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# Stem Cubic-Foot Volume Tables for Tree Species in the Gulf and Atlantic Coastal Plain

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## Abstract

Stemwood cubic-foot volume inside bark tables are presented for 14 species and 9 species groups based on equations used to estimate timber sale volumes on national forests in the Gulf and Atlantic Coastal Plain. Tables are based on form class measurement data for 2,728 trees sampled in the Gulf and Atlantic Coastal Plain and taper data collected across the South. A series of tables is presented for each species based on diameter at breast height (d.b.h.) in combination with total height and height to a 4-inch diameter outside bark (d.o.b.) top. Volume tables are also presented based on d.b.h. in combination with height to a 7-inch d.o.b. top for softwoods and height to a 9-inch d.o.b. top for hardwoods. Sawtimber tables display saw-log stem volume by log (16-foot) and half-log (8-foot) intervals and also show stemwood volume to a 7-inch d.o.b. top for softwoods, to a 9-inch d.o.b. top for hardwoods, and to a 4-inch d.o.b. top for all species. Pulpwood tables show stemwood volume to a 4-inch d.o.b. top in 5-foot height intervals.

**Keywords:** Saw-log volume, pulpwood volume, form class.

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## Introduction

### Purpose and Scope

Starting in 1995, the standard unit of measure for Federal timber inventories and sales will be the cubic foot rather than the board foot. This change is necessary to provide uniform inventory, accounting, and statistical reporting for all national forests. To accommodate this change in the Southern Region of the USDA Forest Service, Clark and others (1991) developed new equations for converting height and diameter measurements into cubic-foot volume estimates. Because they reflect variations in tree form and taper, the new equations are awkward to solve without a computer. For those who lack the time to solve the equations manually and the equipment expertise for electronic processing, conversion tables have been developed to provide volume estimates for 14 individual species and for 9 species groups that have similar stem form. The tables are based on form class measurement data

collected on trees sampled in the Gulf and Atlantic Coastal Plain and taper data collected on trees sampled across the South.

The Southern Region consists of seven geographic areas (fig. i) based on physiographic region, species form and distribution, and Forest Service administrative units (table i). Table ii lists the species and geographic areas for which volume tables are available, and table iii summarizes measurement characteristics of the trees sampled.

A separate set of volume tables is available for many of the species and species groups in other geographic areas of the Southern Region (Clark and Souter 1996a, 1996b, 1996c, 1996d, 1996e, 1996f). When a species volume table for a species measured in the Gulf and Atlantic Coastal Plain is not available the Southwide tables should be used (Clark and Souter 1994).

## Development of Equations

The volume tables in this paper are based on profile equations developed from taper data collected on 13,469 trees sampled in natural stands across the South. Most of the trees measured were on national forests. All were growing in fully stocked stands. The taper data used to develop and verify the profile equations were collected on 11,472 trees by contractors working for the Southern Region and on 1,997 trees by employees of the Forest Service, Southeastern Forest Experiment Station,<sup>1</sup> SE-4701, Utilization of Southern Timber.

Sample trees were felled and their diameter at breast height (d.b.h.) and total height recorded. The contractors measured diameter outside bark (d.o.b.) and bark thickness at stump height and at 1-inch taper intervals from the stump to the tip of the tree. Diameters were measured with a diameter tape and bark thickness determined at two points with a bark gauge at each measurement height. Trees sampled by the Southeastern Station were measured at groundline, 1 and 2

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<sup>1</sup> Now called the Southern Research Station.

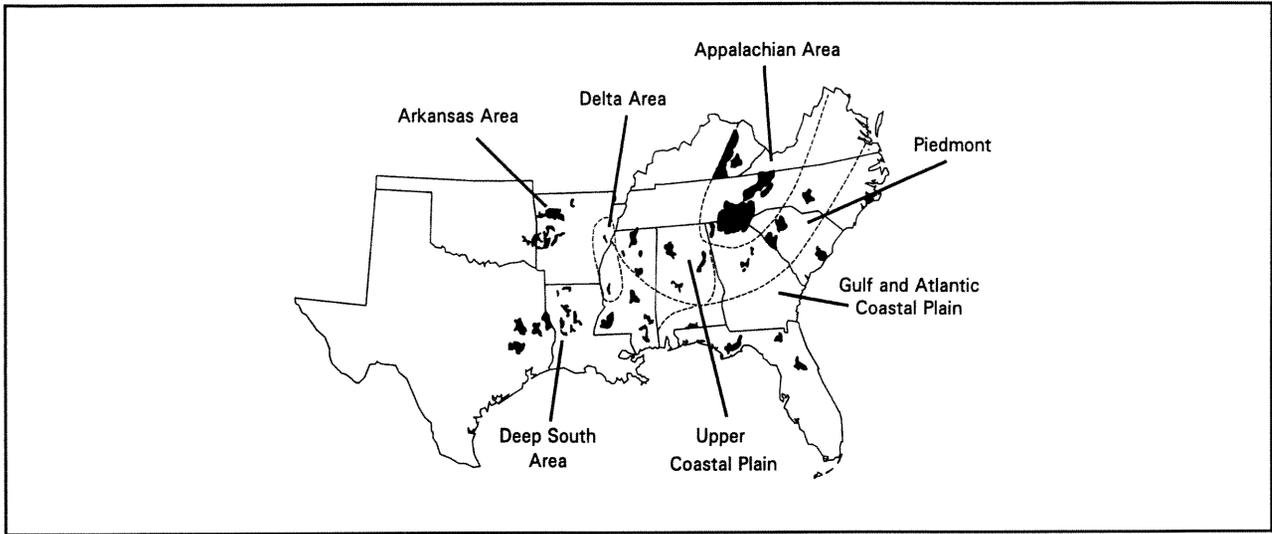


Figure i--Seven geographic areas on which trees were sampled for equation development and verification.

Table i--Geographic areas in the Southern Region with a listing of National Forest System units in each<sup>1</sup>

Gulf and Atlantic Coastal Plain	Piedmont	Appalachian Area	Upper Coastal Plain	Deep South Area	Arkansas Area	Delta Area
Croatan	Uwharrie	George Washington	Talladega	DeSoto	Ozark	Delta
Francis Marion	Sumter <sup>2</sup>	Jefferson	William B. Bankhead	Bienville	Ouachita	St. Francis
Osceola	Oconee	Cherokee	Holly Springs	Kisatchie		
Ocala		Nantahala	Tuskegee	Angelina		
Apalachicola		Chattahoochee	Tombigbee	Davy Crockett		
Conecuh		Sumter <sup>3</sup>		Sam Houston		
Savannah River Site		Daniel Boone		Homochitto		
		Pisgah		Sabine		

<sup>1</sup> All units except the Savannah River Forest Station on the Savannah River Site are public-access national forests.

<sup>2</sup> All districts except Andrew Pickens.

<sup>3</sup> Andrew Pickens District.

Table ii--Species and geographic areas for which volume tables are available

Species/group	Code	Geographic area						
		Gulf and Atlantic Coastal Plain	Piedmont	Appalachian	Upper Coastal Plain	Deep South	Arkansas	Delta
Ash, green	544					Y		Y
White	541			Y				
Baldcypress	221	Y						
Basswood	950			Y				
Beech	531					Y		
Birch	370			Y				
Blackgum, lowland	694	Y						
Upland	693			Y		Y	Y	
Buckeye	330			Y				
Cypress, all	12	Y						
Elm	970		Y			Y		Y
Hackberry	460							Y
Hardwoods, hard	500	Y	Y	Y	Y	Y	Y	Y
Soft	300	Y	Y	Y	Y	Y		Y
All	90	Y	Y	Y	Y	Y	Y	Y
Hemlock	261			Y				
Hickory	400		Y	Y	Y	Y	Y	Y
Locust, black	901			Y				
Magnolia	652					Y		
Maple, red	316			Y		Y		
Oak, all	800	Y	Y	Y	Y	Y	Y	Y
All red	83	Y	Y	Y	Y	Y	Y	Y
All white	82		Y	Y	Y	Y	Y	Y
Black	837		Y	Y			Y	Y
Cherrybark	813					Y		
Chestnut	832		Y	Y	Y			
Northern red	833			Y			Y	
Nuttall	828							Y
Overcup	822							Y
Post	835		Y		Y	Y	Y	Y
Scarlet	806		Y	Y	Y			
Southern red	812		Y	Y	Y	Y	Y	Y
Water	827	Y	Y			Y		
White	802	Y	Y	Y	Y	Y	Y	Y
Willow	831	Y						
Pecan	404							Y
Pine, all	100	Y	Y	Y	Y	Y	Y	
Eastern white	129			Y				
Loblolly	131	Y	Y		Y	Y	Y	
Longleaf	121	Y	Y			Y		
All major	11	Y	Y		Y	Y		
All others	13	Y		Y				
Pitch	126			Y				
Pond	128	Y						
Sand	107	Y						
Shortleaf	110		Y	Y	Y	Y	Y	
Slash	111	Y				Y		
Spruce	115					Y		
Virginia	132		Y	Y	Y			
Pondcypress	222	Y						
Sweetbay	653	Y				Y		
Sweetgum	611	Y	Y		Y	Y		Y
Sycamore	731		Y			Y		
Yellow-poplar	621	Y	Y	Y	Y	Y		Y

Table iii--Trees measured for development of Gulf and Atlantic Coastal Plain volume tables by species and species groups

Species or species group	All trees						Sawtimber trees						
	Sample trees	D.b.h.		Total height		Height to 4-inch d.o.b top		Sample trees	D.b.h.		Height to 7- or 9-inch d.o.b. top		Girard Form Class Mean
		Mean	Range	Mean	Range	Mean	Range		Mean	Range	Mean	Range	
	Number <sup>a</sup>	-----Inches-----		----Feet----		----Feet----		Number <sup>b</sup>	-----Inches-----		----Feet----		%
All pines	2,061	12.3	5.0-29.0	68	32-129	54	11-119	1,628	13.6	9.0-29.0	47	18-113	78
Slash pine	455	11.8	5.0-18.9	70	40-101	56	12- 92	358	13.1	9.0-18.9	48	20- 82	77
Longleaf pine	844	12.2	5.0-22.0	66	32- 93	52	11- 79	681	13.4	9.0-22.0	45	19- 73	78
Loblolly pine	553	13.4	5.0-29.0	74	35-129	59	13-119	449	14.8	9.0-29.0	52	18-113	78
All major pines	1,852	12.5	5.0-29.0	69	32-129	55	11-119	1,488	13.8	9.0-29.0	48	18-113	78
Sand pine	90	9.1	5.0-14.5	56	36- 74	41	17- 62	45	11.1	9.0-14.5	35	21- 54	79
Pone pine	119	11.6	5.4-21.2	57	36- 81	46	21- 71	95	12.6	9.0-21.2	40	20- 64	75
All other pines	209	10.5	5.0-21.2	57	36- 81	44	17- 71	140	12.1	9.0-21.2	38	20- 64	77
All cypress	113	13.1	7.6-22.9	77	45-106	62	28- 88	97	13.8	9.1-22.9	51	18- 79	74
Baldcypress	46	14.3	7.8-21.5	87	55-106	72	34- 88	43	14.8	9.1-21.5	61	22- 79	79
Pondcypress	67	12.2	7.6-22.9	70	45- 91	55	28- 77	54	13.2	9.1-22.9	43	18- 73	69
All soft hardwoods	382	11.3	5.0-23.2	69	34-108	48	10- 91	168	15.5	11.0-23.2	44	17- 74	75
Sweetgum	55	11.4	5.1-20.0	70	38-108	50	16- 91	26	15.6	11.6-20.0	47	22- 74	77
Yellow-poplar	26	12.6	5.5-20.9	82	51-103	60	26- 85	15	15.8	11.0-20.9	50	25- 64	79
Sweet bay	53	11.7	5.5-20.3	66	45- 90	47	22- 70	24	15.7	11.1-20.3	38	20- 52	71
Blackgum (lowland)	161	12.7	5.0-23.2	71	34-101	54	10- 85	98	15.3	11.0-23.2	44	17- 73	75
All hard hardwoods	172	14.4	5.0-23.6	78	37-102	58	7- 82	143	15.6	11.0-23.6	42	20- 68	78
White oak	51	14.7	6.4-20.7	84	49-102	64	25- 81	46	15.3	11.5-20.7	44	20- 64	81
Water oak	30	16.8	11.0-23.6	82	65-100	62	43- 82	30	16.8	11.0-23.6	44	21- 68	79
Willow oak	49	15.6	11.8-23.1	84	74-102	62	51- 79	49	15.6	11.8-23.1	40	23- 65	76
All red oaks	111	14.4	5.1-23.6	76	37-102	56	16- 82	90	15.8	11.0-23.6	41	21- 68	77
All oaks	163	14.4	5.1-23.6	79	37-102	58	16- 82	136	15.6	11.0-23.6	42	20- 68	78
All hardwoods	554	12.2	5.0-23.6	72	34-108	51	7- 91	311	15.5	11.0-23.6	43	17- 74	76

<sup>a b</sup> Number of sample trees do not add to species group totals because some species are included in the total but were not sampled sufficiently to develop individual species equations.

feet, breast height, and at intervals of approximately 4 feet above breast height. Bark thickness was determined from cross-sectional disks cut from the boles. Clark and others (1991) compared available segmented-profile polynomial models (Max and Burkhart 1976; Cao and others 1980; Schlaegel 1983) as potential volume estimators for southern tree species. Because no one model was best for estimating stem volume from the diameter and height of standing trees, they developed a form-class segmented-profile model that uses d.b.h., diameter at 17.3 feet, and total height as independent variables and that combines the

better attributes of Schlaegel's form-class model and Max and Burkhart's segmented-profile model. The new model divides the stem into four segments—butt (groundline up to 4.5 feet), lower stem (4.5 up to 17.3 feet), middle stem (17.3 to 40 up to 70 percent of total height), and upper stem (40 to 70 percent of total height up to stem tip)—and uses different equation form to estimate diameter, height, and volume for each segment. The segment equations are conditioned so that the joins between segments are continuous. Separate profile equations incorporate height to a 4-inch d.o.b. top for all species, and height to a 7-inch d.o.b. top for softwoods or height to a 9-inch d.o.b. top for hardwoods.

The form-class segmented-profile model can be used to predict diameter at a known height, height to a known diameter, and volume between any two heights. The equation forms and coefficients for estimating diameters, heights and volumes are presented in Clark and others (1991).

The profile equations account for differences in stem taper by including a measure of diameter inside bark (d.i.b.) at 17.3 feet or Girard Form Class<sup>2</sup> in each volume estimate, thus, allowing a single form-class segmented-profile equation to serve for a species across the South. However, analysis of the form-class data showed geographic differences in the form class of sawtimber trees with the same d.b.h. and height. Thus linear equations for estimating d.i.b. at 17.3 feet were developed for each species and species group by geographic region. Equations were developed to estimate d.i.b. at 17.3 feet from d.b.h. and total height, from d.b.h. and height to a 4-inch d.o.b. top and from d.b.h. and height to a 7-inch or 9-inch d.o.b. top. Because few short pulpwood trees were sampled, an average form class by species group and d.b.h. and height class was used when predicting stemwood volume of pulpwood trees  $\leq 45$  feet in total height or  $\leq 30$  feet in height to a 4-inch d.o.b. top.

Although the profile equations based on total height can be applied to any tree having both d.b.h.  $\geq 5.0$  inches and total height  $> 17.3$  feet, the total height tables in this book start at 30 feet. The profile model based on d.b.h. and height to a 4-inch d.o.b. top can be applied to any tree with d.b.h.  $\geq 5.0$ -inches and height to a 4-inch d.o.b. top  $> 17.3$  feet, but the tables based on height to a 4-inch d.o.b. top start at 20 feet.

The softwood profile equation based on d.b.h. and height to a 7-inch d.o.b. top is only useful if the trees have a d.b.h.  $\geq 9.0$  inches, and their height to a 7-inch d.o.b. top is  $> 17.3$  feet. The hardwood equation based on d.b.h. and height to a 9-inch d.o.b. top can only be applied to trees

with d.b.h.  $\geq 11.0$  inches, whose height to a 9-inch d.o.b. top  $> 17.3$  feet. However, the softwood and hardwood tables based on height to a 7-inch or 9-inch d.o.b. top respectively, start at 20 feet.

The form-class segmented-profile equation based on height to a 7-inch or 9-inch d.o.b. top can only estimate diameters, heights, or volumes from the ground line to these top heights. Therefore, Clark and others (1991) developed, nonlinear ratio equations for estimating volume between the 7-inch or 9-inch d.o.b. top and the 4-inch d.o.b. top. They developed topwood ratio equations for each commercially important species by geographic area and for each species Southwide.<sup>3</sup>

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<sup>2</sup> Girard Form Class is the ratio of d.i.b. at 17.3 feet from d.b.h.

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<sup>3</sup> ASCII data files containing the coefficients used to generate the volume tables presented are available on floppy disk from the Utilization of Southern Timber RWU, Southern Research Station, Forestry Sciences Laboratory, 320 Green Street, Athens, GA 30602-2044.

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## How To Use Volume Tables

### Content and Organization

For each species or species group, this book presents stemwood volume in a series of five tables based on varying combinations of d.b.h. and height. The first shows volume for sawtimber trees based on d.b.h. and total height. The second shows volume for sawtimber trees based on d.b.h. and height to a 4-inch d.o.b. top. The third shows volume for sawtimber trees based on d.b.h. and height to a 7-inch d.o.b. top for softwoods or height to a 9-inch d.o.b. top for hardwoods. The fourth shows volume for pulpwood trees based on d.b.h. and total height. The fifth shows pulpwood volume based on d.b.h. and height to a 4-inch d.o.b. top. Each sawtimber table displays volume for softwoods (10-inches to 24-inches d.b.h.) and hardwoods (12-inches to 26-inches d.b.h.) in 16-foot log or in 8-foot half-log intervals in 2-inch d.b.h. classes. The saw-log volume tables also show average form class and volume to a 4-inch d.o.b. top, and to a 7-inch d.o.b. top for softwoods or to a 9-inch d.o.b. top for hardwoods. The pulpwood tables show volume to a 4-inch d.o.b. top for trees 5-inches to 16-inches d.b.h. in 5-foot height intervals and in 1-inch d.b.h. classes.

### Finding Volume Estimates

To use these tables you must know the species or species group, d.b.h., and an expression of height. You can look up stem volume based on total height or height to a 4-inch d.o.b. top for pulpwood; based on total height, or height to a 4-inch d.o.b. top for sawtimber; or based on height to a 7-inch d.o.b. top for softwood sawtimber or height to a 9-inch d.o.b. top for hardwood sawtimber. For sawtimber trees, you must also

know the height to the saw-log merchantable<sup>4</sup> top in logs and in half logs. For example, to determine the saw-log and topwood volume for an 18-inch, 3-log longleaf pine with a height to a 7-inch d.o.b. top of 60 feet, refer to the Index of Volume Tables (page 3) for the table number of the longleaf pine volume table based on d.b.h. and height to a 7-inch d.o.b. top (table 13). In table 13 locate the volume data for an 18-inch d.b.h. tree with a height to 7-inch top of 60 feet. If you look across this row you will find the saw-log volume under a 3-log merchantable stem (48.9 cubic feet). This same row also shows stem volume to a 7-inch and a 4-inch d.o.b. top and the estimated Girard Form Class of the tree. To estimate the volume of topwood between the saw-log merchantable top and 4-inch d.o.b. top, subtract the saw-log volume (48.9 cubic feet) from the volume to a 4-inch d.o.b. top (53.8 cubic feet) for a result of 4.9 cubic feet.

If you do not know the height to a given top (total height, height to a 4-inch top, or height to a 7-inch or 9-inch top) for a sawtimber tree, you can use the total height tables for a rough estimate of volume, but only if you know the d.b.h. and saw-log merchantable height and have an estimate of Girard Form Class. Form class can be the species average for the geographic area from table iii or the species average for the area in which the tree is growing. For example, to determine the saw-log volume of a 14-inch slash pine with a saw-log merchantable height of 2.5 logs, refer to the Index of Volume Tables to find the table number for slash pine based on d.b.h. and total height (table 6).

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<sup>4</sup> Saw-log merchantable height is (1) the height to local minimum d.o.b. top, or (2) the height where a whorl of three or more branches—whose diameters are equal to or greater than the diameter of the stem—occurs within a 1-foot stem section if there is not a minimum of 8 feet of clear stem above the whorl.

Assume the average form class for slash pine in the area the tree was growing is 78 (table iii). In table 6, locate the volume data for merchantable stem and find the tree's saw-log merchantable volume for a 14-inch d.b.h. tree with a form class of 78. Look across the row for the saw-log volume under a merchantable 2.5-log stem (25.3 cubic feet).

To determine the stem pulpwood volume of an 8-inch d.b.h. sweetgum with a height to a 4-inch d.o.b. top of 45 feet, refer to the Index of Volume Tables for the table number based on d.b.h. and height to a 4-inch top (table 65). In table 65, locate the volume data for an 8-inch d.b.h. tree with a height to a 4-inch top of 45 feet and find the tree's volume (7.8 cubic feet).

### Index of Volume Tables

Tables available for estimating stemwood cubic-foot volume of sawtimber and pulpwood trees in the Gulf and Atlantic Coastal Plain by species and tree dimensions measured.

Species/group	Code	Tree dimensions measured				
		D.b.h. and total height		D.b.h. and height to 4-inch d.o.b. top		D.b.h. and height to 7- or 9-inch d.o.b. top
		Saw-timber	Pulp-wood	Saw-timber	Pulp-wood	Sawtimber
		----- Table number -----				
Baldcypress	221	46	49	47	50	48
Blackgum, lowland	694	76	79	77	80	78
Cypress, all	12	41	44	42	45	43
Hardwoods, hard	500	81	84	82	85	83
Soft	300	56	59	57	60	58
All	90	111	114	112	115	113
Oak, all	800	106	109	107	110	108
All red	83	101	104	102	105	103
Water	827	91	94	92	95	93
White	802	86	89	87	90	88
Willow	831	96	99	97	100	98
Pine, all	100	1	4	2	5	3
Loblolly	131	16	19	17	20	18
Longleaf	121	11	14	12	15	13
All major	11	21	24	22	25	23
All others	13	36	39	37	40	38
Pond	128	31	34	32	35	33
Sand	107	26	29	27	30	28
Slash	111	6	9	7	10	8
Pondcypress	222	51	54	52	55	53
Sweetbay	653	71	74	72	75	73
Sweetgum	611	61	64	62	65	63
Yellow-poplar	621	66	69	67	70	68

Table 1--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for all pine species combined (species 100) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	Cubic feet		Percent
10	40	5.3									6.2	7.8	67
	50	5.8	7.9								8.3	10.1	73
	60	6.1	8.4								10.1	12.3	76
	70	6.2	8.7	10.9							11.8	14.3	78
	80	6.4	9.0	11.3	13.2						13.4	16.3	79
	90	6.4	9.1	11.6	13.7					15.0	18.2	80	
12	40	7.7	10.1								10.4	11.4	67
	50	8.4	11.4								13.6	14.8	73
	60	8.8	12.2	14.9							16.5	17.9	76
	70	9.0	12.7	15.7	18.2						19.2	20.8	78
	80	9.2	13.0	16.3	19.1	21.3					21.8	23.7	79
	90	9.3	13.2	16.7	19.8	22.3	24.4			24.4	26.5	80	
	100	9.4	13.4	17.0	20.3	23.1	25.4			26.9	29.2	81	
14	40	10.5	13.8								14.9	15.6	67
	50	11.5	15.6	18.6							19.4	20.2	73
	60	12.0	16.6	20.4	23.0						23.5	24.5	76
	70	12.4	17.3	21.5	24.8	27.2					27.4	28.6	78
	80	12.6	17.7	22.3	26.1	29.1					31.1	32.5	79
	90	12.7	18.0	22.8	27.0	30.5	33.2			34.7	36.3	80	
	100	12.9	18.3	23.2	27.6	31.5	34.7	37.2		38.3	40.1	81	
16	50	15.1	20.4	24.3							25.9	26.6	73
	60	15.8	21.8	26.7	30.1						31.3	32.2	76
	70	16.2	22.7	28.1	32.5	35.6					36.5	37.5	78
	80	16.5	23.2	29.1	34.2	38.1	40.9				41.5	42.7	79
	90	16.7	23.6	29.9	35.3	39.9	43.5	46.0			46.3	47.7	80
	100	16.9	23.9	30.4	36.2	41.2	45.4	48.7	51.0	51.1	52.6	81	
	110	17.0	24.1	30.8	36.8	42.2	46.9	50.7	53.8	55.8	57.5	81	
18	50	19.1	25.9	30.8							33.2	33.8	73
	60	20.1	27.7	33.8	38.2						40.1	40.9	76
	70	20.6	28.7	35.7	41.2	45.1					46.7	47.6	78
	80	21.0	29.5	37.0	43.3	48.3	51.8				53.1	54.2	79
	90	21.2	30.0	37.9	44.8	50.5	55.1	58.3			59.3	60.5	80
	100	21.4	30.3	38.5	45.8	52.2	57.5	61.7	64.6	65.4	66.8	81	
	110	21.6	30.6	39.0	46.7	53.5	59.4	64.3	68.1	70.8	71.5	81	
20	60	24.8	34.2	41.8	47.2						49.9	50.6	76
	70	25.5	35.6	44.1	51.0	55.8					58.1	58.9	78
	80	26.0	36.5	45.7	53.5	59.7	64.0				66.1	67.0	79
	90	26.3	37.1	46.8	55.3	62.5	68.1	72.0			73.8	74.9	80
	100	26.5	37.5	47.6	56.7	64.5	71.1	76.2	79.8		81.4	82.6	81
	110	26.7	37.9	48.3	57.7	66.1	73.4	79.5	84.2	87.5	88.9	90.3	81
22	60	30.1	41.5	50.7	57.2	60.6					60.7	61.3	76
	70	31.0	43.1	53.5	61.8	67.6	70.7				70.7	71.4	78
	80	31.5	44.2	55.4	64.8	72.3	77.5	80.3			80.3	81.2	79
	90	31.9	44.9	56.7	67.0	75.7	82.5	87.2			89.8	90.8	80
	100	32.2	45.5	57.7	68.7	78.2	86.1	92.3	96.6		99.0	100.2	81
	110	32.4	45.9	58.5	69.9	80.1	88.9	96.2	102.0	106.0	108.2	109.4	81
24	60	35.9	49.4	60.4	68.2	72.2					72.5	73.1	76
	70	36.9	51.4	63.7	73.6	80.5	84.2				84.5	85.1	78
	80	37.6	52.7	66.0	77.2	86.1	92.3	95.7			96.0	96.8	79
	90	38.0	53.6	67.6	79.8	90.1	98.2	103.8	106.9		107.2	108.2	80
	100	38.3	54.2	68.8	81.8	93.1	102.5	109.9	115.1	118.0	118.3	119.3	81
	110	38.6	54.7	69.7	83.3	95.4	105.9	114.6	121.4	126.2	129.2	130.4	81

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 2--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for all pine species combined (species 100) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
10	30	5.5									6.5	7.7	70
	40	6.0	8.2								8.7	10.5	75
	50	6.2	8.6	10.6							10.7	13.1	78
	60	6.3	8.9	11.1							12.6	15.5	79
	70	6.4	9.1	11.4	13.4						14.4	17.9	80
	80	6.5	9.2	11.6	13.8	15.7					16.2	20.3	80
	90	6.5	9.3	11.8	14.1	16.1					17.9	22.7	81
12	30	7.9									10.3	11.0	70
	40	8.6	11.8								13.8	14.9	75
	50	9.0	12.5	15.2							16.9	18.4	78
	60	9.2	12.8	15.9	18.5						20.0	21.8	79
	70	9.3	13.1	16.4	19.3	21.6					22.9	25.2	80
	80	9.4	13.2	16.7	19.8	22.5	24.7				25.9	28.5	80
	90	9.4	13.4	17.0	20.2	23.1	25.6	27.7			28.7	31.7	81
14	40	11.8	16.0	18.8							19.3	20.0	75
	50	12.3	17.0	20.7	23.3						23.8	24.8	78
	60	12.5	17.5	21.7	25.0	27.5					28.0	29.3	79
	70	12.7	17.9	22.4	26.2	29.3	31.6				32.2	33.7	80
	80	12.8	18.1	22.8	26.9	30.5	33.4	35.7			36.3	38.1	80
	90	12.9	18.2	23.1	27.5	31.3	34.7	37.4	39.7		40.4	42.4	81
	100	12.9	18.4	23.3	27.9	32.0	35.6	38.8	41.5	43.7	44.4	46.7	81
16	40	15.5	21.0	24.6							25.5	26.0	75
	50	16.1	22.2	27.0	30.3						31.4	32.1	78
	60	16.4	22.9	28.4	32.6	35.8					37.0	37.9	79
	70	16.7	23.4	29.2	34.1	38.1	41.1				42.5	43.6	80
	80	16.8	23.7	29.8	35.1	39.7	43.4	46.3			47.9	49.2	80
	90	16.9	23.9	30.2	35.9	40.9	45.1	48.7	51.5		53.3	54.8	81
	100	17.0	24.0	30.5	36.4	41.7	46.4	50.5	53.9	56.6	58.6	60.3	81
18	40	19.7	26.6	31.1							32.4	32.8	75
	50	20.5	28.2	34.2	38.3						39.9	40.4	78
	60	20.9	29.1	35.9	41.3	45.1					47.0	47.7	79
	70	21.1	29.7	37.0	43.2	48.1	51.8				54.0	54.8	80
	80	21.3	30.0	37.8	44.5	50.2	54.8	58.4	60.8		60.9	61.8	80
	90	21.4	30.3	38.3	45.4	51.7	57.0	61.4	64.9	67.3	67.6	68.8	81
	100	21.5	30.5	38.7	46.1	52.8	58.7	63.7	68.0	71.3	74.4	75.7	81
20	50	25.3	34.9	42.2	47.2						49.3	49.7	78
	60	25.8	36.0	44.4	50.9	55.6					58.1	58.7	79
	70	26.2	36.7	45.7	53.3	59.4	63.8	66.6			66.7	67.4	80
	80	26.4	37.1	46.7	54.9	61.9	67.6	71.9	74.8		75.2	76.0	80
	90	26.6	37.5	47.3	56.1	63.8	70.3	75.7	79.9	82.8	83.6	84.4	81
	100	26.7	37.7	47.8	57.0	65.2	72.4	78.6	83.7	87.8	91.9	92.9	81
	22	50	30.7	42.3	51.1	57.1						59.7	60.0
60		31.3	43.6	53.7	61.6	67.2	70.3				70.3	70.8	79
70		31.7	44.4	55.4	64.5	71.8	77.1	80.4			80.7	81.3	80
80		32.0	45.0	56.5	66.5	74.9	81.7	86.8	90.2		91.0	91.6	80
90		32.2	45.4	57.3	67.9	77.1	85.0	91.5	96.5	99.9	101.1	101.8	81
100		32.3	45.7	57.9	69.0	78.8	87.5	95.0	101.1	106.0	111.1	111.9	81
24		50	36.6	50.3	60.8	67.9						71.0	71.3
	60	37.4	52.0	64.0	73.3	79.9	83.5				83.7	84.0	79
	70	37.9	53.0	66.0	76.8	85.4	91.7	95.5			96.0	96.5	80
	80	38.2	53.6	67.3	79.1	89.1	97.2	103.2	107.1		108.2	108.7	80
	90	38.4	54.1	68.3	80.8	91.8	101.1	108.7	114.6	118.7	120.2	120.8	81
	100	38.6	54.5	69.0	82.1	93.8	104.1	112.9	120.2	125.9	132.1	132.8	81

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 3--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 7-inch d.o.b. top and height to a saw-log top for all pine species combined (species 100) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 7-inch d.o.b. top	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
10	20	5.2									5.9	8.0	68
	30	5.9	8.2								9.4	11.7	75
	40	6.2	8.7	11.0							12.7	15.5	78
	50	6.4	9.0	11.4	13.6	15.6					15.8	19.2	79
	60	6.4	9.1	11.7	14.0	16.2	18.2				18.8	22.9	80
	70	6.5	9.2	11.8	14.3	16.6	18.7	20.7			21.9	26.6	80
12	20	7.5									8.4	9.7	68
	30	8.6	11.7								13.1	14.4	75
	40	9.0	12.5	15.4							17.3	19.0	78
	50	9.2	12.9	16.1	18.9	21.1					21.3	23.4	79
	60	9.3	13.1	16.6	19.7	22.4	24.6				25.3	27.7	80
	70	9.4	13.2	16.8	20.1	23.1	25.8	28.1			29.3	32.1	80
80	9.4	13.3	17.0	20.5	23.6	26.5	29.2	31.5		33.2	36.4	80	
14	40	12.3	17.0	20.6							22.8	23.9	78
	50	12.5	17.5	21.8	25.2	27.7					28.0	29.3	79
	60	12.7	17.8	22.4	26.4	29.7	32.3				33.0	34.6	80
	70	12.8	18.0	22.8	27.1	30.9	34.1	36.7			38.0	39.9	80
	80	12.8	18.2	23.1	27.6	31.7	35.3	38.5	41.2		43.0	45.1	80
	90	12.9	18.2	23.3	27.9	32.2	36.2	39.7	42.9	45.5	47.9	50.3	80
100	12.9	18.3	23.4	28.2	32.7	36.8	40.6	44.1	47.2	52.9	55.5	80	
16	40	16.1	22.1	26.7							29.1	29.9	78
	50	16.4	22.9	28.3	32.5	35.4					35.6	36.6	79
	60	16.6	23.3	29.1	34.1	38.2	41.1				41.9	43.0	80
	70	16.7	23.5	29.7	35.1	39.8	43.7	46.8			48.2	49.5	80
	80	16.8	23.7	30.1	35.8	41.0	45.5	49.3	52.4		54.3	55.9	80
	90	16.9	23.9	30.3	36.3	41.8	46.7	51.0	54.8	57.9	60.5	62.2	80
100	16.9	23.9	30.5	36.7	42.4	47.6	52.4	56.6	60.3	66.6	68.5	80	
18	40	20.4	28.0	33.5							36.3	36.9	78
	50	20.8	29.0	35.6	40.7	44.0					44.3	45.0	79
	60	21.1	29.5	36.8	42.9	47.8	51.2				52.0	52.9	80
	70	21.2	29.8	37.5	44.3	50.0	54.7	58.2			59.6	60.6	80
	80	21.3	30.1	38.0	45.2	51.5	57.0	61.5	65.1		67.2	68.4	80
	90	21.4	30.2	38.4	45.8	52.6	58.6	63.9	68.4	72.0	74.8	76.0	80
100	21.5	30.3	38.6	46.3	53.4	59.9	65.7	70.8	75.2	82.3	83.7	80	
20	50	25.8	35.8	43.9	50.0	53.7					54.0	54.5	79
	60	26.1	36.4	45.4	52.8	58.5	62.4				63.3	64.0	80
	70	26.3	36.9	46.3	54.5	61.4	66.9	70.9			72.5	73.3	80
	80	26.4	37.2	46.9	55.7	63.3	69.9	75.3	79.3		81.6	82.5	80
	90	26.5	37.4	47.4	56.5	64.7	72.0	78.3	83.5	87.7	90.7	91.7	80
	100	26.6	37.5	47.7	57.1	65.7	73.6	80.5	86.6	91.8	99.8	100.9	80
22	50	31.2	43.3	53.0	60.2	64.4					64.7	65.2	79
	60	31.6	44.1	54.9	63.7	70.4	74.9				75.8	76.3	80
	70	31.8	44.7	56.0	65.8	74.0	80.5	85.0			86.7	87.3	80
	80	32.0	45.0	56.8	67.2	76.4	84.1	90.4	95.1		97.6	98.3	80
	90	32.1	45.3	57.3	68.3	78.1	86.8	94.2	100.3	105.0	108.4	109.2	80
	100	32.2	45.4	57.7	69.1	79.4	88.7	97.0	104.1	110.2	119.1	120.0	80
24	50	37.2	51.6	63.1	71.4	76.2					76.5	76.8	79
	60	37.7	52.6	65.3	75.6	83.5	88.5				89.5	89.9	80
	70	38.0	53.2	66.6	78.2	87.8	95.3	100.5			102.3	102.8	80
	80	38.2	53.6	67.5	79.9	90.7	99.8	107.0	112.3		115.1	115.6	80
	90	38.3	53.9	68.2	81.2	92.8	102.9	111.6	118.7	124.1	127.7	128.4	80
	100	38.4	54.1	68.7	82.1	94.3	105.3	115.0	123.4	130.3	140.3	141.0	80

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 4--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for all pine species combined (species 100) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.7	1.0	1.2	1.5	1.9	2.1											
6	1.8	2.2	2.5	2.7	3.3	3.7	4.0	4.3									
7	2.6	3.3	3.7	4.0	4.8	5.3	5.8	6.3	6.8	7.2							
8	3.5	4.4	5.0	5.4	6.5	7.2	7.8	8.5	9.1	9.7	10.3	10.9					
9	4.5	5.7	6.4	7.0	8.3	9.2	10.1	10.9	11.7	12.5	13.3	14.0	14.8	15.6			
10	5.7	7.1	8.0	8.8	10.4	11.5	12.5	13.6	14.6	15.6	16.6	17.5	18.5	19.4	20.4	21.3	
11			9.7	10.7	12.7	14.0	15.3	16.5	17.8	19.0	20.2	21.3	22.5	23.7	24.8	25.9	27.1
12			11.7	12.8	15.2	16.8	18.3	19.8	21.3	22.7	24.1	25.5	26.9	28.3	29.7	31.0	32.4
13			13.8	15.1	17.9	19.7	21.6	23.3	25.1	26.8	28.4	30.1	31.7	33.4	35.0	36.6	38.2
14					20.8	23.0	25.1	27.1	29.2	31.1	33.1	35.0	36.9	38.8	40.7	42.5	44.4
15					23.9	26.5	28.9	31.2	33.5	35.8	38.1	40.3	42.5	44.7	46.8	49.0	51.1
16					27.3	30.2	32.9	35.6	38.3	40.8	43.4	45.9	48.4	50.9	53.4	55.8	58.2

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 5--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for all pine species combined (species 100) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.6	2.1	2.6	2.8	3.3	3.7											
6	2.1	2.7	3.3	3.8	4.3	4.9	5.5	6.0									
7	2.6	3.4	4.2	4.9	5.6	6.4	7.1	7.7	8.4	9.1							
8	3.5	4.4	5.2	6.2	7.1	8.0	8.9	9.8	10.6	11.4	12.3	13.1					
9	4.1	5.5	6.5	7.7	8.9	9.9	11.0	12.0	13.1	14.1	15.1	16.1	17.1	18.1			
10	5.1	6.7	7.9	9.4	10.8	12.1	13.4	14.6	15.8	17.0	18.2	19.4	20.6	21.8	23.0	24.2	
11			9.5	11.3	12.9	14.5	16.0	17.4	18.9	20.3	21.8	23.2	24.6	26.0	27.4	28.7	30.1
12			11.3	13.4	15.3	17.1	18.8	20.6	22.3	23.9	25.6	27.2	28.9	30.5	32.1	33.8	35.4
13			13.2	15.7	17.8	19.9	22.0	23.9	25.9	27.9	29.8	31.7	33.6	35.5	37.4	39.2	41.1
14					20.6	23.0	25.3	27.6	29.9	32.1	34.3	36.5	38.7	40.8	43.0	45.1	47.3
15					23.6	26.3	29.0	31.6	34.1	36.7	39.2	41.7	44.1	46.6	49.0	51.5	53.9
16					26.7	29.8	32.8	35.8	38.7	41.5	44.4	47.2	50.0	52.7	55.5	58.3	61.0

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 6--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for slash pine (species 111) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
10	40										4.4	6.5	57
	50	5.5									6.9	9.1	67
	60	5.8	8.0								9.1	11.4	73
	70	6.1	8.4	10.4							11.0	13.6	76
	80	6.2	8.8	11.0	12.8						12.9	15.8	78
	90	6.3	9.0	11.3	13.4						14.6	17.8	80
12	40	7.0									8.2	9.7	57
	50	8.0	10.5								11.9	13.3	67
	60	8.5	11.6	14.0							15.1	16.7	73
	70	8.8	12.3	15.1	17.4						18.2	19.9	76
	80	9.1	12.7	15.9	18.5	20.6					21.1	23.0	78
	90	9.2	13.1	16.4	19.4	21.8	23.7				23.8	26.0	80
100	9.4	13.3	16.9	20.0	22.7	25.0				26.5	28.9	81	
14	40	9.6	12.0								12.3	13.3	57
	50	10.9	14.4	16.8							17.3	18.3	67
	60	11.7	15.8	19.1	21.5						21.8	22.9	73
	70	12.1	16.8	20.6	23.7	25.9					26.1	27.3	76
	80	12.4	17.4	21.7	25.3	28.1					30.1	31.6	78
	90	12.7	17.9	22.5	26.4	29.8	32.4				34.1	35.7	80
100	12.8	18.2	23.0	27.3	31.0	34.1	36.5			37.9	39.7	81	
16	50	14.4	18.9	22.1							23.3	24.0	67
	60	15.3	20.8	25.1	28.1						29.2	30.1	73
	70	15.9	22.0	27.1	31.1	33.9					34.9	35.9	76
	80	16.3	22.8	28.4	33.1	36.8	39.5				40.3	41.4	78
	90	16.6	23.4	29.4	34.6	39.0	42.4	44.9			45.5	46.8	80
	100	16.8	23.9	30.2	35.8	40.6	44.6	47.8	50.2		50.7	52.1	81
110	17.0	24.2	30.7	36.6	41.9	46.4	50.1	53.1	55.3	55.7	57.2	82	
18	50	18.2	23.9	28.0							29.9	30.5	67
	60	19.5	26.4	31.8	35.7						37.6	38.3	73
	70	20.3	27.9	34.3	39.4	43.0					44.8	45.6	76
	80	20.8	29.0	36.1	42.0	46.7	50.1				51.7	52.6	78
	90	21.1	29.7	37.3	43.9	49.4	53.8	56.9			58.4	59.4	80
	100	21.4	30.3	38.3	45.4	51.5	56.6	60.6	63.6		64.9	66.1	81
110	21.6	30.7	39.0	46.5	53.1	58.8	63.6	67.3	70.1	71.3	72.6	82	
20	60	24.1	32.6	39.3	44.1						46.8	47.4	73
	70	25.1	34.6	42.5	48.7	53.2					55.7	56.4	76
	80	25.7	35.9	44.6	52.0	57.7	61.9				64.3	65.1	78
	90	26.2	36.8	46.2	54.3	61.1	66.5	70.3			72.6	73.5	80
	100	26.5	37.5	47.4	56.1	63.6	69.9	74.9	78.6		80.7	81.8	81
	110	26.8	38.0	48.2	57.5	65.6	72.7	78.6	83.2	86.7	88.7	89.9	82
22	60	29.3	39.6	47.7	53.5	56.7					56.9	57.4	73
	70	30.5	41.9	51.5	59.0	64.4	67.5				67.7	68.4	76
	80	31.2	43.5	54.1	62.9	69.9	75.0	77.9			78.2	78.9	78
	90	31.8	44.6	56.0	65.8	74.0	80.5	85.2	88.0		88.3	89.1	80
	100	32.2	45.4	57.4	68.0	77.1	84.7	90.8	95.2	97.8	98.1	99.1	81
	110	32.5	46.1	58.5	69.6	79.5	88.0	95.1	100.8	105.0	107.8	108.9	82
24	60	34.9	47.2	56.8	63.7	67.6					68.0	68.5	73
	70	36.3	49.9	61.3	70.3	76.8	80.4				80.9	81.5	76
	80	37.3	51.8	64.5	75.0	83.3	89.3	92.8			93.3	94.0	78
	90	37.9	53.2	66.7	78.4	88.2	95.9	101.5	104.8		105.4	106.2	80
	100	38.4	54.2	68.4	81.0	91.8	100.9	108.1	113.3	116.5	117.2	118.1	81
	110	38.8	54.9	69.7	83.0	94.7	104.8	113.3	120.1	125.0	128.8	129.8	82

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 7--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for slash pine (species 111) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)								7-inch d.o.b. top	4-inch d.o.b. top		
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
10	30	5.2									5.9	7.2	65
	40	5.8	7.8								8.2	10.0	73
	50	6.0	8.4	10.2							10.3	12.6	76
	60	6.2	8.7	10.8							12.3	15.0	78
	70	6.3	8.9	11.2	13.1						14.1	17.4	79
	80	6.4	9.0	11.4	13.5	15.4					16.0	19.8	80
	90	6.4	9.1	11.6	13.8	15.8	17.6				17.8	22.2	80
12	30	7.6									9.5	10.3	65
	40	8.4	11.3								13.1	14.2	73
	50	8.8	12.1	14.7							16.3	17.8	76
	60	9.0	12.6	15.6	18.0						19.5	21.2	78
	70	9.2	12.9	16.1	18.9	21.1					22.5	24.5	79
	80	9.3	13.1	16.5	19.5	22.1	24.2				25.4	27.8	80
	90	9.3	13.2	16.8	19.9	22.8	25.2	27.2			28.3	31.1	80
14	40	11.5	15.4	18.0							18.4	19.1	73
	50	12.1	16.6	20.1	22.5						22.9	23.9	76
	60	12.4	17.2	21.2	24.4	26.8					27.3	28.5	78
	70	12.6	17.6	22.0	25.7	28.7	30.9				31.5	32.9	79
	80	12.7	17.9	22.5	26.5	30.0	32.8	35.0			35.6	37.3	80
	90	12.8	18.1	22.9	27.2	30.9	34.2	36.9	39.0		39.7	41.6	80
	100	12.9	18.2	23.2	27.6	31.6	35.2	38.3	40.9	43.0	43.7	45.9	81
16	40	15.1	20.2	23.6							24.3	24.9	73
	50	15.9	21.7	26.2	29.3						30.3	31.0	76
	60	16.3	22.6	27.8	31.9	34.9					36.0	36.9	78
	70	16.5	23.1	28.8	33.5	37.4	40.2				41.6	42.6	79
	80	16.7	23.5	29.5	34.7	39.1	42.7	45.5			47.0	48.2	80
	90	16.8	23.7	30.0	35.5	40.4	44.5	48.0	50.7		52.4	53.8	80
	100	16.9	23.9	30.3	36.1	41.3	45.9	49.8	53.1	55.8	57.7	59.2	81
18	40	19.2	25.7	29.8							31.0	31.4	73
	50	20.2	27.6	33.2	37.1						38.6	39.1	76
	60	20.7	28.6	35.2	40.4	44.0					45.8	46.5	78
	70	21.0	29.3	36.5	42.5	47.2	50.8				52.8	53.6	79
	80	21.2	29.8	37.4	43.9	49.5	54.0	57.4	59.6		59.7	60.6	80
	90	21.4	30.1	38.0	45.0	51.1	56.3	60.6	63.9	66.2	66.5	67.6	80
	100	21.5	30.4	38.5	45.8	52.3	58.0	63.0	67.1	70.3	73.2	74.4	81
20	50	25.0	34.1	41.1	45.8						47.7	48.1	76
	60	25.6	35.4	43.5	49.8	54.3					56.6	57.1	78
	70	26.0	36.3	45.1	52.5	58.3	62.6	65.2			65.3	65.9	79
	80	26.3	36.9	46.2	54.3	61.1	66.5	70.7	73.4		73.8	74.5	80
	90	26.5	37.3	47.0	55.6	63.1	69.4	74.6	78.7	81.5	82.2	83.0	80
	100	26.7	37.6	47.5	56.6	64.6	71.6	77.6	82.6	86.6	90.5	91.4	81
	22	50	30.3	41.3	49.7	55.4						57.8	58.1
60		31.1	43.0	52.7	60.3	65.6					68.6	69.0	78
70		31.6	44.0	54.6	63.5	70.5	75.6	78.7			79.0	79.5	79
80		31.9	44.7	56.0	65.7	73.9	80.4	85.4	88.6		89.3	89.9	80
90		32.2	45.2	56.9	67.3	76.3	84.0	90.2	95.0	98.3	99.4	100.1	80
100		32.3	45.6	57.6	68.5	78.2	86.6	93.9	99.9	104.6	109.4	110.2	81
24		50	36.1	49.3	59.2	65.9						68.8	69.1
	60	37.1	51.2	62.8	71.8	78.1	81.5				81.6	81.9	78
	70	37.7	52.4	65.1	75.6	83.9	89.9	93.5			94.0	94.4	79
	80	38.1	53.3	66.7	78.2	87.9	95.7	101.5	105.2		106.2	106.7	80
	90	38.4	53.9	67.8	80.1	90.8	99.9	107.3	112.9	116.8	118.2	118.8	80
	100	38.6	54.3	68.6	81.6	93.1	103.1	111.7	118.7	124.3	130.1	130.7	81

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 8--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 7-inch d.o.b. top and height to a saw-log top for slash pine (species 111) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Height to 7-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
10	20	5.1									5.7	8.4	66
	30	5.8	8.0								9.2	11.5	74
	40	6.1	8.5	10.7							12.3	14.8	77
	50	6.2	8.8	11.1	13.2	15.1					15.3	18.1	78
	60	6.3	8.9	11.4	13.7	15.8	17.6				18.2	21.3	79
	70	6.3	9.0	11.6	14.0	16.2	18.2	20.1			21.2	24.6	79
12	20	7.4									8.2	10.0	66
	30	8.5	11.5								12.8	14.3	74
	40	8.9	12.3	15.1							16.9	18.5	77
	50	9.1	12.7	15.9	18.5	20.6					20.8	22.6	78
	60	9.2	12.9	16.3	19.3	21.9	24.0				24.6	26.7	79
	70	9.3	13.1	16.6	19.8	22.7	25.2	27.3			28.5	30.7	79
14	40	12.2	16.8	20.3							22.3	23.5	77
	50	12.4	17.3	21.5	24.7	27.1					27.3	28.6	78
	60	12.6	17.7	22.1	26.0	29.1	31.5				32.2	33.7	79
	70	12.7	17.9	22.6	26.7	30.4	33.4	35.9			37.1	38.6	79
	80	12.8	18.0	22.8	27.2	31.2	34.7	37.7	40.2		41.9	43.6	80
	90	12.8	18.1	23.1	27.6	31.8	35.6	39.0	42.0	44.5	46.7	48.5	80
16	40	16.0	21.9	26.3							28.5	29.4	77
	50	16.4	22.7	27.9	31.9	34.6					34.8	35.8	78
	60	16.6	23.1	28.9	33.6	37.5	40.3				41.0	42.1	79
	70	16.7	23.4	29.4	34.7	39.2	42.9	45.8			47.0	48.2	79
	80	16.8	23.6	29.8	35.5	40.4	44.7	48.3	51.2		53.1	54.3	80
	90	16.9	23.8	30.1	36.0	41.3	46.0	50.2	53.7	56.6	59.0	60.4	80
18	40	20.3	27.8	33.1							35.7	36.4	77
	50	20.8	28.8	35.3	40.1	43.1					43.4	44.2	78
	60	21.1	29.4	36.5	42.4	47.0	50.1				50.9	51.8	79
	70	21.2	29.7	37.3	43.8	49.3	53.7	57.0			58.3	59.3	79
	80	21.4	30.0	37.8	44.8	50.9	56.1	60.4	63.7		65.7	66.7	80
	90	21.4	30.2	38.2	45.5	52.0	57.8	62.9	67.1	70.4	73.0	74.1	80
20	50	25.8	35.6	43.5	49.2	52.7					52.9	53.6	78
	60	26.1	36.3	45.0	52.1	57.6	61.2				62.0	62.7	79
	70	26.3	36.8	46.0	53.9	60.6	65.8	69.5			71.0	71.7	79
	80	26.5	37.1	46.7	55.2	62.6	68.9	73.9	77.7		79.8	80.7	80
	90	26.6	37.3	47.2	56.1	64.0	71.0	77.1	82.0	85.8	88.7	89.5	80
	100	26.7	37.5	47.5	56.7	65.1	72.7	79.4	85.2	90.0	97.4	98.4	80
22	50	31.3	43.1	52.5	59.3	63.3					63.5	64.0	78
	60	31.7	44.0	54.5	62.9	69.3	73.4				74.3	74.9	79
	70	31.9	44.6	55.7	65.2	73.0	79.1	83.4			84.9	85.6	79
	80	32.1	45.0	56.5	66.7	75.5	82.9	88.9	93.2		95.5	96.2	80
	90	32.2	45.2	57.1	67.8	77.3	85.7	92.7	98.5	102.9	106.0	106.7	80
	100	32.3	45.4	57.5	68.6	78.7	87.7	95.6	102.5	108.1	116.4	117.2	80
24	50	37.3	51.4	62.5	70.4	74.8					75.1	75.5	78
	60	37.8	52.4	64.8	74.8	82.2	86.8				87.8	88.2	79
	70	38.1	53.1	66.3	77.5	86.7	93.8	98.6			100.2	100.8	79
	80	38.3	53.6	67.3	79.3	89.7	98.4	105.2	110.1		112.6	113.2	80
	90	38.5	53.9	68.0	80.7	91.9	101.7	109.9	116.6	121.6	124.9	125.5	80
	100	38.6	54.2	68.5	81.7	93.6	104.2	113.5	121.4	127.9	137.2	137.8	80

\* Includes 1.0-foot stump allowance.

Table 9--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for slash pine (species 111) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
Inches	Cubic feet																
5	0.8	1.2	1.4	1.5	1.5	1.8											
6	1.7	2.2	2.4	2.6	2.8	3.2	3.6	4.0									
7	2.6	3.2	3.6	3.9	4.2	4.8	5.3	5.8	6.4	6.9							
8	3.5	4.4	4.9	5.4	5.7	6.5	7.2	7.9	8.6	9.3	10.0	10.6					
9	4.6	5.7	6.4	7.0	7.5	8.4	9.4	10.3	11.1	12.0	12.9	13.7	14.5	15.3			
10	5.8	7.2	8.0	8.7	9.4	10.6	11.7	12.8	13.9	15.0	16.1	17.1	18.1	19.2	20.2	21.2	
11			9.8	10.7	11.5	12.9	14.3	15.7	17.0	18.3	19.6	20.9	22.1	23.4	24.6	25.8	27.0
12			11.7	12.8	13.7	15.5	17.1	18.8	20.4	21.9	23.5	25.0	26.5	27.9	29.4	30.9	32.3
13			13.8	15.1	16.2	18.2	20.2	22.1	24.0	25.9	27.7	29.4	31.2	32.9	34.6	36.4	38.0
14					18.9	21.2	23.5	25.8	27.9	30.1	32.2	34.3	36.3	38.3	40.3	42.3	44.3
15					21.7	24.5	27.1	29.7	32.2	34.6	37.0	39.4	41.8	44.1	46.4	48.7	50.9
16					24.8	27.9	30.9	33.8	36.7	39.5	42.2	45.0	47.6	50.3	52.9	55.5	58.1

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 10--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for slash pine (species 111) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
Inches	Cubic feet																
5	1.5	2.0	2.5	2.5	3.0	3.4											
6	2.0	2.6	3.2	3.4	4.0	4.6	5.1	5.7									
7	2.5	3.3	4.1	4.6	5.3	6.0	6.7	7.4	8.1	8.7							
8	3.5	4.3	5.1	5.8	6.8	7.6	8.5	9.4	10.2	11.0	11.9	12.7					
9	4.2	5.5	6.4	7.3	8.4	9.5	10.6	11.6	12.6	13.6	14.6	15.6	16.6	17.6			
10	5.2	6.7	7.9	8.9	10.3	11.6	12.9	14.1	15.3	16.6	17.8	18.9	20.1	21.3	22.5	23.6	
11			9.5	10.7	12.3	13.9	15.4	16.9	18.4	19.8	21.2	22.6	24.0	25.4	26.8	28.2	29.5
12			11.3	12.7	14.6	16.4	18.2	19.9	21.6	23.3	25.0	26.6	28.3	29.9	31.5	33.1	34.7
13			13.2	14.9	17.1	19.2	21.2	23.3	25.2	27.2	29.1	31.0	32.9	34.8	36.7	38.5	40.4
14					19.7	22.2	24.5	26.8	29.1	31.3	33.6	35.8	37.9	40.1	42.2	44.4	46.5
15					22.6	25.4	28.1	30.7	33.3	35.8	38.3	40.8	43.3	45.8	48.2	50.7	53.1
16					25.7	28.8	31.8	34.8	37.7	40.6	43.5	46.3	49.1	51.8	54.6	57.4	60.1

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 11--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for longleaf pine (species 121) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									7-inch d.o.b. top	4-inch d.o.b. top	
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			
Inches	Feet	Cubic feet											Percent
10	40	5.6									6.5	8.0	67
	50	6.0	8.1								8.4	10.2	73
	60	6.3	8.6								10.2	12.3	77
	70	6.4	8.9	11.1							11.8	14.3	79
	80	6.5	9.2	11.5							13.4	16.2	80
	90	6.6	9.3	11.7	13.8						14.9	18.0	81
12	40	8.2	10.5								10.7	11.8	67
	50	8.8	11.8								13.8	15.0	73
	60	9.1	12.5	15.2							16.5	18.0	77
	70	9.3	13.0	16.0	18.4						19.2	20.9	79
	80	9.5	13.3	16.6	19.4	21.5					21.7	23.6	80
	90	9.6	13.5	17.0	20.0	22.5					24.2	26.4	81
100	9.6	13.7	17.3	20.5	23.3	25.5				26.6	29.1	82	
14	40	11.2	14.4								15.4	16.2	67
	50	12.1	16.2	19.0							19.7	20.6	73
	60	12.5	17.2	20.8	23.3						23.6	24.7	77
	70	12.8	17.8	22.0	25.2						27.4	28.6	79
	80	13.0	18.2	22.7	26.5	29.3					31.0	32.5	80
	90	13.1	18.5	23.3	27.4	30.8	33.4				34.5	36.2	81
100	13.2	18.7	23.7	28.1	31.8	34.9	37.3			38.0	39.9	82	
16	50	15.9	21.2	25.0							26.3	27.1	73
	60	16.5	22.5	27.3	30.6						31.6	32.5	77
	70	16.9	23.4	28.8	33.0	35.9					36.6	37.6	79
	80	17.1	23.9	29.8	34.7	38.4	41.0				41.4	42.6	80
	90	17.3	24.3	30.5	35.9	40.3	43.7	46.0			46.2	47.6	81
	100	17.4	24.6	31.1	36.8	41.7	45.7	48.8			50.8	52.4	82
110	17.5	24.8	31.5	37.5	42.7	47.2	50.9	53.8		55.4	57.1	82	
18	50	20.2	27.0	31.7							33.8	34.4	73
	60	21.0	28.6	34.6	38.8						40.5	41.3	77
	70	21.4	29.7	36.5	41.9	45.5					46.9	47.8	79
	80	21.8	30.4	37.8	44.0	48.8	52.0				53.1	54.2	80
	90	22.0	30.9	38.7	45.5	51.1	55.4	58.3			59.2	60.4	81
	100	22.1	31.2	39.4	46.7	52.8	57.9	61.8	64.5		65.1	66.5	82
110	22.3	31.5	40.0	47.5	54.2	59.9	64.5	68.1	70.6	71.0	72.6	82	
20	60	26.0	35.4	42.9	48.0						50.4	51.1	77
	70	26.6	36.7	45.2	51.8	56.3					58.4	59.2	79
	80	27.0	37.6	46.8	54.4	60.3	64.3				66.1	67.1	80
	90	27.2	38.2	47.9	56.3	63.2	68.5	72.1			73.7	74.8	81
	100	27.4	38.7	48.8	57.7	65.3	71.6	76.5	79.8		81.1	82.4	82
	110	27.6	39.0	49.4	58.8	67.0	74.0	79.8	84.2	87.3	88.4	89.8	82
22	60	31.5	43.0	52.0	58.2						61.4	62.0	77
	70	32.3	44.6	54.8	62.8	68.3					71.1	71.8	79
	80	32.7	45.6	56.7	65.9	73.1	78.0				80.4	81.3	80
	90	33.1	46.4	58.1	68.2	76.6	83.0	87.4			89.6	90.7	81
	100	33.3	46.9	59.1	69.9	79.2	86.8	92.6	96.6		98.7	99.8	82
	110	33.5	47.3	59.9	71.3	81.2	89.7	96.7	102.0	105.7	107.6	108.9	82
24	60	37.6	51.3	62.0	69.4	73.1					73.3	73.9	77
	70	38.5	53.1	65.3	74.8	81.3	84.7				84.9	85.6	79
	80	39.1	54.4	67.6	78.6	87.1	92.9	96.0			96.1	97.0	80
	90	39.5	55.3	69.3	81.3	91.2	98.9	104.1	107.0		107.1	108.1	81
	100	39.8	55.9	70.5	83.3	94.3	103.4	110.3	115.1	117.8	117.9	119.0	82
	110	40.0	56.4	71.4	84.9	96.7	106.9	115.2	121.5	126.0	128.6	129.8	82

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 12--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for longleaf pine (species 121) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
10	30	5.7									6.6	7.9	69
	40	6.1	8.3								8.9	10.7	76
	50	6.4	8.8	10.8							10.9	13.3	79
	60	6.5	9.1	11.3							12.9	15.8	80
	70	6.6	9.3	11.7	13.7						14.7	18.2	81
	80	6.6	9.4	11.9	14.1	16.0					16.6	20.6	82
	90	6.6	9.5	12.1	14.4	16.5	18.3				18.4	23.0	82
12	30	8.3									10.5	11.3	69
	40	8.9	12.1								14.0	15.1	76
	50	9.3	12.8	15.6							17.2	18.7	79
	60	9.4	13.2	16.3	18.9						20.4	22.2	80
	70	9.6	13.4	16.8	19.7	22.1					23.4	25.6	81
	80	9.6	13.6	17.2	20.3	23.0	25.2				26.4	28.9	82
	90	9.7	13.7	17.4	20.7	23.7	26.2	28.3			29.3	32.3	82
14	40	12.3	16.5	19.3							19.7	20.4	76
	50	12.7	17.5	21.2	23.8						24.2	25.2	79
	60	13.0	18.0	22.3	25.6	28.1					28.5	29.8	80
	70	13.1	18.4	23.0	26.8	29.9	32.3				32.8	34.3	81
	80	13.2	18.6	23.5	27.6	31.2	34.1	36.4			37.0	38.8	82
	90	13.3	18.8	23.8	28.2	32.2	35.5	38.3	40.5		41.1	43.2	82
	100	13.3	18.9	24.0	28.7	32.9	36.5	39.7	42.4	44.6	45.2	47.5	82
16	40	16.1	21.6	25.2							26.0	26.6	76
	50	16.7	22.9	27.7	31.0						32.0	32.7	79
	60	17.0	23.7	29.2	33.5	36.5					37.7	38.6	80
	70	17.2	24.1	30.1	35.0	39.0	42.0				43.3	44.4	81
	80	17.4	24.4	30.7	36.1	40.7	44.5	47.3			48.8	50.1	82
	90	17.4	24.7	31.1	36.9	42.0	46.3	49.8	52.6		54.3	55.8	82
	100	17.5	24.8	31.5	37.5	42.9	47.7	51.7	55.1	57.9	59.7	61.4	82
18	40	20.5	27.5	31.9							33.1	33.5	76
	50	21.2	29.1	35.1	39.2						40.7	41.2	79
	60	21.6	30.0	37.0	42.3	46.1					47.9	48.7	80
	70	21.9	30.6	38.1	44.4	49.3	53.0				55.0	55.9	81
	80	22.1	31.0	38.9	45.8	51.5	56.2	59.7	62.0		62.0	63.0	82
	90	22.2	31.3	39.5	46.8	53.1	58.5	62.9	66.3	68.7	69.0	70.1	82
	100	22.3	31.5	39.9	47.5	54.3	60.3	65.4	69.6	72.9	75.8	77.1	82
20	50	26.3	36.0	43.4	48.3						50.3	50.8	79
	60	26.8	37.2	45.7	52.3	56.9					59.3	59.9	80
	70	27.1	37.9	47.1	54.8	60.9	65.3	68.0			68.1	68.7	81
	80	27.4	38.4	48.1	56.5	63.6	69.3	73.5	76.3		76.7	77.5	82
	90	27.5	38.7	48.9	57.8	65.6	72.2	77.5	81.7	84.5	85.2	86.1	82
	100	27.6	39.0	49.4	58.7	67.1	74.4	80.6	85.7	89.8	93.7	94.7	82
	22	50	32.0	43.7	52.6	58.5						60.9	61.3
60		32.6	45.1	55.3	63.3	68.8					71.8	72.2	80
70		33.0	46.0	57.1	66.3	73.6	78.9	82.1			82.4	82.9	81
80		33.2	46.6	58.3	68.5	77.0	83.8	88.8	92.1		92.8	93.4	82
90		33.4	47.0	59.2	70.0	79.4	87.3	93.7	98.7	102.0	103.1	103.8	82
100		33.5	47.3	59.8	71.1	81.2	90.0	97.4	103.6	108.4	113.3	114.1	82
24		50	38.1	52.1	62.6	69.6						72.6	72.9
	60	38.9	53.8	65.9	75.3	81.8	85.3				85.4	85.8	80
	70	39.3	54.8	68.1	79.0	87.6	93.8	97.5			98.0	98.5	81
	80	39.6	55.5	69.5	81.5	91.6	99.6	105.6	109.4		110.4	110.9	82
	90	39.8	56.0	70.5	83.4	94.5	103.9	111.5	117.3	121.2	122.6	123.2	82
	100	40.0	56.4	71.3	84.7	96.7	107.1	115.9	123.2	128.8	134.8	135.4	82

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 13--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 7-inch d.o.b. top and height to a saw-log top for longleaf pine (species 121) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 7-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
<u>Inches</u>	<u>Feet</u>	<u>Cubic feet</u>										<u>Percent</u>	
10	20	5.5									6.3	8.1	70
	30	6.2	8.5								9.7	11.8	77
	40	6.4	9.0	11.2							12.9	15.5	79
	50	6.5	9.2	11.6	13.8	15.7					16.0	19.3	80
	60	6.6	9.3	11.9	14.3	16.4	18.4				19.0	23.1	81
	70	6.6	9.4	12.0	14.5	16.8	19.0	20.9			22.0	27.0	81
12	20	8.1									9.0	10.1	70
	30	9.0	12.2								13.5	14.8	77
	40	9.3	12.9	15.8							17.7	19.3	79
	50	9.5	13.3	16.6	19.3	21.5					21.7	23.7	80
	60	9.5	13.5	17.0	20.1	22.8	25.0				25.6	28.1	81
	70	9.6	13.6	17.2	20.6	23.6	26.2	28.4			29.6	32.5	81
	80	9.6	13.7	17.4	20.9	24.1	27.0	29.6	31.8		33.5	36.9	81
14	40	12.7	17.6	21.2							23.3	24.4	79
	50	13.0	18.1	22.4	25.8	28.3					28.5	29.8	80
	60	13.1	18.4	23.0	27.0	30.3	32.8				33.5	35.2	81
	70	13.2	18.5	23.4	27.7	31.5	34.7	37.3			38.5	40.5	81
	80	13.2	18.7	23.7	28.2	32.4	36.0	39.1	41.7		43.5	45.7	81
	90	13.2	18.7	23.9	28.6	33.0	36.9	40.4	43.5	46.1	48.4	51.0	81
	100	13.3	18.8	24.0	28.9	33.4	37.6	41.4	44.8	47.9	53.4	56.3	82
16	40	16.7	23.0	27.5							29.9	30.7	79
	50	17.0	23.7	29.1	33.3	36.1					36.3	37.3	80
	60	17.2	24.0	30.0	35.0	39.0	41.9				42.6	43.8	81
	70	17.3	24.3	30.5	36.0	40.7	44.6	47.5			48.9	50.2	81
	80	17.3	24.4	30.9	36.7	41.9	46.4	50.2	53.2		55.1	56.7	81
	90	17.4	24.6	31.2	37.3	42.8	47.7	52.0	55.7	58.7	61.2	63.1	81
	100	17.4	24.6	31.4	37.6	43.4	48.7	53.4	57.6	61.2	67.4	69.5	82
18	40	21.3	29.1	34.7							37.4	38.0	79
	50	21.6	30.0	36.8	41.8	45.0					45.2	46.0	80
	60	21.8	30.5	37.9	44.1	48.9	52.2				53.0	53.8	81
	70	22.0	30.8	38.6	45.4	51.2	55.8	59.2			60.6	61.6	81
	80	22.0	31.0	39.1	46.4	52.8	58.2	62.7	66.1		68.2	69.4	81
	90	22.1	31.2	39.5	47.1	53.9	59.9	65.2	69.5	73.0	75.7	77.1	81
	100	22.2	31.3	39.7	47.6	54.7	61.2	67.0	72.1	76.4	83.3	84.8	82
20	50	26.8	37.1	45.3	51.4	55.0					55.2	55.8	80
	60	27.1	37.7	46.8	54.2	59.9	63.7				64.5	65.2	81
	70	27.2	38.1	47.7	56.0	62.9	68.3	72.2			73.7	74.5	81
	80	27.3	38.4	48.3	57.2	64.9	71.4	76.7	80.7		82.9	83.8	81
	90	27.4	38.5	48.8	58.0	66.3	73.6	79.9	85.0	89.0	92.0	93.0	81
	100	27.5	38.7	49.1	58.7	67.4	75.3	82.2	88.3	93.3	101.0	102.2	82
22	50	32.5	44.9	54.8	61.9	66.0					66.3	66.7	80
	60	32.8	45.7	56.6	65.4	72.1	76.4				77.3	77.9	81
	70	33.0	46.2	57.7	67.6	75.8	82.2	86.6			88.2	88.9	81
	80	33.2	46.5	58.5	69.1	78.3	86.0	92.2	96.7		99.1	99.9	81
	90	33.2	46.7	59.1	70.2	80.1	88.8	96.1	102.2	106.7	109.9	110.8	81
	100	33.3	46.9	59.5	71.0	81.5	90.8	99.1	106.2	112.1	120.7	121.6	82
24	50	38.8	53.5	65.2	73.5	78.1					78.3	78.7	80
	60	39.2	54.5	67.4	77.8	85.5	90.4				91.3	91.8	81
	70	39.4	55.0	68.7	80.4	90.0	97.4	102.4			104.2	104.7	81
	80	39.6	55.4	69.7	82.2	93.0	102.1	109.2	114.3		116.9	117.5	81
	90	39.7	55.7	70.3	83.5	95.2	105.4	114.0	120.9	126.1	129.6	130.3	81
	100	39.8	55.9	70.8	84.5	96.8	107.9	117.5	125.8	132.6	142.2	143.0	82

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 14--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for longleaf pine (species 121) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.8	1.1	1.3	1.5	1.9	2.1											
6	1.8	2.2	2.5	2.6	3.3	3.6	3.9	4.2									
7	2.7	3.3	3.7	4.0	4.8	5.3	5.7	6.2	6.7	7.1							
8	3.7	4.5	5.0	5.4	6.5	7.1	7.8	8.4	9.0	9.6	10.2	10.8					
9	4.8	5.9	6.5	7.0	8.4	9.2	10.1	10.9	11.6	12.4	13.2	13.9	14.7	15.4			
10	6.1	7.4	8.1	8.8	10.5	11.6	12.6	13.6	14.5	15.5	16.5	17.4	18.3	19.3	20.2	21.1	
11			10.0	10.8	12.8	14.1	15.4	16.6	17.8	18.9	20.1	21.2	22.4	23.5	24.6	25.7	26.8
12			12.0	13.0	15.4	16.9	18.4	19.8	21.3	22.7	24.1	25.4	26.8	28.1	29.5	30.8	32.1
13			14.1	15.3	18.2	19.9	21.7	23.4	25.1	26.7	28.4	30.0	31.6	33.2	34.8	36.3	37.9
14					21.1	23.2	25.3	27.3	29.2	31.1	33.0	34.9	36.8	38.6	40.5	42.3	44.1
15					24.4	26.8	29.1	31.4	33.6	35.9	38.1	40.2	42.4	44.5	46.6	48.7	50.8
16					27.8	30.5	33.2	35.8	38.4	40.9	43.4	45.9	48.3	50.7	53.1	55.5	57.9

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 15--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for longleaf pine (species 121) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.6	2.1	2.6	2.7	3.2	3.7											
6	2.1	2.7	3.3	3.7	4.3	4.9	5.5	6.0									
7	2.7	3.5	4.3	4.9	5.7	6.4	7.1	7.8	8.5	9.2							
8	3.7	4.5	5.3	6.3	7.2	8.1	9.0	9.8	10.7	11.5	12.4	13.2					
9	4.4	5.7	6.6	7.8	9.0	10.1	11.1	12.2	13.2	14.3	15.3	16.3	17.3	18.3			
10	5.4	7.0	8.1	9.6	10.9	12.3	13.5	14.8	16.1	17.3	18.5	19.7	20.9	22.1	23.3	24.5	
11			9.8	11.5	13.1	14.7	16.2	17.7	19.2	20.6	22.1	23.5	25.0	26.4	27.8	29.2	30.6
12			11.6	13.7	15.5	17.4	19.1	20.9	22.6	24.3	26.0	27.7	29.4	31.0	32.7	34.3	36.0
13			13.6	16.0	18.2	20.3	22.3	24.4	26.4	28.3	30.3	32.2	34.2	36.1	38.0	39.9	41.8
14					21.0	23.4	25.8	28.1	30.4	32.7	34.9	37.1	39.4	41.6	43.8	46.0	48.1
15					24.0	26.8	29.5	32.1	34.8	37.3	39.9	42.4	44.9	47.5	50.0	52.4	54.9
16					27.3	30.4	33.5	36.5	39.4	42.3	45.2	48.1	50.9	53.7	56.6	59.4	62.2

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 16--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for loblolly pine (species 131) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)								7-inch d.o.b. top	4-inch d.o.b. top		
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
	40										4.1	6.8	60
	50	5.5									7.1	9.4	69
10	60	5.8	8.1								9.2	11.7	74
	70	6.1	8.5	10.6							11.1	13.9	77
	80	6.2	8.8	11.1							12.9	16.0	79
	90	6.4	9.0	11.5	13.6						14.6	18.1	80
	40	6.9									8.6	10.0	60
	50	7.9	10.7								12.3	13.7	69
12	60	8.5	11.7	14.3							15.5	17.1	74
	70	8.8	12.3	15.3	17.7						18.5	20.3	77
	80	9.1	12.8	16.1	18.8	21.0					21.3	23.4	79
	90	9.2	13.1	16.6	19.6	22.2					24.1	26.4	80
	100	9.3	13.3	17.0	20.2	23.1	25.4				26.7	29.3	81
	40	9.5	12.2								12.7	13.7	60
	50	10.9	14.6	17.3							17.8	18.8	69
14	60	11.6	16.0	19.5	22.0						22.3	23.5	74
	70	12.1	16.9	21.0	24.2	26.5					26.5	27.9	77
	80	12.4	17.5	21.9	25.7	28.7					30.6	32.1	79
	90	12.6	17.9	22.6	26.8	30.3	33.0				34.5	36.2	80
	100	12.8	18.2	23.2	27.6	31.5	34.7	37.2			38.3	40.2	81
	50	14.3	19.1	22.7							23.9	24.7	69
	60	15.3	21.0	25.6	28.9						29.9	30.9	74
16	70	15.9	22.1	27.5	31.7	34.7					35.5	36.6	77
	80	16.3	22.9	28.7	33.7	37.6	40.3				40.9	42.2	79
	90	16.6	23.4	29.6	35.1	39.6	43.2	45.8			46.1	47.5	80
	100	16.8	23.8	30.3	36.1	41.2	45.4	48.7	51.1		51.2	52.8	81
	110	16.9	24.1	30.8	36.9	42.3	47.0	51.0	54.1		56.2	57.9	82
	50	18.1	24.3	28.7							30.8	31.4	69
	60	19.4	26.6	32.4	36.6						38.4	39.2	74
18	70	20.2	28.1	34.8	40.2	44.0					45.6	46.5	77
	80	20.7	29.1	36.4	42.7	47.6	51.1				52.5	53.6	79
	90	21.1	29.8	37.6	44.5	50.2	54.8	58.0			59.1	60.4	80
	100	21.3	30.3	38.5	45.8	52.2	57.5	61.7	64.7		65.6	67.0	81
	110	21.5	30.6	39.1	46.8	53.7	59.6	64.6	68.5	71.3	72.0	73.6	82
	60	24.0	32.9	40.1	45.3						47.8	48.6	74
	70	25.0	34.7	43.1	49.7	54.5					56.8	57.6	77
20	80	25.6	36.0	45.1	52.8	58.9	63.2				65.3	66.3	79
	90	26.1	36.8	46.5	55.0	62.1	67.7	71.7			73.6	74.7	80
	100	26.4	37.5	47.6	56.6	64.5	71.1	76.3	80.0		81.7	82.9	81
	110	26.6	37.9	48.4	57.9	66.4	73.7	79.8	84.7	88.1	89.6	91.0	82
	60	29.1	39.9	48.6	54.9	58.2					58.2	58.9	74
	70	30.3	42.1	52.2	60.3	66.0	69.1				69.1	69.8	77
22	80	31.1	43.6	54.6	64.0	71.4	76.6				79.4	80.4	79
	90	31.7	44.6	56.4	66.6	75.2	82.0	86.9			89.5	90.6	80
	100	32.0	45.4	57.6	68.6	78.1	86.1	92.4	96.9		99.4	100.5	81
	110	32.3	46.0	58.6	70.1	80.4	89.3	96.7	102.5	106.7	109.0	110.3	82
	60	34.8	47.6	58.0	65.4	69.3					69.6	70.2	74
	70	36.2	50.2	62.2	71.8	78.6	82.3				82.5	83.3	77
24	80	37.1	52.0	65.1	76.2	85.0	91.2	94.6			94.9	95.8	79
	90	37.8	53.2	67.2	79.4	89.6	97.7	103.5	106.7		107.0	107.9	80
	100	38.2	54.1	68.7	81.7	93.1	102.6	110.1	115.4	118.4	118.7	119.8	81
	110	38.6	54.8	69.8	83.5	95.7	106.3	115.2	122.1	127.1	130.3	131.5	82

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 17--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for loblolly pine (species 131) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
10	30	5.1									5.7	7.3	66
	40	5.8	7.9								8.2	10.2	73
	50	6.1	8.5								10.3	12.9	77
	60	6.2	8.8	11.0							12.3	15.5	79
	70	6.3	9.0	11.3	13.4						14.2	18.0	80
	80	6.4	9.1	11.6	13.8	15.7					16.0	20.5	80
	90	6.5	9.2	11.7	14.0	16.1					17.8	22.9	81
12	30	7.4									9.4	10.3	66
	40	8.4	11.4								13.2	14.4	73
	50	8.8	12.2	14.9							16.6	18.2	77
	60	9.1	12.7	15.8	18.3						19.8	21.8	79
	70	9.2	13.0	16.3	19.2	21.5					22.9	25.2	80
	80	9.3	13.2	16.7	19.8	22.4	24.7				25.9	28.6	80
	90	9.4	13.3	16.9	20.2	23.1	25.7	27.8			28.8	32.0	81
14	40	11.5	15.5	18.3							18.6	19.4	73
	50	12.1	16.7	20.3	22.9						23.3	24.4	77
	60	12.4	17.3	21.5	24.8	27.3					27.8	29.2	79
	70	12.6	17.7	22.2	26.0	29.2	31.6				32.2	33.8	80
	80	12.7	18.0	22.7	26.9	30.4	33.4	35.8			36.4	38.3	80
	90	12.8	18.2	23.1	27.5	31.4	34.7	37.6	39.9		40.6	42.8	81
	100	12.9	18.3	23.3	27.9	32.1	35.8	39.0	41.7	44.0	44.8	47.2	81
16	40	15.0	20.3	23.8							24.6	25.2	73
	50	15.8	21.8	26.5	29.8						30.9	31.7	77
	60	16.3	22.7	28.1	32.4	35.5					36.8	37.8	79
	70	16.5	23.2	29.0	34.0	38.0	41.0				42.5	43.7	80
	80	16.7	23.6	29.7	35.1	39.7	43.5	46.4			48.1	49.5	80
	90	16.8	23.8	30.2	35.9	40.9	45.3	48.9	51.8		53.7	55.2	81
	100	16.9	24.0	30.5	36.5	41.8	46.6	50.7	54.2	57.1	59.2	60.9	81
18	40	19.1	25.7	30.1							31.4	31.8	73
	50	20.1	27.7	33.6	37.7						39.3	39.9	77
	60	20.7	28.8	35.6	40.9	44.8					46.8	47.5	79
	70	21.0	29.5	36.8	43.0	48.0	51.8				54.0	54.9	80
	80	21.2	29.9	37.7	44.4	50.2	54.9	58.6	61.1		61.2	62.2	80
	90	21.4	30.2	38.3	45.4	51.8	57.2	61.7	65.3	67.8	68.2	69.3	81
	100	21.5	30.5	38.7	46.2	52.9	58.9	64.1	68.4	71.9	75.1	76.4	81
20	50	24.9	34.3	41.5	46.5						48.6	49.1	77
	60	25.6	35.6	43.9	50.5	55.2					57.8	58.4	79
	70	26.0	36.5	45.5	53.1	59.2	63.8	66.6			66.8	67.5	80
	80	26.3	37.0	46.5	54.9	61.9	67.7	72.1	75.1		75.6	76.4	80
	90	26.5	37.4	47.3	56.1	63.9	70.5	76.0	80.4	83.4	84.2	85.1	81
	100	26.6	37.7	47.9	57.1	65.4	72.7	79.0	84.3	88.5	92.8	93.8	81
	22	50	30.2	41.5	50.2	56.2						58.8	59.2
60		31.1	43.2	53.2	61.1	66.8	70.0				70.0	70.5	79
70		31.6	44.2	55.1	64.3	71.6	77.0	80.4			80.8	81.4	80
80		31.9	44.9	56.4	66.4	74.9	81.8	87.1	90.6		91.4	92.1	80
90		32.2	45.4	57.3	68.0	77.3	85.3	91.9	97.0	100.6	101.9	102.6	81
100		32.3	45.7	58.0	69.1	79.1	87.9	95.5	101.8	106.9	112.2	113.1	81
24		50	36.1	49.5	59.8	66.8						70.0	70.3
	60	37.1	51.4	63.4	72.7	79.4	83.2				83.3	83.7	79
	70	37.7	52.7	65.6	76.5	85.2	91.6	95.6			96.2	96.6	80
	80	38.1	53.5	67.2	79.1	89.1	97.3	103.5	107.6		108.7	109.3	80
	90	38.4	54.1	68.3	80.9	92.0	101.5	109.3	115.3	119.5	121.2	121.8	81
	100	38.6	54.5	69.1	82.3	94.2	104.6	113.6	121.0	127.0	133.5	134.1	81

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 18--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 7-inch d.o.b. top and height to a saw-log top for loblolly pine (species 131) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 7-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
10	20	4.9									5.6	8.9	66
	30	5.8	8.1								9.3	12.1	75
	40	6.2	8.7	10.9							12.7	15.8	77
	50	6.3	9.0	11.4	13.6	15.6					15.8	19.4	79
	60	6.4	9.1	11.7	14.0	16.3	18.3				19.0	23.1	80
	70	6.5	9.2	11.8	14.3	16.7	18.9	20.9		22.1	26.7	80	
12	20	7.2									8.0	9.8	66
	30	8.4	11.5								12.9	14.5	75
	40	8.9	12.4	15.3							17.3	19.0	77
	50	9.1	12.8	16.1	18.9	21.2					21.4	23.4	79
	60	9.3	13.1	16.6	19.7	22.5	24.8				25.5	27.8	80
	70	9.3	13.2	16.9	20.2	23.2	25.9	28.3		29.5	32.1	80	
	80	9.4	13.3	17.1	20.5	23.7	26.7	29.4	31.7	33.5	36.4	80	
14	40	12.1	16.8	20.5							22.7	23.9	77
	50	12.5	17.5	21.7	25.2	27.8					28.0	29.3	79
	60	12.6	17.8	22.4	26.4	29.8	32.5				33.2	34.7	80
	70	12.7	18.0	22.8	27.2	31.0	34.3	37.0			38.3	40.0	80
	80	12.8	18.2	23.1	27.7	31.8	35.5	38.8	41.5		43.4	45.3	80
	90	12.9	18.3	23.3	28.1	32.4	36.4	40.0	43.2	46.0	48.5	50.5	81
	100	12.9	18.3	23.5	28.3	32.9	37.1	41.0	44.5	47.7	53.5	55.7	81
16	40	15.9	22.0	26.5							29.1	29.9	77
	50	16.3	22.8	28.2	32.5	35.5					35.7	36.6	79
	60	16.6	23.3	29.2	34.2	38.3	41.4				42.2	43.2	80
	70	16.7	23.6	29.8	35.3	40.0	44.0	47.1			48.6	49.7	80
	80	16.8	23.8	30.2	36.0	41.2	45.8	49.7	52.8		54.9	56.1	80
	90	16.9	23.9	30.4	36.5	42.0	47.0	51.5	55.3	58.5	61.2	62.6	81
	100	16.9	24.0	30.7	36.9	42.6	47.9	52.8	57.1	60.9	67.4	68.9	81
18	40	20.2	27.8	33.4							36.2	36.8	77
	50	20.7	28.9	35.6	40.8	44.1					44.4	45.1	79
	60	21.0	29.5	36.8	43.0	48.0	51.5				52.3	53.1	80
	70	21.2	29.9	37.6	44.4	50.3	55.0	58.6			60.1	61.0	80
	80	21.3	30.1	38.1	45.4	51.8	57.4	62.0	65.7		67.9	68.8	80
	90	21.4	30.3	38.5	46.1	52.9	59.0	64.4	69.0	72.7	75.6	76.6	81
	100	21.5	30.4	38.8	46.6	53.7	60.3	66.2	71.4	75.9	83.2	84.3	81
20	50	25.7	35.7	43.9	50.0	53.9					54.1	54.6	79
	60	26.0	36.4	45.4	52.9	58.8	62.8				63.7	64.3	80
	70	26.3	36.9	46.4	54.7	61.7	67.4	71.5			73.1	73.7	80
	80	26.4	37.2	47.1	55.9	63.7	70.4	75.8	80.0		82.4	83.1	80
	90	26.5	37.5	47.6	56.8	65.1	72.5	78.9	84.3	88.5	91.7	92.5	81
	100	26.6	37.6	47.9	57.4	66.2	74.1	81.2	87.4	92.7	100.9	101.8	81
22	50	31.1	43.2	53.0	60.3	64.6					64.9	65.3	79
	60	31.6	44.2	54.9	63.9	70.7	75.3				76.3	76.7	80
	70	31.8	44.7	56.2	66.1	74.4	81.0	85.7			87.4	87.9	80
	80	32.0	45.1	57.0	67.6	76.8	84.7	91.1	95.9		98.5	99.1	80
	90	32.2	45.4	57.6	68.6	78.6	87.4	94.9	101.2	106.1	109.5	110.1	81
	100	32.3	45.6	58.0	69.4	79.9	89.4	97.8	105.1	111.2	120.5	121.1	81
24	50	37.1	51.5	63.0	71.5	76.4					76.7	77.0	79
	60	37.6	52.6	65.4	75.8	83.8	89.0				90.0	90.4	80
	70	38.0	53.3	66.8	78.5	88.3	95.9	101.3			103.2	103.6	80
	80	38.2	53.8	67.8	80.3	91.2	100.5	107.9	113.3		116.2	116.6	80
	90	38.4	54.1	68.5	81.6	93.4	103.7	112.5	119.8	125.3	129.1	129.6	81
	100	38.5	54.3	69.1	82.6	95.0	106.1	116.0	124.5	131.6	141.9	142.4	81

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 19--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for loblolly pine (species 131) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.7	0.9	1.1	1.2	1.6	1.8											
6	1.4	2.1	2.4	2.6	2.9	3.3	3.7	4.1									
7	2.4	3.2	3.6	3.9	4.4	4.9	5.5	6.0	6.5	7.0							
8	3.4	4.3	4.8	5.3	6.0	6.7	7.4	8.1	8.8	9.5	10.2	10.8					
9	4.4	5.6	6.3	6.9	7.7	8.7	9.6	10.5	11.4	12.3	13.1	13.9	14.7	15.5			
10	5.5	7.0	7.9	8.6	9.7	10.9	12.0	13.1	14.2	15.3	16.3	17.4	18.4	19.4	20.4	21.4	
11			9.6	10.5	11.8	13.2	14.7	16.0	17.3	18.7	19.9	21.2	22.4	23.7	24.9	26.1	27.3
12			11.5	12.6	14.1	15.9	17.5	19.2	20.8	22.3	23.8	25.4	26.8	28.3	29.8	31.2	32.6
13			13.5	14.9	16.7	18.7	20.7	22.6	24.5	26.3	28.1	29.9	31.6	33.4	35.1	36.8	38.5
14					19.4	21.8	24.1	26.3	28.5	30.6	32.7	34.8	36.8	38.8	40.8	42.8	44.8
15					22.3	25.1	27.7	30.3	32.8	35.2	37.7	40.0	42.4	44.7	47.0	49.3	51.5
16					25.5	28.6	31.6	34.6	37.4	40.2	42.9	45.6	48.3	51.0	53.6	56.2	58.7

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 20--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for loblolly pine (species 131) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.6	2.1	2.7	2.8	3.2	3.7											
6	2.1	2.7	3.3	3.6	4.3	4.9	5.5	6.0									
7	2.5	3.4	4.2	4.7	5.5	6.3	7.0	7.7	8.4	9.1							
8	3.5	4.3	5.2	6.0	7.0	7.9	8.8	9.7	10.6	11.5	12.3	13.2					
9	4.1	5.4	6.4	7.4	8.6	9.8	10.9	12.0	13.0	14.1	15.1	16.2	17.2	18.2			
10	5.0	6.7	7.9	9.1	10.5	11.9	13.2	14.5	15.8	17.1	18.3	19.5	20.8	22.0	23.2	24.4	
11			9.5	10.9	12.6	14.2	15.8	17.3	18.8	20.3	21.8	23.3	24.7	26.2	27.6	29.0	30.5
12			11.2	12.9	14.9	16.8	18.6	20.4	22.2	23.9	25.7	27.4	29.1	30.8	32.4	34.1	35.8
13			13.1	15.0	17.3	19.6	21.7	23.8	25.8	27.9	29.9	31.8	33.8	35.8	37.7	39.6	41.6
14					20.0	22.6	25.0	27.4	29.8	32.1	34.4	36.7	38.9	41.1	43.4	45.6	47.8
15					22.9	25.8	28.6	31.3	34.0	36.6	39.3	41.8	44.4	46.9	49.5	52.0	54.5
16					26.0	29.3	32.4	35.5	38.5	41.5	44.5	47.4	50.3	53.1	56.0	58.9	61.7

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 21--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for major southern pines combined (species 11) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
10	40	5.2									5.8	7.5	65
	50	5.7	7.7								8.1	10.0	72
	60	6.0	8.3								10.0	12.3	75
	70	6.2	8.7	10.8							11.8	14.4	78
	80	6.3	8.9	11.3	13.2						13.5	16.4	79
	90	6.4	9.1	11.6	13.7					15.2	18.4	80	
12	40	7.5	9.8								10.0	11.1	65
	50	8.3	11.2								13.4	14.6	72
	60	8.7	12.1	14.8							16.4	17.9	75
	70	9.0	12.6	15.7	18.2						19.3	21.0	78
	80	9.2	13.0	16.3	19.1	21.4					22.1	24.0	79
	90	9.3	13.2	16.7	19.8	22.4	24.5			24.7	26.9	80	
	100	9.4	13.4	17.1	20.3	23.2	25.6			27.3	29.8	81	
14	40	10.3	13.4								14.4	15.2	65
	50	11.4	15.4	18.3							19.2	20.1	72
	60	12.0	16.5	20.2	22.9						23.5	24.5	75
	70	12.4	17.2	21.4	24.8	27.3					27.6	28.8	78
	80	12.6	17.7	22.3	26.1	29.2	31.4				31.5	32.9	79
	90	12.8	18.1	22.9	27.1	30.6	33.5			35.3	36.9	80	
	100	12.9	18.3	23.3	27.8	31.7	35.0	37.6		39.0	40.8	81	
16	50	14.9	20.1	24.0							25.6	26.3	72
	60	15.7	21.7	26.5	30.0						31.4	32.2	75
	70	16.2	22.6	28.1	32.5	35.7					36.8	37.8	78
	80	16.5	23.3	29.2	34.2	38.3	41.1				42.0	43.2	79
	90	16.8	23.7	30.0	35.5	40.1	43.8	46.5			47.1	48.4	80
	100	16.9	24.0	30.5	36.4	41.5	45.8	49.2	51.7	52.1	53.6	81	
	110	17.1	24.3	31.0	37.1	42.5	47.3	51.3	54.5	56.8	57.0	58.6	82
18	50	19.0	25.6	30.4							32.9	33.5	72
	60	20.0	27.5	33.6	38.0						40.2	40.9	75
	70	20.6	28.7	35.6	41.2	45.2					47.1	48.0	78
	80	21.0	29.5	37.0	43.4	48.5	52.2				53.8	54.8	79
	90	21.3	30.1	38.0	45.0	50.8	55.5	58.9			60.3	61.5	80
	100	21.5	30.5	38.7	46.1	52.6	58.0	62.3	65.5	66.7	68.0	81	
	110	21.7	30.8	39.3	47.0	53.9	59.9	65.0	69.0	71.9	73.0	74.4	82
20	60	24.8	34.0	41.6	47.0						50.0	50.7	75
	70	25.5	35.5	44.1	51.0	55.9					58.6	59.4	78
	80	26.1	36.5	45.8	53.7	60.0	64.5				66.9	67.8	79
	90	26.4	37.2	47.0	55.6	62.9	68.6	72.8			75.0	76.1	80
	100	26.7	37.7	47.9	57.0	65.0	71.7	77.1	80.9		83.0	84.1	81
	110	26.9	38.1	48.6	58.1	66.6	74.1	80.3	85.3	88.9	90.8	92.1	82
22	60	30.0	41.3	50.4	57.0	60.6					60.8	61.4	75
	70	31.0	43.1	53.4	61.8	67.8	71.1				71.3	72.0	78
	80	31.6	44.3	55.5	65.0	72.6	78.1	81.2			81.4	82.2	79
	90	32.0	45.1	57.0	67.4	76.1	83.1	88.2	91.1		91.2	92.2	80
	100	32.4	45.8	58.0	69.1	78.7	86.9	93.3	98.0	100.7	100.9	102.0	81
	110	32.6	46.2	58.9	70.4	80.7	89.7	97.3	103.3	107.7	110.4	111.6	82
24	60	35.8	49.2	60.1	67.9	72.2					72.7	73.2	75
	70	37.0	51.3	63.7	73.6	80.7	84.7				85.2	85.8	78
	80	37.7	52.8	66.1	77.5	86.5	93.1	96.7			97.2	98.0	79
	90	38.2	53.8	67.9	80.3	90.7	99.0	105.0	108.5		109.0	109.9	80
	100	38.6	54.5	69.2	82.3	93.8	103.5	111.2	116.7	120.0	120.5	121.5	81
	110	38.9	55.1	70.1	83.9	96.2	106.9	115.9	123.0	128.2	131.9	133.0	82

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 22--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for major southern pines combined (species 11) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
10	30	5.3									6.3	7.6	68
	40	5.9	8.1								8.6	10.4	75
	50	6.2	8.6	10.6							10.7	13.1	78
	60	6.3	8.9	11.1							12.7	15.6	79
	70	6.4	9.1	11.4	13.5						14.7	18.1	80
	80	6.5	9.2	11.7	13.9	15.8					16.5	20.6	81
90	6.5	9.3	11.8	14.2	16.2	18.1				18.4	23.0	81	
12	30	7.7									10.0	10.8	68
	40	8.6	11.6								13.7	14.8	75
	50	8.9	12.4	15.2							17.0	18.5	78
	60	9.2	12.8	16.0	18.5						20.2	22.0	79
	70	9.3	13.1	16.5	19.4	21.8					23.3	25.5	80
	80	9.4	13.3	16.8	19.9	22.7	24.9				26.4	28.8	81
90	9.4	13.4	17.1	20.4	23.3	25.9	28.1			29.4	32.2	81	
14	40	11.7	15.9	18.7							19.2	19.9	75
	50	12.3	17.0	20.7	23.3						23.9	24.8	78
	60	12.5	17.5	21.8	25.2	27.7					28.4	29.6	79
	70	12.7	17.9	22.5	26.3	29.5	31.9				32.7	34.1	80
	80	12.9	18.2	22.9	27.1	30.7	33.7	36.1			37.0	38.6	81
	90	12.9	18.3	23.3	27.7	31.6	35.1	37.9	40.3		41.2	43.1	81
100	13.0	18.5	23.5	28.1	32.3	36.0	39.3	42.1	44.3	45.4	47.5	81	
16	40	15.4	20.8	24.4							25.4	25.9	75
	50	16.1	22.2	27.0	30.4						31.5	32.2	78
	60	16.5	23.0	28.5	32.8	36.0					37.4	38.3	79
	70	16.7	23.5	29.4	34.4	38.4	41.5				43.1	44.2	80
	80	16.9	23.8	30.0	35.4	40.1	43.9	46.9			48.8	50.0	81
	90	17.0	24.0	30.5	36.2	41.3	45.7	49.3	52.3		54.3	55.7	81
100	17.1	24.2	30.8	36.8	42.2	47.0	51.2	54.7	57.6	59.8	61.4	81	
18	40	19.5	26.4	30.9							32.3	32.7	75
	50	20.4	28.2	34.2	38.4						40.1	40.6	78
	60	20.9	29.2	36.1	41.5	45.5					47.5	48.2	79
	70	21.2	29.8	37.2	43.5	48.6	52.4				54.8	55.6	80
	80	21.4	30.2	38.0	44.9	50.7	55.5	59.2	61.7		61.9	62.8	81
	90	21.6	30.5	38.6	45.9	52.2	57.7	62.3	65.9	68.5	69.0	70.0	81
100	21.7	30.7	39.0	46.6	53.4	59.4	64.6	69.0	72.6	75.9	77.1	81	
20	50	25.3	34.8	42.2	47.3						49.6	50.0	78
	60	25.9	36.1	44.6	51.2	56.1					58.8	59.3	79
	70	26.3	36.9	46.0	53.7	59.9	64.6	67.5			67.7	68.3	80
	80	26.6	37.4	47.0	55.4	62.6	68.4	72.9	75.9		76.5	77.2	81
	90	26.7	37.8	47.7	56.7	64.5	71.2	76.8	81.2	84.2	85.2	86.0	81
	100	26.9	38.0	48.3	57.6	65.9	73.3	79.7	85.0	89.3	93.8	94.7	81
22	50	30.7	42.2	51.1	57.2						60.0	60.3	78
	60	31.5	43.7	54.0	62.0	67.8	71.1				71.1	71.5	79
	70	31.9	44.7	55.7	65.0	72.5	78.0	81.5			81.9	82.4	80
	80	32.2	45.3	57.0	67.1	75.7	82.7	88.1	91.7		92.5	93.1	81
	90	32.4	45.8	57.8	68.6	78.0	86.1	92.8	98.0	101.7	103.0	103.7	81
	100	32.6	46.1	58.5	69.7	79.8	88.7	96.3	102.8	107.9	113.4	114.1	81
24	50	36.6	50.3	60.9	68.1						71.4	71.7	78
	60	37.5	52.1	64.3	73.8	80.6	84.4				84.6	85.0	79
	70	38.1	53.3	66.4	77.4	86.3	92.8	96.8			97.5	97.9	80
	80	38.4	54.0	67.8	79.9	90.1	98.4	104.7	108.9		110.1	110.5	81
	90	38.7	54.5	68.9	81.7	92.9	102.5	110.4	116.5	120.8	122.5	123.0	81
	100	38.9	54.9	69.7	83.0	95.0	105.5	114.6	122.2	128.2	134.9	135.4	81

\* Includes 1.0-foot stump allowance.

Table 23--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 7-inch d.o.b. top and height to a saw-log top for major southern pines combined (species 11) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 7-inch d.o.b. top	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
10	20	5.2									5.9	8.0	68
	30	5.9	8.2								9.5	11.7	76
	40	6.2	8.8	11.0							12.7	15.5	78
	50	6.4	9.0	11.5	13.7	15.7					15.9	19.2	79
	60	6.4	9.2	11.7	14.1	16.3	18.3				19.0	22.9	80
	70	6.5	9.3	11.9	14.4	16.7	18.9	20.9			22.0	26.6	80
12	20	7.5									8.4	9.7	68
	30	8.6	11.7								13.1	14.5	76
	40	9.0	12.6	15.5							17.4	19.1	78
	50	9.2	13.0	16.3	19.1	21.3					21.6	23.6	79
	60	9.3	13.2	16.7	19.8	22.6	24.9				25.6	28.0	80
	70	9.4	13.3	17.0	20.3	23.4	26.1	28.4			29.6	32.3	80
14	40	12.3	17.1	20.8							23.0	24.2	78
	50	12.6	17.6	22.0	25.5	28.1					28.3	29.6	79
	60	12.7	18.0	22.6	26.7	30.1	32.7				33.4	35.0	80
	70	12.8	18.2	23.0	27.4	31.2	34.6	37.3			38.6	40.4	80
	80	12.9	18.3	23.3	27.9	32.0	35.8	39.0	41.8		43.6	45.7	81
	90	13.0	18.4	23.5	28.2	32.6	36.6	40.3	43.5	46.2	48.7	51.0	81
16	40	16.2	22.3	26.9							29.5	30.3	78
	50	16.5	23.1	28.6	32.9	35.8					36.1	37.1	79
	60	16.7	23.5	29.4	34.5	38.7	41.7				42.5	43.7	80
	70	16.8	23.8	30.0	35.6	40.4	44.4	47.5			48.9	50.2	80
	80	16.9	23.9	30.4	36.2	41.5	46.1	50.0	53.2		55.2	56.7	81
	90	17.0	24.1	30.7	36.7	42.3	47.3	51.8	55.7	58.9	61.5	63.2	81
18	40	20.5	28.2	33.9							36.8	37.4	78
	50	21.0	29.2	36.0	41.3	44.7					44.9	45.7	79
	60	21.2	29.8	37.2	43.5	48.5	52.0				52.8	53.7	80
	70	21.4	30.1	37.9	44.8	50.7	55.5	59.1			60.6	61.7	80
	80	21.5	30.4	38.4	45.7	52.2	57.8	62.5	66.2		68.4	69.5	81
	90	21.6	30.5	38.8	46.4	53.3	59.5	64.9	69.5	73.2	76.1	77.4	81
20	50	26.0	36.1	44.4	50.7	54.5					54.8	55.4	79
	60	26.3	36.8	45.9	53.5	59.4	63.4				64.3	65.0	80
	70	26.5	37.2	46.8	55.2	62.3	68.0	72.1			73.8	74.6	80
	80	26.6	37.5	47.5	56.4	64.2	71.0	76.5	80.7		83.1	84.0	81
	90	26.7	37.7	47.9	57.2	65.6	73.1	79.5	85.0	89.3	92.4	93.4	81
	100	26.8	37.9	48.2	57.8	66.6	74.6	81.8	88.1	93.4	101.7	102.8	81
22	50	31.5	43.7	53.7	61.1	65.5					65.7	66.2	79
	60	31.9	44.6	55.5	64.5	71.5	76.1				77.1	77.7	80
	70	32.1	45.1	56.7	66.7	75.1	81.8	86.5			88.3	89.0	80
	80	32.3	45.5	57.4	68.1	77.5	85.5	92.0	96.8		99.4	100.2	81
	90	32.4	45.7	58.0	69.2	79.2	88.1	95.7	102.1	107.0	110.5	111.3	81
	100	32.5	45.9	58.4	69.9	80.5	90.0	98.5	105.9	112.2	121.5	122.4	81
24	50	37.6	52.1	63.8	72.5	77.4					77.7	78.1	79
	60	38.0	53.1	66.0	76.7	84.8	90.0				91.1	91.5	80
	70	38.3	53.8	67.4	79.3	89.1	96.9	102.3			104.2	104.8	80
	80	38.5	54.2	68.4	81.0	92.0	101.4	108.9	114.4		117.3	117.9	81
	90	38.7	54.5	69.0	82.3	94.1	104.6	113.5	120.9	126.5	130.3	130.9	81
	100	38.8	54.7	69.5	83.2	95.7	106.9	116.9	125.5	132.7	143.2	143.9	81

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 24--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for major southern pines combined (species 11) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.7	1.0	1.2	1.5	1.8	2.0											
6	1.7	2.2	2.5	2.7	3.2	3.6	3.9	4.3									
7	2.5	3.2	3.6	4.0	4.7	5.2	5.8	6.3	6.8	7.2							
8	3.5	4.4	5.0	5.4	6.4	7.1	7.8	8.5	9.1	9.8	10.4	11.0					
9	4.5	5.7	6.4	7.0	8.2	9.2	10.0	10.9	11.8	12.6	13.4	14.2	15.0	15.8			
10	5.7	7.1	8.0	8.8	10.3	11.4	12.5	13.6	14.7	15.7	16.7	17.8	18.7	19.7	20.7	21.7	
11			9.8	10.7	12.5	13.9	15.3	16.6	17.9	19.2	20.4	21.6	22.8	24.1	25.2	26.4	27.6
12			11.7	12.9	15.0	16.7	18.3	19.9	21.4	22.9	24.4	25.9	27.3	28.8	30.2	31.6	33.0
13			13.8	15.2	17.7	19.7	21.6	23.4	25.2	27.0	28.8	30.5	32.2	33.9	35.6	37.3	38.9
14					20.6	22.9	25.1	27.3	29.4	31.4	33.5	35.5	37.5	39.5	41.4	43.4	45.3
15					23.7	26.4	28.9	31.4	33.8	36.2	38.5	40.9	43.1	45.4	47.7	49.9	52.1
16					27.1	30.1	33.0	35.8	38.6	41.3	43.9	46.6	49.2	51.8	54.3	56.9	59.4

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 25--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for major southern pines combined (species 11) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.5	2.0	2.6	2.7	3.2	3.6											
6	2.0	2.6	3.3	3.7	4.3	4.8	5.4	6.0									
7	2.5	3.4	4.2	4.8	5.6	6.3	7.0	7.7	8.4	9.1							
8	3.5	4.3	5.2	6.1	7.1	8.0	8.9	9.8	10.6	11.5	12.3	13.2					
9	4.1	5.5	6.5	7.6	8.8	9.9	11.0	12.1	13.1	14.2	15.2	16.2	17.2	18.3			
10	5.1	6.7	7.9	9.3	10.7	12.1	13.4	14.7	15.9	17.2	18.4	19.6	20.9	22.1	23.3	24.5	
11			9.5	11.2	12.8	14.4	16.0	17.5	19.0	20.5	22.0	23.4	24.9	26.3	27.8	29.2	30.6
12			11.3	13.2	15.2	17.1	18.9	20.7	22.4	24.2	25.9	27.6	29.3	31.0	32.6	34.3	36.0
13			13.2	15.5	17.7	19.9	22.0	24.1	26.1	28.1	30.1	32.1	34.1	36.0	38.0	39.9	41.8
14					20.5	23.0	25.4	27.8	30.1	32.4	34.7	37.0	39.2	41.5	43.7	45.9	48.1
15					23.5	26.3	29.1	31.8	34.4	37.1	39.7	42.2	44.8	47.3	49.9	52.4	54.9
16					26.6	29.9	33.0	36.0	39.1	42.0	45.0	47.9	50.8	53.6	56.5	59.3	62.2

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 26--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for sand pine (species 107) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Total tree height	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)								7-inch d.o.b. top	4-inch d.o.b. top		
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
		Cubic feet											
10	40	6.0									6.8	8.7	69
	50	6.5	8.8								9.1	11.2	77
	60	6.7	9.4								11.2	13.6	81
	70	6.9	9.7	12.1							13.2	15.9	83
	80	7.0	10.0	12.6	14.7						15.1	18.1	85
	90	7.1	10.1	12.9	15.3						16.9	20.3	86
12	40	8.8	11.3								11.5	12.7	69
	50	9.4	12.7								15.0	16.3	77
	60	9.8	13.6	16.6							18.3	19.8	81
	70	10.0	14.1	17.5	20.2						21.4	23.1	83
	80	10.2	14.4	18.2	21.3	23.7					24.4	26.4	85
	90	10.3	14.7	18.6	22.1	24.9	27.2				27.3	29.6	86
100	10.3	14.9	19.0	22.6	25.8	28.4				30.2	32.7	87	
14	40	12.0	15.5								16.6	17.4	69
	50	12.9	17.4	20.6							21.5	22.4	77
	60	13.4	18.5	22.6	25.5						26.1	27.2	81
	70	13.7	19.3	23.9	27.6	30.2					30.5	31.7	83
	80	13.9	19.7	24.8	29.1	32.4					34.7	36.2	85
	90	14.0	20.1	25.5	30.1	34.0	37.0				38.9	40.5	86
100	14.1	20.3	25.9	30.9	35.2	38.8	41.6			42.9	44.8	87	
16	50	16.9	22.8	27.0							28.7	29.4	77
	60	17.6	24.3	29.6	33.4						34.8	35.7	81
	70	18.0	25.2	31.3	36.2	39.5					40.6	41.7	83
	80	18.2	25.9	32.5	38.1	42.4	45.5				46.3	47.5	85
	90	18.4	26.3	33.3	39.4	44.5	48.5	51.2			51.8	53.2	86
	100	18.6	26.6	34.0	40.5	46.1	50.7	54.4	56.9		57.2	58.8	87
110	18.7	26.9	34.4	41.2	47.3	52.5	56.8	60.1	62.5	62.6	64.3	87	
18	50	21.5	28.9	34.3							36.8	37.4	77
	60	22.3	30.8	37.6	42.4						44.5	45.3	81
	70	22.8	32.0	39.8	45.9	50.1					52.0	52.9	83
	80	23.2	32.8	41.2	48.3	53.8	57.6				59.2	60.3	85
	90	23.4	33.4	42.3	50.0	56.4	61.4	64.9			66.3	67.5	86
	100	23.6	33.8	43.1	51.3	58.4	64.3	68.9	72.1		73.2	74.6	87
110	23.7	34.1	43.7	52.3	59.9	66.5	71.9	76.2	79.2	80.1	81.6	87	
20	60	27.7	38.1	46.5	52.4						55.4	56.1	81
	70	28.3	39.6	49.2	56.7	62.0					64.6	65.4	83
	80	28.7	40.6	51.0	59.7	66.5	71.2				73.6	74.6	85
	90	29.0	41.3	52.3	61.8	69.7	75.9	80.2			82.4	83.5	86
	100	29.2	41.8	53.3	63.4	72.2	79.4	85.1	89.1		91.1	92.3	87
	110	29.4	42.2	54.0	64.6	74.1	82.2	88.9	94.1	97.8	99.6	101.0	87
22	60	33.5	46.2	56.4	63.5	67.2					67.4	68.0	81
	70	34.3	48.0	59.6	68.7	75.1	78.4				78.6	79.3	83
	80	34.8	49.2	61.8	72.3	80.5	86.3	89.4			89.5	90.4	85
	90	35.2	50.1	63.4	74.9	84.5	91.9	97.2	100.1		100.2	101.2	86
	100	35.4	50.7	64.5	76.8	87.4	96.2	103.1	107.9	110.6	110.7	111.8	87
	110	35.6	51.2	65.4	78.3	89.7	99.5	107.7	114.0	118.4	121.1	122.4	87
24	60	40.0	55.1	67.1	75.6	80.0					80.4	81.0	81
	70	40.9	57.2	71.0	81.8	89.4	93.4				93.9	94.5	83
	80	41.5	58.7	73.6	86.1	95.9	102.7	106.4			106.9	107.7	85
	90	41.9	59.7	75.5	89.2	100.6	109.5	115.7	119.2		119.7	120.6	86
	100	42.2	60.4	76.9	91.5	104.1	114.6	122.8	128.5	131.7	132.2	133.3	87
	110	42.5	61.0	77.9	93.3	106.8	118.5	128.2	135.7	141.0	144.6	145.8	87

\* Includes 1.0-foot stump allowance.

Table 27--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for sand pine (species 107) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
10	30	6.4									7.8	9.0	75
	40	6.6	9.1								9.9	11.7	79
	50	6.8	9.4	11.6							11.8	14.3	81
	60	6.8	9.6	12.0							13.8	16.9	82
	70	6.9	9.7	12.2	14.5						15.6	19.4	83
	80	6.9	9.8	12.4	14.8	16.9					17.5	22.0	83
	90	6.9	9.8	12.5	15.0	17.2	19.2				19.3	24.5	83
12	30	9.3	12.1								12.2	12.9	75
	40	9.6	13.1	15.6							15.6	16.7	79
	50	9.8	13.6	16.7							18.9	20.3	81
	60	9.9	13.9	17.3	20.1						22.0	23.9	82
	70	10.0	14.1	17.7	20.8	23.4					25.2	27.4	83
	80	10.0	14.2	17.9	21.2	24.2	26.6				28.3	30.9	83
	90	10.0	14.2	18.1	21.6	24.7	27.5	29.9			31.4	34.4	83
14	40	13.2	17.9	21.2							21.8	22.5	79
	50	13.4	18.6	22.7	25.6						26.4	27.4	81
	60	13.6	19.0	23.5	27.2	30.0					30.9	32.1	82
	70	13.7	19.2	24.1	28.2	31.7	34.4				35.4	36.8	83
	80	13.7	19.4	24.4	28.9	32.8	36.1	38.7			39.8	41.5	83
	90	13.8	19.5	24.7	29.4	33.6	37.3	40.4	42.9		44.1	46.1	83
	100	13.8	19.5	24.9	29.8	34.2	38.2	41.7	44.7	47.2	48.5	50.7	83
16	40	17.3	23.5	27.6							28.8	29.3	79
	50	17.7	24.4	29.7	33.4						34.9	35.6	81
	60	17.8	24.8	30.8	35.6	39.1					40.8	41.7	82
	70	17.9	25.2	31.5	36.9	41.3	44.7				46.7	47.7	83
	80	18.0	25.4	32.0	37.8	42.8	47.0	50.3			52.5	53.7	83
	90	18.1	25.5	32.3	38.4	43.9	48.6	52.6	55.8	58.1	58.2	59.6	83
	100	18.1	25.6	32.6	38.9	44.7	49.8	54.3	58.1	61.3	64.0	65.5	83
18	40	22.0	29.8	35.0							36.7	37.0	79
	50	22.4	30.9	37.6	42.3						44.3	44.8	81
	60	22.6	31.5	39.0	45.0	49.4					51.9	52.5	82
	70	22.8	31.9	39.9	46.7	52.2	56.5	59.2			59.3	60.0	83
	80	22.9	32.2	40.5	47.8	54.1	59.4	63.4	66.3		66.6	67.5	83
	90	22.9	32.4	40.9	48.7	55.5	61.4	66.4	70.4	73.2	73.9	74.9	83
	100	23.0	32.5	41.3	49.3	56.5	63.0	68.6	73.4	77.3	81.2	82.3	83
20	50	27.8	38.2	46.4	52.2						54.8	55.2	81
	60	28.0	39.0	48.2	55.6	60.9	64.1				64.1	64.6	82
	70	28.2	39.5	49.3	57.7	64.5	69.6	72.9			73.3	73.8	83
	80	28.3	39.8	50.1	59.1	66.8	73.2	78.2	81.5		82.3	83.0	83
	90	28.4	40.0	50.6	60.1	68.5	75.8	81.9	86.7	90.1	91.3	92.1	83
	100	28.5	40.2	51.0	60.9	69.8	77.7	84.6	90.5	95.2	100.3	101.2	83
	22	50	33.7	46.3	56.2	63.1						66.4	66.7
60		34.0	47.3	58.4	67.2	73.7	77.4				77.6	77.9	82
70		34.2	47.8	59.7	69.8	78.0	84.1	88.0			88.6	89.1	83
80		34.4	48.2	60.6	71.5	80.8	88.5	94.4	98.5		99.6	100.1	83
90		34.5	48.5	61.3	72.8	82.9	91.7	99.0	104.7	108.8	110.5	111.1	83
100		34.5	48.7	61.8	73.7	84.5	94.0	102.3	109.3	114.9	121.3	122.0	83
24		50	40.2	55.2	66.9	75.1						79.0	79.2
	60	40.6	56.3	69.5	80.0	87.6	92.0				92.3	92.6	82
	70	40.8	57.0	71.1	83.1	92.8	100.0	104.6			105.4	105.8	83
	80	41.0	57.5	72.2	85.2	96.2	105.3	112.3	117.0		118.5	118.9	83
	90	41.1	57.8	73.0	86.7	98.7	109.1	117.7	124.5	129.3	131.4	131.9	83
	100	41.2	58.1	73.6	87.8	100.5	111.9	121.7	130.0	136.6	144.3	144.8	83

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 28--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 7-inch d.o.b. top and height to a saw-log top for sand pine (species 107) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 7-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)								7-inch d.o.b. top	4-inch d.o.b. top		
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
10	20	6.2									7.0	8.8	73
	30	6.7	9.2								10.5	12.5	79
	40	6.8	9.6	12.0							13.8	16.5	82
	50	6.9	9.8	12.4	14.8	16.8					17.1	20.6	83
	60	6.9	9.9	12.6	15.2	17.5	19.6				20.3	24.8	83
	70	7.0	10.0	12.8	15.4	17.9	20.2	22.3			23.5	29.1	84
12	20	9.0									10.0	10.8	73
	30	9.6	13.1								14.5	15.5	79
	40	9.9	13.7	16.9							18.9	20.1	82
	50	10.0	14.1	17.6	20.6	22.9					23.1	24.7	83
	60	10.1	14.2	18.0	21.3	24.2	26.6				27.3	29.3	83
	70	10.1	14.3	18.2	21.8	25.0	27.8	30.2			31.5	33.9	84
14	40	13.5	18.7	22.6							24.9	25.6	82
	50	13.7	19.1	23.7	27.4	30.0					30.3	31.1	83
	60	13.7	19.4	24.3	28.6	32.1	34.8				35.6	36.7	83
	70	13.8	19.5	24.7	29.4	33.4	36.8	39.6			40.9	42.2	84
	80	13.8	19.6	25.0	29.9	34.3	38.1	41.5	44.3		46.2	47.7	84
	90	13.9	19.7	25.2	30.2	34.9	39.1	42.8	46.1	48.9	51.5	53.3	84
16	40	17.7	24.4	29.3							31.8	32.2	82
	50	17.9	25.0	30.8	35.3	38.3					38.6	39.1	83
	60	18.0	25.3	31.7	37.0	41.3	44.4				45.2	45.8	83
	70	18.1	25.6	32.2	38.1	43.1	47.2	50.4			51.8	52.6	84
	80	18.1	25.7	32.6	38.8	44.3	49.1	53.1	56.3		58.4	59.3	84
	90	18.2	25.8	32.9	39.3	45.2	50.4	55.0	59.0	62.2	64.9	66.0	84
18	40	22.5	30.9	36.8							39.7	40.0	82
	50	22.8	31.7	38.9	44.3	47.7					48.0	48.3	83
	60	22.9	32.1	40.0	46.6	51.7	55.2				56.1	56.5	83
	70	23.0	32.4	40.7	48.0	54.1	59.0	62.6			64.2	64.6	84
	80	23.0	32.6	41.2	49.0	55.7	61.5	66.3	70.0		72.2	72.8	84
	90	23.1	32.7	41.6	49.6	56.9	63.3	68.9	73.6	77.3	80.2	80.8	84
20	50	28.2	39.1	47.9	54.4	58.2					58.5	58.7	83
	60	28.3	39.7	49.4	57.3	63.3	67.4				68.3	68.5	83
	70	28.4	40.0	50.3	59.1	66.4	72.2	76.4			78.0	78.3	84
	80	28.5	40.3	50.9	60.3	68.5	75.4	81.1	85.3		87.6	88.0	84
	90	28.6	40.4	51.3	61.2	70.0	77.7	84.4	89.9	94.1	97.3	97.7	84
	100	28.6	40.6	51.7	61.8	71.1	79.5	86.9	93.3	98.6	106.9	107.4	84
22	50	34.2	47.4	57.9	65.5	69.8					70.1	70.3	83
	60	34.4	48.1	59.7	69.1	76.2	80.8				81.7	81.9	83
	70	34.5	48.5	60.8	71.3	80.0	86.8	91.5			93.3	93.5	84
	80	34.6	48.8	61.6	72.9	82.6	90.8	97.4	102.2		104.7	105.0	84
	90	34.6	49.0	62.1	74.0	84.5	93.7	101.5	107.9	112.7	116.1	116.5	84
	100	34.7	49.2	62.5	74.8	85.9	95.8	104.6	112.1	118.4	127.5	127.9	84
24	50	40.7	56.5	68.8	77.7	82.6					82.9	83.0	83
	60	41.0	57.3	71.0	82.1	90.3	95.5				96.5	96.6	83
	70	41.1	57.8	72.4	84.8	95.0	102.8	108.1			110.0	110.2	84
	80	41.2	58.1	73.3	86.6	98.1	107.7	115.2	120.7		123.4	123.6	84
	90	41.3	58.4	73.9	87.9	100.4	111.2	120.3	127.6	133.1	136.8	137.1	84
	100	41.4	58.6	74.4	88.9	102.1	113.8	124.0	132.8	140.0	150.2	150.5	84

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 29--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for sand pine (species 107) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.9	1.1	1.2	1.2	1.9	2.1											
6	1.7	2.3	2.5	2.6	3.5	3.9	4.3	4.7									
7	2.8	3.5	3.8	4.1	5.2	5.8	6.3	6.9	7.4	7.9							
8	3.9	4.7	5.2	5.6	7.1	7.8	8.6	9.3	10.0	10.7	11.4	12.1					
9	5.1	6.2	6.8	7.3	9.2	10.1	11.1	12.0	12.9	13.8	14.7	15.6	16.5	17.3			
10	6.5	7.7	8.5	9.2	11.5	12.7	13.8	15.0	16.1	17.3	18.4	19.5	20.5	21.6	22.7	23.8	
11			10.4	11.2	14.0	15.4	16.9	18.3	19.7	21.0	22.4	23.7	25.0	26.4	27.7	28.9	30.2
12			12.5	13.5	16.7	18.5	20.2	21.9	23.5	25.2	26.8	28.4	30.0	31.5	33.1	34.6	36.2
13			14.7	15.9	19.7	21.8	23.8	25.8	27.7	29.7	31.6	33.4	35.3	37.1	39.0	40.8	42.6
14					23.0	25.4	27.7	30.0	32.3	34.5	36.7	38.9	41.1	43.2	45.3	47.5	49.6
15					26.4	29.2	31.9	34.5	37.2	39.7	42.3	44.8	47.3	49.7	52.2	54.6	57.0
16					30.1	33.3	36.4	39.4	42.4	45.3	48.2	51.0	53.9	56.7	59.5	62.3	65.0

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 30--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for sand pine (species 107) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.7	2.2	2.7	3.0	3.4	3.9											
6	2.3	2.9	3.5	4.1	4.7	5.3	5.8	6.4									
7	3.0	3.7	4.5	5.4	6.2	6.9	7.6	8.3	9.0	9.7							
8	4.0	4.8	5.6	7.0	7.9	8.8	9.7	10.5	11.4	12.3	13.1	14.0					
9	4.9	6.1	7.0	8.7	9.8	10.9	12.0	13.1	14.1	15.2	16.2	17.3	18.3	19.4			
10	6.0	7.5	8.6	10.7	12.0	13.3	14.6	15.9	17.2	18.5	19.7	21.0	22.2	23.5	24.7	26.0	
11			10.4	12.8	14.4	16.0	17.5	19.0	20.6	22.1	23.6	25.1	26.5	28.0	29.5	31.0	32.5
12			12.3	15.2	17.1	18.9	20.7	22.5	24.3	26.0	27.8	29.5	31.3	33.0	34.8	36.5	38.2
13			14.4	17.8	20.0	22.1	24.2	26.2	28.3	30.3	32.4	34.4	36.4	38.4	40.5	42.5	44.5
14					23.1	25.5	27.9	30.3	32.7	35.0	37.3	39.7	42.0	44.3	46.6	48.9	51.2
15					26.4	29.2	31.9	34.7	37.4	40.0	42.7	45.3	48.0	50.6	53.2	55.8	58.5
16					30.0	33.2	36.3	39.3	42.4	45.4	48.4	51.4	54.4	57.3	60.3	63.3	66.2

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 31--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for pond pine (species 128) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
10	40	5.5									6.8	8.0	68
	50	5.8	7.9								8.6	10.1	73
	60	6.0	8.3	10.2							10.2	12.0	76
	70	6.1	8.6	10.6							11.7	13.8	78
	80	6.2	8.8	11.0	12.8						13.2	15.6	79
	90	6.3	8.9	11.2	13.2						14.6	17.3	79
12	40	8.0	10.4								10.9	11.7	68
	50	8.5	11.5	13.6							13.7	14.7	73
	60	8.7	12.1	14.7							16.2	17.5	76
	70	8.9	12.4	15.4	17.7						18.7	20.1	78
	80	9.0	12.7	15.9	18.5	20.6					21.1	22.7	79
	90	9.1	12.9	16.2	19.1	21.5	23.4				23.4	25.3	79
100	9.1	13.0	16.5	19.6	22.2	24.4				25.7	27.8	80	
14	40	11.0	14.3								15.5	16.1	68
	50	11.6	15.7	18.6							19.4	20.1	73
	60	12.0	16.5	20.1	22.6						23.0	24.0	76
	70	12.2	17.0	21.0	24.2	26.4					26.5	27.6	78
	80	12.3	17.3	21.7	25.3	28.1					29.9	31.2	79
	90	12.4	17.6	22.2	26.1	29.4	31.9				33.2	34.7	79
100	12.5	17.8	22.5	26.7	30.3	33.3	35.6			36.5	38.2	80	
16	50	15.3	20.6	24.4							25.8	26.5	73
	60	15.7	21.6	26.3	29.6						30.7	31.5	76
	70	16.0	22.3	27.6	31.7	34.6					35.3	36.3	78
	80	16.2	22.7	28.4	33.2	36.8	39.4				39.8	40.9	79
	90	16.3	23.1	29.0	34.2	38.5	41.8	44.0			44.3	45.5	79
	100	16.4	23.3	29.5	35.0	39.7	43.6	46.6	48.6		48.7	50.1	80
110	16.5	23.5	29.8	35.6	40.6	45.0	48.5	51.3		53.0	54.6	80	
18	50	19.4	26.1	30.9							33.1	33.6	73
	60	20.0	27.5	33.4	37.5						39.3	40.0	76
	70	20.4	28.3	35.0	40.2	43.8					45.2	46.1	78
	80	20.6	28.9	36.1	42.1	46.7	49.9				51.0	52.0	79
	90	20.8	29.3	36.8	43.4	48.8	53.0	55.8			56.7	57.8	79
	100	20.9	29.6	37.4	44.4	50.3	55.3	59.1	61.7		62.3	63.6	80
110	21.0	29.8	37.8	45.1	51.5	57.0	61.5	65.0	67.4	67.9	69.3	80	
20	60	24.8	34.0	41.3	46.4						48.9	49.5	76
	70	25.2	35.1	43.3	49.8	54.2					56.3	57.0	78
	80	25.5	35.7	44.6	52.0	57.8	61.7				63.5	64.4	79
	90	25.7	36.2	45.6	53.6	60.3	65.5	69.0			70.6	71.6	79
	100	25.9	36.6	46.3	54.9	62.2	68.3	73.0	76.2		77.5	78.7	80
	110	26.0	36.9	46.8	55.8	63.7	70.5	76.1	80.4	83.3	84.4	85.7	80
22	60	30.1	41.3	50.1	56.3	59.4					59.4	60.0	76
	70	30.6	42.5	52.5	60.3	65.7					68.5	69.2	78
	80	31.0	43.4	54.1	63.0	70.0	74.8				77.2	78.1	79
	90	31.2	43.9	55.2	65.0	73.1	79.3	83.6			85.8	86.8	79
	100	31.4	44.4	56.1	66.5	75.4	82.8	88.4	92.3		94.3	95.4	80
	110	31.6	44.7	56.7	67.6	77.2	85.4	92.1	97.3	100.9	102.7	103.9	80
24	60	35.9	49.2	59.7	67.1	70.8					71.0	71.6	76
	70	36.5	50.7	62.6	71.9	78.3	81.6				81.8	82.4	78
	80	37.0	51.7	64.5	75.1	83.4	89.1	92.1			92.3	93.0	79
	90	37.3	52.4	65.8	77.5	87.1	94.5	99.6	102.4		102.6	103.4	79
	100	37.5	52.9	66.9	79.2	89.8	98.6	105.3	110.0	112.6	112.7	113.7	80
	110	37.7	53.3	67.6	80.5	91.9	101.7	109.7	115.9	120.2	122.8	123.9	80

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 32--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for pond pine (species 128) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
10	30	5.5									6.7	7.7	69
	40	5.9	8.0								8.6	10.2	74
	50	6.0	8.4	10.2							10.4	12.5	76
	60	6.1	8.6	10.6							12.2	14.8	77
	70	6.2	8.7	10.9	12.8						13.9	17.1	78
	80	6.2	8.8	11.1	13.2	15.0					15.6	19.3	79
	90	6.2	8.9	11.2	13.4	15.3	17.1			17.2	21.5	79	
12	30	8.0	10.4								10.4	11.0	69
	40	8.5	11.5								13.4	14.4	74
	50	8.8	12.1	14.7							16.4	17.7	76
	60	8.9	12.4	15.3	17.7						19.2	20.8	77
	70	9.0	12.6	15.7	18.4	20.6					21.9	23.9	78
	80	9.0	12.7	16.0	18.9	21.4	23.5				24.7	27.0	79
	90	9.1	12.8	16.2	19.3	22.0	24.3	26.3		27.3	30.1	79	
14	40	11.7	15.7	18.4							18.8	19.5	74
	50	12.0	16.5	20.0	22.4						22.9	23.8	76
	60	12.2	16.9	20.9	24.0	26.3					26.8	28.0	77
	70	12.3	17.2	21.5	25.0	27.9	30.1				30.7	32.1	78
	80	12.4	17.4	21.8	25.7	29.1	31.8	33.9			34.5	36.2	79
	90	12.4	17.5	22.1	26.2	29.9	33.0	35.6	37.7		38.3	40.2	79
	100	12.4	17.6	22.3	26.6	30.5	33.9	36.9	39.4	41.4	42.1	44.2	79
16	40	15.4	20.6	24.0							24.8	25.3	74
	50	15.8	21.6	26.1	29.2						30.2	30.9	76
	60	16.0	22.2	27.3	31.3	34.2					35.4	36.3	77
	70	16.1	22.5	28.1	32.7	36.4	39.2				40.5	41.5	78
	80	16.2	22.8	28.6	33.6	37.9	41.4	44.1			45.6	46.8	79
	90	16.3	22.9	28.9	34.3	39.0	43.0	46.3	48.9		50.6	51.9	79
	100	16.3	23.1	29.2	34.8	39.8	44.2	48.0	51.2	53.7	55.5	57.1	79
18	40	19.5	26.2	30.4							31.6	32.0	74
	50	20.1	27.4	33.1	36.9						38.4	38.9	76
	60	20.3	28.2	34.6	39.7	43.3					45.0	45.6	77
	70	20.5	28.6	35.6	41.4	46.0	49.5				51.5	52.2	78
	80	20.6	28.9	36.2	42.6	47.9	52.3	55.6	57.8		57.9	58.8	79
	90	20.7	29.1	36.7	43.4	49.3	54.3	58.5	61.7	63.9	64.2	65.2	79
	100	20.8	29.3	37.1	44.1	50.4	55.9	60.6	64.6	67.7	70.5	71.7	79
20	50	24.8	34.0	40.9	45.6						47.5	47.9	76
	60	25.2	34.8	42.8	49.0	53.3					55.6	56.1	77
	70	25.4	35.4	44.0	51.1	56.8	61.0	63.5			63.6	64.2	78
	80	25.6	35.8	44.8	52.6	59.2	64.5	68.5	71.1		71.5	72.2	79
	90	25.7	36.0	45.4	53.7	60.9	67.0	72.0	75.9	78.6	79.3	80.1	79
	100	25.8	36.2	45.8	54.5	62.2	68.9	74.7	79.5	83.3	87.1	88.0	79
22	50	30.2	41.2	49.5	55.1						57.5	57.9	76
	60	30.6	42.3	51.8	59.3	64.5	67.3				67.3	67.8	77
	70	30.9	42.9	53.3	61.9	68.7	73.7	76.7			77.0	77.5	78
	80	31.0	43.4	54.3	63.7	71.6	78.0	82.7	85.8		86.5	87.1	79
	90	31.2	43.7	55.0	65.0	73.7	81.1	87.1	91.7	94.9	95.9	96.6	79
	100	31.3	44.0	55.5	66.0	75.3	83.4	90.4	96.1	100.6	105.3	106.0	79
24	50	36.0	49.1	59.0	65.6						68.5	68.8	76
	60	36.5	50.4	61.7	70.6	76.7	80.0				80.2	80.5	77
	70	36.8	51.2	63.5	73.7	81.8	87.6	91.1			91.6	92.0	78
	80	37.0	51.7	64.7	75.8	85.2	92.7	98.3	102.0		102.9	103.4	79
	90	37.2	52.1	65.5	77.4	87.7	96.5	103.6	109.0	112.7	114.1	114.6	79
	100	37.3	52.4	66.2	78.6	89.6	99.3	107.5	114.3	119.6	125.2	125.8	79

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 33--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 7-inch d.o.b. top and height to a saw-log top for pond pine (species 128) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 7-inch d.o.b. top	Volume to											Girard Form Class	
		Saw-log merchantable height (16-foot logs)										7-inch d.o.b. top		4-inch d.o.b. top
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0				
<u>Inches</u>	<u>Feet</u>	<u>Cubic feet</u>											<u>Percent</u>	
10	20	5.6										6.3	7.7	70
	30	6.0	8.2									9.3	11.3	75
	40	6.1	8.5	10.6								12.2	15.2	76
	50	6.2	8.7	11.0	13.0	14.8						15.0	19.3	77
	60	6.2	8.8	11.2	13.4	15.4	17.2					17.8	23.6	78
	70	6.3	8.8	11.3	13.6	15.7	17.7	19.6				20.6	28.3	78
12	20	8.0										9.0	9.6	70
	30	8.6	11.6									12.9	13.9	75
	40	8.8	12.2	14.9								16.7	18.0	76
	50	8.9	12.5	15.5	18.1	20.2						20.4	22.3	77
	60	9.0	12.6	15.9	18.8	21.3	23.4					24.0	26.5	78
	70	9.0	12.7	16.1	19.2	22.0	24.4	26.5				27.6	30.9	78
80	9.0	12.7	16.2	19.5	22.4	25.1	27.6	29.7			31.2	35.4	78	
14	40	12.1	16.6	20.0								22.1	22.8	76
	50	12.2	17.0	21.0	24.2	26.5						26.7	27.7	77
	60	12.3	17.2	21.5	25.2	28.3	30.7					31.4	32.7	78
	70	12.3	17.3	21.8	25.8	29.4	32.4	34.8				36.0	37.7	78
	80	12.3	17.4	22.0	26.3	30.1	33.5	36.4	38.9			40.6	42.7	78
	90	12.4	17.4	22.2	26.6	30.6	34.3	37.6	40.5	42.9		45.1	47.8	78
100	12.4	17.5	22.3	26.8	31.0	34.9	38.4	41.6	44.5		49.7	52.8	78	
16	40	15.8	21.7	26.0								28.3	28.7	76
	50	16.0	22.2	27.3	31.2	33.9						34.1	34.7	77
	60	16.1	22.4	28.0	32.7	36.4	39.2					39.9	40.7	78
	70	16.1	22.6	28.4	33.5	37.9	41.6	44.4				45.6	46.6	78
	80	16.2	22.7	28.7	34.1	39.0	43.2	46.7	49.5			51.3	52.6	78
	90	16.2	22.8	28.9	34.6	39.7	44.3	48.3	51.8	54.7		57.0	58.6	78
100	16.2	22.9	29.1	34.9	40.2	45.1	49.5	53.5	56.9		62.7	64.6	78	
18	40	20.1	27.4	32.7								35.3	35.6	76
	50	20.3	28.1	34.4	39.2	42.2						42.5	42.8	77
	60	20.4	28.4	35.3	41.1	45.6	48.8					49.6	50.0	78
	70	20.5	28.7	35.9	42.3	47.7	52.0	55.2				56.6	57.2	78
	80	20.5	28.8	36.3	43.1	49.0	54.1	58.4	61.6			63.6	64.4	78
	90	20.6	28.9	36.6	43.6	50.0	55.6	60.5	64.7	68.0		70.6	71.5	78
100	20.6	29.0	36.8	44.1	50.7	56.7	62.2	66.9	71.0		77.5	78.7	78	
20	50	25.1	34.7	42.4	48.2	51.6						51.8	52.1	77
	60	25.3	35.2	43.6	50.6	56.0	59.6					60.4	60.7	78
	70	25.4	35.4	44.3	52.1	58.5	63.7	67.4				68.8	69.3	78
	80	25.4	35.6	44.8	53.1	60.3	66.4	71.4	75.2			77.3	77.8	78
	90	25.5	35.8	45.2	53.8	61.5	68.3	74.2	79.1	82.9		85.7	86.3	78
	100	25.5	35.9	45.5	54.3	62.4	69.8	76.3	82.0	86.7		94.1	94.8	78
22	50	30.5	42.0	51.3	58.0	62.0						62.2	62.4	77
	60	30.7	42.6	52.8	61.1	67.4	71.5					72.3	72.6	78
	70	30.8	42.9	53.7	62.9	70.6	76.6	80.9				82.4	82.7	78
	80	30.9	43.2	54.3	64.2	72.7	80.0	85.8	90.1			92.4	92.8	78
	90	30.9	43.3	54.7	65.0	74.3	82.4	89.3	95.0	99.4		102.4	102.9	78
	100	31.0	43.5	55.1	65.7	75.4	84.2	91.9	98.6	104.2		112.4	112.9	78
24	50	36.4	50.1	61.0	68.9	73.3						73.6	73.7	77
	60	36.6	50.8	62.8	72.5	79.9	84.6					85.5	85.6	78
	70	36.7	51.2	63.9	74.8	83.8	90.8	95.6				97.3	97.5	78
	80	36.8	51.5	64.6	76.3	86.4	94.9	101.7	106.6			109.0	109.3	78
	90	36.9	51.7	65.2	77.4	88.3	97.8	105.9	112.5	117.4		120.8	121.1	78
	100	36.9	51.8	65.6	78.2	89.7	100.0	109.0	116.8	123.3		132.5	132.8	78

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 34--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for pond pine (species 128) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	1.0	1.5	1.6	1.7	2.1	2.3											
6	1.9	2.4	2.6	2.8	3.4	3.7	4.0	4.3									
7	2.8	3.4	3.7	4.0	4.8	5.3	5.7	6.1	6.6	7.0							
8	3.7	4.5	5.0	5.4	6.5	7.1	7.7	8.2	8.8	9.4	9.9	10.5					
9	4.8	5.8	6.5	7.0	8.3	9.1	9.8	10.6	11.3	12.0	12.7	13.4	14.1	14.8			
10	6.0	7.3	8.1	8.8	10.3	11.3	12.2	13.2	14.1	15.0	15.9	16.8	17.6	18.5	19.4	20.2	
11			9.8	10.7	12.6	13.8	14.9	16.1	17.2	18.3	19.3	20.4	21.5	22.5	23.6	24.6	25.7
12			11.8	12.8	15.1	16.5	17.9	19.2	20.5	21.8	23.1	24.4	25.7	27.0	28.2	29.5	30.7
13			13.9	15.1	17.8	19.4	21.1	22.6	24.2	25.8	27.3	28.8	30.3	31.8	33.3	34.7	36.2
14					20.7	22.6	24.5	26.4	28.2	30.0	31.7	33.5	35.2	37.0	38.7	40.4	42.1
15					23.8	26.0	28.2	30.3	32.4	34.5	36.5	38.6	40.6	42.6	44.6	46.5	48.5
16					27.2	29.7	32.2	34.6	37.0	39.3	41.7	44.0	46.3	48.5	50.8	53.1	55.3

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 35--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for pond pine (species 128) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.6	2.1	2.6	2.8	3.2	3.6											
6	2.2	2.7	3.3	3.7	4.2	4.7	5.3	5.8									
7	2.7	3.5	4.3	4.8	5.5	6.1	6.8	7.4	8.0	8.7							
8	3.7	4.5	5.2	6.1	6.9	7.7	8.5	9.3	10.1	10.9	11.7	12.4					
9	4.4	5.6	6.5	7.6	8.6	9.6	10.6	11.5	12.5	13.4	14.3	15.3	16.2	17.1			
10	5.5	6.9	8.0	9.3	10.5	11.7	12.8	14.0	15.1	16.2	17.4	18.5	19.6	20.7	21.8	22.9	
11			9.6	11.1	12.6	14.0	15.3	16.7	18.0	19.4	20.7	22.0	23.3	24.6	25.9	27.2	28.5
12			11.4	13.2	14.8	16.5	18.1	19.7	21.3	22.8	24.4	25.9	27.4	28.9	30.5	32.0	33.5
13			13.4	15.4	17.3	19.2	21.1	22.9	24.8	26.6	28.3	30.1	31.9	33.7	35.4	37.2	38.9
14					20.0	22.2	24.4	26.5	28.5	30.6	32.7	34.7	36.7	38.7	40.8	42.8	44.8
15					22.9	25.4	27.8	30.2	32.6	35.0	37.3	39.6	41.9	44.2	46.5	48.8	51.1
16					26.0	28.8	31.6	34.3	37.0	39.6	42.3	44.9	47.5	50.1	52.7	55.2	57.8

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 36--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for all pines except major pines (species 13) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)									7-inch d.o.b. top		4-inch d.o.b. top
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
10	40	5.4									6.4	7.9	69
	50	5.8	7.9								8.3	10.0	74
	60	6.0	8.4								10.0	12.0	77
	70	6.1	8.7	10.8							11.5	13.8	79
	80	6.2	8.9	11.2							13.0	15.6	80
	90	6.3	9.0	11.4	13.5						14.4	17.4	81
12	40	7.7	10.2								10.6	11.5	69
	50	8.3	11.4								13.5	14.6	74
	60	8.7	12.1	14.8							16.1	17.5	77
	70	8.9	12.5	15.6	18.0						18.6	20.2	79
	80	9.0	12.8	16.1	18.9	20.9					21.0	22.8	80
	90	9.1	13.0	16.5	19.5	21.9					23.4	25.4	81
100	9.1	13.1	16.7	19.9	22.7	24.9				25.7	28.0	81	
14	40	10.6	14.0								15.1	15.7	69
	50	11.4	15.6	18.5							19.2	20.0	74
	60	11.8	16.5	20.2	22.7						22.9	23.9	77
	70	12.1	17.1	21.3	24.5						26.4	27.7	79
	80	12.3	17.5	22.0	25.7	28.5					29.9	31.3	80
	90	12.4	17.7	22.5	26.5	29.9	32.4				33.2	34.9	81
100	12.5	17.9	22.8	27.2	30.9	33.9	36.1			36.5	38.4	81	
16	50	14.9	20.4	24.3							25.5	26.2	74
	60	15.5	21.6	26.4	29.7						30.5	31.4	77
	70	15.8	22.4	27.8	32.0	34.8					35.2	36.3	79
	80	16.1	22.8	28.7	33.6	37.3	39.7				39.8	41.1	80
	90	16.2	23.2	29.4	34.7	39.1	42.3				44.3	45.8	81
	100	16.3	23.4	29.9	35.5	40.4	44.3	47.2			48.7	50.4	81
110	16.4	23.6	30.2	36.2	41.4	45.8	49.4	52.0		53.1	54.9	82	
18	50	18.9	25.9	30.7							32.6	33.3	74
	60	19.6	27.4	33.5	37.6						39.0	39.8	77
	70	20.1	28.3	35.2	40.6	44.1					45.1	46.1	79
	80	20.4	29.0	36.4	42.6	47.2	50.3				51.0	52.2	80
	90	20.6	29.4	37.2	44.0	49.5	53.6	56.3			56.8	58.1	81
	100	20.7	29.7	37.8	45.0	51.1	56.1	59.8	62.2		62.5	63.9	81
110	20.8	29.9	38.3	45.8	52.4	58.0	62.5	65.9	68.1	68.1	69.7	82	
20	60	24.3	33.9	41.4	46.5						48.6	49.3	77
	70	24.8	35.0	43.5	50.1	54.5					56.2	57.0	79
	80	25.2	35.8	45.0	52.6	58.4	62.1				63.5	64.5	80
	90	25.4	36.3	46.0	54.3	61.1	66.3	69.6			70.7	71.9	81
	100	25.6	36.7	46.8	55.6	63.2	69.3	73.9	76.9		77.8	79.1	81
	110	25.7	37.0	47.3	56.6	64.8	71.7	77.2	81.4	84.1	84.8	86.2	82
22	60	29.4	41.0	50.1	56.3						59.1	59.7	77
	70	30.1	42.4	52.7	60.7	65.9					68.3	69.1	79
	80	30.5	43.3	54.5	63.7	70.7	75.2				77.2	78.2	80
	90	30.8	44.0	55.7	65.8	74.0	80.2	84.2			86.0	87.1	81
	100	31.0	44.4	56.6	67.3	76.5	83.9	89.5	93.1		94.6	95.8	81
	110	31.1	44.8	57.3	68.5	78.4	86.8	93.5	98.5	101.8	103.2	104.5	82
24	60	35.1	48.9	59.7	67.0	70.5					70.6	71.1	77
	70	35.9	50.5	62.8	72.3	78.5	81.5				81.6	82.3	79
	80	36.4	51.6	64.9	75.8	84.1	89.5	92.3			92.3	93.1	80
	90	36.7	52.4	66.3	78.3	88.1	95.5	100.3			102.8	103.7	81
	100	36.9	52.9	67.4	80.2	91.1	99.9	106.5	110.8		113.1	114.2	81
	110	37.1	53.3	68.2	81.6	93.4	103.3	111.3	117.3	121.1	123.3	124.5	82

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 37--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for all pines except major pines (species 13) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
10	30	5.6									6.8	8.0	73
	40	5.9	8.1								8.6	10.4	76
	50	6.1	8.5								10.3	12.8	78
	60	6.1	8.7	10.8							11.9	15.0	79
	70	6.2	8.8	11.0	13.0						13.4	17.3	79
	80	6.2	8.9	11.2	13.3						14.9	19.5	80
	90	6.2	8.9	11.3	13.5	15.5					16.4	21.7	80
12	30	8.1									10.6	11.3	73
	40	8.5	11.7								13.5	14.7	76
	50	8.7	12.2	14.9							16.3	17.9	78
	60	8.9	12.5	15.5	17.9						19.0	21.0	79
	70	8.9	12.7	15.9	18.6	20.8					21.6	24.1	79
	80	9.0	12.8	16.1	19.1	21.6	23.6				24.2	27.1	80
	90	9.0	12.8	16.3	19.4	22.1	24.5	26.5			26.8	30.1	80
14	40	11.6	15.9	18.7							18.9	19.8	76
	50	11.9	16.6	20.2	22.6						22.9	24.0	78
	60	12.1	17.0	21.0	24.2	26.5					26.7	28.1	79
	70	12.2	17.2	21.6	25.2	28.1	30.2				30.4	32.2	79
	80	12.3	17.4	21.9	25.9	29.2	31.9	34.0			34.1	36.2	80
	90	12.3	17.5	22.2	26.4	30.0	33.1	35.7	37.7		37.8	40.1	80
	100	12.3	17.6	22.4	26.7	30.6	34.0	36.9	39.4	41.4	41.4	44.1	80
16	40	15.2	20.8	24.3							25.0	25.6	76
	50	15.6	21.7	26.3	29.4						30.2	31.0	78
	60	15.8	22.2	27.5	31.5	34.4					35.2	36.3	79
	70	16.0	22.5	28.2	32.8	36.5	39.2				40.2	41.5	79
	80	16.0	22.8	28.7	33.7	38.0	41.4	44.0			45.1	46.6	80
	90	16.1	22.9	29.0	34.4	39.1	43.0	46.3	48.8		49.9	51.7	80
	100	16.1	23.0	29.3	34.9	39.9	44.2	48.0	51.1	53.5	54.8	56.8	80
18	40	19.3	26.3	30.7							31.8	32.2	76
	50	19.8	27.5	33.3	37.1						38.4	39.0	78
	60	20.1	28.2	34.7	39.8	43.3					44.8	45.6	79
	70	20.2	28.6	35.6	41.5	46.1	49.4				51.1	52.1	79
	80	20.3	28.8	36.3	42.7	48.0	52.2	55.4			57.3	58.5	80
	90	20.4	29.0	36.7	43.5	49.4	54.3	58.3	61.4		63.4	64.8	80
	100	20.5	29.2	37.1	44.1	50.4	55.9	60.5	64.3	67.3	69.6	71.1	80
20	50	24.5	34.0	41.1	45.7						47.4	48.0	78
	60	24.8	34.8	42.9	49.0	53.3					55.3	56.0	79
	70	25.0	35.3	44.0	51.2	56.8	60.8				63.1	63.9	79
	80	25.2	35.6	44.8	52.6	59.1	64.3	68.2	70.7		70.8	71.7	80
	90	25.2	35.9	45.3	53.7	60.9	66.9	71.8	75.5	78.0	78.4	79.4	80
	100	25.3	36.0	45.8	54.5	62.2	68.9	74.5	79.2	82.8	85.9	87.2	80
	22	50	29.7	41.1	49.7	55.2						57.4	57.8
60		30.1	42.1	51.9	59.3	64.4					66.9	67.5	79
70		30.3	42.7	53.3	61.9	68.6	73.4	76.2			76.3	77.0	79
80		30.5	43.1	54.2	63.7	71.5	77.7	82.3	85.2		85.6	86.3	80
90		30.6	43.4	54.9	64.9	73.6	80.8	86.7	91.1	94.0	94.8	95.6	80
100		30.7	43.6	55.4	65.9	75.2	83.2	90.0	95.6	99.8	103.9	104.9	80
24		50	35.4	49.0	59.1	65.6						68.3	68.6
	60	35.8	50.2	61.7	70.5	76.5					79.6	80.1	79
	70	36.1	50.9	63.4	73.6	81.5	87.2	90.4			90.7	91.3	79
	80	36.3	51.4	64.5	75.7	85.0	92.3	97.7	101.1		101.7	102.4	80
	90	36.4	51.7	65.3	77.3	87.5	96.1	103.0	108.1	111.6	112.6	113.4	80
	100	36.5	52.0	65.9	78.4	89.4	99.0	107.0	113.5	118.5	123.5	124.3	80

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 38--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 7-inch d.o.b. top and height to a saw-log top for all pines except major pines (species 13) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 7-inch d.o.b. top	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet											Percent
10	20	5.4									6.2	8.0	72
	30	5.9	8.3								9.5	11.6	77
	40	6.1	8.6	10.9							12.6	15.2	78
	50	6.2	8.8	11.2	13.4	15.3					15.6	18.8	79
	60	6.2	8.9	11.4	13.7	15.9	17.8				18.5	22.3	79
	70	6.2	8.9	11.5	13.9	16.2	18.3	20.3			21.5	25.9	79
12	20	7.8									8.8	9.9	72
	30	8.5	11.7								13.1	14.4	77
	40	8.8	12.3	15.1							17.0	18.7	78
	50	8.9	12.6	15.8	18.5	20.7					20.9	22.8	79
	60	8.9	12.7	16.1	19.1	21.8	24.0				24.7	27.0	79
	70	9.0	12.8	16.3	19.6	22.5	25.0	27.3			28.5	31.1	79
80	9.0	12.9	16.5	19.8	22.9	25.7	28.3	30.5		32.2	35.2	80	
14	40	11.9	16.6	20.2							22.3	23.5	78
	50	12.1	17.1	21.2	24.5	27.0					27.2	28.5	79
	60	12.2	17.3	21.7	25.6	28.8	31.3				32.0	33.6	79
	70	12.2	17.4	22.1	26.2	29.9	33.0	35.5			36.8	38.6	79
	80	12.3	17.5	22.3	26.7	30.6	34.1	37.1	39.7		41.5	43.5	80
	90	12.3	17.6	22.5	27.0	31.2	34.9	38.3	41.3	43.9	46.2	48.5	80
100	12.3	17.6	22.6	27.2	31.6	35.6	39.2	42.5	45.5	50.9	53.4	80	
16	40	15.6	21.7	26.1							28.5	29.3	78
	50	15.8	22.2	27.5	31.5	34.3					34.5	35.5	79
	60	16.0	22.5	28.2	33.0	36.9	39.7				40.4	41.6	79
	70	16.0	22.7	28.7	34.0	38.4	42.1	45.0			46.3	47.6	79
	80	16.1	22.9	29.0	34.6	39.5	43.8	47.4	50.3		52.2	53.7	80
	90	16.1	23.0	29.3	35.1	40.3	45.0	49.1	52.6	55.5	58.0	59.7	80
100	16.1	23.0	29.5	35.4	40.9	45.9	50.4	54.4	57.8	63.9	65.7	80	
18	40	19.8	27.4	32.7							35.4	36.0	78
	50	20.1	28.1	34.6	39.5	42.5					42.8	43.5	79
	60	20.2	28.5	35.6	41.5	46.0	49.2				50.0	50.9	79
	70	20.3	28.8	36.3	42.7	48.2	52.5	55.8			57.2	58.2	79
	80	20.4	28.9	36.7	43.6	49.6	54.8	59.0	62.3		64.3	65.4	80
	90	20.4	29.1	37.0	44.2	50.7	56.4	61.3	65.5	68.8	71.4	72.7	80
100	20.5	29.2	37.2	44.7	51.4	57.6	63.0	67.8	71.9	78.5	79.9	80	
20	50	24.8	34.7	42.6	48.3	51.8					52.0	52.6	79
	60	25.0	35.2	43.9	50.9	56.3	59.9				60.7	61.4	79
	70	25.1	35.5	44.7	52.5	59.0	64.2	67.8			69.3	70.1	79
	80	25.2	35.7	45.2	53.6	60.9	67.0	72.0	75.7		77.9	78.8	80
	90	25.2	35.9	45.6	54.4	62.2	69.1	75.0	79.8	83.6	86.4	87.4	80
	100	25.3	36.0	45.9	55.0	63.3	70.7	77.2	82.8	87.6	95.0	96.0	80
22	50	30.1	42.0	51.4	58.1	62.0					62.3	62.7	79
	60	30.3	42.6	53.0	61.4	67.6	71.7				72.6	73.1	79
	70	30.4	43.0	54.0	63.4	71.1	77.0	81.2			82.8	83.4	79
	80	30.5	43.3	54.7	64.7	73.4	80.6	86.4	90.6		92.9	93.6	80
	90	30.6	43.5	55.2	65.7	75.1	83.2	90.1	95.7	99.9	103.0	103.8	80
	100	30.6	43.6	55.5	66.5	76.3	85.1	92.8	99.5	104.9	113.1	114.0	80
24	50	35.8	50.0	61.1	68.9	73.2					73.5	73.9	79
	60	36.1	50.7	63.0	72.8	80.1	84.6				85.5	86.0	79
	70	36.2	51.2	64.2	75.2	84.2	91.1	95.8			97.5	98.0	79
	80	36.4	51.5	65.0	76.9	87.1	95.5	102.1	106.9		109.3	109.9	80
	90	36.4	51.7	65.6	78.1	89.1	98.6	106.6	113.1	117.9	121.2	121.8	80
	100	36.5	51.9	66.1	79.0	90.6	101.0	110.0	117.7	124.0	133.0	133.7	80

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 39--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for all pines except major pines (species 13) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.7	0.9	1.0	1.1	1.8	2.0											
6	1.3	2.1	2.3	2.5	3.2	3.5	3.8	4.1									
7	2.5	3.2	3.5	3.8	4.7	5.2	5.6	6.1	6.5	6.9							
8	3.4	4.3	4.8	5.2	6.4	7.0	7.6	8.2	8.8	9.3	9.9	10.4					
9	4.4	5.5	6.2	6.7	8.2	9.0	9.8	10.6	11.3	12.0	12.7	13.4	14.2	14.9			
10	5.5	6.9	7.7	8.4	10.3	11.3	12.2	13.2	14.1	15.0	15.9	16.8	17.7	18.6	19.4	20.3	
11			9.4	10.2	12.5	13.7	14.9	16.1	17.2	18.3	19.4	20.5	21.6	22.6	23.7	24.8	25.8
12			11.2	12.3	14.9	16.4	17.8	19.2	20.6	21.9	23.2	24.5	25.8	27.1	28.4	29.6	30.9
13			13.2	14.5	17.6	19.3	21.0	22.6	24.2	25.8	27.4	28.9	30.4	31.9	33.4	34.9	36.4
14					20.5	22.5	24.4	26.3	28.2	30.0	31.8	33.6	35.4	37.1	38.9	40.6	42.4
15					23.6	25.9	28.1	30.3	32.4	34.5	36.6	38.7	40.7	42.7	44.8	46.8	48.8
16					26.9	29.5	32.0	34.5	37.0	39.4	41.7	44.1	46.4	48.7	51.0	53.3	55.6

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 40--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for all pines except major pines (species 13) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.7	2.1	2.7	2.9	3.3	3.7											
6	2.1	2.7	3.3	3.8	4.4	4.9	5.4	5.9									
7	2.6	3.4	4.2	5.0	5.6	6.3	7.0	7.6	8.3	8.9							
8	3.5	4.4	5.1	6.3	7.1	7.9	8.7	9.5	10.3	11.1	11.9	12.6					
9	4.1	5.4	6.4	7.8	8.8	9.8	10.8	11.7	12.7	13.6	14.5	15.5	16.4	17.3			
10	5.1	6.6	7.8	9.5	10.7	11.9	13.0	14.2	15.3	16.4	17.5	18.6	19.7	20.8	21.9	23.0	
11			9.3	11.4	12.8	14.2	15.5	16.9	18.2	19.5	20.8	22.1	23.4	24.7	26.0	27.3	28.6
12			11.0	13.4	15.1	16.7	18.3	19.9	21.4	22.9	24.5	26.0	27.5	29.0	30.5	32.0	33.5
13			12.9	15.6	17.6	19.4	21.3	23.1	24.9	26.7	28.4	30.2	31.9	33.7	35.4	37.1	38.8
14					20.3	22.4	24.5	26.6	28.6	30.7	32.7	34.7	36.7	38.7	40.7	42.6	44.6
15					23.2	25.6	28.0	30.3	32.7	35.0	37.3	39.5	41.8	44.1	46.3	48.6	50.8
16					26.3	29.0	31.7	34.4	37.0	39.6	42.2	44.7	47.3	49.8	52.4	54.9	57.4

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 41--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for all cypress combined (species 12) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
10	40										3.6	5.5	43
	50										5.3	8.7	58
	60	7.0									8.6	11.7	67
	70	7.6	9.7								11.1	14.4	72
	80	8.0	10.3	12.4							13.3	16.9	75
	90	8.3	10.8	13.0	15.0						15.4	19.3	78
12	40										5.5	7.9	43
	50	8.4									10.3	12.4	58
	60	9.6	12.2	14.2							14.4	16.6	67
	70	10.4	13.4	16.0	18.0						18.1	20.4	72
	80	10.9	14.3	17.3	19.7						21.5	24.0	75
	90	11.3	15.0	18.2	21.0	23.3					24.7	27.4	78
	100	11.6	15.4	18.9	21.9	24.5	26.8				27.7	30.7	79
14	40										8.4	10.8	43
	50	11.3	13.9								15.2	16.8	58
	60	12.9	16.4	19.2							20.9	22.4	67
	70	13.9	18.0	21.5	24.3						25.9	27.7	72
	80	14.6	19.2	23.2	26.6	29.2					30.7	32.5	75
	90	15.1	20.1	24.4	28.2	31.4	33.9				35.2	37.2	78
	100	15.5	20.7	25.3	29.5	33.1	36.1	38.5			39.5	41.7	79
16	50	14.7	18.1	20.5							20.8	22.0	58
	60	16.7	21.3	24.9	27.6						28.1	29.3	67
	70	18.0	23.4	28.0	31.6	34.2					34.8	36.1	72
	80	18.9	25.0	30.2	34.5	38.0	40.6				41.0	42.5	75
	90	19.6	26.0	31.8	36.7	40.9	44.2	46.6			47.0	48.6	78
	100	20.1	26.8	32.9	38.3	43.0	47.0	50.1	52.5		52.7	54.4	79
	110	20.5	27.5	33.9	39.6	44.7	49.2	52.9	55.9	58.1	58.2	60.1	81
18	50	18.6	22.9	26.0							26.9	27.9	58
	60	21.1	26.9	31.5	34.9						36.2	37.1	67
	70	22.8	29.6	35.4	40.0	43.3					44.7	45.7	72
	80	23.9	31.5	38.1	43.7	48.1	51.3				52.6	53.8	75
	90	24.8	32.9	40.1	46.4	51.7	55.9	58.9			60.2	61.5	78
	100	25.4	33.9	41.6	48.5	54.4	59.4	63.4	66.3		67.5	68.9	79
	110	25.9	34.7	42.8	50.1	56.6	62.2	66.9	70.7	73.5	74.6	76.2	81
20	60	26.1	33.3	39.0	43.1						45.1	46.0	67
	70	28.2	36.6	43.7	49.4	53.5					55.7	56.6	72
	80	29.6	39.0	47.1	53.9	59.4	63.3				65.5	66.5	75
	90	30.6	40.6	49.6	57.3	63.8	69.0	72.8			74.9	76.1	78
	100	31.3	41.9	51.4	59.9	67.2	73.3	78.3	81.9		84.0	85.2	79
	110	31.9	42.8	52.8	61.8	69.8	76.8	82.6	87.3	90.8	92.8	94.1	81
22	60	31.7	40.3	47.2	52.2						55.0	55.7	67
	70	34.1	44.4	53.0	59.8	64.8	67.7				67.8	68.6	72
	80	35.9	47.2	57.1	65.3	71.9	76.7	79.6			79.7	80.6	75
	90	37.1	49.2	60.0	69.4	77.3	83.5	88.1	91.0		91.2	92.2	78
	100	38.0	50.7	62.3	72.5	81.4	88.8	94.8	99.2	102.0	102.2	103.3	79
	110	38.7	51.9	64.0	74.9	84.5	92.9	100.0	105.7	109.9	112.9	114.1	81
24	60	37.8	48.1	56.3	62.2	65.6					65.8	66.5	67
	70	40.7	52.9	63.2	71.3	77.2	80.7				81.0	81.7	72
	80	42.8	56.3	68.0	77.9	85.7	91.4	94.9			95.3	96.1	75
	90	44.2	58.7	71.5	82.7	92.0	99.5	105.0	108.4		108.9	109.8	78
	100	45.3	60.5	74.2	86.4	96.9	105.8	112.9	118.1	121.4	122.0	123.1	79
	110	46.1	61.9	76.2	89.2	100.7	110.7	119.1	125.8	130.9	134.8	135.9	81

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 42--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for all cypress combined (species 12) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
<u>Inches</u>	<u>Feet</u>	<u>Cubic feet</u>											<u>Percent</u>
10	30										4.0	7.0	56
	40	6.7									8.1	10.5	67
	50	7.5	9.6								10.8	13.7	73
	60	8.0	10.3	12.4							13.2	16.6	76
	70	8.3	10.8	13.0	15.0						15.5	19.3	77
	80	8.5	11.1	13.5	15.6	17.4					17.5	22.0	79
	90	8.7	11.4	13.8	16.0	18.1					19.5	24.6	79
12	30	7.4									8.2	9.6	56
	40	9.3	11.8								12.9	14.4	67
	50	10.3	13.3	15.8							17.0	18.7	73
	60	10.9	14.3	17.1	19.5						20.6	22.7	76
	70	11.3	14.9	18.0	20.7	23.0					24.0	26.5	77
	80	11.6	15.3	18.7	21.6	24.2	26.4				27.3	30.1	79
	90	11.8	15.6	19.1	22.3	25.1	27.5	29.6			30.4	33.6	79
14	40	12.4	15.8	18.1							18.1	19.2	67
	50	13.7	17.8	21.1	23.5						23.6	24.9	73
	60	14.5	19.1	22.9	26.0	28.4					28.7	30.1	76
	70	15.0	19.9	24.1	27.8	30.7	33.0				33.4	35.1	77
	80	15.4	20.5	25.0	28.9	32.4	35.2	37.5			37.9	39.9	79
	90	15.7	20.9	25.6	29.8	33.6	36.8	39.6	41.8		42.4	44.6	79
	100	15.9	21.2	26.0	30.5	34.5	38.1	41.2	43.9	46.1	46.7	49.1	80
16	40	16.1	20.5	23.5							24.0	24.7	67
	50	17.8	23.2	27.4	30.3						31.1	32.0	73
	60	18.8	24.8	29.7	33.7	36.7					37.7	38.8	76
	70	19.5	25.8	31.3	36.0	39.8	42.6				43.9	45.1	77
	80	19.9	26.5	32.4	37.5	41.9	45.6	48.4			49.9	51.3	79
	90	20.3	27.0	33.2	38.7	43.5	47.7	51.2	54.0		55.7	57.3	79
	100	20.5	27.4	33.7	39.5	44.7	49.3	53.3	56.7	59.5	61.4	63.2	80
18	40	20.3	25.9	29.6							30.5	31.1	67
	50	22.4	29.2	34.5	38.2						39.6	40.2	73
	60	23.7	31.2	37.5	42.5	46.1					47.9	48.6	76
	70	24.5	32.5	39.5	45.4	50.1	53.6				55.7	56.6	77
	80	25.1	33.4	40.9	47.3	52.8	57.4	60.9	63.2		63.3	64.3	79
	90	25.5	34.1	41.8	48.8	54.9	60.1	64.5	67.9	70.4	70.6	71.8	79
	100	25.9	34.6	42.6	49.9	56.4	62.2	67.2	71.4	74.8	77.8	79.2	80
20	50	27.7	36.1	42.6	47.1						48.9	49.4	73
	60	29.3	38.6	46.3	52.4	56.8					59.1	59.7	76
	70	30.3	40.2	48.7	55.9	61.7	66.0	68.7			68.8	69.5	77
	80	31.0	41.3	50.4	58.4	65.1	70.6	74.9	77.7		78.1	78.9	79
	90	31.5	42.1	51.6	60.1	67.6	74.0	79.3	83.5	86.4	87.2	88.1	79
	100	31.9	42.7	52.5	61.5	69.5	76.6	82.7	87.9	92.0	96.1	97.1	80
22	50	33.6	43.7	51.5	56.9						59.2	59.7	73
	60	35.5	46.7	56.0	63.4	68.6					71.6	72.1	76
	70	36.7	48.6	59.0	67.6	74.6	79.7	82.9			83.2	83.8	77
	80	37.5	50.0	61.0	70.6	78.7	85.4	90.4	93.8		94.5	95.1	79
	90	38.2	50.9	62.5	72.8	81.8	89.5	95.8	100.8	104.3	105.4	106.2	79
	100	38.6	51.6	63.6	74.4	84.1	92.6	100.0	106.1	111.0	116.2	117.0	80
24	50	40.1	52.1	61.4	67.7						70.5	70.9	73
	60	42.3	55.7	66.7	75.4	81.6	85.1				85.2	85.6	76
	70	43.7	58.0	70.2	80.5	88.7	94.8	98.5			99.1	99.5	77
	80	44.8	59.5	72.6	84.0	93.7	101.5	107.5	111.4		112.4	112.9	79
	90	45.5	60.7	74.4	86.6	97.3	106.4	114.0	119.8	123.8	125.4	126.0	79
	100	46.0	61.5	75.7	88.6	100.1	110.2	118.9	126.2	131.9	138.1	138.8	80

\* Includes 1.0-foot stump allowance.

Table 43--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 7-inch d.o.b. top and height to a saw-log top for all cypress combined (species 12) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 7-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
10	20	5.8									6.4	10.1	63
	30	7.2	9.1								10.2	13.5	68
	40	8.2	10.4	12.5							14.1	17.1	73
	50	8.7	11.1	13.4	15.5	17.3					17.6	20.5	75
	60	9.1	11.6	14.0	16.2	18.3	20.2				20.8	23.7	77
	70	9.4	11.9	14.4	16.7	18.9	21.0	22.9			24.0	26.9	77
12	20	7.0									7.7	11.7	54
	30	9.5	12.1								13.4	16.0	68
	40	10.7	13.9	16.5							18.3	20.7	73
	50	11.4	14.8	17.8	20.4	22.4					22.7	25.0	75
	60	11.8	15.4	18.6	21.5	24.0	26.2				26.8	29.2	77
	70	12.1	15.7	19.1	22.2	25.0	27.5	29.7			30.9	33.2	77
80	12.3	16.0	19.5	22.7	25.7	28.5	31.0	33.2		34.8	37.2	78	
14	40	14.0	18.1	21.4							23.4	25.5	73
	50	14.8	19.3	23.2	26.4	28.7					29.0	31.0	75
	60	15.3	20.1	24.3	28.0	31.1	33.5				34.2	36.2	77
	70	15.6	20.5	25.0	29.0	32.6	35.6	38.0			39.3	41.3	77
	80	15.9	20.9	25.5	29.8	33.6	37.0	40.0	42.5		44.3	46.3	78
	90	16.1	21.1	25.9	30.3	34.3	38.0	41.4	44.3	46.8	49.1	51.2	78
100	16.2	21.3	26.2	30.7	34.9	38.8	42.4	45.7	48.6	54.0	56.1	78	
16	40	17.9	23.2	27.3							29.5	31.4	73
	50	18.9	24.8	29.7	33.5	36.1					36.4	38.2	75
	60	19.5	25.7	31.1	35.7	39.4	42.1				42.9	44.7	77
	70	19.9	26.3	32.0	37.1	41.4	45.0	47.9			49.2	51.0	77
	80	20.2	26.7	32.6	38.0	42.8	47.0	50.6	53.4		55.3	57.1	78
	90	20.4	27.0	33.1	38.7	43.9	48.5	52.5	56.0	58.9	61.4	63.2	78
100	20.5	27.2	33.5	39.3	44.6	49.6	54.0	57.9	61.4	67.4	69.3	78	
18	40	22.4	29.1	34.0							36.5	38.2	73
	50	23.6	31.0	37.1	41.7	44.6					44.9	46.6	75
	60	24.3	32.1	38.9	44.5	48.9	52.0				52.8	54.5	77
	70	24.8	32.9	40.0	46.3	51.6	55.9	59.1			60.5	62.1	77
	80	25.2	33.4	40.9	47.6	53.4	58.5	62.7	66.0		68.0	69.7	78
	90	25.4	33.8	41.5	48.5	54.8	60.4	65.3	69.4	72.7	75.4	77.1	78
100	25.6	34.1	41.9	49.2	55.8	61.8	67.2	72.0	76.1	82.7	84.4	78	
20	50	28.9	38.1	45.4	50.9	54.2					54.5	56.0	75
	60	29.8	39.5	47.7	54.4	59.6	63.2				64.0	65.6	77
	70	30.4	40.3	49.1	56.7	63.0	68.1	71.7			73.2	74.8	77
	80	30.8	41.0	50.1	58.3	65.4	71.4	76.4	80.1		82.2	83.8	78
	90	31.1	41.4	50.9	59.4	67.1	73.9	79.7	84.5	88.3	91.1	92.7	78
	100	31.4	41.8	51.4	60.3	68.4	75.7	82.2	87.8	92.5	99.9	101.5	78
22	50	34.9	45.9	54.7	61.1	64.9					65.1	66.6	75
	60	36.0	47.6	57.5	65.5	71.6	75.6				76.4	77.9	77
	70	36.7	48.7	59.2	68.3	75.8	81.7	85.8			87.4	88.8	77
	80	37.2	49.4	60.5	70.2	78.7	85.8	91.5	95.7		98.1	99.5	78
	90	37.5	50.0	61.3	71.6	80.8	88.8	95.6	101.2	105.5	108.6	110.1	78
	100	37.8	50.4	62.0	72.7	82.4	91.1	98.7	105.3	110.8	119.0	120.5	78
24	50	41.5	54.6	64.9	72.4	76.6					76.9	78.3	75
	60	42.8	56.6	68.2	77.6	84.7	89.2				90.1	91.5	77
	70	43.6	57.9	70.3	81.0	89.8	96.6	101.2			102.9	104.3	77
	80	44.2	58.7	71.8	83.3	93.3	101.6	108.2	113.0		115.5	116.9	78
	90	44.6	59.4	72.9	85.0	95.8	105.2	113.2	119.6	124.5	127.8	129.2	78
	100	44.9	59.9	73.7	86.3	97.7	107.9	116.9	124.6	130.9	140.0	141.4	78

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 44--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for all cypress combined (species 12) in the Gulf and Atlantic Coastal Plain.<sup>a,b</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	2.4	2.8	3.2	3.6	4.1	4.9											
6	2.3	2.7	3.2	4.2	4.7	5.4	6.0	6.6									
7	2.5	2.9	3.6	4.7	5.6	6.4	7.2	7.9	8.6	9.3							
8	2.8	3.3	4.5	5.6	6.7	7.7	8.7	9.6	10.5	11.4	12.2	13.0					
9	3.2	3.9	5.4	6.8	8.1	9.3	10.5	11.7	12.8	13.8	14.9	15.9	16.8	17.8			
10	3.8	4.6	6.4	8.1	9.7	11.2	12.7	14.0	15.4	16.7	17.9	19.2	20.3	21.5	22.7	23.8	
11			7.6	9.6	11.5	13.3	15.1	16.7	18.3	19.9	21.4	22.9	24.3	25.7	27.1	28.4	29.8
12			9.0	11.3	13.5	15.7	17.7	19.7	21.6	23.4	25.2	27.0	28.7	30.3	32.0	33.6	35.2
13			10.5	13.1	15.8	18.3	20.7	23.0	25.2	27.3	29.4	31.5	33.5	35.4	37.4	39.3	41.1
14					18.2	21.1	23.9	26.5	29.1	31.6	34.0	36.4	38.7	41.0	43.2	45.4	47.6
15					20.8	24.1	27.3	30.4	33.3	36.2	39.0	41.7	44.3	46.9	49.5	52.0	54.5
16					23.7	27.4	31.0	34.5	37.9	41.1	44.3	47.4	50.4	53.4	56.3	59.2	62.0

<sup>a</sup> Includes 0.5-foot stump allowance.

<sup>b</sup> Based on Gulf and Atlantic Coastal Plain all cypress combined form class.

Table 45--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for all cypress combined (species 12) in the Gulf and Atlantic Coastal Plain.<sup>a,b</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	3.1	4.0	4.9	5.7	6.4	7.1											
6	3.1	3.9	4.7	5.6	6.6	7.5	8.3	9.0									
7	3.2	4.0	5.1	6.3	7.3	8.4	9.3	10.2	11.1	11.9							
8	3.5	4.3	5.8	7.2	8.4	9.6	10.8	11.8	12.9	13.9	14.8	15.8					
9	3.9	5.0	6.7	8.3	9.8	11.2	12.6	13.8	15.1	16.3	17.4	18.5	19.6	20.7			
10	4.4	5.8	7.8	9.7	11.5	13.2	14.7	16.2	17.7	19.1	20.4	21.8	23.1	24.4	25.7	27.0	
11			9.1	11.3	13.4	15.3	17.2	18.9	20.6	22.3	23.9	25.5	27.0	28.5	30.0	31.5	33.0
12			10.6	13.2	15.5	17.8	19.9	22.0	23.9	25.8	27.7	29.6	31.4	33.1	34.9	36.7	38.4
13			12.2	15.2	17.9	20.5	23.0	25.3	27.6	29.8	32.0	34.1	36.2	38.2	40.3	42.3	44.3
14					20.5	23.5	26.3	29.0	31.6	34.1	36.6	39.0	41.4	43.7	46.1	48.4	50.7
15					23.3	26.7	29.9	32.9	35.9	38.8	41.6	44.3	47.0	49.7	52.4	55.0	57.6
16					26.3	30.1	33.7	37.2	40.5	43.8	46.9	50.0	53.1	56.1	59.1	62.1	65.0

<sup>a</sup> Includes 0.5-foot stump allowance.

<sup>b</sup> Based on Gulf and Atlantic Coastal Plain all cypress combined form class.

Table 46--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for baldcypress (species 221) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Total tree height	Volume to											Girard Form Class	
		Saw-log merchantable height (16-foot logs)									7-inch d.o.b. top	4-inch d.o.b. top		
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0				
Inches	Feet	Cubic feet											Percent	
10	40										3.4	6.8	57	
	50	6.1									6.8	9.8	68	
	60	6.8	8.9								9.3	12.5	73	
	70	7.3	9.7								11.6	15.0	76	
	80	7.7	10.2	12.5							13.6	17.4	79	
	90	8.0	10.6	13.0	15.1						15.4	19.7	80	
12	40	7.2									7.9	9.9	57	
	50	8.7	11.3								12.3	14.2	68	
	60	9.7	12.8	15.3							16.1	18.1	73	
	70	10.4	13.8	16.7	19.0						19.5	21.8	76	
	80	10.9	14.6	17.8	20.5	22.6						22.7	25.2	79
	90	11.3	15.1	18.6	21.5	24.1					25.7	28.6	80	
	100	11.6	15.6	19.2	22.4	25.2	27.5				28.6	31.8	81	
14	40	9.8	12.2								12.2	13.6	57	
	50	11.8	15.3	17.8							18.1	19.4	68	
	60	13.1	17.3	20.7	23.1						23.3	24.7	73	
	70	14.1	18.7	22.7	25.8						28.1	29.7	76	
	80	14.7	19.7	24.1	27.8	30.7					32.6	34.4	79	
	90	15.2	20.5	25.2	29.2	32.6	35.4				36.9	38.9	80	
	100	15.7	21.1	26.0	30.3	34.1	37.3	39.9			41.1	43.3	81	
16	50	15.4	20.0	23.3							24.4	25.4	68	
	60	17.1	22.6	27.0	30.2						31.3	32.4	73	
	70	18.3	24.4	29.6	33.7	36.7					37.7	38.9	76	
	80	19.2	25.7	31.4	36.2	40.1	42.9				43.7	45.0	79	
	90	19.8	26.7	32.8	38.1	42.6	46.1	48.8			49.4	50.9	80	
	100	20.4	27.4	33.8	39.5	44.5	48.7	52.0	54.5		55.0	56.7	81	
	110	20.8	28.0	34.7	40.7	46.0	50.7	54.6	57.7	60.1	60.4	62.2	82	
18	50	19.5	25.3	29.5							31.4	32.2	68	
	60	21.7	28.6	34.2	38.2						40.2	41.0	73	
	70	23.2	30.9	37.4	42.6	46.4					48.3	49.3	76	
	80	24.3	32.5	39.7	45.8	50.7	54.2				56.0	57.1	79	
	90	25.1	33.7	41.5	48.2	53.8	58.4	61.7			63.3	64.5	80	
	100	25.7	34.7	42.8	50.0	56.3	61.6	65.8	68.9		70.4	71.8	81	
	110	26.3	35.4	43.8	51.4	58.2	64.1	69.0	73.0	76.0	77.3	78.8	82	
20	60	26.7	35.3	42.2	47.2						50.0	50.7	73	
	70	28.6	38.1	46.2	52.6	57.3					60.1	60.9	76	
	80	29.9	40.1	49.1	56.6	62.6	66.9				69.6	70.5	79	
	90	31.0	41.6	51.2	59.5	66.5	72.0	76.2			78.7	79.7	80	
	100	31.8	42.8	52.8	61.7	69.5	76.0	81.2	85.1		87.5	88.7	81	
	110	32.4	43.7	54.1	63.5	71.8	79.1	85.2	90.1	93.8	96.1	97.4	82	
22	60	32.4	42.8	51.1	57.1	60.6					60.8	61.4	73	
	70	34.6	46.2	55.9	63.7	69.4	72.7				73.0	73.7	76	
	80	36.2	48.6	59.4	68.4	75.7	81.0	84.2			84.6	85.4	79	
	90	37.5	50.4	61.9	72.0	80.4	87.2	92.2	95.3			95.6	96.6	80
	100	38.4	51.8	63.9	74.7	84.0	91.9	98.3	103.0	106.0		106.3	107.4	81
	110	39.2	52.9	65.4	76.8	86.9	95.7	103.1	109.0	113.5	116.8	118.0	82	
24	60	38.5	50.9	60.8	68.0	72.1					72.6	73.2	73	
	70	41.2	54.9	66.6	75.8	82.6	86.5				87.1	87.8	76	
	80	43.1	57.8	70.7	81.5	90.1	96.4	100.2			100.9	101.7	79	
	90	44.6	60.0	73.7	85.6	95.7	103.7	109.7	113.4			114.1	115.0	80
	100	45.7	61.6	76.0	88.9	100.0	109.4	116.9	122.5	126.1		126.9	127.9	81
	110	46.7	62.9	77.9	91.4	103.4	113.9	122.7	129.8	135.1	139.4	140.4	82	

\* Includes 1.0-foot stump allowance.

Table 47--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for baldcypress (species 221) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										7-inch d.o.b. top	4-inch d.o.b. top	Girard Form Class
		Saw-log merchantable height (16-foot logs)												
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0				
Inches	Feet	Cubic feet											Percent	
10	30											3.5	7.1	62
	40	6.3										7.9	10.5	71
	50	7.0	9.3									10.5	13.7	76
	60	7.5	10.0	12.1								12.9	16.6	78
	70	7.8	10.5	12.8	14.8							15.1	19.5	79
	80	8.1	10.8	13.3	15.5							17.1	22.2	80
	90	8.3	11.1	13.6	16.0	18.1						19.1	24.9	81
12	30	7.4										8.7	10.0	62
	40	9.0	11.8									13.2	14.7	71
	50	9.9	13.3	15.9								17.2	19.1	76
	60	10.6	14.2	17.2	19.7							21.0	23.2	78
	70	11.1	14.8	18.2	21.0	23.4						24.5	27.1	79
	80	11.4	15.3	18.8	21.9	24.6	26.9					27.8	30.8	80
	90	11.7	15.7	19.3	22.6	25.5	28.1	30.3				31.1	34.5	81
14	40	12.2	16.0	18.6								18.8	19.8	71
	50	13.5	17.9	21.5	24.0							24.3	25.5	76
	60	14.3	19.2	23.3	26.6	29.1						29.5	30.9	78
	70	14.9	20.1	24.5	28.3	31.5	33.9					34.4	36.1	79
	80	15.4	20.7	25.4	29.6	33.2	36.1	38.5				39.1	41.0	80
	90	15.8	21.2	26.1	30.5	34.4	37.8	40.7	43.0			43.7	45.9	81
	100	16.1	21.6	26.6	31.2	35.4	39.1	42.4	45.2	47.4		48.2	50.7	81
16	40	15.9	20.9	24.2								24.9	25.6	71
	50	17.5	23.4	27.9	31.2							32.1	33.0	76
	60	18.7	25.0	30.3	34.5	37.7						38.9	39.9	78
	70	19.4	26.1	31.9	36.8	40.8	43.9					45.3	46.5	79
	80	20.0	26.9	33.1	38.4	43.1	46.9	49.8				51.5	52.9	80
	90	20.5	27.5	33.9	39.7	44.7	49.1	52.7	55.7			57.5	59.1	81
	100	20.9	28.0	34.6	40.6	46.0	50.8	55.0	58.5	61.4		63.5	65.2	81
18	40	20.1	26.4	30.5								31.7	32.2	71
	50	22.2	29.5	35.3	39.3							40.8	41.4	76
	60	23.6	31.6	38.3	43.6	47.4						49.3	50.1	78
	70	24.6	33.0	40.3	46.5	51.5	55.2					57.5	58.4	79
	80	25.3	34.0	41.7	48.5	54.3	59.0	62.7	65.2			65.3	66.3	80
	90	25.9	34.8	42.8	50.1	56.4	61.9	66.4	70.0	72.6		73.0	74.1	81
	100	26.4	35.4	43.7	51.2	58.0	64.0	69.3	73.6	77.2		80.4	81.7	81
20	50	27.4	36.5	43.5	48.3							50.4	50.9	76
	60	29.1	39.0	47.2	53.7	58.4						60.9	61.5	78
	70	30.3	40.7	49.7	57.3	63.4	67.9	70.8				70.9	71.6	79
	80	31.2	41.9	51.5	59.8	66.9	72.7	77.1	80.1			80.6	81.4	80
	90	31.9	42.9	52.8	61.7	69.5	76.2	81.7	86.1	89.1		90.0	90.9	81
	100	32.5	43.6	53.9	63.2	71.5	78.9	85.3	90.6	94.9		99.2	100.2	81
	22	50	33.1	44.1	52.6	58.4							61.0	61.4
60		35.2	47.1	57.0	64.9	70.5	73.6					73.7	74.1	78
70		36.6	49.2	60.1	69.2	76.5	82.0	85.3				85.7	86.3	79
80		37.7	50.7	62.2	72.3	80.8	87.8	93.0	96.6			97.4	98.0	80
90		38.6	51.9	63.9	74.6	84.0	92.0	98.7	103.8	107.5		108.8	109.5	81
100		39.3	52.8	65.1	76.4	86.4	95.3	103.0	109.3	114.4		119.9	120.7	81
24		50	39.5	52.5	62.5	69.4							72.5	72.8
	60	41.9	56.1	67.9	77.1	83.7	87.4					87.6	87.9	78
	70	43.6	58.5	71.5	82.3	91.0	97.4	101.3				101.9	102.4	79
	80	44.9	60.3	74.1	86.0	96.1	104.3	110.5	114.6			115.8	116.3	80
	90	45.9	61.7	76.0	88.7	99.9	109.4	117.2	123.3	127.6		129.3	129.8	81
	100	46.7	62.8	77.5	90.8	102.8	113.3	122.4	129.9	135.9		142.5	143.1	81

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 48--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 7-inch d.o.b. top and height to a saw-log top for baldcypress (species 221) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Height to 7-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
<u>Inches</u>	<u>Feet</u>	<u>Cubic feet</u>										<u>Percent</u>	
10	20	5.1									5.8	12.6	65
	30	6.4	8.6								9.8	14.5	74
	40	7.2	9.7	11.9							13.7	18.3	77
	50	7.8	10.4	12.9	15.1	17.1					17.4	22.2	79
	60	8.2	10.9	13.5	15.9	18.1	20.2				20.9	26.0	80
	70	8.6	11.3	14.0	16.5	18.8	21.1	23.1			24.3	29.8	80
12	20	7.1									8.0	11.8	63
	30	9.0	12.0								13.4	15.9	74
	40	10.1	13.6	16.4							18.4	20.8	77
	50	10.8	14.5	17.8	20.6	22.8					23.1	25.7	79
	60	11.3	15.2	18.7	21.8	24.5	26.8				27.6	30.4	80
	70	11.8	15.7	19.3	22.7	25.7	28.4	30.7			31.9	34.9	80
80	12.1	16.1	19.8	23.3	26.5	29.4	32.1	34.4		36.2	39.4	81	
14	40	13.6	18.2	21.8							24.0	25.5	77
	50	14.5	19.4	23.7	27.1	29.6					29.9	31.5	79
	60	15.1	20.3	24.9	28.9	32.2	34.8				35.6	37.3	80
	70	15.6	20.9	25.7	30.1	33.9	37.1	39.8			41.1	42.9	80
	80	16.0	21.4	26.4	30.9	35.0	38.7	41.9	44.6		46.5	48.4	81
	90	16.3	21.7	26.8	31.6	35.9	39.9	43.4	46.6	49.3	51.8	53.9	81
100	16.5	22.0	27.2	32.1	36.6	40.8	44.6	48.1	51.2	57.0	59.2	81	
16	40	17.6	23.6	28.0							30.4	31.5	77
	50	18.7	25.2	30.5	34.7	37.5					37.8	38.9	79
	60	19.5	26.2	32.1	37.1	41.1	44.0				44.8	46.0	80
	70	20.1	27.0	33.2	38.7	43.3	47.2	50.3			51.7	52.9	80
	80	20.6	27.6	34.0	39.8	45.0	49.5	53.3	56.3		58.3	59.7	81
	90	21.0	28.0	34.6	40.7	46.2	51.1	55.4	59.2	62.3	64.9	66.4	81
100	21.3	28.4	35.1	41.3	47.1	52.3	57.1	61.3	65.0	71.4	72.9	81	
18	40	22.2	29.7	35.1							37.8	38.6	77
	50	23.6	31.7	38.3	43.3	46.5					46.8	47.6	79
	60	24.5	33.0	40.3	46.4	51.2	54.5				55.4	56.2	80
	70	25.3	34.0	41.7	48.5	54.2	58.8	62.2			63.7	64.6	80
	80	25.8	34.7	42.7	49.9	56.3	61.7	66.2	69.7		71.9	72.8	81
	90	26.3	35.2	43.5	51.0	57.8	63.8	69.1	73.5	77.0	79.9	80.9	81
100	26.6	35.7	44.1	51.9	59.0	65.5	71.3	76.3	80.7	87.8	88.9	81	
20	50	29.0	39.0	47.0	53.0	56.6					56.9	57.5	79
	60	30.2	40.6	49.5	56.8	62.5	66.3				67.2	67.8	80
	70	31.1	41.8	51.2	59.4	66.3	71.7	75.6			77.2	77.9	80
	80	31.7	42.6	52.5	61.3	68.9	75.4	80.7	84.7		87.0	87.7	81
	90	32.3	43.3	53.4	62.6	70.9	78.1	84.3	89.5	93.6	96.6	97.4	81
	100	32.7	43.8	54.2	63.7	72.4	80.2	87.1	93.1	98.2	106.1	107.0	81
22	50	35.0	47.1	56.7	63.7	67.7					68.0	68.5	79
	60	36.4	49.0	59.7	68.4	75.0	79.3				80.3	80.8	80
	70	37.5	50.4	61.8	71.6	79.7	86.0	90.5			92.1	92.7	80
	80	38.3	51.5	63.3	73.8	82.9	90.6	96.7	101.3		103.8	104.3	81
	90	38.9	52.3	64.5	75.5	85.3	93.9	101.3	107.3	111.9	115.2	115.8	81
	100	39.4	52.9	65.4	76.8	87.2	96.5	104.7	111.8	117.7	126.4	127.1	81
24	50	41.6	55.9	67.3	75.4	80.0					80.2	80.6	79
	60	43.3	58.3	70.9	81.1	88.8	93.6				94.6	95.0	80
	70	44.5	59.9	73.4	84.9	94.4	101.7	106.7			108.5	108.9	80
	80	45.5	61.1	75.2	87.6	98.3	107.2	114.3	119.5		122.1	122.6	81
	90	46.2	62.1	76.6	89.6	101.2	111.3	119.8	126.7	131.9	135.5	136.0	81
	100	46.8	62.8	77.6	91.1	103.4	114.3	123.9	132.2	139.0	148.7	149.2	81

\* Includes 1.0-foot stump allowance.

Table 49--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for baldcypress (species 221) in the Gulf and Atlantic Coastal Plain.<sup>a,b</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.9	1.1	1.3	1.5	1.8	2.2											
6	1.2	1.5	1.9	2.9	3.5	4.0	4.5	5.0									
7	1.7	2.1	3.4	4.2	5.0	5.7	6.4	7.0	7.7	8.3							
8	2.2	3.5	4.6	5.6	6.6	7.6	8.4	9.3	10.1	10.9	11.7	12.4					
9	2.8	4.5	5.9	7.2	8.5	9.6	10.7	11.8	12.8	13.8	14.8	15.8	16.7	17.6			
10	3.7	5.7	7.4	9.0	10.5	11.9	13.3	14.6	15.9	17.1	18.3	19.5	20.6	21.8	22.9	24.0	
11			9.0	10.9	12.7	14.4	16.1	17.7	19.2	20.7	22.2	23.6	25.0	26.3	27.7	29.0	30.3
12			10.7	13.0	15.1	17.2	19.1	21.0	22.9	24.6	26.4	28.1	29.7	31.4	33.0	34.5	36.1
13			12.6	15.3	17.8	20.2	22.5	24.7	26.8	28.9	30.9	32.9	34.9	36.8	38.7	40.5	42.4
14					20.6	23.4	26.1	28.6	31.1	33.5	35.9	38.2	40.5	42.7	44.9	47.0	49.2
15					23.7	26.9	29.9	32.9	35.7	38.5	41.2	43.9	46.4	49.0	51.5	54.0	56.4
16					27.0	30.6	34.1	37.4	40.7	43.8	46.9	49.9	52.9	55.8	58.6	61.4	64.2

<sup>a</sup> Includes 0.5-foot stump allowance.

<sup>b</sup> Based on Gulf and Atlantic Coastal Plain baldcypress form class.

Table 50--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for baldcypress (species 221) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.9	2.4	2.9	3.5	4.0	4.6											
6	2.1	2.7	3.3	4.2	5.0	5.7	6.5	7.2									
7	2.5	3.1	4.2	5.2	6.2	7.1	8.1	8.9	9.8	10.6							
8	2.9	3.9	5.2	6.4	7.7	8.8	9.9	11.0	12.0	13.0	14.0	15.0					
9	3.3	4.8	6.4	7.9	9.3	10.7	12.1	13.3	14.6	15.8	17.0	18.2	19.3	20.5			
10	3.8	5.8	7.7	9.5	11.2	12.9	14.5	16.0	17.5	18.9	20.4	21.8	23.1	24.5	25.8	27.1	
11			9.2	11.3	13.3	15.3	17.2	19.0	20.7	22.4	24.1	25.7	27.4	28.9	30.5	32.1	33.6
12			10.8	13.3	15.7	17.9	20.1	22.2	24.3	26.3	28.2	30.1	32.0	33.9	35.7	37.5	39.3
13			12.6	15.5	18.2	20.8	23.3	25.8	28.1	30.4	32.7	34.9	37.1	39.2	41.3	43.5	45.5
14					21.0	24.0	26.8	29.6	32.3	35.0	37.5	40.1	42.6	45.0	47.5	49.9	52.3
15					23.9	27.3	30.6	33.8	36.8	39.8	42.8	45.7	48.5	51.3	54.0	56.8	59.5
16					27.1	30.9	34.6	38.2	41.7	45.1	48.4	51.6	54.8	58.0	61.1	64.2	67.2

<sup>a</sup> Includes 0.5-foot stump allowance.

<sup>b</sup> Based on Gulf and Atlantic Coastal Plain baldcypress form class.

Table 51--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for pondcypress (species 222) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to										Girard Form Class		
		Saw-log merchantable height (16-foot logs)											7-inch d.o.b. top	4-inch d.o.b. top
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0				
<u>Inches</u>	<u>Feet</u>	<u>Cubic feet</u>										<u>Percent</u>		
10	40										4.0	6.4	49	
	50										6.2	9.0	60	
	60	7.0									8.4	11.4	66	
	70	7.5	9.4								10.2	13.6	69	
	80	7.8	9.9	11.7							11.9	15.6	72	
	90	8.0	10.3	12.2							13.4	17.5	73	
12	40										6.7	9.1	49	
	50	8.7	10.7								10.9	12.8	60	
	60	9.6	12.1	14.1							14.1	16.2	66	
	70	10.3	13.1	15.4							16.9	19.3	69	
	80	10.7	13.7	16.4	18.5						19.5	22.2	72	
	90	11.0	14.2	17.1	19.5	21.5					22.0	25.0	73	
	100	11.3	14.6	17.6	20.2	22.5					24.3	27.6	75	
14	40	9.7									10.9	12.3	49	
	50	11.7	14.4								15.9	17.4	60	
	60	12.9	16.3	18.9							20.4	22.0	66	
	70	13.7	17.5	20.7	23.2						24.4	26.2	69	
	80	14.3	18.4	22.0	24.9	27.3					28.1	30.1	72	
	90	14.7	19.0	22.9	26.2	29.0	31.2				31.6	33.9	73	
	100	15.0	19.5	23.6	27.2	30.3	32.8	34.9				35.0	37.5	75
16	50	15.1	18.7	21.2							21.6	22.7	60	
	60	16.7	21.1	24.6	27.1						27.4	28.7	66	
	70	17.8	22.8	26.9	30.2	32.5					32.7	34.1	69	
	80	18.5	23.9	28.6	32.4	35.5	37.7				37.7	39.3	72	
	90	19.0	24.7	29.7	34.1	37.7	40.5				42.5	44.2	73	
	100	19.4	25.3	30.6	35.3	39.4	42.7	45.4			47.0	48.9	75	
	110	19.7	25.8	31.3	36.3	40.7	44.5	47.6	50.1		51.4	53.5	75	
18	50	19.1	23.6	26.8							27.9	28.8	60	
	60	21.1	26.7	31.1	34.2						35.3	36.3	66	
	70	22.4	28.8	34.0	38.2	41.1					42.1	43.2	69	
	80	23.3	30.2	36.1	41.0	44.8	47.6				48.5	49.7	72	
	90	24.0	31.2	37.6	43.1	47.6	51.2	53.8			54.6	56.0	73	
	100	24.5	32.0	38.7	44.6	49.7	54.0	57.4	59.9		60.4	62.0	75	
	110	24.9	32.6	39.6	45.9	51.4	56.2	60.2	63.3	65.7	66.1	67.8	75	
20	60	26.1	33.0	38.4	42.3						44.1	44.9	66	
	70	27.7	35.5	42.0	47.1	50.8					52.5	53.4	69	
	80	28.8	37.3	44.5	50.6	55.4	58.8				60.4	61.5	72	
	90	29.6	38.5	46.4	53.1	58.8	63.2	66.5			68.0	69.2	73	
	100	30.2	39.5	47.8	55.1	61.4	66.6	70.8	73.9		75.3	76.6	75	
	110	30.7	40.2	48.9	56.6	63.4	69.3	74.3	78.2	81.1	82.4	83.8	75	
22	60	31.6	40.0	46.5	51.2						53.7	54.4	66	
	70	33.5	43.0	50.9	57.1	61.5					64.0	64.8	69	
	80	34.9	45.1	53.9	61.3	67.0	71.2				73.6	74.5	72	
	90	35.9	46.7	56.2	64.3	71.2	76.5	80.5			82.8	83.8	73	
	100	36.6	47.8	57.8	66.7	74.3	80.7	85.7	89.4		91.6	92.8	75	
	110	37.2	48.7	59.2	68.5	76.8	83.9	89.9	94.6	98.2	100.3	101.6	75	
24	60	37.7	47.6	55.5	61.0	64.1					64.2	64.9	66	
	70	40.0	51.3	60.6	68.0	73.2	76.3				76.5	77.2	69	
	80	41.6	53.8	64.3	73.0	79.8	84.8	87.8			88.0	88.8	72	
	90	42.7	55.6	66.9	76.7	84.8	91.2	95.8	98.7		98.9	99.9	73	
	100	43.6	57.0	68.9	79.5	88.5	96.1	102.1	106.5	109.3	109.5	110.6	75	
	110	44.3	58.0	70.5	81.6	91.5	100.0	107.0	112.7	116.9	119.8	121.0	75	

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 52--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for pondcypress (species 222) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class		
		Saw-log merchantable height (16-foot logs)												
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top		
Inches	Feet	Cubic feet										Percent		
10	30										4.0	6.8	53	
	40	6.6									7.3	10.0	63	
	50	7.3	9.2								9.6	12.8	68	
	60	7.7	9.8								11.6	15.3	71	
	70	8.1	10.2	12.2							13.4	17.7	72	
	80	8.3	10.5	12.6	14.4						15.0	20.0	73	
	90	8.5	10.8	12.9	14.8	16.6					16.6	22.3	74	
12	30	7.4									7.8	9.3	53	
	40	9.0	11.3								12.0	13.6	63	
	50	10.0	12.6	14.8							15.4	17.4	68	
	60	10.5	13.5	16.0	18.0						18.5	20.9	71	
	70	10.9	14.0	16.8	19.1	21.1					21.4	24.2	72	
	80	11.2	14.4	17.3	19.9	22.1	24.0				24.2	27.3	73	
	90	11.4	14.7	17.7	20.5	22.9	25.1				26.8	30.4	74	
14	40	12.0	15.1								16.9	18.1	63	
	50	13.3	16.9	19.7							21.7	23.1	68	
	60	14.0	18.0	21.3	24.1						26.0	27.6	71	
	70	14.5	18.7	22.4	25.5	28.1					30.1	32.0	72	
	80	14.8	19.2	23.1	26.6	29.6	32.0				34.0	36.1	73	
	90	15.1	19.6	23.7	27.4	30.6	33.5	35.8			37.7	40.2	74	
	100	15.3	19.9	24.1	27.9	31.4	34.5	37.2	39.6		41.4	44.2	74	
16	40	15.6	19.5	22.1							22.4	23.3	63	
	50	17.1	21.9	25.6	28.2						28.7	29.7	68	
	60	18.1	23.3	27.6	31.1	33.7					34.3	35.5	71	
	70	18.7	24.2	29.0	33.1	36.4	38.9				39.7	41.1	72	
	80	19.2	24.9	30.0	34.4	38.2	41.4	43.9			44.8	46.4	73	
	90	19.5	25.3	30.7	35.4	39.6	43.3	46.3	48.7		49.8	51.6	74	
	100	19.7	25.7	31.2	36.2	40.7	44.7	48.2	51.1	53.5	54.7	56.7	74	
18	40	19.7	24.6	27.9							28.6	29.2	63	
	50	21.6	27.6	32.2	35.4						36.5	37.2	68	
	60	22.8	29.4	34.8	39.2	42.3					43.6	44.5	71	
	70	23.6	30.5	36.6	41.6	45.8	48.9				50.4	51.5	72	
	80	24.1	31.3	37.8	43.4	48.2	52.1	55.1			56.9	58.1	73	
	90	24.5	31.9	38.6	44.6	49.9	54.5	58.2	61.2		63.2	64.6	74	
	100	24.8	32.4	39.3	45.6	51.3	56.3	60.6	64.2	67.2	69.5	71.0	74	
20	50	26.7	34.0	39.7	43.6						45.1	45.7	68	
	60	28.1	36.2	42.9	48.3	52.1					54.0	54.7	71	
	70	29.1	37.6	45.1	51.3	56.3	60.1				62.3	63.1	72	
	80	29.7	38.6	46.5	53.4	59.3	64.1	67.8	70.2		70.3	71.3	73	
	90	30.2	39.4	47.6	55.0	61.5	67.0	71.6	75.2	77.8		79.2	74	
	100	30.6	39.9	48.4	56.2	63.1	69.3	74.6	79.0	82.5		85.8	87.0	74
22	50	32.3	41.2	48.0	52.7						54.6	55.1	68	
	60	34.0	43.8	51.9	58.3	62.9					65.3	65.9	71	
	70	35.2	45.5	54.5	62.0	68.1	72.5	75.3			75.4	76.1	72	
	80	36.0	46.7	56.3	64.6	71.7	77.4	81.8	84.7		85.1	85.9	73	
	90	36.6	47.6	57.6	66.5	74.3	81.0	86.5	90.8	93.8		94.6	95.4	74
	100	37.0	48.3	58.6	68.0	76.3	83.7	90.1	95.4	99.6		103.8	104.8	74
24	50	38.5	49.0	57.2	62.7						65.1	65.5	68	
	60	40.5	52.2	61.8	69.4	74.8					77.8	78.2	71	
	70	41.9	54.2	64.9	73.8	80.9	86.2	89.4			89.8	90.3	72	
	80	42.9	55.7	67.0	76.9	85.3	92.0	97.2	100.6		101.3	101.9	73	
	90	43.6	56.7	68.6	79.2	88.4	96.3	102.8	107.8	111.3		112.5	113.2	74
	100	44.1	57.5	69.8	80.9	90.8	99.6	107.1	113.3	118.3		123.5	124.3	74

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 53--Predicted stemwood volume to a saw-log merchantable top, and to 7-inch and 4-inch d.o.b. tops based on d.b.h., height to a 7-inch d.o.b. top and height to a saw-log top for pondcypress (species 222) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Height to 7-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
10	20	5.7									6.4	9.9	62
	30	7.3	9.2								10.3	13.2	67
	40	8.4	10.5	12.4							13.9	16.5	70
	50	9.1	11.2	13.3	15.2	17.0					17.2	19.6	71
	60	9.5	11.8	13.9	15.9	17.8	19.6				20.3	22.6	72
	70	9.9	12.1	14.3	16.4	18.4	20.3	22.1			23.2	25.4	72
12	20	7.4									8.1	11.4	59
	30	9.5	12.0								13.2	15.7	67
	40	10.6	13.5	15.9							17.6	19.8	70
	50	11.3	14.4	17.1	19.5	21.4					21.6	23.6	71
	60	11.8	15.0	17.8	20.4	22.8	24.8				25.4	27.3	72
	70	12.1	15.3	18.3	21.1	23.6	25.9	27.9			29.1	30.9	72
80	12.4	15.6	18.7	21.6	24.2	26.7	29.0	31.0		32.6	34.4	73	
14	40	13.6	17.4	20.4							22.3	24.2	70
	50	14.3	18.4	21.9	24.8	27.0					27.2	29.0	71
	60	14.8	19.1	22.8	26.1	28.9	31.2				31.9	33.5	72
	70	15.2	19.5	23.5	27.0	30.2	32.9	35.2			36.4	38.0	72
	80	15.5	19.8	23.9	27.6	31.0	34.1	36.8	39.1		40.8	42.3	73
	90	15.7	20.1	24.2	28.1	31.7	35.0	37.9	40.6	42.9	45.1	46.6	73
100	15.8	20.3	24.5	28.5	32.2	35.6	38.8	41.7	44.4	49.4	50.9	73	
16	40	17.1	22.0	25.7							27.8	29.6	70
	50	18.0	23.2	27.7	31.1	33.6					33.8	35.4	71
	60	18.5	24.0	28.8	32.9	36.3	38.8				39.5	41.1	72
	70	18.9	24.5	29.6	34.1	37.9	41.2	43.8			45.0	46.5	72
	80	19.2	24.9	30.1	34.9	39.1	42.8	46.0	48.7		50.4	51.9	73
	90	19.4	25.2	30.6	35.5	40.0	44.0	47.7	50.8	53.4	55.8	57.2	73
100	19.6	25.4	30.9	35.9	40.6	44.9	48.9	52.4	55.5	61.0	62.4	73	
18	40	21.2	27.4	31.8							34.2	35.9	70
	50	22.2	28.9	34.3	38.5	41.2					41.4	43.0	71
	60	22.9	29.8	35.7	40.7	44.7	47.6				48.3	49.8	72
	70	23.3	30.4	36.7	42.2	46.9	50.8	53.7			55.0	56.4	72
	80	23.7	30.8	37.4	43.2	48.4	52.9	56.7	59.6		61.5	62.9	73
	90	23.9	31.2	37.9	44.0	49.5	54.5	58.8	62.5	65.5	68.0	69.3	73
100	24.1	31.4	38.3	44.6	50.4	55.7	60.4	64.6	68.3	74.4	75.7	73	
20	50	27.1	35.2	41.8	46.7	49.8					50.1	51.5	71
	60	27.8	36.3	43.6	49.6	54.3	57.5				58.3	59.6	72
	70	28.3	37.0	44.8	51.4	57.1	61.6	64.9			66.2	67.6	72
	80	28.7	37.6	45.6	52.7	59.0	64.3	68.7	72.0		74.0	75.3	73
	90	29.0	38.0	46.2	53.6	60.4	66.3	71.4	75.7	79.1	81.8	83.0	73
	100	29.2	38.3	46.6	54.4	61.4	67.8	73.5	78.4	82.7	89.4	90.6	73
22	50	32.5	42.3	50.2	56.0	59.4					59.6	61.0	71
	60	33.4	43.6	52.3	59.5	64.9	68.5				69.3	70.7	72
	70	34.0	44.5	53.7	61.7	68.3	73.6	77.3			78.7	80.0	72
	80	34.4	45.1	54.7	63.3	70.7	77.0	82.0	85.8		88.0	89.2	73
	90	34.7	45.5	55.4	64.4	72.4	79.4	85.4	90.4	94.2	97.1	98.3	73
	100	35.0	45.9	56.0	65.3	73.7	81.3	88.0	93.8	98.7	106.1	107.3	73
24	50	38.5	50.2	59.4	66.1	70.0					70.2	71.6	71
	60	39.5	51.7	62.0	70.3	76.6	80.7				81.5	82.8	72
	70	40.2	52.7	63.6	73.0	80.7	86.8	91.0			92.5	93.7	72
	80	40.7	53.4	64.8	74.9	83.6	90.9	96.7	101.0		103.3	104.5	73
	90	41.1	53.9	65.7	76.2	85.7	93.9	100.8	106.5	110.9	113.9	115.1	73
	100	41.3	54.3	66.3	77.3	87.2	96.1	103.9	110.7	116.3	124.5	125.6	73

\* Includes 1.0-foot stump allowance.

Table 54--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for pondcypress (species 222) in the Gulf and Atlantic Coastal Plain.<sup>a,b</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	2.4	2.8	3.2	3.6	4.1	4.7											
6	2.4	2.8	3.4	4.3	4.8	5.3	5.8	6.3									
7	2.6	3.2	4.2	5.0	5.7	6.4	7.0	7.6	8.1	8.7							
8	3.0	4.1	5.1	6.0	6.9	7.7	8.5	9.3	10.0	10.7	11.3	11.9					
9	3.5	4.8	6.1	7.3	8.4	9.4	10.3	11.3	12.1	13.0	13.8	14.6	15.4	16.1			
10	4.1	5.8	7.3	8.7	10.0	11.3	12.4	13.6	14.6	15.7	16.7	17.7	18.6	19.6	20.5	21.4	
11			8.7	10.3	11.9	13.4	14.8	16.2	17.5	18.7	19.9	21.1	22.3	23.4	24.5	25.6	26.7
12			10.2	12.2	14.0	15.8	17.4	19.0	20.6	22.1	23.5	24.9	26.3	27.6	29.0	30.3	31.6
13			11.9	14.2	16.3	18.4	20.3	22.2	24.0	25.7	27.4	29.1	30.7	32.3	33.8	35.4	36.9
14					18.9	21.2	23.5	25.6	27.7	29.7	31.7	33.6	35.5	37.3	39.1	40.9	42.7
15					21.6	24.3	26.9	29.4	31.7	34.0	36.3	38.5	40.6	42.7	44.8	46.9	48.9
16					24.5	27.6	30.5	33.4	36.1	38.7	41.2	43.7	46.2	48.6	50.9	53.3	55.6

<sup>a</sup> Includes 0.5-foot stump allowance.

<sup>b</sup> Based on Gulf and Atlantic Coastal Plain pondcypress form class.

Table 55--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for pondcypress (species 222) in the Gulf and Atlantic Coastal Plain.<sup>a,b</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	3.0	4.0	4.8	5.5	6.2	6.8											
6	3.0	3.9	4.7	5.5	6.3	7.1	7.9	8.6									
7	3.2	4.0	5.0	6.1	7.1	8.0	8.8	9.6	10.4	11.1							
8	3.5	4.4	5.7	7.0	8.1	9.2	10.2	11.1	12.0	12.9	13.8	14.6					
9	3.9	5.1	6.6	8.1	9.4	10.7	11.9	13.0	14.1	15.1	16.1	17.1	18.1	19.1			
10	4.4	5.9	7.7	9.4	11.0	12.5	13.9	15.2	16.5	17.7	18.9	20.1	21.2	22.4	23.5	24.6	
11			9.0	11.0	12.8	14.5	16.1	17.7	19.2	20.6	22.0	23.4	24.8	26.1	27.4	28.7	30.0
12			10.4	12.7	14.8	16.8	18.7	20.5	22.2	23.9	25.5	27.1	28.7	30.3	31.8	33.3	34.8
13			12.0	14.6	17.1	19.3	21.5	23.6	25.6	27.5	29.4	31.2	33.1	34.8	36.6	38.4	40.1
14					19.5	22.1	24.6	26.9	29.2	31.4	33.6	35.7	37.8	39.8	41.9	43.9	45.9
15					22.2	25.1	27.9	30.6	33.2	35.7	38.1	40.5	42.9	45.2	47.5	49.8	52.1
16					25.0	28.4	31.5	34.5	37.4	40.3	43.0	45.7	48.4	51.0	53.6	56.2	58.7

<sup>a</sup> Includes 0.5-foot stump allowance.

<sup>b</sup> Based on Gulf and Atlantic Coastal Plain pondcypress form class.

Table 56--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for all soft hardwoods combined (species 300) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
		Cubic feet											
12	40										4.5	9.2	56
	50										6.4	12.4	65
	60	8.8									10.0	15.2	70
	70	9.2									12.1	17.8	73
	80	9.4	12.7								14.0	20.3	75
	90	9.6	13.1								15.7	22.7	76
	100	9.7	13.3	16.5							17.3	25.0	77
14	40										7.8	12.6	56
	50	11.1									13.8	17.0	65
	60	11.9	15.7								17.4	20.9	70
	70	12.5	16.7	20.1							20.5	24.5	73
	80	12.8	17.3	21.1							23.4	27.9	75
	90	13.1	17.8	21.9	25.3						26.1	31.2	76
	100	13.3	18.1	22.5	26.2						28.7	34.4	77
16	50	14.4	18.6								19.9	22.3	65
	60	15.6	20.6	24.3							24.7	27.4	70
	70	16.3	21.8	26.3							28.9	32.1	73
	80	16.8	22.7	27.6	31.5						32.9	36.6	75
	90	17.1	23.3	28.6	33.0	36.4					36.7	40.9	76
	100	17.3	23.7	29.3	34.2	38.1					40.4	45.1	77
	110	17.5	24.0	29.9	35.0	39.4	42.9				44.0	49.2	78
18	50	18.3	23.5								26.3	28.3	65
	60	19.7	26.0	30.7							32.4	34.8	70
	70	20.6	27.6	33.2	37.3						38.0	40.8	73
	80	21.2	28.7	35.0	39.9						43.2	46.5	75
	90	21.7	29.5	36.2	41.8	46.1					48.2	52.0	76
	100	22.0	30.0	37.1	43.3	48.3	52.0				53.1	57.3	77
	110	22.2	30.4	37.9	44.4	49.9	54.4	57.7			57.8	62.5	78
20	50	22.6	29.1	33.2							33.2	35.0	65
	60	24.4	32.1	37.9							40.9	43.0	70
	70	25.5	34.1	41.1	46.0						47.9	50.5	73
	80	26.2	35.4	43.2	49.3	53.5					54.6	57.5	75
	90	26.8	36.4	44.7	51.7	57.0	60.6				60.9	64.3	76
	100	27.1	37.1	45.9	53.4	59.6	64.3				67.1	70.9	77
	110	27.4	37.6	46.8	54.8	61.6	67.1	71.2			73.1	77.3	78
22	60	29.5	38.9	45.9	50.1						50.2	52.2	70
	70	30.9	41.3	49.7	55.7						58.9	61.2	73
	80	31.8	42.9	52.3	59.7	64.8					67.0	69.7	75
	90	32.4	44.0	54.2	62.5	69.0	73.4				74.8	77.9	76
	100	32.8	44.9	55.5	64.7	72.1	77.8	81.7			82.4	85.9	77
	110	33.2	45.5	56.6	66.3	74.6	81.2	86.2	89.7			89.8	93.7
24	60	35.1	46.3	54.7	59.7						60.3	62.2	70
	70	36.7	49.2	59.2	66.3	70.5					70.8	72.9	73
	80	37.8	51.1	62.3	71.0	77.1					80.6	83.1	75
	90	38.6	52.4	64.5	74.4	82.1	87.4				90.0	92.8	76
	100	39.1	53.4	66.1	77.0	85.9	92.6	97.2			99.1	102.3	77
	110	39.5	54.2	67.4	79.0	88.8	96.7	102.6	106.8			108.1	111.6
26	60	41.3	54.4	64.2	70.0						71.3	73.0	70
	70	43.1	57.7	69.5	77.9	82.8					83.7	85.6	73
	80	44.4	60.0	73.1	83.4	90.6	94.8				95.3	97.6	75
	90	45.3	61.6	75.7	87.4	96.4	102.6	106.4			106.4	109.0	76
	100	45.9	62.7	77.6	90.4	100.8	108.7	114.1			117.3	120.2	77
	110	46.4	63.6	79.1	92.7	104.2	113.5	120.5	125.3			127.8	131.1

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 57--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for all soft hardwoods combined (species 300) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	30										7.6	10.9	68
	40	8.8									10.0	14.1	72
	50	9.1									11.5	17.1	73
	60	9.3	12.6								12.9	19.9	74
	70	9.5	12.8								14.2	22.7	75
	80	9.6	13.0								15.4	25.4	75
	90	9.6	13.1	16.2							16.6	28.1	76
14	40	11.9	15.7								16.0	18.9	72
	50	12.4	16.5								19.0	22.8	73
	60	12.7	17.1	20.6							21.7	26.6	74
	70	12.9	17.4	21.2							24.3	30.3	75
	80	13.0	17.6	21.7	25.1						26.8	33.8	75
	90	13.1	17.8	22.0	25.6	28.8					29.3	37.4	76
	100	13.2	17.9	22.2	26.0	29.4					31.8	40.9	76
16	40	15.6	20.4								22.3	24.5	72
	50	16.2	21.6	25.6							26.6	29.5	73
	60	16.6	22.3	26.9	30.3						30.7	34.3	74
	70	16.9	22.7	27.7	31.7						34.6	39.0	75
	80	17.0	23.0	28.3	32.7	36.3					38.4	43.6	75
	90	17.2	23.3	28.7	33.4	37.5	40.8				42.1	48.1	76
	100	17.3	23.4	29.0	33.9	38.3	42.1	45.2			45.8	52.6	76
18	40	19.8	25.9								29.1	30.8	72
	50	20.6	27.3	32.3							34.8	37.1	73
	60	21.0	28.2	33.9	38.3						40.2	43.1	74
	70	21.4	28.8	35.0	40.1	43.9					45.4	48.9	75
	80	21.6	29.2	35.7	41.3	45.9	49.5				50.5	54.6	75
	90	21.8	29.5	36.3	42.2	47.3	51.5	54.9			55.6	60.2	76
	100	21.9	29.7	36.7	42.9	48.4	53.1	57.0	60.2		60.5	65.8	76
20	40	24.4	31.9	36.3							36.5	37.8	72
	50	25.4	33.8	39.8	43.7						43.7	45.5	73
	60	26.0	34.8	41.9	47.1						50.6	52.8	74
	70	26.4	35.5	43.2	49.4	54.1					57.2	59.9	75
	80	26.7	36.0	44.1	50.9	56.5	60.9				63.7	66.9	75
	90	26.9	36.4	44.8	52.1	58.3	63.4	67.5			70.1	73.8	76
	100	27.0	36.6	45.3	52.9	59.6	65.4	70.2	74.1		76.4	80.6	76
22	50	30.8	40.9	48.2	52.8						53.4	54.8	73
	60	31.5	42.2	50.6	57.0	61.2					61.8	63.6	74
	70	32.0	43.0	52.3	59.7	65.4	69.3				69.9	72.1	75
	80	32.3	43.6	53.4	61.6	68.3	73.5	77.2			77.9	80.5	75
	90	32.5	44.0	54.2	63.0	70.5	76.6	81.5	85.1		85.7	88.7	76
	100	32.7	44.4	54.8	64.0	72.1	79.0	84.8	89.4	92.9		93.5	96.9
24	50	36.6	48.6	57.3	62.7						63.9	65.1	73
	60	37.5	50.2	60.3	67.7	72.6					73.9	75.5	74
	70	38.1	51.2	62.2	71.0	77.7	82.3				83.7	85.5	75
	80	38.5	51.9	63.5	73.3	81.2	87.3	91.7			93.2	95.4	75
	90	38.8	52.4	64.5	74.9	83.8	91.1	96.8	101.0		102.6	105.2	76
	100	39.0	52.8	65.2	76.2	85.8	93.9	100.7	106.1	110.2		112.0	114.8
26	50	43.0	57.1	67.2	73.5						75.2	76.2	73
	60	44.0	58.9	70.7	79.4	85.1					87.0	88.3	74
	70	44.7	60.1	73.0	83.3	91.1	96.4				98.5	100.1	75
	80	45.2	60.9	74.5	85.9	95.2	102.4	107.4			109.8	111.6	75
	90	45.5	61.5	75.7	87.9	98.3	106.8	113.4	118.3		120.9	123.0	76
	100	45.8	62.0	76.5	89.4	100.6	110.1	118.0	124.4	129.1		131.9	134.3

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 58--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 9-inch d.o.b. top and height to a saw-log top for all soft hardwoods combined (species 300) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Height to 9-inch d.o.b. top	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
12	20	8.3									9.5	15.5	70
	30	9.0	12.2								14.1	19.4	74
	40	9.3	12.7	15.9							18.5	23.7	75
	50	9.5	13.0	16.3	19.5	22.4					22.8	28.1	76
	60	9.6	13.2	16.6	19.9	23.0	26.0				27.0	32.5	76
	70	9.7	13.3	16.7	20.1	23.3	26.5	29.5			31.2	36.8	76
	80	9.7	13.3	16.8	20.3	23.6	26.8	29.9	32.9		35.4	41.1	76
14	40	12.7	17.2	21.1							23.9	28.0	75
	50	12.9	17.6	21.8	25.6	28.8					29.2	33.3	76
	60	13.1	17.8	22.3	26.3	30.0	33.3				34.3	38.6	76
	70	13.2	18.0	22.5	26.8	30.7	34.4	37.6			39.5	43.8	76
	80	13.2	18.1	22.7	27.1	31.2	35.1	38.7	42.0		44.6	49.0	76
	90	13.3	18.2	22.9	27.4	31.6	35.6	39.4	43.0	46.3	49.7	54.2	76
	100	13.3	18.3	23.0	27.5	31.9	36.0	40.0	43.8	47.3	54.7	59.3	76
16	40	16.6	22.4	27.0							30.1	33.5	75
	50	16.9	22.9	28.2	32.6	36.1					36.5	39.9	76
	60	17.1	23.3	28.8	33.8	38.1	41.7				42.8	46.3	76
	70	17.2	23.5	29.3	34.5	39.3	43.5	47.1			49.0	52.6	76
	80	17.3	23.6	29.5	35.0	40.1	44.7	48.8	52.5		55.2	58.8	76
	90	17.4	23.8	29.8	35.4	40.7	45.6	50.1	54.1	57.8	61.3	65.0	76
	100	17.4	23.8	29.9	35.7	41.1	46.2	51.0	55.4	59.4	67.5	71.2	76
18	40	21.0	28.2	33.8							37.1	40.1	75
	50	21.4	29.0	35.4	40.6	44.5					44.8	47.8	76
	60	21.7	29.4	36.3	42.3	47.3	51.2				52.4	55.3	76
	70	21.8	29.7	36.9	43.3	49.0	53.8	57.8			59.8	62.8	76
	80	21.9	29.9	37.3	44.0	50.1	55.6	60.3	64.4		67.2	70.3	76
	90	22.0	30.1	37.5	44.5	50.9	56.8	62.1	66.8	70.8	74.6	77.7	76
	100	22.1	30.2	37.8	44.9	51.6	57.7	63.4	68.6	73.2	81.9	85.1	76
20	40	25.9	34.8	41.3							45.0	47.6	75
	50	26.4	35.7	43.4	49.5	53.8					54.1	56.7	76
	60	26.8	36.3	44.6	51.7	57.5	61.9				63.1	65.7	76
	70	27.0	36.7	45.4	53.1	59.8	65.4	69.8			71.9	74.5	76
	80	27.1	36.9	45.9	54.0	61.3	67.7	73.2	77.6		80.6	83.3	76
	90	27.2	37.1	46.3	54.7	62.4	69.4	75.6	80.9	85.4	89.3	92.1	76
	100	27.3	37.2	46.5	55.2	63.2	70.6	77.3	83.3	88.6	98.0	100.8	76
22	50	32.0	43.2	52.4	59.4	64.0					64.4	66.7	76
	60	32.4	43.9	53.8	62.2	68.8	73.6				74.9	77.2	76
	70	32.7	44.3	54.8	63.9	71.7	78.1	83.0			85.2	87.6	76
	80	32.8	44.7	55.4	65.1	73.7	81.1	87.4	92.3		95.5	97.9	76
	90	33.0	44.9	55.9	66.0	75.1	83.3	90.4	96.5	101.5	105.7	108.1	76
	100	33.1	45.1	56.2	66.6	76.2	84.9	92.7	99.7	105.7	115.8	118.3	76
	24	50	38.1	51.4	62.1	70.2	75.3					75.7	77.8
60		38.6	52.2	63.9	73.6	81.2	86.5				87.8	90.0	76
70		38.9	52.8	65.1	75.8	84.8	92.1	97.6			99.8	102.0	76
80		39.1	53.1	65.9	77.3	87.3	95.8	102.9	108.4		111.7	113.9	76
90		39.3	53.4	66.4	78.3	89.0	98.5	106.7	113.7	119.2	123.6	125.8	76
100		39.4	53.6	66.9	79.1	90.3	100.5	109.6	117.5	124.3	135.4	137.6	76
26		50	44.8	60.3	72.7	81.9	87.5					87.9	89.9
	60	45.3	61.3	74.9	86.1	94.7	100.6				101.9	103.9	76
	70	45.7	61.9	76.3	88.7	99.1	107.4	113.3			115.7	117.7	76
	80	45.9	62.4	77.2	90.5	102.0	111.8	119.9	125.9		129.4	131.4	76
	90	46.1	62.7	77.9	91.7	104.1	115.0	124.4	132.3	138.4	143.0	145.1	76
	100	46.3	63.0	78.4	92.7	105.7	117.5	127.9	137.0	144.6	156.6	158.6	76

\* Includes 1.0-foot stump allowance.

Table 59--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for all soft hardwoods combined (species 300) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<b>Inches</b>	<b>Cubic feet</b>																
5	0.9	0.9	1.0	1.2	1.1	1.3											
6	1.5	2.1	2.4	2.7	2.7	3.0	3.3	3.6									
7	2.8	3.1	3.6	4.0	4.0	4.5	4.9	5.4	5.8	6.1							
8	3.8	4.2	4.8	5.4	5.5	6.1	6.7	7.2	7.8	8.3	8.8	9.3					
9	4.8	5.4	6.2	6.9	7.1	7.9	8.6	9.3	10.0	10.7	11.4	12.0	12.7	13.3			
10	6.0	6.7	7.7	8.6	8.8	9.8	10.8	11.7	12.6	13.4	14.3	15.1	15.9	16.7	17.5	18.2	
11			9.4	10.5	10.8	12.0	13.1	14.3	15.3	16.4	17.4	18.4	19.4	20.4	21.3	22.3	23.2
12			11.2	12.6	12.9	14.4	15.7	17.1	18.4	19.6	20.9	22.1	23.2	24.4	25.6	26.7	27.8
13			13.2	14.8	15.2	16.9	18.6	20.1	21.7	23.1	24.6	26.0	27.4	28.8	30.1	31.5	32.8
14					17.7	19.7	21.6	23.4	25.2	26.9	28.6	30.3	31.9	33.5	35.1	36.6	38.2
15					20.4	22.7	24.9	27.0	29.0	31.0	32.9	34.9	36.7	38.6	40.4	42.2	44.0
16					23.2	25.8	28.3	30.8	33.1	35.4	37.6	39.7	41.9	44.0	46.1	48.1	50.1

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 60--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for all soft hardwoods combined (species 300) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<b>Inches</b>	<b>Cubic feet</b>																
5	1.9	2.4	2.7	2.9	3.3	3.7											
6	2.3	2.9	3.5	3.8	4.3	4.8	5.3	5.8									
7	2.9	3.6	4.2	4.9	5.5	6.2	6.8	7.4	8.0	8.6							
8	3.7	4.3	5.4	6.2	7.0	7.7	8.5	9.2	9.9	10.7	11.4	12.1					
9	4.6	5.4	6.7	7.6	8.6	9.5	10.4	11.3	12.2	13.0	13.9	14.7	15.6	16.4			
10	5.6	6.6	8.1	9.3	10.4	11.5	12.6	13.6	14.7	15.7	16.7	17.7	18.7	19.7	20.7	21.7	
11			9.7	11.1	12.4	13.7	15.0	16.2	17.4	18.6	19.8	21.0	22.2	23.3	24.5	25.6	26.8
12			11.5	13.1	14.6	16.1	17.6	19.1	20.5	21.9	23.2	24.6	26.0	27.3	28.7	30.0	31.3
13			13.4	15.2	17.0	18.8	20.5	22.1	23.8	25.4	27.0	28.5	30.1	31.7	33.2	34.7	36.3
14					19.6	21.6	23.6	25.5	27.3	29.2	31.0	32.8	34.6	36.3	38.1	39.9	41.6
15					22.4	24.7	26.9	29.0	31.2	33.2	35.3	37.3	39.4	41.4	43.4	45.4	47.4
16					25.4	28.0	30.4	32.9	35.3	37.6	39.9	42.2	44.5	46.8	49.0	51.3	53.5

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 61--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for sweetgum (species 611) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	Cubic feet		Percent
12	40										4.2	9.9	62
	50	8.1									8.9	13.2	70
	60	8.7									11.5	16.2	74
	70	9.2	12.5								13.7	19.0	76
	80	9.4	13.0								15.6	21.6	78
	90	9.7	13.4	16.6							17.4	24.2	79
	100	9.8	13.6	17.0						19.2	26.6	79	
14	40	9.7									11.0	13.6	62
	50	11.1	14.8								15.4	18.2	70
	60	11.9	16.2								19.0	22.3	74
	70	12.5	17.1	20.9							22.3	26.1	76
	80	12.9	17.8	21.9	25.3						25.4	29.7	78
	90	13.2	18.2	22.7	26.4						28.3	33.2	79
	100	13.4	18.6	23.2	27.2	30.6				31.2	36.6	79	
16	50	14.5	19.3								21.7	23.9	70
	60	15.7	21.2	25.4							26.7	29.3	74
	70	16.4	22.4	27.4	31.0						31.2	34.3	76
	80	16.9	23.3	28.7	33.0						35.5	39.0	78
	90	17.3	23.9	29.7	34.5	38.4					39.6	43.6	79
	100	17.6	24.3	30.4	35.6	40.0	43.4				43.5	48.1	79
	110	17.8	24.7	30.9	36.5	41.3	45.2			47.4	52.5	80	
18	50	18.4	24.5								28.5	30.3	70
	60	19.9	26.9	32.2							34.9	37.2	74
	70	20.8	28.4	34.7	39.3						40.8	43.5	76
	80	21.5	29.5	36.4	41.9	45.8					46.4	49.6	78
	90	22.0	30.3	37.6	43.7	48.6					51.8	55.4	79
	100	22.3	30.9	38.5	45.1	50.7	55.0				57.0	61.1	79
	110	22.6	31.3	39.2	46.2	52.3	57.2	61.0		62.1	66.6	80	
20	50	22.8	30.3	35.3							35.9	37.5	70
	60	24.6	33.2	39.8	44.0						44.0	46.0	74
	70	25.7	35.1	42.9	48.6						51.4	53.9	76
	80	26.6	36.5	44.9	51.7	56.6					58.5	61.4	78
	90	27.2	37.4	46.5	54.1	60.1	64.3				65.3	68.6	79
	100	27.6	38.1	47.6	55.8	62.6	67.9	71.6			71.9	75.6	79
	110	28.0	38.7	48.5	57.1	64.6	70.7	75.4		78.4	82.5	80	
22	60	29.8	40.3	48.3	53.3						53.9	55.8	74
	70	31.2	42.6	51.9	58.8	63.0					63.1	65.3	76
	80	32.2	44.2	54.4	62.7	68.6					71.8	74.4	78
	90	32.9	45.3	56.3	65.5	72.7	77.8				80.1	83.1	79
	100	33.5	46.2	57.6	67.6	75.8	82.2	86.7			88.3	91.6	79
	110	33.9	46.9	58.7	69.2	78.2	85.6	91.3	95.3		96.2	100.0	80
24	60	35.5	47.9	57.5	63.4						64.8	66.5	74
	70	37.2	50.7	61.8	70.0	75.0					75.8	77.9	76
	80	38.4	52.6	64.8	74.6	81.7	85.9				86.3	88.7	78
	90	39.2	54.0	67.0	78.0	86.6	92.7				96.3	99.1	79
	100	39.9	55.1	68.7	80.5	90.3	97.9	103.2			106.1	109.2	79
	110	40.4	55.9	69.9	82.4	93.1	102.0	108.7	113.5		115.7	119.1	80
26	60	41.7	56.3	67.5	74.5						76.5	78.1	74
	70	43.7	59.6	72.6	82.2	88.1					89.6	91.5	76
	80	45.1	61.8	76.1	87.6	95.9	100.9				101.9	104.2	78
	90	46.1	63.5	78.7	91.6	101.7	108.8	113.2			113.8	116.4	79
	100	46.9	64.7	80.6	94.5	106.0	115.0	121.2	125.2		125.4	128.3	79
	110	47.5	65.6	82.1	96.8	109.4	119.7	127.7	133.3		136.7	139.9	80

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 62--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for sweetgum (species 611) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)										9-inch d.o.b. top	
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			
Inches	Feet	Cubic feet											Percent
12	30	7.7									7.9	10.6	69
	40	8.6									10.4	14.3	74
	50	9.1	12.4								12.5	17.8	76
	60	9.4	12.9								14.4	21.0	77
	70	9.6	13.2								16.2	24.2	78
	80	9.8	13.4	16.7							17.9	27.3	79
	90	9.9	13.6	17.0						19.6	30.3	79	
14	40	11.7	15.7								16.5	19.3	74
	50	12.4	16.9								20.2	23.8	76
	60	12.8	17.6	21.4							23.6	28.1	77
	70	13.1	18.0	22.2	25.7						26.8	32.3	78
	80	13.3	18.3	22.8	26.6	29.8					30.0	36.4	79
	90	13.5	18.6	23.2	27.2	30.7					33.0	40.4	79
	100	13.6	18.8	23.5	27.7	31.5	34.7			36.0	44.4	79	
16	40	15.3	20.5								23.0	25.0	74
	50	16.2	22.0	26.4							28.2	30.8	76
	60	16.8	23.0	28.0	31.8						33.0	36.4	77
	70	17.2	23.6	29.0	33.5	37.0					37.7	41.7	78
	80	17.5	24.0	29.7	34.7	38.8	42.0				42.2	46.9	79
	90	17.7	24.3	30.3	35.5	40.0	43.9				46.7	52.1	79
	100	17.8	24.6	30.7	36.2	41.0	45.2	48.8		51.1	57.2	79	
18	40	19.5	26.0								29.9	31.4	74
	50	20.6	27.9	33.4							36.7	38.8	76
	60	21.3	29.1	35.4	40.2						43.1	45.7	77
	70	21.8	29.9	36.7	42.3	46.7					49.3	52.4	78
	80	22.2	30.4	37.7	43.8	49.0	53.0				55.3	58.9	79
	90	22.4	30.8	38.3	44.9	50.6	55.4	59.2			61.2	65.3	79
	100	22.6	31.2	38.9	45.8	51.9	57.1	61.6	65.3	67.0	71.7	79	
20	40	24.1	32.1	37.0							37.5	38.7	74
	50	25.5	34.5	41.2	45.5						46.0	47.6	76
	60	26.4	36.0	43.7	49.6	53.6					54.1	56.1	77
	70	27.0	36.9	45.4	52.2	57.6	61.4				61.9	64.3	78
	80	27.4	37.6	46.5	54.1	60.4	65.3	69.0			69.5	72.3	79
	90	27.7	38.1	47.4	55.5	62.4	68.2	72.9	76.4		76.9	80.2	79
	100	28.0	38.5	48.0	56.5	64.0	70.5	75.9	80.4	83.8	84.2	87.9	79
22	50	30.9	41.8	49.8	55.0						56.2	57.5	76
	60	31.9	43.5	52.9	60.0	64.8					66.0	67.6	77
	70	32.7	44.7	54.9	63.2	69.6	74.1				75.5	77.5	78
	80	33.2	45.6	56.3	65.4	73.0	78.9	83.3			84.8	87.1	79
	90	33.6	46.2	57.3	67.1	75.5	82.5	88.1	92.2		93.9	96.5	79
	100	33.9	46.6	58.1	68.4	77.4	85.2	91.7	97.0	101.1	102.9	105.9	79
24	50	36.8	49.8	59.3	65.4						67.2	68.2	76
	60	38.1	51.9	63.0	71.3	77.0					78.9	80.3	77
	70	38.9	53.3	65.4	75.2	82.8	88.1				90.3	91.9	78
	80	39.6	54.3	67.0	77.9	86.8	93.8	98.9			101.4	103.3	79
	90	40.1	55.0	68.3	79.9	89.8	98.1	104.6	109.6		112.3	114.5	79
	100	40.4	55.6	69.2	81.4	92.1	101.3	109.0	115.3	120.1	123.1	125.5	79
26	50	43.2	58.4	69.6	76.7						79.0	79.9	76
	60	44.7	60.9	73.9	83.7	90.2					92.9	94.0	77
	70	45.7	62.6	76.7	88.2	97.1	103.3				106.3	107.6	78
	80	46.5	63.7	78.7	91.4	101.8	110.0	115.9			119.3	120.9	79
	90	47.1	64.6	80.2	93.7	105.4	115.0	122.7	128.4	132.1	132.2	134.0	79
	100	47.5	65.3	81.3	95.5	108.1	118.8	127.9	135.1	140.7	144.8	146.9	79

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 63--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 9-inch d.o.b. top and height to a saw-log top for sweetgum (species 611) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Height to 9-inch d.o.b. top	Volume to											Girard Form Class	
		Saw-log merchantable height (16-foot logs)										9-inch d.o.b. top		4-inch d.o.b. top
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0				
Inches	Feet	Cubic feet											Percent	
12	20	7.4										8.5	15.0	67
	30	8.7	12.0									13.9	19.2	75
	40	9.3	12.9	16.2								18.9	24.1	77
	50	9.6	13.4	16.9	20.2	23.3						23.6	29.0	78
	60	9.8	13.7	17.3	20.8	24.1	27.2					28.3	33.9	79
	70	10.0	13.9	17.6	21.2	24.7	27.9	31.0				32.8	38.7	79
	80	10.1	14.0	17.8	21.5	25.0	28.4	31.7	34.8			37.4	43.4	80
14	40	12.7	17.4	21.5								24.4	28.2	77
	50	13.1	18.1	22.7	26.7	30.0						30.4	34.2	78
	60	13.4	18.6	23.3	27.7	31.6	35.0					36.1	40.2	79
	70	13.6	18.8	23.8	28.4	32.6	36.5	39.9				41.8	46.0	79
	80	13.7	19.0	24.1	28.8	33.3	37.4	41.3	44.7			47.4	51.8	80
	90	13.9	19.2	24.3	29.1	33.8	38.1	42.2	46.0	49.5		53.0	57.5	80
	100	13.9	19.3	24.5	29.4	34.1	38.6	42.9	47.0	50.7		58.5	63.2	80
16	40	16.6	22.7	27.7								30.9	33.8	77
	50	17.2	23.6	29.3	34.1	37.8						38.2	41.2	78
	60	17.5	24.2	30.2	35.6	40.3	44.1					45.2	48.3	79
	70	17.8	24.6	30.9	36.6	41.8	46.3	50.2				52.2	55.4	79
	80	18.0	24.8	31.3	37.3	42.8	47.8	52.3	56.2			59.0	62.4	80
	90	18.1	25.0	31.6	37.8	43.5	48.9	53.8	58.2	62.1		65.8	69.3	80
	100	18.2	25.2	31.8	38.1	44.1	49.7	54.9	59.7	64.1		72.6	76.2	80
18	40	21.0	28.7	34.6								38.2	40.5	77
	50	21.7	29.9	36.8	42.5	46.6						47.0	49.4	78
	60	22.2	30.6	38.1	44.6	50.1	54.3					55.5	58.0	79
	70	22.5	31.1	38.9	45.9	52.2	57.5	61.8				63.9	66.5	79
	80	22.8	31.4	39.5	46.9	53.6	59.6	64.8	69.2			72.2	74.9	80
	90	22.9	31.7	39.9	47.5	54.6	61.1	66.9	72.0	76.5		80.4	83.2	80
	100	23.1	31.9	40.2	48.0	55.4	62.2	68.4	74.1	79.3		88.6	91.5	80
20	40	25.9	35.3	42.4								46.4	48.3	77
	50	26.9	36.8	45.2	51.9	56.5						56.9	58.9	78
	60	27.5	37.8	46.9	54.7	61.0	65.8					67.1	69.2	79
	70	27.9	38.4	47.9	56.4	63.8	70.0	74.8				77.1	79.2	79
	80	28.1	38.8	48.6	57.6	65.6	72.7	78.8	83.7			86.9	89.2	80
	90	28.4	39.1	49.2	58.5	67.0	74.7	81.6	87.5	92.5		96.7	99.0	80
	100	28.5	39.4	49.6	59.1	68.0	76.2	83.6	90.3	96.2		106.4	108.8	80
22	50	32.5	44.6	54.6	62.3	67.4						67.8	69.5	78
	60	33.3	45.7	56.6	65.8	73.2	78.5					79.8	81.6	79
	70	33.7	46.4	57.9	68.0	76.6	83.8	89.2				91.6	93.4	79
	80	34.1	47.0	58.8	69.5	79.0	87.3	94.3	99.8			103.2	105.1	80
	90	34.4	47.4	59.4	70.6	80.7	89.8	97.8	104.6	110.2		114.7	116.7	80
	100	34.6	47.7	59.9	71.4	82.0	91.6	100.4	108.2	114.9		126.1	128.2	80
	24	50	38.8	53.0	64.8	73.7	79.4						79.8	81.3
60		39.6	54.4	67.2	78.0	86.5	92.4					93.8	95.3	79
70		40.2	55.3	68.8	80.6	90.7	98.9	105.0				107.5	109.1	79
80		40.6	55.9	69.9	82.5	93.6	103.2	111.2	117.4			121.0	122.7	80
90		40.9	56.4	70.7	83.8	95.7	106.3	115.6	123.4	129.7		134.5	136.2	80
100		41.2	56.8	71.3	84.8	97.3	108.6	118.8	127.8	135.5		147.8	149.5	80
26		50	45.5	62.2	75.9	86.1	92.4						92.8	94.1
	60	46.5	63.8	78.8	91.2	100.9	107.5					109.0	110.4	79
	70	47.2	64.9	80.7	94.4	106.1	115.4	122.2				124.8	126.2	79
	80	47.7	65.7	82.0	96.6	109.5	120.6	129.7	136.6			140.4	141.9	80
	90	48.1	66.2	82.9	98.2	112.0	124.3	134.9	143.8	150.8		155.9	157.4	80
	100	48.4	66.6	83.7	99.4	113.9	127.0	138.8	149.0	157.8		171.3	172.8	80

\* Includes 1.0-foot stump allowance.

Table 64--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for sweetgum (species 611) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.6	0.6	0.7	0.9	1.5	1.7											
6	1.2	1.9	2.2	2.5	2.9	3.2	3.5	3.9									
7	2.5	2.8	3.3	3.8	4.3	4.8	5.2	5.7	6.1	6.5							
8	3.4	3.9	4.5	5.1	5.8	6.5	7.1	7.7	8.2	8.8	9.4	9.9					
9	4.4	5.0	5.8	6.7	7.5	8.3	9.1	9.9	10.7	11.4	12.1	12.8	13.5	14.2			
10	5.5	6.3	7.3	8.3	9.4	10.4	11.4	12.4	13.3	14.3	15.2	16.0	16.9	17.7	18.6	19.4	
11			8.9	10.2	11.5	12.8	14.0	15.2	16.3	17.4	18.5	19.6	20.6	21.7	22.7	23.7	24.7
12			10.7	12.2	13.7	15.3	16.8	18.2	19.5	20.9	22.2	23.5	24.7	26.0	27.2	28.4	29.6
13			12.6	14.4	16.2	18.0	19.8	21.4	23.1	24.6	26.2	27.7	29.2	30.7	32.1	33.6	35.0
14					18.9	21.0	23.0	25.0	26.9	28.7	30.5	32.3	34.0	35.7	37.4	39.1	40.7
15					21.7	24.2	26.5	28.7	30.9	33.0	35.1	37.1	39.1	41.1	43.1	45.0	46.9
16					24.8	27.6	30.2	32.8	35.3	37.7	40.0	42.4	44.6	46.9	49.1	51.3	53.5

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 65--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for sweetgum (species 611) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.7	2.1	2.5	2.7	3.2	3.6											
6	2.0	2.6	3.3	3.7	4.2	4.8	5.3	5.9									
7	2.6	3.3	4.0	4.8	5.5	6.2	6.9	7.6	8.2	8.9							
8	3.3	4.0	5.1	6.1	7.0	7.8	8.7	9.5	10.3	11.1	11.9	12.7					
9	4.2	5.0	6.3	7.5	8.6	9.7	10.7	11.7	12.7	13.7	14.6	15.6	16.5	17.5			
10	5.1	6.1	7.7	9.2	10.5	11.8	13.0	14.2	15.4	16.5	17.7	18.8	19.9	21.0	22.1	23.2	
11			9.2	11.0	12.6	14.1	15.5	16.9	18.3	19.7	21.0	22.4	23.7	25.0	26.3	27.6	28.9
12			10.9	13.0	14.8	16.6	18.3	19.9	21.6	23.2	24.7	26.3	27.8	29.4	30.9	32.4	33.9
13			12.8	15.2	17.3	19.3	21.3	23.2	25.1	26.9	28.7	30.5	32.3	34.1	35.8	37.6	39.3
14					20.0	22.3	24.6	26.7	28.9	31.0	33.1	35.1	37.2	39.2	41.2	43.2	45.2
15					22.8	25.5	28.0	30.5	33.0	35.4	37.7	40.1	42.4	44.7	47.0	49.2	51.5
16					25.9	28.9	31.8	34.6	37.4	40.1	42.7	45.4	48.0	50.6	53.1	55.7	58.2

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 66--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for yellow-poplar (species 621) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
<u>Inches</u>	<u>Feet</u>	<u>Cubic feet</u>										<u>Percent</u>	
12	40										4.5	9.7	61
	50	8.2									8.6	13.0	69
	60	8.8									11.2	16.0	74
	70	9.2	12.6								13.4	18.7	76
	80	9.4	13.0								15.3	21.3	78
	90	9.6	13.4	16.6							17.1	23.8	79
100	9.8	13.6	17.0							18.8	26.2	80	
14	40	9.7									10.4	13.3	61
	50	11.1	14.7								14.9	17.8	69
	60	12.0	16.2								18.6	21.9	74
	70	12.5	17.1	20.8							21.8	25.7	76
	80	12.9	17.8	21.9							24.8	29.2	78
	90	13.1	18.2	22.6	26.3						27.7	32.7	79
100	13.3	18.5	23.2	27.2	30.4					30.4	36.0	80	
16	50	14.6	19.2								21.1	23.4	69
	60	15.7	21.2	25.2							26.0	28.7	74
	70	16.4	22.4	27.2							30.5	33.7	76
	80	16.8	23.2	28.6	32.8						34.7	38.4	78
	90	17.1	23.8	29.6	34.3	38.0					38.7	42.9	79
	100	17.4	24.2	30.3	35.5	39.7					42.5	47.3	80
110	17.5	24.5	30.8	36.4	41.0	44.8				46.3	51.6	81	
18	50	18.4	24.3								27.8	29.7	69
	60	19.8	26.8	31.9							34.1	36.5	74
	70	20.7	28.3	34.5	38.9						39.9	42.7	76
	80	21.3	29.4	36.2	41.5	45.3					45.4	48.7	78
	90	21.7	30.1	37.4	43.5	48.1					50.7	54.4	79
	100	22.0	30.7	38.4	44.9	50.3	54.3				55.8	60.0	80
110	22.2	31.1	39.1	46.0	52.0	56.7	60.3			60.8	65.5	81	
20	50	22.8	30.1	34.7							35.0	36.7	69
	60	24.5	33.1	39.5							43.0	45.1	74
	70	25.6	35.0	42.6	48.0						50.3	52.9	76
	80	26.3	36.3	44.7	51.3	55.9					57.3	60.2	78
	90	26.8	37.2	46.2	53.7	59.4	63.4				63.9	67.3	79
	100	27.2	37.9	47.4	55.5	62.1	67.1				70.4	74.2	80
110	27.5	38.4	48.2	56.9	64.2	70.1	74.5			76.8	81.0	81	
22	60	29.7	40.1	47.8	52.4						52.7	54.7	74
	70	31.0	42.4	51.5	58.1						61.7	64.1	76
	80	31.9	43.9	54.1	62.1	67.6					70.3	73.0	78
	90	32.5	45.1	56.0	65.0	71.9	76.7				78.5	81.6	79
	100	32.9	45.9	57.3	67.2	75.2	81.2	85.4			86.5	90.0	80
	110	33.2	46.5	58.4	68.8	77.7	84.8	90.1	93.9		94.3	98.2	81
24	60	35.3	47.7	56.9	62.4						63.3	65.1	74
	70	36.9	50.5	61.3	69.1	73.7					74.2	76.3	76
	80	37.9	52.3	64.4	73.9	80.5					84.5	87.0	78
	90	38.7	53.6	66.6	77.4	85.6	91.3				94.4	97.2	79
	100	39.2	54.6	68.3	79.9	89.5	96.7	101.7			104.0	107.2	80
	110	39.6	55.3	69.5	81.9	92.5	100.9	107.3	111.7		113.4	116.9	81
26	60	41.5	56.0	66.8	73.2						74.8	76.5	74
	70	43.3	59.2	72.0	81.2	86.5					87.7	89.7	76
	80	44.5	61.4	75.6	86.8	94.5	99.2				99.8	102.1	78
	90	45.4	63.0	78.2	90.8	100.5	107.2	111.3			111.5	114.2	79
	100	46.0	64.1	80.1	93.8	105.0	113.5	119.3			122.9	125.9	80
	110	46.5	65.0	81.6	96.2	108.5	118.5	125.9	131.1		134.1	137.4	81

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 67--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for yellow-poplar (species 621) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										9-inch d.o.b. top	4-inch d.o.b. top	Girard Form Class
		Saw-log merchantable height (16-foot logs)												
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0				
Inches	Feet	Cubic feet										Percent		
12	30	8.3									9.0	11.3	72	
	40	8.9									11.1	14.8	76	
	50	9.3	12.7								12.9	18.0	78	
	60	9.5	13.1								14.6	21.0	79	
	70	9.6	13.3								16.2	24.0	79	
	80	9.7	13.5	16.8							17.8	26.9	80	
	90	9.8	13.6	17.0						19.3	29.9	80		
14	40	12.2	16.4								17.2	19.9	76	
	50	12.7	17.3								20.5	24.1	78	
	60	12.9	17.8	21.7							23.5	28.1	79	
	70	13.1	18.1	22.3	25.8						26.5	32.0	79	
	80	13.2	18.4	22.8	26.6						29.4	35.9	80	
	90	13.3	18.5	23.1	27.2	30.6					32.2	39.7	80	
	100	13.4	18.7	23.4	27.6	31.3	34.5			35.0	43.5	80		
16	40	15.9	21.4								23.7	25.7	76	
	50	16.6	22.6	26.9							28.4	31.1	78	
	60	16.9	23.3	28.3	32.1						32.8	36.3	79	
	70	17.2	23.7	29.2	33.6	37.0					37.1	41.3	79	
	80	17.3	24.0	29.8	34.6	38.6					41.3	46.3	80	
	90	17.4	24.2	30.2	35.4	39.8	43.5				45.5	51.1	80	
	100	17.5	24.4	30.5	36.0	40.8	44.9	48.3		49.6	56.0	80		
18	40	20.2	27.0								30.8	32.3	76	
	50	21.0	28.6	34.0							37.0	39.1	78	
	60	21.4	29.4	35.8	40.5						42.8	45.5	79	
	70	21.7	30.0	36.9	42.4	46.6					48.5	51.8	79	
	80	22.0	30.4	37.7	43.8	48.7	52.6				54.1	58.0	80	
	90	22.1	30.7	38.2	44.8	50.3	54.9	58.5			59.6	64.1	80	
	100	22.2	30.9	38.6	45.5	51.5	56.6	60.9	64.3	65.1	70.1	80		
20	40	25.0	33.4	38.2							38.5	39.8	76	
	50	25.9	35.3	42.0	46.1						46.3	48.0	78	
	60	26.5	36.4	44.1	49.9	53.7					53.7	55.9	79	
	70	26.9	37.1	45.5	52.3	57.4					60.9	63.6	79	
	80	27.1	37.5	46.5	54.0	60.1	64.8				68.0	71.1	80	
	90	27.3	37.9	47.2	55.2	62.0	67.6	72.0			74.9	78.5	80	
	100	27.5	38.1	47.7	56.2	63.5	69.8	75.0	79.1	81.9	85.9	80		
22	50	31.4	42.7	50.7	55.7						56.5	57.9	78	
	60	32.1	44.0	53.4	60.3	64.8					65.6	67.3	79	
	70	32.5	44.9	55.1	63.2	69.4	73.6				74.4	76.5	79	
	80	32.8	45.4	56.2	65.3	72.6	78.2	82.2			83.0	85.6	80	
	90	33.1	45.9	57.1	66.8	75.0	81.7	86.9	90.7		91.6	94.5	80	
	100	33.2	46.2	57.7	67.9	76.8	84.3	90.5	95.5	99.2	100.0	103.4	80	
24	50	37.4	50.8	60.3	66.2						67.5	68.7	78	
	60	38.2	52.4	63.5	71.6	76.9					78.4	79.9	79	
	70	38.7	53.4	65.5	75.2	82.4	87.4				88.9	90.8	79	
	80	39.1	54.1	66.9	77.6	86.3	92.9	97.6			99.3	101.5	80	
	90	39.4	54.6	67.9	79.4	89.1	97.1	103.2	107.7		109.5	112.0	80	
	100	39.6	55.0	68.7	80.8	91.3	100.2	107.6	113.4	117.8	119.7	122.5	80	
26	50	43.9	59.6	70.8	77.6						79.4	80.4	78	
	60	44.9	61.5	74.5	84.0	90.2					92.2	93.5	79	
	70	45.5	62.7	76.9	88.2	96.7	102.4				104.7	106.2	79	
	80	45.9	63.5	78.5	91.1	101.2	108.9	114.4			116.9	118.7	80	
	90	46.3	64.1	79.7	93.2	104.6	113.8	121.0	126.2		128.9	131.1	80	
	100	46.5	64.5	80.6	94.8	107.1	117.5	126.1	132.9	137.9	140.9	143.3	80	

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 68--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 9-inch d.o.b. top and height to a saw-log top for yellow-poplar (species 621) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 9-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)								9-inch d.o.b. top	4-inch d.o.b. top		
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
12	20	9.2									10.6	19.6	81
	30	9.4	13.1								15.0	21.7	80
	40	9.6	13.4	16.7							19.3	25.0	80
	50	9.7	13.5	17.1	20.3	23.3					23.6	28.7	80
	60	9.7	13.6	17.3	20.7	23.9	26.9				27.9	32.5	79
	70	9.8	13.7	17.4	20.9	24.3	27.5	30.4			32.2	36.5	79
14	80	9.8	13.7	17.5	21.1	24.5	27.8	31.0	34.0		36.4	40.5	79
	40	13.0	18.0	22.2							25.0	30.3	80
	50	13.2	18.3	22.8	26.7	29.9					30.3	35.0	80
	60	13.2	18.4	23.2	27.4	31.2	34.5				35.5	39.8	79
	70	13.3	18.5	23.4	27.9	32.0	35.7	38.9			40.8	44.8	79
	80	13.4	18.6	23.6	28.2	32.5	36.5	40.1	43.4		46.0	49.7	79
16	90	13.4	18.7	23.7	28.4	32.9	37.1	41.0	44.6	47.9	51.2	54.7	79
	100	13.4	18.7	23.8	28.6	33.2	37.5	41.6	45.4	49.0	56.3	59.8	79
	40	17.0	23.4	28.4							31.5	36.7	80
	50	17.2	23.8	29.5	34.1	37.6					38.0	42.5	80
	60	17.3	24.0	30.0	35.2	39.6	43.2				44.3	48.5	79
	70	17.4	24.2	30.4	35.9	40.9	45.2	48.8			50.6	54.5	79
18	80	17.5	24.3	30.6	36.4	41.7	46.5	50.7	54.3		57.0	60.6	79
	90	17.5	24.4	30.8	36.8	42.3	47.4	52.0	56.1	59.8	63.3	66.7	79
	100	17.6	24.4	30.9	37.0	42.8	48.1	53.0	57.5	61.6	69.5	72.8	79
	40	21.5	29.6	35.6							38.9	44.0	80
	50	21.8	30.1	37.0	42.4	46.3					46.6	51.1	80
	60	21.9	30.4	37.8	44.0	49.2	53.1				54.3	58.3	79
20	70	22.0	30.6	38.2	45.0	50.9	55.9	59.9			61.9	65.6	79
	80	22.1	30.7	38.6	45.7	52.1	57.8	62.6	66.6		69.4	72.9	79
	90	22.2	30.8	38.8	46.2	53.0	59.1	64.5	69.3	73.3	77.0	80.3	79
	100	22.3	30.9	39.0	46.6	53.6	60.1	66.0	71.3	75.9	84.5	87.7	79
	40	26.6	36.4	43.5							47.2	52.2	80
	50	26.9	37.1	45.4	51.8	56.0					56.4	60.8	80
22	60	27.1	37.5	46.4	53.9	59.9	64.2				65.4	69.4	79
	70	27.2	37.7	47.1	55.2	62.2	67.9	72.4			74.4	78.1	79
	80	27.3	37.9	47.5	56.1	63.8	70.4	76.0	80.4		83.4	86.8	79
	90	27.4	38.0	47.8	56.8	64.9	72.2	78.5	84.0	88.5	92.3	95.6	79
	100	27.5	38.2	48.1	57.3	65.8	73.5	80.4	86.6	92.0	101.2	104.3	79
	24	50	32.5	44.8	54.7	62.1	66.8					67.1	71.5
60		32.8	45.3	56.0	64.8	71.7	76.5				77.7	81.7	79
70		33.0	45.6	56.8	66.5	74.7	81.2	86.1			88.3	91.9	79
80		33.1	45.9	57.4	67.7	76.7	84.4	90.7	95.7		98.8	102.2	79
90		33.2	46.0	57.8	68.5	78.1	86.6	94.0	100.2	105.2	109.2	112.5	79
100		33.3	46.2	58.1	69.1	79.2	88.3	96.4	103.6	109.7	119.7	122.8	79
26	50	38.7	53.3	64.9	73.4	78.5					78.9	83.2	80
	60	39.0	53.9	66.5	76.8	84.6	90.0				91.2	95.1	79
	70	39.2	54.3	67.5	78.9	88.3	95.8	101.2			103.5	107.1	79
	80	39.4	54.6	68.2	80.3	90.8	99.7	106.9	112.4		115.6	119.0	79
	90	39.5	54.8	68.7	81.3	92.6	102.5	111.0	118.0	123.5	127.8	131.0	79
	100	39.6	54.9	69.1	82.1	93.9	104.6	114.0	122.2	129.1	139.9	143.0	79
26	50	45.5	62.5	76.0	85.7	91.3					91.7	96.0	80
	60	45.8	63.2	77.9	89.8	98.7	104.6				105.9	109.8	79
	70	46.1	63.7	79.1	92.3	103.2	111.6	117.6			120.0	123.6	79
	80	46.3	64.0	80.0	94.0	106.2	116.3	124.5	130.6		134.0	137.4	79
	90	46.4	64.3	80.6	95.3	108.3	119.7	129.4	137.3	143.5	148.0	151.2	79
	100	46.5	64.5	81.0	96.2	109.9	122.2	133.1	142.4	150.1	161.9	165.0	79

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 69--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for yellow-poplar (species 621) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<b>Inches</b>	<b>Cubic feet</b>																
5	0.7	0.8	0.9	1.0	1.2	1.7											
6	1.3	1.9	2.2	2.6	2.8	3.2	3.5	3.8									
7	2.5	2.9	3.4	3.8	4.2	4.7	5.2	5.6	6.0	6.4							
8	3.5	3.9	4.6	5.2	5.7	6.4	7.0	7.6	8.1	8.7	9.2	9.7					
9	4.5	5.1	5.9	6.6	7.4	8.2	9.0	9.8	10.5	11.2	11.9	12.6	13.3	13.9			
10	5.6	6.3	7.3	8.3	9.2	10.2	11.2	12.2	13.1	14.0	14.9	15.7	16.6	17.4	18.3	19.1	
11			8.9	10.1	11.2	12.5	13.7	14.9	16.0	17.1	18.2	19.2	20.3	21.3	22.3	23.3	24.3
12			10.7	12.1	13.4	15.0	16.4	17.8	19.2	20.5	21.8	23.0	24.3	25.5	26.7	27.9	29.1
13			12.6	14.3	15.8	17.6	19.3	21.0	22.6	24.1	25.7	27.1	28.6	30.1	31.5	32.9	34.3
14					18.4	20.5	22.5	24.4	26.3	28.1	29.9	31.6	33.3	35.0	36.6	38.3	39.9
15					21.2	23.6	25.9	28.1	30.3	32.3	34.4	36.4	38.3	40.3	42.2	44.1	46.0
16					24.2	26.9	29.5	32.1	34.5	36.9	39.2	41.5	43.7	45.9	48.1	50.3	52.4

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 70--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for yellow-poplar (species 621) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<b>Inches</b>	<b>Cubic feet</b>																
5	1.7	2.2	2.5	2.9	3.3	3.7											
6	2.1	2.7	3.4	3.8	4.4	4.9	5.5	6.0									
7	2.7	3.3	4.0	5.0	5.7	6.4	7.0	7.7	8.3	8.9							
8	3.4	4.1	5.1	6.4	7.2	8.0	8.8	9.6	10.4	11.1	11.9	12.6					
9	4.3	5.1	6.4	7.9	8.9	9.9	10.9	11.8	12.7	13.7	14.6	15.5	16.4	17.3			
10	5.3	6.2	7.8	9.6	10.8	12.0	13.1	14.3	15.4	16.5	17.6	18.6	19.7	20.8	21.8	22.9	
11			9.3	11.5	12.9	14.3	15.7	17.0	18.3	19.6	20.9	22.1	23.4	24.6	25.9	27.1	28.4
12			11.0	13.6	15.2	16.9	18.4	20.0	21.5	23.0	24.5	26.0	27.4	28.9	30.3	31.8	33.2
13			12.8	15.8	17.8	19.6	21.4	23.2	25.0	26.7	28.4	30.1	31.8	33.5	35.2	36.8	38.5
14					20.5	22.6	24.7	26.7	28.7	30.7	32.7	34.6	36.5	38.5	40.4	42.3	44.2
15					23.4	25.8	28.2	30.5	32.8	35.0	37.2	39.5	41.6	43.8	46.0	48.1	50.3
16					26.5	29.3	31.9	34.5	37.1	39.6	42.1	44.6	47.1	49.5	52.0	54.4	56.8

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 71--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for sweetbay (species 653) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to							Girard Form Class			
		Saw-log merchantable height (16-foot logs)					9-inch d.o.b. top	4-inch d.o.b. top				
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	Cubic feet	Percent
12	40	8.2									9.2	70
	50	8.5									9.9	70
	60	8.8									10.6	70
	70	8.9									11.2	71
	80	9.1									11.7	71
	90	9.2	12.1								12.3	71
100	9.2	12.2								12.8	71	
14	40	11.3									14.4	70
	50	11.7	15.4								16.2	70
	60	12.0	15.8								17.9	70
	70	12.2	16.1	19.3							19.6	71
	80	12.4	16.4	19.7							21.1	71
	90	12.5	16.5	20.0							22.7	71
100	12.6	16.7	20.3	23.4						24.2	71	
16	50	15.3	20.1								22.8	70
	60	15.7	20.7	24.5							25.4	70
	70	16.0	21.1	25.3							28.0	71
	80	16.2	21.4	25.8	29.3						30.5	71
	90	16.4	21.7	26.2	30.1						33.0	71
	100	16.5	21.8	26.5	30.6	34.0					35.4	71
110	16.7	22.0	26.8	31.0	34.7	37.7				37.8	71	
18	50	19.4	25.5	29.5							29.8	70
	60	19.9	26.2	31.0							33.5	70
	70	20.3	26.8	32.0	35.9						37.1	71
	80	20.6	27.1	32.7	37.2	40.5					40.5	71
	90	20.8	27.5	33.2	38.1	41.9					43.9	71
	100	21.0	27.7	33.6	38.8	43.1	46.4				47.3	71
110	21.1	27.9	34.0	39.3	43.9	47.8				50.6	71	
20	50	24.0	31.5	36.5							37.5	70
	60	24.6	32.4	38.3	42.1						42.2	70
	70	25.1	33.1	39.6	44.4						46.8	71
	80	25.4	33.6	40.4	45.9	50.0					51.3	71
	90	25.7	33.9	41.1	47.1	51.8	55.3				55.7	71
	100	25.9	34.2	41.6	47.9	53.2	57.4				60.1	71
110	26.1	34.5	42.0	48.6	54.3	59.0	62.7			64.4	71	
22	60	29.8	39.3	46.4	51.0						51.8	70
	70	30.4	40.1	47.9	53.7	57.4					57.5	71
	80	30.8	40.7	49.0	55.6	60.5					63.0	71
	90	31.2	41.1	49.7	57.0	62.7	67.0				68.5	71
	100	31.4	41.5	50.4	58.0	64.4	69.5	73.2			73.9	71
	110	31.7	41.8	50.8	58.8	65.7	71.4	75.9	79.2		79.3	71
24	60	35.5	46.8	55.3	60.8						62.1	70
	70	36.2	47.7	57.0	64.0	68.4					69.0	71
	80	36.7	48.4	58.3	66.2	72.1	75.7				75.8	71
	90	37.1	49.0	59.2	67.9	74.7	79.7				82.4	71
	100	37.5	49.4	60.0	69.1	76.7	82.7	87.1			89.0	71
	110	37.7	49.7	60.6	70.1	78.3	85.1	90.4	94.3		95.5	71
26	60	41.7	54.9	64.9	71.3						73.4	70
	70	42.5	56.0	67.0	75.2	80.3					81.6	71
	80	43.1	56.9	68.5	77.8	84.6	88.9				89.6	71
	90	43.6	57.5	69.6	79.7	87.7	93.6	97.3			97.5	71
	100	44.0	58.0	70.4	81.1	90.1	97.1	102.3			105.3	71
	110	44.3	58.4	71.1	82.3	91.9	99.9	106.2	110.7		113.0	71

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 72--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for sweetbay (species 653) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class
		Saw-log merchantable height (16-foot logs)								9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0		Percent
12	30	8.1									8.5	68
	40	8.6									9.7	70
	50	8.9									10.7	71
	60	9.1									11.7	71
	70	9.2	12.2								12.5	71
	80	9.3	12.4								13.3	71
	90	9.4	12.5								14.1	71
14	40	11.7	15.3								15.8	70
	50	12.1	16.0								18.2	71
	60	12.4	16.4	19.7							20.5	71
	70	12.6	16.7	20.1							22.7	71
	80	12.7	16.9	20.5	23.6						24.8	71
	90	12.8	17.0	20.7	24.1						26.9	71
	100	12.9	17.1	20.9	24.4	27.5					28.9	71
16	40	15.4	20.0								22.1	70
	50	15.9	20.9	24.7							25.8	71
	60	16.2	21.4	25.7	28.9						29.3	71
	70	16.5	21.8	26.3	30.1						32.7	71
	80	16.7	22.0	26.8	30.8	34.3					36.0	71
	90	16.8	22.2	27.1	31.4	35.1	38.3				39.3	71
	100	16.9	22.4	27.4	31.8	35.8	39.3	42.3			42.6	71
18	40	19.5	25.4								28.8	70
	50	20.2	26.5	31.2							33.8	71
	60	20.6	27.2	32.5	36.6						38.6	71
	70	20.9	27.6	33.3	38.0	41.7					43.2	71
	80	21.1	27.9	33.9	39.0	43.3	46.7				47.8	71
	90	21.3	28.2	34.3	39.7	44.4	48.4	51.6			52.3	71
	100	21.4	28.4	34.6	40.3	45.3	49.6	53.3	56.4		56.7	71
20	40	24.1	31.3	35.7							36.1	70
	50	24.9	32.7	38.5	42.3						42.5	71
	60	25.5	33.6	40.1	45.1	48.5					48.6	71
	70	25.9	34.1	41.1	46.9	51.4					54.6	71
	80	26.1	34.5	41.9	48.1	53.3	57.5				60.4	71
	90	26.3	34.8	42.4	49.0	54.8	59.6	63.5			66.1	71
	100	26.5	35.1	42.8	49.7	55.9	61.2	65.7	69.4		71.8	71
22	50	30.2	39.6	46.6	51.1						51.9	71
	60	30.9	40.6	48.5	54.5	58.6					59.5	71
	70	31.3	41.3	49.8	56.7	62.1	65.9				66.8	71
	80	31.7	41.8	50.7	58.2	64.5	69.4	73.1			73.9	71
	90	31.9	42.2	51.3	59.3	66.2	72.0	76.6	80.2		81.0	71
	100	32.1	42.5	51.8	60.2	67.6	73.9	79.4	83.8	87.2	88.0	71
	24	50	36.0	47.2	55.4	60.7						62.1
60		36.8	48.4	57.7	64.8	69.7					71.2	71
70		37.3	49.2	59.2	67.5	73.8	78.3				79.9	71
80		37.7	49.8	60.3	69.3	76.7	82.5	86.8			88.6	71
90		38.0	50.2	61.1	70.6	78.8	85.6	91.1	95.2		97.1	71
100		38.3	50.6	61.7	71.6	80.4	87.9	94.3	99.5	103.5	105.5	71
26		50	42.3	55.4	65.0	71.2						73.2
	60	43.2	56.8	67.8	76.1	81.7					83.8	71
	70	43.8	57.8	69.5	79.1	86.6	91.8				94.2	71
	80	44.3	58.5	70.8	81.3	89.9	96.8	101.7			104.3	71
	90	44.7	59.0	71.7	82.9	92.4	100.4	106.8	111.5		114.4	71
	100	45.0	59.4	72.4	84.1	94.3	103.1	110.6	116.6	121.2	124.3	71

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 73--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 9-inch d.o.b. top and height to a saw-log top for sweetbay (species 653) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Height to 9-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	20	8.3									9.4	15.0	70
	30	8.8	11.8								13.6	18.0	71
	40	9.0	12.1	15.1							17.5	21.4	71
	50	9.1	12.3	15.3	18.3	21.1					21.4	24.9	71
	60	9.2	12.4	15.5	18.5	21.4	24.2				25.3	28.5	71
	70	9.3	12.5	15.6	18.6	21.6	24.5	27.3			29.1	32.2	71
	80	9.3	12.5	15.6	18.7	21.7	24.7	27.6	30.4		32.8	35.8	71
14	40	12.4	16.5	20.1							22.7	26.5	71
	50	12.6	16.8	20.6	24.1	27.1					27.5	30.9	71
	60	12.7	16.9	20.9	24.6	28.0	31.1				32.1	35.3	71
	70	12.8	17.1	21.1	24.9	28.5	31.9	34.9			36.7	39.7	71
	80	12.9	17.1	21.2	25.1	28.9	32.4	35.7	38.8		41.3	44.1	71
	90	12.9	17.2	21.3	25.3	29.1	32.8	36.2	39.5	42.6	45.9	48.6	71
	100	12.9	17.2	21.4	25.4	29.3	33.1	36.6	40.1	43.4	50.4	53.1	71
16	40	16.3	21.6	25.9							28.7	32.5	71
	50	16.6	22.0	26.7	30.8	34.1					34.4	37.8	71
	60	16.7	22.2	27.2	31.6	35.6	38.9				40.0	43.1	71
	70	16.8	22.4	27.5	32.2	36.5	40.3	43.7			45.5	48.5	71
	80	16.9	22.5	27.7	32.6	37.1	41.3	45.1	48.5		51.1	53.8	71
	90	17.0	22.6	27.8	32.8	37.5	41.9	46.0	49.8	53.2	56.5	59.2	71
	100	17.0	22.6	28.0	33.0	37.9	42.4	46.7	50.7	54.5	62.0	64.6	71
18	40	20.8	27.3	32.4							35.5	39.3	71
	50	21.1	27.8	33.6	38.3	42.0					42.3	45.7	71
	60	21.3	28.1	34.3	39.6	44.2	47.9				49.0	52.1	71
	70	21.4	28.4	34.7	40.4	45.5	49.9	53.7			55.6	58.5	71
	80	21.5	28.5	35.0	41.0	46.4	51.3	55.7	59.4		62.1	64.9	71
	90	21.6	28.6	35.2	41.4	47.1	52.3	57.1	61.4	65.1	68.6	71.3	71
	100	21.7	28.7	35.4	41.7	47.6	53.1	58.1	62.8	67.0	75.2	77.7	71
20	40	25.7	33.7	39.7							43.1	46.9	71
	50	26.1	34.4	41.3	46.8	50.8					51.1	54.5	71
	60	26.4	34.8	42.2	48.6	53.8	57.8				59.0	62.1	71
	70	26.5	35.1	42.8	49.6	55.6	60.7	64.8			66.7	69.7	71
	80	26.7	35.3	43.2	50.4	56.8	62.6	67.5	71.6		74.5	77.2	71
	90	26.8	35.4	43.4	50.9	57.7	63.9	69.5	74.3	78.5	82.2	84.8	71
	100	26.8	35.5	43.7	51.3	58.4	64.9	70.9	76.3	81.1	89.8	92.4	71
22	50	31.7	41.6	49.8	56.2	60.5					60.9	64.3	71
	60	32.0	42.1	51.0	58.4	64.4	68.8				70.0	73.2	71
	70	32.2	42.5	51.7	59.8	66.8	72.6	77.0			79.1	82.1	71
	80	32.4	42.7	52.2	60.7	68.4	75.0	80.6	85.2		88.1	90.9	71
	90	32.5	42.9	52.5	61.4	69.5	76.7	83.1	88.7	93.2	97.1	99.8	71
	100	32.6	43.0	52.8	61.9	70.4	78.0	85.0	91.2	96.7	106.1	108.6	71
	24	50	37.8	49.6	59.2	66.4	71.2					71.5	75.0
60		38.1	50.2	60.6	69.2	76.1	80.9				82.2	85.3	71
70		38.4	50.6	61.5	70.9	79.0	85.6	90.5			92.7	95.6	71
80		38.6	50.9	62.1	72.1	81.0	88.6	95.0	100.0		103.1	105.9	71
90		38.7	51.1	62.5	73.0	82.4	90.8	98.1	104.3	109.4	113.5	116.2	71
100		38.8	51.3	62.9	73.6	83.5	92.4	100.5	107.6	113.7	123.8	126.4	71
26		50	44.4	58.2	69.3	77.6	82.7					83.1	86.6
	60	44.8	58.9	71.0	81.0	88.7	94.0				95.3	98.5	71
	70	45.1	59.4	72.1	83.1	92.3	99.7	105.1			107.4	110.4	71
	80	45.4	59.8	72.8	84.5	94.7	103.4	110.6	116.1		119.4	122.2	71
	90	45.5	60.0	73.4	85.5	96.4	106.1	114.4	121.4	127.0	131.3	134.0	71
	100	45.6	60.2	73.8	86.3	97.7	108.1	117.3	125.3	132.2	143.2	145.8	71

\* Includes 1.0-foot stump allowance.

Table 74--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for sweetbay (species 653) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.7	0.8	0.9	1.1	1.6	1.7											
6	1.4	2.0	2.3	2.6	3.0	3.2	3.3	3.5									
7	2.6	3.0	3.5	3.9	4.5	4.8	5.0	5.3	5.5	5.7							
8	3.6	4.1	4.7	5.4	6.1	6.5	6.8	7.2	7.5	7.9	8.2	8.6					
9	4.6	5.3	6.1	6.9	7.9	8.4	8.8	9.3	9.8	10.2	10.7	11.2	11.6	12.0			
10	5.8	6.6	7.7	8.7	9.8	10.5	11.1	11.7	12.3	12.8	13.4	14.0	14.6	15.1	15.7	16.2	
11			9.4	10.6	12.0	12.8	13.5	14.3	15.0	15.7	16.4	17.1	17.8	18.5	19.2	19.9	20.6
12			11.2	12.7	14.4	15.3	16.2	17.1	18.0	18.8	19.7	20.5	21.4	22.2	23.0	23.9	24.7
13			13.2	15.0	16.9	18.0	19.1	20.1	21.2	22.2	23.2	24.2	25.2	26.2	27.2	28.2	29.2
14					19.7	21.0	22.2	23.5	24.7	25.9	27.0	28.2	29.4	30.5	31.7	32.8	34.0
15					22.7	24.1	25.6	27.0	28.4	29.8	31.1	32.5	33.8	35.2	36.5	37.8	39.1
16					25.9	27.5	29.2	30.8	32.4	34.0	35.5	37.1	38.6	40.1	41.6	43.2	44.7

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 75--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for sweetbay (species 653) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.7	2.2	2.6	2.7	3.1	3.4											
6	2.1	2.7	3.4	3.6	4.1	4.6	5.0	5.5									
7	2.7	3.4	4.1	4.8	5.3	5.9	6.5	7.0	7.5	8.1							
8	3.5	4.2	5.3	6.1	6.8	7.5	8.1	8.8	9.4	10.1	10.7	11.4					
9	4.4	5.3	6.6	7.5	8.4	9.2	10.0	10.8	11.6	12.4	13.2	13.9	14.7	15.4			
10	5.4	6.5	8.1	9.2	10.2	11.2	12.2	13.1	14.0	15.0	15.9	16.8	17.7	18.6	19.5	20.4	
11			9.7	11.0	12.2	13.4	14.5	15.6	16.7	17.8	18.9	20.0	21.0	22.1	23.1	24.2	25.2
12			11.5	13.0	14.4	15.8	17.1	18.4	19.7	20.9	22.2	23.4	24.6	25.9	27.1	28.3	29.5
13			13.4	15.2	16.8	18.4	19.9	21.4	22.9	24.3	25.8	27.2	28.6	30.0	31.4	32.8	34.2
14					19.4	21.2	22.9	24.7	26.3	28.0	29.6	31.3	32.9	34.5	36.1	37.7	39.3
15					22.2	24.2	26.2	28.1	30.0	31.9	33.8	35.6	37.5	39.3	41.1	42.9	44.7
16					25.2	27.5	29.7	31.9	34.0	36.1	38.2	40.3	42.4	44.4	46.5	48.5	50.6

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 76--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for blackgum (lowland) (species 694) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									9-inch d.o.b. top	4-inch d.o.b. top	
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			
<u>Inches</u>	<u>Feet</u>	<u>Cubic feet</u>											<u>Percent</u>
12	40										5.1	10.5	58
	50										7.1	13.8	66
	60	9.4									11.0	16.8	70
	70	9.8	12.9								13.2	19.5	73
	80	10.1	13.4								15.1	22.2	74
	90	10.3	13.7	16.7							16.8	24.7	76
	100	10.4	13.9	17.0							18.5	27.2	76
14	40	10.6									10.9	14.3	58
	50	12.0	15.3								15.5	18.8	66
	60	12.8	16.7								19.2	22.9	70
	70	13.3	17.6	21.1							22.5	26.7	73
	80	13.7	18.2	22.0	25.2						25.6	30.4	74
	90	13.9	18.6	22.7	26.2						28.5	33.8	76
	100	14.1	18.9	23.2	27.0	30.2					31.3	37.2	76
16	50	15.7	20.0								22.3	24.7	66
	60	16.7	21.8	25.7							27.3	30.0	70
	70	17.4	22.9	27.5	31.0						31.9	35.0	73
	80	17.9	23.7	28.7	32.9	36.1					36.2	39.8	74
	90	18.2	24.3	29.6	34.2	38.0					40.4	44.3	76
	100	18.4	24.7	30.3	35.2	39.4	42.9				44.4	48.8	76
	110	18.6	25.0	30.8	36.0	40.5	44.4	47.6			48.3	53.2	77
18	50	19.8	25.3	29.1							29.4	31.3	66
	60	21.2	27.5	32.5							35.9	38.1	70
	70	22.0	29.0	34.8	39.3						41.9	44.4	73
	80	22.6	30.0	36.4	41.6	45.7					47.6	50.4	74
	90	23.0	30.7	37.5	43.3	48.1	51.8				53.1	56.2	76
	100	23.3	31.2	38.3	44.5	49.9	54.3	57.7			58.4	61.9	76
	110	23.6	31.6	39.0	45.5	51.3	56.2	60.3	63.4		63.5	67.4	77
20	50	24.5	31.2	35.9							37.2	38.7	66
	60	26.1	34.0	40.2	44.4						45.3	47.1	70
	70	27.2	35.8	43.0	48.5	52.4					52.8	54.9	73
	80	27.9	37.0	44.9	51.4	56.4	59.9				60.0	62.3	74
	90	28.5	37.9	46.3	53.4	59.4	64.0				66.9	69.5	76
	100	28.8	38.6	47.3	55.0	61.6	67.0	71.2			73.5	76.5	76
	110	29.1	39.1	48.1	56.2	63.3	69.4	74.4	78.3		80.1	83.4	77
22	60	31.6	41.2	48.6	53.8						55.5	57.0	70
	70	32.9	43.3	52.0	58.7	63.4					64.7	66.5	73
	80	33.8	44.8	54.3	62.2	68.3	72.5				73.5	75.5	74
	90	34.4	45.9	56.0	64.7	71.8	77.4	81.3			81.9	84.2	76
	100	34.9	46.7	57.3	66.6	74.5	81.1	86.2	89.8		90.1	92.7	76
	110	35.2	47.3	58.2	68.0	76.6	84.0	90.1	94.8		98.1	101.0	77
24	60	37.7	49.0	57.8	64.0						66.5	67.9	70
	70	39.2	51.6	61.9	69.9	75.4					77.6	79.2	73
	80	40.3	53.4	64.7	74.0	81.3	86.3				88.1	89.9	74
	90	41.0	54.6	66.7	77.0	85.5	92.1	96.7			98.2	100.3	76
	100	41.5	55.6	68.2	79.2	88.7	96.5	102.6	106.9		108.0	110.4	76
	110	42.0	56.3	69.3	81.0	91.2	100.0	107.2	112.8	116.8		117.6	120.3
26	60	44.2	57.5	67.9	75.1						78.5	79.7	70
	70	46.0	60.6	72.6	82.0	88.6					91.5	93.0	73
	80	47.3	62.7	75.9	86.9	95.4	101.3				103.9	105.6	74
	90	48.1	64.1	78.3	90.4	100.4	108.1	113.5			115.8	117.8	76
	100	48.8	65.2	80.0	93.0	104.1	113.3	120.5	125.5		127.4	129.6	76
	110	49.3	66.1	81.4	95.1	107.1	117.4	125.9	132.5	137.1		138.8	141.3

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 77--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for blackgum (lowland) (species 694) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
<u>Inches</u>	<u>Feet</u>	<u>Cubic feet</u>										<u>Percent</u>	
12	30										6.0	11.3	66
	40	9.3									10.4	14.7	70
	50	9.7									12.2	17.9	73
	60	10.0	13.2								13.9	20.9	74
	70	10.1	13.4								15.4	23.8	74
	80	10.2	13.6	16.6							16.8	26.6	75
	90	10.3	13.8	16.9						18.2	29.5	75	
14	40	12.7	16.3							17.0	19.8	70	
	50	13.2	17.3							20.3	23.9	73	
	60	13.5	17.9	21.5						23.4	27.9	74	
	70	13.8	18.2	22.1	25.4					26.4	31.8	74	
	80	13.9	18.5	22.6	26.1	29.1				29.3	35.6	75	
	90	14.0	18.7	22.9	26.6	29.9				32.1	39.3	75	
	100	14.1	18.8	23.1	27.0	30.6	33.7			34.9	43.0	76	
16	40	16.5	21.3							23.7	25.6	70	
	50	17.2	22.6	26.6						28.5	31.0	73	
	60	17.7	23.3	28.0	31.6					33.0	36.1	74	
	70	18.0	23.8	28.8	33.0	36.4				37.3	41.1	74	
	80	18.2	24.1	29.4	34.0	37.9	41.1			41.5	45.9	75	
	90	18.3	24.4	29.9	34.7	39.0	42.6	45.6		45.7	50.7	75	
	100	18.5	24.6	30.2	35.3	39.8	43.8	47.2		49.8	55.5	76	
18	40	20.9	26.9	30.8						30.8	32.2	70	
	50	21.8	28.5	33.7						37.1	39.0	73	
	60	22.4	29.5	35.4	39.9					43.1	45.4	74	
	70	22.7	30.1	36.5	41.7	46.0				48.8	51.6	74	
	80	23.0	30.5	37.2	43.0	47.9	51.8			54.5	57.7	75	
	90	23.2	30.9	37.8	43.9	49.2	53.8	57.5		60.0	63.7	75	
	100	23.4	31.1	38.2	44.6	50.3	55.3	59.6	63.2	65.5	69.6	76	
20	40	25.8	33.2	37.9						38.6	39.6	70	
	50	26.9	35.2	41.5	45.8					46.5	47.9	73	
	60	27.6	36.4	43.6	49.2	53.2				54.0	55.7	74	
	70	28.1	37.2	45.0	51.5	56.6	60.4			61.3	63.3	74	
	80	28.4	37.7	45.9	53.0	59.0	63.8	67.4		68.3	70.8	75	
	90	28.7	38.1	46.6	54.1	60.7	66.3	70.8	74.3	75.3	78.1	75	
	100	28.8	38.4	47.1	55.0	62.0	68.1	73.4	77.8	81.2	82.2	76	
22	50	32.6	42.6	50.2	55.3					56.7	57.7	73	
	60	33.4	44.1	52.8	59.5	64.2				65.8	67.2	74	
	70	34.0	45.0	54.4	62.2	68.4	72.9			74.7	76.3	74	
	80	34.4	45.6	55.6	64.1	71.3	77.0	81.4		83.4	85.3	75	
	90	34.7	46.1	56.4	65.5	73.4	80.1	85.5	89.7	91.9	94.1	75	
	100	34.9	46.5	57.0	66.5	75.0	82.4	88.7	93.9	98.0	100.4	102.9	76
24	50	38.8	50.7	59.7	65.7					67.7	68.6	73	
	60	39.8	52.4	62.8	70.8	76.3				78.7	79.7	74	
	70	40.5	53.5	64.7	74.0	81.3	86.6			89.3	90.6	74	
	80	40.9	54.3	66.1	76.3	84.8	91.6	96.6		99.7	101.2	75	
	90	41.3	54.9	67.1	77.9	87.3	95.2	101.6	106.5	109.9	111.6	75	
	100	41.6	55.3	67.9	79.1	89.2	97.9	105.4	111.5	116.3	120.0	122.0	76
26	50	45.5	59.5	70.1	77.0					79.6	80.3	73	
	60	46.7	61.5	73.7	83.0	89.5				92.5	93.4	74	
	70	47.5	62.9	76.0	86.8	95.4	101.5			105.0	106.1	74	
	80	48.1	63.8	77.6	89.5	99.4	107.4	113.3	117.0	117.2	118.5	75	
	90	48.5	64.4	78.8	91.4	102.4	111.6	119.1	124.9	129.2	130.7	75	
	100	48.8	65.0	79.6	92.9	104.6	114.9	123.6	130.7	136.3	141.2	142.8	76

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 78--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 9-inch d.o.b. top and height to a saw-log top for blackgum (lowland) (species 694) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 9-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	20	9.3									10.4	11.0	71
	30	9.8	13.0								14.9	15.4	74
	40	10.1	13.5	16.6							19.1	19.7	75
	50	10.2	13.7	17.0	20.1	22.9					23.3	23.9	75
	60	10.3	13.8	17.2	20.4	23.5	26.4				27.4	28.1	75
	70	10.4	13.9	17.3	20.6	23.8	26.8	29.7			31.5	32.2	75
14	80	10.4	14.0	17.4	20.8	24.0	27.2	30.2	33.1		35.6	36.3	76
	40	13.7	18.2	22.0							24.7	25.1	75
	50	13.9	18.5	22.7	26.4	29.5					29.9	30.3	75
	60	14.0	18.7	23.1	27.1	30.7	33.8				34.9	35.4	75
	70	14.1	18.9	23.3	27.5	31.3	34.9	38.1			39.9	40.4	75
	80	14.2	19.0	23.5	27.8	31.8	35.6	39.1	42.3		44.9	45.4	76
16	90	14.2	19.0	23.6	28.0	32.2	36.1	39.8	43.3	46.5	49.8	50.4	76
	100	14.3	19.1	23.7	28.2	32.4	36.5	40.4	44.0	47.5	54.8	55.3	76
	40	17.9	23.6	28.2							31.2	31.5	75
	50	18.2	24.1	29.3	33.6	37.1					37.4	37.7	75
	60	18.3	24.4	29.9	34.7	39.0	42.5				43.6	43.9	75
	70	18.5	24.6	30.3	35.4	40.1	44.2	47.8			49.6	50.0	75
18	80	18.5	24.7	30.5	35.9	40.9	45.4	49.4	53.0		55.6	56.0	76
	90	18.6	24.8	30.7	36.2	41.4	46.2	50.6	54.6	58.2	61.6	62.0	76
	100	18.7	24.9	30.9	36.5	41.8	46.8	51.5	55.8	59.8	67.6	68.0	76
	40	22.7	29.8	35.3							38.6	38.8	75
	50	23.0	30.5	36.8	41.9	45.7					46.1	46.3	75
	60	23.2	30.8	37.6	43.5	48.4	52.2				53.4	53.6	75
20	70	23.4	31.1	38.1	44.4	50.0	54.8	58.7			60.6	60.9	75
	80	23.5	31.3	38.5	45.1	51.1	56.4	61.1	65.1		67.9	68.1	76
	90	23.6	31.4	38.8	45.6	51.9	57.6	62.8	67.4	71.4	75.0	75.3	76
	100	23.6	31.5	39.0	45.9	52.5	58.5	64.1	69.2	73.7	82.2	82.5	76
	40	28.0	36.7	43.2							46.8	47.0	75
	50	28.4	37.6	45.2	51.2	55.3					55.7	55.9	75
22	60	28.7	38.1	46.2	53.2	58.9	63.2				64.4	64.6	75
	70	28.9	38.4	46.9	54.5	61.1	66.6	70.9			73.0	73.2	75
	80	29.0	38.6	47.4	55.4	62.5	68.8	74.2	78.6		81.5	81.7	76
	90	29.1	38.8	47.8	56.0	63.6	70.4	76.5	81.8	86.2	90.0	90.2	76
	100	29.2	38.9	48.0	56.5	64.4	71.6	78.2	84.1	89.3	98.5	98.7	76
	24	50	34.4	45.4	54.4	61.4	66.0					66.3	66.5
60		34.7	46.0	55.8	64.0	70.6	75.3				76.5	76.7	75
70		35.0	46.4	56.7	65.7	73.3	79.6	84.5			86.6	86.7	75
80		35.1	46.7	57.3	66.8	75.2	82.5	88.6	93.5		96.6	96.8	76
90		35.3	46.9	57.7	67.6	76.5	84.6	91.6	97.6	102.5	106.5	106.7	76
100		35.4	47.1	58.0	68.2	77.5	86.1	93.8	100.6	106.5	116.5	116.7	76
26	50	41.0	54.0	64.6	72.6	77.6					78.0	78.1	75
	60	41.4	54.8	66.3	75.8	83.3	88.5				89.8	89.9	75
	70	41.6	55.2	67.3	77.9	86.8	93.9	99.3			101.5	101.6	75
	80	41.8	55.6	68.1	79.2	89.1	97.5	104.5	109.9		113.1	113.3	76
	90	42.0	55.8	68.6	80.2	90.7	100.0	108.1	114.9	120.4	124.7	124.8	76
	100	42.1	56.0	69.0	81.0	92.0	101.9	110.9	118.7	125.4	136.2	136.3	76
28	50	48.1	63.4	75.6	84.7	90.3					90.7	90.8	75
	60	48.6	64.3	77.7	88.7	97.2	103.0				104.3	104.4	75
	70	48.9	64.8	78.9	91.1	101.4	109.5	115.4			117.7	117.8	75
	80	49.1	65.2	79.8	92.8	104.1	113.8	121.7	127.7		131.1	131.2	76
	90	49.3	65.5	80.4	94.0	106.2	116.9	126.1	133.8	139.8	144.4	144.5	76
	100	49.4	65.8	80.9	94.9	107.7	119.2	129.4	138.3	145.9	157.6	157.8	76

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 79--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for blackgum (lowland) (species 694) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	1.2	1.2	1.3	1.5	1.5	1.8											
6	1.8	2.5	2.9	3.2	3.2	3.6	3.9	4.2									
7	3.2	3.6	4.1	4.6	4.7	5.2	5.7	6.1	6.6	7.0							
8	4.3	4.8	5.5	6.1	6.3	7.0	7.6	8.2	8.8	9.4	9.9	10.5					
9	5.4	6.1	7.0	7.8	8.1	8.9	9.7	10.5	11.3	12.0	12.7	13.4	14.1	14.8			
10	6.7	7.5	8.6	9.7	10.1	11.1	12.1	13.1	14.0	14.9	15.8	16.7	17.6	18.4	19.3	20.1	
11			10.5	11.7	12.2	13.5	14.7	15.9	17.0	18.1	19.2	20.3	21.4	22.4	23.4	24.5	25.5
12			12.5	14.0	14.6	16.1	17.6	19.0	20.3	21.7	23.0	24.3	25.5	26.8	28.0	29.2	30.4
13			14.6	16.4	17.1	18.9	20.6	22.3	23.9	25.5	27.0	28.5	30.0	31.5	33.0	34.4	35.8
14					19.9	22.0	24.0	25.9	27.8	29.6	31.4	33.2	34.9	36.6	38.3	40.0	41.6
15					22.9	25.3	27.6	29.8	31.9	34.0	36.1	38.1	40.1	42.1	44.0	46.0	47.9
16					26.0	28.8	31.4	33.9	36.4	38.8	41.1	43.4	45.7	48.0	50.2	52.4	54.5

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 80--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for blackgum (lowland) (species 694) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	2.3	2.7	3.0	3.1	3.5	3.9											
6	2.7	3.3	3.9	4.1	4.6	5.1	5.6	6.1									
7	3.3	4.0	4.7	5.2	5.9	6.5	7.1	7.7	8.3	8.9							
8	4.2	4.8	5.9	6.5	7.4	8.2	8.9	9.7	10.4	11.1	11.9	12.6					
9	5.2	6.0	7.3	8.1	9.1	10.0	11.0	11.9	12.8	13.7	14.5	15.4	16.3	17.1			
10	6.3	7.3	8.8	9.8	11.0	12.2	13.3	14.4	15.4	16.5	17.6	18.6	19.6	20.7	21.7	22.7	
11			10.6	11.7	13.1	14.5	15.8	17.1	18.4	19.7	20.9	22.1	23.3	24.6	25.8	27.0	28.2
12			12.5	13.8	15.5	17.1	18.6	20.1	21.6	23.1	24.6	26.0	27.4	28.8	30.2	31.6	33.0
13			14.6	16.1	18.0	19.9	21.7	23.4	25.2	26.9	28.5	30.2	31.8	33.5	35.1	36.7	38.3
14					20.8	22.9	25.0	27.0	29.0	30.9	32.8	34.8	36.6	38.5	40.4	42.2	44.1
15					23.8	26.2	28.5	30.8	33.1	35.3	37.5	39.6	41.8	43.9	46.0	48.2	50.3
16					26.9	29.7	32.3	34.9	37.5	40.0	42.4	44.9	47.3	49.7	52.1	54.5	56.8

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 81--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for all hard hardwoods combined (species 500) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	tree height	Volume to							Inches
		Total	4-inch d.o.b. top	9-inch d.o.b. top	5.0	4.5	4.0	3.5	
12	50	8.7	9.2	9.6	13.0	13.4	17.0	17.3	10.7
12	60	9.2	9.6	13.0	13.4	17.0	17.3	10.7	10.7
12	70	9.6	9.6	13.0	13.4	17.0	17.3	10.7	13.7
12	80	9.8	9.8	13.4	17.0	17.3	17.0	10.7	16.4
12	90	9.9	9.9	13.7	17.0	17.3	17.0	10.7	18.9
12	100	10.1	10.1	13.9	17.3	17.3	17.0	10.7	21.3
14	40	10.7	11.9	15.8	17.0	17.3	17.0	10.7	14.7
14	50	11.9	12.6	17.0	17.3	17.3	17.0	10.7	16.2
14	60	12.6	13.1	17.8	17.3	17.3	17.0	10.7	18.8
14	70	13.1	13.4	18.4	17.8	17.3	17.0	10.7	19.3
14	80	13.4	13.4	18.4	17.8	17.3	17.0	10.7	22.6
14	90	13.6	13.6	18.7	17.8	17.3	17.0	10.7	26.0
14	100	13.8	13.8	19.0	17.8	17.3	17.0	10.7	29.3
16	50	15.6	20.6	26.4	26.4	26.4	26.4	26.4	24.8
16	60	16.6	22.3	28.2	28.2	28.2	28.2	28.2	29.7
16	70	17.2	23.3	29.5	29.5	29.5	29.5	29.5	34.2
16	80	17.6	24.1	29.5	29.5	29.5	29.5	29.5	38.6
16	90	17.8	24.6	30.4	30.4	30.4	30.4	30.4	42.8
16	100	18.0	24.9	31.0	31.0	31.0	31.0	31.0	46.9
18	50	19.8	26.2	33.5	33.5	33.5	33.5	33.5	31.5
18	60	21.0	28.3	35.8	35.8	35.8	35.8	35.8	37.7
18	70	21.8	29.6	35.8	35.8	35.8	35.8	35.8	43.5
18	80	22.3	30.5	37.4	37.4	37.4	37.4	37.4	49.0
18	90	22.6	31.1	38.5	38.5	38.5	38.5	38.5	54.4
18	100	22.9	31.6	39.3	39.3	39.3	39.3	39.3	59.6
20	50	24.5	32.4	37.0	37.0	37.0	37.0	37.0	39.0
20	60	26.0	35.0	41.4	41.4	41.4	41.4	41.4	46.7
20	70	26.9	36.6	44.3	44.3	44.3	44.3	44.3	51.1
20	80	27.6	37.7	46.2	46.2	46.2	46.2	46.2	57.5
20	90	28.0	38.5	47.6	47.6	47.6	47.6	47.6	60.7
20	100	28.3	39.1	48.6	48.6	48.6	48.6	48.6	67.3
22	60	31.5	42.4	50.1	50.1	50.1	50.1	50.1	80.1
22	70	32.7	44.4	53.6	53.6	53.6	53.6	53.6	85.6
22	80	33.4	45.7	56.0	56.0	56.0	56.0	56.0	91.6
22	90	34.0	46.7	57.6	57.6	57.6	57.6	57.6	97.1
22	100	34.4	47.4	58.9	58.9	58.9	58.9	58.9	103.1
24	60	37.6	50.5	59.7	59.7	59.7	59.7	59.7	115.7
24	70	38.9	52.8	63.9	63.9	63.9	63.9	63.9	125.7
24	80	39.8	54.4	66.7	66.7	66.7	66.7	66.7	130.4
24	90	40.5	55.6	68.7	68.7	68.7	68.7	68.7	136.0
24	100	40.9	56.4	70.1	70.1	70.1	70.1	70.1	142.0
26	60	44.1	59.3	70.2	70.2	70.2	70.2	70.2	151.4
26	70	45.7	62.1	75.0	75.0	75.0	75.0	75.0	157.3
26	80	46.8	64.0	78.3	78.3	78.3	78.3	78.3	163.3
26	90	47.6	65.3	80.6	80.6	80.6	80.6	80.6	169.3
26	100	48.1	66.3	82.4	82.4	82.4	82.4	82.4	175.3

\* Includes 1.0-foot stump allowance.

Table 82--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for all hard hardwoods combined (species 500) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	30	8.3									8.8	11.2	71
	40	9.1									11.0	14.8	75
	50	9.5	12.8								12.9	18.1	77
	60	9.7	13.3								14.7	21.2	79
	70	9.9	13.6								16.3	24.2	79
	80	10.0	13.8	17.1							17.9	27.2	80
	90	10.1	13.9	17.3							19.4	30.1	80
14	40	12.4	16.5								17.1	19.9	75
	50	13.0	17.5								20.5	24.2	77
	60	13.3	18.1	22.0							23.6	28.3	79
	70	13.5	18.5	22.7	26.1						26.6	32.3	79
	80	13.7	18.8	23.2	27.0						29.5	36.2	80
	90	13.8	19.0	23.6	27.6	31.0					32.4	40.1	80
	100	13.9	19.2	23.9	28.1	31.8	35.0				35.2	43.9	80
16	40	16.2	21.5								23.7	25.8	75
	50	17.0	22.9	27.2							28.5	31.3	77
	60	17.4	23.7	28.7	32.5						33.0	36.6	79
	70	17.7	24.3	29.7	34.1						37.3	41.7	79
	80	17.9	24.6	30.4	35.2	39.2					41.6	46.7	80
	90	18.1	24.9	30.9	36.1	40.5	44.1				45.7	51.6	80
	100	18.2	25.1	31.2	36.7	41.5	45.5	48.9			49.9	56.5	80
18	40	20.6	27.3								30.8	32.5	75
	50	21.6	29.0	34.4							37.2	39.4	77
	60	22.1	30.1	36.4	41.0						43.1	46.0	79
	70	22.5	30.8	37.6	43.1	47.3					48.9	52.4	79
	80	22.8	31.2	38.5	44.5	49.5	53.3				54.5	58.6	80
	90	23.0	31.5	39.1	45.6	51.1	55.7	59.3			60.1	64.7	80
	100	23.1	31.8	39.6	46.4	52.4	57.5	61.7	65.1		65.6	70.8	80
20	40	25.5	33.7	38.4							38.6	39.9	75
	50	26.7	35.9	42.5	46.6						46.6	48.4	77
	60	27.4	37.2	44.9	50.6						54.2	56.5	79
	70	27.8	38.0	46.4	53.2	58.2					61.5	64.3	79
	80	28.2	38.6	47.5	55.0	61.0	65.7				68.6	71.9	80
	90	28.4	39.0	48.3	56.3	63.1	68.6	73.0			75.6	79.4	80
	100	28.6	39.3	48.9	57.3	64.7	70.9	76.0	80.2		82.5	86.8	80
22	50	32.3	43.5	51.4	56.3						56.9	58.4	77
	60	33.2	45.0	54.3	61.1	65.6					66.2	68.1	79
	70	33.8	46.0	56.2	64.3	70.4	74.5				75.1	77.4	79
	80	34.1	46.7	57.5	66.5	73.8	79.3	83.3			83.8	86.6	80
	90	34.4	47.2	58.5	68.1	76.3	82.9	88.1	91.9		92.4	95.6	80
	100	34.7	47.6	59.2	69.4	78.2	85.7	91.9	96.8	100.4	101.0	104.5	80
	24	50	38.5	51.8	61.2	66.9						68.1	69.3
60		39.5	53.6	64.7	72.7	77.9					79.2	80.8	79
70		40.2	54.8	66.9	76.5	83.7	88.5				89.9	91.8	79
80		40.7	55.7	68.5	79.2	87.7	94.3	98.9			100.4	102.7	80
90		41.0	56.3	69.6	81.1	90.7	98.6	104.7	109.1		110.7	113.3	80
100		41.3	56.7	70.5	82.6	93.0	101.9	109.2	115.0	119.2	120.9	123.9	80
26		50	45.2	60.8	71.8	78.5						80.1	81.2
	60	46.5	63.0	75.9	85.3	91.3					93.2	94.6	79
	70	47.3	64.4	78.6	89.8	98.1	103.8				105.8	107.5	79
	80	47.8	65.4	80.4	92.9	102.9	110.6	115.9			118.2	120.2	80
	90	48.2	66.1	81.8	95.2	106.5	115.6	122.8	127.9		130.3	132.6	80
	100	48.5	66.6	82.8	96.9	109.2	119.5	128.0	134.7	139.7	142.4	145.0	80

\* Includes 1.0-foot stump allowance.

Table 83--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 9-inch d.o.b. top and height to a saw-log top for all hard hardwoods combined (species 500) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Height to 9-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
<u>Inches</u>	<u>Feet</u>	<u>Cubic feet</u>										<u>Percent</u>	
12	20	8.0									9.2	15.6	70
	30	9.2	12.6								14.5	19.5	76
	40	9.6	13.4	16.8							19.4	24.0	79
	50	9.9	13.8	17.4	20.8	23.8					24.1	28.6	80
	60	10.0	14.0	17.8	21.3	24.6	27.7				28.8	33.1	80
	70	10.1	14.1	18.0	21.7	25.2	28.5	31.5			33.4	37.7	81
	80	10.2	14.2	18.1	21.9	25.5	29.0	32.3	35.4		37.9	42.2	81
14	40	13.2	18.2	22.3							25.2	29.2	79
	50	13.5	18.7	23.4	27.4	30.7					31.1	34.9	80
	60	13.7	19.1	24.0	28.4	32.3	35.7				36.8	40.6	80
	70	13.9	19.3	24.3	29.0	33.3	37.2	40.6			42.5	46.2	81
	80	14.0	19.4	24.6	29.4	34.0	38.2	42.0	45.5		48.1	51.8	81
	90	14.0	19.5	24.8	29.7	34.4	38.9	43.0	46.8	50.3	53.7	57.4	81
	100	14.1	19.6	24.9	30.0	34.8	39.4	43.7	47.8	51.5	59.3	62.9	81
16	40	17.3	23.7	28.7							31.9	35.5	79
	50	17.8	24.5	30.3	35.1	38.8					39.1	42.5	80
	60	18.0	24.9	31.1	36.6	41.2	45.0				46.1	49.5	80
	70	18.2	25.2	31.7	37.5	42.7	47.3	51.1			53.0	56.4	81
	80	18.3	25.4	32.0	38.1	43.7	48.8	53.2	57.1		59.9	63.2	81
	90	18.4	25.6	32.3	38.6	44.5	49.9	54.8	59.2	63.1	66.7	70.0	81
	100	18.5	25.7	32.5	39.0	45.0	50.7	55.9	60.7	65.1	73.5	76.8	81
18	40	22.0	30.0	36.0							39.5	42.8	79
	50	22.6	31.0	38.1	43.8	47.8					48.2	51.4	80
	60	22.9	31.6	39.2	45.8	51.3	55.5				56.7	59.7	80
	70	23.1	32.0	40.0	47.1	53.4	58.7	63.0			65.0	68.0	81
	80	23.3	32.2	40.5	48.0	54.8	60.8	66.0	70.3		73.3	76.3	81
	90	23.4	32.4	40.8	48.6	55.8	62.3	68.1	73.3	77.6	81.5	84.4	81
	100	23.5	32.6	41.1	49.1	56.6	63.5	69.8	75.4	80.5	89.6	92.6	81
20	40	27.2	37.0	44.1							48.0	51.1	79
	50	27.9	38.3	46.8	53.5	58.0					58.4	61.3	80
	60	28.4	39.0	48.3	56.2	62.5	67.2				68.5	71.3	80
	70	28.6	39.5	49.3	57.9	65.3	71.5	76.2			78.4	81.2	81
	80	28.8	39.8	49.9	59.0	67.2	74.3	80.3	85.1		88.2	91.0	81
	90	29.0	40.1	50.4	59.9	68.5	76.3	83.1	89.0	93.9	98.0	100.7	81
	100	29.1	40.3	50.7	60.5	69.5	77.8	85.2	91.9	97.7	107.7	110.4	81
22	50	33.9	46.3	56.5	64.2	69.2					69.6	72.4	80
	60	34.4	47.2	58.4	67.6	75.0	80.2				81.5	84.2	80
	70	34.7	47.8	59.5	69.8	78.5	85.6	90.9			93.2	95.8	81
	80	35.0	48.2	60.4	71.2	80.8	89.1	96.0	101.4		104.7	107.3	81
	90	35.1	48.5	60.9	72.3	82.5	91.7	99.6	106.4	111.9	116.2	118.8	81
	100	35.3	48.8	61.4	73.1	83.8	93.6	102.3	110.1	116.7	127.6	130.2	81
	24	50	40.4	55.1	67.1	76.0	81.5					81.9	84.6
60		41.0	56.3	69.4	80.2	88.6	94.4				95.8	98.3	80
70		41.4	57.0	70.8	82.8	92.9	101.0	107.0			109.4	111.9	81
80		41.7	57.5	71.8	84.6	95.8	105.4	113.3	119.3		122.8	125.3	81
90		41.9	57.8	72.5	85.9	97.9	108.5	117.7	125.5	131.5	136.2	138.6	81
100		42.0	58.1	73.0	86.8	99.5	110.9	121.1	130.0	137.6	149.5	151.9	81
26		50	47.5	64.7	78.6	88.8	94.9					95.3	97.8
	60	48.2	66.1	81.3	93.8	103.5	109.9				111.3	113.7	80
	70	48.6	66.9	83.0	97.0	108.6	117.9	124.4			127.0	129.4	81
	80	49.0	67.5	84.2	99.1	112.1	123.1	132.1	138.8		142.5	144.8	81
	90	49.2	67.9	85.1	100.6	114.6	126.9	137.4	146.2	152.9	157.9	160.2	81
	100	49.4	68.2	85.7	101.8	116.5	129.7	141.4	151.6	160.2	173.2	175.6	81

\* Includes 1.0-foot stump allowance.

Table 84--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for all hard hardwoods combined (species 500) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.6	0.8	0.9	1.3	1.6	1.8											
6	1.7	2.2	2.4	2.7	3.0	3.3	3.5	3.8									
7	2.6	3.2	3.6	3.9	4.4	4.8	5.2	5.6	6.0	6.3							
8	3.6	4.4	4.8	5.3	5.9	6.5	7.1	7.6	8.1	8.6	9.1	9.6					
9	4.6	5.7	6.3	6.9	7.7	8.5	9.2	9.9	10.6	11.2	11.8	12.5	13.1	13.7			
10	5.8	7.1	7.9	8.7	9.7	10.6	11.5	12.4	13.3	14.1	14.9	15.7	16.5	17.2	18.0	18.7	
11			9.6	10.6	11.9	13.0	14.1	15.2	16.2	17.2	18.2	19.2	20.1	21.1	22.0	23.0	23.9
12			11.5	12.8	14.2	15.6	16.9	18.2	19.5	20.7	21.9	23.0	24.2	25.3	26.4	27.6	28.7
13			13.6	15.1	16.8	18.4	20.0	21.5	23.0	24.4	25.8	27.2	28.6	29.9	31.2	32.5	33.9
14					19.6	21.5	23.3	25.1	26.8	28.5	30.1	31.7	33.3	34.8	36.4	37.9	39.5
15					22.6	24.8	26.9	28.9	30.9	32.8	34.7	36.5	38.3	40.2	41.9	43.7	45.5
16					25.7	28.2	30.7	33.0	35.2	37.4	39.6	41.7	43.8	45.8	47.9	49.9	51.9

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 85--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for all hard hardwoods combined (species 500) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.6	2.0	2.5	2.8	3.2	3.7											
6	2.2	2.7	3.3	3.8	4.3	4.9	5.4	5.9									
7	2.7	3.4	4.2	4.9	5.7	6.3	7.0	7.6	8.3	8.9							
8	3.6	4.5	5.3	6.3	7.2	8.0	8.8	9.6	10.4	11.2	11.9	12.7					
9	4.5	5.6	6.6	7.8	8.9	9.9	10.9	11.9	12.8	13.7	14.7	15.6	16.5	17.4			
10	5.6	6.9	8.1	9.6	10.8	12.0	13.2	14.4	15.5	16.6	17.7	18.8	19.9	20.9	22.0	23.1	
11			9.8	11.5	13.0	14.4	15.8	17.1	18.5	19.8	21.1	22.3	23.6	24.9	26.1	27.4	28.6
12			11.6	13.6	15.3	17.0	18.6	20.2	21.7	23.2	24.7	26.2	27.7	29.2	30.6	32.1	33.5
13			13.5	15.8	17.9	19.8	21.7	23.5	25.3	27.0	28.7	30.5	32.2	33.9	35.6	37.2	38.9
14					20.6	22.8	25.0	27.0	29.1	31.1	33.1	35.0	37.0	38.9	40.9	42.8	44.7
15					23.6	26.1	28.5	30.9	33.2	35.5	37.7	40.0	42.2	44.4	46.6	48.7	50.9
16					26.7	29.6	32.3	35.0	37.6	40.2	42.7	45.2	47.7	50.2	52.6	55.1	57.5

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 86--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for white oak (species 802) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	40										4.6	9.4	58
	50	8.4									8.8	13.1	69
	60	9.2									12.2	16.4	74
	70	9.7	13.2								14.8	19.4	78
	80	10.0	13.8								17.0	22.3	80
	90	10.2	14.2	17.7							19.1	25.0	81
	100	10.4	14.5	18.2						21.0	27.6	83	
14	40	9.7									9.7	12.9	58
	50	11.4	15.0								15.2	17.9	69
	60	12.5	16.8								19.2	22.5	74
	70	13.1	18.0	21.9							22.8	26.6	78
	80	13.6	18.8	23.2							26.1	30.5	80
	90	13.9	19.3	24.1	28.0						29.2	34.3	81
	100	14.1	19.7	24.8	29.1					32.3	37.9	83	
16	50	14.9	19.6								21.2	23.5	69
	60	16.3	22.0	26.1							26.6	29.5	74
	70	17.1	23.5	28.6							31.5	34.9	78
	80	17.7	24.5	30.3	34.6						36.1	40.0	80
	90	18.1	25.2	31.5	36.5	40.2					40.5	45.0	81
	100	18.4	25.8	32.4	38.0	42.3					44.7	49.7	83
	110	18.6	26.1	33.0	39.0	43.9	47.7			48.9	54.4	83	
18	50	18.9	24.8								27.8	29.9	69
	60	20.6	27.8	33.1							34.8	37.4	74
	70	21.7	29.7	36.2	40.6						41.3	44.3	78
	80	22.4	31.0	38.3	43.8						47.3	50.8	80
	90	22.9	31.9	39.9	46.2	50.9					53.1	57.1	81
	100	23.3	32.6	41.0	48.0	53.5	57.5				58.7	63.1	83
	110	23.6	33.1	41.8	49.4	55.6	60.4	63.9		64.1	69.0	83	
20	50	23.3	30.7								35.0	36.9	69
	60	25.4	34.4	40.9							43.9	46.2	74
	70	26.8	36.7	44.7	50.1						52.0	54.8	78
	80	27.7	38.3	47.3	54.1	58.6					59.7	62.8	80
	90	28.3	39.4	49.2	57.1	62.8	66.7				67.0	70.6	81
	100	28.7	40.2	50.6	59.3	66.1	71.0				74.0	78.1	83
	110	29.1	40.8	51.6	61.0	68.7	74.6	78.9		80.9	85.4	83	
22	60	30.8	41.6	49.4	53.9						53.9	56.0	74
	70	32.4	44.4	54.1	60.6						63.9	66.4	78
	80	33.5	46.3	57.3	65.5	70.9					73.2	76.1	80
	90	34.2	47.7	59.5	69.1	76.0	80.7				82.2	85.5	81
	100	34.8	48.7	61.2	71.8	80.0	86.0	90.1			90.9	94.6	83
	110	35.2	49.4	62.4	73.8	83.1	90.2	95.5	99.2		99.4	103.5	83
24	60	36.6	49.5	58.8	64.1						64.8	66.7	74
	70	38.6	52.9	64.4	72.1	76.5					76.8	79.0	78
	80	39.9	55.2	68.2	77.9	84.4					88.0	90.7	80
	90	40.8	56.8	70.9	82.2	90.5	96.0				98.8	101.8	81
	100	41.4	57.9	72.8	85.4	95.2	102.3	107.2			109.3	112.7	83
	110	41.9	58.8	74.3	87.8	98.9	107.4	113.7	118.1		119.5	123.3	83
26	60	43.0	58.1	69.1	75.2						76.6	78.3	74
	70	45.3	62.1	75.6	84.6	89.8					90.7	92.8	78
	80	46.8	64.7	80.0	91.5	99.1	103.6				104.0	106.5	80
	90	47.8	66.6	83.2	96.5	106.2	112.7	116.8			116.8	119.6	81
	100	48.6	68.0	85.5	100.2	111.7	120.1	125.9			129.2	132.3	83
	110	49.2	69.1	87.2	103.1	116.1	126.0	133.4	138.6		141.3	144.7	83

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 87--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for white oak (species 802) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	30	8.2									8.5	11.1	70
	40	9.2									11.3	15.1	76
	50	9.7	13.2								13.8	18.7	79
	60	10.0	13.7								16.0	22.2	80
	70	10.2	14.0	17.3							18.0	25.5	81
	80	10.3	14.3	17.8							20.0	28.7	82
	90	10.4	14.4	18.1	21.3					21.9	31.9	82	
14	40	12.5	16.6								17.6	20.3	76
	50	13.2	17.9	21.4							21.6	25.1	79
	60	13.6	18.6	22.7							25.3	29.6	80
	70	13.8	19.1	23.5	27.2						28.8	34.0	81
	80	14.0	19.4	24.1	28.1	31.5					32.2	38.3	82
	90	14.1	19.6	24.5	28.8	32.5					35.5	42.6	82
	100	14.2	19.8	24.8	29.3	33.3	36.8			38.8	46.8	82	
16	40	16.3	21.7								24.3	26.2	76
	50	17.2	23.3	27.9							29.8	32.4	79
	60	17.7	24.3	29.6	33.6						35.0	38.3	80
	70	18.0	24.9	30.7	35.4	39.1					40.0	43.9	81
	80	18.3	25.3	31.4	36.6	41.0	44.4				44.9	49.4	82
	90	18.4	25.6	32.0	37.5	42.3	46.4				49.6	54.9	82
	100	18.6	25.8	32.4	38.2	43.4	47.9	51.7		54.3	60.3	82	
18	40	20.6	27.4								31.5	33.0	76
	50	21.7	29.5	35.3							38.8	40.8	79
	60	22.4	30.7	37.4	42.5						45.6	48.1	80
	70	22.8	31.5	38.8	44.7	49.3					52.1	55.1	81
	80	23.1	32.0	39.7	46.3	51.7	56.0				58.5	62.0	82
	90	23.3	32.4	40.4	47.4	53.5	58.5	62.6			64.8	68.8	82
	100	23.5	32.6	40.9	48.3	54.8	60.4	65.1	69.0	71.0	75.6	82	
20	40	25.4	33.9	38.9							39.4	40.6	76
	50	26.8	36.4	43.5	48.0						48.5	50.1	79
	60	27.7	37.9	46.1	52.3	56.5					57.0	59.0	80
	70	28.2	38.8	47.8	55.1	60.8	64.7				65.3	67.7	81
	80	28.5	39.5	49.0	57.1	63.7	69.0	72.8			73.3	76.1	82
	90	28.8	39.9	49.9	58.5	65.9	72.1	77.0	80.7		81.2	84.4	82
	100	29.0	40.3	50.5	59.6	67.6	74.4	80.2	84.9	88.5	89.0	92.7	82
22	50	32.5	44.1	52.5	58.0						59.1	60.4	79
	60	33.5	45.9	55.8	63.2	68.2					69.5	71.2	80
	70	34.1	47.0	57.8	66.6	73.4	78.1				79.6	81.5	81
	80	34.5	47.8	59.3	69.0	77.0	83.3	87.8			89.4	91.7	82
	90	34.8	48.3	60.3	70.7	79.7	87.1	92.9	97.3		99.0	101.7	82
	100	35.1	48.7	61.1	72.0	81.7	89.9	96.9	102.5	106.7	108.6	111.6	82
24	50	38.6	52.4	62.5	68.9						70.6	71.7	79
	60	39.8	54.6	66.3	75.2	81.1					83.1	84.4	80
	70	40.6	55.9	68.8	79.3	87.2	92.8				95.1	96.7	81
	80	41.1	56.8	70.5	82.1	91.6	99.0	104.3			106.8	108.8	82
	90	41.5	57.5	71.7	84.1	94.7	103.5	110.4	115.6		118.4	120.6	82
	100	41.7	58.0	72.7	85.7	97.1	106.9	115.1	121.7	126.7	129.8	132.3	82
26	50	45.4	61.5	73.3	80.7						83.0	84.0	79
	60	46.7	64.0	77.8	88.2	95.0					97.7	98.9	80
	70	47.6	65.6	80.7	93.0	102.3	108.8				111.8	113.2	81
	80	48.2	66.7	82.7	96.3	107.4	116.0	122.2			125.7	127.3	82
	90	48.7	67.5	84.2	98.7	111.1	121.3	129.4	135.4		139.2	141.1	82
	100	49.0	68.1	85.3	100.5	113.9	125.4	135.0	142.7	148.5	152.7	154.8	82

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 88--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 9-inch d.o.b. top and height to a saw-log top for white oak (species 802) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Height to 9-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	20	8.3									9.4	15.5	71
	30	9.7	13.4								15.3	20.5	79
	40	10.2	14.3	17.9							20.7	25.6	82
	50	10.5	14.7	18.7	22.3	25.5					25.9	30.7	83
	60	10.7	15.0	19.1	23.0	26.6	29.8				30.9	35.7	84
	70	10.8	15.2	19.4	23.4	27.2	30.7	34.0			35.9	40.7	84
	80	10.9	15.3	19.5	23.7	27.6	31.4	34.9	38.2		40.9	45.7	85
14	40	13.8	19.2	23.8							26.9	31.5	82
	50	14.2	19.9	25.0	29.4	33.1					33.5	37.9	83
	60	14.4	20.2	25.6	30.5	34.9	38.6				39.8	44.3	84
	70	14.5	20.5	26.0	31.2	36.0	40.3	44.1			46.1	50.6	84
	80	14.6	20.6	26.3	31.7	36.7	41.4	45.7	49.5		52.3	56.8	85
	90	14.7	20.7	26.5	32.0	37.2	42.1	46.7	51.0	54.8	58.5	63.0	85
	100	14.8	20.8	26.7	32.2	37.6	42.7	47.5	52.0	56.3	64.7	69.2	85
16	40	18.0	24.9	30.6							34.1	38.5	82
	50	18.4	25.8	32.2	37.7	41.8					42.2	46.5	83
	60	18.7	26.3	33.1	39.3	44.6	48.8				50.1	54.3	84
	70	18.9	26.6	33.7	40.3	46.2	51.4	55.7			57.8	62.1	84
	80	19.0	26.8	34.1	40.9	47.2	53.0	58.1	62.5		65.5	69.8	85
	90	19.1	27.0	34.4	41.4	48.0	54.1	59.7	64.8	69.2	73.2	77.5	85
	100	19.2	27.1	34.6	41.8	48.6	54.9	60.9	66.4	71.4	80.8	85.1	85
18	40	22.7	31.4	38.3							42.3	46.5	82
	50	23.3	32.5	40.5	47.0	51.7					52.1	56.3	83
	60	23.6	33.1	41.7	49.2	55.5	60.4				61.7	65.8	84
	70	23.9	33.6	42.5	50.5	57.7	63.9	68.9			71.2	75.3	84
	80	24.0	33.8	43.0	51.4	59.2	66.1	72.2	77.2		80.5	84.7	85
	90	24.1	34.0	43.4	52.1	60.2	67.7	74.4	80.4	85.5	89.9	94.0	85
	100	24.2	34.2	43.6	52.6	61.0	68.8	76.1	82.7	88.6	99.1	103.3	85
20	40	28.0	38.7	46.9							51.5	55.6	82
	50	28.7	40.1	49.7	57.5	62.8					63.3	67.3	83
	60	29.1	40.8	51.3	60.3	67.8	73.4				74.8	78.8	84
	70	29.4	41.3	52.2	62.0	70.6	77.9	83.6			86.1	90.1	84
	80	29.6	41.7	52.9	63.2	72.5	80.8	87.9	93.7		97.3	101.3	85
	90	29.7	41.9	53.4	64.0	73.9	82.9	90.9	97.9	103.7	108.5	112.5	85
	100	29.8	42.1	53.7	64.7	74.9	84.4	93.0	100.9	107.8	119.6	123.6	85
22	50	34.7	48.4	59.9	69.1	75.1					75.5	79.5	83
	60	35.2	49.4	61.9	72.6	81.3	87.7				89.2	93.1	84
	70	35.5	50.0	63.1	74.8	84.9	93.4	99.9			102.6	106.5	84
	80	35.8	50.4	63.9	76.2	87.3	97.1	105.4	112.0		115.9	119.8	85
	90	35.9	50.7	64.5	77.3	89.0	99.6	109.1	117.2	123.9	129.1	133.0	85
	100	36.1	50.9	64.9	78.0	90.3	101.5	111.8	121.0	129.1	142.3	146.2	85
	24	50	41.3	57.5	71.1	81.7	88.6					89.0	92.9
60		41.9	58.7	73.5	86.1	96.2	103.4				105.0	108.8	84
70		42.3	59.4	74.9	88.7	100.6	110.4	117.8			120.7	124.5	84
80		42.6	59.9	75.9	90.5	103.5	114.9	124.5	132.0		136.2	140.1	85
90		42.8	60.3	76.6	91.7	105.6	118.0	129.0	138.4	146.0	151.7	155.6	85
100		42.9	60.5	77.1	92.7	107.1	120.4	132.4	143.1	152.3	167.1	171.0	85
26		50	48.4	67.5	83.3	95.5	103.2					103.7	107.5
	60	49.1	68.8	86.1	100.7	112.4	120.4				122.1	126.0	84
	70	49.6	69.7	87.8	103.8	117.6	128.9	137.2			140.3	144.1	84
	80	49.9	70.3	89.0	106.0	121.1	134.3	145.2	153.7		158.3	162.1	85
	90	50.2	70.7	89.8	107.5	123.6	138.0	150.7	161.5	170.0	176.2	180.1	85
	100	50.3	71.0	90.5	108.6	125.4	140.8	154.7	167.1	177.6	194.0	197.9	85

\* Includes 1.0-foot stump allowance.

Table 89--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for white oak (species 802) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.8	1.0	1.2	1.5	1.5	2.0											
6	1.8	2.4	2.7	2.9	3.1	3.5	3.8	4.2									
7	2.8	3.4	3.8	4.2	4.4	4.9	5.4	5.9	6.4	6.8							
8	3.7	4.5	5.0	5.5	5.8	6.6	7.3	7.9	8.6	9.2	9.8	10.3					
9	4.7	5.7	6.4	7.1	7.5	8.4	9.3	10.2	11.0	11.8	12.6	13.3	14.0	14.8			
10	5.8	7.1	8.0	8.8	9.4	10.5	11.6	12.7	13.7	14.7	15.7	16.6	17.5	18.4	19.3	20.2	
11			9.7	10.8	11.4	12.8	14.2	15.5	16.7	17.9	19.1	20.2	21.4	22.5	23.6	24.7	25.8
12			11.6	12.9	13.6	15.3	16.9	18.5	20.0	21.4	22.8	24.2	25.6	26.9	28.2	29.5	30.8
13			13.6	15.1	16.1	18.1	20.0	21.8	23.5	25.2	26.9	28.5	30.1	31.7	33.3	34.8	36.3
14					18.7	21.0	23.2	25.3	27.4	29.4	31.3	33.2	35.1	36.9	38.7	40.5	42.3
15					21.5	24.2	26.7	29.1	31.5	33.8	36.0	38.2	40.3	42.4	44.5	46.6	48.6
16					24.5	27.5	30.4	33.2	35.9	38.5	41.0	43.5	46.0	48.4	50.8	53.1	55.4

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 90--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for white oak (species 802) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.8	2.2	2.7	3.0	3.5	4.0											
6	2.3	2.9	3.5	4.0	4.6	5.2	5.8	6.3									
7	2.9	3.6	4.3	5.1	5.9	6.7	7.4	8.1	8.8	9.5							
8	3.7	4.6	5.5	6.5	7.4	8.4	9.3	10.1	11.0	11.8	12.6	13.4					
9	4.6	5.7	6.8	8.0	9.2	10.3	11.4	12.4	13.5	14.5	15.5	16.5	17.4	18.4			
10	5.7	7.0	8.3	9.7	11.1	12.5	13.8	15.0	16.3	17.5	18.7	19.8	21.0	22.2	23.3	24.5	
11			9.9	11.6	13.3	14.9	16.4	17.9	19.3	20.8	22.2	23.6	25.0	26.3	27.7	29.1	30.4
12			11.7	13.7	15.7	17.5	19.3	21.0	22.7	24.4	26.1	27.7	29.3	30.9	32.5	34.1	35.7
13			13.6	16.0	18.2	20.4	22.5	24.5	26.4	28.4	30.3	32.2	34.0	35.9	37.7	39.6	41.4
14					21.0	23.5	25.9	28.2	30.4	32.6	34.8	37.0	39.1	41.3	43.4	45.5	47.6
15					24.0	26.8	29.5	32.1	34.7	37.2	39.7	42.2	44.6	47.0	49.4	51.8	54.2
16					27.2	30.4	33.4	36.4	39.3	42.1	44.9	47.7	50.5	53.2	55.9	58.6	61.3

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 91--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for water oak (species 827) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
12	40	8.4									9.3	12.0	71
	50	9.0									11.2	14.7	75
	60	9.4	12.8								12.9	17.1	77
	70	9.7	13.2								14.4	19.5	78
	80	9.8	13.5								15.8	21.7	79
	90	10.0	13.7	17.0							17.1	23.9	79
	100	10.1	13.9	17.2							18.4	26.0	79
14	40	11.6									14.6	16.5	71
	50	12.4	16.6								17.7	20.2	75
	60	12.9	17.5								20.4	23.6	77
	70	13.3	18.1	22.0							22.9	26.8	78
	80	13.5	18.5	22.7							25.3	29.9	79
	90	13.7	18.8	23.2	26.9						27.6	32.9	79
	100	13.8	19.0	23.6	27.5						29.9	35.9	79
16	50	16.3	21.8								24.4	26.6	75
	60	17.0	23.0	27.4							28.3	31.1	77
	70	17.4	23.7	28.8							31.9	35.3	78
	80	17.8	24.3	29.8	34.0						35.3	39.4	79
	90	18.0	24.7	30.5	35.2						38.7	43.4	79
	100	18.2	24.9	31.0	36.1	40.2					41.9	47.3	79
	110	18.3	25.2	31.4	36.8	41.3	44.9				45.2	51.1	80
18	50	20.7	27.7								31.9	33.9	75
	60	21.6	29.2	34.8							37.0	39.6	77
	70	22.2	30.2	36.6	41.1						41.8	44.9	78
	80	22.6	30.8	37.8	43.2						46.4	50.1	79
	90	22.9	31.3	38.7	44.7	49.2					50.9	55.2	79
	100	23.2	31.7	39.3	45.8	51.0	54.9				55.3	60.1	79
	110	23.4	32.0	39.8	46.7	52.4	56.9				59.7	65.0	80
20	50	25.7	34.3	39.7							40.2	42.0	75
	60	26.8	36.2	43.1							46.7	49.0	77
	70	27.5	37.4	45.3	50.8						52.9	55.7	78
	80	28.1	38.2	46.8	53.4	57.9					58.8	62.1	79
	90	28.4	38.8	47.9	55.3	60.9					64.5	68.4	79
	100	28.7	39.3	48.7	56.7	63.1	67.9				70.2	74.5	79
	110	29.0	39.6	49.3	57.8	64.9	70.4	74.6			75.7	80.6	80
22	60	32.6	43.9	52.3	57.1						57.4	59.5	77
	70	33.4	45.4	55.0	61.6						65.0	67.6	78
	80	34.1	46.4	56.8	64.8	70.2					72.3	75.4	79
	90	34.5	47.1	58.1	67.1	73.8	78.3				79.4	83.0	79
	100	34.9	47.7	59.0	68.8	76.5	82.3	86.2			86.4	90.4	79
	110	35.2	48.1	59.8	70.0	78.6	85.4	90.4			93.3	97.8	80
24	60	38.9	52.4	62.4	68.1						69.0	71.0	77
	70	39.9	54.1	65.5	73.5	78.0					78.2	80.6	78
	80	40.7	55.3	67.7	77.2	83.7					87.1	89.9	79
	90	41.2	56.2	69.2	79.9	87.9	93.4				95.7	99.0	79
	100	41.7	56.8	70.4	82.0	91.2	98.0	102.7			104.1	107.8	79
	110	42.0	57.4	71.3	83.5	93.7	101.7	107.7	111.8		112.5	116.6	80
26	60	45.7	61.6	73.3	80.0						81.6	83.5	77
	70	47.0	63.6	77.0	86.3	91.7					92.6	94.8	78
	80	47.9	65.0	79.6	90.8	98.3	102.8				103.1	105.7	79
	90	48.5	66.1	81.4	94.0	103.3	109.7				113.3	116.3	79
	100	49.0	66.8	82.7	96.3	107.2	115.2	120.7			123.4	126.8	79
	110	49.4	67.5	83.8	98.1	110.1	119.5	126.5	131.4		133.3	137.1	80

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 92--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for water oak (species 827) in the Gulf and Atlantic Coastal Plain.\*

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	30	8.7									9.8	12.1	75
	40	9.3									11.7	15.5	77
	50	9.6	13.1								13.4	18.7	78
	60	9.8	13.4								15.0	21.8	79
	70	10.0	13.6								16.5	24.9	79
	80	10.1	13.8	17.1							18.0	27.9	79
	90	10.1	13.9	17.3						19.5	30.8	79	
14	40	12.8	17.1								18.3	21.0	77
	50	13.2	17.9	21.4							21.4	25.2	78
	60	13.5	18.4	22.4							24.5	29.3	79
	70	13.7	18.7	23.0	26.5						27.4	33.3	79
	80	13.8	18.9	23.4	27.2						30.3	37.3	79
	90	13.9	19.1	23.7	27.8	31.3					33.1	41.2	79
	100	14.0	19.2	23.9	28.2	31.9	35.3			35.9	45.1	79	
16	40	16.8	22.4								25.2	27.2	77
	50	17.4	23.5	28.0							29.9	32.7	78
	60	17.7	24.1	29.3	33.2						34.3	37.9	79
	70	18.0	24.5	30.1	34.6	38.2					38.7	43.1	79
	80	18.2	24.8	30.6	35.6	39.8					42.9	48.1	79
	90	18.3	25.0	31.0	36.3	40.9	44.7				47.1	53.1	79
	100	18.5	25.2	31.3	36.8	41.7	46.0	49.6		51.2	58.1	79	
18	40	21.3	28.4								32.8	34.4	77
	50	22.1	29.8	35.5							39.0	41.2	78
	60	22.6	30.6	37.1	42.1						44.9	47.7	79
	70	22.9	31.1	38.1	43.9	48.3					50.7	54.2	79
	80	23.2	31.5	38.8	45.1	50.3	54.4				56.4	60.5	79
	90	23.3	31.8	39.4	46.0	51.7	56.5	60.4			62.0	66.7	79
	100	23.5	32.0	39.8	46.7	52.8	58.1	62.7	66.4	67.6	72.9	79	
20	40	26.5	35.2	40.5							41.1	42.3	77
	50	27.4	36.9	43.9	48.5						48.9	50.7	78
	60	28.0	37.9	45.9	52.0	56.1					56.5	58.7	79
	70	28.4	38.6	47.2	54.2	59.7	63.6				63.8	66.5	79
	80	28.7	39.1	48.1	55.7	62.1	67.1	70.9			71.0	74.3	79
	90	29.0	39.4	48.7	56.9	63.9	69.8	74.5	78.1		78.1	81.9	79
	100	29.1	39.7	49.2	57.7	65.3	71.8	77.3	81.8	85.2	89.4	79	
22	50	33.3	44.7	53.2	58.7						59.8	61.2	78
	60	34.0	46.0	55.6	62.9	67.9					69.0	70.9	79
	70	34.5	46.8	57.2	65.6	72.2	76.8				78.0	80.3	79
	80	34.9	47.4	58.3	67.5	75.2	81.2	85.6			86.8	89.5	79
	90	35.2	47.8	59.1	68.9	77.3	84.4	90.0	94.3		95.6	98.7	79
	100	35.4	48.1	59.7	70.0	79.0	86.8	93.4	98.8	102.9	104.2	107.7	79
24	50	39.7	53.3	63.4	69.8						71.6	72.7	78
	60	40.6	54.8	66.3	74.9	80.7					82.6	84.2	79
	70	41.2	55.8	68.1	78.2	85.9	91.3				93.4	95.3	79
	80	41.7	56.5	69.4	80.4	89.5	96.6	101.8			104.0	106.2	79
	90	42.0	57.0	70.4	82.1	92.1	100.4	107.1	112.1		114.5	117.1	79
	100	42.3	57.4	71.1	83.3	94.1	103.3	111.1	117.4	122.3	124.9	127.8	79
26	50	46.7	62.7	74.5	81.9						84.3	85.3	78
	60	47.8	64.5	77.8	87.9	94.7					97.3	98.6	79
	70	48.5	65.6	80.1	91.8	100.8	107.1				110.1	111.6	79
	80	49.0	66.4	81.6	94.5	105.0	113.3	119.3			122.6	124.4	79
	90	49.4	67.1	82.7	96.4	108.1	117.9	125.6	131.4		134.9	137.1	79
	100	49.7	67.5	83.6	97.9	110.5	121.3	130.4	137.7	143.3	147.2	149.6	79

\* Includes 1.0-foot stump allowance.

Table 93--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 9-inch d.o.b. top and height to a saw-log top for water oak (species 827) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 9-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	20	8.6									9.8	15.1	75
	30	9.4	13.0								15.0	19.5	77
	40	9.8	13.6	17.1							19.9	24.1	78
	50	10.0	13.9	17.5	21.0	24.3					24.6	28.7	79
	60	10.2	14.1	17.8	21.4	24.9	28.1				29.3	33.2	79
	70	10.3	14.2	18.0	21.7	25.2	28.7	32.0			33.9	37.7	79
	80	10.4	14.3	18.1	21.9	25.5	29.0	32.5	35.7		38.5	42.2	79
14	40	13.4	18.4	22.8							25.9	29.8	78
	50	13.7	18.9	23.6	27.8	31.4					31.8	35.5	79
	60	13.9	19.1	24.0	28.6	32.7	36.3				37.5	41.1	79
	70	14.1	19.3	24.3	29.0	33.4	37.5	41.2			43.3	46.8	79
	80	14.2	19.5	24.5	29.4	34.0	38.3	42.3	46.0		48.9	52.4	79
	90	14.2	19.6	24.7	29.6	34.3	38.8	43.1	47.1	50.8	54.6	58.0	80
	100	14.3	19.6	24.8	29.8	34.6	39.2	43.7	47.9	51.8	60.2	63.5	80
16	40	17.6	24.0	29.3							32.8	36.5	78
	50	18.0	24.6	30.5	35.6	39.6					40.0	43.6	79
	60	18.3	25.0	31.2	36.8	41.7	45.8				47.1	50.5	79
	70	18.5	25.3	31.7	37.6	42.9	47.8	51.9			54.1	57.4	79
	80	18.6	25.5	32.0	38.1	43.8	49.0	53.7	57.9		61.0	64.3	79
	90	18.7	25.6	32.2	38.4	44.3	49.9	55.0	59.7	63.9	67.9	71.1	80
	100	18.8	25.7	32.4	38.7	44.8	50.5	55.9	60.9	65.6	74.7	77.9	80
18	40	22.4	30.4	36.8							40.7	44.3	78
	50	22.9	31.2	38.5	44.5	49.0					49.4	52.8	79
	60	23.2	31.7	39.4	46.2	52.0	56.6				57.9	61.2	79
	70	23.5	32.1	40.0	47.2	53.7	59.4	64.1			66.4	69.6	79
	80	23.6	32.3	40.4	48.0	54.9	61.2	66.7	71.4		74.7	77.8	79
	90	23.7	32.5	40.7	48.5	55.7	62.4	68.5	74.0	78.7	83.0	86.1	80
	100	23.9	32.6	41.0	48.9	56.3	63.3	69.8	75.8	81.2	91.3	94.3	80
20	40	27.7	37.5	45.2							49.5	53.0	78
	50	28.4	38.6	47.3	54.4	59.5					59.9	63.2	79
	60	28.8	39.2	48.6	56.7	63.5	68.7				70.1	73.3	79
	70	29.1	39.6	49.3	58.1	65.8	72.4	77.7			80.1	83.2	79
	80	29.3	39.9	49.9	59.0	67.3	74.8	81.2	86.6		90.1	93.1	79
	90	29.4	40.2	50.3	59.7	68.4	76.4	83.6	90.0	95.4	100.0	102.9	80
	100	29.6	40.3	50.6	60.2	69.3	77.7	85.4	92.4	98.7	109.8	112.8	80
22	50	34.4	46.7	57.2	65.5	71.1					71.5	74.8	79
	60	34.9	47.5	58.7	68.3	76.2	82.1				83.5	86.7	79
	70	35.3	48.1	59.7	70.1	79.2	86.8	92.7			95.3	98.4	79
	80	35.5	48.4	60.4	71.3	81.1	89.8	97.3	103.3		107.1	110.0	79
	90	35.7	48.7	60.8	72.1	82.5	91.9	100.4	107.7	113.7	118.7	121.6	80
	100	35.9	48.9	61.2	72.8	83.6	93.5	102.6	110.8	118.0	130.3	133.2	80
24	50	41.1	55.7	68.0	77.5	83.8					84.3	87.5	79
	60	41.7	56.6	69.8	81.1	90.2	96.7				98.3	101.3	79
	70	42.1	57.3	71.0	83.2	93.8	102.6	109.3			112.0	115.0	79
	80	42.4	57.7	71.8	84.7	96.2	106.3	114.9	121.6		125.7	128.6	79
	90	42.6	58.1	72.5	85.8	98.0	109.0	118.7	127.1	133.9	139.2	142.1	80
	100	42.8	58.3	72.9	86.6	99.3	110.9	121.5	131.0	139.2	152.7	155.6	80
26	50	48.3	65.4	79.7	90.7	97.7					98.2	101.3	79
	60	49.0	66.6	81.9	94.9	105.3	112.6				114.3	117.3	79
	70	49.5	67.3	83.4	97.5	109.7	119.8	127.2			130.2	133.1	79
	80	49.9	67.8	84.3	99.3	112.7	124.3	134.0	141.6		145.9	148.8	79
	90	50.2	68.2	85.1	100.6	114.8	127.5	138.7	148.2	155.8	161.6	164.4	80
	100	50.4	68.6	85.6	101.6	116.3	129.8	142.1	152.9	162.3	177.1	179.9	80

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 94--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for water oak (species 827) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.7	0.9	1.5	1.6	2.0	2.1											
6	1.8	2.2	2.5	2.7	3.3	3.5	3.8	4.0									
7	2.6	3.2	3.6	4.0	4.7	5.1	5.5	5.8	6.2	6.5							
8	3.5	4.4	4.8	5.4	6.4	6.9	7.4	7.9	8.4	8.8	9.3	9.7					
9	4.6	5.6	6.3	7.0	8.3	8.9	9.6	10.2	10.9	11.5	12.1	12.6	13.2	13.8			
10	5.8	7.1	7.9	8.7	10.4	11.2	12.0	12.8	13.6	14.4	15.1	15.9	16.6	17.4	18.1	18.8	
11			9.7	10.7	12.7	13.7	14.7	15.7	16.7	17.6	18.6	19.5	20.4	21.3	22.2	23.1	23.9
12			11.6	12.9	15.2	16.5	17.7	18.9	20.0	21.2	22.3	23.4	24.5	25.6	26.6	27.7	28.8
13			13.7	15.2	18.0	19.5	20.9	22.3	23.7	25.0	26.3	27.6	28.9	30.2	31.5	32.7	34.0
14					21.0	22.7	24.4	26.0	27.6	29.2	30.7	32.2	33.7	35.2	36.7	38.2	39.6
15					24.2	26.2	28.1	30.0	31.8	33.6	35.4	37.2	38.9	40.6	42.3	44.0	45.7
16					27.6	29.9	32.1	34.3	36.4	38.4	40.4	42.4	44.4	46.4	48.3	50.3	52.2

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 95--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for water oak (species 827) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.6	2.0	2.5	2.9	3.3	3.8											
6	2.1	2.7	3.3	3.9	4.5	5.0	5.6	6.1									
7	2.7	3.4	4.2	5.2	5.9	6.5	7.2	7.8	8.5	9.1							
8	3.5	4.4	5.4	6.6	7.5	8.3	9.1	9.9	10.7	11.4	12.2	13.0					
9	4.5	5.6	6.7	8.3	9.3	10.3	11.3	12.2	13.2	14.1	15.0	15.9	16.9	17.8			
10	5.6	6.9	8.2	10.1	11.3	12.5	13.7	14.8	15.9	17.1	18.2	19.3	20.3	21.4	22.5	23.6	
11			9.9	12.2	13.6	15.0	16.4	17.7	19.0	20.3	21.6	22.9	24.2	25.5	26.8	28.0	29.3
12			11.7	14.4	16.1	17.7	19.3	20.9	22.4	24.0	25.5	27.0	28.5	29.9	31.4	32.9	34.4
13			13.7	16.8	18.8	20.7	22.5	24.3	26.1	27.9	29.6	31.4	33.1	34.8	36.5	38.2	39.9
14					21.7	23.9	26.0	28.1	30.1	32.1	34.1	36.1	38.1	40.0	42.0	43.9	45.9
15					24.9	27.3	29.7	32.1	34.4	36.7	39.0	41.2	43.5	45.7	47.9	50.1	52.3
16					28.2	31.0	33.7	36.4	39.0	41.6	44.1	46.7	49.2	51.7	54.2	56.7	59.2

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 96--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for willow oak (species 831) in the Gulf and Atlantic Coastal Plain.<sup>a,b</sup>

D.b.h. class	Total tree height	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)								9-inch d.o.b. top	4-inch d.o.b. top		
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
		Cubic feet											
12	40										5.2	10.0	63
	50	8.4									9.4	13.1	70
	60	9.0									11.6	15.8	74
	70	9.4	12.7								13.4	18.2	76
	80	9.6	13.2								15.0	20.6	77
	90	9.8	13.5								16.6	22.9	78
	100	10.0	13.7	17.0							18.0	25.1	79
14	40	10.2									11.6	13.8	63
	50	11.5	15.2								15.3	18.0	70
	60	12.3	16.5								18.4	21.7	74
	70	12.8	17.4	21.0							21.2	25.1	76
	80	13.2	18.0	22.0							23.7	28.4	77
	90	13.5	18.4	22.7	26.1						26.2	31.5	78
	100	13.7	18.8	23.3	27.0						28.5	34.5	79
16	50	15.1	19.9								21.3	23.7	70
	60	16.2	21.7	25.5							25.6	28.5	74
	70	16.9	22.8	27.5							29.5	33.0	76
	80	17.3	23.6	28.8	32.6						33.2	37.3	77
	90	17.7	24.2	29.8	34.2						36.7	41.4	78
	100	17.9	24.6	30.5	35.4	39.1					40.1	45.4	79
	110	18.1	24.9	31.0	36.3	40.5					43.4	49.3	80
18	50	19.2	25.2								28.0	30.1	70
	60	20.5	27.5	32.4							33.7	36.3	74
	70	21.4	29.0	34.9	38.7						38.9	42.0	76
	80	22.0	30.0	36.6	41.4						43.8	47.4	77
	90	22.4	30.7	37.8	43.4	47.4					48.4	52.7	78
	100	22.8	31.2	38.7	44.9	49.6					53.0	57.8	79
	110	23.0	31.6	39.4	46.0	51.3	55.4				57.4	62.7	80
20	50	23.8	31.2								35.4	37.3	70
	60	25.4	34.0	40.1							42.6	45.0	74
	70	26.5	35.8	43.1	47.9						49.2	52.1	76
	80	27.3	37.1	45.2	51.2	55.1					55.4	58.8	77
	90	27.8	38.0	46.7	53.6	58.6					61.4	65.2	78
	100	28.2	38.6	47.8	55.5	61.3	65.6				67.2	71.5	79
	110	28.5	39.1	48.7	56.9	63.5	68.5	72.3			72.9	77.7	80
22	60	30.9	41.3	48.5							52.4	54.6	74
	70	32.2	43.4	52.2	58.0						60.5	63.1	76
	80	33.1	44.9	54.8	62.0	66.8					68.2	71.3	77
	90	33.7	46.0	56.6	64.9	71.0	75.0				75.6	79.1	78
	100	34.2	46.8	58.0	67.2	74.3	79.4				82.8	86.8	79
	110	34.6	47.4	59.0	68.9	76.9	83.0	87.5			89.8	94.2	80
24	60	36.8	49.2	57.8	62.7						63.0	65.1	74
	70	38.3	51.8	62.2	69.1						72.9	75.3	76
	80	39.4	53.6	65.3	73.9	79.5					82.2	85.0	77
	90	40.2	54.9	67.5	77.4	84.5	89.4				91.1	94.3	78
	100	40.8	55.8	69.1	80.0	88.5	94.6	98.8			99.8	103.4	79
	110	41.2	56.6	70.3	82.1	91.6	98.9	104.3	108.0			108.3	112.4
26	60	43.3	57.8	68.0	73.6						74.6	76.5	74
	70	45.1	60.8	73.1	81.2	85.9					86.3	88.5	76
	80	46.3	62.9	76.7	86.8	93.4					97.3	99.9	77
	90	47.3	64.5	79.3	90.9	99.3	105.0				107.9	110.9	78
	100	47.9	65.6	81.2	94.0	103.9	111.1	116.1			118.2	121.6	79
	110	48.5	66.5	82.6	96.4	107.6	116.1	122.4	126.9			128.3	132.1

<sup>a</sup> Includes 1.0-foot stump allowance.

<sup>b</sup> Based on South-wide willow oak form class.

Table 97--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for willow oak (species 831) in the Gulf and Atlantic Coastal Plain.<sup>a,b</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	30	7.9									8.1	10.7	68
	40	8.9									10.5	14.4	73
	50	9.4									12.7	17.8	76
	60	9.7	13.2								14.5	21.0	78
	70	9.9	13.5								16.3	24.1	78
	80	10.0	13.7	17.0							18.0	27.2	79
	90	10.1	13.9	17.3							19.6	30.1	79
14	40	12.2	16.1								16.6	19.4	73
	50	12.9	17.3								20.2	23.9	76
	60	13.3	18.0	21.8							23.5	28.2	78
	70	13.5	18.4	22.6	26.0						26.6	32.3	78
	80	13.7	18.8	23.1	26.9						29.6	36.3	79
	90	13.9	19.0	23.5	27.5	31.0					32.6	40.2	79
	100	14.0	19.2	23.8	28.0	31.7	34.9				35.5	44.1	80
16	40	16.0	21.0								23.1	25.2	73
	50	16.9	22.6	26.8							28.2	31.0	76
	60	17.4	23.5	28.5	32.2						32.9	36.4	78
	70	17.8	24.1	29.5	33.9	37.3					37.4	41.7	78
	80	18.0	24.6	30.3	35.1	39.1					41.7	46.8	79
	90	18.2	24.9	30.8	36.0	40.4	44.1				46.0	51.8	79
	100	18.3	25.1	31.2	36.6	41.4	45.5	49.0			50.3	56.8	80
18	40	20.3	26.6								30.1	31.8	73
	50	21.4	28.7	34.0							36.8	39.0	76
	60	22.1	29.9	36.0	40.7						43.0	45.8	78
	70	22.5	30.6	37.4	42.9	47.1					48.9	52.3	78
	80	22.9	31.2	38.3	44.4	49.4	53.3				54.7	58.7	79
	90	23.1	31.5	39.0	45.5	51.1	55.6	59.3			60.4	65.0	79
	100	23.3	31.8	39.5	46.4	52.4	57.5	61.8	65.3		66.1	71.2	80
20	40	25.1	32.9	37.6							37.7	39.1	73
	50	26.5	35.5	41.9	46.0						46.1	47.9	76
	60	27.4	36.9	44.5	50.2	54.0					54.0	56.3	78
	70	27.9	37.9	46.2	52.9	58.0					61.5	64.3	78
	80	28.3	38.5	47.4	54.8	60.9	65.6				68.8	72.1	79
	90	28.6	39.0	48.2	56.2	63.0	68.6	73.0			76.0	79.7	79
	100	28.8	39.4	48.9	57.3	64.6	70.9	76.1	80.4		83.1	87.3	80
22	50	32.1	43.0	50.8	55.7						56.4	57.8	76
	60	33.2	44.8	53.9	60.7	65.2					66.0	67.8	78
	70	33.9	45.9	56.0	64.0	70.2	74.4				75.2	77.4	78
	80	34.3	46.7	57.4	66.3	73.6	79.3	83.4			84.2	86.8	79
	90	34.7	47.3	58.4	68.0	76.2	82.9	88.2	92.1		93.0	96.0	79
	100	34.9	47.7	59.2	69.3	78.2	85.7	92.0	97.0	100.8	101.7	105.1	80
	24	50	38.3	51.2	60.4	66.2						67.4	68.7
60		39.6	53.3	64.2	72.2	77.5					78.9	80.5	78
70		40.4	54.7	66.6	76.2	83.5	88.4				90.0	91.9	78
80		40.9	55.7	68.3	79.0	87.6	94.3	99.0			100.7	103.0	79
90		41.4	56.4	69.6	81.0	90.7	98.6	104.9	109.5		111.3	113.9	79
100		41.7	56.9	70.5	82.6	93.0	102.0	109.4	115.3	119.8	121.8	124.7	80
26		50	45.0	60.1	71.0	77.7						79.4	80.5
	60	46.5	62.7	75.4	84.8	90.9					93.0	94.3	78
	70	47.5	64.3	78.3	89.5	97.9	103.7				106.0	107.6	78
	80	48.1	65.4	80.3	92.7	102.8	110.6	116.1			118.7	120.6	79
	90	48.6	66.2	81.7	95.1	106.4	115.7	123.0	128.3		131.1	133.3	79
	100	49.0	66.8	82.8	96.9	109.2	119.7	128.3	135.2	140.3	143.4	145.9	80

<sup>a</sup> Includes 1.0-foot stump allowance.

<sup>b</sup> Based on South-wide willow oak form class.

Table 98--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 9-inch d.o.b. top and height to a saw-log top for willow oak (species 831) in the Gulf and Atlantic Coastal Plain.<sup>a,b</sup>

D.b.h. class	Height to 9-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
<u>Inches</u>	<u>Feet</u>	<u>Cubic feet</u>										<u>Percent</u>	
12	20	8.4									9.5	19.1	72
	30	9.3	12.8								14.7	20.1	76
	40	9.8	13.4	16.9							19.6	23.5	78
	50	10.0	13.8	17.3	20.7	23.8					24.2	27.4	79
	60	10.1	13.9	17.6	21.2	24.5	27.7				28.8	31.5	79
	70	10.2	14.1	17.8	21.4	24.9	28.3	31.4			33.3	35.7	79
	80	10.2	14.1	17.9	21.6	25.2	28.7	32.0	35.2		37.8	39.9	79
14	40	13.3	18.2	22.5							25.5	29.2	78
	50	13.6	18.7	23.3	27.4	30.9					31.2	34.3	79
	60	13.8	19.0	23.8	28.2	32.2	35.8				36.9	39.5	79
	70	13.9	19.2	24.1	28.7	33.1	37.0	40.6			42.5	44.8	79
	80	14.0	19.3	24.3	29.1	33.6	37.8	41.7	45.3		48.1	50.1	79
	90	14.1	19.4	24.5	29.3	34.0	38.4	42.6	46.5	50.0	53.6	55.5	79
	100	14.1	19.4	24.6	29.5	34.3	38.8	43.2	47.3	51.2	59.2	60.8	80
16	40	17.5	23.8	28.9							32.3	35.9	78
	50	17.9	24.4	30.2	35.1	39.0					39.4	42.3	79
	60	18.1	24.8	30.9	36.4	41.2	45.1				46.3	48.8	79
	70	18.3	25.0	31.4	37.2	42.4	47.1	51.1			53.2	55.4	79
	80	18.4	25.2	31.7	37.7	43.3	48.4	53.0	57.1		60.0	61.9	79
	90	18.4	25.3	31.9	38.1	43.9	49.3	54.3	58.9	63.0	66.8	68.5	79
	100	18.5	25.4	32.1	38.4	44.4	50.0	55.3	60.2	64.7	73.5	75.2	80
18	40	22.2	30.1	36.3							40.0	43.6	78
	50	22.7	30.9	38.0	43.9	48.2					48.6	51.5	79
	60	23.0	31.4	39.0	45.6	51.3	55.7				57.0	59.4	79
	70	23.2	31.7	39.6	46.7	53.1	58.6	63.1			65.3	67.4	79
	80	23.3	32.0	40.0	47.5	54.3	60.4	65.8	70.4		73.5	75.4	79
	90	23.4	32.1	40.3	48.0	55.1	61.7	67.7	73.0	77.6	81.7	83.4	79
	100	23.5	32.2	40.5	48.4	55.8	62.7	69.1	74.9	80.2	89.8	91.4	80
20	40	27.5	37.1	44.5							48.7	52.2	78
	50	28.1	38.2	46.8	53.7	58.5					58.9	61.8	79
	60	28.5	38.8	48.0	56.0	62.6	67.6				68.9	71.3	79
	70	28.7	39.2	48.8	57.4	65.0	71.4	76.5			78.8	80.9	79
	80	28.9	39.5	49.4	58.4	66.6	73.8	80.1	85.3		88.6	90.5	79
	90	29.0	39.7	49.7	59.1	67.7	75.6	82.6	88.8	94.0	98.4	100.1	79
	100	29.1	39.9	50.0	59.6	68.6	76.8	84.4	91.3	97.4	108.1	109.6	80
22	50	34.1	46.2	56.5	64.5	69.9					70.3	73.2	79
	60	34.5	47.0	58.0	67.5	75.1	80.7				82.1	84.5	79
	70	34.8	47.5	59.0	69.3	78.2	85.6	91.3			93.8	95.9	79
	80	35.0	47.9	59.7	70.5	80.2	88.7	96.0	101.8		105.3	107.2	79
	90	35.2	48.1	60.2	71.4	81.6	90.9	99.1	106.2	112.1	116.8	118.5	79
	100	35.3	48.3	60.6	72.0	82.7	92.5	101.5	109.5	116.5	128.3	129.8	80
	24	50	40.6	55.1	67.1	76.4	82.4					82.8	85.7
60		41.2	56.0	69.0	80.0	88.9	95.1				96.6	99.0	79
70		41.5	56.6	70.2	82.2	92.6	101.1	107.6			110.2	112.3	79
80		41.8	57.0	71.0	83.7	95.1	105.0	113.3	119.8		123.7	125.5	79
90		41.9	57.3	71.6	84.8	96.9	107.7	117.2	125.4	131.9	137.0	138.7	79
100		42.1	57.5	72.1	85.6	98.2	109.7	120.1	129.4	137.4	150.4	151.9	80
26		50	47.7	64.6	78.6	89.3	96.0					96.5	99.3
	60	48.4	65.8	80.9	93.7	103.8	110.8				112.4	114.7	79
	70	48.8	66.5	82.4	96.4	108.3	118.0	125.2			128.0	130.1	79
	80	49.1	67.0	83.3	98.2	111.3	122.7	132.1	139.4		143.6	145.4	79
	90	49.3	67.3	84.1	99.5	113.4	126.0	136.9	146.2	153.5	159.0	160.7	79
	100	49.5	67.6	84.6	100.4	115.0	128.4	140.4	151.0	160.1	174.4	175.9	80

<sup>a</sup> Includes 1.0-foot stump allowance.

<sup>b</sup> Based on South-wide willow oak form class.

Table 99--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for willow oak (species 831) in the Gulf and Atlantic Coastal Plain.<sup>a,b</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.7	0.9	1.2	1.5	1.6	1.8											
6	1.8	2.2	2.4	2.7	2.9	3.2	3.4	3.7									
7	2.6	3.2	3.5	3.9	4.2	4.6	5.0	5.4	5.8	6.1							
8	3.5	4.3	4.8	5.3	5.7	6.3	6.8	7.3	7.8	8.3	8.8	9.3					
9	4.5	5.5	6.2	6.8	7.4	8.1	8.8	9.5	10.2	10.8	11.5	12.1	12.7	13.3			
10	5.7	6.9	7.7	8.6	9.3	10.2	11.1	12.0	12.8	13.6	14.4	15.2	16.0	16.7	17.5	18.2	
11			9.5	10.5	11.4	12.5	13.6	14.7	15.7	16.7	17.7	18.6	19.5	20.5	21.4	22.3	23.2
12			11.4	12.6	13.6	15.0	16.3	17.6	18.8	20.0	21.2	22.3	23.5	24.6	25.7	26.8	27.8
13			13.4	14.9	16.1	17.7	19.3	20.8	22.3	23.7	25.0	26.4	27.7	29.1	30.4	31.6	32.9
14					18.8	20.7	22.5	24.3	25.9	27.6	29.2	30.8	32.3	33.9	35.4	36.9	38.4
15					21.6	23.8	25.9	28.0	29.9	31.8	33.7	35.5	37.3	39.0	40.8	42.5	44.2
16					24.7	27.2	29.6	31.9	34.1	36.3	38.4	40.5	42.5	44.6	46.6	48.5	50.5

<sup>a</sup> Includes 0.5-foot stump allowance.

<sup>b</sup> Based on South-wide willow oak form class.

Table 100--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for willow oak (species 831) in the Gulf and Atlantic Coastal Plain.<sup>a,b</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.6	2.0	2.5	2.7	3.2	3.7											
6	2.2	2.8	3.4	3.7	4.3	4.8	5.4	5.9									
7	2.7	3.5	4.2	4.8	5.6	6.3	6.9	7.6	8.3	8.9							
8	3.6	4.5	5.4	6.1	7.0	7.9	8.7	9.6	10.4	11.2	11.9	12.7					
9	4.5	5.6	6.7	7.6	8.7	9.8	10.8	11.8	12.8	13.7	14.7	15.6	16.5	17.4			
10	5.6	6.9	8.2	9.3	10.6	11.9	13.1	14.3	15.4	16.6	17.7	18.8	19.9	21.0	22.1	23.2	
11			9.8	11.2	12.7	14.2	15.6	17.0	18.4	19.7	21.1	22.4	23.7	25.0	26.2	27.5	28.8
12			11.6	13.2	15.0	16.8	18.4	20.1	21.7	23.2	24.8	26.3	27.8	29.3	30.8	32.3	33.7
13			13.6	15.4	17.5	19.5	21.5	23.4	25.2	27.0	28.8	30.5	32.3	34.0	35.7	37.4	39.1
14					20.2	22.5	24.8	26.9	29.0	31.1	33.1	35.1	37.1	39.1	41.1	43.0	45.0
15					23.1	25.8	28.3	30.7	33.1	35.5	37.8	40.1	42.3	44.6	46.8	49.0	51.2
16					26.2	29.2	32.1	34.8	37.5	40.2	42.8	45.4	47.9	50.4	53.0	55.4	57.9

<sup>a</sup> Includes 0.5-foot stump allowance.

<sup>b</sup> Based on South-wide willow oak form class.

Table 101--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for all red oaks combined (species 83) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
<u>Inches</u>	<u>Feet</u>	<u>Cubic feet</u>										<u>Percent</u>	
12	40	8.3									8.9	11.6	70
	50	8.9									10.7	14.1	74
	60	9.2									12.2	16.4	75
	70	9.4	12.9								13.6	18.6	76
	80	9.6	13.1								14.9	20.7	77
	90	9.7	13.3								16.0	22.7	78
100	9.8	13.5	16.7							17.2	24.7	78	
14	40	11.4									14.1	16.0	70
	50	12.2	16.2								16.9	19.5	74
	60	12.6	17.1								19.4	22.6	75
	70	13.0	17.6	21.3							21.7	25.6	76
	80	13.2	18.0	22.0							23.9	28.5	77
	90	13.3	18.2	22.5	25.9						25.9	31.3	78
100	13.5	18.4	22.9	26.6						28.0	34.1	78	
16	50	16.0	21.3								23.4	25.6	74
	60	16.6	22.4	26.5							26.9	29.8	75
	70	17.0	23.1	27.9							30.2	33.7	76
	80	17.3	23.6	28.8	32.7						33.4	37.5	77
	90	17.5	23.9	29.5	33.9						36.5	41.2	78
	100	17.7	24.2	30.0	34.8	38.5					39.5	44.8	78
110	17.8	24.4	30.3	35.5	39.7					42.4	48.4	78	
18	50	20.3	27.0								30.6	32.6	74
	60	21.1	28.4	33.6							35.3	37.9	75
	70	21.6	29.3	35.4	39.4						39.7	42.9	76
	80	22.0	29.9	36.6	41.5						44.0	47.7	77
	90	22.2	30.4	37.4	43.0	47.1					48.1	52.4	78
	100	22.4	30.7	38.0	44.1	48.9					52.2	57.0	78
110	22.6	31.0	38.5	45.0	50.3	54.3				56.2	61.6	78	
20	50	25.1	33.4	38.3							38.5	40.3	74
	60	26.1	35.1	41.6							44.6	46.9	75
	70	26.7	36.2	43.7	48.7						50.3	53.1	76
	80	27.2	37.0	45.2	51.3	55.3					55.7	59.1	77
	90	27.5	37.6	46.2	53.2	58.2					61.0	64.9	78
	100	27.8	38.0	47.0	54.6	60.4	64.7				66.3	70.6	78
110	28.0	38.3	47.6	55.6	62.2	67.2	70.9			71.4	76.3	78	
22	60	31.6	42.6	50.4	54.7						54.7	56.9	75
	70	32.4	43.9	53.0	59.0						61.8	64.4	76
	80	33.0	44.9	54.8	62.1	67.0					68.6	71.6	77
	90	33.4	45.5	56.0	64.4	70.5	74.6				75.2	78.7	78
	100	33.7	46.0	57.0	66.1	73.2	78.3				81.7	85.6	78
	110	34.0	46.4	57.7	67.4	75.3	81.4	85.8			88.1	92.5	78
24	60	37.7	50.7	60.0	65.2						65.8	67.8	75
	70	38.6	52.3	63.1	70.3						74.4	76.7	76
	80	39.3	53.4	65.3	74.0	79.8					82.6	85.4	77
	90	39.8	54.2	66.8	76.7	83.9	88.8				90.6	93.8	78
	100	40.2	54.8	67.9	78.7	87.1	93.3	97.5			98.4	102.1	78
	110	40.5	55.3	68.7	80.3	89.7	96.9	102.2	106.0		106.2	110.3	78
26	60	44.3	59.6	70.5	76.6						77.8	79.7	75
	70	45.4	61.5	74.2	82.6	87.4					88.0	90.2	76
	80	46.2	62.8	76.6	86.9	93.7					97.7	100.3	77
	90	46.8	63.7	78.4	90.1	98.6	104.3				107.3	110.3	78
	100	47.2	64.4	79.7	92.5	102.3	109.5	114.5			116.6	120.0	78
	110	47.6	65.0	80.7	94.3	105.3	113.8	120.1	124.5		125.8	129.6	78

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 102--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for all red oaks combined (species 83) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			Percent
		Cubic feet											
12	30	8.5									9.2	11.5	73
	40	9.1									10.9	14.7	75
	50	9.4									12.5	17.7	77
	60	9.6	13.0								13.9	20.6	77
	70	9.7	13.3								15.2	23.4	78
	80	9.8	13.4								16.4	26.2	78
	90	9.9	13.5	16.8						17.7	29.0	78	
14	40	12.4	16.5								17.1	19.9	75
	50	12.9	17.3								20.0	23.8	77
	60	13.1	17.8	21.5							22.7	27.6	77
	70	13.3	18.1	22.2							25.3	31.3	78
	80	13.5	18.4	22.6	26.2						27.9	35.0	78
	90	13.6	18.5	22.9	26.7	30.0					30.4	38.6	78
	100	13.6	18.7	23.2	27.1	30.6				32.9	42.2	78	
16	40	16.3	21.6								23.7	25.8	75
	50	16.9	22.7	26.9							27.9	30.8	77
	60	17.3	23.3	28.1	31.7						32.0	35.7	77
	70	17.5	23.8	29.0	33.2						35.9	40.4	78
	80	17.7	24.1	29.6	34.2	37.9					39.7	45.1	78
	90	17.8	24.3	30.0	34.9	39.1	42.6				43.5	49.7	78
	100	17.9	24.5	30.3	35.5	40.0	43.8	47.1		47.2	54.3	78	
18	40	20.7	27.4								30.8	32.5	75
	50	21.4	28.8	34.0							36.5	38.8	77
	60	21.9	29.6	35.6	40.1						41.9	44.9	77
	70	22.2	30.1	36.7	41.9	45.9					47.2	50.8	78
	80	22.5	30.5	37.5	43.2	47.9	51.6				52.3	56.6	78
	90	22.6	30.8	38.0	44.2	49.4	53.7	57.1			57.4	62.3	78
	100	22.8	31.0	38.4	44.9	50.6	55.4	59.4		62.4	68.0	78	
20	40	25.6	33.8	38.5							38.6	40.0	75
	50	26.5	35.6	42.0							45.8	47.7	77
	60	27.1	36.6	44.0	49.5						52.7	55.1	77
	70	27.5	37.3	45.4	51.8	56.6					59.4	62.3	78
	80	27.8	37.8	46.3	53.4	59.1	63.5				65.9	69.4	78
	90	28.0	38.1	47.0	54.6	61.0	66.2	70.3			72.4	76.4	78
	100	28.2	38.4	47.5	55.5	62.4	68.3	73.2	77.0	78.8	83.4	78	
22	50	32.2	43.1	50.8	55.5						56.0	57.5	77
	60	32.9	44.3	53.3	59.8	64.0					64.4	66.4	77
	70	33.4	45.2	54.9	62.6	68.4	72.3				72.6	75.1	78
	80	33.7	45.8	56.0	64.6	71.5	76.8	80.5			80.7	83.6	78
	90	34.0	46.2	56.9	66.1	73.8	80.0	84.9	88.5		88.7	92.0	78
	100	34.2	46.5	57.5	67.2	75.5	82.6	88.4	93.0	96.5	96.5	100.3	78
24	50	38.4	51.3	60.5	66.0						67.0	68.3	77
	60	39.2	52.8	63.4	71.2	76.1					77.2	78.8	77
	70	39.8	53.8	65.4	74.5	81.4	85.9				87.0	89.1	78
	80	40.2	54.5	66.7	76.9	85.0	91.2	95.6			96.7	99.1	78
	90	40.5	55.1	67.7	78.6	87.8	95.2	100.9	105.1		106.2	109.1	78
	100	40.8	55.5	68.5	80.0	89.9	98.2	105.1	110.5	114.5	115.7	118.9	78
26	50	45.1	60.3	71.0	77.4						78.9	80.0	77
	60	46.1	62.1	74.5	83.5	89.2					90.9	92.3	77
	70	46.8	63.2	76.8	87.5	95.4	100.7				102.5	104.3	78
	80	47.3	64.1	78.4	90.3	99.8	107.0	112.0			113.9	116.0	78
	90	47.7	64.7	79.6	92.3	103.0	111.6	118.3	123.1		125.2	127.6	78
	100	47.9	65.2	80.5	93.9	105.5	115.2	123.2	129.5	134.2	136.4	139.1	78

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 103--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 9-inch d.o.b. top and height to a saw-log top for all red oaks combined (species 83) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 9-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	20	8.1									9.2	15.7	70
	30	9.0	12.4								14.2	19.2	75
	40	9.4	13.0	16.3							19.0	23.5	77
	50	9.6	13.4	16.9	20.1	23.1					23.5	27.8	78
	60	9.7	13.5	17.2	20.6	23.9	26.9				28.0	32.1	79
	70	9.8	13.7	17.4	20.9	24.3	27.5	30.6			32.4	36.5	79
	80	9.9	13.8	17.5	21.1	24.6	28.0	31.2	34.2		36.8	40.8	79
14	40	13.0	17.8	21.8							24.7	28.4	77
	50	13.3	18.3	22.7	26.7	29.9					30.3	33.9	78
	60	13.5	18.6	23.3	27.5	31.4	34.7				35.8	39.2	79
	70	13.6	18.8	23.6	28.1	32.3	36.0	39.4			41.2	44.6	79
	80	13.7	18.9	23.8	28.5	32.8	36.9	40.6	44.0		46.6	50.0	79
	90	13.7	19.0	24.0	28.8	33.3	37.5	41.5	45.2	48.6	52.0	55.3	79
	100	13.8	19.1	24.1	29.0	33.6	38.0	42.2	46.1	49.8	57.4	60.6	79
16	40	17.1	23.3	28.2							31.3	34.5	77
	50	17.5	24.0	29.5	34.2	37.8					38.1	41.2	78
	60	17.8	24.4	30.3	35.5	40.0	43.7				44.8	47.8	79
	70	17.9	24.6	30.8	36.4	41.4	45.8	49.5			51.5	54.4	79
	80	18.0	24.8	31.1	37.0	42.3	47.2	51.5	55.3		58.0	60.9	79
	90	18.1	24.9	31.4	37.4	43.0	48.2	52.9	57.2	61.0	64.5	67.4	79
	100	18.2	25.0	31.6	37.7	43.5	48.9	54.0	58.6	62.8	71.1	73.8	79
18	40	21.8	29.5	35.3							38.8	41.6	77
	50	22.3	30.4	37.2	42.7	46.6					47.0	49.7	78
	60	22.6	30.9	38.3	44.6	49.8	53.9				55.1	57.7	79
	70	22.8	31.3	38.9	45.8	51.8	56.9	61.0			63.0	65.6	79
	80	23.0	31.5	39.4	46.6	53.1	58.8	63.8	68.0		70.9	73.4	79
	90	23.1	31.7	39.7	47.2	54.0	60.3	65.8	70.8	75.0	78.8	81.2	79
	100	23.2	31.8	40.0	47.6	54.7	61.3	67.3	72.8	77.7	86.6	89.0	79
20	40	27.0	36.4	43.3							47.1	49.7	77
	50	27.7	37.6	45.8	52.2	56.6					56.9	59.4	78
	60	28.0	38.3	47.2	54.7	60.8	65.3				66.5	68.9	79
	70	28.3	38.7	48.0	56.3	63.4	69.2	73.9			76.0	78.3	79
	80	28.5	39.0	48.6	57.3	65.1	71.9	77.6	82.3		85.3	87.6	79
	90	28.6	39.2	49.1	58.1	66.3	73.7	80.3	85.9	90.6	94.6	96.9	79
	100	28.7	39.4	49.4	58.7	67.3	75.2	82.3	88.7	94.2	103.9	106.1	79
22	50	33.6	45.5	55.3	62.7	67.5					67.9	70.2	78
	60	34.0	46.4	57.0	65.9	72.9	77.9				79.2	81.3	79
	70	34.4	46.9	58.1	67.8	76.2	82.9	88.0			90.3	92.4	79
	80	34.6	47.3	58.8	69.2	78.4	86.3	92.9	98.0		101.3	103.3	79
	90	34.7	47.5	59.4	70.2	79.9	88.7	96.3	102.7	108.0	112.2	114.2	79
	100	34.9	47.8	59.8	70.9	81.1	90.4	98.8	106.2	112.5	123.1	125.1	79
	24	50	40.1	54.2	65.6	74.2	79.5					79.9	82.0
60		40.6	55.2	67.8	78.1	86.2	91.7				93.0	95.0	79
70		41.0	55.9	69.1	80.5	90.2	97.9	103.6			105.9	107.9	79
80		41.3	56.3	70.0	82.2	92.9	102.0	109.5	115.3		118.7	120.6	79
90		41.4	56.7	70.7	83.4	94.8	105.0	113.7	121.1	126.9	131.4	133.3	79
100		41.6	56.9	71.2	84.3	96.3	107.2	116.9	125.4	132.6	144.1	145.9	79
26		50	47.1	63.7	76.9	86.7	92.6					93.0	94.9
	60	47.8	64.9	79.5	91.4	100.6	106.7				108.1	110.0	79
	70	48.2	65.7	81.1	94.3	105.4	114.2	120.5			123.0	124.8	79
	80	48.5	66.2	82.1	96.3	108.7	119.2	127.7	134.1		137.7	139.5	79
	90	48.7	66.6	82.9	97.8	111.1	122.7	132.8	141.1	147.5	152.3	154.1	79
	100	48.9	66.9	83.5	98.9	112.8	125.4	136.6	146.2	154.4	166.9	168.6	79

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 104--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for all red oaks combined (species 83) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
Inches	Cubic feet																
5 <sup>b</sup>	0.6	0.7	0.9	1.1	1.7	1.8											
6 <sup>b</sup>	1.6	2.1	2.3	2.5	3.0	3.2	3.4	3.6									
7	2.5	3.1	3.5	3.8	4.4	4.8	5.1	5.4	5.7	6.0							
8	3.5	4.3	4.7	5.2	6.1	6.5	7.0	7.4	7.9	8.3	8.7	9.1					
9	4.6	5.6	6.2	6.8	7.9	8.5	9.1	9.7	10.3	10.9	11.4	12.0	12.5	13.0			
10	5.7	7.0	7.8	8.6	10.0	10.8	11.5	12.3	13.0	13.7	14.4	15.1	15.8	16.4	17.1	17.8	
11			9.6	10.6	12.2	13.2	14.1	15.0	15.9	16.8	17.7	18.5	19.3	20.2	21.0	21.8	22.6
12			11.5	12.7	14.7	15.8	17.0	18.1	19.1	20.2	21.2	22.2	23.3	24.3	25.2	26.2	27.2
13			13.6	15.0	17.3	18.7	20.1	21.3	22.6	23.9	25.1	26.3	27.5	28.7	29.9	31.0	32.2
14					20.2	21.8	23.4	24.9	26.4	27.8	29.3	30.7	32.1	33.5	34.8	36.2	37.6
15					23.3	25.2	27.0	28.7	30.4	32.1	33.7	35.4	37.0	38.6	40.2	41.7	43.3
16					26.6	28.7	30.8	32.8	34.7	36.6	38.5	40.4	42.2	44.0	45.8	47.6	49.4

<sup>a</sup> Includes 0.5-foot stump allowance.

<sup>b</sup> Cylindrical volume assumed below breast height.

Table 105--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for all red oaks combined (species 83) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
Inches	Cubic feet																
5 <sup>b</sup>	1.5	1.9	2.4	2.7	3.1	3.5											
6 <sup>b</sup>	2.1	2.6	3.2	3.7	4.2	4.7	5.2	5.7									
7	2.7	3.4	4.0	4.9	5.5	6.1	6.8	7.4	8.0	8.6							
8	3.5	4.4	5.2	6.3	7.1	7.8	8.6	9.3	10.1	10.8	11.5	12.2					
9	4.5	5.5	6.6	7.9	8.8	9.7	10.7	11.5	12.4	13.3	14.2	15.0	15.9	16.7			
10	5.6	6.8	8.1	9.6	10.8	11.9	13.0	14.0	15.1	16.1	17.1	18.1	19.2	20.2	21.2	22.2	
11			9.7	11.6	12.9	14.2	15.5	16.7	18.0	19.2	20.4	21.6	22.8	24.0	25.1	26.3	27.5
12			11.5	13.7	15.3	16.8	18.3	19.7	21.2	22.6	24.0	25.4	26.8	28.1	29.5	30.9	32.2
13			13.5	16.0	17.8	19.6	21.3	23.0	24.6	26.3	27.9	29.5	31.1	32.7	34.2	35.8	37.4
14					20.6	22.6	24.6	26.5	28.4	30.3	32.1	33.9	35.8	37.6	39.4	41.2	42.9
15					23.6	25.9	28.1	30.3	32.4	34.5	36.6	38.7	40.8	42.8	44.9	46.9	48.9
16					26.8	29.3	31.8	34.3	36.7	39.1	41.5	43.8	46.1	48.4	50.7	53.0	55.3

<sup>a</sup> Includes 0.5-foot stump allowance.

<sup>b</sup> Cylindrical volume assumed below breast height.

Table 106--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for all oaks combined (species 800) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	40										5.7	10.8	66
	50	8.7									10.2	13.8	72
	60	9.3									12.3	16.5	76
	70	9.6	13.1								14.1	19.0	77
	80	9.8	13.5								15.8	21.4	79
	90	10.0	13.7	17.0							17.3	23.7	80
	100	10.1	13.9	17.4							18.8	25.9	80
14	40	10.7									12.7	14.8	66
	50	12.0	15.9								16.4	19.0	72
	60	12.7	17.1								19.5	22.7	76
	70	13.1	17.9	21.7							22.3	26.1	77
	80	13.4	18.4	22.6							24.9	29.4	79
	90	13.6	18.8	23.2	26.8						27.4	32.6	80
	100	13.8	19.1	23.7	27.7						29.8	35.7	80
16	50	15.7	20.8								22.7	25.0	72
	60	16.6	22.4	26.5							27.0	29.8	76
	70	17.2	23.4	28.3							30.9	34.4	77
	80	17.6	24.1	29.6	33.6						34.6	38.7	79
	90	17.9	24.6	30.4	35.1						38.2	42.8	80
	100	18.1	25.0	31.1	36.2	40.2					41.7	46.9	80
	110	18.2	25.2	31.6	37.0	41.5	44.9				45.1	50.9	81
18	50	19.9	26.3								29.7	31.7	72
	60	21.1	28.4	33.6							35.4	37.9	76
	70	21.8	29.7	35.9	40.1						40.6	43.7	77
	80	22.3	30.6	37.5	42.6						45.5	49.1	79
	90	22.7	31.2	38.6	44.5	48.8					50.3	54.4	80
	100	22.9	31.7	39.4	45.9	50.9	54.6				54.9	59.6	80
	110	23.1	32.0	40.0	46.9	52.6	56.9				59.5	64.7	81
20	50	24.6	32.6	37.3							37.4	39.3	72
	60	26.1	35.1	41.6							44.6	46.9	76
	70	27.0	36.7	44.4	49.6						51.3	54.1	77
	80	27.6	37.8	46.3	52.7	56.9					57.6	60.8	79
	90	28.0	38.6	47.7	55.0	60.3					63.7	67.4	80
	100	28.4	39.2	48.7	56.7	62.9	67.4				69.6	73.8	80
	110	28.6	39.6	49.5	58.0	65.0	70.3	74.3			75.4	80.1	81
22	60	31.6	42.5	50.4	54.8						54.8	56.9	76
	70	32.7	44.5	53.8	60.0						63.0	65.6	77
	80	33.5	45.8	56.1	63.8	68.9					70.8	73.8	79
	90	34.0	46.8	57.8	66.6	73.0	77.3				78.3	81.7	80
	100	34.4	47.4	59.0	68.7	76.2	81.7	85.5			85.6	89.5	80
	110	34.7	48.0	59.9	70.3	78.7	85.2	90.0			92.8	97.1	81
24	60	37.6	50.7	60.0	65.2						65.9	67.8	76
	70	39.0	53.0	64.1	71.5	75.8					75.8	78.1	77
	80	39.9	54.6	66.9	76.0	82.1					85.2	87.9	79
	90	40.5	55.7	68.8	79.3	86.9	92.1				94.3	97.4	80
	100	41.0	56.5	70.3	81.8	90.7	97.3	101.8			103.1	106.7	80
	110	41.4	57.1	71.4	83.7	93.7	101.4	107.1	111.2		111.8	115.8	81
26	60	44.2	59.5	70.5	76.6						77.9	79.7	76
	70	45.8	62.3	75.3	84.0	89.0					89.6	91.8	77
	80	46.9	64.1	78.5	89.3	96.4	100.6				100.8	103.3	79
	90	47.6	65.4	80.8	93.1	102.1	108.2				111.5	114.5	80
	100	48.2	66.4	82.5	96.1	106.5	114.2	119.5			122.0	125.3	80
	110	48.6	67.1	83.8	98.3	110.0	119.1	125.8	130.5		132.4	136.0	81

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 107--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for all oaks combined (species 800) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to											Girard Form Class
		Saw-log merchantable height (16-foot logs)									9-inch d.o.b. top	4-inch d.o.b. top	
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0			
<u>Inches</u>	<u>Feet</u>	<u>Cubic feet</u>											<u>Percent</u>
12	30	8.3									8.8	11.2	71
	40	9.1									11.0	14.8	75
	50	9.5	12.9								12.9	18.0	78
	60	9.8	13.3								14.6	21.2	79
	70	9.9	13.6								16.3	24.2	79
	80	10.0	13.8	17.1							17.8	27.1	80
	90	10.1	14.0	17.4						19.4	30.0	80	
14	40	12.4	16.5								17.1	19.9	75
	50	13.0	17.6								20.5	24.2	78
	60	13.4	18.2	22.0							23.6	28.3	79
	70	13.6	18.6	22.8	26.2						26.5	32.3	79
	80	13.7	18.9	23.3	27.0						29.4	36.2	80
	90	13.8	19.1	23.7	27.7	31.1					32.2	40.0	80
	100	13.9	19.2	23.9	28.1	31.8	35.0			35.0	43.8	80	
16	40	16.3	21.6								23.7	25.8	75
	50	17.0	23.0	27.3							28.5	31.3	78
	60	17.5	23.8	28.8	32.5						32.9	36.6	79
	70	17.8	24.3	29.8	34.1						37.2	41.6	79
	80	18.0	24.7	30.4	35.3	39.2					41.4	46.6	80
	90	18.1	24.9	30.9	36.1	40.5	44.1				45.6	51.5	80
	100	18.3	25.1	31.3	36.7	41.5	45.5	48.9		49.7	56.4	80	
18	40	20.7	27.3								30.8	32.5	75
	50	21.6	29.1	34.5							37.1	39.4	78
	60	22.2	30.2	36.4	41.0						43.1	45.9	79
	70	22.6	30.8	37.7	43.1	47.3					48.8	52.3	79
	80	22.8	31.3	38.5	44.6	49.5	53.3				54.4	58.5	80
	90	23.0	31.6	39.2	45.7	51.2	55.7	59.2			59.9	64.6	80
	100	23.2	31.9	39.6	46.5	52.4	57.5	61.7	65.1	65.3	70.7	80	
20	40	25.6	33.8	38.5							38.6	39.9	75
	50	26.8	36.0	42.6							46.5	48.4	78
	60	27.5	37.3	45.0	50.6						54.1	56.4	79
	70	27.9	38.1	46.5	53.2	58.2					61.3	64.2	79
	80	28.3	38.7	47.6	55.0	61.0	65.6				68.4	71.7	80
	90	28.5	39.1	48.4	56.4	63.1	68.6	72.9			75.4	79.2	80
	100	28.7	39.4	49.0	57.4	64.7	70.9	76.0	80.1	82.2	86.6	80	
22	50	32.4	43.6	51.5	56.3						56.8	58.4	78
	60	33.3	45.2	54.4	61.2	65.5					66.0	68.0	79
	70	33.9	46.2	56.3	64.4	70.4	74.4				74.9	77.3	79
	80	34.3	46.9	57.6	66.6	73.8	79.3	83.2			83.6	86.4	80
	90	34.6	47.4	58.6	68.2	76.3	82.9	88.0	91.8		92.2	95.4	80
	100	34.8	47.8	59.3	69.5	78.3	85.7	91.8	96.6	100.2	100.6	104.3	80
24	50	38.7	51.9	61.3	66.9						68.0	69.3	78
	60	39.7	53.8	64.8	72.8	77.9					79.0	80.7	79
	70	40.4	55.0	67.1	76.6	83.7	88.5				89.7	91.7	79
	80	40.8	55.8	68.6	79.3	87.8	94.3	98.8			100.1	102.5	80
	90	41.2	56.4	69.8	81.2	90.8	98.6	104.6	109.0		110.3	113.1	80
	100	41.4	56.9	70.6	82.7	93.1	101.9	109.1	114.8	119.0	120.5	123.6	80
26	50	45.4	61.0	71.9	78.5						80.1	81.2	78
	60	46.6	63.2	76.0	85.4	91.3					93.1	94.5	79
	70	47.4	64.6	78.7	89.9	98.1	103.7				105.6	107.3	79
	80	48.0	65.6	80.6	93.0	103.0	110.5	115.8			117.9	119.9	80
	90	48.4	66.3	81.9	95.3	106.5	115.6	122.6	127.7		130.0	132.3	80
	100	48.7	66.8	82.9	97.1	109.3	119.6	128.0	134.6	139.4	141.9	144.6	80

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 108--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 9-inch d.o.b. top and height to a saw-log top for all oaks combined (species 800) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 9-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
<u>Inches</u>	<u>Feet</u>	<u>Cubic feet</u>										<u>Percent</u>	
12	20	8.1									9.2	15.6	70
	30	9.2	12.7								14.5	19.5	77
	40	9.7	13.4	16.8							19.5	24.1	79
	50	9.9	13.8	17.4	20.8	23.8					24.2	28.6	80
	60	10.0	14.0	17.8	21.3	24.7	27.7				28.8	33.1	80
	70	10.1	14.2	18.0	21.7	25.2	28.5	31.6			33.4	37.7	81
	80	10.2	14.3	18.2	21.9	25.6	29.0	32.3	35.4		37.9	42.2	81
14	40	13.3	18.2	22.4							25.3	29.3	79
	50	13.6	18.8	23.4	27.4	30.8					31.1	35.0	80
	60	13.8	19.1	24.0	28.4	32.4	35.8				36.9	40.6	80
	70	13.9	19.3	24.4	29.1	33.4	37.2	40.6			42.5	46.2	81
	80	14.0	19.5	24.6	29.5	34.0	38.2	42.0	45.5		48.1	51.8	81
	90	14.1	19.6	24.8	29.8	34.5	38.9	43.0	46.8	50.3	53.7	57.4	81
	100	14.1	19.7	25.0	30.0	34.9	39.4	43.8	47.8	51.6	59.3	62.9	81
16	40	17.4	23.8	28.8							32.0	35.6	79
	50	17.8	24.6	30.3	35.1	38.8					39.2	42.6	80
	60	18.1	25.0	31.2	36.6	41.3	45.0				46.2	49.5	80
	70	18.3	25.3	31.7	37.6	42.8	47.3	51.1			53.1	56.4	81
	80	18.4	25.5	32.1	38.2	43.8	48.8	53.3	57.1		59.9	63.2	81
	90	18.5	25.6	32.4	38.7	44.5	49.9	54.8	59.2	63.1	66.7	70.0	81
	100	18.5	25.7	32.6	39.0	45.1	50.7	56.0	60.8	65.1	73.5	76.7	81
18	40	22.1	30.0	36.1							39.6	42.9	79
	50	22.7	31.1	38.2	43.8	47.9					48.3	51.4	80
	60	23.0	31.7	39.3	45.9	51.3	55.5				56.7	59.8	80
	70	23.2	32.1	40.1	47.2	53.4	58.7	63.0			65.0	68.0	81
	80	23.4	32.3	40.6	48.1	54.9	60.9	66.0	70.3		73.3	76.2	81
	90	23.5	32.5	40.9	48.7	55.9	62.4	68.2	73.3	77.6	81.5	84.4	81
	100	23.5	32.7	41.2	49.2	56.7	63.5	69.8	75.5	80.5	89.6	92.6	81
20	40	27.4	37.1	44.2							48.1	51.2	79
	50	28.1	38.4	46.9	53.6	58.1					58.4	61.4	80
	60	28.5	39.1	48.4	56.3	62.6	67.3				68.5	71.3	80
	70	28.7	39.6	49.4	58.0	65.4	71.5	76.2			78.4	81.2	81
	80	28.9	40.0	50.0	59.2	67.3	74.3	80.3	85.1		88.2	91.0	81
	90	29.1	40.2	50.5	60.0	68.6	76.3	83.2	89.0	93.9	97.9	100.7	81
	100	29.2	40.4	50.9	60.6	69.6	77.9	85.3	91.9	97.7	107.6	110.4	81
22	50	34.0	46.5	56.6	64.3	69.3					69.7	72.5	80
	60	34.5	47.4	58.5	67.8	75.1	80.2				81.5	84.2	80
	70	34.8	48.0	59.7	69.9	78.6	85.6	90.9			93.2	95.8	81
	80	35.1	48.4	60.5	71.4	81.0	89.2	96.1	101.4		104.7	107.3	81
	90	35.2	48.7	61.1	72.4	82.7	91.8	99.7	106.4	111.8	116.1	118.7	81
	100	35.4	48.9	61.5	73.2	83.9	93.7	102.4	110.1	116.7	127.5	130.1	81
	24	50	40.6	55.3	67.2	76.1	81.6					82.0	84.6
60		41.2	56.4	69.5	80.3	88.7	94.5				95.8	98.3	80
70		41.5	57.2	71.0	83.0	93.0	101.1	107.0			109.4	111.9	81
80		41.8	57.6	72.0	84.8	96.0	105.5	113.3	119.3		122.8	125.2	81
90		42.0	58.0	72.7	86.0	98.1	108.7	117.8	125.5	131.5	136.1	138.6	81
100		42.2	58.3	73.2	87.0	99.6	111.0	121.2	130.0	137.5	149.4	151.8	81
26		50	47.7	64.9	78.8	89.0	95.0					95.4	97.9
	60	48.4	66.3	81.5	94.0	103.6	109.9				111.3	113.8	80
	70	48.8	67.1	83.3	97.2	108.8	117.9	124.4			127.0	129.3	81
	80	49.1	67.7	84.4	99.3	112.3	123.2	132.1	138.7		142.4	144.8	81
	90	49.4	68.1	85.3	100.9	114.8	127.0	137.5	146.2	152.9	157.8	160.1	81
	100	49.6	68.4	85.9	102.0	116.7	129.9	141.6	151.7	160.2	173.1	175.4	81

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 109--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for all oaks combined (species 800) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.7	0.8	1.0	1.3	1.7	1.9											
6	1.8	2.2	2.4	2.7	3.0	3.3	3.6	3.8									
7	2.6	3.2	3.6	3.9	4.4	4.8	5.2	5.6	6.0	6.4							
8	3.6	4.4	4.8	5.3	6.0	6.6	7.1	7.7	8.2	8.7	9.2	9.6					
9	4.6	5.6	6.2	6.9	7.8	8.5	9.3	9.9	10.6	11.3	11.9	12.5	13.1	13.7			
10	5.8	7.0	7.8	8.7	9.8	10.7	11.6	12.5	13.3	14.1	14.9	15.7	16.5	17.3	18.0	18.8	
11			9.6	10.6	12.0	13.1	14.2	15.3	16.3	17.3	18.3	19.2	20.2	21.1	22.1	23.0	23.9
12			11.5	12.7	14.3	15.7	17.0	18.3	19.5	20.7	21.9	23.1	24.2	25.4	26.5	27.6	28.7
13			13.6	15.0	16.9	18.6	20.1	21.6	23.1	24.5	25.9	27.3	28.6	29.9	31.3	32.6	33.9
14					19.7	21.6	23.4	25.2	26.9	28.5	30.2	31.8	33.3	34.9	36.4	38.0	39.5
15					22.7	24.9	27.0	29.0	31.0	32.9	34.8	36.6	38.4	40.2	42.0	43.7	45.5
16					25.9	28.4	30.8	33.1	35.3	37.5	39.7	41.8	43.8	45.9	47.9	49.9	51.9

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 110--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for all oaks combined (species 800) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.6	2.0	2.5	2.8	3.2	3.7											
6	2.2	2.8	3.3	3.8	4.3	4.9	5.4	5.9									
7	2.8	3.5	4.2	5.0	5.7	6.3	7.0	7.7	8.3	8.9							
8	3.6	4.5	5.3	6.3	7.2	8.0	8.8	9.6	10.4	11.2	11.9	12.7					
9	4.5	5.6	6.7	7.9	8.9	9.9	10.9	11.9	12.8	13.7	14.6	15.6	16.5	17.4			
10	5.6	6.9	8.1	9.6	10.8	12.0	13.2	14.4	15.5	16.6	17.7	18.8	19.8	20.9	22.0	23.0	
11			9.8	11.5	13.0	14.4	15.8	17.1	18.4	19.8	21.0	22.3	23.6	24.8	26.1	27.3	28.6
12			11.6	13.6	15.3	17.0	18.6	20.2	21.7	23.2	24.7	26.2	27.7	29.1	30.6	32.0	33.5
13			13.5	15.9	17.9	19.8	21.6	23.5	25.2	27.0	28.7	30.4	32.1	33.8	35.5	37.2	38.8
14					20.6	22.8	25.0	27.0	29.1	31.1	33.0	35.0	36.9	38.9	40.8	42.7	44.6
15					23.6	26.1	28.5	30.9	33.2	35.4	37.7	39.9	42.1	44.3	46.5	48.6	50.8
16					26.7	29.6	32.3	35.0	37.6	40.1	42.6	45.1	47.6	50.1	52.5	55.0	57.4

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 111--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., total-tree height and height to a saw-log top for soft and hard hardwoods combined (species 90) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total tree height	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	40										4.6	9.2	57
	50										6.8	12.4	66
	60	8.9									10.4	15.3	71
	70	9.3	12.5								12.5	17.9	74
	80	9.5	13.0								14.4	20.3	76
	90	9.7	13.3								16.1	22.7	78
100	9.9	13.6	16.8							17.6	25.0	79	
14	40										8.3	12.7	57
	50	11.2									14.1	17.1	66
	60	12.1	16.0								17.6	21.0	71
	70	12.7	17.0	20.5							20.6	24.6	74
	80	13.0	17.7	21.6							23.4	28.0	76
	90	13.3	18.2	22.4	25.8						26.1	31.2	78
100	13.5	18.5	23.0	26.7						28.6	34.4	79	
16	50	14.7	19.0								20.1	22.5	66
	60	15.9	21.0	24.7							24.7	27.6	71
	70	16.6	22.3	26.8							28.9	32.3	74
	80	17.1	23.2	28.2	32.1						32.8	36.8	76
	90	17.4	23.8	29.3	33.7						36.5	41.1	78
	100	17.6	24.2	30.0	34.9	38.7					40.1	45.2	79
110	17.8	24.6	30.6	35.8	40.2	43.5				43.6	49.3	79	
18	50	18.6	24.0								26.4	28.6	66
	60	20.1	26.6	31.3							32.5	35.1	71
	70	21.0	28.3	34.0	37.8						38.0	41.1	74
	80	21.6	29.4	35.8	40.6						43.2	46.7	76
	90	22.1	30.1	37.1	42.7	46.8					48.1	52.2	78
	100	22.4	30.7	38.1	44.2	49.1	52.6				52.9	57.4	79
110	22.6	31.1	38.8	45.4	50.9	55.1				57.5	62.6	79	
20	50	23.0	29.7								33.4	35.4	66
	60	24.9	32.9	38.7							41.1	43.4	71
	70	26.0	34.9	42.0	46.7						48.1	50.9	74
	80	26.8	36.3	44.2	50.2	54.2					54.6	57.9	76
	90	27.3	37.2	45.8	52.7	57.8					60.9	64.6	78
	100	27.7	38.0	47.0	54.6	60.6	65.0				67.0	71.1	79
110	28.0	38.5	47.9	56.1	62.8	68.0	71.9			72.9	77.5	79	
22	60	30.1	39.8	46.8							50.5	52.7	71
	70	31.5	42.3	50.8	56.6						59.1	61.7	74
	80	32.4	43.9	53.5	60.8	65.6					67.2	70.1	76
	90	33.1	45.1	55.5	63.9	70.0	74.1				74.9	78.3	78
	100	33.5	46.0	56.9	66.2	73.4	78.7	82.3			82.4	86.2	79
	110	33.9	46.6	58.0	67.9	76.1	82.4	87.0			89.7	93.9	79
24	60	35.9	47.4	55.8	60.4						60.8	62.8	71
	70	37.5	50.4	60.5	67.3						71.1	73.5	74
	80	38.6	52.3	63.8	72.4	78.1					80.9	83.6	76
	90	39.4	53.7	66.1	76.0	83.3	88.2				90.2	93.3	78
	100	39.9	54.7	67.8	78.8	87.4	93.7	98.0			99.2	102.7	79
	110	40.3	55.5	69.1	80.9	90.6	98.0	103.6	107.5		108.1	111.9	79
26	60	42.1	55.7	65.5	71.0						71.9	73.7	71
	70	44.1	59.1	71.0	79.1	83.7					84.2	86.3	74
	80	45.4	61.5	74.9	84.9	91.7	95.7				95.7	98.2	76
	90	46.3	63.1	77.6	89.3	97.8	103.6				106.7	109.6	78
	100	46.9	64.3	79.6	92.5	102.6	110.0	115.0			117.5	120.7	79
	110	47.4	65.2	81.1	95.0	106.3	115.1	121.6	126.2		127.9	131.5	79

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 112--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 4-inch d.o.b. top and height to a saw-log top for soft and hard hardwoods combined (species 90) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 4-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	30	8.1									8.2	10.8	68
	40	8.9									10.2	14.2	73
	50	9.3									11.9	17.3	75
	60	9.5	12.8								13.4	20.2	76
	70	9.6	13.1								14.8	23.1	77
	80	9.7	13.3								16.2	25.9	77
14	90	9.8	13.4	16.6							17.5	28.6	78
	40	12.1	15.9								16.2	19.1	73
	50	12.6	16.9								19.3	23.2	75
	60	12.9	17.5	21.1							22.1	27.0	76
	70	13.2	17.8	21.8							24.8	30.8	77
	80	13.3	18.1	22.2	25.8						27.4	34.4	77
16	90	13.4	18.3	22.6	26.4	29.6					30.0	38.1	78
	100	13.5	18.4	22.9	26.8	30.3					32.6	41.6	78
	40	15.8	20.8								22.5	24.7	73
	50	16.5	22.1	26.1							27.0	29.9	75
	60	17.0	22.8	27.5	31.0						31.1	34.9	76
	70	17.2	23.3	28.4	32.5						35.1	39.6	77
18	80	17.4	23.7	29.1	33.6	37.3					39.0	44.3	77
	90	17.6	23.9	29.5	34.4	38.5	41.9				42.8	49.0	78
	100	17.7	24.1	29.9	35.0	39.4	43.2	46.4			46.6	53.5	78
	40	20.1	26.3								29.4	31.1	73
	50	21.0	27.9	33.0							35.3	37.6	75
	60	21.5	28.9	34.8	39.1						40.8	43.8	76
20	70	21.8	29.6	36.0	41.1	45.0					46.1	49.7	77
	80	22.1	30.0	36.8	42.5	47.1	50.6				51.4	55.6	77
	90	22.3	30.3	37.4	43.5	48.6	52.8	56.2			56.5	61.3	78
	100	22.4	30.5	37.8	44.2	49.8	54.6	58.5			61.5	67.0	78
	40	24.8	32.4	36.8							36.8	38.2	73
	50	25.9	34.5	40.7							44.3	46.2	75
22	60	26.6	35.7	42.9	48.2						51.3	53.7	76
	70	27.0	36.5	44.4	50.7	55.4					58.1	61.0	77
	80	27.3	37.1	45.4	52.4	58.0	62.3				64.7	68.1	77
	90	27.5	37.4	46.1	53.6	59.9	65.1	69.1			71.2	75.1	78
	100	27.7	37.7	46.7	54.6	61.4	67.2	72.0	75.9		77.6	82.1	78
	24	50	31.4	41.8	49.2	53.7						54.1	55.7
60		32.2	43.3	51.9	58.3	62.3					62.7	64.7	76
70		32.7	44.2	53.7	61.2	66.9	70.7				71.0	73.4	77
80		33.1	44.9	54.9	63.3	70.1	75.3	78.9			79.1	82.0	77
90		33.3	45.3	55.8	64.9	72.5	78.6	83.5	87.0		87.1	90.4	78
100		33.5	45.7	56.5	66.0	74.3	81.2	87.0	91.5	94.9	95.1	98.7	78
26	50	37.4	49.8	58.5	63.8						64.7	66.1	75
	60	38.3	51.5	61.8	69.3	74.1					75.1	76.7	76
	70	39.0	52.6	63.9	72.8	79.5	84.0				85.0	87.1	77
	80	39.4	53.4	65.4	75.3	83.3	89.4	93.7			94.8	97.2	77
	90	39.7	54.0	66.5	77.2	86.2	93.5	99.1	103.2		104.4	107.1	78
	100	39.9	54.4	67.3	78.6	88.3	96.6	103.4	108.7	112.7	113.9	117.0	78
28	50	43.9	58.4	68.6	74.8						76.2	77.3	75
	60	45.0	60.5	72.5	81.2	86.8					88.4	89.8	76
	70	45.8	61.8	75.0	85.5	93.2	98.4				100.1	101.9	77
	80	46.3	62.7	76.8	88.4	97.7	104.8	109.8			111.6	113.7	77
	90	46.6	63.4	78.0	90.6	101.1	109.6	116.2	120.9		123.0	125.3	78
	100	46.9	63.9	79.0	92.2	103.6	113.3	121.2	127.4	132.0	134.2	136.8	78

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 113--Predicted stemwood volume to a saw-log merchantable top, and to 9-inch and 4-inch d.o.b. tops based on d.b.h., height to a 9-inch d.o.b. top and height to a saw-log top for soft and hard hardwoods combined (species 90) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Height to 9-inch d.o.b. top	Volume to										Girard Form Class	
		Saw-log merchantable height (16-foot logs)											
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	9-inch d.o.b. top	4-inch d.o.b. top	
Inches	Feet	Cubic feet										Percent	
12	20	8.2									9.3	15.5	70
	30	9.1	12.4								14.3	19.4	75
	40	9.5	13.0	16.3							18.9	23.8	77
	50	9.7	13.3	16.8	20.0	23.0					23.3	28.2	77
	60	9.8	13.5	17.1	20.5	23.7	26.7				27.7	32.6	78
	70	9.8	13.6	17.2	20.7	24.1	27.3	30.3			32.1	37.0	78
	80	9.9	13.7	17.4	20.9	24.4	27.7	30.9	33.9		36.4	41.3	78
14	40	12.9	17.6	21.6							24.5	28.5	77
	50	13.2	18.1	22.5	26.3	29.6					30.0	34.0	77
	60	13.4	18.4	23.0	27.2	31.0	34.3				35.4	39.4	78
	70	13.5	18.5	23.3	27.7	31.8	35.5	38.8			40.7	44.7	78
	80	13.6	18.7	23.5	28.1	32.4	36.3	40.0	43.4		46.0	50.1	78
	90	13.6	18.8	23.7	28.3	32.8	36.9	40.9	44.5	47.9	51.3	55.4	78
	100	13.7	18.8	23.8	28.5	33.1	37.4	41.5	45.4	49.0	56.5	60.7	78
16	40	17.0	23.0	27.8							30.9	34.4	77
	50	17.3	23.6	29.1	33.7	37.2					37.6	41.1	77
	60	17.5	24.0	29.8	35.0	39.4	43.0				44.1	47.6	78
	70	17.7	24.2	30.3	35.8	40.7	45.0	48.7			50.6	54.1	78
	80	17.8	24.4	30.6	36.3	41.6	46.4	50.6	54.3		57.1	60.6	78
	90	17.8	24.5	30.8	36.7	42.2	47.3	52.0	56.2	59.9	63.5	67.0	78
	100	17.9	24.6	31.0	37.0	42.7	48.0	53.0	57.5	61.7	69.8	73.4	78
18	40	21.5	29.0	34.8							38.2	41.3	77
	50	22.0	29.9	36.6	41.9	45.9					46.2	49.3	77
	60	22.2	30.4	37.6	43.8	48.9	52.9				54.1	57.2	78
	70	22.4	30.7	38.2	44.9	50.8	55.8	59.9			61.9	65.0	78
	80	22.6	30.9	38.6	45.7	52.0	57.7	62.6	66.7		69.6	72.7	78
	90	22.6	31.1	38.9	46.2	52.9	59.1	64.5	69.4	73.5	77.3	80.4	78
	100	22.7	31.2	39.2	46.7	53.6	60.1	66.0	71.3	76.1	84.9	88.1	78
20	40	26.6	35.8	42.6							46.3	49.2	77
	50	27.2	36.9	44.9	51.2	55.5					55.9	58.7	77
	60	27.5	37.5	46.2	53.6	59.6	64.0				65.3	68.1	78
	70	27.7	37.9	47.0	55.1	62.1	67.8	72.4			74.5	77.3	78
	80	27.9	38.2	47.6	56.1	63.7	70.4	76.0	80.6		83.6	86.4	78
	90	28.0	38.4	48.0	56.9	64.9	72.2	78.6	84.2	88.8	92.7	95.6	78
	100	28.1	38.5	48.3	57.4	65.8	73.5	80.5	86.8	92.2	101.8	104.6	78
22	50	32.9	44.6	54.2	61.4	66.2					66.6	69.2	77
	60	33.3	45.4	55.8	64.5	71.4	76.3				77.6	80.1	78
	70	33.6	45.9	56.8	66.4	74.5	81.2	86.2			88.4	91.0	78
	80	33.8	46.2	57.5	67.7	76.6	84.4	90.9	95.9		99.1	101.7	78
	90	33.9	46.5	58.0	68.6	78.2	86.7	94.1	100.5	105.6	109.8	112.4	78
	100	34.1	46.7	58.4	69.3	79.3	88.4	96.6	103.8	110.1	120.4	123.1	78
	24	50	39.2	53.1	64.3	72.7	77.9					78.3	80.7
60		39.7	54.0	66.3	76.4	84.3	89.7				91.1	93.5	78
70		40.1	54.6	67.5	78.7	88.2	95.8	101.3			103.6	106.0	78
80		40.3	55.0	68.4	80.3	90.8	99.7	107.1	112.7		116.1	118.5	78
90		40.4	55.3	69.0	81.5	92.7	102.6	111.2	118.4	124.1	128.5	130.9	78
100		40.6	55.6	69.5	82.3	94.1	104.7	114.2	122.5	129.6	140.9	143.3	78
26		50	46.1	62.3	75.3	84.9	90.6					91.0	93.3
	60	46.7	63.4	77.7	89.4	98.3	104.4				105.7	108.0	78
	70	47.1	64.1	79.2	92.2	103.0	111.6	117.8			120.2	122.5	78
	80	47.3	64.6	80.2	94.1	106.2	116.4	124.8	131.0		134.6	136.8	78
	90	47.5	65.0	81.0	95.5	108.5	119.9	129.7	137.8	144.1	148.9	151.1	78
	100	47.7	65.2	81.5	96.5	110.2	122.5	133.4	142.8	150.8	163.1	165.3	78

<sup>a</sup> Includes 1.0-foot stump allowance.

Table 114--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and total-tree height for soft and hard hardwoods combined (species 90) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Total-tree height (feet)																
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
<u>Inches</u>	<u>Cubic feet</u>																
5	0.7	0.8	1.0	1.2	1.0	1.3											
6	1.5	2.2	2.5	2.7	2.6	2.9	3.2	3.5									
7	2.7	3.3	3.6	4.0	3.9	4.4	4.8	5.2	5.6	6.0							
8	3.7	4.4	4.9	5.4	5.4	6.0	6.6	7.1	7.7	8.2	8.7	9.2					
9	4.7	5.7	6.3	7.0	7.0	7.8	8.6	9.3	10.0	10.7	11.3	12.0	12.6	13.2			
10	5.9	7.2	7.9	8.8	8.8	9.8	10.8	11.7	12.5	13.4	14.2	15.0	15.8	16.6	17.4	18.1	
11			9.7	10.7	10.8	12.0	13.2	14.3	15.3	16.4	17.4	18.4	19.4	20.3	21.3	22.2	23.1
12			11.6	12.8	13.0	14.4	15.8	17.1	18.4	19.7	20.9	22.1	23.2	24.4	25.5	26.7	27.8
13			13.7	15.1	15.3	17.0	18.7	20.2	21.7	23.2	24.7	26.1	27.4	28.8	30.2	31.5	32.8
14					17.8	19.8	21.7	23.6	25.3	27.0	28.7	30.4	32.0	33.6	35.1	36.7	38.2
15					20.5	22.8	25.0	27.1	29.2	31.2	33.1	35.0	36.8	38.7	40.5	42.3	44.0
16					23.4	26.1	28.6	31.0	33.3	35.5	37.7	39.9	42.0	44.1	46.2	48.2	50.2

<sup>a</sup> Includes 0.5-foot stump allowance.

Table 115--Predicted stemwood volume to a 4-inch d.o.b. top in pulpwood trees based on d.b.h. and height to a 4-inch d.o.b. top for soft and hard hardwoods combined (species 90) in the Gulf and Atlantic Coastal Plain.<sup>a</sup>

D.b.h. class	Tree height to 4-inch d.o.b. top (feet)																
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
<u>Inches</u>	<u>Cubic feet</u>																
5	1.7	2.1	2.6	2.7	3.2	3.6											
6	2.3	2.8	3.4	3.7	4.2	4.8	5.3	5.8									
7	2.8	3.5	4.2	4.8	5.5	6.2	6.8	7.4	8.0	8.6							
8	3.7	4.6	5.4	6.1	7.0	7.8	8.5	9.3	10.0	10.8	11.5	12.2					
9	4.7	5.7	6.7	7.6	8.6	9.6	10.5	11.4	12.3	13.2	14.1	14.9	15.8	16.6			
10	5.8	7.0	8.2	9.3	10.5	11.6	12.7	13.8	14.9	15.9	16.9	18.0	19.0	20.0	21.0	22.0	
11			9.9	11.1	12.5	13.8	15.2	16.4	17.7	18.9	20.1	21.3	22.5	23.7	24.9	26.1	27.2
12			11.7	13.1	14.7	16.3	17.8	19.3	20.8	22.2	23.6	25.0	26.4	27.8	29.2	30.5	31.9
13			13.7	15.3	17.2	19.0	20.7	22.5	24.1	25.8	27.4	29.0	30.6	32.2	33.8	35.4	36.9
14					19.8	21.9	23.9	25.8	27.8	29.6	31.5	33.3	35.2	37.0	38.8	40.6	42.4
15					22.6	25.0	27.3	29.5	31.7	33.8	35.9	38.0	40.1	42.1	44.2	46.2	48.2
16					25.7	28.3	30.9	33.4	35.8	38.2	40.6	43.0	45.3	47.6	49.9	52.2	54.5

<sup>a</sup> Includes 0.5-foot stump allowance.

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Stemwood cubic-foot volume inside bark tables are presented for 14 species and 9 species groups based on equations used to estimate timber sale volumes on national forests in the Gulf and Atlantic Coastal Plain. Tables are based on form class measurement data for 2,728 trees sampled in the Gulf and Atlantic Coastal Plain and taper data collected across the South. A series of tables is presented for each species based on diameter at breast height (d.b.h.) in combination with total height and height to a 4-inch diameter outside bark (d.o.b.) top. Volume tables are also presented based on d.b.h. in combination with height to a 7-inch d.o.b. top for softwoods and height to a 9-inch d.o.b. top for hardwoods. Sawtimber tables display saw-log stem volume by log (16-foot) and half-log (8-foot) intervals and also show stemwood volume to a 7-inch d.o.b. top for softwoods, to a 9-inch d.o.b. top for hardwoods, and to a 4-inch d.o.b. top for all species. Pulpwood tables show stemwood volume to a 4-inch d.o.b. top in 5-foot height intervals.

**Keywords:** Saw-log volume, pulpwood volume, form class.

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