loblolly pine	84.3	84.3		
Virginia pine	588.2	575.0	13.2	
			1.9	.9
White pine	180.2	138.7	4.3	.1
Redcedar	52.5	50.6	1.9	
			1.9	
Black mountain pine	46.3	44.4	14.7	1.1
				.3
Total	1,447.1	1,381.4	2,177.0	4.3
Hardwood:				
Select white oaks	256.0	224.4	22.2	9.4
Select red oaks	224.7	205.4	12.4	6.9
Other white oaks	575.4	477.2	66.7	31.5
Other red oaks	512.7	457.1	37.6	18.0
Hickories	326.3	290.2	28.6	7.5
Persimmon	7.8	7.1	.7	
Hard maple	46.6	36.6	8.8	1.2
Soft maple	201.4	162.7	28.5	10.2
Beech	1.5		.7	.8
Sweetgum	67.9	46.3	10.1	11.5
Blackgum	28.0	26.1	1.9	
Whiteash	70.6	55.0	5.4	10.2
Other ashes	52.5	39.2	12.5	.8
Sycamore	11.5	10.6	.2	.7
Basswood	10.9	10.2	.3	.4
Yellow-poplar	21.8	18.9	1.9	1.0
Magnolia	433.5	404.7	18.1	10.7
Black walnut	20.5	19.6	.9	
Black cherry	26.5	23.0	3.4	.1
American elm	18.3	11.9	4.6	1.8
Other elms	16.1	11.2	4.4	.5
River birch	18.1	12.8	5.3	
Other birches	1.4	.8	.6	
Hackberry	51.0	39.4	8.0	3.6
Black locust	5.8	4.1	1.6	.1
Sassafras	51.0	34.0	8.4	8.6
Dogwood	21.1	14.9	5.7	.5
Holly	5.4	4.1	1.3	-
Other commercial	23.1	16.0	5.0	2.1
Noncommercial	79.7		79.7	
Total	3,187.1	2,663.5	3,009.2	117.0
All species	4,505.0	3,950.7	414.9	139.4

Table 32.--Average volume per acre of growing stock and sawtimber a commercial land by species group and ownership class, 1980

Ownership class	Growing stock			Sawtimber		
	All species	Softwood	Hardwood	All species	Softwood	Hardwood
- - - - Cubic feet - - - - - - - - Board feet - - - -						
National forest	1,431	504	927	4,712	2,014	2,698
Other public	1,236	410	826	3,463	1,236	2,227
Forest industry	867	439	428	2,022	1,148	874
Farmer	1,101	299	802	3,543	930	2,613
Misc. Private	1,096	373	723	3,329	1,081	2,248
All ownerships	1,144	373	771	3,560	1,186	1,374

Table 33.--Average volume per acre of growing stock and sawtimber on commercial forest land by forest type and species group, 1980

Forest type	Growing stock			Sawtimber		
	All species	Softwood	Hardwood	All species	Softwood	Hardwood
- - - - Cubic feet - - - - - - - - Board feet - - - -						
White pine	2,442	1,596	846	7,750	7,750	
Loblolly shortleaf pine	1,260	1,119	141	3,323	3,067	256
Oak pine	1,193	90	550	3,681	2,252	1,429
Oak-hickory	1,089	100	999	3,589	370	3,219
Oak-gum-cypress	1,864		1,764	6,191	527	5,664
Maple-beech-birch	1,277		1,277	2,445		2,445
All types	1,144	373	771	3,560	1,186	2,374

Table 34.--Metric area of commercial forest land by ownership class, 1980

County	All ownerships	National forest	Other public	Forest industry	Farmer	Misc. private
- - - - - Thousand hectares - - - - -						
Anderson	54.3	-	3.4	9.9	12.5	28.5
Blount	51.0	-	(1)	7.3	37.1	6.6
Brandley	39.1	-	.1	6.5	6.6	25.9
Carter	61.2	31.6	-	-	-	29.6
Claiborne	72.6		2.6		35.3	34.7
Cocke	70.4	17.2	.1	-	37.1	16.0
Grainger	40.8	-	1.3	-	37.1	2.4
Greene	54.7	13.7	.1	-	25.7	15.2
Hamblen	12.3		.8	-	11.5	
Hamilton	82.2		5.8	-	20.2	56.2
Hancock	40.8	-	-	-	38.5	2.3
Hawkins	75.1	-	2.7	2.3	33.4	36.7
Jefferson	23.7		.4	-	21.4	1.9
Johnson	52.6	19.6	.1	-	6.4	26.5
Knox	41.3		.7	-	14.0	26.6
Loudon	22.3	-	1.7	3.7	9.5	7.4
McMinn	52.5	.7	.2	11.9	4.9	34.8
Meigs	34.7		.6	8.0	13.6	12.5
Monroe	117.6	48.7	2.2	6.9	25.8	34.0
Polk	84.2	53.6	.9		10.7	19.0
Rhea	50.3		.5	17.5	24.5	7.8
Roane	60.7		7.6	4.1	22.6	26.4
Sevier	55.7	-	.2	-	21.0	34.5
Sullivan	40.1	14.4	.4	-	11.1	14.2
Unicoi	39.2	19.5	1.1	-	.	18.6
Union	43.8	-	11.5	-	11.7	20.6
Washington	24.8	6.5	.4		a.4	9.5
All counties	1,398.0	225.5	45.4	78.1	500.6	548.4

Table 35.--Metric volume of growing stock on commercial forest land by species group, 1980

County	All species	Softwood			Hardwood			
		Total	Pine	Other	Total	Oak	Gum	Other
----- Thousand cubic meters -----								
Anderson	4,358	895	606	289	3,463	1,523	150	1,790
Blount	5,527	2,574	2,393	181	2,953	1,817	102	1,034
Brandley	3,950	2,500	2,364	136	1,450	566	167	717
Carter	6,292	1,201	261	940	5,091	2,803	85	2,203
Claiborne	4,500	473	428	45	4,027	1,702	74	2,251
Cocke	5,833	1,368	1,025	343	4,465	2,169	14	2,282
Grainger	3,075	479	357	122	2,596	1,042	175	1,379
Greene	4,140	813	485	328	3,327	1,348	110	1,869
Hamblen	748	210	184	26	538	374	-	164
Hamilton	5,550	2,427	2,427		3,123	2,067	65	991
Hancock	2,161	71	54	17	2,090	456	48	1,586
Hawkins	4,967	569	532	37	4,398	2,294	85	2,019
Jefferson	1,900	524	399	125	1,376	637	51	688
Johnson	3,933	538	153	385	3,395	1,750	37	1,608
Knox	3,373	665	631	34	2,708	1,473	51	1,184
Loudon	1,875	847	805	42	1,028	750	37	241
McMinn	4,248	2,161	2,119	42	2,087	1,090	88	909
Meigs	2,840	1,489	1,398	91	1,351	802	130	419
Monroe	10,395	5,505	4,816	689	4,890	2,200	199	2,491
Polk	7,855	5,046	4,188	858	2,809	1,826	108	875
Rhea	3,268	982	821	161	2,286	1,456	122	708
Roane	4,783	1,158	1,036	122	3,625	2,402	113	1,110
Sevier	3,992	1,438	1,322	116	2,554	1,373	96	1,085
Sullivan	3,216	529	235	294	2,687	1,574	40	1,073
Unicoi	3,741	776	65	711	2,965	1,020	45	1,900
Union	3,293	677	490	187	2,616	1,158	62	1,396
Washington	2,059	535	238	297	1,524	955	42	527
All counties	111,872	36,450	29,832	6,618	75,422	38,627	2,296	34,499

Table 36.--Average volume per hectare of growing stock on commercial forest land by species group and ownership class, 1980

Ownership class	All species	Softwood	Hardwood
----- Cubic meters -----			
National forest	186	35	65
Other public	61	29	57
Forest industry		31	30
Farmer	77	21	56
Misc. private	77	26	51
All ownerships	80	26	54

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1982. Forest statistics for East Tennessee
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