

United States
Department of
Agriculture

Forest Service



Southeastern Forest
Experiment Station

General Technical Report
SE-27

September 1984

Stand Structure and Yields of Site-Prepared Loblolly Pine Plantations in the Lower Coastal Plain of the Carolinas, Georgia, and North Florida

Jerome L. Clutter, William R. Harms, Graham H. Brister, and John W. Rheney

September 1984

Southeastern Forest Experiment Station
200 Weaver Blvd.
Asheville, North Carolina 28804



Stand Structure and Yields of Site-Prepared
Loblolly Pine Plantations in the Lower Coastal Plain
of the Carolinas, Georgia, and North Florida

Jerome L. Clutter
Union Camp Professor of Forest Resources
University of Georgia
School of Forest Resources, Athens, Georgia

William R. Harms, Research Forester
Southeastern Forest Experiment Station
Charleston, South Carolina

Graham H. Brister
Associate Professor of Forest Resources

and

John W. Rheney
Research Coordinator
University of Georgia
School of Forest Resources, Athens, Georgia

Acknowledgments

Funding for the research reported here was provided by the Southeastern Forest Experiment Station of the USDA Forest Service, the University of Georgia School of Forest Resources, the University of Georgia Plantation Management Research Cooperative,[†] Boise Cascade Corporation, Champion International Corporation, International Paper Company, and **Westvaco**.

The following companies provided plantations for plot measurement and felling of sample trees:

Brunswick Pulp Land Company
Champion International Corporation
Container Corporation of America
Continental Forest Industries
Federal Paper Board Company, Incorporated
Gilman Paper Company
International Paper Company
St. Regis Paper Company
Union Camp Corporation
Westvaco
Weyerhaeuser Company

Many University of Georgia students participated in the data collection and analysis involved in this project. Numerous school faculty (in addition to the authors) and employees of the cooperating companies also assisted in various phases of the research. To all of these individuals, the authors express their most sincere thanks. We also wish to particularly acknowledge the contributions made by Willard R. Flowers, Jr., and James L. Smith, whose masters theses form the basis for many of the results reported here.

[†]**Cooperating** companies at the time this research was conducted were: Brunswick Pulp Land Company, Buckeye Cellulose Corporation, Container Corporation of America, Continental Forest Industries, **Gilman** Paper Company, Hudson Pulp and Paper Company, ITT Rayonier Incorporated, Owens-Illinois, St. Joe Paper Company, St. Regis Paper Company, and Union Camp Corporation.

Contents

	Page
1. Introduction	1
2. Data Collection	1
3. Individual Tree Volume and Weight	5
4. Site Index	23
5. Per Acre Volume and Weight Yields	27
6. Survival Trends	157
7. Literature Cited	162

Appendix I

English to Metric Conversion Factors ,	163
--	-----

Appendix II

Computer Subprograms	163
--------------------------------	-----

Tables

	<u>Page</u>		<u>Page</u>
1. Distribution of 226 yield plots by County, State, and year of measurement	2	11. Merchantable volume outside bark to a 6.0-inch top diameter	13
2. Distribution of yield plots by age, site index, and number of trees per acre	4	12. Merchantable volume inside bark to a 6.0-inch top diameter	14
3. Number of felled sample trees by height and diameter classes	4	13. Total green weight (wood + bark)	15
4. Distribution of the 1981 re-measured yield plots by State and County	5	14. Total dry weight (wood only)	16
5. Total volume outside bark	7	15. Merchantable green weight (wood + bark) to a 2.0-inch top diameter	17
6. Total volume inside bark	8	16. Merchantable dry weight (wood only) to a 2.0-inch top diameter	18
7. Merchantable volume outside bark to a 2.0-inch top diameter	9	17. Merchantable green weight (wood + bark) to a 4.0-inch top diameter	19
8. Merchantable volume inside bark to a 2.0-inch top diameter	10	18. Merchantable dry weight (wood only) to a 4.0-inch top diameter	20
9. Merchantable volume outside bark to a 4.0-inch top diameter	11	19. Merchantable green weight (wood + bark) to a 6.0-inch top diameter	21
10. Merchantable volume inside bark to a 4.0-inch top diameter	12	20. Merchantable dry weight (wood only) to a 6.0-inch top diameter	22

	<u>Page</u>		<u>Page</u>
21. Distribution of sample plots by soil group, taxonomic group, and soil series	24	27. Weight yields per acre for lob-lolly pine in Soil Group A	95
22. Distribution of yield plots by age , site index, and number of trees per acre for Soil Groups A and B	25	28. Weight yields per acre for lob-lolly pine in Soil Group B	139
23. Distribution of sample trees by age and height class	26	29. Projected volume yields (outside bark, 4-inch merchantable top) of stands with specified number of stems per acre at age 10 for Soil Groups A and B, by site index	159
24. Calculation of stand structure and estimated yield per acre (total volume, outside bark) for a Soil Group A plantation at age = 30 years, site index = 60 feet, and stems per acre = 450	31	30. Mean annual increment (outside bark volume, 4-inch merchantable top) for stands with specified number of stems per acre at age 10 for Soil Groups A and B, by site index	160
25. Volume yields per acre for lob-lolly pine in Soil Group A	33	31. Age for maximum mean annual increment of various combinations of site index and number of trees per acre at age 10 for Soil Group A plantations	161
26. Volume yields per acre for lob-lolly pine in Soil Group B	77		

ABSTRACT

Equations and tables are presented for estimating total and merchantable volumes and weights of loblolly pine planted on prepared sites in the Lower Atlantic Coastal Plain. The equation system can be used to predict current and projected yields in cubic feet and green and dry weights.

Keywords: *Pinus taeda*, taper equations, volume equations, forest management in Southeastern States.

1. Introduction

During the past few decades, plantations have assumed an increasingly important role in the forests of the Southeastern United States. Initially, most plantations in this region were established on old-field sites, but in recent years, the vast majority of new plantations have been established on cutover land following mechanical site preparation. The use of mechanical site preparation is a fairly new development in southeastern forest management, and reliable information on the yields that can be expected from site-prepared plantations has not been generally available. The studies reported here were initiated to obtain such information for unthinned loblolly pine plantations in the Lower Atlantic Coastal Plain of the Carolinas, Georgia, and Florida.

A description of the data collection activities and characteristics of the data bases obtained is provided in section 2. Taper equations, volume equations, and tables showing predicted individual tree volumes and weights by diameter and height classes are presented in section 3. Site index curves for the plantation population studied are contained in section 4. Section 5 provides tables of expected stand structure and per acre volume and weight yields for selected combinations of soil group, plantation age, site index, and number of trees per acre. Methods for predicting mortality are included in section 6, together with yield tables that describe stand development through time for se-

lected combinations of soil group, site index, age, and initial number of trees per acre. Equations used in generating the various tables and curves are presented in each section. For those wishing to express results in metric units, a table of conversion factors is given in Appendix I. A set of FORTRAN computer subroutines is contained in Appendix II. These subroutines were used to generate the tables and graphs presented in this report, and they can be easily used to compute values for situations not included in the published tables and graphs.

2. Data Collection

Basic data for the studies reported here were collected during the summers of 1975, 1976, 1977, 1979, and 1981. Data acquisition involved the collection of yield plot data and felled sample tree data.

Yield plot measurement began in 1975 with the establishment of 44 temporary plots in the Lower Coastal Plain of South Carolina, Georgia, and Florida. During 1977, an additional 182 monumented plots were installed in the North and South Carolina Lower Coastal Plain. Table 1 and figure 1 show the geographic distribution of these sample plots by County and State. Plantations included in the sample satisfied the following criteria:

- at least 10 years of age
- planted following mechanical site preparation
- unthinned
- unfertilized
- unpruned
- show no evidence of excessive insect or disease damage
- show no evidence of interplanting or excessive numbers of wildlings

Plots were generally laid out in a rectangular configuration designed to include approximately 64 original plant-

Table 1.--Distribution of 226 yield plots by County, State, and year of measurement

State and County	Number of plots		State and County	Number of plots	
	1975	1977		1975	1977
Florida			Craven	--	11
Marion	2	--	Duplin	--	1
Nassau	4	--	Jones	--	20
	6	--	Onslow	--	8
				--	83
Georgia			South Carolina		
Bryan	2	--	Allendale	2	--
Camden	3	--	Beaufort	1	
Charlton	6	--	Berkeley		10
Chatham	3	--	Charleston	--	5
Effingham	3	--	Colleton	--	1
Glynn	1	--	Dillon		4
Liberty	5	--	Dorchester	--	34
Lony	6	--	tieorgetown	--	27
McIntosh	2	--	Hampton	1	1
Wayne	1	--	Jasper	2	6
	32	--	Marion	--	2
			Marlboro	--	1
North Carolina			Orangeburg	--	1
Beaufort	--	8	Williamsburg		7
Bladen	--	1		6	99
Brunswick	--	3			
Carteret	--	3			
Columbus	--	28			
			Total	44	182

ing spaces. In plantations where rows were irregular or indistinguishable, square 0.1-acre plots were used. Plots were purposively located within the plantations to achieve uniform stocking within the plot. The location procedure was not an attempt to find areas with maximum stocking, in any sense, and essentially simply involved shifting the plot location to avoid obvious "holes" in the stand.

Data collected for each plot included the following:

- method of site preparation (obtained from company records)
- plantation age (from planting date)
- length and width of plot

- total number of trees in each 1-inch d.b.h. class
- number of wildlings and *Cronartium*-infected trees in each 1-inch d.b.h. class
- d.b.h., crown class, and total height of at least two trees in each d.b.h. class
- a complete soil profile description

The site-preparation methods identified included many combinations of such treatments as burning, chopping, harrowing, rootraking, bedding, etc.

The distribution of the yield plots by age, site index, and number of trees per acre at the time of measurement is

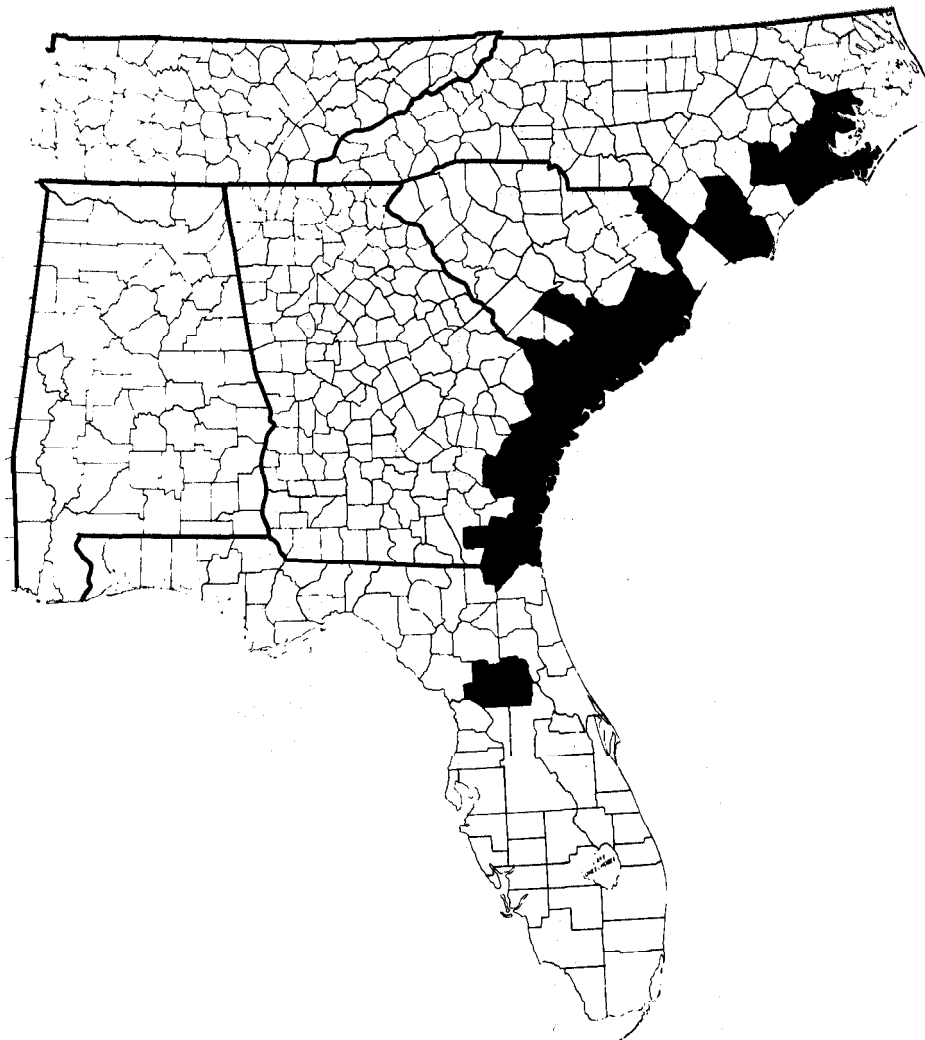


Figure 1. --Geographic distribution of sample plots, by County and State.

shown in table 2. Additional information on collection of the yield plot data is available in Smith (1978).

Felled sample tree data were collected during 1977 in the 182 established plots in North and South Carolina plantations. In addition, 12 of the Georgia-Florida plantations sampled for yield information during 1975 were revisited during 1976 for felled sample tree data. Generally, four trees were felled in each plantation sampled. Two were selected from the larger diameter classes, one from the classes close to average d.b.h., and one from the lower end of the d.b.h. range. No trees were cut in or immediately adjacent to the yield plots. A total of 762 trees was included in this sample. Distribution of the sample trees by diameter and height classes is shown in table 3.

After felling, disks were removed from the trees at **5-foot** intervals and sufficient field and laboratory measurements were made to determine the following quantities:

- **total stem** outside bark (o.b.) volume
- **total stem** inside bark (i.b.) volume
- merchantable stem (o.b.) volumes to merchantable diameter limits (o.b.) of 2, 3, 4, and 6 inches
- merchantable stem (i.b.) volumes to merchantable diameter limits (o.b.) of 2, 3, 4, and 6 inches

Table 2.--Distribution of yield blots by age, site index, and number of trees per acre

Age class	Site class	Trees per acre							Total
		3uu	4uo	500	600	700	800	900	
10	40			3		1			4
	50		2	5	7	2			16
	60				3				14
	70		3	3	4	4	2		10
	80		3	4			1		8
15	40		3	2		3	1		12
	50	1	7	8	3	6	2	1	27
	60		4	10	8	6	1	4	36
	70	1		9	7	1	1	1	24
	80	2	7	4		1	1		15
20	40		2	2					4
	50		1	2	4		2		9
	60	1	2	4	6				13
	70	2	5	3	4	3			17
	80	2	3	1	1	1			8
25	40			1					1
	60	2	1	3					6
	70				1				1
30	50				1				1
Total		11	45	66	56	31	11	6	226

Site index for individual plots was calculated using the equations described in section 4. Equations and site index values tabulated here are based on an index age of 25 years.

Table 3.--Number of felled sample trees by height and diameter classes

Diameter class (inches)	Height class (feet)														Total
	15	20	25	30	35	40	45	50	55	60	65	70	75		
2		3	1											4	
3	1	8	16	12	9	1								47	
4		4	10	20	21	20	8	3						86	
5		1	8	26	30	22	16	9	4					116	
6				17	25	25	19	9	10	3				108	
7			1	6	23	37	29	21	12	8	3			140	
8					2	9	22	26	16	9	3			87	
9			1			2	10	12	24	20	10	2	1	82	
10						1	1	7	11	16	10	6		52	
11							1	3	3	5	7	7		26	
12										2	2	3		7	
13											1	3	2	6	
14													1	1	
Total	1	16	37	81	110	117	106	90	80	63	36	21	4	762	

Table 4.--Distribution of the **1981** re-measured yield plots by State and County

Location	Number of plots
North Carolina	
Beaufort	6
Bladen	1
Brunswick	1
Carteret	2
Columbus	10
Craven	8
Duplin	1
Jones	19
Onslow	5
	53
South Carolina	
Berkeley	3
Charleston	4
Dillon	2
Dorchester	28
Georgetown	20
Hampton	1
Jasper	6
Marlboro	1
Orangeburg	1
Williamsburg	6
	77
Total	130

- total stem green weight (wood and bark)
- merchantable stem green weight (wood and bark) to merchantable diameter limits (o.b.) of 2, 3, 4, and 6 inches
- total stem dry weight (wood only)
- merchantable stem dry weight (wood only) to merchantable diameter limits (o.b.) of 2, 3, 4, and 6 inches

Details of the procedures used to obtain these values are found in Flowers (1978).

The plots established in **1977** were remeasured during the summer of **1981** to

obtain growth and survival data. Of the original 182 plots, 130 were reidentified and measured for (a) plantation age, (b) number of trees in each 1-inch d.b.h. class, (c) number of wildlings and *Cronartium*-infected trees in each 1-inch d.b.h. class, and (d) d.b.h., crown class, and total height of at least two trees in each d.b.h. class. Plots that were not remeasured had been clearcut, thinned, or otherwise disturbed during the 4 years since establishment. Distribution of the remeasured plots by State and County is shown in table 4.

3. Individual Tree Volume and Weight

This section presents the system of tree volume, weight, and taper equations used to develop the yield tables. Although there are a number of loblolly pine volume and weight equations in existence, they were developed for old-field plantations in the Piedmont and Coastal Plain (Bailey and Clutter 1970; Burkhart and Clutter 1971; Burkhart and others 1972; Romancier 1961; Shipman 1961). The following equations were developed specifically for site-prepared plantations of the flatwoods by Flowers (1978) from the felled sample tree data. They incorporate current mensurational techniques that provide great flexibility in calculation of volumes and weights.

Volume Prediction

$$\begin{aligned} \text{Total stem volume, o.b.} \\ TV_o = 0.00395569 D^{1.8945} H^{0.9288} \end{aligned} \quad (1)$$

$$\begin{aligned} \text{Total stem volume, i.b.} \\ TV_i = 0.00148209 D^{1.9229} H^{1.1105} \end{aligned} \quad (2)$$

$$\begin{aligned} \text{Merchantable stem volume, o.b.} \\ MV_o = TV_o [1 - 0.4724 D_m^{3.3559} D^{-3.1135}] \end{aligned} \quad (3)$$

$$\begin{aligned} \text{Merchantable stem volume, i.b.} \\ MV_i = TV_i [1 - 0.5694 D_m^{3.4304} D^{-3.2395}] \end{aligned} \quad (4)$$

where:

TV_o = total stem volume (cubic feet), o.b.
TV_i = total stem volume (cubic feet), i.b.
MV_o = merchantable stem volume (cubic feet), o.b.
MV_i = merchantable stem volume (cubic feet), i.b.
D = d.b.h. (inches)

D_m = merchantable diameter (inches), o.b.
 H = total height (feet)

Weight Prediction

$$\text{Total stem green weight (wood plus bark)} \\ \text{TGW} = 0.133280 D^{1.9159} H^{1.0481} \quad (5)$$

$$\text{Total stem dry weight (wood only)} \\ \text{TDW} = 0.028932 D^{1.8721} H^{1.2273} \quad (6)$$

$$\text{Merchantable stem green weight (wood plus bark)} \\ \text{MGW} = \text{TGW} [1 - 0.4819 D_m^{3.3208} D^{-3.0622}] \quad (7)$$

$$\text{Merchantable stem dry weight (wood only)} \\ \text{MDW} = \text{TDW} [1 - 0.4868 D_m^{3.5503} D^{-3.3322}] \quad (8)$$

where:

TGW = total stem green weight, wood plus bark
 (pounds)
 TDW = total stem dry weight, wood only (pounds)
 MGW = merchantable stem green weight, wood plus
 bark (pounds)
 MDW = merchantable stem dry weight, wood only
 (pounds)
 D = d.b.h. (inches)
 D_m = merchantable diameter (inches), o.b.
 H = total height (feet)

Tabulations of predicted volumes and weights, by height and diameter classes for these equations, are given for selected merchantability limits in tables 5 to 20.

Taper Equations

Variable top merchantable volume and weight relationships of the type shown in equations (3), (4), (7), and (8) are very useful because a single equation expresses weight or volume of a tree to any desired top diameter limit. However, in practice, the user often needs to know the outside- or inside-bark diameter at a given height up the stem or, conversely, the height at which a given outside- or inside-bark diameter occurs. It has recently been shown that total and merchantable volume equations of the type given by (1), (2), (3), and (4) implicitly define taper functions that relate upper-stem diameter to a given height up the stem (Clutter 1980). Taper functions derived from these equations can therefore be used to estimate upper-stem

dimensions. The taper functions for the present volume equations are:

Prediction of diameter o.b. from height aboveground

$$d_o = 1.129318 D^{0.899034} H^{-0.685006} \\ \times (H-h)^{0.737518} \quad (9)$$

Prediction of height aboveground from diameter o.b.

$$h = H - [0.84798 D^{-1.2190} H^{0.9288} d_o^{1.3559}] \quad (10)$$

Prediction of diameter i.b. from height aboveground

$$d_i = 0.770783 D^{0.883723} H^{-0.619672} \\ \times (H-h)^{0.764991} \quad (11)$$

Prediction of height aboveground from diameter i.b.

$$h = H - [1.405410 D^{-1.155207} H^{0.810039} d_i^{1.307206}] \quad (12)$$

where:

d_o = diameter (inches) o.b. at a point h feet up the stem
 d_i = diameter (inches) i.b. at a point h feet up the stem
 h = distance aboveground (feet) to a point on the stem
 where d_o and d_i occur
 D = d.b.h. (inches)
 H = total height (feet)

Example Applications

Consider a loblolly pine tree with a d.b.h. of 10.5 inches and a height of 65 feet. Total cubic-foot volumes, o.b. and i.b., are estimated from equations (1) and (2) as follows:

$$\text{TV} = 0.00395569 (10.5)^{1.8945} (65)^{0.9288} \\ = 16.43 \text{ cubic feet} \\ \text{TV}_i = 0.00148209 (10.5)^{1.9229} (65)^{1.1105} \\ = 14.05 \text{ cubic feet}$$

Merchantable volumes o.b. to a 6- and 4-inch top are calculated from equation (3):

$$\text{MV}_o(6) = (16.43) [1 - 0.4724 (6)^{3.3559} (10.5)^{-3.1135}] \\ = 14.33 \text{ cubic feet} \\ \text{MV}_o(4) = (16.43) [1 - 0.4724 (4)^{3.3559} (10.5)^{-3.1135}] \\ = 15.89 \text{ cubic feet}$$

and merchantable volumes i.b. are calculated from equation (4):

$$\text{MV}_i(6) = (14.05) [1 - 0.5694 (6)^{3.4304} (10.5)^{-3.2395}] \\ = 12.21 \text{ cubic feet} \\ \text{MV}_i(4) = (14.05) [1 - 0.5694 (4)^{3.4304} (10.5)^{-3.2395}] \\ = 13.59 \text{ cubic feet}$$

Table 5.--Total volume outside bark

D.b.h. (inches)	Height (feet)													
	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	- - - - - <i>Cubic feet</i> - - - - -													
2	0.18	0.24	0.29											
3	0.39	0.51	0.63	0.75	0.86	0.98	1.09							
4	0.68	0.88	1.09	1.29	1.49	1.68	1.88	2.07	2.26					
5	1.03	1.35	1.66	1.97	2.27	2.57	2.86	3.16	3.45	3.74				
6			2.34	2.78	3.20	3.63	4.05	4.46	4.87	5.28	5.69			
7			3.14	3.72	4.29	4.86	5.42	5.97	6.53	7.08	7.62	8.17		
8			4.04	4.79	5.52	6.25	6.98	7.69	8.41	9.11	9.82	10.52		
9			5.05	5.98	6.91	7.82	8.72	9.62	10.51	11.39	12.27	13.15	14.01	14.88
10					8.43	9.54	10.65	11.74	12.83	13.91	14.98	16.05	17.11	18.17
11						11.43	12.75	14.07	15.37	16.66	17.95	19.23	20.50	21.76
12									18.12	19.65	21.16	22.67	24.17	25.66
13										22.86	24.63	26.38	28.13	29.87
14												30.36	32.37	34.37

Volume includes entire stem with bark above a 6-inch stump height. Block indicates extent of data.

Table 6.--Total volume inside bark

D.b.h. (inches)	Height (feet)														
	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
	----- Cubic feet -----														
2	0.11	0.16	0.20												
3	0.25	0.34	0.44	0.54	0.64	0.74	0.84								
4	0.43	0.59	0.76	0.93	1.10	1.28	1.46	1.64	1.82						
5	0.66	0.91	1.17	1.43	1.70	1.97	2.24	2.52	2.80	3.09					
6			1.66	2.03	2.41	2.79	3.18	3.58	3.98	4.38	4.79				
7			2.23	2.73	3.24	3.76	4.28	4.82	5.35	5.90	6.44	7.00			
8			2.88	3.53	4.19	4.86	5.54	6.22	6.92	7.62	8.33	9.04			
9		E1	3.62	4.43	5.25	6.09	6.95	7.81	8.68	9.56	10.45	11.34	12.25	13.16	
10					6.43	7.46	8.50	9.56	10.63	11.71	12.79	13.89	15.00	16.11	
11						8.96	10.22	11.48	12.77	14.06	15.37	16.69	18.01	19.35	
12									15.09	16.62	18.17	19.72	21.30	22.80	
13										19.39	21.19	23.01	24.84	26.68	
14												26.53	28.64	30.77	

Volume includes entire stem without bark above a 6-inch stump height. Block indicates extent of data.

Table 7.--Merchantable volume outside bark to a 2.0-inch top diameter

D.b.h. (inches)	Height (feet)													
	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	----- <i>Cubic feet</i> -----													
5	1.00	1.30	1.61	1.90	2.19	2.48	2.77	3.06	3.34	3.62				
6			2.30	2.73	3.14	3.56	3.97	4.38	4.78	5.19	5.59			
7			3.10	3.68	4.24	4.80	5.36	5.91	6.45	7.00	7.54	8.07		
8			4.01	4.75	5.48	6.21	6.92	7.64	8.34	9.05	9.74	10.44		
9			5.03	5.95	6.87	7.78	8.68	9.57	10.45	11.33	12.21	13.08	13.94	14.80
10					8.40	9.51	10.61	11.70	12.78	13.86	14.93	15.99	17.05	18.10
11						11.40	12.72	14.03	15.32	16.61	17.90	19.17	20.44	21.70
12								18.08	19.60	21.12	22.62	24.12	25.61	
13									22.83	24.59	26.34	28.08	29.82	
14											30.32	32.33	34.32	

Volume includes merchantable stem with bark above a 6-inch stump height to a 2.0-inch top diameter outside bark. Block indicates extent of data.

Table 8.--Merchantable volume inside bark to a 2.0-inch top diameter

D.b.h. (inches)	Height (feet)														
	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
	----- Cubic feet -----														
5	0.64	0.88	1.13	1.38	1.64	1.90	2.17	2.44	2.71	2.98					
6			1.63	1.99	2.36	2.74	3.13	3.51	3.91	4.30	4.70				
7			2.21	2.70	3.26	3.72	4.24	4.76	5.29	5.83	6.37	6.92			
8			2.86	3.50	4.16	4.82	5.50	6.18	6.87	7.57	8.27	8.98			
9			3.60	4.41	5.23	6.06	6.91	7.77	8.64	9.51	10.40	11.29	12.19	13.09	
10					6.41	7.44	8.47	9.53	10.59	11.66	12.75	13.84	14.94	16.06	
11						8.94	10.19	11.45	12.73	14.02	15.33	16.64	17.97	19.30	
12									15.06	16.59	18.13	19.69	21.25	22.83	
13										19.36	21.16	22.97	24.80	26.64	
14												26.50	28.61	30.73	

Volume includes merchantable stem without bark above a 6-inch **stump** height to a 2.0-inch top diameter outside bark.
 Block indicates extent of data.

Table 9.--Merchantable volume outside bark to a 4.0-inch top diameter

D.b.h. (inches)	Height (feet)													
	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	----- <i>Cubic feet</i> -----													
5	0.69	0.90	1.11	1.32	1.52	1.72	1.92	2.12	2.31	2.51				
6		1.90	2.26	2.60	2.95	3.29	3.63	3.96	4.30	4.63				
7		2.77	3.29	3.79	4.29	4.79	5.28	5.77	6.26	6.74	7.22			
8		3.73	4.42	5.10	5.78	6.44	7.11	7.76	8.42	9.07	9.71			
9		4.78	5.67	6.54	7.40	8.26	9.11	9.95	10.79	11.62	12.45	13.27	14.09	
10				8.11	9.18	10.24	11.29	12.34	13.38	14.41	15.44	16.46	17.48	
11					11.11	12.39	13.67	14.93	16.19	17.44	18.68	19.92	21.15	
12								17.73	19.22	20.70	22.18	23.65	25.11	
13									22.48	24.21	25.94	27.65	29.36	
14											29.95	31.94	33.91	

Volume includes merchantable stem with bark above a 6-inch stump height to a **4.0-inch** top diameter outside bark. Block indicates extent of data.

Table 10.--Merchantable volume inside bark to a 4.0-inch top diameter

D.b.h. (inches)	Height (feet)													
	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	----- Cubic feet -----													
5	0.42	0.58	0.75	0.91	1.09	1.26	1.44	1.61	1.79	1.98				
6		1.33	1.63	1.93	2.24	2.55	2.87	3.19	3.51	3.84				
7		1.96	2.40	2.85	3.30	3.76	4.23	4.70	5.18	5.66	6.15			
8		2.66	3.25	3.86	4.48	5.10	5.73	6.38	7.02	7.68	8.33			
9		3.42	4.19	4.97	5.77	6.57	7.39	8.21	9.05	9.89	10.74	11.59	12.45	
10				6.19	7.18	8.18	9.20	10.22	11.26	12.31	13.36	14.43	15.50	
11					8.71	9.93	11.16	12.41	13.67	14.94	16.22	17.51	18.81	
12								14.77	16.27	17.78	19.31	20.85	22.39	
13									19.07	20.84	22.63	24.43	26.25	
14											26.19	28.28	30.38	

Volume includes merchantable stem without bark above a 6-inch stump height to a 4.0-inch top diameter outside bark.
Block indicates extent of data.

Table 11.--Merchantable volume outside bark to a 6.0-inch top diameter

D.b.h. (inches)	Height (feet)													
	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	- - - - - <i>Cubic feet</i> - - - - -													
6			0.63	0.75	0.87	0.98	1.09	1.21	1.32	1.43	1.54			
7			1.72	2.04	2.35	2.66	2.97	3.28	3.58	3.88	4.18	4.48		
8			2.84	3.36	3.88	4.39	4.90	5.40	5.90	6.40	6.89	7.38		
9			4.01	4.75	5.48	6.20	6.92	7.63	8.34	9.04	9.74	10.43	11.12	11.81
10					7.18	8.12	9.06	10.00	10.92	11.84	12.75	13.66	14.57	15.47
11						10.17	11.34	12.51	13.67	14.82	15.96	17.10	18.23	19.36
12								16.59	17.99	19.38	20.76	22.13	23.50	
13									21.36	24.65	26.28	27.90		
14										28.78	30.68	32.58		

Volume includes merchantable stem with bark above a 6-inch stump height to a 6.0-inch top diameter outside bark. Block indicates extent of data.

Table 12.--Merchantable volume inside bark to a 6.0-inch top diameter

D.b.h. (inches)	Height (feet)													
	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	- - - - - Cubic feet - - - - -													
6			0.33	0.40	0.48	0.55	0.63	0.71	0.79	0.87	0.95			
7			1.15	1.40	1.66	1.93	2.20	2.47	2.75	3.03	3.31	3.59		
8			1.97	2.42	2.87	3.32	3.79	4.26	4.74	5.22	5.70	6.19		
9		2.84	3.47	4.12	4.78	5.45	6.12	6.81	7.50	8.20	8.90	9.61	10.32	
10				5.45								12.70	13.64	
11					7.95	9.07	10.19	11.33	12.48	13.64	14.81	15.99	17.18	
12						6.32	7.20	8.10	9.00	9.91	10.83	11.76	12.70	13.64
13										18.12	19.80	21.50	23.21	24.94
14												25.16	27.17	29.19

Volume includes merchantable stem without bark above a 6-inch stump height to a 6.0-inch top diameter outside bark.
 Block indicates extent of data.

Table 13.--Total green weight (wood + bark)

D.b.h. (inches)	Height (feet)														
	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
	----- <i>Pounds</i> -----														
2	9	12	15												
3	19	25	32	39	45	52	59								
4	32	44	55	67	79	91	103	115	127						
5	50	67	85	103	121'	139	157	176	194	213					
6			120	146	171	197	223	249	275	302	328				
7			162	196	230	265	300	335	370	405	441	476			
8			209	253	297	342	387	432	478	523	569	615			
9			262	317	373	429	485	542	599	656	713	771	828	886	
10					456	525	593	663	732	802	873	943	1014	1085	
11						630	712	796	879	963	1047	1132	1217	1302	
12									1039	1138	1237	-1337	1438	1538	
13										1326	1442	1559	1676	1793	
14												1797	1931	2067	

Weight includes entire stem with bark above a 6-inch stump height. Block indicates extent of data.

Table 14.---Total dry weight (wood only)

D.b.h. (inches)	Height (feet)													
	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	----- <i>Pounds</i> -----													
2	3	4	6											
3	6	9	12	15	18	21	24							
4	11	15	20	25	30	36	41	47	53					
5	16	23	31	38	46	54	63	72	81	90				
6			43	54	65	77	89	101	113	126	139			
7			57	72	87	102	118	134	151	168	186	203		
8			74	92	111	131	152	173	194	216	238	261		
9			92	115	139	164	189	215	242	269	297	325	354	383
10					169	199	230	262	295	328	362	396	431	467
11						238	275	313	352	392	432	474	516	558
12									415	461	509	557	607	657
13										536	591	648	705	763
14												744	810	876

Weight includes entire stem without bark above a 6-inch stump height. Block indicates extent of data.

Table 15.--Merchantable green weight (wood + bark) to a 2.0-inch top diameter

D.b.h. (inches)	Height (feet)														
	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
	----- Pounds -----														
5	48	65	82	99	117	134	152	170	187	205					
6			118	143	168	193	219	244	270	296	321				
7			193	227	262	296	331	365	400	435	470				
8			207	251	295	339	384	429	474	519	564	610			
9			260	315	371	426	482	538	596	652	709	766	824	881	
10					454	522	591	660	729	799	869	939	1009	1080	
11						628	710	793	876	960	1044	1128	1213	1298	
12								1036	1135	1234	1334	1435	1534		
13									1324	1440	1556	1673	1790		
14											1794	1929	2064		

Weight includes merchantable stem with bark above a 6-inch stump height to a 2.0-inch top diameter outside bark. Block indicates extent of data.

Table 16.--Merchantable dry weight (wood only) to a 2.0-inch top diameter

D.b.h. (inches)	Height (feet)													
	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	----- Pounds -----													
5	16	23	30	37	45	53	61	70	78	a7				
6			42	53	64	76	a7	99	112	124	137			
7			57	71	86	101	117	133	150	167	1a4	201		
a			73	92	111	131	151	172	193	215	237	259		
9			92	115	138	163	188	214	241	268	296	324	353	382
10					169	199	230	262	294	327	361	395	430	466
11						238	275	313	352	391	432	473	515	557
12								414		461	508	557	606	656
13										535	591	647	704	762
14												743	809	876

Weight includes merchantable stem without bark above a 6-inch stump height to a 2.0-inch top diameter outside bark.
Block indicates extent of data.

Table 17.--Merchantable green weight (wood + bark) to a 4.0-inch top diameter

D.b.h. (inches)	Height (feet)													
	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	----- <i>Pounds</i> -----													
5	32	44	55	67	79	91	103	114	127	139				
6			96	117	137	158	179	199	220	241	263			
7			142	172	202	232	262	293	324	355	386	417		
8			192	232	273	314	355	397	438	480	522	564		
9			247	299	351	404	457	510	564	618	672	726	781	835
10					437	503	569	635	702	769	836	904	971	1039
11						610	690	771	852	933	1015	1097	1179	1261
12									1014	1111	1208	1305	1403	1501
13										1302	1415	1530	1645	1760
14												1770	1903	2036

Weight includes merchantable stem with bark above a 6-inch stump height to a 4.0-inch top diameter outside bark. Block indicates extent of data.

Table 18.--Merchantable dry weight (wood only) to a 4.0-inch top diameter

D.b.h. (inches)	Height (feet)													
	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	----- <i>Pounds</i> -----													
5	11	16	21	26	32	37	43	49	55	62				
6			36	45	54	64	73	84	94	105	115			
7			52	65	78	92	106	121	136	151	167	182		
8			69	86	104	123	142	161	181	202	223	244		
9			88	110	133	156	181	206	231	257	284	311	338	366
10					164	193	223	254	286	318	351	384	418	452
11						233	269	306	344	383	423	463	504	545
12								408		454	500	548	596	646
13									529		584	639	696	753
14												736	801	868

Weight includes merchantable stem without bark above a 6-inch stump height to a 4.0-inch top diameter outside bark.

Block indicates extent of data.

Table 19.--Merchantable green weight (wood + bark) to a 6.0-inch top diameter

D.b.h. (inches)	Height (feet)													
	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	----- Pounds -----													
6		28	34	40	46	52	58	64	71	77	77			
7		85	102	120	138	157	175	193	212	230	249			
8		143	173	203	234	264	295	326	357	388	420			
9		204	247	290	334	378	422	466	511	555	600	645	690	
10				383	440	498	557	615	674	733	792	851	911	
11					554	627	700	774	848	922	996	1071	1146	
12								943	1033	1124	1215	1306	1397	
13									1231	1339	1447	1556	1664	
14											1694	1821	1948	

Weight includes merchantable stem with bark above a 6-inch stump height to a 6.0-inch top diameter outside bark.
Block indicates extent of data.

Table 20.--Merchantable dry weight (wood only) to a 6.0-inch top diameter

D.b.h. (inches)	Height (feet)														
	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
	----- Pounds -----														
6			12	15	18	21	25	28	32	35	39				
7			33	41	49	58	67	77	86	96	106	116			
8			53	67	81	95	110	125	141	156	173	189			
9			75	94	113	133	154	175	197	219	242	265	288	312	
10					147	173	200	228	256	285	314	344	375	406	
11						216	249	283	319	355	391	428	466	505	
12									385	428	473	518	563	610	
13										507	559	612	666	721	
14												712	775	839	

Weight includes merchantable stem without bark above a 6-inch stump height to a 6.0-inch top diameter outside bark.
Block indicates extent of data.

Green and dry weights can be similarly estimated with equations (5), (6), (7), and (8).

Outside- and inside-bark diameters at the top of the first 16.5-foot log (i.e., at 17 feet aboveground assuming a 0.5-foot stump) can be estimated from equations (9) and (11) as follows:

$$\begin{aligned} d_o &= 1.129318 (10.5)^{0.899034} (65)^{-0.685006} \\ &\quad \times (65 - 17)^{0.737518} \\ &= 9.3 \text{ inches} \\ d_i &= 0.770783 (10.5)^{0.883723} (65)^{-0.619672} \\ &\quad \times (65 - 17)^{0.764991} \\ &= 9.0 \text{ inches} \end{aligned}$$

The height corresponding to a diameter o.b. of 6 inches can be estimated from equation (10):

$$\begin{aligned} h &= 65 - [0.84798 (10.5)^{-1.2190} (65)^{0.9288} \\ &\quad \times (6)^{1.3559}] \\ &= 38.5 \text{ feet} \end{aligned}$$

The corresponding height for a diameter i.b. of 6 inches from equation (12) is:

$$\begin{aligned} h &= 65 - [1.405410 (10.5)^{-1.155207} (65)^{0.810039} \\ &\quad \times (6)^{1.307206}] \\ &= 36.6 \text{ feet} \end{aligned}$$

4. Site Index

The yield of an unthinned plantation is largely determined by three factors:

1. age of the plantation
2. stand density (expressed here as number of surviving stems per acre)
3. innate productivity of the site upon which the plantation is growing

Site productivity is usually expressed in terms of site index, which is defined as the average height that would be attained by dominant and codominant trees at some specified index age. The conventional index age for southern pine plantations is 25 years.

No site index curves or equations for site-prepared loblolly pine plantations in the Lower Coastal Plain existed

before this study. King-count data collected from the dominant and codominant stem analysis trees sampled in 1977 formed the basis for an investigation of height-growth patterns that was reported by Pienaar and Shiver (1980). Their results showed that the sample plots came from two soil strata (A and B) with significantly different height-growth patterns. Plots classified as Group B had the following characteristics:

- very poorly drained (SCS drainage class)
- Al horizon ranging from 7 to 24 inches in thickness
- organic matter content of the Al horizon equal to or greater than 10 percent

Virtually all plots in this group were on North Carolina pocosin and river swamp soils in areas that had been extensively ditched to remove excess water. The effect of ditching on growth could not be tested; however, it is unlikely that the site index relationships observed in ditched areas would be appropriate for similar soils that have not been ditched.

The soils in Group B are classified as Humaquepts, Paleaquults, and Umbraquults. The specific soil series sampled were:

Humaquepts Paleaquults Umbraquults

Ballahack	Bayboro	Byars
Torhunta	Pantego	

All other soil series sampled were placed in Group A. The distributions of sample plots by taxonomic group and soil series for Group A and Group B are shown in table 21. Separate distributions of the plots by age, site index, and number of trees per acre for Soil Groups A and B are given in table 22.

Separate site index equations were developed for use with Group A and Group B soils (Pienaar and Shiver 1980). Each of these equations defined an anamorphic

Table 21.--Distribution of sample plots by soil group, taxonomic group, and soil series

Taxonomic group and soil series	Number of plots	Taxonomic group and soil series	Number of plots
SOIL GROUP A			
Haplaquods		Ocilla	5
Leon	1	Wagrum	2
Ridgeland	2		29
Sapelo	1		
	4	Quartzipsamments	
		Chipley	12
Haplohumods		Kureb	1
Echaw	3	Lakeland	4
		Pactolus	1
	3		18
		Udipsamments	
Hapludults		Wando	2
Altavista	2		2
Autryville	1		
Bertie	5		
Chrisolm	2	Unbraquults	
Coosaw	4	Cape Fear	1
Craven	10		
Eddings	1		1
Eulonia	5		
Eunola	8		
Kalmia	4		
Kenansville	7		
Nemours	3	Total	155
	52		
		SOIL GROUP B	
Ochraquults		Humaquepts	
Augusta	1	Ballahack	6
Bladen	3	Torhunta	1
Coxville	2		
Leaf	14		7
Lenoir	3		
Lynchburg	3	Paleaquults	
Tomotley	3	Bayboro	4
Wahee	12	Pantego	14
Williman	1		
	42		18
		Umbraquults	
Paleaquults		Byars	1
Plummer	2		1
Rainsq	2		
	4	Total	26
Paleudults			
Onslow	1	Grand Total	181
Blanton	4		
Foreston	1		
Goldsboro	7		
Norfolk	9		

Table 22. --Distribution of yield plots by age, site index, and number of trees per acre for Soil Groups A and B

Age class	Site class	Trees per acre							Row total
		300	400	500	600	700	800	900	
SOIL GROUP A									
10	40			3		1			4
	50		2	5	7	2			16
	60		3	1	3	4	2		13
	70			3	4	2			9
	80		3	3					6
15	40		3	2	3	3	1		12
	50	1	7	8	7	6	2	1	27
	60		3	10	8	6	1	3	35
	70	1		9	6	1	1	1	22
	80	2	5	4		1	1		13
20	40		2	2					4
	50		1	2	4		2		9
	60	1	2	4	5				12
	70	2	3			1			6
	80	1	2						3
25	40			1					1
	60	2	1	3					6
	70				1				1
30	50				1				1
Column total		10	39	60	49	27	10	5	200
SOIL GROUP B									
10	60			1					1
	70					1			1
	80			1			1		2
15	60								1
	70		1		1				2
	80		2						2
20	60				1				1
	70		2	3	4	2			11
	80	1	1	1	1	1			5
Column total		1	6	6	7	4	1	1	26

series' of site index curves. The Group A site index equation was derived from the stem analysis data from 308 felled sample trees in 154 plantations. The data base used for the Group B site index equation came from 50 sample trees in 25 plantations. Distribution of sample trees by age and height class is shown in table 23,

Height remeasurement data collected in 1981 offered an alternative to the use of stem analysis data for the development of site index equations. Of the 130 remeasured plots, 122 were located on Group A soils. Average heights of dominants and codominants for these plots in 1977 and 1981 were compared with height trends predicted by the Pienaar and Shiver site index curves. Actual growth compared well with the curves for

plots with moderate site index values. Examination of the growth data for plots with more extreme site indices, however, indicated that low site index plots showed a height development pattern with less curvature than that observed on the moderate site index plots, while high site index plots displayed more curvature than the moderate site plots. These trends indicated that an equation capable of generating a polymorphic family of site index curves was needed for plantations on Group A soils.

An equation form previously used by Clutter and Lenhart (1968) and Clutter and Jones (1980) was successfully fitted to the remeasurement data from the 122 Soil Group A plots. The resulting equation was:

$$\log_e(H_{D2}) = \beta_2 A_2^{-1} - \beta_3 + [\log_e(H_{D1}) - \beta_2 A_1^{-1} + \beta_3] \exp[\beta_1 (A_1^{-1} - A_2^{-1})] \quad (13)$$

where:

A_1 = plot age at the beginning of the growth period
 A_2 = plot age at the end of the growth period
 H_{D1} = average height of dominant and codominant trees at the beginning of the growth period

¹In an anamorphic series of site index curves, a constant proportionality relationship exists for any pair of curves in the series. This pattern is not present in a polymorphic series.

Table 23. --Distribution of sample trees by age and height class

Age (years)	Height class (feet)							Total
	15	25	35	45	55	65	75	
10	1	7	40	16				64
11		4	20	19	5			48
12								46
13			4	14	8			26
14			2	6	16			24
15				12	12	6		30
16			2	6	4	10		22
17				1	9	10		20
18				1	9	9	1	20
19				4	7	12	3	26
20					4	8	4	16
21					3	2	1	6
22					1	1		2
23				1	1			2
24						2		2
25					1	1		2
26								
27								
28								2
Total	1	13	85	100	87	63	9	358

H_{D2} = average height of dominant and codominant trees at the end of the growth period

$$\beta_1 = -4.69839$$

$$\beta_2 = -37.22042$$

$$\beta_3 = -0.67644, \text{ and } \log_e(X) \text{ denotes the natural logarithm of the quantity } X, \text{ and } \exp \text{ is the exponential function}$$

If A_2 is set equal to 25 years, H_{D2} is then, by definition, equal to site index. This substitution in (13) results in the site index equation,

$$\log_e(S) = -0.81238 + [1.20676 \log_e(H_D) + 44.91596A^{-1} - 0.81630] \times \exp(-4.69839A^{-1}) \quad (14)$$

where:

S = site index (base age 25 years)

A = stand age

H_D = average height of dominants and codominants at age A

Equation (14) is easily inverted to obtain an equation for average dominant height as a function of stand age and site index.

$$\log_e(H_D) = 0.67644 - 37.22042A^{-1} + 0.82867 \times [\log_e(S) + 0.812381 \exp(4.69838A^{-1})] \quad (15)$$

The above equations should be used to predict site index and average height of dominants and codominants in stands growing on soils classified as Group A. The site index curves defined by equation (15) are shown in figure 2.

The 182 plots installed in 1977 included 26 on Group B soils. Twenty-two of these were clearcut or thinned before the 1981 remeasurement. As a result, remeasured height data were available for only four plots on Group B soils. In view of the small sample size, no attempt was made to develop new site index curves for Group B soils and the original equations developed by Pienaar and Shiver (1980) are recommended for application in this stratum. These equations are:

$$\text{Site index} \\ S = H_D \left[\frac{0.7476}{1 - \exp(-0.5507 A)} \right]^{1.4350} \quad (16)$$

$$\text{Average dominant height} \\ H_D = S [1.3376 (1 - \exp(-0.05507 A))]^{1.4350} \quad (17)$$

where S , H_D , and A are as defined above. Group B site index curves defined by equation (17) are shown in figure 3.

Estimating site index for a particular plantation requires examination of

soil characteristics to place the plantation in Soil Group A or B, and determination of plantation age and average height of dominants and codominants. Site index can then be calculated by inserting these data into the proper equation or by interpolating the site index curves shown in figure 2 or 3.

5. Per Acre Volume and Weight Yields

Measurement data collected on the 226 yield plots described in section 2 were used to develop equations for predicting stand structure and per acre yields. The overall approach involves the prediction of a diameter distribution and associated heights by 1-inch diameter class for any given combination of plantation age, site index, number of stems per acre, and soil group. Once heights and number of stems per acre by d.b.h. class have been determined, per acre volumes or weights can be calculated easily by applying the appropriate individual tree volume or weight equation and accumulating yields over the occupied diameter classes (Bennett and Clutter 1968).

The statistical distribution used to describe the relative frequencies of trees in the various d.b.h. classes is the three-parameter Weibull distribution (Bailey and Dell 1973). Details of the analysis used to develop the prediction system are available in Smith (1978). When tree diameters have a Weibull distribution, the proportion, P , of the population diameters that exceeds a lower limit, D_L , but is less than an upper limit D_U , is given by

$$P(D_L, D_U) = \exp\{-[(D_L - a)/b]^c\} - \exp\{-[(D_U - a)/b]^c\} \quad (18)$$

where a , b , and c are the parameters that determine the characteristics of the particular Weibull distribution involved, and $\exp$ denotes the exponential function. In the system described here, values for these parameters are obtained as functions of plantation age, average height of dominants and codominants, and number of trees per acre at the prediction age. It should be noted that the

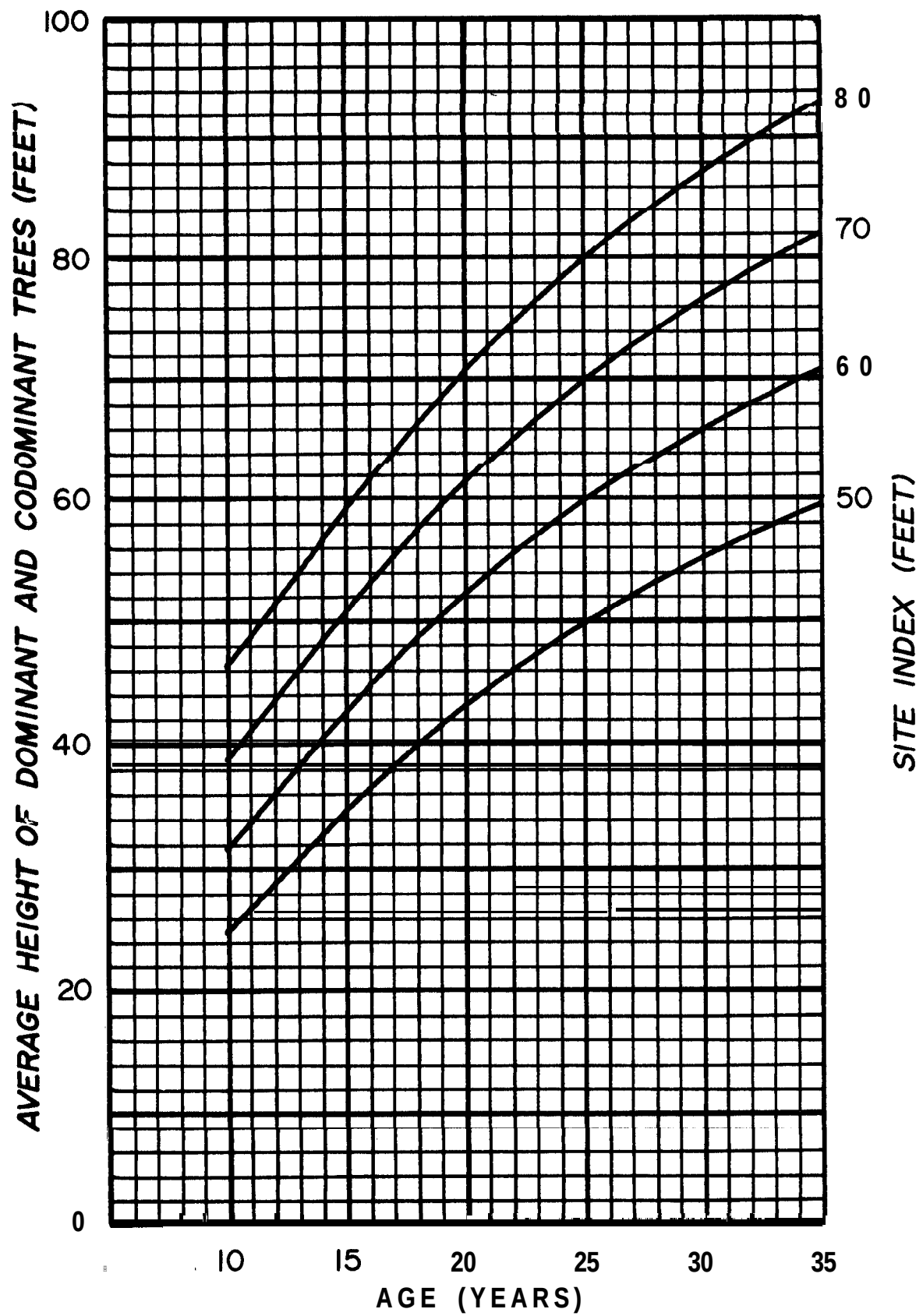


Figure 2. --Site index curves for Soil Group A.

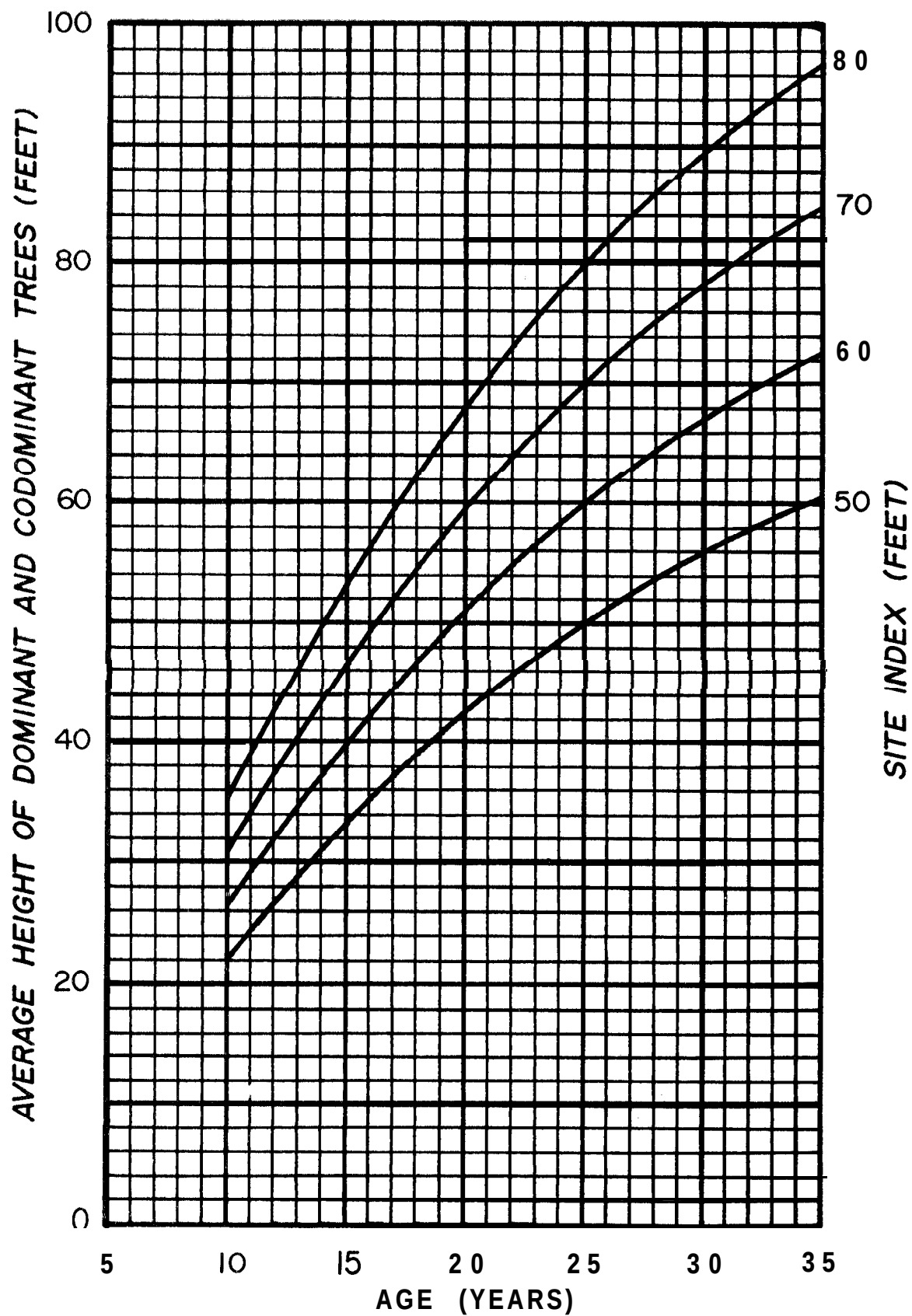


Figure 3. --Site index curves for Soil Group B.

average height of dominants is a function of plantation age and site index and can always be estimated from these two factors by using either equation (15) or equation (17), depending upon the soil group involved. The equations for predicting the Weibull parameters a, b, and c are shown below:

Soil Group A

$$a = A^{0.5} [0.2576 A^{0.5} - 0.1073 \log_e (N)] \quad (19)$$

$$b = \exp[2.2978 - 1.2111 (A/H_D) - 0.0192 (N/H_D)] \quad (20)$$

$$c = \exp[1.5518 - 0.0339 A + 0.0714 \log_e (A)] \quad (21)$$

Soil Group 8

$$a = A^{0.5} [0.4912 A^{0.5} - 0.2139 \log_e (N)] \quad (22)$$

$$b = \exp[2.5829 - 0.0359 A - 0.000672 N] \quad (23)$$

$$c = \exp[5.0037 - 0.1495 A - 22.3577/A] \quad (24)$$

where:

A = plantation age (years)

H_D = average height of dominants and codominants (feet)

N = number of surviving trees per acre at age A, and

log_e = natural logarithm

A single equation can be used with both soil groups to predict total tree height for each d.b.h. class. This equation is

$$H = H_D (0.6046 + 0.0449 (H_D/A) + 0.7385 \log_e [CDF(D) + 1] - 0.0862 (H_D/A) \times \log_e [CDF(D) + 1]) \quad (25)$$

where:

H = total tree height (feet)

D = d.b.h. (inches)

A = plantation age

H_D = average height of dominants and codominants

The notation CDF(D) denotes the Weibull cumulative distribution function value associated with the d.b.h. value, D, and is defined as

$$CDF(D) = 1 - \exp\{-(D - a)/b\}^c \quad (26)$$

where a, b, and c are the Weibull parameter estimates.

Example Applications

The use of these equations is illustrated below in a calculation of the expected outside-bark, per acre, total-volume yield (5-inch d.b.h. class and above) for a Soil Group A plantation 30 years of age with a site index of 60 feet and 450 stems per acre (table 24). We first use equation (15) to calculate H_D:

$$\begin{aligned} \log_e (H_D) &= 0.67644 - 37.22042 (1/30) \\ &\quad + 0.82867 [\log_e (60) + 0.812381 \\ &\quad \times \exp[4.69839 (1/30)]] \\ &= 4.19187 \end{aligned}$$

$$H_D = 66.1012 \text{ feet}$$

The a, b, and c parameter estimates for the diameter frequency distribution are obtained as

$$\begin{aligned} a &= (30)^{0.5} [0.2576 (30)^{0.5} - 0.1073 \log_e (450)] \\ &= 4.137557 \end{aligned}$$

$$\begin{aligned} b &= \exp[2.2978 - 1.2111 (30/66.1012) \\ &\quad - 0.0192 (450/66.1012)] \\ &= 5.040141 \end{aligned}$$

$$\begin{aligned} c &= \exp[1.5518 - 0.0339 (30) + 0.0714 \log_e (30)] \\ &= 2.176342 \end{aligned}$$

With these parameter estimates, equation (18) can be written as

$$\begin{aligned} P(D_L, D_U) &= \exp\{-(D_L - 4.137557) \\ &\quad / 5.040141\}^{2.176342} \\ &\quad - \exp\{-(D_U - 4.137557) \\ &\quad / 5.040141\}^{2.176342} \end{aligned} \quad (27)$$

and equation (26) becomes

$$CDF(D) = 1 - \exp\{-(D - 4.137557) / 5.040141\}^{2.176342} \quad (28)$$

Since the a-parameter estimates the smallest diameter of the population, the smallest occupied 1-inch class in this sample is the 4-inch class with a lower limit equal to the a-parameter

Table 24.--Calculation of stand structure and estimated yield per acre (total volume, outside bark) for a Soil Group A plantation at age = 30 years, site index = feet, and stems per acre = 450

D.b.h. class	D _L	D _U	Class midpoint	Class frequency	Average height	Volume per tree	Volume per class
- - - - - Inches - - - - -			Number		Feet	• • • • Cubic feet • • •	
4	4.137557	4.5	4.318779	1.46	46.53		
5	4.5	5.5	5.0	23.90	47.27	3.00	71.71
6	5.5	6.5	6.0	53.33	50.23	4.48	238.92
7	6.5	7.5	7.0	73.98	54.69	6.49	480.10
8	7.5	8.5	8.0	80.54	59.45	9.04	728.09
9	8.5	9.5	9.0	73.51	63.62	12.03	884.27
10	9.5	10.5	10.0	57.75	66.81	15.37	887.66
11	10.5	11.5	11.0	39.56	68.98	18.97	750.49
12	11.5	12.5	12.0	23.79	70.31	22.76	541.36
13	12.5	13.5	13.0	12.60	71.04	26.75	336.92
14	13.5	14.5	14.0	5.88	71.39	30.92	181.94
15	14.5	15.5	15.0	2.43	71.55	35.31	85.72
16	15.5	16.5	16.0	1.27	71.61	39.93	50.71
Total estimated yield						5237.89	

All calculated values in this table were obtained by using the computer program in Appendix II. Since the computer does not round intermediate results, computations with the table values will often produce results that differ slightly from those generated by the computer.

value and an upper limit of 4.5 inches. Diameter classes in the upper tail of the distribution containing less than 0.5 trees are not considered and their frequencies are included in the frequency for the largest class containing 0.5 trees or more before this inclusion.

Computation of the values shown in table 24 is illustrated below for the 8-inch d.b.h. class. The relative class frequency is obtained from equation (27) as

$$\begin{aligned} P(7.5, 8.5) &= \exp\left\{-\left[\frac{7.5 - 4.137557}{5.040141}\right]^{2.176342}\right\} \\ &\quad - \exp\left\{-\left[\frac{8.5 - 4.137557}{5.040141}\right]^{2.176342}\right\} \\ &= 0.178980 \end{aligned}$$

and the stems per acre value is calculated as

$$\begin{aligned} \text{stems per acre} &= 450 (0.178980) \\ &= 80.54 \end{aligned}$$

The average height for each class is calculated as the height associated with the midpoint d.b.h. value. For the 8-inch class from equation (28)

$$\begin{aligned} \text{CDF}(8.0) &= 1 - \exp\left\{-\left[\frac{8.0 - 4.137557}{5.040141}\right]^{2.176342}\right\} \\ &= 0.428989 \end{aligned}$$

so that the estimated average height from equation (25) is obtained as

$$\begin{aligned} H &= 66.1012 [0.6046 + 0.0449(66.1012/30) \\ &\quad + 0.7385 \log_e (1.428989) \\ &\quad - 0.0862(66.1012/30) \log_e (1.428989)] \\ &= 59.45 \text{ feet} \end{aligned}$$

The per tree volume is calculated using equation (1) as

$$\begin{aligned} \text{TV} &= 0.00395569(8.0)^{1.8945} (59.45)^{0.9288} \\ &= 9.04 \text{ cubic feet} \end{aligned}$$

Multiplication of this per tree volume by the class frequency of 80.54 gives the volume per class for the 8-inch class; i.e., 728.09 cubic feet. Accumulation of the volume per class values over the occupied classes gives a total volume estimate of 5237.89 cubic feet per acre.

Tables 25 and 26 contain predicted stand structure and per acre volumetric

yields by selected combinations of site index, age, and number of trees per acre for Soil Group A and Soil Group B plantations, respectively. Per tree volumes in the calculations involved were obtained by using equations (1), (2), (3), and (4). Per acre weight yields by combinations of site index, plantation age, and number of trees per acre for Soil Groups A and B are shown in tables 27 and 28. Equations (5), (6), (7), and (8) were used to calculate per tree weights in the computation of these tables. Soil Group A tables include predictions for site indices 50, 60, 70, and 80. For each age and site index combination, predictions are given for number of trees per acre from 300 up to a reasonable maximum number tabulated below:

Age	Site Index			
	50	60	70	80
10	800	800	800	800
15	800	800	800	800
20	800	600	600	600
25	600	500	500	500
30	500	400	400	300

Because of the limited amount of data available for Soil Group B plantations, predictions are given only for site indices 60, 70, and 80 at the selected combinations of age and numbers of trees per acre tabulated below:

Age	Site Index		
	60	70	80
10	500	600	700
15	500	600	700
20	500	600	700

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)

STTE INDEX 50 AGE 10 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	6	0.1	18	—	—	--	--	--	--	--	--
3	28	1.4	19	--	--	--	--	--	--	--	--
4	64	5.6	20	--	—	--	--	--	--	--	--
5	90	12.3	23	139	96	134	93	93	62	--	--
6	74	14.5	25	175	124	172	122	142	99	47	25
7	31	8.3	27	103	74	102	73	91	65	56	38
8	6	2.1	27	26	19	26	19	24	17	18	13
	300	44.3	--	443	313	434	307	350	243	122	76

SITE INDEX 50 AGE 10 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	18	--	--	--	--	--	--	--	--
2	14	0.3	18	--	--	--	--	--	--	--	--
3	54	2.7	19	--	—	--	--	--	--	--	--
4	111	9.7	21	--	--	--	--	--	--	--	--
5	127	17.3	24	204	143	198	138	137	91	--	--
6	73	14.4	26	179	128	176	125	146	102	49	25
7	18	4.8	27	60	43	59	43	53	38	33	22
8	1	0.5	27	6	5	6	5	6	4	4	3
	400	49.7	--	450	319	439	311	341	236	86	51

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 50 AGE 10 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	2	0.0	18	--	--	--	--	--	--	--	--
2	26	0.6	18	--	--	--	--	--	--	--	--
3	95	4.7	19	--	--	--	--	--	--	--	--
4	168	14.7	22	--	--	--	--	--	--	--	--
5	148	20.1	25	247	174	239	168	165	111	--	--
6	54	10.6	27	135	96	132	95	109	77	36	19
7	7	1.8	27	22	16	22	16	20	14	12	8
	500	52.5	--	404	286	393	279	294	203	49	27

SITE INDEX 50 AGE 10 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	4	0.0	18	--	--	--	--	--	--	--	--
2	47	1.0	18	--	--	--	--	--	--	--	--
3	153	7.5	20	--	--	--	--	--	--	--	--
4	226	19.7	23	--	--	--	--	--	--	--	--
5	140	19.1	26	241	171	233	165	162	109	--	--
6	29	5.6	27	72	51	70	50	58	41	19	10
7	1	0.4	27	5	3	4	3	4	3	2	2
	600	53.3	--	317	225	308	219	224	153	22	12

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 50 AGE 10 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	8	0.0	18	--	--	--	--	--	--	--	--
2	79	1.7	18	--	--	--	--	--	--	--	--
3	230	11.3	21	--	--	--	--	--	--	--	--
4	267	23.3	25	--	--	--	--	--	--	--	--
5	106	14.4	27	185	132	179	127	124	84	--	--
6	10	2.0	27	25	18	25	18	21	15	7	4
	700	52.8	--	211	150	204	145	145	99	7	4

SITE INDEX 50 AGE 10 STEMS/ACRE 800											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	14	0.1	18	--	--	--	--	--	--	--	--
2	128	2.8	19	--	--	--	--	--	--	--	--
3	321	15.8	22	--	--	--	--	--	--	--	--
4	274	23.9	25	--	--	--	--	--	--	--	--
5	60	8.2	27	107	76	104	74	72	49	--	--
6	2	0.4	27	5	4	5	4	4	3	1	1
	800	51.2	--	112	80	109	78	76	52	1	1

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 50 AGE 15 STEMS/ACRE 300														
D.b.h. (in)	Stems w acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
				2 inches		4 inches		6 inches						
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
2	1	0.0	25	—	—	—	—	--	--	--	--			
3	11	0.6	25	—	—	—	—	--	--	--	--			
4	35	3.1	26	—	—	—	—	--	--	--	--			
5	64	8.7	29	121	88	117	85	81	56	--	--			
6	78	15.4	32	233	172	228	169	189	138	63	34			
7	64	17.2	35	277	209	274	207	245	184	152	107			
8	34	11.7	37	195	149	194	148	180	138	137	102			
9	10	4.6	38	77	60	77	59	73	56	61	47			
10	2	1.1	38	18	14	17	13	17	13	15	11			
				300	62.3	--	920	692	907	682	785	585	428	302

SITE INDEX 50 AGE 15 STEMS/ACRE 400														
D.b.h. (in)	Stems v - acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
2	3	0.1	25	—	—	—	--	—	--	--	--			
3	22	1.1	25	—	--	—	—	—	--	--	--			
4	60	5.3	27	—	--	—	—	--	--	--	--			
5	100	13.7	30	197	143	190	138	132	92	--	--			
6	107	21.0	34	330	246	324	242	268	197	89	49			
7	72	19.3	36	319	242	315	239	282	213	175	124			
8	29	10.0	37	168	129	167	128	155	119	118	88			
9	6	2.7	38	45	35	45	35	43	33	36	27			
10	1	0.4	38	6	5	6	5	6	4	5	4			
				400	73.5	--	1064	799	1047	786	885	657	423	292

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 50				AGE 15		STEMS/ACRE 500								
D.b.h. (in)	Stems w - acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
2	6	0.1	25	--	--	--	--	--	--	--	--			
3	37	1.8	25	--	--	--	--	--	--	--	--			
4	94	8.2	28	--	--	--	--	--	--	--	--			
5	141	19.2	31	287	210	277	203	192	134	--	--			
6	130	25.5	35	411	308	403	303	334	247	111	61			
7	70	18.6	37	312	238	309	235	276	209	171	122			
8	20	7.0	38	118	90	117	90	109	83	83	62			
9	3	1.3	38	21	16	21	16	20	16	17	13			
				500	81.7	--	1149	863	1127	847	931	689	382	258

SITE INDEX 50				AGE 15		STEMS/ACRE 600								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
2	10	0.2	25	--	--	--	--	--	--	--	--			
3	58	2.9	26	--	--	--	--	--	--	--	--			
4	137	12.0	28	--	--	--	--	--	--	--	--			
5	183	25.0	32	385	284	372	274	258	181	--	--			
6	141	27.7	36	458	346	450	339	373	277	124	69			
7	58	15.5	37	263	201	260	199	233	177	144	103			
8	11	4.0	38	67	51	66	51	62	47	47	35			
9	1	0.4	38	7	5	7	5	7	5	5	4			
				600	87.6	--	1180	887	1156	868	931	687	321	211

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 50 AGE 15 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	16	0.4	25	--	--	--	--	--	--	—	--
3	87	4.3	26	--	--	--	--	--	--	--	--
4	189	16.5	29	--	--	--	--	—	--	--	—
5	222	30.3	33	480	356	465	344	322	228	--	--
6	139	27.3	36	459	348	451	341	373	278	124	69
7	42	11.1	37	190	145	188	143	168	128	104	75
8	5	1.9	38	32	24	31	24	29	22	22	17
	700	91.6	--	1161	873	1135	853	892	656	251	160

SITE INDEX 50 AGE 15 STEMS/ACRE 800											
D.b.h. (in)	Stems Per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	26	0.6	25	--	--	--	--	--	--	—	--
3	125	6.1	26	--	--	—	—	—	--	--	--
4	248	21.7	30	—	—	—	—	—	—	—	—
5	251	34.2	34	558	416	540	402	374	266	--	--
6	123	24.1	37	412	313	404	307	335	250	111	62
7	25	6.7	38	116	88	114	87	102	78	63	45
8	2	0.6	38	11	8	11	8	10	8	8	6
	800	94.0	--	1096	825	1069	805	821	602	183	113

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 50				AGE 20		STEMS/ACRE 300								
D.b.h. (in)	Stems per acre (no.)	B a s a l a r e a (ft ²)	A v g. h t. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
				_____		2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
3	3	0.2	30	--	--	--	--	--	--	--	--			
4	19	1.6	31	--	--	--	--	--	--	--	--			
5	43	5.8	33	92	69	89	66	62	44	--	--			
6	64	12.5	37	214	162	210	159	174	130	58	32			
7	69	18.3	41	339	263	335	260	300	231	186	135			
8	55	19.0	44	371	293	368	291	342	270	260	200			
9	31	13.9	46	278	222	277	221	264	210	221	174			
10	13	7.0	47	142	114	141	113	136	109	121	96			
11	4	2.4	47	48	39	48	39	47	38	43	34			
12	1	0.6	47	12	10	12	10	12	10	11	9			
				300	81.4	--	1496	1171	1480	1159	1336	1042	899	682

SITE INDEX 50				AGE 20		STEMS/ACRE 400								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. ____(ft ³)____		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
3	7	0.3	30	--	--	--	--	--	--	--	--			
4	33	2.8	31	--	--	--	--	--	--	--	--			
5	68	9.3	34	151	113	146	109	101	72	--	--			
6	94	18.4	38	325	248	319	243	264	198	88	49			
7	91	24.4	42	463	361	458	357	409	318	254	186			
8	64	22.2	45	440	349	437	346	406	321	309	239			
9	31	13.7	46	276	221	275	220	261	209	219	173			
10	10	5.6	47	113	91	112	90	108	87	96	77			
11	3	1.7	47	33	27	33	27	33	26	30	24			
				400	90.3	--	1801	1409	1780	1393	1583	1232	996	747

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 50			AGE 20		STEMS/ACRE 500						
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	13	0.6	31	--	--	--	--	--	--	--	--
4	51	4.5	32	--	--	--	--	--	--	--	--
5	99	13.5	35	225	169	218	163	151	108	--	--
6	125	24.6	39	447	343	439	337	363	275	121	68
7	110	29.4	43	570	447	564	442	504	393	313	230
8	66	23.2	45	466	371	463	368	431	342	327	254
9	27	11.8	46	241	193	240	192	228	183	191	151
10	7	3.8	47	77	62	77	62	74	60	66	53
11	1	0.8	47	16	13	16	13	16	13	15	12
500 112.3 --				2043	1598	2016	1577	1767	1372	1033	767

SITE INDEX 50			AGE 20		STEMS/ACRE 600						
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	1	0.0	30	--	--	--	--	--	--	--	--
3	21	1.0	31	--	--	--	--	--	--	--	--
4	75	6.5	32	--	--	--	--	--	--	--	--
5	135	18.4	36	314	236	304	228	211	151	--	--
6	157	30.9	40	574	443	564	435	467	355	155	88
7	123	32.8	44	649	511	642	505	574	449	356	262
8	63	22.1	46	450	358	446	356	415	330	316	245
9	21	9.2	47	188	151	187	150	178	142	149	118
10	4	2.3	47	46	37	46	37	44	36	39	31
11	1	0.3	47	7	5	7	5	7	5	6	5
600 123.6 --				2228	1742	2196	1716	1895	1469	1022	750

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 50				AGE 20		STEMS/ACRE 700					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	1	0.0	30	--	--	--	--	--	--	--	--
3	31	1.5	31	--	--	--	--	--	--	--	--
4	104	9.1	33	--	--	--	--	--	--	--	--
5	176	24.0	37	418	316	405	305	280	202	--	--
6	187	36.7	41	698	541	685	531	568	433	189	107
7	128	34.3	45	689	544	682	538	610	478	378	280
8	56	19.4	46	398	317	395	315	367	292	279	217
9	14	6.4	47	131	105	130	105	124	99	104	82
10	2	1.3	47	26	21	26	21	25	20	22	18
700				132.6	--	3360	1845	2323	1815	1974	1526
										972	704

SITE INDEX 50				AGE 20		STEMS/ACRE 800					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.1	30	--	--	--	--	--	--	--	--
3	45	2.2	31	--	--	--	--	--	--	--	--
4	140	12.2	33	--	--	--	--	--	--	--	--
5	220	30.0	38	536	406	518	393	359	260	--	--
6	211	41.5	42	808	629	793	617	657	504	219	125
7	126	33.7	45	686	543	678	537	607	477	377	279
8	45	15.7	47	323	258	320	256	298	237	227	176
9	9	4.0	47	82	66	81	65	77	62	65	51
10	1	0.6	47	11	9	11	9	11	9	10	8
800				139.9	--	2445	1911	2403	1877	2009	1549
										896	639

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 50 AGE 25 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	7	0.6	35	--	--	..	..	..	--	--	--
5	27	3.7	36	64	48	62	47	43	31	--	--
6	49	9.6	40	177	136	173	133	144	109	48	27
7	62	16.5	44	327	257	323	254	289	226	179	132
8	60	20.9	48	442	355	439	352	408	327	310	243
9	46	20.3	51	448	365	446	363	424	345	356	286
10	28	15.3	53	346	284	344	283	332	273	294	241
11	14	9.0	54	204	169	204	169	198	164	182	150
12	5	4.1	54	93	77	93	77	91	76	85	71
13	2	1.8	54	42	35	42	35	41	34	39	32
	300	101.8	--	2142	1726	2125	1713	1971	1585	1493	1181

SITE INDEX 50 AGE 25 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (St)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	14	1.2	35	--	--	--	--	..	--	--	--
5	45	6.1	37	108	81	104	79	72	52	--	--
6	74	14.6	41	274	212	269	208	223	170	74	42
7	87	23.2	45	472	373	467	369	417	328	259	192
8	78	27.1	49	586	473	582	469	541	435	412	323
9	54	23.9	52	537	438	534	436	508	415	426	344
10	29	16.1	53	367	302	366	301	353	291	313	256
11	13	8.3	54	189	156	188	156	184	152	168	139
12	4	3.2	54	73	61	73	61	72	60	67	56
13	1	1.2	54	26	22	26	22	26	21	24	20
	400	124.9	--	2632	2119	2609	2101	2396	1924	1743	1372

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 50 AGE 25 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. ____(ft ³)____		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	1	0.1	35	--	--	--	--	--	--	--	--
4	24	2.1	35	--	--	--	--	--	--	--	--
5	67	9.1	38	162	123	156	118	108	78	--	--
6	103	20.2	42	387	301	380	295	315	241	105	60
7	112	30.0	46	624	496	617	490	551	436	342	254
8	92	32.3	50	711	575	706	571	657	530	499	394
9	58	25.8	52	587	480	584	478	556	455	466	377
10	28	15.4	54	355	292	353	291	341	281	302	248
11	10	6.9	54	158	131	158	130	153	127	140	116
12	3	2.3	54	52	43	52	43	51	42	47	39
13	1	0.6	54	15	12	15	12	14	12	14	11
	500	144.8	--	3050	2453	3020	2430	2747	2202	1916	1499

SITE INDEX 50 AGE 25 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. ____(ft ³)____		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	2	0.1	35	--	--	--	--	--	--	--	--
4	37	3.2	35	--	--	--	--	--	--	--	--
5	93	12.6	38	228	173	220	167	153	111	--	--
6	134	26.3	43	516	402	506	395	419	322	140	80
7	137	36.5	47	775	618	766	611	685	544	425	318
8	104	36.2	51	809	656	803	652	747	605	568	449
9	59	26.1	53	598	491	595	488	567	464	475	385
10	25	13.8	54	317	262	316	261	305	252	270	222
11	8	5.3	54	121	100	121	100	118	98	108	89
12	2	1.7	54	40	33	39	33	39	32	36	30
	600	161.7	--	3404	2736	3367	2707	3033	2427	2022	1572

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 50 AGE 30 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
5	13	1.8	38	33	25	32	24	22	16	--	--
6	36	7.2	41	135	105	133	103	110	84	37	21
7	53	14.2	45	289	229	286	226	256	201	159	117
8	58	20.2	50	445	359	441	357	411	331	312	246
9	52	22.8	54	531	437	528	434	503	413	421	342
10	39	22.1	57	510	424	508	423	490	408	434	359
11	25	16.3	58	402	338	401	337	391	328	358	300
12	14	10.7	59	265	224	264	223	259	219	243	205
13	6	5.9	60	147	125	147	125	145	123	138	117
14	3	2.8	60	70	59	70	59	69	59	66	56
15	1	1.6	60	40	34	40	34	39	34	38	33
	300	124.7	--	2866	2359	2850	2345	2694	2216	2205	1796

SITE INDEX 50 AGE 30 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	1	0.1	38	--	--	--	--	--	--	--	--
5	25	3.4	39	62	47	60	45	41	30	--	--
6	57	11.2	42	215	167	211	164	175	134	58	33
7	77	20.5	46	428	341	424	337	379	300	235	175
8	79	27.5	51	618	502	614	499	571	463	434	344
9	66	29.1	55	690	569	686	566	653	539	547	446
10	46	25.1	57	614	513	612	511	591	493	523	434
11	27	18.0	59	446	376	445	375	434	365	397	333
12	14	10.8	60	269	227	268	227	263	223	246	208
13	6	5.5	60	136	115	135	115	133	113	127	108
14	2	2.3	60	58	49	58	49	57	48	55	47
15	1	1.1	60	28	24	28	24	28	24	27	23
	400	154.5	--	3564	2930	3540	2911	3325	2731	2649	2151

Continued

Table 25. --Volume yields, per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 50 AGE 30 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	3	0.3	38	--	--	--	--	--	--	--	--
5	39	5.3	39	98	75	95	73	66	48	--	--
6	80	15.8	43	310	241	304	237	252	193	84	48
7	102	27.3	48	582	465	575	460	515	409	319	239
8	99	34.5	52	792	646	786	641	732	595	556	442
9	78	34.4	56	827	685	823	681	783	648	656	537
10	51	27.7	58	684	572	682	570	658	551	583	485
11	28	18.4	59	458	386	457	385	445	375	408	343
12	13	10.1	60	252	213	252	213	247	209	231	195
13	5	4.6	60	115	98	115	98	113	96	108	91
14	2	1.8	60	44	37	44	37	43	37	42	35
15	1	0.7	60	18	15	18	15	18	15	17	15
	500	180.8	--	4181	3434	4151	3410	3872	3176	3003	2430

SITE INDEX 60 AGE 10 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	3	0.1	24	--	--	--	--	--	--	--	--
3	16	0.8	24	--	--	--	--	--	--	--	--
4	39	3.4	25	--	--	--	--	--	--	--	--
5	67	9.1	28	122	87	118	84	81	56	--	--
6	78	15.4	30	219	160	215	157	178	128	59	32
7	60	16.1	32	241	179	238	177	213	158	132	92
8	28	9.8	34	149	112	148	111	137	103	104	77
9	7	3.1	34	47	35	47	35	44	34	37	28
10	1	0.5	34	7	5	7	5	7	5	6	5
	300	58.2	--	784	579	772	571	661	483	339	233

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 60 AGE 10 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	7	0.2	24	--	--	--	--	--	--	--	--
3	29	1.4	24	--	--	--	--	--	--	--	--
4	68	6.0	26	--	--	--	--	--	--	--	--
5	105	14.3	29	197	142	191	137	132	91	--	--
6	104	20.5	31	301	222	296	218	245	178	82	44
7	62	16.7	33	254	190	251	188	225	167	139	98
8	20	7.0	34	107	80	106	80	99	74	75	55
9	3	1.4	34	21	16	21	16	20	15	17	12
	400	67.4	--	880	650	864	639	720	525	312	209

SITE INDEX 60 AGE 10 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	24	--	--	--	--	--	--	--	--
2	13	0.3	24	--	--	--	--	--	--	--	--
3	49	2.4	25	--	--	--	--	--	--	--	--
4	108	9.4	27	--	--	--	--	--	--	--	--
5	146	19.9	30	284	206	275	199	190	132	--	--
6	119	23.4	32	354	262	347	257	287	210	96	52
7	52	14.0	34	216	162	213	160	191	142	118	83
8	11	3.7	34	57	43	56	42	52	39	40	29
9	1	0.4	34	6	4	5	4	5	4	4	3
	500	73.5	--	915	676	897	663	726	527	258	167

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 60				AGE 10		STEMS/ACRE 600								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (Et)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
1	2	0.0	24	--	--	--	--	--	--	--	--			
2	21	0.5	24	--	--	--	--	--	--	--	--			
3	78	3.9	25	--	--	--	--	--	--	--	--			
4	157	13.7	27	--	--	--	--	--	--	--	--			
5	184	25.1	31	369	269	357	260	247	172	--	--			
6	118	23.1	33	356	265	350	260	290	212	96	53			
7	35	9.4	34	146	110	144	108	129	96	80	56			
8	4	1.4	34	22	17	22	17	20	15	16	11			
				600	77.1	--	893	661	873	645	686	496	192	120

SITE INDEX 60				AGE 10		STEMS/ACRE 700								
D.b.h. (in)	Stems p e r acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. ____(ft ³)____		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
1	3	0.0	24	--	--	--	--	--	--	--	--			
2	34	0.8	24	--	--	--	--	--	--	--	--			
3	118	5.8	25	--	--	--	--	--	--	--	--			
4	214	18.7	28	--	--	--	--	--	--	--	--			
5	211	28.7	32	434	318	420	308	291	204	--	--			
6	99	19.5	33	305	227	299	223	248	182	83	45			
7	18	4.9	34	77	58	76	57	68	51	42	30			
8	1	0.4	34	6	4	6	4	5	4	4	3			
				700	78.8	--	821	608	801	592	612	440	129	78

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE 'INDEX 60 AGE 10 STEMS/ACRE 800														
D.b.h. (in)	stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
				- 2 inches		4 inches		6 inches						
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
1	5	0.0	24	--	--	--	--	--	--	--	--			
2	53	1.2	24	--	--	--	--	--	--	--	--			
3	171	8.4	26	--	--	--	--	--	--	--	--			
4	275	24.0	29	--	--	--	--	--	--	--	--			
5	217	29.6	32	457	337	443	326	306	216	--	--			
6	70	13.8	34	218	163	214	160	177	130	59	32			
7	7	2.0	34	31	23	30	23	27	20	17	12			
				800	79.0	--	706	523	687	508	510	366	76	44

SITE INDEX 60				AGE 15		STEMS/ACRE 300								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
2	1	0.0	31	--	--	--	--	--	--	--	--			
3	7	0.4	32	—	--	—	--	—	—	—	—			
4	23	2.0	33	--	--	--	--	--	--	--	--			
5	46	6.3	35	103	77	100	75	69	49	--	--			
6	65	12.7	38	224	171	219	167	182	137	61	34			
7	68	18.1	41	338	263	334	260	298	231	185	135			
8	51	17.9	44	348	275	345	273	321	253	244	188			
9	27	11.9	45	236	188	235	187	224	178	188	148			
10	9	5.1	46	102	82	102	81	98	79	87	69			
11	2	1.5	46	30	24	30	24	29	24	27	22			
				300	76.0	--	1381	1079	1365	1067	1222	950	791	595

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 60				AGE 15		STEMS/ACRE 400					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.0	31	--	--	--	--	--	--	--	--
3	14	0.7	32	--	--	--	--	--	--	--	--
4	40	3.5	33	--	--	--	--	--	--	--	--
5	73	9.9	36	168	126	162	122	112	80	--	--
6	95	18.6	39	336	258	330	253	273	206	91	51
7	88	23.6	42	451	353	446	349	399	310	247	181
8	57	19.9	44	394	312	391	310	364	287	277	213
9	24	10.7	46	215	171	213	170	203	162	170	134
10	6	3.5	46	70	56	69	56	67	54	59	47
11	1	0.7	46	14	11	14	11	13	11	12	10
400				1646	1286	1625	1270	1431	1110	857	637

SITE INDEX 60				AGE 15		STEMS/ACRE 500					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	3	0.1	31	--	--	--	--	--	--	--	--
3	23	1.1	32	--	--	--	--	--	--	--	--
4	61	5.3	33	--	--	--	--	--	--	--	--
5	105	14.4	36	248	187	240	180	166	119	--	--
6	126	24.7	40	456	352	448	345	371	281	123	70
7	103	27.6	43	538	422	532	418	476	371	295	217
8	56	19.5	45	391	310	388	308	361	286	274	212
9	19	8.3	46	166	133	165	132	158	126	132	104
10	4	2.2	46	43	35	43	35	42	33	37	29
500				1842	1438	1816	1418	1573	1217	862	632

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 60 AGE 15 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable 2 inches		volume to top-- 4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	6	0.1	31	--	--	--	--	--	--	--	--
3	35	1.7	32	---	---	---	--	--	--	--	--
4	89	7.7	34	--	--	--	--	--	--	--	--
5	143	19.5	37	343	260	332	251	230	166	--	--
6	155	30.4	41	575	445	564	437	467	356	156	88
7	110	29.5	44	585	461	579	456	517	405	321	237
8	49	17.1	45	345	274	342	272	318	253	242	188
9	13	5.5	46	111	89	110	88	105	84	88	70
10	2	1.0	46	19	16	19	16	19	15	17	13
600		112.5	--	1979	1544	1947	1520	1657	1279	823	595

SITE INDEX 60 AGE 15 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable 2 inches		volume to top-- 4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	9	0.2	31	--	--	--	--	--	--	--	--
3	51	2.5	32	---	--	--	--	--	--	--	--
4	122	10.7	34	--	--	--	--	--	--	--	--
5	184	25.1	38	452	344	438	333	303	220	--	--
6	179	35.1	42	679	528	667	519	552	423	184	105
7	109	29.1	45	584	461	578	456	517	405	321	237
8	38	13.4	46	272	216	270	215	251	199	191	148
9	7	3.2	46	64	51	63	51	60	48	51	40
10	1	0.4	46	7	6	7	6	7	6	6	5
700		119.6	--	2058	1606	2022	1578	1690	1301	752	534

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 60 AGE 15 STEMS/ACRE 800											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	14	0.3	31	--	--	--	--	--	--	--	--
3	71	3.5	32	--	--	--	--	--	--	--	--
4	163	14.3	35	--	--	--	--	--	--	--	--
5	227	30.9	39	571	436	553	422	383	279	--	--
6	195	38.3	43	756	590	742	579	614	472	205	117
7	99	26.4	45	536	424	530	419	474	373	294	218
8	27	9.3	46	190	151	189	150	176	139	133	104
9	4	1.6	46	33	26	33	26	31	25	26	21
	800	124.7	--	2085	1627	2046	1596	1677	1288	658	459

SITE INDEX 60 AGE 20 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	2	0.1	38	--	--	--	--	--	--	--	--
4	13	1.2	38	--	--	--	--	--	--	--	--
5	31	4.3	40	81	62	78	60	54	40	--	--
6	50	9.8	43	196	153	192	150	159	123	53	30
7	61	16.3	47	345	276	342	273	305	242	190	142
8	58	20.3	51	454	369	451	366	420	340	319	252
9	43	19.2	54	445	366	443	364	422	347	353	287
10	25	13.7	55	324	268	322	267	311	258	276	227
11	11	7.3	56	173	144	172	144	168	140	154	128
12	4	2.8	56	67	56	67	56	65	55	61	51
13	1	0.9	56	22	18	22	18	22	18	20	17
	300	95.9	--	2107	1712	2089	1698	1926	1562	1426	1135

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 60				AGE 20		STEMS/ACRE 400					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	5	0.2	38	--	--	--	--	--	--	--	--
4	23	2.0	39	--	--	--	--	--	--	--	--
5	50	6.8	41	131	100	126	97	87	64	--	--
6	75	14.7	44	300	235	294	231	244	188	81	47
7	85	22.8	48	494	396	489	392	437	348	271	203
8	75	26.0	52	595	484	590	481	549	446	417	331
9	50	22.1	54	521	429	518	427	493	406	413	337
10	25	13.8	56	329	273	328	272	317	263	280	231
11	9	6.3	56	149	124	148	124	144	120	132	110
12	3	2.0	56	47	39	47	39	46	39	43	36
1.3	1	0.5	56	12	10	12	10	12	10	11	9
400				117.2	--	2576	2092	2552	2073	2329	1885
										1649	1305

SITE INDEX 60				AGE 20		STEMS/ACRE 500					
D.b.h. (in)	Stems Per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	8	0.4	38	--	--	--	--	--	--	--	--
4	35	3.1	39	--	--	--	--	--	--	--	--
5	72	9.9	42	192	148	186	144	129	95	--	--
6	103	20.2	45	420	331	412	325	341	265	114	66
7	109	29.1	50	646	520	639	514	571	457	354	267
8	88	30.5	53	709	579	704	575	655	534	498	396
9	53	23.2	55	551	455	549	453	522	431	438	357
10	23	12.6	56	301	250	300	249	290	241	256	212
11	7	4.8	56	114	95	113	95	111	92	101	84
12	2	1.4	56	34	28	34	28	33	28	31	26
500				135.2	--	2967	2408	2936	2383	2651	2142
										1792	1408

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 60				AGE 20		STEMS/ACRE 600					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. ____(ft ³)____		Merchantable volume to top--					
				2 inches		4 inches		6 inches			
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	13	0.7	38	--	--	--	--	--	--	--	--
4	51	4.4	39	--	--	--	--	--	--	--	--
5	99	13.5	42	267	207	258	200	179	132	--	--
6	133	26.1	46	554	438	543	430	450	351	150	87
7	131	35.1	51	793	640	784	633	701	563	435	329
8	96	33.5	54	789	646	783	642	728	595	554	442
9	51	22.6	55	540	447	538	445	512	423	429	351
10	19	10.5	56	252	210	251	209	242	202	215	177
11	5	3.3	56	79	66	78	65	76	64	70	58
12	1	0.8	56	18	15	18	15	17	15	16	14
600 150.4 --				3291	2669	3253	2639	2906	2344	1868	1458

SITE INDEX 60				AGE 25		STEMS/ACRE 300					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. ____(ft ³)____		Merchantable volume to top--					
				2 inches		4 inches		6 inches			
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	5	0.5	43	--	--	--	--	--	--	--	--
5	21	2.8	44	58	45	56	44	39	29	--	--
6	38	7.5	47	162	128	159	126	131	103	44	25
7	52	13.8	51	315	255	312	252	279	224	173	131
8	56	19.5	55	471	388	467	385	435	357	330	265
9	50	21.9	59	555	464	552	462	525	439	440	364
10	37	20.0	62	523	443	521	441	503	426	446	375
11	23	15.0	63	398	339	397	339	387	330	354	301
12	12	9.2	64	246	211	245	210	240	206	225	193
13	5	4.6	65	123	106	123	106	121	104	115	99
14	2	1.9	65	50	43	50	43	50	43	48	41
15	1	0.8	65	21	18	21	18	21	18	20	18
300 117.6 --				2922	2440	2904	2425	2732	2279	2196	1812

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 60 AGE 25 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
				2 inches		4 inches		6 inches			
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	10	0.9	43	--	--	--	--	--	--	--	--
5	34	4.6	45	9.5	75	92	72	64	48	--	--
6	58	11.4	48	250	199	245	195	203	159	68	39
7	74	19.8	52	462	375	456	371	408	330	253	193
8	75	26.3	56	650	538	645	534	600	495	456	368
9	63	27.8	60	715	600	711	597	677	568	567	470
10	43	23.5	62	622	527	620	525	598	507	530	446
11	24	16.2	64	431	368	430	367	419	358	384	327
12	11	9.0	64	240	205	239	205	235	201	220	188
13	4	4.0	65	107	92	107	92	105	90	100	86
14	2	1.9	65	50	43	50	43	49	42	47	41
	400	145.4	--	3621	3021	3595	3000	3358	2798	2624	2158

SITE INDEX 60 AGE 25 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
				2 inches		4 inches		6 inches			
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	1	0.0	43	--	--	--	--	--	--	--	--
4	17	1.5	43	--	--	--	--	--	--	--	--
5	49	6.7	45	142	111	137	107	95	71	--	--
6	81	15.9	49	352	282	346	276	287	225	95	56
7	98	26.2	53	621	507	614	501	549	445	341	260
8	94	32.9	58	827	686	820	681	763	632	580	469
9	74	32.5	61	849	714	844	710	804	676	674	560
10	47	25.6	63	681	578	679	576	655	556	580	490
11	24	16.0	64	430	367	429	366	418	357	383	326
12	10	8.0	65	215	184	214	184	210	180	197	168
13	3	3.2	65	85	73	84	73	83	72	79	68
14	1	1.2	65	33	28	33	28	33	28	31	27
	500	169.8	--	4234	3530	4201	3503	3897	3243	2960	2425

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 60 AGE 30 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
				2		inches		4 inches		6 inches	
				(ft)	o.b..	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.
5	10	1.4	47	30	24	29	23	20	15	--	--
6	29	5.6	49	126	100	123	99	102	80	34	20
7	44	11.6	53	275	224	272	221	243	197	151	115
8	51	17.8	58	447	371	444	368	413	342	314	254
9	50	22.0	62	584	493	581	491	553	467	464	387
10	42	23.0	65	635	543	632	541	611	522	540	460
11	31	20.6	68	585	505	583	504	568	491	520	448
12	21	16.1	70	463	403	462	402	453	394	424	369
13	12	11.0	71	319	279	318	278	314	274	298	260
14	6	6.7	71	192	168	192	168	190	166	182	160
15	3	3.5	71	102	90	102	89	101	89	98	86
16	1	1.7	72	48	42	48	42	47	42	46	41
17	1	1.0	72	29	25	29	25	29	25	28	25
	300	142.1	--	3834	3267	3815	3251	3643	3104	3099	2623

SITE INDEX 60 AGE 30 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
				2		inches		4 inches		6 inches	
				(ft)	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.
4	1	0.1	47	--	--	--	--	--	--	--	--
5	19	2.6	47	56	44	54	43	38	28	--	--
6	44	8.7	50	198	159	194	156	161	127	54	32
7	63	16.9	54	408	334	403	330	361	293	224	171
8	71	24.6	59	632	527	627	523	584	485	444	360
9	66	29.1	63	786	666	782	662	744	630	624	522
10	53	28.9	66	809	694	806	691	779	667	689	588
11	37	24.6	69	704	609	702	607	684	592	626	540
12	23	18.1	70	524	456	523	455	512	446	480	417
13	13	11.6	71	337	295	336	294	331	290	315	275
14	6	6.5	71	189	166	189	165	186	163	179	157
15	3	3.2	72	93	81	92	81	92	80	89	78
16	1	2.0	72	59	52	59	52	58	51	57	50
	400	177.1	--	4794	4081	4768	4060	4529	3854	3779	3191

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 70				AGE 10		STEMS/ACRE 300					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.0	30	--	--	--	--	--	--	--	--
3	10	0.5	31	--	--	--	--	--	--	--	--
4	27	2.4	32	--	--	--	--	--	--	--	--
5	50	6.8	33	109	81	105	78	73	52	--	--
6	68	13.4	36	223	169	219	166	182	135	60	33
7	68	18.1	38	316	242	312	239	279	213	173	124
8	47	16.3	40	291	226	289	225	269	209	205	155
9	21	9.1	41	165	129	164	128	156	122	131	101
10	5	2.9	41	53	42	53	42	51	40	45	35
11	1	0.5	41	9	7	9	7	9	7	8	7
300 70.2 --				1167	896	1152	885	1019	778	623	456

SITE INDEX 70				AGE 10		STEMS/ACRE 400					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	4	0.1	30	--	--	--	--	--	--	--	--
3	19	0.9	31	--	--	--	--	--	--	--	--
4	47	4.1	32	--	--	--	--	--	--	--	--
5	80	10.9	34	178	132	172	128	119	85	--	--
6	99	19.4	37	332	252	326	247	270	202	90	50
7	85	22.7	39	404	311	399	308	357	273	221	160
8	47	16.5	41	299	233	296	231	276	214	210	159
9	15	6.8	41	124	97	123	97	118	92	98	76
10	3	1.6	41	29	22	28	22	27	22	24	19
400 83.1 --				1364	1047	1345	1033	1166	888	644	464

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 70 AGE 10 STEMS/ACRE 500

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	30	--	--	--	--	--	--	--	--
2	8	0.2	30	--	--	--	--	--	--	--	--
3	31	1.5	31	--	--	--	--	--	--	--	--
4	73	6.3	32	--	--	--	--	--	--	--	--
5	116	15.9	35	263	197	254	190	176	126	--	--
6	129	25.2	38	441	336	433	330	358	269	119	67
7	93	24.8	40	449	347	444	343	397	305	246	178
8	40	14.0	41	256	200	254	198	237	184	180	137
9	9	4.1	41	74	58	74	58	70	55	59	46
10	1	0.6	41	10	8	10	8	10	8	9	7
500				1493	1146	1469	1127	1248	947	613	434

SITE INDEX 70 AGE 10 STEMS/ACRE 600

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	30	--	--	--	--	--	--	--	--
2	13	0.3	31	--	--	--	--	--	--	--	--
3	48	2.3	31	--	--	--	--	--	--	--	--
4	106	9.3	33	--	--	--	--	--	--	--	--
5	157	21.4	36	363	272	351	263	243	174	--	--
6	152	29.9	39	533	408	524	401	434	327	144	81
7	90	24.0	40	440	341	435	338	389	300	242	175
8	29	10.1	41	185	144	183	143	171	133	130	99
9	5	2.0	41	37	29	37	29	35	27	29	23
600				1558	1195	1530	1173	1272	961	545	378

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 70 AGE 10 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. ____(ft ³)____		Merchantable volume to top--					
				2 inches		4 inches		6 inches			
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	2	0.0	30	--	--	--	--	--	--	--	--
2	19	0.4	31	--	--	--	--	--	--	--	--
3	70	3.4	31	--	--	--	--	--	--	--	--
4	148	12.9	34	--	--	--	--	--	--	--	--
5	199	27.2	37	470	355	455	343	315	227	--	--
6	166	32.6	39	591	454	580	446	481	363	160	90
7	77	20.6	41	380	295	376	292	336	259	209	152
8	17	6.0	41	111	87	110	86	102	80	78	59
9	2	0.7	41	13	10	13	10	12	10	10	8
	700	103.8	--	1566	1201	1534	1177	1247	939	457	309

SITE INDEX 70 AGE 10 STEMS/ACRE 800											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. ____(ft ³)____		Merchantable volume to top--					
				2 inches		4 inches		6 inches			
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	3	0.0	30	--	--	--	--	--	--	--	--
2	29	0.6	31	--	--	--	--	--	--	--	--
3	100	4.9	32	--	--	--	--	--	--	--	--
4	197	17.2	34	--	--	--	--	--	--	--	--
5	239	32.6	37	576	436	558	422	386	279	--	--
6	166	32.5	40	599	461	588	453	487	369	162	91
7	58	15.4	41	286	222	283	220	253	195	157	114
8	9	3.1	41	57	44	56	44	53	41	40	30
	800	106.3	--	1518	1164	1485	1139	1178	885	359	236

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 70 AGE 15 STEMS/ACRE 300											
D.b.h. (in)	stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
				2		inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	1	0.0	39	--	--	--	--	--	--	--	--
3	5	0.3	39	--	--	--	--	--	--	--	--
4	17	1.5	40	--	--	--	--	--	--	--	--
5	36	4.9	41	94	73	91	70	63	46	--	--
6	54	10.6	44	214	168	210	165	174	135	58	33
7	63	16.9	48	360	287	356	284	318	253	198	148
8	57	20.0	50	444	360	440	357	410	331	312	246
9	39	17.2	53	393	322	391	320	372	304	312	252
10	19	10.5	54	242	200	242	199	233	192	206	169
11	7	4.4	54	101	84	101	84	98	81	90	74
12	2	1.4	54	32	26	32	26	31	26	29	24
	300	87.6	--	1881	1520	1863	1506	1700	1370	1204	948

SITE INDEX 70 AGE 15 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	1	0.0	39	--	--	--	--	--	--	--	--
3	10	0.5	39	--	--	--	--	--	--	--	--
4	29	2.5	40	--	--	--	--	--	--	--	--
5	56	7.7	42	151	117	146	113	101	75	--	--
6	80	15.8	45	326	257	320	252	265	205	88	51
7	87	23.3	49	506	406	501	402	448	357	278	209
8	71	24.8	51	560	455	556	452	517	420	393	312
9	42	18.6	53	429	352	426	350	406	333	340	276
10	17	9.5	54	220	181	219	181	211	174	187	154
11	5	3.2	54	73	60	72	60	70	58	65	53
12	1	0.7	54	16	14	16	14	16	13	15	12
	400	106.5	--	2281	1842	2257	1823	2035	1636	1366	1067

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic **feet**)--Contd.

SITE INDEX 70 AGE 15 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.1	39	--	--	--	--	--	--	--	--
3	16	0.8	39	--	--	--	--	--	--	--	--
4	44	3.9	40	--	--	--	--	--	--	--	--
5	81	11.1	43	222	172	215	166	149	110	--	--
6	109	21.5	46	453	358	444	351	368	287	123	71
7	109	29.2	50	648	521	641	516	573	458	356	268
8	80	27.8	52	637	519	632	516	588	479	447	355
9	41	17.9	54	416	342	414	341	394	324	331	269
10	14	7.5	54	174	144	174	143	168	138	148	122
11	3	2.2	54	51	42	50	42	49	41	45	37
	500	121.9	--	2601	2099	2570	2075	2289	1837	1449	1122

SITE INDEX 70 AGE 15 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	4	0.1	39	--	--	--	--	--	--	--	--
3	24	1.2	39	--	--	--	--	--	--	--	--
4	63	5.5	41	--	--	--	--	--	--	--	--
5	111	15.1	43	307	239	297	231	206	153	--	--
6	140	27.5	47	591	469	580	460	480	375	160	93
7	128	34.3	50	772	624	764	617	683	548	424	320
8	83	28.8	53	667	545	662	543	616	502	469	373
9	36	15.7	54	367	302	365	300	347	286	291	237
10	10	5.3	54	122	101	122	101	118	97	104	86
11	2	1.1	54	26	21	26	21	25	21	23	19
	600	134.6	--	2853	2301	2816	2272	2476	1983	1470	1128

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 70 AGE 15 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable 2 inches		volume to 4 inches		top-- 6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	6	0.1	39	--	--	--	--	--	--	--	--
3	34	1.7	39	--	--	--	--	--	--	--	--
4	87	7.6	41	--	--	--	--	--	--	--	--
5	145	19.8	44	408	318	395	308	273	204	--	--
6	171	33.6	48	734	585	721	574	597	468	199	116
7	142	37.9	51	868	703	858	695	767	617	476	361
8	80	27.8	53	649	531	644	527	599	489	456	363
9	28	12.6	54	294	242	292	241	278	229	233	190
10	6	3.3	54	76	63	76	63	74	61	65	54
11	1	0.5	54	11	9	11	9	11	9	10	8
700 144.8 -- 3041 2452 2998 2417 2600 2078 1439 1092											

SITE INDEX 70 AGE 15 STEMS/ACRE 800											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable 2 inches		volume to 4 inches		top-- 6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	9	0.2	39	--	--	--	--	--	--	--	--
3	47	2.3	39	--	--	--	--	--	--	--	--
4	115	10.1	41	--	--	--	--	--	--	--	--
5	183	24.9	45	523	409	506	396	350	262	--	--
6	200	39.3	49	875	699	859	686	711	560	237	139
7	149	39.9	52	923	749	913	741	816	658	506	385
8	72	25.0	54	588	482	583	478	543	444	413	330
9	21	9.2	54	215	177	214	176	203	167	170	139
10	4	2.0	54	46	38	46	38	44	36	39	32
800 152.8 -- 3169 2554 3120 2515 2668 2128 1365 1024											

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 70				AGE 20		STEMS/ACRE 300								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
3	2	0.1	46	--	--	--	--	--	--	--	--			
4	10	0.9	46	--	--	--	--	--	--	--	--			
5	2.5	3.4	48	75	60	73	58	50	38	--	--			
6	41	8.1	51	187	150	183	147	152	120	50	30			
7	54	14.3	54	346	283	342	280	306	249	190	145			
8	56	19.6	58	498	414	494	411	460	382	350	284			
9	48	21.3	61	560	472	557	470	531	447	445	370			
10	33	18.2	64	491	418	489	416	472	402	418	354			
11	19	12.3	65	333	285	332	284	324	277	296	253			
12	8	6.4	66	174	149	173	149	170	146	159	137			
13	3	2.5	66	69	59	69	59	68	58	64	55			
14	1	0.9	66	25	22	25	22	25	21	24	20			
				300	108.1	--	2758	2312	2738	2297	2557	2141	1996	1648

SITE INDEX 70				AGE 20		STEMS/ACRE 400								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
3	4	0.2	46	--	--	--	--	--	--	--	--			
4	18	1.5	46	--	--	--	--	--	--	--	--			
5	39	5.4	48	120	95	116	92	81	61	--	--			
6	62	12.2	52	285	230	280	226	231	184	77	46			
7	76	20.4	56	502	412	496	408	444	363	275	212			
8	75	26.3	59	678	566	673	562	627	522	476	387			
9	60	26.4	62	704	595	700	592	667	563	559	467			
10	38	20.6	64	559	476	557	475	538	458	476	403			
11	19	12.4	65	337	289	336	288	328	281	300	257			
12	7	5.6	66	153	132	153	131	150	129	140	120			
13	2	1.9	66	52	44	51	44	51	44	48	42			
14	1	0.6	66	15	13	15	13	15	13	14	12			
				400	133.3	--	3405	2853	3379	2831	3130	2617	2366	1946

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 70 AGE 20 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	6	0.3	46	--	--	--	--	--	--	--	--
4	27	2.3	47	--	--	--	--	--	--	--	--
5	57	7.7	49	175	140	170	135	118	89	--	--
6	86	16.8	52	399	323	392	317	324	258	108	64
7	100	26.7	57	670	552	662	546	592	485	368	283
8	93	32.4	60	849	710	842	705	784	655	596	486
9	68	30.1	63	812	687	808	684	769	650	644	539
10	39	21.3	65	583	497	580	495	560	478	496	421
11	17	11.4	65	311	267	310	266	302	259	277	237
12	6	4.5	66	122	105	122	105	119	103	112	96
13	2	1.5	66	42	36	41	36	41	35	39	33
500 155.0 -- 3962 3317 3928 3289 3610 3014 2639 2160											

SITE INDEX 70 AGE 20 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	10	0.5	46	--	--	--	--	--	--	--	--
4	38	3.3	47	--	--	--	--	--	--	--	--
5	77	10.5	49	241	192	234	186	162	123	--	--
6	112	21.9	53	528	429	519	421	429	343	143	85
7	124	33.2	58	844	698	835	690	747	614	463	358
8	108	37.7	61	1001	840	994	834	925	774	703	575
9	73	32.3	64	879	745	874	742	832	705	697	585
10	38	20.6	65	567	484	565	482	545	466	483	410
11	15	9.7	66	266	228	265	228	258	222	237	203
12	4	3.3	66	89	77	89	77	88	75	82	70
13	1	0.9	66	24	21	24	21	24	21	23	20
600 173.9 -- 4441 3715 4399 3681 4010 3343 2831 2306											

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 70				AGE 25		STEMS/ACRE 300								
D.b.h. (in)	Stems Per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
4	4	0.4	51	--	--	--	--	--	--	--	--			
5	17	2.3	52	55	44	53	43	37	28	--	--			
6	32	6.3	55	155	127	152	124	126	101	42	25			
7	45	11.9	59	310	257	307	254	274	226	170	132			
8	51	17.8	63	487	411	483	408	450	379	342	281			
9	49	21.7	67	621	532	618	529	588	503	493	417			
10	41	22.1	70	653	566	651	564	629	544	556	479			
11	29	19.0	72	572	499	570	498	555	485	508	443			
12	18	13.8	74	418	367	417	367	409	360	383	336			
13	9	8.4	75	256	226	256	226	252	222	239	211			
14	4	4.4	75	132	117	132	117	130	115	125	111			
15	2	1.9	75	57	50	57	50	56	50	54	48			
16	1	0.9	75	28	25	28	24	27	24	27	24			
				300	130.9	--	3744	3221	3723	3204	3533	3039	2940	2508

SITE INDEX 70				AGE 25 STEMS/ACRE 400										
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. ____(ft ³)____		Merchantable volume to top--								
				2 inches		4 inches		6 inches						
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
4	8	0.7	51	--	--	--	--	--	--	--	--			
5	27	3.7	53	90	72	87	70	60	46	--	--			
6	48	9.5	56	238	195	234	191	194	156	64	39			
7	64	17.2	60	455	379	450	375	402	333	250	195			
8	70	24.5	64	683	578	678	574	631	533	479	396			
9	64	28.5	68	827	710	822	706	783	672	656	557			
10	50	27.4	71	819	711	816	708	788	684	697	602			
11	33	22.1	73	669	585	667	584	650	569	595	519			
12	19	14.8	74	453	398	452	397	443	390	415	364			
13	9	8.4	75	255	225	254	224	250	221	238	210			
14	4	3.9	75	119	105	119	105	117	104	113	100			
15	2	2.1	75	63	56	63	56	62	55	60	54			
				400	162.8	--	4670	4014	4641	3991	4380	3763	3567	3035

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 70				AGE 25		STEMS/ACRE 500								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
				2		inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
3	1	0.0	51	--	--	--	--	--	--	--	--			
4	14	1.2	51	--	--	--	--	--	--	--	--			
5	40	5.4	53	132	107	128	103	89	68	--	--			
6	67	13.1	57	334	274	328	269	272	220	91	54			
7	86	22.9	61	616	514	609	508	544	452	338	264			
8	90	31.3	65	885	751	878	746	817	692	621	514			
9	78	34.7	69	1019	877	1013	873	965	830	808	688			
10	58	31.4	72	951	827	948	824	915	796	810	701			
11	36	23.8	74	726	636	724	634	705	618	646	564			
12	19	14.9	75	455	400	454	399	445	392	416	366			
13	8	7.7	75	234	207	234	207	230	203	219	193			
14	3	3.3	75	99	88	99	88	98	87	94	83			
15	1	1.5	75	45	40	45	40	45	40	43	38			
				500	191.3	--	5496	4722	5460	4692	5125	4398	4086	3467

SITE INDEX 70				AGE 30		STEMS/ACRE 300								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
5	8	1.1	56	29	24	28	23	20	15	--	--			
6	24	4.7	58	122	100	120	99	99	80	33	20			
7	37	10.0	61	270	226	267	223	239	199	148	116			
8	45	15.9	66	452	384	448	381	417	354	317	263			
9	47	20.7	70	619	535	616	532	587	506	492	420			
10	42	23.2	74	721	630	718	628	693	606	613	534			
11	34	22.7	77	724	640	722	638	704	622	644	568			
12	25	19.6	80	637	568	636	567	624	556	584	519			
13	16	15.1	81	496	444	495	443	487	437	463	415			
14	10	10.5	82	343	309	343	308	339	305	325	293			
15	5	6.5	82	213	192	213	192	210	190	204	184			
16	3	3.6	83	118	107	118	107	117	106	114	103			
17	1	1.8	83	59	54	59	54	59	53	58	52			
18	1	1.3	83	42	38	41	38	41	37	41	37			
				300	156.7	--	4846	4250	4825	4233	4636	4067	4036	3524

Continued

Table 25. - Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet) - Contd.

SITE INDEX 70			AGE 30		STEMS/ACRE 400						
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	1	0.1	55	--	--	--	--	--	--	--	--
5	15	2.1	56	54	44	52	42	36	28	--	--
6	37	7.3	58	191	158	188	155	155	126	52	31
7	55	14.6	62	400	336	395	332	354	295	219	172
8	64	22.2	67	642	548	637	544	593	505	451	375
9	63	27.9	72	846	733	842	730	802	694	672	575
10	55	30.0	75	944	828	941	825	908	797	804	701
11	43	28.1	78	908	804	905	802	882	781	807	713
12	30	23.3	80	761	679	760	678	745	665	697	621
13	19	17.1	81	563	504	562	503	553	496	526	471
14	10	11.2	82	369	332	368	331	364	327	349	315
15	5	6.6	82	215	194	215	194	213	192	206	186
16	2	3.4	83	113	102	112	102	112	101	109	98
17	1	1.6	83	53	48	53	48	52	47	51	46
18	1	1.0	83	33	30	33	30	33	30	32	29
				6092	5339	6063	5366	5802	5085	4976	4336

SITE INDEX 80			AGE 10		STEMS/ACRE 300						
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.0	38	--	--	--	--	--	--	--	--
3	8	0.4	38	--	--	--	--	--	--	--	--
4	21	1.8	39	--	--	--	--	--	--	--	--
5	40	5.4	40	103	79	99	76	69	50	--	--
6	58	11.5	42	223	174	219	171	182	139	60	34
7	66	17.6	45	355	280	351	277	314	246	195	144
8	55	17.4	47	400	320	397	317	370	295	281	219
9	33	14.6	48	306	246	304	245	289	233	243	193
10	13	7.1	49	149	121	149	120	143	116	127	102
11	4	2.4	49	50	41	50	40	48	39	44	36
				1585	1260	1569	1247	1415	1119	950	728

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 80				AGE 10		STEMS/ACRE 400							
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--							
						2 inches		4 inches		6 inches			
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.		
2	3	0.1	38	—	--	--	--	--	—	—	—		
3	14	0.7	38	—	--	--	—	—	—	—	—		
4	35	3.0	39	--	--	--	--	--	--	--	--		
5	63	8.6	41	165	127	160	123	111	81	--	--		
6	87	17.1	43	338	264	332	259	275	211	91	52		
7	89	23.8	45	487	386	482	382	431	339	267	198		
8	65	22.7	47	476	381	472	378	439	351	334	261		
9	32	14.1	48	297	239	295	238	281	227	236	188		
10	10	5.3	49	111	90	110	89	106	86	94	76		
11	2	1.2	49	25	20	25	20	24	20	22	18		
400				96.6	--	1898	1507	1875	1489	1667	1315	1044	793

SITE INDEX 80				AGE 10		STEMS/ACRE 500							
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--							
						2 inches		4 inches		6 inches			
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.		
2	5	0.1	38	—	--	--	--	--	--	--	--		
3	22	1.1	38	—	—	--	--	--	--	--	--		
4	53	4.7	39	--	--	--	--	--	--	--	--		
5	92	12.6	41	244	188	236	182	164	120	--	--		
6	118	23.1	44	465	365	457	358	378	292	126	72		
7	108	28.9	46	601	477	594	472	531	419	329	245		
8	67	23.6	48	498	399	494	396	460	368	349	273		
9	26	11.7	48	247	199	246	198	234	189	196	156		
10	6	3.2	49	68	55	67	55	65	53	58	46		
11	1	0.5	49	10	8	10	8	9	8	9	7		
500				109.4	--	2132	1691	2103	1669	1841	1449	1067	800

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 80				AGE 10		STEMS/ACRE 600								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable 2 inches		volume to top-- 4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
1	1	0.0	38	--	--	--	--	--	--	--	--			
2	9	0.2	38	--	--	--	--	--	--	--	--			
3	33	1.6	38	--	--	--	--	--	--	--	--			
4	77	6.7	40	--	--	--	--	--	--	--	--			
5	126	17.2	42	339	262	328	253	227	168	--	--			
6	149	29.2	45	597	469	586	460	485	376	162	93			
7	121	32.3	47	678	540	671	534	600	475	372	277			
8	63	21.9	48	466	374	462	371	430	345	327	256			
9	19	8.4	49	178	143	177	143	168	136	141	113			
10	3	1.7	49	37	30	37	30	35	29	31	25			
				600	119.3	--	2294	1819	2260	1792	1946	1527	1033	764

SITE INDEX 80				AGE 10		STEMS/ACRE 700								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable 2 inches		volume to top-- 4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
1	1	0.0	38	--	--	--	--	--	--	--	--			
2	13	0.3	38	--	--									
3	47	2.3	39	--	--	--	--	--	--	--	--			
4	106	9.3	40	--	--	--	--	--	--	--	--			
5	165	22.5	43	449	348	435	337	301	223	--	--			
6	177	34.8	45	721	569	708	558	586	455	195	113			
7	125	33.3	47	707	565	699	558	625	496	388	290			
8	52	18.3	48	391	314	388	312	361	289	274	215			
9	12	5.2	49	110	89	110	89	104	84	87	70			
10	1	0.7	49	15	12	15	12	14	11	12	10			
				700	126.6	--	2393	1896	2354	1865	1992	1559	957	697

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 80 AGE 10 STEMS/ACRE 800											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft²)	Avg. ht. (ft)	Total vol. (ft³)		Merchantable volume to top--					
				(ft³)		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	2	0.0	38	--	--	--	--	--	--	--	--
2	19	0.4	38	--	--	--	--	--	--	--	--
3	66	3.2	39	--	--	--	--	--	--	--	--
4	142	12.4	41	--	--	--	--	--	--	--	--
5	207	28.2	43	571	444	553	429	383	284	--	--
6	200	39.2	46	824	652	809	640	670	522	223	129
7	119	31.7	48	681	544	673	538	602	478	374	279
8	39	13.6	49	292	235	290	234	270	217	205	161
9	7	3.9	49	62	50	62	50	59	47	49	39
	800	131.8	--	2431	1925	2387	1890	1983	1548	851'	609

SITE INDEX 80 AGE 15 STEMS/ACRE 300											
D.b.h. (in)	Stems Per acre (no.)	Basal area (ft²)	Avg. ht. (ft)	Total vol. (ft³)		Merchantable volume to top--					
				(ft³)		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	4	0.2	47	—	—	--	--	--	--	--	--
4	14	1.2	47	—	--	--	--	--	--	--	--
5	29	4.0	49	90	72	87	69	60	46	--	--
6	46	9.0	51	210	169	206	166	171	136	57	34
7	58	15.4	54	373	305	368	302	329	268	204	157
8	58	20.1	58	506	420	502	417	467	387	355	287
9	46	20.1	60	519	435	516	433	491	412	412	341
10	28	15.0	62	393	332	391	331	378	320	334	281
11	12	8.2	62	214	182	214	182	208	177	191	162
12	4	3.1	63	82	70	82	70	80	68	75	64
13	1	0.9	63	25	21	24	21	24	21	23	20
	300	97.4	--	2411	2006	2391	1990	2210	1834	1651	1346

continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 80				AGE 15		STEMS/ACRE 400								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable 2 inches		volume to top--						
								4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
2	1	0.0	46	--	--	--	--	--	--	--	--			
3	8	0.4	47	--	--	--	--	--	--	--	--			
4	23	2.0	47	--	--	--	--	--	--	--	--			
5	46	6.3	49	143	114	138	110	96	73	--	--			
6	69	13.5	52	319	258	313	253	259	207	86	51			
7	81	21.7	55	534	439	528	434	473	386	293	225			
8	75	26.3	58	671	558	666	554	619	514	471	382			
9	54	23.8	61	619	521	616	518	586	493	491	408			
10	29	15.6	62	410	347	408	346	394	334	349	294			
11	11	7.2	63	189	161	189	160	184	156	168	143			
12	3	2.3	63	59	50	59	50	57	49	54	46			
13	1	0.5	63	13	11	13	11	13	11	12	11			
				400	119.6	--	2957	2459	2930	2437	2682	2223	1925	1560

SITE INDEX 80				AGE 15		STEMS/ACRE		500						
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable 2 inches		volume to top-- 4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
2	2	0.0	46	--	--	--	--	--	--	--	--			
3	12	0.6	47	--	--	--	--	--	--	--	--			
4	35	3.0	48	--	--	--	--	--	--	--	--			
5	66	9.0	50	208	166	201	160	139	106	--	--			
6	95	18.6	53	445	361	437	354	362	289	120	72			
7	105	28.1	56	703	579	695	572	621	509	386	297			
8	90	31.5	59	812	678	806	673	750	624	570	464			
9	58	25.5	61	671	565	667	562	635	535	532	443			
10	27	14.6	62	385	326	383	325	370	314	328	276			
11	9	5.6	63	148	126	148	126	144	123	132	112			
12	2	1.6	63	42	36	42	36	41	35	39	33			
				500	138.2	--	3414	2836	3379	2808	3063	2534	2107	1697

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 80 AGE 15 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	3	0.1	46	--	--	--	--	--	--	--	--
3	18	0.9	47	--	--	--	--	--	--	--	--
4	49	4.3	48	--	--	--	--	--	--	--	--
5	90	12.2	50	285	228	276	221	191	146	--	--
6	123	24.1	54	586	477	575	468	476	381	159	95
7	128	34.3	57	870	718	860	710	769	631	477	369
8	101	35.2	60	919	769	912	763	849	708	645	526
9	58	25.5	62	673	568	670	565	638	537	534	446
10	23	12.5	62	331	281	330	280	318	270	282	238
11	6	4.0	63	105	89	105	89	102	87	93	79
12	1	0.9	63	23	19	23	19	22	19	21	18
	600	154.0	--	3792	3149	3751	3114	3366	2780	2211	1769

SITE INDEX 80 AGE 1.5 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	5	0.1	46	--	--	--	--	--	--	--	--
3	26	1.3	47	--	--	--	--	--	--	--	--
4	67	5.8	48	--	--	--	--	--	--	--	--
5	117	16.0	51	377	302	365	292	252	193	--	--
6	153	30.1	55	740	603	726	592	602	483	200	120
7	150	40.0	58	1026	849	1014	840	907	747	563	436
8	1.07	37.3	61	984	824	976	818	909	759	691	564
9	54	23.8	62	632	534	629	531	599	505	502	419
10	18	9.9	63	262	223	261	222	252	214	223	188
11	4	2.6	63	67	57	67	57	65	56	60	51
12	1	0.4	63	11	9	11	9	11	9	10	8
	700	167.2	--	4099	3401	4050	3361	3597	2966	2249	1786

Continued

Table 25.-- Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 80			AGE 15		STEMS/ACRE 800						
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	7	0.1	46	--	--	--	--	--	--	--	--
3	35	1.7	47	--	--	--	--	--	--	--	--
4	87	7.6	49	--	--	--	--	--	--	--	--
5	148	20.2	52	483	387	467	375	323	248	--	--
6	184	36.2	55	903	738	886	724	734	591	244	146
7	167	44.7	59	1161	964	1148	953	1027	847	637	495
8	108	37.7	61	1001	840	993	834	924	774	703	575
9	47	20.9	62	557	471	554	468	528	446	442	369
10	13	7.2	63	192	163	191	162	185	157	163	138
11	2	1.6	63	43	36	43	36	41	35	38	32
800		178.1	--	4339	3598	4282	3552	3762	3097	2228	1755

SITE INDEX 80			AGE 20		STEMS/ACRE 300						
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	1	0.1	54	--	--	--	--	--	--	--	--
4	9	0.7	55	--	--	--	--	--	--	--	--
5	21	2.8	56	73	60	71	58	49	38	--	--
6	35	7.0	59	183	151	180	148	149	121	50	30
7	48	12.8	62	349	292	345	289	308	257	191	150
8	53	18.6	66	528	449	524	446	488	414	371	307
9	49	21.8	69	643	554	640	551	609	524	510	435
10	38	20.9	72	629	548	627	546	605	527	536	464
11	24	16.1	74	493	432	492	431	479	420	439	384
12	13	10.0	75	308	271	307	270	301	265	282	248
13	5	5.0	75	152	534	151	134	149	132	142	125
14	2	1.9	75	58	52	58	52	58	51	55	49
15	1	0.7	75	21	19	21	19	21	19	21	18
300		118.4	--	3438	2962	3417	2944	3217	2768	2596	2210

Continued

Table 25. --Volume yields per acre for loblolly pine in Soil Group A (in cubic feet)--Contd.

SITE INDEX 80				AGE 20		STEMS/ACRE 400								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
3	3	0.1	54	--	--	--	--	--	--	--	--			
4	14	1.3	55	--	--	--	--	--	--	--	--			
5	33	4.5	56	116	94	112	91	78	60	--	--			
6	53	10.4	59	278	230	273	226	226	184	75	46			
7	69	18.3	63	508	427	502	422	449	375	279	219			
8	73	25.3	67	732	625	727	620	676	576	514	427			
9	64	28.1	70	838	724	834	720	794	685	665	568			
10	46	25.0	73	761	663	758	661	732	638	648	561			
11	27	17.7	74	545	478	544	477	530	465	485	424			
12	13	10.0	75	306	270	305	269	300	264	280	247			
13	5	4.4	75	133	118	133	118	131	116	125	110			
14	2	1.9	75	56	50	56	50	56	49	53	47			
				400	147.0	--	4274	3679	4245	3654	3971	3412	3124	2650

SITE INDEX 80				AGE 20		STEMS/ACRE 500								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft")	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
				(ft ³)		2 inches		4 inches		6 inches				
				o.b.	.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
3	5	0.3	54	--	--	--	--	--	--	--	--			
4	22	1.9	55	--	--	--	--	--	--	--	--			
5	47	6.4	57	167	137	162	132	112	87	--	--			
6	73	14.4	60	388	322	381	316	315	258	105	64			
7	91	24.3	64	682	575	675	569	603	506	374	295			
8	92	32.0	68	937	801	930	795	865	738	658	548			
9	76	33.4	71	1008	872	1003	868	955	826	800	684			
10	51	27.7	73	848	740	845	738	816	712	722	627			
11	27	18.0	74	555	487	554	486	539	474	494	432			
12	12	9.1	75	280	247	279	246	274	241	256	226			
13	4	3.5	75	108	95	107	95	106	93	100	89			
14	1	1.2	75	38	33	38	33	37	33	36	32			
				500	172.1	--	5011	4310	4973	4278	4623	3968	3546	2997

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil Group A
(in cubic feet)--Contd.

SITE INDEX 80				AGE 20		STEMS/ACRE 600					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	8	0.4	54	--	--	--	--	--	--	--	--
4	31	2.7	55	--	--	--	--	--	--	--	--
5	64	8.7	57	228	187	221	180	153	119	--	--
6	96	18.8	61	513	426	503	419	417	341	139	85
7	114	30.5	65	869	734	859	726	768	645	477	377
8	110	38.3	69	1135	973	1126	966	1048	896	797	666
9	85	37.7	72	1146	994	1141	989	1086	941	910	780
10	53	28.9	74	892	780	889	777	858	750	760	660
11	26	17.2	75	531	466	529	465	516	453	472	414
12	10	7.8	75	239	211	239	210	234	206	219	193
13	3	2.6	7.5	80	71	80	71	79	70	75	66
14	1	0.8	75	23	21	23	21	23	20	22	20
600 194.2 -- 5657 4862				5610	4823	5182	4443	3870	3260		

SITE INDEX 80				AGE 25		STEMS/ACRE 300					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	4	0.3	60	--	--	--	--	--	--	--	--
5	14	1.9	61	54	45	52	43	36	29	--	--
6	28	5.4	63	153	129	151	126	125	103	42	25
7	40	10.6	67	311	264	307	261	275	232	170	136
8	47	16.4	71	502	433	498	430	463	399	352	296
9	48	21.0	75	670	586	667	583	635	555	532	460
10	42	22.9	79	753	666	750	664	724	641	641	564
11	32	21.4	82	718	640	716	639	697	623	638	568
12	22	17.2	83	583	524	582	523	570	513	534	479
13	13	11.9	84	405	366	404	365	398	360	378	342
14	7	7.1	85	241	218	241	218	238	216	229	207
15	3	3.6	85	123	112	123	112	122	111	118	107
16	1	1.6	85	54	49	54	49	53	48	52	47
17	1	0.8	86	27	25	27	25	27	25	27	24
300 142.1 -- 4594 4056				4572	4037	4364	3852	3713	3256		

Continued

Table 25.--Volume yields per acre for loblolly pine in Soil 'Group A (in cubic feet)--Contd.

SITE INDEX 80 AGE 25 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. _____(ft ³)_____		Merchantable 2 inches		volume to top-- 4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	7	0.6	60	--	--	--	--	--	--	--	--
5	23	3.1	61	88	73	85	70	59	47	--	--
6	42	8.2	64	234	196	230	193	190	157	63	39
7	57	15.3	6%	455	388	450	384	403	341	250	199
8	65	22.8	72	70%	613	703	608	654	564	497	419
9	64	28.1	76	907	795	902	791	859	753	720	624
10	54	29.2	80	971	861	968	858	934	828	827	729
11	39	25.9	82	877	783	874	781	852	762	780	695
12	25	19.6	84	670	602	669	601	655	590	614	551
13	14	12.7	85	435	393	434	392	428	386	406	367
14	7	7.0	85	240	217	240	217	237	215	228	206
15	3	3.3	85	113	102	113	102	112	101	108	98
16	1	1.9	85	63	57	63	57	62	57	61	55
400 177.8 -- 5760 5082 5729 5056 5444 4800 4553 3984											

SITE INDEX 80 AGE 25 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. _____(ft ³)_____		Merchantable 2 inches		volume to top-- 4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	11	1.0	60	—	--	--	—	--	--	—	—
5	33	4.5	62	12%	106	124	103	86	68	--	--
6	5%	11.3	65	327	275	321	270	266	220	88	55
7	76	20.4	69	616	526	609	520	545	463	33%	270
8	84	29.4	73	925	802	918	796	854	739	649	549
9	79	34.8	77	113%	1001	1132	996	1078	947	903	785
10	64	34.7	81	1164	1034	1160	1030	1120	994	991	875
11	44	29.3	83	997	892	994	889	968	867	886	791
12	27	20.9	84	717	645	716	644	702	632	657	591
13	14	12.7	85	435	393	435	393	428	387	407	367
14	6	6.5	85	223	202	223	202	220	199	211	192
15	2	2.8	85	96	87	96	87	95	86	92	84
16	1	1.4	85	47	43	47	43	47	42	45	41
500 209.8 -- 6813 6007 6774 5973 6408 5645 5269 4601											

Continued

Table 25. --Volume yields per acre for loblolly pine in Soi Group A
(in cubic feet)--Contd.

SITE INDEX 80				AGE 30		STEMS/ACRE 300					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
5	7	1.0	65	29	24	28	24	20	16	--	--
6	21	4.1	66	122	103	119	101	99	82	33	20
7	33	8.9	70	271	232	268	230	240	204	149	119
8	41	14.4	74	460	400	457	398	425	369	323	274
9	44	19.5	79	650	573	646	570	615	542	516	450
10	42	22.8	83	788	704	785	701	758	677	671	596
11	36	23.5	87	836	754	834	752	812	733	744	669
12	28	21.7	89	786	715	785	713	769	700	720	654
13	20	18.1	91	661	605	660	604	650	595	618	565
14	13	13.6	92	500	460	499	459	493	454	474	436
15	8	9.3	93	342	316	342	315	339	312	328	303
16	4	5.8	93	213	197	213	197	211	195	206	190
17	2	3.3	94	121	112	121	112	120	111	117	109
18	1	1.7	94	62	58	62	58	62	58	61	57
19	1	1.3	94	47	44	47	44	47	44	46	43
	300	169.2	--	5888	5296	5866	5277	5659	5091	5004	4485

Table 26. --Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)

SITE INDEX 60 AGE 10 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
				(ft ³)		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.0	19	--	--	--	--	--	--	--	--
3	10	0.5	19	--	--	--	--	--	--	--	--
4	24	2.1	20	--	--	--	--	--	--	--	--
5	44	6.0	21	62	42	60	41	42	27	--	--
6	64	12.6	22	137	95	134	93	111	76	37	19
7	76	20.4	24	233	165	230	163	206	145	128	85
8	73	25.4	26	305	219	303	217	282	202	214	150
9	55	24.4	27	302	219	300	218	286	208	240	172
10	32	17.5	28	220	161	219	161	212	155	188	137
11	14	9.2	28	116	85	115	85	112	83	103	76
12	4	3.4	29	42	31	42	31	41	31	39	29
13	1	1.0	29	12	9	12	9	12	9	11	8
400 122.5 -- 1429 1027 1416 1019 1304 935 959 675											

SITE INDEX 60 AGE 10 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
				(ft ³)		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	4	0.1	19	--	--	--	--	--	--	--	--
3	18	0.9	20	--	--	--	--	--	--	--	--
4	42	3.6	20	--	--	--	--	--	--	--	--
5	72	9.8	22	104	71	101	69	70	46	--	--
6	96	18.9	23	212	148	208	146	173	119	57	29
7	102	27.2	25	323	230	319	228	286	202	177	118
8	83	29.1	27	360	260	357	258	332	240	253	178
9	51	22.6	28	286	209	285	208	271	198	227	164
10	23	12.4	28	157	115	157	115	151	111	134	98
11	7	4.6	29	58	43	58	42	56	41	51	38
12	2	1.2	29	15	11	15	11	15	11	14	10
500 130.4 -- 1516 1088 1500 1077 1354 968 914 635											

Continued

Table 26.--Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 60			AGE 0		STEMS/ACRE 600						
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	19	--	--	--	--	--	--	--	--
2	8	0.2	19	--	--	--	--	--	--	--	--
3	31	1.5	20	--	--	--	--	--	--	--	--
4	67	5.9	21	--	--	--	--	--	--	--	--
5	108	14.7	22	161	111	155	107	108	71	--	--
6	131	25.7	24	300	211	294	207	243	169	81	42
7	120	32.2	26	395	283	391	280	349	249	217	145
8	81	28.3	28	359	261	356	259	332	240	252	178
9	38	17.0	28	217	159	216	158	206	150	172	125
10	12	6.6	29	84	62	84	62	81	59	71	52
11	3	1.8	29	22	16	22	16	22	16	20	15
600		133.7	--	1538	1103	1519	1089	1340	955	814	557

SITE INDEX 60			AGE .0		STEMS/ACRE 700						
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	19	--	--	--	--	--	--	--	--
2	15	0.3	19	--	--	--	--	--	--	--	--
3	50	2.4	20	--	--	--	--	--	--	--	--
4	102	8.9	21	--	--	--	--	--	--	--	--
5	150	20.5	23	232	161	225	156	156	103	--	--
6	162	31.9	25	385	273	378	268	313	219	104	54
7	126	33.5	27	424	306	419	302	375	269	233	157
8	66	23.2	28	298	217	296	216	276	200	210	149
9	23	10.0	28	128	94	128	94	122	89	102	74
10	5	2.5	29	32	24	32	23	31	23	27	20
11	1	0.4	29	5	3	5	3	4	3	4	3
700		133.6	--	1505	1079	1483	1063	1276	906	680	457

Continued

Table 26.--Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 60 AGE 15 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal. area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	1	0.0	29	-	-	-	-	-	-	-	-
4	9	0.8	29	--	--	--	--	--	--	--	--
5	28	3.9	30	55	40	54	39	37	26	--	--
6	57	11.2	32	167	124	164	121	136	99	45	25
7	83	22.3	35	356	268	352	265	315	236	195	138
8	91	31.7	38	541	416	537	413	500	383	380	285
9	72	31.9	40	570	445	567	443	540	421	452	349
10	40	21.8	42	399	315	398	314	384	303	340	267
11	15	9.6	43	178	141	177	140	172	137	158	125
12	4	3.0	43	54	43	54	43	53	42	50	40
400		136.2	--	2320	1793	2302	1779	2137	1648	1620	1228

SITE INDEX 60 AGE 15 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal. area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	3	0.1	29	--	--	--	--	--	--	--	--
4	18	1.6	29	--	--	--	--	--	--	--	--
5	51	7.0	30	103	75	99	72	69	48	--	--
6	94	18.4	33	285	212	279	208	231	170	77	42
7	121	32.3	36	538	409	532	405	476	360	295	210
8	110	38.5	40	682	529	677	525	630	488	479	362
9	68	30.2	42	555	435	552	433	525	412	440	342
10	27	14.8	43	274	216	273	216	263	208	233	183
11	6	4.2	43	77	61	77	61	75	60	69	54
12	1	0.7	43	12	10	12	10	12	10	11	9
500		147.8	--	2525	1948	2502	1930	2282	1754	1604	1203

Continued

Table 26.--Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 60				AGE 15		STEMS/ACRE 600					
D.b.h. (in)	Stems per acre (no,)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	6	0.3	29	--	--	--	--	--	--	--	--
4	33	2.9	29	--	--	--	--	--	--	--	--
5	85	11.6	31	174	128	168	123	117	82	--	--
6	139	27.4	34	440	330	432	324	357	264	119	65
7	155	41.4	36	718	550	710	544	635	484	394	283
8	114	39.7	41	725	566	720	562	670	521	509	387
9	52	22.9	42	427	336	425	334	404	318	339	264
10	13	7.3	43	137	108	136	108	132	104	116	92
11	2	1.3	43	23	19	23	19	23	18	21	16
600		154.8	----	2643	2036	2613	2014	2337	1791	1498	1107

SITE INDEX 60				AGE 15		STEMS/ACRE 700					
D.b.h. (in)	Stems Per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	12	0.6	29	--	--	--	--	--	--	--	--
4	57	5.0	30	--	--	--	--	--	--	--	--
5	131	17.9	32	276	203	267	196	185	130	--	--
6	190	37.3	36	623	471	612	462	507	377	169	93
7	176	46.9	40	844	652	835	645	746	573	463	335
8	98	34.3	42	641	502	636	498	592	463	450	344
9	30	13.4	43	253	199	252	198	239	189	201	156
10	5	2.7	43	51	40	50	40	49	39	43	34
700		158.2	--	2688	2068	2651	2040	2318	1770	1326	962

Continued

Table 26. --Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 60				AGE 20		STEMS/ACRE 400								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
4	1	0.1	37	--	--	--	--	--	--	--	--			
5	17	2.3	37	41	31	40	30	28	20	--	--			
6	45	8.9	39	160	123	157	121	130	99	43	24			
7	70	18.6	42	356	279	352	275	315	245	195	143			
8	80	27.8	46	570	454	566	451	526	419	400	311			
9	73	32.2	50	696	564	692	561	659	534	552	442			
10	54	29.7	52	663	544	660	542	638	523	564	460			
11	33	22.0	54	500	413	498	412	486	402	445	367			
12	17	13.1	54	301	350	300	249	294	245	275	229			
13	7	6.3	55	145	121	145	121	142	119	135	113			
14	2	2.5	55	56	47	56	47	55	46	53	44			
15	1	1.0	55	22	18	22	18	22	18	21	18			
				400	164.5	--	3509	2844	3,488	2828	3295	2668	2685	2151

SITE INDEX 60				AGE 20		STEMS/ACRE 500								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
4	4	0.3	37	--	--	--	--	--	--	--	--			
5	33	4.6	37	81	61	78	59	54	39	--	--			
6	74	14.5	40	268	206	263	202	218	165	72	41			
7	102	27.1	44	539	424	532	419	476	373	295	218			
8	105	36.5	48	774	621	768	617	715	573	543	425			
9	84	37.3	51	829	676	825	672	785	639	658	530			
10	54	29.7	53	676	556	673	555	650	535	575	471			
11	28	18.5	54	424	352	423	351	412	342	378	312			
12	11	9.0	55	207	172	206	172	202	169	189	158			
13	4	3.4	55	78	65	78	65	77	64	73	61			
14	1	1.3	55	29	24	29	24	28	24	27	23			
				500	182.1	--	3904	3159	3876	3137	3618	2923	2812	2239

Continued

Table 26.--Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 60				AGE 20		STEMS/ACRE 600								
D.b.h (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
4	9	0.8	37	—	—	—	—	—	—	—	—			
5	57	7.7	38	139	105	134	102	93	67	--	--			
6	109	21.4	41	408	316	401	310	332	253	110	63			
7	3.36	36.3	46	746	591	737	584	659	520	409	304			
8	125	43.5	50	952	769	945	763	879	709	669	526			
9	88	38.8	52	881	721	876	718	834	682	699	566			
10	48	26.1	54	602	497	600	495	579	478	513	421			
11	20	13.3	55	307	255	306	254	299	248	273	226			
12	7	5.1	55	118	98	118	98	115	96	108	90			
13	2	1.8	5.5	41	34	41	34	41	34	39	32			
				600	194.8	--	4194	3387	4158	3360	3831	3087	2819	2227

SITE INDEX 60				AGE 20		STEMS/ACRE 700								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
4	20	1.7	37	--	--	--	--	--	--	--	--			
5	88	12.0	39	219	167	212	161	147	107	--	--			
6	151	29.7	43	582	454	572	446	473	364	158	90			
7	169	45.2	47	959	766	949	757	848	673	526	393			
8	137	47.7	51	1072	870	1064	864	990	802	753	596			
9	82	36.3	53	839	689	835	686	795	652	666	541			
10	37	20.1	54	469	387	467	386	451	373	399	328			
11	12	8.1	55	188	157	188	156	183	152	168	139			
12	3	2.4	55	55	46	55	45	54	45	50	42			
13	1	0.6	55	13	11	13	11	13	11	12	10			
				700	203.9	--	4397	3546	4353	3512	3953	3.177	2731	2138

Continued

Table 26.--Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 70 AGE 10 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.0	23	--	--	--	--	--	--	--	--
3	10	0.5	23	--	--	--	--	--	--	--	--
4	24	2.1	24	--	--	--	--	--	--	--	--
5	44	6.0	25	73	51	71	50	49	33	--	--
6	64	12.6	27	160	114	157	112	130	91	43	23
7	76	20.4	28	270	197	267	194	239	173	148	101
8	73	25.4	30	352	260	350	258	325	240	247	178
9	55	24.4	32	347	260	346	258	329	246	276	204
10	32	17.5	33	253	191	252	190	243	183	215	161
11	14	9.2	33	133	100	132	100	129	98	118	89
12	4	3.4	33	49	37	48	37	47	36	44	34
13	1	1.0	33	14	10	14	10	13	10	13	10
400 122.5 -- 1651 1220 1636 1210 1505 1110 1105 799											

SITE INDEX 70 . AGE 10 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	4	0.1	23	--	--	--	--	--	--	--	--
3	18	0.9	23	--	--	--	--	--	--	--	--
4	42	3.6	24	--	--	--	--	--	--	--	--
5	72	9.8	26	122	86	118	83	82	55	--	--
6	96	18.9	28	247	178	243	175	201	142	67	35
7	102	27.2	30	374	274	370	271	331	241	205	141
8	83	29.1	31	415	308	412	306	383	284	291	211
9	51	22.6	32	329	247	327	245	311	233	261	193
10	23	12.4	33	180	136	180	136	174	131	154	115
11	7	4.6	33	66	50	66	50	64	49	59	45
12	2	1.2	33	18	13	18	13	17	13	16	12
500 130.4 -- 1751 ¹ 1292 1732 1279 1563 1148 1053 752											

Continued

Table 26.--Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 70				AGE 10		STEMS/ACRE 600					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	23	--	--	--	--	--	--	--	--
2	8	0.2	23	--	--	--	--	--	--	--	--
3	31	1.5	24	--	--	--	--	--	--	--	--
4	67	5.9	25	--	--	--	--	--	--	--	--
5	108	14.7	26	188	133	182	129	126	85	--	--
6	131	25.7	29	347	252	341	247	282	202	94	50
7	120	32.2	31	456	336	451	332	403	296	250	173
8	81	28.3	32	413	308	410	306	382	284	290	211
9	38	17.0	33	249	188	248	187	236	177	198	147
10	12	6.6	33	96	73	96	73	93	70	82	62
11	3	1.8	33	25	19	25	19	25	19	23	17
600				1775	1309	1753	1293	1547	1133	937	659

SITE INDEX 70				AGE 10		STEMS/ACRE 700					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	23	--	--	--	--	--	--	--	--
2	15	0.3	23	--	--	--	--	--	--	--	--
3	50	2.4	24	--	--	--	--	--	--	--	--
4	102	8.9	25	--	--	--	--	--	--	--	--
5	150	20.5	27	271	194	262	187	181	124	--	--
6	162	31.9	30	446	325	437	319	362	260	121	64
7	126	33.5	31	488	362	483	358	432	318	268	186
8	66	23.2	33	343	257	340	255	317	236	241	176
9	23	10.0	33	147	111	147	110	140	105	117	87
10	5	2.5	33	37	28	37	28	35	27	31	24
11	1	0.4	33	5	4	5	4	5	4	5	4
700				1737	1280	1711	1261	1472	1074	782	540

Continued

Table 26.--Voiume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 70 AGE 15 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	1	0.0	35	--	--	--	--	--	--	--	--
4	9	0.8	35	--	--	--	--	--	--	--	--
5	28	3.9	36	65	49	63	47	44	31	--	--
6	57	11.2	38	196	150	193	147	159	120	53	30
7	83	22.3	41	414	322	410	318	366	283	227	165
8	91	31.7	44	626	496	621	492	578	457	440	339
9	72	31.9	47	657	527	653	525	622	499	521	414
10	40	21.8	49	459	372	457	371	441	358	390	315
11	15	9.6	50	204	166	203	166	198	161	181	147
12	4	3.0	50	62	51	62	51	61	50	57	47
	400	136.2	--	2683	2132	2662	2116	2470	1959	1870	1457

SITE INDEX 70 AGE 15 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	3	0.1	35	--	--	--	--	--	--	--	--
4	18	1.6	35	--	--	--	--	--	--	--	--
5	51	7.0	36	121	91	117	88	81	58	--	--
6	94	18.4	39	333	255	327	251	271	204	90	51
7	121	32.3	43	624	489	617	484	552	430	343	251
8	110	38.5	46	787	628	782	623	727	578	553	430
9	68	30.2	48	638	514	634	512	604	487	506	404
10	27	14.8	49	314	255	313	254	302	245	267	216
11	6	4.2	50	89	72	88	72	86	70	79	64
12	1	0.7	50	14	12	14	12	14	11	13	11
	500	147.8	--	2920	2317	2892	2295	2637	2085	1851	1426

Continued

Table 26.--Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 70 AGE 15 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	6	0.3	35	--	--	--	--	--	--	--	--
4	33	2.9	35	--	--	--	--	--	--	--	--
5	85	11.6	37	204	155	198	149	137	99	--	--
6	139	27.4	41	512	396	503	389	417	317	139	79
7	155	41.4	45	830	655	821	648	734	576	456	336
8	114	39.7	48	835	669	829	664	771	617	586	458
9	52	22.9	49	490	397	488	395	464	375	389	311
10	13	7.3	50	157	128	156	127	151	123	134	108
11	2	1.3	50	27	22	27	22	26	21	24	19
	600	154.8	--	3056	2421	3021	2394	2700	2128	1727	1312

SITE INDEX 70 AGE 15 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	12	0.6	35	--	--	--	--	--	--	--	--
4	57	5.0	36	--	--	--	--	--	--	--	--
5	131	17.9	38	323	246	313	237	216	157	--	--
6	190	37.3	42	724	564	711	553	589	451	196	112
7	176	46.9	46	974	774	963	765	861	680	534	397
8	98	34.3	49	737	593	731	589	680	546	517	406
9	30	13.4	50	290	235	289	234	275	223	230	185
10	5	2.7	50	58	47	58	47	56	45	49	40
	700	158.2	--	3106	2458	3064	2425	2677	2103	1527	1139

Continued

Table 26.--Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 70 AGE 20 STEMS/ACRE 400														
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
4	1	0.1	44	--	--	--	--	--	--	--	--			
5	17	2.3	44	49	38	47	37	33	24	--	--			
6	4.5	8.9	46	189	149	185	147	153	120	51	30			
7	70	18.6	50	416	336	411	332	368	295	228	172			
8	80	27.8	54	662	543	657	539	611	500	465	372			
9	73	32.2	58	804	670	799	667	761	634	638	526			
10	54	29.7	61	763	644	761	641	734	619	650	545			
11	33	22.0	62	574	488	573	487	558	474	511	433			
12	17	13.1	63	345	295	344	294	338	289	316	270			
13	7	6.3	64	166	142	166	142	163	140	155	133			
14	2	2.5	64	64	55	64	55	63	55	61	52			
15	1	1.0	64	25	22	25	22	25	21	24	21			
				400	164.5	--	4057	3382	4033	3363	3808	3172	3099	2554

SITE INDEX 70 AGE 20 STEMS/ACRE 500														
D.b.h. (in)	Stems per acre (no.)	Basal. area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
4	4	0.3	44	--	--	--	--	--	--	--	--			
5	33	4.6	45	95	75	92	72	64	48	--	--			
6	74	14.5	48	314	250	308	245	255	200	85	50			
7	102	27.1	52	627	509	620	503	555	447	344	261			
8	105	36.5	56	896	740	889	735	828	682	629	507			
9	84	37.3	60	956	801	951	797	905	758	759	628			
10	54	29.7	62	777	658	774	655	748	633	662	557			
11	28	18.5	63	488	415	486	414	474	404	434	368			
12	11	9.0	64	237	203	237	203	232	199	217	186			
13	4	3.4	64	90	77	90	77	89	76	84	72			
14	1	1.3	64	33	28	33	28	32	28	31	27			
				500	182.1	--	4514	3756	4481	3730	4182	3474	3245	2656

Continued

Table 26. --Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 70 AGE 20 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	9	0.8	44	--	--	--	--	--	--	--	--
5	57	7.7	45	164	128	158	124	110	82	--	--
6	109	21.4	49	478	382	469	375	388	306	129	76
7	136	36.3	54	866	707	856	699	766	622	475	363
8	125	43.5	58	1100	914	1092	907	1016	842	772	625
9	88	38.8	61	1014	853	1009	849	960	808	805	669
10	48	26.1	63	692	587	689	585	665	564	589	497
11	20	13.3	63	353	301	352	300	343	292	314	267
12	7	5.1	64	135	116	135	115	132	113	124	106
13	2	1.8	64	47	41	47	41	47	40	44	38
	600	194.8	--	4848	4028	4807	3995	4427	3669	3252	2641

SITE INDEX 70 AGE 20 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	20	1.7	44	--	--	--	--	--	--	--	--
5	88	12.0	46	258	203	250	196	173	130	--	--
6	151	29.7	50	680	547	668	537	553	438	184	108
7	169	45.2	55	1112	913	1099	903	983	803	610	469
8	137	47.7	59	1236	1032	1227	1025	1142	951	868	706
9	82	36.3	62	965	814	960	810	914	771	766	639
10	37	20.1	63	538	457	536	456	518	440	458	387
11	12	8.1	64	216	185	216	184	210	179	192	164
12	3	2.4	64	63	54	63	54	61	53	58	49
13	1	0.6	64	15	13	15	13	15	13	14	12
	700	203.9	--	5083	4217	5033	4176	4568	3776	3150	2535

Continued

Table 26.--Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 80 AGE 10 STEMS/ACRE 400														
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
2	2	0.0	27	--	--	--	--	--	--	--	--			
3	10	0.5	27	--	--	--	--	--	--	--	--			
4	24	2.1	28	--	--	--	--	--	--	--	--			
5	44	6.0	29	84	61	81	59	56	39	--	--			
6	64	12.6	31	183	134	179	132	149	108	49	27			
7	76	20.4	33	308	230	304	227	272	202	169	118			
8	73	25.4	35	399	302	396	300	369	278	280	207			
9	55	24.4	36	392	300	390	299	371	284	311	235			
10	32	17.5	37	285	220	284	219	274	212	243	186			
11	14	9.2	37	149	116	149	115	145	112	133	103			
12	4	3.4	38	55	42	54	42	53	42	50	39			
13	1	1.0	38	15	12	15	12	15	12	14	11			
				400	122.5	--	1871	1417	1854	1405	1705	1288	1250	926

SITE INDEX 80 AGE 10 STEMS/ACRE 500														
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
2	4	0.1	27	--	--	--	--	--	--	--	--			
3	18	0.9	27	--	--	--	--	--	--	--	--			
4	42	3.6	28	--	--	--	--	--	--	--	--			
5	72	9.8	30	140	102	135	98	94	65	--	--			
6	96	18.9	32	282	209	277	205	229	167	76	41			
7	102	27.2	34	424	319	420	315	375	280	233	164			
8	83	29.1	36	469	357	465	354	433	329	329	244			
9	51	22.6	37	371	285	369	283	351	269	294	223			
10	23	12.4	37	203	157	202	156	195	151	173	133			
11	7	4.6	38	75	58	74	58	72	56	66	51			
12	2	1.2	38	20	15	20	15	19	15	18	14			
				500	130.4	--	1983	1500	1962	1485	1770	1332	1190	871

Continued

Table 26.--Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 80 AGE 10 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	27	--	--	--	--	--	--	--	--
2	8	0.2	27	--	--	--	--	--	--	--	--
3	31	1.5	28	--	--	--	--	--	--	--	--
4	67	5.9	29	--	--	--	--	--	--	--	--
5	108	14.7	31	215	157	208	152	144	100	--	--
6	131	25.7	33	395	294	388	289	321	235	107	58
7	120	32.2	35	516	390	510	386	457	343	283	200
8	81	28.3	36	466	356	463	354	431	328	327	244
9	38	17.0	37	281	216	279	215	266	205	223	170
10	12	6.6	38	108	84	108	84	104	81	92	71
11	3	1.8	38	29	22	29	22	28	22	25	20
600	133.7	--	2011	1519		1986	1500	1751	1314	1058	763

SITE INDEX 80 AGE 10 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	27	--	--	--	--	--	--	--	--
2	15	0.3	27	--	--	--	--	--	--	--	--
3	50	2.4	28	--	--	--	--	--	--	--	--
4	102	8.9	29	--	--	--	--	--	--	--	--
5	150	20.5	32	309	227	299	219	207	145	--	--
6	162	31.9	34	506	378	496	371	411	303	137	75
7	126	33.5	36	551	419	545	414	488	368	303	215
8	66	23.2	37	386	296	383	294	357	273	271	203
9	23	10.0	38	166	128	165	127	157	121	132	100
10	5	2.5	38	41	32	41	32	40	31	35	27
11	1	0.4	38	6	5	6	5	6	4	5	4
700	133.6	--	1966	1484		1937	1462	1665	1245	883	624

Continued

Table 26.--Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 80 . AGE 15 STEMS/ACRE 400

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
				2		inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
3	1	0.0	41	--	--	--	--	--	--	--	--			
4	9	0.8	41	--	--	--	--	--	--	--	--			
5	28	3.9	42	76	58	73	56	51	37	--	--			
6	57	11.2	44	226	177	222	174	183	142	61	35			
7	83	22.3	47	473	378	468	373	419	332	260	194			
8	91	31.7	51	711	577	705	572	656	531	499	395			
9	72	31.9	54	742	610	738	607	703	578	589	479			
10	40	21.8	56	517	429	515	428	497	413	440	363			
11	15	9.6	56	229	191	229	191	223	186	204	170			
12	4	3.0	57	70	59	70	59	69	57	64	54			
				400	136.2	--	3044	2479	3020	2460	2800	2276	2117	1689

SITE INDEX 80 AGE 15 STEMS/ACRE 500

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
3	3	0.1	41	--	--	--	--	--	--	--	--			
4	18	1.6	41	--	--	--	--	--	--	--	--			
5	51	7.0	42	140	108	135	105	94	69	--	--			
6	94	18.4	45	382	301	375	295	310	241	103	60			
7	121	32.3	49	711	571	703	565	629	502	390	293			
8	110	38.5	53	891	728	885	723	823	671	626	498			
9	68	30.2	55	719	594	715	591	681	562	571	466			
10	27	14.8	56	354	294	352	293	340	283	301	249			
11	6	4.2	56	100	83	100	83	97	81	89	74			
12	1	0.7	57	16	13	16	13	16	13	15	12			
				500	147.8	--	3312	2693	3280	2668	2989	2422	2094	1652

Continued

Table 26.--Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 80 AGE 15 STEMS/ACRE 600

D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total vol.		Merchantable volume to ton--								
	per acre (no.)			(ft ³)	2 inches		4 inches		6 inches					
					o.b.	i.b.	o.b.	i.b.	o.b.	i.b.				
3	6	0.3	41	--	--	--	--	--	--	--	--			
4	33	2.9	41	--	--	--	--	--	--	--	--			
5	85	11.6	43	236	183	228	177	158	117	--	--			
6	139	27.4	47	586	465	575	456	476	372	159	92			
7	155	41.4	51	942	762	932	754	833	670	517	391			
8	114	39.7	54	943	774	936	768	871	713	662	530			
9	52	22.9	56	552	457	549	455	523	433	438	359			
10	13	7.3	56	177	147	176	146	170	141	150	124			
11	2	1.3	57	30	25	30	25	29	25	27	22			
				600	154.8	--	3466	2814	3426	2782	3060	2471	1953	1519

SITE INDEX 80 AGE 15 STEMS/ACRE 700

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--								
						2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
3	12	0.6	41	--	--	—	—	—	—	--	--			
4	57	5.0	42	—	—	--	—	—	--	--	--			
5	131	17.9	44	371	290	359	280	249	186	--	--			
6	190	37.3	49	825	659	810	647	671	528	223	131			
7	176	46.9	53	1102	897	1090	887	975	788	605	461			
8	98	34.3	55	831	684	824	679	767	631	583	468			
9	30	13.4	56	327	271	325	270	309	257	259	213			
10	5	2.7	57	65	54	65	54	63	52	56	46			
				700	158.2	--	3522	2856	3474	2818	3034	2441	1726	1318

Continued

Table 26. --Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 80				AGE 20		STEMS/ACRE 400					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	1	0.1	52	--	--	--	--	--	--	--	--
5	17	2.3	52	56	45	55	44	38	29	--	--
6	45	8.9	54	218	177	214	174	177	142	59	35
7	70	18.6	58	477	395	471	390	422	347	262	203
8	80	27.8	62	753	635	748	630	696	585	529	434
9	73	32.2	66	911	778	906	774	863	736	723	610
10	54	29.7	69	862	745	859	742	830	716	734	631
11	33	22.0	71	648	563	646	562	629	548	576	500
12	17	13.1	72	389	340	388	339	380	333	356	311
13	7	6.3	72	187	164	187	164	184	162	175	153
14	2	2.5	72	72	64	72	64	71	63	69	60
15	1	1.0	72	28	25	28	25	28	25	27	24
400 164.5 --				4602	3931	4574	3908	4318	3685	3510	2962

SITE INDEX 80				AGE 20		STEMS/ACRE 500					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--					
						2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	4	0.3	52	--	--	--	--	--	--	--	--
5	33	4.6	52	110	89	107	86	74	57	--	--
6	74	14.5	55	361	295	355	290	294	237	98	59
7	102	27.1	60	717	597	709	591	634	525	393	307
8	105	36.5	64	1018	862	1010	856	940	795	715	590
9	84	37.3	68	1081	928	1076	924	1024	878	858	728
10	54	29.7	70	877	760	874	757	844	731	747	643
11	28	18.5	72	549	479	548	478	534	465	489	425
12	11	9.0	72	267	234	267	234	262	229	245	214
13	4	3.4	72	101	89	101	89	100	88	95	83
14	1	1.3	72	37	32	37	32	36	32	35	31
500 182.1 --				5120	4366	5083	4336	4741	4036	3674	3080

Continued

Table 26. --Volume yields per acre for loblolly pine in Soil Group B
(in cubic feet)--Contd.

SITE INDEX 80 AGE 20 STEMS/ACRE 600

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--							
						2 inches		4 inches		6 inches			
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.		
4	9	0.8	52	—	—	—	—	—	—	—	—		
5	57	7.7	53	189	153	183	147	127	98	--	--		
6	109	21.4	57	548	450	538	442	446	361	148	89		
7	136	36.3	62	987	827	976	818	873	727	542	425		
8	125	43.5	66	1247	1062	1237	1054	1151	978	875	726		
9	88	38.8	69	1145	987	1139	982	1085	934	909	774		
10	48	26.1	71	780	677	777	675	750	651	664	573		
11	20	13.3	72	397	347	396	346	386	337	353	308		
12	7	5.1	72	152	133	152	133	149	130	139	122		
13	2	1.8	72	53	47	53	47	52	46	50	44		
600				194.8	--	5499	4682	5452	4643	5019	4262	3681	3061

SITE INDEX 80 AGE 20 STEMS/ACRE 700

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total vol. (ft ³)		Merchantable volume to top--							
						2 inches		4 inches		6 inches			
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.		
4	20	1.7	52	—	—	—	--	—	--	--	--		
5	88	12.0	54	298	241	288	233	199	154	--	--		
6	151	29.7	58	779	643	765	631	633	515	211	128		
7	169	45.2	64	1264	1065	1250	1053	1118	936	694	547		
8	137	47.7	68	1398	1196	1388	1187	1291	1102	982	818		
9	82	36.3	71	1088	941	1083	936	1031	890	864	738		
10	37	20.1	72	606	527	604	525	583	507	516	446		
11	12	8.1	72	244	213	243	212	237	207	217	189		
12	3	2.4	72	71	62	71	62	69	61	65	57		
13	1	0.6	72	17	15	17	15	17	15	16	14		
700				203.9	--	5765	4902	5708	4854	5178	4386	3563	2936

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)

SITE INDEX 50 AGE 10 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
2	6	0.1	18	--	--	--	--	--	--	--	--
3	28	1.4	19	--	--	--	--	--	--	--	--
4	64	5.6	20	--	--	--	--	--	--	--	--
5	90	12.3	23	70	25	68	24	46	17	--	--
6	74	14.5	25	90	32	88	32	72	27	21	9
7	31	8.3	27	53	19	53	19	47	17	28	11
8	6	2.1	27	14	5	14	5	12	5	9	4
	300	44.3	--	227	81	222	80	177	66	58	24

SITE INDEX 50 AGE 10 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
1	1	0.0	18	--	--	--	--	--	--	--	--
2	14	0.3	18	--	--	--	--	--	--	--	--
3	54	2.7	19	--	--	--	--	--	--	--	--
4	111	9.7	21	--	--	--	--	--	--	--	--
5	127	17.3	24	104	37	101	36	68	26	--	--
6	73	14.4	26	93	33	91	33	74	28	22	9
7	18	4.8	27	31	11	31	11	27	10	16	6
8	1	0.5	27	3	1	3	1	3	1	2	1
	400	49.7	--	231	83	225	81	172	64	40	17

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 50 AGE 10 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	2	0.0	18	--	--	--	--	--	--	--	--
2	26	0.6	18	--	--	--	--	--	--	--	--
3	95	4.7	19	--	--	--	--	--	--	--	--
4	168	14.7	22	--	--	--	--	--	--	--	--
5	148	20.1	25	126	46	122	44	82	31	--	--
6	54	10.6	27	70	25	68	25	56	21	16	7
7	7	1.8	27	12	4	11	4	10	4	6	2
	500	52.5	--	208	75	202	73	148	56	22	9

SITE INDEX 50 AGE 10 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	4	0.0	18	--	--	--	--	--	--	--	--
2	47	1.0	18	--	--	--	--	--	--	--	--
3	153	7.5	20	--	--	--	--	--	--	--	--
4	226	19.7	23	--	--	--	--	--	--	--	--
5	140	19.1	26	124	45	120	44	81	31	--	--
6	29	5.6	27	37	13	36	13	30	11	9	4
7	1	0.4	27	2	1	2	1	2	1	1	--
	600	53.3	--	163	59	158	58	113	43	10	4

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 50 AGE 10 STEMS/ACRE 700											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green dry		green dry		green dry	
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	8	0.0	18	—	--	--	--	--	--	--	--
2	79	1.7	18	--	--	--	--	--	--	--	--
3	230	11.3	21	--	--	--	--	--	--	--	--
4	267	23.3	25	--	--	--	--	--	--	--	--
5	106	14.4	27	96	35	92	34	62	24	--	--
6	10	2.0	27	13	5	13	5	11	4	3	1
	700	52.8	--	109	40	105	39	73'	28	3	1

SITE INDEX 50 AGE 10, STEMS/ACRE 800											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green dry		2 inches		4 inches		6 inches	
	o.b.			i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	
1	14	0.1	18	--	--	--	--	--	--	--	--
2	128	2.8	19	--	--	--	--	--	--	--	—
3	321	15.8	22	--	--	--	—	--	—	—	—
4	274	23.9	25	--	--	--	--	--	--	--	--
5	60	8.2	27	55	20	53	20	36	14	--	--
6	2	0.4	27	3	1	3	1	2	1	1	--
	800	51.2	--	58	21	56	21	38	15	1	0

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 50 AGE 15 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
						green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	1	0.0	25	--	--	--	--	--	--	--	--
3	11	0.6	25	--	--	--	--	--	--	--	--
4	35	3.1	26	--	--	--	--	--	--	--	--
5	64	8.7	29	63	23	61	23	41	16	--	--
6	78	15.4	32	123	46	121	45	99	38	29	13
7	64	17.2	35	149	56	147	56	130	50	78	32
8	34	11.7	37	106	40	105	40	97	37	72	29
9	10	4.6	38	42	16	42	16	40	15	33	13
10	2	3.1	38	10	4	10	4	9	3	8	3
	300	62.3	--	492	185	485	183	416	161	219	90

SITE INDEX 50 AGE 15 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
						green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	3	0.1	25	--	--	--	--	--	--	--	--
3	22	1.1	25	--	--	--	--	--	--	--	--
4	60	5.3	27	--	--	--	--	--	--	--	--
5	100	13.7	30	103	38	99	37	67	26	--	--
6	107	21.0	34	176	66	172	65	141	55	41	19
7	72	19.3	36	172	65	170	65	150	58	90	37
8	29	10.0	37	91	35	90	34	84	32	62	25
9	6	2.7	38	25	9	24	9	23	9	19	8
10	1	0.4	38	3	1	3	1	3	1	3	1
	400	73.5	--	569	214	559	212	468	182	215	89

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 50 AGE 15 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
2	6	0.1	25	--	--	--	---	--	--	--	--
3	37	1.8	25	--	--	--	--	--	--	--	--
4	94	8.2	28	--	--	--	--	--	--	--	--
5	141	19.2	31	151	56	145	55	98	39	--	--
6	130	25.5	35	220	83	215	82	176	69	51	23
7	70	18.6	37	169	64	167	64	148	58	88	37
8	20	7.0	38	64	24	63	24	59	23	44	18
9	3	1.3	38	12	4	12	4	11	4	9	4
	500	81.7	--	614	232	602	229	491	192	192	81

SITE INDEX 50 AGE 15 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
2	10	0.2	25	--	--	--	--	--	--	--	--
3	58	2.9	26	--	--	--	--	--	--	--	--
4	137	12.0	28	--	--	--	--	--	--	--	--
5	183	25.0	32	203	77	196	74	132	53	--	--
6	141	27.7	36	246	93	241	92	197	78	58	26
7	58	15.5	37	142	54	141	54	125	49	74	31
8	11	4.0	38	36	14	36	14	33	13	25	10
9	1	0.4	38	4	1	4	1	4	1	3	1
	600	87.6	--	631	239	617	235	490	193	160	68

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 50 AGE 15 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	16	0.4	25	--	--	--	--	--	--	--	--
3	87	4.3	26	--	--	--	--	--	--	--	--
4	189	16.5	29	--	--	--	--	--	--	--	--
5	222	30.3	33	254	96	245	94	166	66	--	--
6	139	27.3	36	247	94	242	93	198	78	58	26
7	42	11.1	37	103	39	101	39	90	35	54	22
8	5	1.9	38	17	7	17	6	16	6	12	5
	700	91.6	--	621	236	606	232	469	186	123	53

SITE INDEX 50 AGE 15 STEMS/ACRE 800											
D.b.h. (in)	Stems w - acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	26	0.6	25	--	--	--	--	--	--	--	--
3	125	6.1	26	--	--	--	--	--	--	--	--
4	248	21.7	30	--	--	--	--	--	--	--	--
5	251	34.2	34	297	113	286	110	193	78	--	--
6	123	24.1	37	222	85	217	84	177	70	52	24
7	25	6.7	38	63	24	62	24	55	21	33	14
8	2	0.6	38	6	2	6	2	5	2	4	2
	800	94.0	--	587	224	571	220	431	172	89	39

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 50 AGE 20 STEMS/ACRE 300											
D.b.h. (in)	Stems p=-- acre (no.)	Basal area (ft')	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	3	0.2	30	--	--	--	--	--	--	--	--
4	19	1.6	31	--	--	--	--	--	--	--	--
5	43	5.8	33	49	19	47	18	32	13	--	--
6	64	12.5	37	115	44	113	43	92	37	27	12
7	69	18.3	41	185	72	183	71	162	64	97	41
8	55	19.0	44	205	80	203	80	188	75	140	58
9	31	13.9	46	155	61	154	60	146	58	121	49
10	13	7.0	47	79	31	79	31	76	30	67	27
11	4	2.4	47	27	11	27	10	26	10	24	10
12	1	0.6	47	7	3	7	3	7	3	6	2
	300	81.4	--	822	319	813	317	729	289	481	199

SITE INDEX 50 AGE 20 STEMS/ACRE 400											
D.b.h. (in)	Stems Per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	7	0.3	30	--	--	--	--	--	--	--	--
4	33	2.8	31	--	--	--	--	--	--	--	--
5	68	9.3	34	80	31	78	30	52	21	--	--
6	94	18.4	38	175	68	172	67	140	56	41	19
7	91	24.4	42	254	99	251	98	222	89	133	56
8	64	22.2	45	244	96	242	95	224	89	167	69
9	31	13.7	46	154	60	153	60	145	58	120	49
10	10	5.6	47	63	25	63	25	60	24	53	21
11	3	1.7	47	19	7	19	7	18	7	17	7
	400	98.3	--	990	385	977	381	863	344	530	222

Continued

Table 27, --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 50 AGE 20 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	13	0.6	31	--	--	--	--	--	--	--	--
4	51	4.5	32	--	--	--	--	--	--	--	--
5	99	13.5	35	120	46	116	45	78	32	--	--
6	125	24.6	39	242	94	238	93	194	78	57	26
7	110	29.4	43	314	123	310	122	275	110	164	70
8	66	23.2	45	259	102	257	101	238	95	177	74
9	27	11.8	46	135	53	134	53	127	50	105	43
10	7	3.8	47	43	17	43	17	41	16	36	15
11	1	0.8	47	9	4	9	4	9	3	8	3
	500	112.3	--	1122	437	1106	433	962	385	546	231

SITE INDEX 50 AGE 20 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	1	0.0	30	--	--	--	--	--	--	--	--
3	21	1.0	31	--	--	--	--	--	--	--	--
4	75	6.5	32	--	--	--	--	--	--	--	--
5	135	18.4	36	168	65	162	63	110	44	--	--
6	157	30.9	40	313	122	306	120	250	101	73	34
7	123	32.8	44	358	141	354	139	313	126	187	80
8	63	22.1	46	250	98	248	98	229	92	171	71
9	21	9.2	47	105	41	104	41	99	39	82	34
10	4	2.3	47	26	10	26	10	25	10	22	9
11	1	0.3	47	4	1	4	1	4	1	3	1
	600	123.6	--	1223	478	1204	472	1030	414	537	229

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 50 AGE 20 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	1	0.0	30	--	--	--	--	--	--	--	--
3	31	1.5	31	--	--	--	--	--	--	--	--
4	104	9.1	33	--	--	--	--	--	--	--	--
5	176	24.0	37	224	87	216	84	146	59	--	--
6	187	36.7	41	381	149	373	147	305	124	89	42
7	128	34.3	45	381	150	376	149	334	135	199	85
8	56	19.4	46	221	87	219	87	203	81	151	63
9	14	6.4	47	73	29	73	29	69	27	57	23
10	2	1.3	47	14	6	14	6	14	5	12	5
	700	132.6	--	1295	507	1273	501	1071	432	508	219

SITE INDEX 50 AGE 20 STEMS/ACRE 800											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.1	30	--	--	--	--	--	--	--	--
3	45	2.2	31	--	--	--	--	--	--	--	--
4	140	12.2	33	--	--	--	--	--	--	--	--
5	220	30.0	38	288	112	278	109	188	77	--	--
6	211	41.5	42	442	174	433	171	354	144	103	49
7	126	33.7	45	380	150	375	149	333	135	198	85
8	45	15.7	47	180	71	178	70	165	66	123	51
9	9	4.0	47	46	18	45	18	43	17	36	15
10	1	0.6	47	6	2	6	2	6	2	5	2
	800	139.9	--	1342	527	1316	519	1088	441	465	202

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 50 AGE 25 STEMS/ACRE 300											
D.b.h. [in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per			green	dry	2 inches		4 inches		6 inches	
	acre (no.)			o.b.	i.b.	green	dry	green	dry	green	dry
4	7	0.6	35	--	--	—	—	—	--	—	—
5	27	3.7	36	34	13	33	13	22	9	--	--
6	49	9.6	40	96	37	94	37	77	31	22	10
7	62	16.5	44	180	71	178	70	158	63	94	40
8	60	20.9	48	247	98	245	97	226	91	169	71
9	46	20.3	51	253	101	251	100	238	96	197	82
10	28	15.3	53	196	78	196	78	188	76	165	68
11	14	9.0	54	117	47	116	46	113	45	103	42
12	5	4.1	54	53	21	53	21	52	21	48	20
13	2	1.8	54	24	9	24	9	23	9	22	9
	300	101.8	--	1200	475	1190	473	1098	443	820	342

SITE INDEX 50 AGE 25 STEMS/ACRE 400											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per			green	dry	2 inches		4 inches		6 inches	
	acre (no.)			o.b.	i.b.	green	dry	green	dry	green	dry
4	14	1.2	35	--	--	--	--	--	--	--	--
5	45	6.1	37	58	22	56	22	38	15	--	--
6	74	14.6	41	149	58	146	57	119	48	35	16
7	87	23.2	45	261	103	258	102	229	93	136	59
8	78	27.1	49	328	131	326	130	301	122	224	95
9	54	23.9	52	304	121	302	121	286	116	236	99
10	29	16.1	53	209	84	208	83	200	81	175	73
11	13	8.3	54	108	43	108	43	104	42	95	39
12	4	3.2	54	42	17	42	17	41	16	38	16
13	1	1.2	54	15	6	15	6	15	6	14	6
	400	124.9	--	1474	585	1460	581	1333	540	954	401

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 50 AGE 25 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
3	1	0.1	35	--	--	--	--	--	--	--	--
4	24	2.1	35	--	--	--	--	--	--	--	--
5	67	9.1	38	87	34	84	33	57	23	--	--
6	103	20.2	42	212	83	207	82	169	69	50	23
7	112	30.0	46	346	137	342	136	303	123	181	78
8	92	32.3	50	399	160	396	159	366	149	273	116
9	58	25.8	52	332	133	330	133	313	127	259	108
10	28	15.4	54	202	81	201	81	193	78	170	70
11	10	6.9	54	90	36	90	36	87	35	79	33
12	3	2.3	54	30	12	30	12	29	12	27	11
13	1	0.6	54	8	3	8	3	8	3	8	3
	500	144.8	--	1707	679	1689	674	1527	620	1045	442

SITE INDEX 50 AGE 25 STEMS/ACRE 600											
D.b.h. (in)	Stems Per acre (no.)	Basal area (ft')	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
3	2	0.1	35	--	--	--	--	--	--	--	--
4	37	3.2	35	---	---	---	---	---	---	---	---
5	93	12.6	38	123	48	118	46	80	33	--	--
6	134	26.3	43	283	111	277	110	226	92	66	31
7	137	36.5	47	431	172	426	170	378	154	225	98
8	104	36.2	51	455	182	452	181	418	170	311	132
9	59	26.1	53	339	136	337	136	320	130	264	111
10	25	13.8	54	181	72	180	72	173	70	152	63
11	8	5.3	54	69	28	69	28	67	27	61	25
12	2	1.7	54	23	9	23	9	22	9	21	8
	600	161.7	--	1904	758	1882	752	1684	686	1100	468

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 50 AGE 30 STEMS/ACRE 300											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	Per			green dry		2 inches		4 inches		6 inches	
	acre (no.)			o.b.	i.b.	green dry o.b.	i.b.	green dry o.b.	i.b.	green dry o.b.	i.b.
5	13	1.8	38	18	7	17	7	11	5	--	--
6	36	7.2	41	74	29	72	28	59	24	17	8
7	53	14.2	45	160	63	158	63	140	57	84	36
a	58	20.2	50	250	100	248	99	229	93	170	72
9	52	22.8	54	302	121	300	121	284	116	235	99
10	39	21.1	57	292	118	291	118	280	114	245	103
11	25	16.3	58	232	94	231	94	225	92	204	85
12	14	10.7	59	153	62	153	62	150	61	139	58
13	6	5.9	60	86	35	85	35	84	34	79	33
14	3	2.8	60	41	16	40	16	40	16	38	16
15	1	1.6	60	23	9	23	9	23	9	22	9
	300	124.7	--	1629	654	1618	651	1525	621	1234	517

SITE INDEX 50 AGE 30 STEMS/ACRE 400											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per			green dry		2 inches		4 inches		6 inches	
	acre (no.)			o.b.	i.b.	green dry o.b.	i.b.	green dry o.b.	i.b.	green dry o.b.	i.b.
4	1	0.1	38	--	--	--	--	--	--	--	--
5	25	3.4	39	33	13	32	13	22	9	--	--
6	57	11.2	42	118	46	115	45	94	38	28	13
7	77	20.5	46	238	94	235	94	208	85	124	54
a	79	27.5	51	348	140	345	139	319	131	238	101
9	66	29.1	55	393	159	390	158	370	152	306	129
10	46	25.1	57	352	143	351	143	338	138	296	124
11	27	18.0	59	258	104	257	104	249	102	227	95
12	14	10.8	60	156	63	155	63	152	62	141	59
13	6	5.5	60	79	32	79	32	77	31	73	30
14	2	2.3	60	34	14	34	14	33	13	32	13
15	1	1.1	60	16	7	16	7	16	7	16	6
	400	154.5	--	2024	814	2009	810	1879	768	1479	623

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 50 AGE 30 STEMS/ACRE 500											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
4	3	0.3	38	--	--	--	--	--	--	--	--
5	39	5.3	39	53	21	51	20	35	14	--	--
6	80	15.8	43	170	67	166	66	136	55	40	19
7	102	27.3	48	324	129	320	128	284	116	169	74
8	99	34.5	52	447	180	443	179	410	168	305	130
9	78	34.4	56	472	191	469	190	445	183	367	156
10	51	27.7	58	393	160	392	159	377	155	330	139
11	28	18.4	59	265	107	264	107	256	105	233	97
12	13	10.1	60	146	59	146	59	143	58	133	55
13	5	4.6	60	67	27	67	27	66	27	62	26
14	2	1.8	60	26	10	25	10	25	10	24	10
15	1	0.7	60	11	4	11	4	10	4	10	4
	500	180.8	--	2373	956	2354	951	2186	896	1674	709

SITE INDEX 60 AGE 10 STEMS/ACRE 300											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
2	3	0.1	24	--	--	--	--	--	--	--	--
3	16	0.8	24	--	--	--	--	--	--	--	--
4	39	3.4	25	--	--	--	--	--	--	--	--
5	67	9.1	28	63	23	61	22	41	16	--	--
6	78	15.4	30	115	43	113	42	92	35	27	12
7	60	16.1	32	128	48	126	47	112	43	67	27
8	28	9.8	34	80	30	79	29	73	28	54	21
9	7	3.1	34	25	9	25	9	24	9	20	8
10	1	0.5	34	4	1	4	1	4	1	3	1
	300	58.2	--	415	154	408	152	346	132	171	69

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 60 AGE 10 STEMS/ACRE 400											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per			green	dry	2 inches		4 inches		6 inches	
	acre (no.)			o.b.	i.b.	green	dry	green	dry	green	dry
2	7	0.2	24	--	--	--	--	--	--	--	--
3	29	1.4	24	--	--	--	--	--	--	--	--
4	68	6.0	26	--	--	--	--	--	--	--	--
5	105	14.3	29	103	38	99	37	67	26	--	--
6	104	20.5	31	159	59	156	58	127	49	37	17
7	62	16.7	33	136	51	134	50	119	45	71	29
8	20	7.0	34	57	21	57	21	52	20	39	15
9	3	1.4	34	11	4	11	4	11	4	9	3
	400	67.4	--	466	173	457	171	376	144	156	64

SITE INDEX 60 AGE 10 STEMS/ACRE 500											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per			green	dry	2 inches		4 inches		6 inches	
	acre (no.)			o.b.	i.b.	green	dry	green	dry	green	dry
1	1	0.0	24	--	--	--	--	--	--	--	--
2	13	0.3	24	--	--	--	--	--	--	--	--
3	49	2.4	25	--	--	--	--	--	--	--	--
4	108	9.4	27	--	--	--	--	--	--	--	--
5	146	19.9	30	148	55	143	54	97	38	--	--
6	119	23.4	32	187	70	184	69	150	58	44	20
7	52	14.0	34	115	43	114	43	101	39	60	25
8	11	3.7	34	30	11	30	11	28	11	21	8
9	1	0.4	34	3	1	3	1	3	1	2	1
	500	73.5	--	484	181	473	178	378	146	127	53

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 60 AGE 10 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	2	0.0	24	--	--	--	--	--	--	--	--
2	21	0.5	24	--	--	--	--	--	--	--	--
3	78	3.9	25	--	--	--	--	--	--	--	--
4	157	13.7	27	--	--	--	--	--	--	--	--
5	184	25.1	31	194	72	187	70	126	50	--	--
6	118	23.1	33	189	71	185	70	152	59	44	20
7	35	9.4	34	78	29	77	29	68	26	41	17
8	4	1.4	34	12	4	12	4	11	4	8	3
	600	77.1	--	473	177	461	174	357	139	93	40

SITE INDEX 60 AGE 10 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	3	0.0	24	--	--	--	--	--	--	--	--
2	34	0.8	24	--	--	--	--	--	--	--	--
3	118	5.8	25	--	--	--	--	--	--	--	--
4	214	18.7	28	--	--	--	--	--	--	--	--
5	211	28.7	32	228	86	220	83	149	59	--	--
6	99	19.5	33	162	61	159	60	130	51	38	17
7	18	4.9	34	41	15	41	15	36	14	21	9
8	1	0.4	34	3	1	3	1	3	1	2	1
	700	78.8	--	435	163	423	160	317	124	61	27

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 60 AGE 10 STEMS/ACRE 800											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	5	0.0	24	--	--	--	--	--	--	--	--
2	53	1.2	24	--	--	--	--	--	--	--	--
3	171	8.4	26	--	--	--	--	--	--	--	--
4	275	24.0	29	--	--	--	--	--	--	--	--
5	217	29.6	32	241	91	233	89	157	63	--	--
6	70	13.8	34	116	44	114	43	93	36	27	12
7	7	2.0	34	16	6	16	6	14	6	9	4
	800	79.0	--	374	141	363	138	265	104	36	16

SITE INDEX 60 AGE 15 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	1	0.0	31	--	--	--	--	--	--	--	--
3	7	0.4	32	--	--	--	--	--	--	--	--
4	23	2.0	33	--	--	--	--	--	--	--	--
5	46	6.3	35	55	21	53	20	36	14	--	--
6	65	12.7	38	121	46	118	46	97	39	28	13
7	68	18.1	41	185	72	182	71	162	64	96	41
8	51	17.9	44	192	75	191	75	176	70	131	54
9	27	11.9	45	132	51	131	51	124	49	102	42
10	9	5.1	46	57	22	57	22	55	21	48	19
11	2	1.5	46	17	7	17	7	16	6	15	6
	300	76.0	--	758	294	749	292	666	264	421	175

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 60 AGE 15 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
2	2	0.0	31	--	--	--	--	--	--	--	--
3	14	0.7	32	—	—						
4	40	3.5	33	--	--	--	--	--	--	--	--
5	73	9.9	36	89	34	86	33	58	24	--	--
6	95	18.6	39	182	70	178	69	146	58	43	20
7	88	23.6	42	248	97	245	96	217	87	129	55
8	57	19.9	44	218	85	216	85	200	80	149	62
9	24	10.7	46	120	47	119	47	113	45	93	38
10	6	3.5	46	39	15	39	15	37	15	33	13
11	1	0.7	46	8	3	8	3	7	3	7	3
	400	91.2	--	903	351	891	348	778	311	453	190

SITE INDEX 60 AGE 15 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
2	3	0.1	31	--	--	--	--	--	--	--	--
3	23	1.1	32	—	—	--	--	--	—	--	--
4	61	5.3	33	—	—	--	—	—	—	--	—
5	105	14.4	36	133	51	128	50	86	35	--	--
6	126	24.7	40	248	96	243	95	199	80	58	27
7	103	27.6	43	296	116	293	115	259	104	155	66
8	56	19.5	45	217	85	215	84	199	79	148	62
9	19	8.3	46	93	36	92	36	87	35	72	29
10	4	2.2	46	24	9	24	9	23	9	20	8
	500	103.2	--	1010	394	995	390	854	342	453	192

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 60 AGE 15 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	6	0.1	31	--	--	--	--	--	--	--	--
3	35	1.7	32	--	--	--	--	--	--	--	--
4	89	7.7	34	--	--	--	--	--	--	--	--
5	143	19.5	37	184	71	178	69	120	49	--	--
6	155	30.4	41	314	122	307	121	251	102	73	34
7	110	29.5	44	323	127	319	126	283	114	169	72
8	49	17.1	45	191	75	190	75	176	70	131	54
9	13	5.5	46	62	24	62	24	58	23	48	20
10	2	1.0	46	11	4	11	4	10	4	9	4
	600	112.5	--	1085	424	1066	419	898	362	430	184

SITE INDEX 60 AGE 15 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	9	0.2	31	--	--	--	--	--	--	--	--
3	51	2.5	32	--	--	--	--	--	--	--	--
4	122	10.7	34	--	--	--	--	--	--	--	--
5	184	25.1	38	244	95	235	92	159	65	--	--
6	179	35.1	42	372	146	364	144	298	121	87	41
7	109	29.1	45	323	127	319	126	283	114	169	72
8	38	13.4	46	151	59	150	59	138	55	103	43
9	7	3.2	46	35	14	35	14	33	13	28	11
10	1	0.4	46	4	2	4	2	4	2	3	1
	700	119.6	--	1128	442	1107	436	915	370	390	169

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 60 AGE 15 STEMS/ACRE 800											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
2	14	0.3	31	--	--	--	--	--	--	--	--
3	71	3.5	32	—	—	—	—	--	--	--	--
4	163	14.3	35	--	--	--	--	--	--	--	--
5	227	30.9	39	308	120	298	117	201	83	--	--
6	195	38.3	43	414	163	406	161	332	135	97	46
7	99	26.4	45	296	117	293	116	260	105	155	67
8	27	9.3	46	106	42	105	41	97	39	72	30
9	4	1.6	46	18	7	18	7	17	7	14	6
	800	124.7	--	1143	449	1120	442	907	369	338	148

SITE INDEX 60 AGE 20 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
3	2	0.1	38	--	--	--	--	--	--	--	--
4	13	1.2	38	--	--	--	--	--	--	--	--
5	31	4.3	40	44	17	42	17	28	12	--	--
6	50	9.8	43	108	42	105	42	86	35	25	12
7	61	16.3	47	192	76	190	76	168	69	100	44
8	58	20.3	51	256	102	254	102	235	96	175	74
9	43	19.2	54	253	102	251	101	238	97	197	83
10	25	13.7	55	185	74	184	74	177	72	155	65
11	11	7.3	56	99	40	99	40	96	39	87	36
12	4	2.8	56	38	15	38	15	37	15	35	14
13	1	0.9	56	13	5	13	5	12	5	12	5
	300	95.9	--	1187	475	1176	472	1079	440	786	332

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

		SITE INDEX 60		AGE 20		STEMS/ACRE 400					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
						2 inches		4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	5	0.2	38	--	--	--	--	--	--	--	--
4	23	2.0	39	--	--	--	--	--	--	--	--
5	50	6.8	41	71	28	68	27	46	19	--	--
6	75	14.7	44	165	65	162	64	132	54	39	18
7	85	22.8	48	276	110	272	109	241	99	144	63
8	75	26.0	52	336	135	333	134	308	126	229	98
9	50	22.1	54	296	119	294	119	279	114	231	97
10	25	13.8	56	188	76	187	76	180	74	158	66
11	9	6.3	56	85	34	85	34	83	34	75	31
12	3	2.0	56	27	11	27	11	26	11	25	10
13	1	0.5	56	7	3	7	3	7	3	6	3
400		117.2	--	1450	582	1436	577	1303	533	906	386

		SITE INDEX 60		AGE 20		STEMS/ACRE 500					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
						2 inches		4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	8	0.4	38	--	--	--	--	--	--	--	--
4	35	3.1	39	--	--	--	--	--	--	--	--
5	72	9.9	42	105	41	101	40	68	28	--	--
6	103	20.2	45	232	92	227	91	185	76	54	26
7	109	29.1	50	362	145	357	144	317	130	189	83
8	88	30.5	53	401	162	398	161	368	151	274	117
9	53	23.2	55	314	127	312	126	296	121	245	103
10	23	12.6	56	172	70	172	69	165	67	145	60
11	7	4.8	56	65	26	65	26	63	26	57	24
1%	2	1.4	56	19	8	19	8	19	8	18	7
500		135.2	--	1670	671	1651	665	1481	608	981	420

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

		SITE INDEX 60		AGE 20		STEMS/ACRE 600					
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)					2 inches		4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	13	0.7	38	--	--	--	--	--	--	--	--
4	51	4.4	39	--	--	--	--	--	--	--	--
5	99	13.5	42	146	58	140	56	95	40	--	--
6	133	26.1	46	306	122	300	121	245	101	72	34
7	131	35.1	51	445	179	439	178	390	161	232	102
8	96	33.5	54	447	181	443	180	410	169	305	131
9	51	22.6	55	308	125	306	124	290	119	240	101
10	19	10.5	56	144	58	144	58	138	56	121	51
11	5	3.3	56	45	18	45	18	44	18	40	16
12	1	0.8	56	10	4	10	4	10	4	9	4
600		150.4	--	1851	745	1828	738	1622	668	1019	439

		SITE INDEX 60		AGE 25		STEMS/ACRE 300					
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	w acre (no.)					2 inches		4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	5	0.5	43	--	--	--	--	--	--	--	--
5	21	2.8	44	32	13	31	12	21	9	--	--
6	38	7.5	47	90	36	88	35	72	30	21	10
7	52	13.8	51	177	71	175	71	155	64	92	41
8	56	19.5	55	268	109	265	108	245	102	183	79
9	50	21.9	59	319	130	317	130	300	125	248	106
10	37	20.0	62	303	124	302	124	290	121	254	108
11	23	15.0	63	232	95	231	95	224	93	204	86
12	12	9.2	64	143	59	143	59	140	58	130	55
13	5	4.6	65	72	30	72	30	71	29	67	28
14	2	1.9	65	29	12	29	12	29	12	28	12
15	1	0.8	65	13	5	13	5	12	5	12	5
300		117.6	--	1677	684	1665	681	1560	646	1239	529

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 60 AGE 25 STEMS/ACRE 400											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	10	0.9	43	--	--	--	--	--	--	--	--
5	34	4.6	45	52	21	50	20	34	14	--	--
6	58	11.4	48	139	56	136	55	111	46	32	16
7	74	19.8	52	260	105	257	104	228	94	136	60
8	75	26.3	56	370	151	367	150	340	141	253	110
9	63	27.8	60	411	169	409	168	388	161	320	137
10	43	23.5	62	360	148	359	148	345	144	303	129
11	24	16.2	64	251	103	250	103	243	101	221	94
12	11	9.0	64	140	58	140	57	137	57	127	53
13	4	4.0	65	63	26	62	26	61	25	58	24
14	2	1.9	65	29	12	29	12	29	12	28	11
	400	145.4	--	2076	849	2060	844	1916	796	1478	634

SITE INDEX 60 AGE 25 STEMS/ACRE 500											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	1	0.0	43	--	--	--	--	--	--	--	--
4	17	1.5	43	--	--	--	--	--	--	--	--
5	49	6.7	45	78	31	75	30	51	21	--	--
6	81	15.9	49	196	79	192	78	157	66	46	22
7	98	26.2	53	351	143	346	141	307	128	183	81
8	94	32.9	58	472	193	468	192	433	181	322	140
9	74	32.5	61	489	201	486	201	461	193	381	164
10	47	25.6	63	395	163	394	162	379	158	332	142
11	24	16.0	64	251	103	250	103	243	101	221	93
12	10	8.0	65	125	52	125	51	122	51	114	48
13	3	3.2	65	50	20	49	20	49	20	46	19
14	1	1.2	65	19	8	19	8	19	8	18	8
	500	169.8	--	2426	993	2406	988	2221	925	1663	717

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 60 AGE 30 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
5	10	1.4	47	17	7	16	7	11	5	--	--
6	29	5.6	49	70	28	69	28	56	23	16	8
7	44	11.6	53	155	63	153	62	136	57	81	36
8	51	17.8	58	255	105	253	104	234	98	174	76
9	50	22.0	62	337	139	336	139	318	133	263	113
10	42	23.0	65	370	154	368	153	355	149	311	133
11	31	20.6	68	343	143	342	143	332	140	302	129
12	21	16.1	70	273	114	272	114	267	112	248	106
13	12	11.0	71	189	78	188	78	185	77	175	74
14	6	6.7	71	114	47	114	47	112	47	107	45
15	3	3.5	71	61	25	60	25	60	25	58	24
16	1	1.7	72	28	12	28	12	28	12	27	11
17	1	1.0	72	17	7	17	7	17	7	17	7
	300	142.1	--	2229	922	2218	919	2111	884	1779	763

SITE INDEX 60 AGE 30 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
4	1	0.1	47	--	--	--	--	--	--	--	--
5	19	2.6	47	31	13	30	12	20	9	--	--
6	44	8.7	50	111	45	108	44	88	37	26	13
7	63	16.9	54	231	94	228	93	202	84	121	54
8	71	24.6	59	362	149	359	148	332	139	247	108
9	66	29.1	63	455	189	452	188	429	180	354	153
10	53	28.9	66	473	197	471	196	453	191	397	171
11	37	24.6	69	413	172	412	172	401	169	364	156
12	23	18.1	70	309	129	308	129	302	127	281	120
13	13	11.6	71	199	83	199	83	196	82	185	78
14	6	6.5	71	112	47	112	46	110	46	106	45
15	3	3.2	72	55	23	55	23	54	23	52	22
16	1	2.0	72	35	14	35	14	35	14	34	14
	400	177.1	--	2786	1153	2769	1149	2622	1100	2166	933

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 70 AGE 10 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				<u>green dry</u>		<u>2 inches</u>		<u>4 inches</u>		<u>6 inches</u>	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.0	30	--	--	--	--	--	--	--	--
3	10	0.5	31	--	--	--	--	--	--	--	--
4	27	2.4	32	--	--	--	--	--	--	--	--
5	50	6.8	33	58	22	56	21	38	15	--	--
6	68	13.4	36	120	46	118	45	96	38	28	13
7	68	18.1	38	171	66	169	65	150	59	89	37
8	47	16.3	40	159	61	158	61	146	57	109	44
9	21	9.1	41	91	35	90	35	85	33	71	28
10	5	2.9	41	29	11	29	11	28	11	25	10
11	1	0.5	41	5	2	5	2	5	2	5	2
	300	70.2	--	633	242	625	240	548	215	326	134

SITE INDEX 70 AGE 10 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				<u>green dry</u>		<u>2 inches</u>		<u>4 inches</u>		<u>6 inches</u>	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	4	0.1	30	--	--	--	--	--	--	--	--
3	19	0.9	31	--	--	--	--	--	--	--	--
4	47	4.1	32	--	--	--	--	--	--	--	--
5	80	10.9	34	94	36	91	35	61	25	--	--
6	99	19.4	37	179	68	175	67	143	57	42	19
7	85	22.7	39	220	84	217	84	192	76	115	48
8	47	16.5	41	164	63	162	63	150	59	112	46
9	15	6.8	41	68	26	68	26	64	25	53	21
10	3	1.6	41	16	6	16	6	15	6	13	5
	400	83.1	--	740	284	729	281	626	247	335	139

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 70 AGE 10 STEMS/ACRE 500

D.b.h. (in)	Stems per acre (no.)	Basal area (ft')	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	30	--	--	--	--	--	--	--	--
2	8	0.2	30	--	--	--	--	--	--	--	--
3	31	1.5	31	--	--	--	--	--	--	--	--
4	73	6.3	32	--	--	--	--	--	--	--	--
5	116	15.9	35	140	54	135	52	91	37	--	--
6	129	25.2	38	238	91	233	90	191	76	56	26
7	93	24.8	40	245	94	242	94	214	85	128	54
8	40	14.0	41	140	54	139	54	129	51	Y6	39
9	9	4.1	41	41	16	41	16	38	15	32	13
10	1	0.6	41	6	2	6	2	5	2	5	2
500		92.6	--	810	311	796	307	669	265	316	133

SITE INDEX 70 AGE 10 STEMS/ACRE 600

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	30	--	--	--	--	--	--	--	--
2	13	0.3	31	--	--	--	--	--	--	--	--
3	48	2.3	31	--	--	--	--	--	--	--	--
4	106	9.3	33	--	--	--	--	--	--	--	--
5	157	21.4	36	194	74	187	72	126	51	--	--
6	152	29.9	39	289	111	283	110	231	92	68	31
7	90	24.0	40	240	93	238	92	211	84	126	53
8	29	10.1	41	101	39	101	39	93	37	69	28
9	5	2.0	41	20	8	20	8	19	7	16	6
600		99.3	--	845	326	828	321	680	271	278	119

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 70 AGE 10 STEMS/ACRE 700											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green	dry	2 inches		4 inches		6 inches	
	o.b.			i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	
1	2	0.0	30	--	--	--	--	--	--	--	--
2	19	0.4	31	--	--	--	--	--	--	--	--
3	70	3.4	31	--	--	--	--	--	--	--	--
4	148	12.9	34	--	--	--	--	--	--	--	--
5	199	27.2	37	252	97	243	95	164	67	--	--
6	166	32.6	39	321	124	314	122	257	103	75	35
7	77	20.6	41	208	81	205	80	182	72	109	46
8	17	6.0	41	61	23	60	23	56	22	42	17
9	2	0.7	41	7	3	7	3	7	3	6	2
700 103.8 -- 848 328 830 323 666 267 231 100											

SITE INDEX 70 AGE 10 STEMS/ACRE 800											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green	dry	2 inches		4 inches		6 inches	
	o.b.			i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	
1	3	0.0	30	--	--	--	--	--	--	--	--
2	29	0.6	31	--	--	--	--	--	--	--	--
3	100	4.9	32	--	--	--	--	--	--	--	--
4	197	17.2	34	--	--	--	--	--	--	--	--
5	239	32.6	37	310	120	299	117	202	82	--	--
6	166	32.5	40	325	126	319	125	261	105	76	35
7	58	15.4	41	157	61	155	60	137	55	82	35
8	9	3.1	41	31	12	31	12	29	11	21	9
	800	106.3	--	823	319	803	313	628	253	179	79

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 70 AGE 15 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	1	0.0	39	--	--	--	--	--	--	--	--
3	5	0.3	39	--	--	--	--	--	--	--	--
4	17	1.5	40	--	--	--	--	--	--	--	--
5	36	4.9	41	51	20	49	20	33	14	--	--
6	54	10.6	44	118	47	116	46	94	39	28	13
7	63	16.9	48	200	80	198	79	176	72	105	45
8	57	20.0	50	250	100	248	99	229	93	170	72
9	39	17.2	53	223	89	221	89	210	85	173	73
10	19	10.5	54	138	55	137	55	132	54	116	48
11	7	4.4	54	58	23	58	23	56	23	51	21
12	2	1.4	54	18	7	18	7	18	7	17	7
300		87.6	--	1056	421	1045	418	948	386	659	279

SITE INDEX 70 AGE 15 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	1	0.0	39	--	--	--	--	--	--	--	--
3	10	0.5	39	--	--	--	--	--	--	--	--
4	29	2.5	40	--	--	--	--	--	--	--	--
5	56	7.7	42	82	33	79	32	54	22	--	--
6	80	15.8	45	180	71	176	70	144	59	42	20
7	87	23.3	49	283	113	279	112	248	102	148	64
8	71	24.8	51	316	127	313	126	290	118	215	92
9	42	18.6	53	243	98	242	97	229	93	189	80
10	17	9.5	54	125	50	125	50	120	49	105	44
11	5	3.2	54	41	17	41	17	40	16	36	15
12	1	0.7	54	9	4	9	4	9	4	8	3
400		106.5	--	1280	512	1265	508	1133	463	745	318

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds) --Contd.

SITE INDEX 70 AGE 15 STEMS/ACRE 500											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	w -			green dry		2 inches		4 inches		6 inches	
	per acre (no.)			o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.1	39								
3	16	0.8	39	--	--	--	--	--	--	--	--
4	44	3.9	40	--	--	--	--	--	--	--	--
5	81	11.1	43	121	48	117	47	79	33	--	--
6	109	21.5	46	250	100	245	98	200	83	59	28
7	109	29.2	50	363	145	358	144	318	131	189	83
8	80	27.8	52	360	145	357	144	330	135	246	105
9	41	17.9	54	236	95	235	95	223	91	184	77
10	14	7.5	54	99	40	99	40	95	39	83	35
11	3	2.2	54	29	12	29	12	28	11	25	10
500	121.9	--	1458	585	1440	579	1273	523	786	338	

SITE INDEX 70 AGE 15 STEMS/ACRE 600											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	4	0.1	39	--	--	--	--	--	--	--	--
3	24	1.2	39	--	--	--	--	--	--	--	--
4	63	5.5	41	--	--	--	--	--	--	--	--
5	111	15.1	43	168	67	162	65	110	46	--	--
6	140	27.5	47	328	131	321	129	262	109	77	37
7	128	34.3	50	433	174	428	173	379	157	226	99
8	83	28.8	53	377	152	374	151	346	142	258	110
9	36	15.7	54	208	84	207	84	196	80	162	68
10	10	5.3	54	70	28	70	28	67	27	59	24
11	2	1.1	54	15	6	15	6	14	6	13	5
600	134.6	--	1599	642	1576	636	1375	566	794	344	

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 70 AGE 15 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	6	0.1	39	--	--	--	--	--	--	--	--
3	34	1.7	39	--	--	--	--	--	--	--	--
4	87	7.6	41	--	--	--	--	--	--	--	--
5	145	19.8	44	223	89	216	87	146	61	--	--
6	171	33.6	48	408	164	400	161	327	136	96	46
7	142	37.9	51	487	197	481	195	427	177	255	112
8	80	27.8	53	367	148	364	148	337	139	251	107
9	28	12.6	54	167	67	166	67	158	64	130	55
10	6	3.3	54	44	18	43	17	42	17	37	15
11	1	0.5	54	6	3	6	3	6	3	6	2
700 144.8 -- 1703 686 1677 678 1442 596 773 338											

SITE INDEX 70 AGE 15 STEMS/ACRE 800											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	9	0.2	39	--	--	--	--	--	--	--	--
3	47	2.3	39	--	--	--	--	--	--	--	--
4	115	10.1	41	--	--	--	--	--	--	--	--
5	183	24.9	45	287	115	277	112	187	79	--	--
6	200	39.3	49	487	196	478	193	390	163	114	55
7	149	39.9	52	519	210	513	208	455	189	271	120
8	72	25.0	54	333	135	330	134	305	126	227	98
9	21	9.2	54	122	49	121	49	115	47	95	40
10	4	2.0	54	26	10	26	10	25	10	22	9
800 152.8 -- 1775 716 1745 707 1478 613 730 321											

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

STTE INDEX 70 AGE 20 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	2	0.1	46	--	--	--	--	--	--	--	--
4	10	0.9	46	--	--	--	--	--	--	--	--
5	25	3.4	48	42	17	40	16	27	12	--	--
6	41	8.1	51	104	42	102	42	84	35	24	12
7	54	14.3	54	196	80	193	79	171	72	102	45
8	56	19.6	58	285	117	283	116	261	109	195	85
9	48	21.3	61	323	133	322	133	305	127	252	108
10	33	18.2	64	285	118	284	117	273	114	239	102
11	19	12.3	65	194	80	194	80	188	78	171	73
12	8	6.4	66	102	42	101	42	99	41	92	39
13	3	2.5	66	40	17	40	17	40	16	37	16
14	1	0.9	66	15	6	15	6	14	6	14	6
	300	108.1	--	1586	652	1574	648	1463	611	1127	486

SITE INDEX 70 AGE 20 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	4	0.2	46	--	--	--	--	--	--	--	--
4	18	1.5	46	--	--	--	--	--	--	--	--
5	39	5.4	48	67	27	64	26	43	19	--	--
6	62	12.2	52	160	65	156	64	128	54	37	18
7	76	20.4	56	285	117	281	116	249	105	149	66
8	75	26.3	59	389	160	386	159	357	150	265	116
9	60	26.4	62	407	168	405	168	384	161	317	137
10	38	20.6	64	325	135	324	134	312	130	273	117
11	19	12.4	65	197	81	196	81	191	80	173	74
12	7	5.6	66	90	37	89	37	87	36	81	34
13	2	1.9	66	30	12	30	12	30	12	28	12
14	1	0.6	66	9	4	9	4	9	4	8	3
	400	133.3	--	1958	806	1941	801	1789	750	1333	577

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 70			AGE 20		STEMS/ACRE 500						
D.b.h. (in)	Stems per acre (no.)	Basal area (ft')	Avg. ht. (ft)	Total wgt.		Merchantable 2 inches		weight to top-- 4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	6	0.3	46	--	--	--	--	--	--	--	--
4	27	2.3	47	--	--	--	--	--	--	--	--
5	57	7.7	49	97	40	94	38	63	27	--	--
6	86	16.8	52	224	91	219	90	179	76	52	26
7	100	26.7	57	381	156	376	155	333	140	199	89
8	93	32.4	60	488	201	484	200	447	188	333	146
9	68	30.1	63	470	195	467	194	443	186	366	158
10	39	21.3	65	339	141	338	140	325	136	285	122
11	17	11.4	65	182	75	181	75	176	73	160	68
12	6	4.5	66	71	29	71	29	70	29	65	27
13	2	1.5	66	24	10	24	10	24	10	23	9
	500	155.0	--	2276	939	2255	932	2061	866	1482	646

SITE INDEX 70			AGE 20		STEMS/ACRE 600						
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable 2 inches		weight to top-- 4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	10	0.5	46	--	--	--	--	--	--	--	--
4	38	3.3	47	--	--	--	--	--	--	--	--
5	77	10.5	49	134	55	129	53	87	37	--	--
6	112	21.9	53	297	122	291	120	238	101	70	34
7	124	33.2	58	481	198	475	196	421	178	251	113
8	108	37.7	61	576	239	571	237	528	223	393	173
9	73	32.3	64	509	211	506	211	480	202	397	172
10	38	20.6	65	330	137	329	137	316	133	277	119
11	15	9.7	66	155	64	155	64	151	63	137	58
12	4	3.3	66	52	22	52	22	51	21	48	20
13	1	0.9	66	14	6	14	6	14	6	13	6
	600	173.9	--	2550	1053	2524	1045	2287	964	1586	694

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 70 AGE 25 STEMS/ACRE 300

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
4	4	0.4	51	--	--	--	--	--	--	--	--
5	17	2.3	52	31	13	30	12	20	9	--	--
6	32	6.3	55	88	36	86	36	70	30	21	10
7	45	11.9	59	177	73	175	73	155	66	92	42
8	51	17.8	63	281	117	279	116	258	109	192	85
9	49	21.7	67	362	152	360	151	341	145	282	123
10	41	22.1	70	384	161	382	161	368	156	323	140
11	29	19.0	72	338	142	337	142	327	139	298	129
12	18	13.8	74	248	104	248	104	242	103	225	97
13	9	8.4	75	153	64	152	64	150	63	142	61
14	4	4.4	75	79	33	79	33	77	33	74	32
15	2	1.9	75	34	14	34	14	34	14	32	14
16	1	0.9	75	17	7	16	7	16	7	16	7
	300	130.9	--	2191	917	2178	913	2059	874	1696	739

SITE INDEX 70 AGE 25 STEMS/ACRE 400

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
4	8	0.7	51	--	--	--	--	--	--	--	--
5	27	3.7	53	50	21	49	20	33	14	--	--
6	48	9.5	56	135	56	132	55	108	46	32	16
7	64	17.2	60	261	108	257	107	228	97	136	62
8	70	24.5	64	395	165	392	164	363	154	270	120
9	64	28.5	68	483	203	480	202	455	194	376	165
10	50	27.4	71	482	203	480	203	462	197	405	177
11	33	22.1	73	396	167	395	167	384	163	349	151
12	19	14.8	74	269	113	268	113	263	111	244	105
13	9	8.4	75	152	64	151	64	149	63	141	60
14	4	3.9	75	71	30	71	30	70	29	67	28
15	2	2.1	75	38	16	38	16	37	16	36	15
	400	162.8	--	2731	1145	2713	1140	2551	1085	2055	899

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 70 AGE 25 STEMS/ACRE 500

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	1	0.0	51	--	--	--	--	--	--	--	--
4	14	1.2	51	--	--	--	--	--	--	--	--
5	40	5.4	53	74	31	71	30	48	21	--	--
6	67	13.1	57	189	78	186	77	152	65	44	22
7	86	22.9	61	353	147	349	146	309	132	184	84
8	90	31.3	65	513	215	509	214	471	201	350	156
9	78	34.7	69	596	251	593	250	562	240	464	204
10	58	31.6	72	561	237	558	236	537	229	471	206
11	36	23.8	74	430	182	429	181	417	177	379	164
12	19	14.9	75	270	114	270	114	264	112	245	106
13	8	7.7	75	140	59	139	59	137	58	130	55
14	3	3.3	75	59	25	59	25	58	25	56	24
15	1	1.5	75	27	11	27	11	27	11	26	11
500		191.3	--	3213	1349	3189	1342	2981	1271	2349	1031

SITE INDEX 70 AGE 30 STEMS/ACRE 300

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
5	8	1.1	56	16	7	16	7	11	5	--	--
6	24	4.7	58	69	29	68	28	55	24	16	8
7	37	10.0	61	155	65	153	64	136	58	81	37
8	45	15.9	66	262	110	260	109	240	103	179	80
9	47	20.7	70	363	154	361	153	342	147	283	125
10	42	23.2	74	426	181	425	181	409	175	358	157
11	34	22.7	77	432	184	430	183	418	180	380	166
12	25	19.6	80	382	163	381	163	373	160	347	151
13	16	15.1	81	298	127	298	127	293	125	277	120
14	10	10.5	82	207	88	207	88	204	87	195	84
15	5	6.5	82	129	55	128	55	127	54	123	53
16	3	3.6	83	72	30	72	30	71	30	69	30
17	1	1.8	83	36	15	36	15	36	15	35	15
18	1	1.3	83	25	11	25	11	25	11	25	10
300		156.7	--	2873	1218	2859	1214	2739	1174	2367	1036

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 70			AGE 30		STEMS/ACRE 400						
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	1	0.1	55	--	--	--	--	--	--	--	--
5	15	2.1	56	30	13	29	12	20	9	--	--
6	37	7.3	58	109	45	106	45	87	37	25	13
7	55	14.6	62	230	96	227	95	201	86	120	55
8	64	22.2	67	374	157	370	156	343	147	255	114
9	63	27.9	72	497	211	495	210	469	202	387	172
10	55	30.0	75	560	238	557	238	536	231	470	207
11	43	28.1	78	542	231	540	231	525	226	477	209
12	30	23.3	80	456	195	455	195	446	192	415	181
13	19	17.1	81	338	144	338	144	332	143	314	137
14	10	11.2	82	222	95	222	95	219	94	210	91
15	5	6.6	82	130	55	130	55	129	55	124	53
16	2	3.4	83	68	29	68	29	67	29	66	28
17	1	1.6	83	32	14	32	14	32	13	31	13
18	1	1.0	83	20	8	20	8	20	8	20	8
	400	196.4	--	3609	1532	3591	1527	3425	1471	2913	1280

SITE INDEX 80			AGE 10		STEMS/ACRE 300						
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.0	38	--	--	--	--	--	--	--	--
3	8	0.4	38	--	--	--	--	--	--	--	--
4	21	1.8	39	--	--	--	--	--	--	--	--
5	40	5.4	40	56	22	54	21	36	15	--	--
6	58	11.5	42	122	48	120	47	98	40	29	13
7	66	17.6	45	196	77	194	77	172	69	102	44
8	55	19.4	47	223	88	221	87	205	82	152	64
9	33	14.6	48	171	68	170	67	161	65	133	55
10	13	7.1	49	84	33	84	33	80	32	70	29
11	4	2.4	49	28	11	28	11	27	11	25	10
	300	80.3	--	880	347	870	344	779	314	512	215

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds) -Contd.

		SITE INDEX	80	AGE 10		STEMS/ACRE		400			
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green dry	green dry	green dry	green dry	green dry	green dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	3	0.1	38	--	--	---		--	--	--	--
3	14	0.7	38	--	--	---	--	--	--	--	--
4	35	3.0	39	--	--	--	--	--	--	--	--
5	63	8.6	41	90	35	87	34	59	24	---	---
6	87	17.1	43	185	73	182	72	148	61	43	20
7	89	23.8	45	270	107	266	106	236	96	141	61
8	65	22.7	47	265	105	263	104	243	98	181	76
9	32	14.1	48	166	66	165	65	157	63	130	53
10	10	5.3	49	62	24	62	24	60	24	52	21
11	2	1.2	49	14	5	14	5	13	5	12	5
400		96.6	--	1053	416	1039	412	917	370	560	237

SITE INDEX 80 AGE 10 STEMS/ACRE 500											
D.b.h. (in)	Stems w - acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
						2 inches		4 inches		6 inches	
				green dry		green dry		green dry		green dry	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	5	0.1	38	--	--	--	--	--	--	--	--
3	22	1.1	38	--	--	--	--	--	--	--	--
4	53	4.7	39	--	--	--	--	--	--	--	--
5	92	12.6	41	133	52	128	51	86	36	--	--
6	118	23.1	44	256	101	251	100	205	84	60	28
7	108	28.9	46	333	132	329	131	292	119	174	75
8	67	23.6	48	278	110	276	110	255	103	190	80
9	26	11.7	48	139	55	138	55	131	52	108	45
10	6	3.2	49	38	15	38	15	36	15	32	13
11	1	0.5	49	5	2	5	2	5	2	5	2
500		109.4	--	1182	467	1165	463	1010	410	568	243

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 80 AGE 10 STEMS/ACRE 600											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	w acre (no.)			green	dry	2 inches		4 inches		6 inches	
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	38	--	--	--	--	--	--	--	--
2	9	0.2	38	--	--	--	--	--	--	--	--
3	33	1.6	38	--	--	--	--	--	--	--	--
4	77	6.7	40	--	--	--	--	--	--	--	--
5	126	17.2	42	185	73	178	71	120	50	--	--
6	149	29.2	45	329	130	322	128	263	108	77	37
7	121	32.3	47	377	150	372	148	330	134	197	85
8	63	21.9	48	260	103	258	103	239	97	178	75
9	19	8.4	49	100	39	99	39	94	38	78	32
10	3	1.7	49	21	8	21	8	20	8	17	7
	600	119.3	--	1271	504	1251	498	1066	435	547	236

SITE INDEX 80 AGE 10 STEMS/ACRE 700											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	38	--	—	—	—	--	—	--	--
2	13	0.3	38	--	--	--	--	--	--	--	--
3	47	2.3	39	--	—	—	--	—	--	--	--
4	106	9.3	40	--	—	—	--	--	--	--	--
5	165	22.5	43	245	97	236	94	160	67	--	--
6	177	34.8	45	398	158	390	156	319	131	93	44
7	125	33.3	47	394	157	389	155	345	141	206	89
8	52	18.3	48	219	87	217	86	200	81	149	63
9	12	5.2	49	62	24	61	24	58	23	48	20
10	1	0.7	49	8	3	8	3	8	3	7	3
	700	126.6	--	1325	526	1302	520	1090	446	503	219

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 80				AGE 10		STEMS/ACRE 800					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
1	2	0.0	38	-	-	-	-	-	-	-	-
2	19	0.4	38	--	--	--	--	--	--	--	--
3	66	3.2	39	--	--	--	--	--	--	--	--
4	142	12.4	41	--	--	--	--	--	--	--	--
5	207	28.2	43	312	124	301	121	204	85	--	--
6	200	39.2	46	456	182	447	179	365	151	107	51
7	119	31.7	48	379	151	375	150	332	136	198	86
8	39	13.6	49	164	65	162	65	150	61	112	47
9	7	2.9	49	35	14	35	14	33	13	27	11
800		131.8	--	1346	536	1319	528	1083	446	444	195

SITE INDEX 80				AGE 15		STEMS/ACRE 300					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
3	4	0.2	47	--	--	--	--	--	--	--	--
4	14	1.2	47	--	--	--	--	--	--	--	--
5	29	4.0	49	50	20	48	20	33	14	--	--
6	46	9.0	51	118	48	115	47	94	40	28	13
7	58	15.4	54	211	86	208	85	185	77	110	49
8	58	20.1	58	289	118	287	118	265	111	197	86
9	46	20.1	60	299	123	297	122	281	117	232	100
10	28	15.0	62	227	93	226	93	218	90	191	81
11	12	8.2	62	124	51	124	51	121	50	110	46
12	4	3.1	63	48	19	48	19	47	19	43	18
13	1	0.9	63	14	6	14	6	14	6	13	6
300		97.4	--	1380	565	1368	561	1257	524	924	399

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 80 AGE 15 STEMS/ACRE 400

D.b.h. (in)	Stems w acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	1	0.0	46	—	—	—	—	—	—	—	—
3	8	0.4	47	—	—	—	—	—	—	—	—
4	23	2.0	47	—	—	—	—	—	—	—	—
5	46	6.3	49	79	32	77	31	52	22	—	—
6	69	13.5	52	179	73	175	72	143	61	42	20
7	81	21.7	55	303	124	299	123	265	111	158	71
8	75	26.3	58	384	158	381	157	352	147	262	114
9	54	23.8	61	357	147	355	146	336	140	278	119
10	29	15.6	62	237	98	236	97	228	95	199	85
11	11	7.2	63	110	45	110	45	106	44	97	41
12	3	2.3	63	34	14	34	14	33	14	31	13
13	1	0.5	63	8	3	8	3	8	3	7	3
400		119.6	--	1691	694	1675	689	1524	637	1074	466

SITE INDEX 80 AGE 15 STEMS/ACRE 500

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.0	46	—	—	—	—	—	—	—	—
3	12	0.6	47	—	—	—	—	—	—	—	—
4	35	3.0	48	—	—	—	—	—	—	—	—
5	66	9.0	50	115	47	111	46	75	32	—	—
6	95	18.6	53	250	102	245	101	200	85	59	29
7	105	28.1	56	399	164	394	162	350	147	209	93
8	90	31.5	59	466	192	462	191	427	179	318	139
9	58	25.5	61	387	160	385	159	365	152	301	130
10	27	14.6	62	223	92	222	92	214	89	187	80
11	9	5.6	63	86	35	86	35	84	35	76	32
12	2	1.6	63	25	10	25	10	24	10	22	9
500		138.2	--	1951	802	1930	795	1738	729	1172	512

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 80 AGE 15 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	3	0.1	46	--	--	--	--	--	--	--	--
3	18	0.9	47	--	--	--	--	--	--	--	--
4	49	4.3	48	--	--	--	--	--	--	--	--
5	90	12.2	50	159	65	153	63	104	45	--	--
6	123	24.1	54	330	135	323	133	264	112	77	38
7	128	34.3	57	495	204	489	202	433	183	259	116
8	101	35.2	60	528	218	523	217	484	204	360	158
9	58	25.5	62	389	160	387	160	366	153	303	131
10	23	12.5	62	192	79	191	79	184	77	161	69
11	6	4.0	63	61	25	61	25	59	24	54	23
12	1	0.9	63	13	5	13	5	13	5	12	5
600		154.0	--	2166	892	2141	884	1908	803	1226	538

SITE INDEX 80 AGE 15 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2				--	--	--	--	--	--	--	--
3	26.5	0.1	46.47	--	--	--	--	--	--	--	--
4	67	5.8	48	--	--	--	--	--	--	--	--
5	117	16.0	51	210	86	203	84	137	59	--	--
6	153	30.1	55	417	172	409	169	334	142	98	48
7	150	40.0	58	585	241	578	239	512	217	305	3.37
8	107	37.3	61	565	234	561	232	519	218	386	169
9	54	23.8	62	365	151	363	150	344	144	285	123
10	18	9.9	63	152	63	151	62	146	61	128	54
11	4	2.6	63	39	16	39	16	38	16	34	14
12	1	0.4	63	6	3	6	3	6	3	6	2
700		167.2	--	2340	965	2310	956	2036	860	1241	549

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 80				AGE 15		STEMS/ACRE 800								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--								
				green dry		2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
2	7	0.1	46	--	--	--	--	--	--	--	--			
3	35	1.7	47	--	--	--	--	--	--	--	--			
4	87	7.6	49	--	--	--	--	--	--	--	--			
5	148	20.2	52	269	110	260	108	176	76	--	--			
6	184	36.2	55	510	210	500	207	408	174	119	59			
7	167	44.7	59	663	274	655	272	581	246	346	156			
8	108	37.7	61	576	238	571	237	528	223	393	173			
9	47	20.9	62	322	133	320	133	304	127	251	108			
10	13	7.2	63	111	46	111	46	107	44	94	40			
11	2	1.6	63	25	10	25	10	24	10	22	9			
				800	178.1	--	2476	1022	2441	1012	2127	901	1225	545

SITE INDEX 80				AGE 20		STEMS/ACRE 300								
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--								
				green dry		2 inches		4 inches		6 inches				
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.			
3	1	0.1	54	--	--	--	--	--	--	--	--			
4	9	0.7	55	--	--	--	--	--	--	--	--			
5	21	2.8	56	41	17	40	17	27	12	--	--			
6	35	7.0	59	104	43	102	43	83	36	24	12			
7	48	12.8	62	201	84	198	83	176	75	105	48			
8	53	18.6	66	307	129	304	128	281	120	209	93			
9	49	21.8	69	377	159	374	158	355	152	293	129			
10	38	20.9	72	371	157	369	156	356	152	312	136			
11	24	16.1	74	292	123	291	123	283	121	257	112			
12	13	10.0	75	183	77	182	77	179	76	166	72			
13	5	5.0	75	90	38	90	38	89	37	84	36			
14	2	1.9	75	35	15	35	15	34	14	33	14			
15	1	0.7	75	13	5	13	5	13	5	12	5			
				300	118.4	--	2013	847	1999	843	1875	800	1495	657

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 80 AGE 20 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
3	3	0.1	54	--	--	--	--	--	--	--	--
4	14	1.3	55	--	--	--	--	--	--	--	--
5	33	4.5	56	65	27	63	26	43	19	--	--
6	53	10.4	59	158	66	155	65	127	55	37	19
7	69	18.3	63	293	123	289	122	256	110	153	70
8	73	25.3	67	426	179	422	178	391	168	291	130
9	64	28.1	70	492	208	489	207	463	198	383	169
10	46	25.0	73	449	190	447	189	430	184	377	165
11	27	17.7	74	323	137	322	136	313	134	285	124
12	13	10.0	75	182	77	182	77	178	76	165	71
13	5	4.4	75	80	33	79	33	78	33	74	32
14	2	1.9	75	34	14	34	14	33	14	32	14
400 147.0 -- 2501 1054 2482 1048 2312 990 1796 792											

SITE INDEX 80 AGE 20 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
3	5	0.3	54	--	--	--	--	--	--	--	--
4	22	1.9	55	--	--	--	--	--	--	--	--
5	47	6.4	57	94	39	91	38	62	27	--	--
6	73	14.4	60	221	93	217	91	177	77	52	26
7	91	24.3	64	394	165	389	164	345	148	206	94
8	92	32.0	68	546	230	541	229	501	215	372	167
9	76	33.4	71	592	251	589	250	558	240	461	204
10	51	27.7	73	501	212	499	212	480	206	421	184
11	27	18.0	74	329	139	328	139	319	136	290	126
12	12	9.1	75	166	70	166	70	162	69	151	65
13	4	3.5	75	64	27	64	27	63	27	59	25
14	1	1.2	75	23	9	23	9	22	9	21	9
500 172.1 -- 2931 1236 2906 1229 2689 1154 2034 901											

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 80 AGE 20 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable 2 inches		weight to top-- 4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	8	0.4	54	--	--	--	--	--	--	--	--
4	31	2.7	55	--	--	--	--	--	--	--	--
5	64	8.7	57	129	54	124	52	84	37	--	--
6	96	18.8	61	293	123	287	121	235	102	69	34
7	114	30.5	65	502	211	496	209	440	190	262	120
8	110	38.3	69	662	280	657	279	607	262	452	203
9	85	37.7	72	674	286	670	285	635	273	525	233
10	53	28.9	74	527	224	525	223	505	217	443	194
11	26	17.2	75	315	133	314	133	305	130	277	121
12	10	7.8	75	142	60	142	60	139	59	129	56
13	3	2.6	75	48	20	48	20	47	20	45	19
14	1	0.8	75	14	6	14	6	14	6	13	6
	600	194.2	--	3307	1397	3277	1388	3011	1295	2215	986

SITE INDEX 80 AGE 25 STEMS/ACRE 300											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable 2 inches		weight to top-- 4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	4	0.3	60	--	--	--	--	--	--	--	--
5	14	1.9	61	31	13	30	13	20	9	--	--
6	28	5.4	63	88	37	86	37	71	31	21	10
7	40	10.6	67	180	76	178	76	158	69	94	43
8	47	16.4	71	294	125	291	124	270	117	201	91
9	48	21.0	75	396	170	394	169	374	162	309	138
10	42	22.9	79	449	193	447	192	430	187	377	167
11	32	21.4	82	430	185	429	185	417	181	379	167
12	22	17.2	83	351	151	350	151	343	148	319	140
13	13	11.9	84	245	105	244	105	240	104	227	99
14	7	7.1	85	146	63	146	63	144	62	138	60
15	3	3.6	85	75	32	75	32	74	32	71	31
16	1	1.6	85	33	14	33	14	32	14	31	14
17	1	0.8	86	17	7	17	7	17	7	16	7
	300	142.1	--	2735	1171	2720	1167	2588	1122	2182	968

Continued

Table 27. --Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 80 AGE 25 STEMS/ACRE 400											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	w - acre [no.]			green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
4	7	0.6	60	--	--	--	--	--	--	--	--
5	23	3.1	61	50	21	48	21	33	15	--	--
6	42	8.2	64	135	57	132	56	108	47	32	16
7	57	15.3	68	265	112	261	111	232	101	138	64
8	65	22.8	72	416	177	412	176	381	166	284	128
9	64	28.1	76	537	230	534	230	506	220	418	188
10	54	29.2	80	580	249	577	249	556	242	487	217
11	39	25.9	82	526	227	524	226	510	221	463	205
12	25	19.6	84	404	174	403	174	394	171	367	161
13	14	12.7	85	263	113	262	113	258	112	244	107
14	7	7.0	85	145	62	145	62	143	62	137	60
15	3	3.3	85	68	29	68	29	68	29	65	28
16	1	1.9	85	38	16	38	16	38	16	37	16
	400	177.8	--	3427	1469	3407	1463	3226	1401	2672	1190

SITE INDEX 80 AGE 25 STEMS/ACRE 500											
D.b.h. (in)	Stems	Basal are2 (ft')	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
4	11	1.0	60	—	—	—	—	—	—	—	—
5	33	4.5	62	73	31	70	30	48	21	--	--
6	58	11.3	65	188	80	185	79	151	66	44	22
7	76	20.4	69	358	153	354	151	314	137	187	87
8	84	29.4	73	544	233	539	231	499	218	371	169
9	79	34.8	77	675	290	672	289	637	278	526	236
10	64	34.7	81	696	300	693	299	667	290	584	260
11	44	29.3	83	599	258	597	258	580	252	527	234
12	27	20.9	84	433	186	432	186	422	183	393	173
13	14	12.7	85	263	113	263	113	258	112	244	107
14	6	6.5	85	135	58	135	58	133	57	127	55
15	2	2.8	85	58	25	58	25	58	25	56	24
16	1	1.4	85	29	12	29	12	28	12	28	12
	500	209.8	--	4051	1739	4026	1732	3794	1652	3087	1380

Continued

Table 27.--Weight yields per acre for loblolly pine in Soil Group A
(in hundreds of pounds)--Contd.

SITE INDEX 80 AGE 30 STEMS/ACRE 300											
D.b.h. (in)	Stems	Basal	Avg.	Total wgt.		Merchantable weight to top--					
	per	area	ht.	green dry		2 inches		4 inches		6 inches	
	acre (no.)	(ft ²)	(ft)	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
5	7	1.0	65	17	7	16	7	11	5	--	--
6	21	4.1	66	70	30	69	29	56	25	16	8
7	33	8.9	70	158	67	156	67	138	61	83	38
8	41	14.4	74	271	116	269	116	249	109	185	84
9	44	19.5	79	386	167	384	166	364	159	301	136
10	42	22.8	83	473	205	471	204	453	198	397	178
11	36	23.5	87	505	220	503	219	489	215	444	199
12	28	21.7	89	477	208	476	208	466	204	434	193
13	20	18.1	91	403	175	402	175	395	173	374	166
14	13	13.6	92	306	133	305	133	301	132	288	127
15	8	9.3	93	210	91	210	91	207	90	200	88
16	4	5.8	93	131	57	131	57	130	56	126	55
17	2	3.3	94	74	32	74	32	74	32	72	31
18	1	1.7	94	38	17	38	17	38	17	37	16
19	1	1.3	94	29	13	29	13	29	12	28	12
	300	169.2	--	3549	1537	3534	1533	3401	1488	2986	1333

Table 28. --Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)

SITE INDEX 60 AGE 10 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.0	19	--	--	--	--	--	--	--	--
3	10	0.5	19	--	--	--	--	--	--	--	--
4	24	2.1	20	--	--	--	--	--	--	--	--
5	44	6.0	21	31	11	30	11	20	7	--	--
6	64	12.6	22	69	24	68	24	56	20	16	7
7	76	20.4	24	120	42	118	42	105	38	62	24
8	73	25.4	26	158	56	157	56	145	53	108	41
9	55	24.4	27	158	56	157	56	149	54	123	46
10	32	17.5	28	116	41	116	41	111	40	97	36
11	14	9.2	28	61	22	61	22	59	21	54	20
12	4	3.4	29	22	8	22	8	22	8	20	7
13	1	1.0	29	6	2	6	2	6	2	6	2
400 122.5 -- 743 263 736 262 674 243 487 183											

SITE INDEX 60 AGE 10 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	4	0.1	19	--	--	--	--	--	--	--	--
3	18	0.9	20	--	--	--	--	--	--	--	--
4	42	3.6	20	--	--	--	--	--	--	--	--
5	72	9.8	22	52	18	50	18	34	13	--	--
6	96	18.9	23	108	38	106	38	87	32	25	11
7	102	27.2	25	167	59	165	59	146	53	87	34
8	83	29.1	27	188	67	186	67	172	63	128	49
9	51	22.6	28	150	54	149	54	142	51	117	44
10	23	12.4	28	83	30	83	30	79	29	70	26
11	7	4.6	29	31	11	30	11	30	11	27	10
12	2	1.2	29	8	3	8	3	8	3	7	3
500 130.4 -- 787 280 778 278 698 254 462 175											

Continued

Table 28.--Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 60 AGE 10 STEMS/ACRE 600											
D.b.h. (in)	Stems	Basal	Avg.	Total-		Merchantable weight to top--					
	per	area	ht.	green	dry	2 inches		4 inches		6 inches	
	acre	(ft ²)	(ft)	o.b.	i.b.	green	dry	green	dry	green	dry
	(no.)					o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	19	--	--	--	--	--	--	--	--
2	8	0.2	19	--	--	--	--	--	--	--	--
3	31	1.5	20	--	--	--	--	--	--	--	--
4	67	5.9	21	--	--	--	--	--	--	--	--
5	108	14.7	22	81	29	78	28	53	20	--	--
6	131	25.7	24	1.53	55	150	54	123	45	36	15
7	120	32.2	26	205	73	202	73	180	66	107	42
8	81	28.3	28	188	67	186	67	172	63	128	49
9	38	17.0	28	114	41	114	41	108	39	89	33
10	12	6.6	29	44	16	44	16	42	15	37	14
11	3	1.8	29	12	4	12	4	11	4	10	4
	600	133.7	--	798	285	787	282	689	253	408	157

SITE INDEX 60 AGE 10 STEMS/ACRE 700											
D.b.h. (in)	Stems	Basal	Avg.	Total wgt.		Merchantable weight to top--					
	per	area	ht.	green	dry	2 inches		4 inches		6 inches	
	acre	(ft ²)	(ft)	o.b.	i.b.	green	dry	green	dry	green	dry
	(no.)					o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	19	--	--	--	--	--	--	--	--
2	15	0.3	19	--	--	--	--	--	--	--	--
3	50	2.4	20	--	--	--	--	--	--	--	--
4	102	8.9	21	--	--	--	--	--	--	--	--
5	150	20.5	23	118	42	114	41	77	29		
6	162	31.9	25	198	71	194	70	159	59	46	20
7	126	33.5	27	221	79	218	79	193	71	115	45
8	66	23.2	28	156	56	155	56	144	53	107	41
9	23	10.0	28	68	24	67	24	64	23	53	20
10	5	2.5	29	17	6	17	6	16	6	14	5
11	1	0.4	29	2	1	2	1	2	1	2	1
	700	133.6	--	780	280	768	277	655	242	337	132

Continued

Table 28. --Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 60 AGE 15 STEMS/ACRE 400

D.b.h. (in)	Stems per acre (no.)	Basal area (ft')	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	1	0.0	29	--	--	--	--	--	--	--	--
4	9	0.8	29	--	--	--	--	--	--	--	--
5	28	3.9	30	29	11	28	10	19	7	--	--
6	57	11.2	32	88	33	87	33	71	27	21	9
7	83	22.3	35	191	72	188	71	167	64	100	41
8	91	31.7	38	294	112	292	111	270	104	201	81
9	72	31.9	40	313	120	311	119	295	115	244	97
10	40	21.8	42	221	85	220	84	212	82	185	74
11	15	9.6	43	99	38	98	38	95	37	87	34
12	4	3.0	43	30	12	30	12	29	11	27	11
400		136.2	--	1265	481	1254	478	1158	448	864	347

SITE INDEX 60 AGE 15 STEMS/ACRE 500

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	3	0.1	29	--	--	--	--	--	--	--	--
4	18	1.6	29	--	--	--	--	--	--	--	--
5	51	7.0	30	54	20	52	20	35	14	--	--
6	94	18.4	33	151	57	148	56	121	47	35	16
7	121	32.3	36	290	110	287	109	254	99	152	63
8	110	38.5	40	373	143	370	142	342	133	254	103
9	68	30.2	42	306	118	304	117	288	112	238	96
10	27	14.8	43	152	58	151	58	145	56	127	51
11	6	4.2	43	43	16	43	16	42	16	38	15
12	1	0.7	43	7	3	7	3	7	3	6	2
500		147.8	--	1375	525	1361	521	1234	481	851	346

Continued

Table 28. --Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 60 AGE 15 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
3	6	0.3 ^b	29	--	--	--	--	--	--	--	--
4	33	2.9	29	--	--	--	--	--	--	--	--
5	85	11.6	31	91	34	88	33	60	24	--	--
6	139	27.4	34	235	89	230	88	188	74	55	25
7	155	41.4	38	389	149	384	148	341	134	203	85
8	114	39.7	41	398	153	394	152	365	143	271	111
9	52	22.9	42	236	91	234	91	222	87	183	74
10	13	7.3	43	76	29	75	29	73	28	64	25
11	2	1.3	43	13	5	13	5	13	5	11	5
	600	154.8	--	1437	550	1420	546	1261	494	788	324

SITE INDEX 60 AGE 15 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
3	12	0.6	29	--	--	--	--	--	--	--	--
4	57	5.0	30	--	--	--	--	--	--	--	--
5	131	17.9	32	145	55	140	53	95	38	--	--
6	190	37.3	36	335	128	328	126	268	106	78	36
7	176	46.9	40	460	177	454	176	403	159	240	101
8	98	34.3	42	353	136	350	136	323	127	241	99
9	30	13.4	43	140	54	139	54	132	52	109	44
10	5	2.7	43	28	11	28	11	27	10	24	9
	700	158.2	--	1460	561	1439	555	1247	492	691	289

Continued

Table 28.--Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 60 AGE 20 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	1	0.1	37	--	--	--	--	--	--	--	--
5	17	2.3	37	22	9	21	8	14	6	--	--
6	45	8.9	39	87	34	85	33	10	28	20	9
7	70	18.6	42	196	76	193	76	171	69	102	43
8	80	27.8	46	317	125	314	124	291	117	216	90
9	73	32.2	50	391	155	389	155	369	148	305	126
10	54	29.7	52	376	150	374	149	360	145	316	130
11	33	22.0	54	285	114	284	113	276	111	251	103
12	17	13.1	54	172	69	172	68	168	67	156	64
13	7	6.3	55	83	33	83	33	82	33	77	31
14	2	2.5	55	32	13	32	13	32	13	30	12
15	1	1.0	55	13	5	13	5	13	5	12	5
	400	164.5	--	1974	782	1961	778	1845	741	1486	615

SITE INDEX 60 AGE 20 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	4	0.3	37	--	--	--	--	--	--	--	--
5	33	4.6	37	43	17	42	16	28	12	--	--
6	74	14.5	40	146	57	143	56	117	47	34	16
7	102	27.1	44	297	117	293	116	260	105	155	66
8	105	36.5	48	433	172	429	171	397	160	295	124
9	84	37.3	51	468	187	465	186	441	179	365	152
10	54	29.7	53	384	154	383	153	368	149	323	134
11	28	18.5	54	242	97	242	97	235	95	213	88
12	11	9.0	55	119	47	118	47	116	46	108	44
13	4	3.4	55	45	18	45	18	44	18	42	17
14	1	1.3	55	16	7	16	7	16	6	15	6
	500	182.1	--	2193	871	2176	866	2022	816	1550	647

Continued

Table 28. --Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 60 AGE 20 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	9	0.8	37	--	--	--	--	--	--	--	--
5	57	7.7	38	75	29	72	28	49	20	--	--
6	109	21.4	41	223	87	218	86	178	72	52	24
7	136	36.3	46	413	163	408	162	362	147	216	93
8	125	43.5	50	534	213	530	212	490	199	365	154
9	88	38.8	52	499	200	496	199	470	191	388	163
10	48	26.1	54	343	138	341	137	329	133	288	119
11	20	13.3	55	176	70	175	70	170	69	155	64
12	7	5.1	55	68	27	67	27	66	26	61	25
13	2	1.8	55	24	9	24	9	23	9	22	9
	600	194.8	--	2353	937	2332	931	2137	867	1547	651

SITE INDEX 60 AGE 20 STEMS/ACRE 700											
D.b.h. (in)	Stems Per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	20	1.7	37	--	--	--	--	--	--	--	--
5	88	12.0	39	118	46	114	45	77	32	--	--
6	151	29.7	43	319	125	313	124	256	104	75	35
7	169	45.2	47	534	212	527	211	468	191	279	121
8	137	47.7	51	604	242	599	241	554	226	412	175
9	82	36.3	53	476	191	473	191	449	183	371	156
10	37	20.1	54	267	107	266	107	256	104	224	93
11	12	8.1	55	108	43	107	43	104	42	95	39
12	3	2.4	55	31	13	31	13	31	12	28	12
13	1	0.6	55	7	3	7	3	7	3	7	3
	700	203.9	--	2465	983	2438	976	2201	897	1491	634

Continued

Table 28.--Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 70 AGE 10 STEMS/ACRE 400

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.0	23	--	--	--	--	--	--	--	--
3	10	0.5	23	--	--	--	--	--	--	--	--
4	24	2.1	24	--	--	--	--	--	--	--	--
5	44	6.0	25	37	13	36	13	24	9	--	--
6	64	12.6	27	83	30	81	29	66	25	19	8
7	76	20.4	28	142	51	140	51	124	46	74	29
8	73	25.4	30	186	68	185	68	171	64	127	49
9	55	24.4	32	185	68	184	68	175	65	144	55
10	32	17.5	33	136	50	135	50	130	48	114	43
11	14	9.2	33	71	26	71	26	69	26	63	24
12	4	3.4	33	26	10	26	10	26	9	24	9
13	1	1.0	33	7	3	7	3	7	3	7	3
	400	122	5	874	319	866	317	792	294	572	220

SITE INDEX 70 AGE 10 STEMS/ACRE 500

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	4	0.1	23								
3	18	0.9	23				--				
4	42	3.6	24	--	--	--	--	--	--	--	--
5	72	9.8	26	63	23	60	22	41	16	--	--
6	96	18.9	28	129	47	126	46	103	39	30	13
7	102	27.2	30	197	72	194	71	172	65	103	41
8	83	29.1	31	220	81	218	80	202	76	150	59
9	51	22.6	32	176	65	175	64	166	62	137	53
10	23	12.4	33	97	36	97	35	93	34	81	31
11	7	4.6	33	36	13	36	13	35	13	31	12
12	2	1.2	33	10	3	9	3	9	3	9	3
	500	130.4	--	926	339	915	336	820	307	541	211

Continued

Table 28.--Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 70 AGE 10 STEMS/ACRE 600											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	23	--	--	--	--	--	—	--	—
2	8	0.2	23	--	--	--	--	--	—	—	—
3	31	1.5	24	—	—	—	—	—	—	—	—
4	67	5.9	25	--	--	--	—	--	—	--	—
5	108	14.7	26	97	3.5	93	34	63	24	--	--
6	131	25.7	29	181	66	178	65	145	55	42	19
7	120	32.2	31	241	89	238	88	211	80	126	50
8	81	28.3	32	220	81	218	81	202	76	150	59
9	38	17.0	33	134	49	133	49	126	47	104	40
10	12	6.6	33	52	19	52	19	50	18	43	17
11	3	1.8	33	14	5	14	5	13	5	12	5
	600	133.7	--	938	345	925	341	810	305	478	189

SITE INDEX 70 AGE 10 STEMS/ACRE 700											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	23	--							
2	15	0.3	23	--		--	--	--	--	--	--
3	50	2.4	24	--		--	--	--	--	--	--
4	102	8.9	25	--		--	--	--	--	--	--
5	150	20.5	27	140	51	135	50	91	35	--	--
6	162	31.9	30	234	86	229	85	187	71	55	24
7	126	33.5	31	259	96	256	95	227	86	135	55
8	66	23.2	33	183	68	181	67	168	63	125	49
9	23	10.0	33	79	29	79	29	74	28	62	24
10	5	2.5	33	20	7	20	7	19	7	17	6
11	1	0.4	33	3	1	3	1	3	1	2	1
	700	133.6	--	917	338	902	334	769	292	395	159

Continued

Table 28.--Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 70 AGE 15 STEMS/ACRE 400

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	1	0.0	35	--	--	--	--	--	--	--	--
4	9	0.8	35	--	--	--	--	--	--	--	--
5	28	3.9	36	35	13	34	13	23	9	--	--
6	57	11.2	38	106	41	104	40	85	34	25	11
7	83	22.3	41	227	88	224	87	198	79	118	50
8	91	31.7	44	347	136	344	135	318	127	237	98
9	72	31.9	47	367	144	365	144	346	138	286	118
10	40	21.8	49	258	102	257	101	247	99	217	88
11	15	9.6	50	115	45	115	45	112	44	101	41
12	4	3.0	50	35	14	35	14	34	14	32	13
400		136.2	--	1490	583	1477	579	1363	543	1016	419

SITE INDEX 70 AGE 15 STEMS/ACRE 500

D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	3	0.1	35	--	--	--	--	--	--	--	--
4	18	1.6	35	--	--	--	--	--	--	--	--
5	51	7.0	36	65	25	62	24	42	17	--	--
6	94	18.4	39	180	70	177	69	144	58	42	20
7	121	32.3	43	343	134	339	133	301	120	179	76
8	110	38.5	46	438	172	434	172	402	161	299	125
9	68	30.2	48	358	141	356	141	337	135	278	115
10	27	14.8	49	177	70	176	70	170	68	149	61
11	6	4.2	50	50	20	50	20	49	19	44	18
12	1	0.7	50	8	3	8	3	8	3	7	3
500		147.8	--	1619	635	1603	631	1452	582	999	417

Continued

Table 28. --Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 70 AGE 15 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				<u>green dry</u>		<u>2 inches</u>		<u>4 inches</u>		<u>6 inches</u>	
				o.b.	i.b.	green	dry	green	dry	green	dry
3	6	0.3	35	--	--	--	--	--	--	--	--
4	33	2.9	35	--	--	--	--	--	--	--	--
5	85	11.6	37	110	42	106	41	72	29	--	--
6	139	27.4	41	279	109	274	107	223	90	65	31
7	155	41.4	45	459	181	453	179	402	162	240	103
8	114	39.7	48	466	185	462	184	428	172	318	134
9	52	22.9	49	275	109	274	109	260	104	215	89
10	13	7.3	50	88	35	88	35	85	34	74	30
11	2	1.3	50	15	6	15	6	15	6	13	5
	600	154.8	--	1693	666	1672	661	1483	598	925	392

SITE INDEX 70 AGE 15 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				<u>green dry</u>		<u>2 inches</u>		<u>4 inches</u>		<u>6 inches</u>	
				o.b.	i.b.	green	dry	green	dry	green	dry
3	12	0.6	35	--	--	--	--	--	--	--	--
4	57	5.0	36	--	--	--	--	--	--	--	--
5	131	17.9	38	174	68	168	66	113	46	--	--
6	190	37.3	42	396	156	388	153	317	129	93	44
7	176	46.9	46	540	214	534	212	473	192	282	122
8	98	34.3	49	412	164	409	163	378	153	282	119
9	30	13.4	50	163	65	162	65	154	62	127	53
10	5	2.7	50	33	13	33	13	31	13	28	11
	700	158.2	--	1719	679	1694	672	1467	595	811	348

Continued

Table 28. --Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

		SITE INDEX 70		AGE 20		STEMS/ACRE 400					
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Merchantable weight to top--							
	per acre (no.)			Total wgt.		2 inches		4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
4	1	0.1	44	--	--	--	--	--	--	--	--
5	17	2.3	44	27	11	26	10	17	7	--	--
6	45	8.9	46	104	42	102	41	84	35	24	12
7	70	18.6	50	233	94	230	93	204	84	122	53
8	80	27.8	54	375	152	372	151	344	142	256	110
9	73	32.2	58	461	188	458	187	434	180	359	153
10	54	29.7	61	441	181	439	180	423	175	370	157
11	33	22.0	62	334	137	332	136	323	134	294	124
12	17	13.1	63	201	82	201	82	196	81	183	76
13	7	6.3	64	97	40	97	40	9.5	39	90	37
14	2	2.5	64	38	15	38	15	37	15	35	15
15	1	1.0	64	15	6	15	6	15	6	14	6
400		164.5	--	2325	947	2310	942	2172	898	1747	743

		SITE INDEX 70		AGE 20		STEMS/ACRE 500					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	4	0.3	44	--	--	--	--	--	--	--	--
5	33	4.6	45	52	21	51	20	34	14	--	--
6	74	14.5	48	174	70	171	69	140	58	41	20
7	102	27.1	52	353	143	349	142	309	128	184	81
8	105	36.5	56	510	208	506	207	468	195	348	151
9	84	37.3	60	550	225	547	225	518	215	428	183
10	54	29.7	62	450	185	448	184	431	179	378	161
11	28	18.5	63	283	116	283	116	275	114	250	105
12	11	9.0	64	138	57	138	57	135	56	126	53
13	4	3.4	64	53	21	53	21	52	21	49	20
14	1	1.3	64	19	8	19	8	19	8	18	7
500		182.1	--	2584	1055	2563	1049	2381	988	1822	782

Continued

Table 28. --Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 70 AGE 20 STEMS/ACRE 600											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)					2 inches		4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	9	0.8	44	--	--	--	--	--	--	--	--
5	57	7.7	45	90	36	87	35	59	25	--	--
6	109	21.4	49	266	107	261	106	213	89	62	30
7	136	36.3	54	489	199	483	197	429	179	256	113
8	125	43.5	58	629	258	624	256	577	241	429	187
9	88	38.8	61	585	241	581	240	551	230	455	196
10	48	26.1	63	401	165	399	165	384	160	337	144
11	20	13.3	63	205	84	205	84	199	82	181	76
12	7	5.1	64	79	32	79	32	77	32	72	30
13	2	1.8	64	28	11	28	11	27	11	26	11
	600	194.8	--	2772	1134	2746	1127	2515	1049	1817	787

SITE INDEX 70 AGE 20 STEMS/ACRE 700											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)					2 inches		4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	20	1.7	44	--	--	--	--	--	--	--	--
5	88	12.0	46	142	57	137	56	93	39	--	--
6	151	29.7	50	380	154	373	152	304	128	89	43
7	169	45.2	55	631	258	623	256	552	232	329	147
8	137	47.7	59	709	292	703	290	650	273	484	212
9	82	36.3	62	557	230	554	229	525	220	434	187
10	37	20.1	63	312	129	311	129	299	125	262	112
11	12	8.1	64	126	52	126	52	122	51	111	47
12	3	2.4	64	37	15	37	15	36	15	33	14
13	1	0.6	64	9	4	9	4	9	4	8	3
	700	203.9	--	2903	1191	2871	1182	2590	1086	1751	765

Continued

Table 28. --Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

		SITE INDEX 80		AGE 10		STEMS/ACRE 400					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	2	0.0	27	--	--	--	--	--	--	--	--
3	10	0.5	27	--	--	--	--	--	--	--	--
4	24	2.1	28	--	--	--	--	--	--	--	--
5	44	6.0	29	44	16	42	16	29	11	--	--
6	64	12.6	31	96	36	94	35	77	30	23	10
7	76	20.4	33	164	61	162	60	143	55	86	35
8	73	25.4	35	215	80	213	80	197	75	146	58
9	55	24.4	36	213	80	211	79	200	76	165	65
10	32	17.5	37	155	58	155	58	149	56	130	51
11	14	9.2	37	82	31	81	30	79	30	72	28
12	4	3.4	38	30	11	30	11	29	11	27	10
13	1	1.0	38	8	3	8	3	8	3	8	3
400		122.5	--	1006	376	997	374	912	347	657	259

		SITE INDEX 80		AGE 10		STEMS/ACRE 500					
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green dry		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
2	4	0.1	27	--	--	--	--	--	--	--	--
3	18	0.9	27	--	--	--	--	--	--	--	--
4	42	3.6	28	--	--	--	--	--	--	--	--
5	72	9.8	30	73	27	71	26	48	19	--	--
6	96	18.9	32	149	56	146	55	119	46	35	16
7	102	27.2	34	227	85	224	84	199	76	119	48
8	83	29.1	36	253	95	251	95	232	89	173	69
9	51	22.6	37	201	76	200	75	190	72	157	62
10	23	12.4	37	111	42	110	42	106	40	93	36
11	7	4.6	38	41	15	41	15	39	15	36	14
12	2	1.2	38	11	4	11	4	11	4	10	4
500		130.4	--	1066	400	1054	396	944	362	622	248

Continued

Table 26.--Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 80 AGE 10 STEMS/ACRE 600											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green		2 inches		4 inches		6 inches	
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	27	--	--	--	--	--	--	--	--
2	8	0.2	27	--	--	--	--	--	--	--	--
3	31	1.5	28	--	--	--	--	--	--	--	--
4	67	5.9	29	--	--	--	--	--	--	--	--
5	108	14.7	31	113	42	109	41	73	29	--	--
6	131	25.7	33	210	79	206	78	168	65	49	22
7	120	32.2	35	277	104	274	104	243	94	145	59
8	81	28.3	36	252	95	250	95	231	89	172	69
9	38	17.0	37	153	58	152	57	144	55	119	47
10	12	6.6	38	59	22	59	22	57	22	50	19
11	3	1.8	38	16	6	16	6	15	6	14	5
	600	133.7	--	1080	406	1065	402	932	359	548	222

SITE INDEX 80 AGE 10 STEMS/ACRE 700											
D.b.h. (in)	Stems	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
	per acre (no.)			green	dry	2 inches		4 inches		6 inches	
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
1	1	0.0	27	--	--	--	--			--	--
2	15	0.3	27	--	--	--	--				
3	50	2.4	28	--	--	--	--				
4	102	8.9	29	--	--	--	--	--	--	--	--
5	150	20.5	32	163	61	157	59	106	42	--	--
6	162	31.9	34	270	102	264	100	216	84	63	29
7	126	33.5	36	297	112	293	111	260	101	155	64
8	66	23.2	37	209	79	208	79	192	74	143	57
9	23	10.0	38	90	34	90	34	85	33	70	28
10	5	2.5	38	23	8	22	8	22	8	19	7
11	1	0.4	38	3	1	3	1	3	1	3	1
	700	133.6	--	1055	398	1038	394	884	343	453	186

Continued

Table 28. --Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 80 AGE 15 STEMS/ACRE 400											
D.b.h. (in)	Stems w - acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	1	0.0	41	--	--	--	--	--	--	--	--
4	9	0.8	41	--	--	--	--	--	--	--	--
5	28	3.9	42	41	16	40	16	27	11	--	--
6	57	11.2	44	124	49	122	48	99	41	29	14
7	83	22.3	47	263	105	260	104	231	94	138	60
8	91	31.7	51	400	160	397	159	367	150	273	116
9	72	31.9	54	422	170	419	169	397	162	328	138
10	40	21.8	56	295	119	294	119	283	115	248	103
11	15	9.6	56	132	53	131	53	128	52	116	48
12	4	3.0	57	40	16	40	16	39	16	37	15
	400	136.2	--	1717	688	1703	684	1571	641	1168	494

SITE INDEX 80 AGE 15 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green	dry	2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
						o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	3	0.1	41	--	--	--	--	--	--	--	--
4	18	1.6	41	--	--	--	--	--	--	--	--
5	51	7.0	42	76	30	73	29	50	21	--	--
6	94	18.4	45	211	84	206	83	169	69	49	23
7	121	32.3	49	397	159	392	158	348	143	208	91
8	110	38.5	53	504	203	500	202	462	190	344	147
9	68	30.2	55	410	166	407	165	386	158	319	135
10	27	14.8	56	202	82	202	82	194	79	170	71
11	6	4.2	56	57	23	57	23	55	23	50	21
12	1	0.7	57	9	4	9	4	9	4	8	3
	500	147.8	--	1866	750	1847	745	1673	687	1148	491

Continued

Table 28. --Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds) --Contd.

SITE INDEX 80 AGE 15 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
						2 inches		4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	6	0.3	41	--	--	--	--	--	--	--	--
4	33	2.3	41	--	--	--	--	--	--	--	--
5	85	11.6	43	129	51	124	50	84	35	--	--
6	130	27.4	47	325	130	318	128	260	108	76	36
7	155	41.4	51	529	213	522	212	463	192	276	122
8	174	39.7	54	535	217	530	216	491	203	365	157
9	52	22.7	56	315	128	313	127	297	122	245	104
10	13	7.3	56	101	41	101	41	97	40	85	36
11	2	1.3	57	17	7	17	7	17	7	15	6
	600	154.8	--	1951	787	1927	780	1708	706	1063	461

SITE INDEX 80 AGE 15 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
						2 inches		4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
3	12	0.6	41	—	—	--	—	—	--	—	—
4	57	5.0	42	—	—	—	—	—	—	—	--
5	131	17.9	44	204	81	197	79	133	56	--	--
6	190	37.3	49	459	185	450	182	368	153	108	52
7	176	46.9	53	621	252	614	250	544	226	324	144
8	98	34.3	55	472	192	468	191	433	180	322	139
9	30	13.4	56	187	76	186	75	176	72	145	62
10	5	2.7	57	37	15	37	15	36	15	31	13
	700	158.2	--	1981	801	1951	793	1690	702	931	409

Continued

Table 28.--Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 80 AGE 20 STEMS/ACRE 400											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
4	1	0.1	52	--	--	--	--	--	--	--	--
5	17	2.3	52	31	13	30	13	21	9	--	--
6	45	8.9	54	123	50	120	50	98	42	29	14
7	70	18.6	58	272	112	269	111	238	101	142	64
8	80	27.8	62	435	181	431	180	399	169	297	131
9	73	32.2	66	530	222	527	221	500	212	413	180
10	54	29.7	69	506	212	504	212	485	206	425	184
11	33	22.0	71	382	160	381	160	370	157	336	145
12	17	13.1	72	230	96	229	96	225	95	209	89
13	7	6.3	72	111	46	111	46	109	46	103	44
14	2	2.5	72	43	18	43	18	42	18	41	17
15	1	1.0	72	17	7	17	7	17	7	16	7
	400	164.5	--	2680	1118	2662	1113	2503	1059	2010	876

SITE INDEX 80 AGE 20 STEMS/ACRE 500											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
				green		2 inches		4 inches		6 inches	
				o.b.	i.b.	green	dry	green	dry	green	dry
4	4	0.3	52	--	--	--	--	--	--	--	--
5	33	4.6	52	62	25	60	25	40	17	--	--
6	74	14.5	55	204	84	200	83	164	70	48	24
7	102	27.1	60	410	170	405	169	359	153	214	97
8	105	36.5	64	589	246	584	245	541	230	402	178
9	84	37.3	68	632	265	628	264	595	254	492	216
10	54	29.7	70	516	217	513	216	494	210	433	188
11	28	18.5	72	324	136	323	136	314	133	286	123
12	11	9.0	72	158	66	158	66	155	65	144	62
13	4	3.4	72	60	25	60	25	59	25	56	24
14	1	1.3	72	22	9	22	9	22	9	21	9
	500	182.1	--	2978	1245	2954	1239	2743	1166	2095	921

Continued

Table 28.--Weight yields per acre for loblolly pine in Soil Group B
(in hundreds of pounds)--Contd.

SITE INDEX 80 AGE 20 STEMS/ACRE 600											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
						2 inches		4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	9	0.8	52	--	--	--	--	--	—	--	—
5	57	7.7	53	106	44	102	42	69	30	--	--
6	109	21.4	57	311	129	305	127	249	107	73	36
7	136	36.3	62	567	237	560	235	497	213	296	135
8	125	43.5	66	724	304	718	303	664	284	494	220
9	88	38.8	69	671	283	667	282	632	270	522	230
10	48	26.1	71	459	194	457	193	440	188	386	168
11	20	13.3	72	235	99	234	99	227	97	207	89
12	7	5.1	72	90	38	90	38	88	37	82	35
13	2	1.8	72	32	13	32	13	31	13	29	12
	600	194.8	--	3195	1339	3165	1331	2898	1238	2089	926

SITE INDEX 80 AGE 20 STEMS/ACRE 700											
D.b.h. (in)	Stems per acre (no.)	Basal area (ft ²)	Avg. ht. (ft)	Total wgt.		Merchantable weight to top--					
						2 inches		4 inches		6 inches	
				green	dry	green	dry	green	dry	green	dry
				o.b.	i.b.	o.b.	i.b.	o.b.	i.b.	o.b.	i.b.
4	20	1.7	52	--	—	—	—	—	—	--	--
5	88	12.0	54	167	69	161	67	109	47	--	--
6	151	29.7	58	443	184	434	182	355	153	104	52
7	169	45.2	64	729	306	720	303	638	275	381	174
8	137	47.7	68	815	344	808	342	747	321	556	249
9	82	36.3	71	639	270	635	269	602	258	497	220
10	37	20.1	72	357	151	356	150	342	146	300	131
11	12	8.1	72	144	61	144	60	140	59	127	55
12	3	2.4	72	42	18	42	18	41	17	38	16
13	1	0.6	72	10	4	10	4	10	4	9	4
	700	203.9	--	3345	1406	3309	1395	2984	1281	2012	901

6. Survival Trends

The methodology used in section 5 to predict structure and current per acre yield of a stand with given age, site index, and number of surviving stems per acre can be used to estimate future stand structure and yield if an estimate of surviving number of trees per acre at the projection age can be obtained. A modified form of the nonlinear survival model developed by Clutter and Jones (1980) was fitted to the survival data collected on the remeasured plots described in section 2. The final equation is

$$N_2 = 100 \left\{ \left(\frac{N_1}{100} \right)^{\beta_1} + \left(\beta_2 + \frac{\beta_3}{S} \right) \times \left[\left(\frac{A_2}{10} \right)^{\beta_4} - \left(\frac{A_1}{10} \right)^{\beta_4} \right] \right\}^{\left(\frac{1}{\beta_1} \right)} \quad (29)$$

where:

A_1 = initial age

A_2 = projection age

N_1 = number of surviving stems per acre at age A_1

N_2 = predicted number of surviving stems per acre at age A_2

S = site index (age 25)

$\beta_1 = -2.029625$

$\beta_2 = 0.00261778$

$\beta_3 = -0.0933325$

$\beta_4 = 3.683674$

The above equation is based on data from 123 plots and explains 86.4 percent of the variability among the observed N_2 values.

To illustrate the use of equation (29), consider a site index 68 plantation that is currently 12 years old with 575 surviving stems per acre. An estimate of the number of surviving stems that will be present at age 25 is desired. Substituting into equation (29) and solving gives

$$N_2 = 100 \left\{ \left(\frac{575}{100} \right)^{\beta_1} + \left(\beta_2 + \frac{\beta_3}{68} \right) \times \left[\left(\frac{25}{10} \right)^{\beta_4} - \left(\frac{12}{10} \right)^{\beta_4} \right] \right\}^{\left(\frac{1}{\beta_1} \right)}$$

= 391 stems per acre.

If predictions of stand structure and yields at age 25 are needed, they can be obtained by techniques described in sec-

tion 5 with plantation age set equal to 25, site index equal to 68, and stems per acre equal to 391.

Graphs of the survival relationships defined by equation (29) are shown in figure 4. These curves show that for any given combination of plantation age and initial number of trees per acre, subsequent mortality is positively correlated with site index. Previously published equations for predicting southern pine mortality do not include site index as a variable. However, the equation of Smalley and Bailey (1974) uses dominant height as a predictor. It may well be that competition mortality has been a minor component of total mortality in previously collected data sets for southern pine mortality and, as a result, the significance of site index as a predictor variable has not been detected. The data available for this analysis have generally higher average levels of both site index and stand density than the data used in previous comparable studies and could possibly be the reason for the significant effect of site index on mortality.

Table 29 shows stand volume development that incorporates mortality trends predicted by equation (29). For example, a site index 60, Soil Group A plantation with 600 stems per acre at age 10 is shown as having an age-20 volume of 2,637 cubic feet per acre. This figure was obtained by first solving equation (29) with $A_1 = 10$, $A_2 = 20$, $N_1 = 600$, and $S = 60$ to obtain $N_2 = 495$ and then using the techniques described in section 5 to calculate the age-20 yield.

Mean annual increment values have been calculated from yields shown in table 29 and are tabulated in table 30. These results show that, for example, a Soil Group A, site index 70 plantation with 600 stems per acre at age 10 would produce average annual growth rates of 160.1 cubic feet per acre over a 15-year rotation, 175.8 cubic feet per acre with a 20-year rotation, 172.5 cubic feet per acre per year during a 25-year rotation, and 159.9 cubic feet per acre with a 30-year rotation. Although these tabulations convey considerable information about the relationship between plantation age and mean annual increment, they

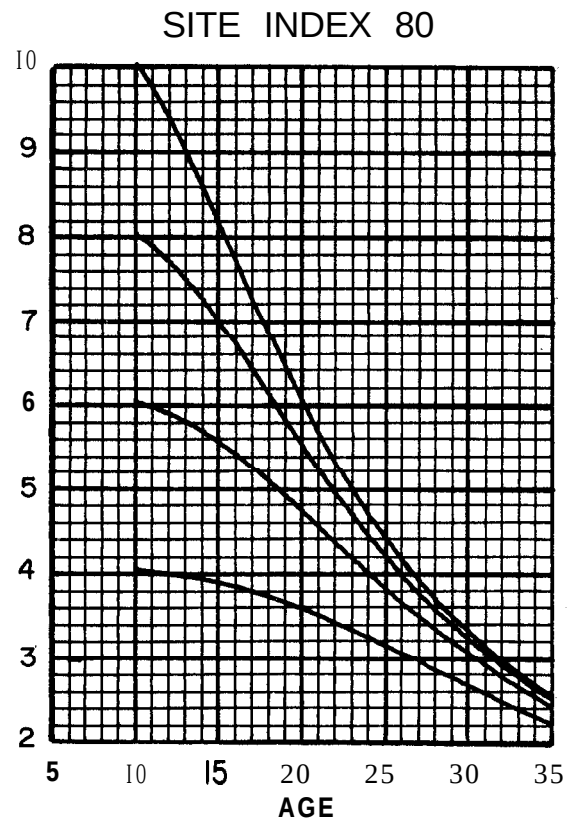
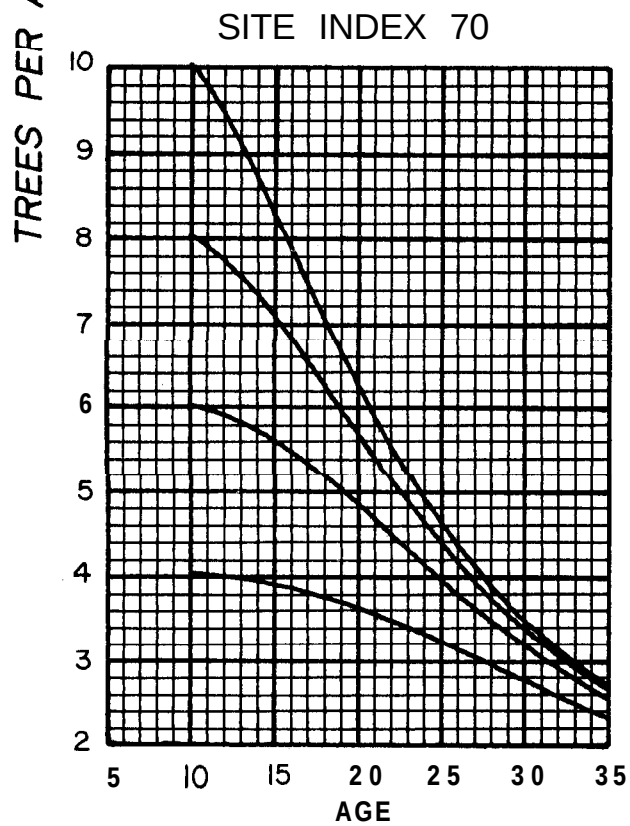
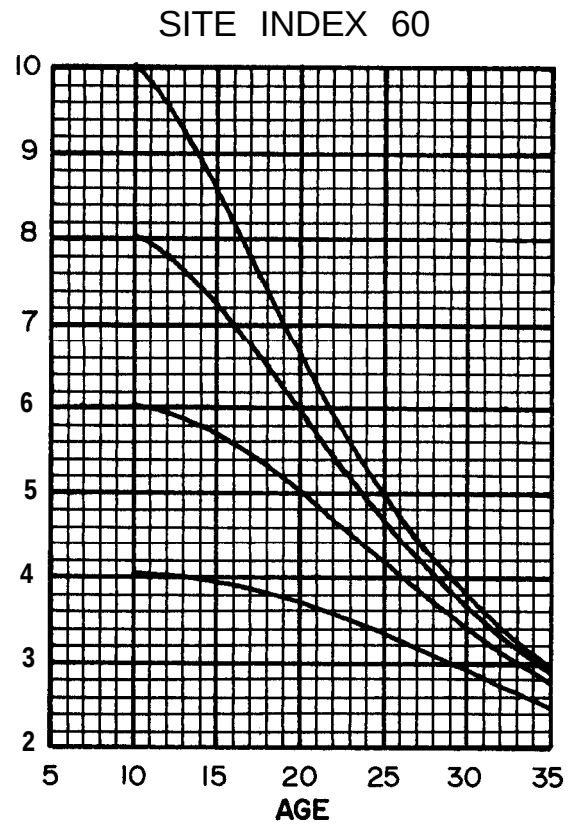
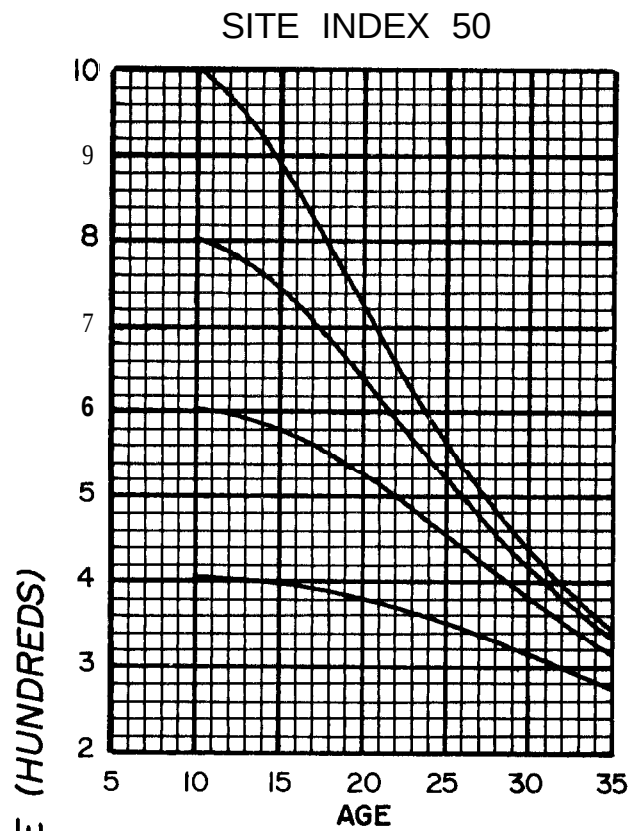


Figure 4. --Survival trends for various combinations of site index and number of trees per acre at age 10.

Table 29.--Projected volume yields (outside bark, 4-inch merchantable top) of stands with specified number of stems per acre at age 10 for Soil Groups A and B, by site index

Site index	Stems per acre at age 10	Age (years)			
		15	20	25	30
- - - - - Cubic feet per acre - - - - -					
SOIL GROUP A					
50	400	879	1524	2170	2746
	600	935	1797	2575	3172
	800	868	1926	2794	3386
	1000	738	1984	2918	3502
60	400	1411	2194	2915	3496
	600	1632	2637	3431	3965
	800	1691	2883	3705	4187
	1000	1656	3023	3859	4304
70	400	1994	2900	3685	4273
	600	2401	3517	4314	4797
	800	2602	3873	4641	5038
	1000	2678	4085	4823	5163
80	400	2615	3631	4473	5067
	600	3226	4427	5216	5652
	800	3581	4891	5596	5915
	1000	3774	5171	5806	6050
SOIL GROUP B					
60	400	2114	3147	--	--
	600	2325	3605	--	--
	800	2309	3813	--	--
70	400	2439	3605	--	--
	600	2683	4115	--	--
	800	2676	4352	--	--
80	400	2761	4060	--	--
	600	3038	4624	--	--
	800	3039	4886	--	--

Table 30.--Mean annual increment (outside bark volume, 4-inch merchantable top) of stands with specified number of stems per acre at age 10 for Soil Groups A and B, by site index

Site index	Stems per acre at age 10	Age (years)			
		15	20	25	30
■ ■ ■ ■ ■ ■ ■ Cubic feet per acre ■ ■ ■ ■ ■ ■					
SOIL GROUP A					
50	400	58.6	76.2	86.8	91.5
	600	62.4	89.8	103.0	105.7
	800	57.9	96.3	111.8	112.9
	1000	49.2	99.2	116.7	116.7
60	400	94.1	109.7	116.6	116.5
	600	108.8	131.8	137.2	132.2
	800	112.7	144.2	148.2	139.6
	1000	110.4	151.2	154.4	143.5
70	400	132.9	145.0	147.4	142.4
	600	160.1	175.8	172.5	159.9
	800	173.5	193.6	185.6	167.9
	1000	178.5	204.2	192.9	172.1
80	400	174.3	181.6	178.9	168.9
	600	215.1	221.4	208.6	188.4
	800	238.8	244.6	223.8	197.2
	1000	251.6	258.5	232.2	201.7
SOIL GROUP B					
60	400	141.0	157.3	--	--
	600	155.0	180.2	--	--
	800	153.9	190.7	--	--
70	400	162.6	180.2	--	--
	600	178.8	205.8	--	--
	800	178.4	217.6	--	--
80	400	184.0	203.0	--	--
	600	202.5	231.2	--	--
	800	202.6	244.3	--	--

XXX
 Table 31.--Age for maximum mean annual increment of various combinations of site index and number of trees per acre at age 10 for Soil Group A plantations

Site index	Trees per acre			
	400	600	800	1000
	■ - - - ■ Years - - - - - ■			
50	>30	29	28	27
60	28	24	23	23
70	24			
80	21	21 ½	20 ½	20 ½

do not provide a precise estimate of the age at which maximum mean annual increment occurs. The ages for maximum mean annual increment for various combinations

of number of trees per acre at age 10 and site index have therefore been determined by making annual calculations. The results are given in table 31 for Soil Group A plantations. The table shows that for a site index 70 plantation with 600 trees per acre at age 10, maximum mean annual increment is achieved with a rotation length of 21 years. Calculations for Soil Group B indicate that maximum mean annual increment is still increasing at ages up to 20 years for all combinations of site index and number of trees per acre at age 10. Accurate prediction of mean annual increment for Soil Group B plantations older than age 20 is probably impossible because of the limitations of the available data.

7. Literature Cited

- Bailey, R. L.; Clutter, J. L. Volume tables for old-field loblolly pine plantations in the Georgia Piedmont. Rep. 22, Ser. 2. Macon, GA: Georgia Forestry Research Council; 1970. 4 p.
- Bailey, R. L.; Dell, T. R. Quantifying diameter distributions with the Weibull function. Forest Science 19: 97-104; **1973**.
- Bennett, F. A.; Clutter, J. L. Multiple-product yield estimates for unthinned slash pine plantations - pulpwood, sawtimber and gum. Res. Pap. SE-35. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station; 1968. 21 p.
- Burkhart, H. E.; Clutter, J. L. Green and dry weight yields for old-field loblolly pine plantations in the Georgia Piedmont. Rep. 22, Ser. 4. Macon, GA: Georgia Forestry Research Council; 1971. 11 p.
- Burkhart, H. E.; Parker, R. C.; Strub, M. R.; Oderwald, R. G. Yields of old-field loblolly pine plantations. FWS-3-72. Blacksburg, VA: Virginia Polytechnic Institute and State University, Division of Forestry and Wildlife Resources; **1972**. 51 p.
- Clutter, J. L. Development of taper functions from variable-top merchantable volume equations. Forest Science 26: 117-120; **1980**.
- Clutter, J. L.; Jones, E. P., Jr. Prediction of growth after thinning in old-field slash pine plantations. Res. Pap. SE-217. Asheville, NC: U.S. Department of Agriculture, Southeastern Forest Experiment Station; **1980**. 19 p.
- Clutter, J. L.; Lenhart, J. D. Site index curves for old-field loblolly pine plantations in the Georgia Piedmont. Rep. 22, Ser. 1. Macon, GA: Georgia Forestry Research Council; 1968. 4 p.
- Flowers, W. R., Jr. Individual tree weight and volume equations for site prepared loblolly pine plantations in the Coastal Plain of the Carolinas, Georgia, and North Florida. Athens: University of Georgia; **1978**. 53 p. Thesis.
- Pienaar, L. V.; Shiver, B. D. Dominant height growth and site index curves for loblolly pine plantations in the Carolina flatwoods. Southern Journal of Applied Forestry 4: 55-59; **1980**.
- Romancier, R. M. Weight and volume for plantation-grown loblolly pine. Res. Notes 161. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station; **1961**. 2 p.
- Shipman, R. D. Volume tables for loblolly pine plantations in the South Carolina Piedmont. For. Res. Ser. 3. Clemson, SC: Department of Forestry, South Carolina Agricultural Experiment Station; **1961**. 7 p.
- Smalley, G. W.; Bailey, R. L. Yield tables and stand structure for loblolly pine plantations in Tennessee, Alabama, and Georgia Highlands. Res. Pap. SO-96. New Orleans, LA: U.S. Department of Agriculture, Southern Forest Experiment Station; 1974. 81 p.
- Smith, J. L. Volume yields of site prepared loblolly pine plantations in the lower coastal plain of the Carolinas, Georgia, and north Florida. Athens: University of Georgia; Thesis. **1978**. 58 p.

Appendix I

English to Metric Conversion Factors

1 inch = 2.540 centimeters

1 foot = 0.3048 meters

1 pound = 0.4536 kilograms

1 cubic foot = 0.02832 cubic meters

1 stem per acre = 2.471 stems per hectare

1 cubic foot per acre = 0.06997 cubic meters per hectare

1 pound per acre = 1.121 kilograms per hectare

1 square foot per acre = 0.2296 square meters per hectare

Appendix II

Computer Subprograms

This Appendix lists a set of FORTRAN subprograms designed to perform the calculations for all the equations previously presented. (Documentation of the operation of the subprograms is given in comment statements in the listing.) These subprograms can be logically divided into five groups:

1. Subprograms used to calculate per acre volume or weight yields. Estimates of per acre volume or weight yields are obtained by calling the subroutine SPYLDL. Subroutine PSPDS2 is called by SPYLDL, and the function subprogram CDF is called by PSPDS2.
2. Subprograms used to calculate per tree volume or weight yields. A number of function subprograms are included to calculate estimated per tree volumes and weights. These subprograms, by name and function, are as follows:

<u>Subprogram</u>	<u>Function</u>
VOLOBT	Calculates total stem outside bark volume
VOLIBT	Calculates total stem inside bark volume
VOLOBM	Calculates merchantable stem outside bark volume
VOLIBM	Calculates merchantable stem inside bark volume
GWTOT	Calculates total stem green weight (wood and bark)
GWMER	Calculates merchantable stem green weight (wood and bark)
DWTOT	Calculates total stem dry weight (wood only)
DWMER	Calculates merchantable stem dry weight (wood only)

3. Subprograms used to evaluate taper relationships. Four function subprograms are included for carrying out the computations involved in evaluating taper relationships. These subprograms, by name and function, are as follows:

<u>Subprogram</u>	<u>Function</u>
TFDOB	Calculates the outside bark diameter at a specified height above the ground
TFHTOB	Calculates the height above ground at which a specified outside bark diameter occurs
TFDIB	Calculates the inside bark diameter at a specified height above the ground

TFHTIB

Calculates the height above ground at which a specified inside bark diameter occurs

can be used to calculate the average height of dominants and codominants from site index and age.

4. Subprograms used to calculate site index or average height of dominants and codominants. The subroutine SPLPSI can be used to calculate site index from age and average height of dominants and codominants. When site index is known, subroutine SPLPHD

5. Subprogram used to calculate predicted number of stems per acre. The subroutine KILLEM can be used to calculate predicted number of stems per acre. Required inputs to the subroutine are site index, current **age**, current number of stems per acre, and future age.

SUBROUTINE FOLLOWS:

```

SUBROUTINE SPYLDL(A,S,D,UNIT,BARK,TPD,GROUP,YIELD,FR,H,CLYLD)      L1983I
C                                                                    L1983I
C THIS SUBROUTINE CALCULATES ESTIMATED PER ACRE YIELD              L1983I
C FOR A SITE PREPARED LOBLOLLY PINE PLANTATION OF AGE "A"         L1983I
C SITE INDEX "S", AND "D" STEMS PER ACRE. YIELD MAY BE             L1983I
C VOLUMETRIC, GREEN WEIGHT, OR DRY WEIGHT DEPENDING ON             L1983I
C THE LITERAL CODE ASSIGNED TO "UNIT". THE ARGUMENT "BARK"         L1983I
C CONTROLS WHETHER YIELDS ARE CALCULATED ON AN INSIDE-BARK         L1983I
C OR OUTSIDE-BARK BASIS. THE MERCHANTABILITY LIMIT USED           L1983I
C IS CONTROLLED BY THE ARGUMENT "TPD". DETAILED DEFINITIONS        L1983I
C FOR ALL ARGUMENTS INVOLVED IN THE CALLING SEQUENCE ARE GIVEN     L1983I
C BELOW:                                                            L1983I
C       A = PLANTATION AGE                                          L1983I
C       S = SITE INDEX (BASE AGE 25 YEARS)                          L1983I
C       D = NUMBER OF SURVIVING STEMS ACRE AT AGE "A"              L1983I
C       UNIT = AN INPUT SPECIFYING THE TYPE OF YIELD STATISTIC     L1983I
C               DESIRED. IF UNIT = 'VOL ', YIELD WILL BE VOLUMETRIC L1983I
C               IN CUBIC FEET; IF UNIT = 'GWT ', YIELD WILL BE PER  L1983I
C               ACRE GREEN WEIGHT IN HUNDREDS OF POUNDS; IF         L1983I
C               UNIT = 'DWT ', YIELD WILL BE PER ACRE DRY WEIGHT    L1983I
C               IN HUNDREDS OF POUNDS.                              L1983I
C       BARK = AN INPUT SPECIFYING WHETHER VOLUMETRIC YIELD        L1983I
C               IS TO BE CALCULATED ON AN OUTSIDE-BARK OR INSIDE-   L1983I
C               BARK BASIS. IF BARK = 'OB ', OUTSIDE-BARK VOLUMES  L1983I
C               ARE CALCULATED; IF BARK = 'IB ', INSIDE-BARK        L1983I
C               VOLUMES ARE CALCULATED. THE CODE ASSIGNED TO       L1983I
C               BARK HAS EFFECT ONLY WHEN UNIT = 'VOL '. GREEN-     L1983I
C               WEIGHT YIELDS ARE ALWAYS CALCULATED ON AN OUTSIDE-  L1983I
C               BARK BASIS AND DRY-WEIGHT YIELDS ARE ALWAYS        L1983I
C               COMPUTED ON AN INSIDE-BARK BASIS.                   L1983I
C CONTINUE                                                         L1983I
C       TPD = OUTSIDE-BARK MERCHANTABLE TOP DIAMETER. TOTAL-      L1983I
C               STEM VOLUMES OR WEIGHTS ARE OBTAINED BY SETTING    L1983I
C               TPD = 0.. IF TPD = 4., THE YIELD STATISTIC         L1983I
C               COMPUTED WOULD BE MERCHANTABLE YIELD TO A 4"       L1983I
C               TOP. RECOMMENDED RANGE FOR THIS VARIABLE IS        L1983I
C               6.0 >= TPD >= 0.0.                                L1983I
C       GROUP = AN INPUT IDENTIFYING THE SOIL GROUP FOR THE SITE   L1983I
C               ON WHICH THE PLANTATION IS GROWING.                L1983I
C               GROUP = 2. IF THE SOIL SERIES IS BALLAHACK, TORHUNTA, L1983I
C               BAYBORO, BYARS, OR PANTEGO, OR IF THE SITE         L1983I
C               IS A TYPICAL POCOSIN OR CAROLINA BAY, OR           L1983I
C               IF THE A1 HORIZON IS MORE THAN 8 INCHES            L1983I
C               THICK WITH 10 PERCENT OR MORE ORGANIC              L1983I
C               MATTER.                                             L1983I
C               GROUP = 1. FOR ALL OTHER CASES                      L1983I
C CONTINUE                                                         L1983I
C                                                                    L1983I
C DETAILED DEFINITIONS FOR ALL QUANTITIES RETURNED BY THE          L1983I
C SUBROUTINE ARE GIVEN BELOW:                                       L1983I
C       YIELD = THE PER ACRE YIELD. VOLUME YIELDS ARE IN CUBIC FOOT L1983I
C               AND WEIGHT YIELDS ARE IN HUNDREDS OF POUNDS.       L1983I
C       FR = A 20-ELEMENT ARRAY IN WHICH FR(I) IS THE NUMBER      L1983I
C               OF TREES/ACRE IN DBH CLASS "I".                    L1983I
C       H = A 20-ELEMENT ARRAY IN WHICH H(1) IS THE AVERAGE      L1983I
C               TOTAL HEIGHT FOR TREES IN DBH CLASS "I".           L1983I
C       CLYLD = A 20-ELEMENT ARRAY IN WHICH CLYLD(I) IS THE PER   L1983I

```

C	ACRE YIELD FOR TREES IN DBH CLASS "I". VOLUMETRIC	E1983I
C	VALUES ARE IN CUBIC FEET AND WEIGHT	L1983I
C	VALUES ARE IN HUNDREDS OF POUNDS.	L1983I
C		L1983I
C	REAL IB	L1983I
	DIMENSIONFR(20),H(20),DBH(20),TRYLD(20),CLYLD(20)	L1983I
	DATA VOL,GWT,DWT,OB,IB/'VOL ','GWT ','DWT ','OB ','IB '/	L1983I
C		L1983I
	IEQN = 0	L1983I
C		L1983I
	IF(UNIT.EQ.VOL.AND.BARK.EQ.OB)IEQN=1	L1983I
	IF(UNIT.EQ.VOL.AND.BARK.EQ.IB)IEQN=2	L1983I
	IF(UNIT.EQ.DWT)IEQN=3	L1983I
	IF(UNIT.EQ.GWT)IEQN=4	L1983I
C		L1983I
	IF(IEQN.GE.1.AND.IEQN.LE.4)GO TO 20	L1983I
	WRITE(6,100)UNIT,BARK	L1983I
100	FORMAT(1H1,'UNIT=',A4,' AND BARK=',A4,' IS INVALID COMBINATION OF	L1983I
	1ARGUMENTS TO SUBROUTINE SPYLDL. EXECUTION TERMINATED.')	L1983I
	STOP	L1983I
20	CONTINUE	L1983I
C		L1983I
	YIELD = 0.	L1983I
	DO 25 I=1,20	L1983I
	FR(I) = 0.	L1983I
	H(1) = 0.	L1983I
25	CLYLD(I) = 0.	L1983I
	IF(A.LT.10..OR.S.LT.20..OR.D.LT.25.)RETURN	L1983I
	CALL PSPDS2(A,S,D,GROUP,FR,H,DBH,MINCL,MAXCL)	L1983I
C		L1983I
	DO 10 I=MINCL,MAXCL	L1983I
	IF(I.LT.5)GO TO 10	L1983I
	GO TO (1,2,3,4),IEQN	L1983I
C		L1983I
1	TRYLD(I) = VOLOBM(DBH(I),H(I),TOPD)	L1983I
	GO TO 5	L1983I
C		L1983I
2	TRYLD(I) = VOLIBM(DBH(I),H(I),TOPD)	L1983I
	GO TO 5	L1983I
C		L1983I
3	TRYLD(I) = DWMER(DBH(I),H(I),TOPD)	L1983I
	GO TO 5	L1983I
C		L1983I
4	TRYLD(I) = GWMER(DBH(I),H(I),TOPD)	L1983I
C		L1983I
5	IF(TRYLD(I).LT.0.)TRYLD(I)=0.	L1983I
	CLYLD(I) = TRYLD(I)*FR(I)	L1983I
	YIELD = YIELD + CLYLD(I)	L1983I
	IF(UNIT.EQ.DWT.OR.UNIT.EQ.GWT)CLYLD(I) = CLYLD(I)/100.	L1983I
10	CONTINUE	L1983I
	IF(UNIT.EQ.DWT.OR.UNIT.EQ.GWT)YIELD=YIELD/100.	L1983I
C		L1983I
	RETURN	L1983I
	END	L1983I
C		L1983I
C	*****	L1983 I
	SUBROUTINEPSPDS2(A,S,D,GROUP,FR,H,DBH,MINCL,MAXCL)	L1983I

```

C      THIS SUBROUTINE CALCULATES THE PREDICTED STAND STRUCTURE      L1983I
C      FOR A SITE-PREPARED LOBLOLLY PINE PLANTATION OF KNOWN AGE,    L1983I
C      SITE INDEX, NUMBER OF STEMS PER ACRE AND SOIL GROUP.          L1983I
C      ARGUMENTS INVOLVED IN THE CALLING SEQUENCE ARE:              L1983I
C          A = PLANTATION AGE.                                        L1983I
C          S = SITE INDEX (BASE AGE 25 YEARS).                      L1983I
C          D = NUMBER OF SURVIVING STEMS PER ACRE AT AGE "A".       L1983I
C      GROUP = AN INPUT IDENTIFYING THE SOIL GROUP FOR THE SITE     L1983I
C              ON WHICH THE PLANTATION IS GROWING. (FOR A COMPLETE  L1983I
C              DEFINITION OF THIS VARIABLE, SEE SUBROUTINE SPYDL.)  L1983I
C      VALUES RETURNED ARE:                                        L1983I
C          FR = A 20-ELEMENT ARRAY IN WHICH FR(I) IS THE NUMBER    L1983I
C              OF TREES/ACRE IN DBH CLASS "I".                     L1983I
C          H = A 20-ELEMENT ARRAY IN WHICH H(1) IS THE AVERAGE    L1983I
C              TOTAL HEIGHT FOR TREES IN CLASS "I".                L1983I
C          DBH = A 20-ELEMENT ARRAY IN WHICH DBH(I) IS THE         L1983I
C              MIDPOINT DBH VALUE FOR DBH CLASS "I".               L1983I
C          MINCL = THE SMALLEST OCCUPIED DBH CLASS                 L1983I
C          MAXCL = THE LARGEST OCCUPIED DBH CLASS                  L1983I
C                                                                    L1983I
C                                                                    L1983I
C      COMMON /WPARAM/ALPHA,BETA,GAMMA                             L1983I
C      DIMENSION FR(20),H(20),DBH(20)                             L1983I
C                                                                    L1983I
C      CALL    SPLPHD(A,S,GROUP,HDOM)                               L1983I
C      Z1=SQRT(A)                                                    L1983I
C      Z2=ALOG(D)                                                    L1983I
C      Z3=A/HDOM                                                      L1983I
C      Z4=D/HDOM                                                      L1983I
C      Z5=ALOG(A)                                                    L1983I
C      IF(GROUP.EQ.2.)GO TO 40                                       L1983I
C                                                                    L1983I
C      CALCULATE  WEIBULL  PARAMETERS  -  ALPHA,BETA,GAMMA          L1983I
C                                                                    L1983I
C              SOIL GROUP 1                                         L1983I
C                                                                    L1983I
C                                                                    L1983I
C      ALPHA=Z1*(0.2576*Z1-0.1073*Z2)                               L1983I
C      XBETA=2.2978-1.2111*Z3-0.0192*Z4                             L1983I
C      BETA=EXP(XBETA)                                                L1983I
C      XGAMMA=1.5518-0.0339*A +0.0714*Z5                             L1983I
C      GAMMA=EXP(XGAMMA)                                              L1983I
C      GO TO 50                                                       L1983I
C                                                                    L1983I
C                                                                    L1983I
C      CALCULATE  WEIBULL  PARAMETERS  -  ALPHA,BETA,GAMMA          L1983I
C                                                                    L1983I
C              SOIL GROUP 2                                         L1983I
C                                                                    L1983I
C                                                                    L1983I
C      40  ALPHA=Z1*(0.4912*Z1-0.2139*Z2)                             L1983I
C          XBETA=2.5829-0.0359*A-0.000672*D                           L1983I
C          BETA=EXP(XBETA)                                             L1983I
C          XGAMMA=5.0037-0.1495*A-22.3577/A                           L1983I
C          GAMMA=EXP(XGAMMA)                                           L1983I
C      50  CONTINUE                                                  L1983I
C      IF(ALPHA.LT.0.)ALPHA=0.                                       L1983I

```

C		L1983I
C	INITIALIZE FR, H AND DBH ARRAYS	L1983I
C		L1983I
	DO 10 I=1,20	L1983I
	DBH(I)=0.	L1983I
	H(I)=0.	L1983I
	10 FR(I)=0.	L1983I
C		L1983I
C	TIME TO CALCULATE A DIAMETER DISTRIBUTION	L1983I
C	HERE WE GO	L1983I
C		L1983I
	MINCL = ALPHA+.5	L1983I
	IF(MINCL.LT.1)MINCL=1	L1983I
	DLOWER = ALPHA	L1983I
	DUPPER = FLOAT(MINCL)+.5	L1983I
	DBH(MINCL)=.5*(DLOWER+DUPPER)	L1983I
	CUMF = CDF(DBH(MINCL))	L1983I
	X1=HDOM/A	L1983I
	X2=ALOG(CUMF+1.0)	L1983I
	H(MINCL)=HDOM*(.6046+0.0449*X1+(0.7385-0.0862*X1)*X2)	L1983I
	FR(MINCL) = (CDF(DUPPER) - CDF(DLOWER)) * D	L1983I
	COUNT = FR(MINCL)	L1983I
	IBEGIN = MINCL + 1	L1983I
	DO 20 I=IBEGIN,20	L1983I
	MAXCL=I	L1983I
	DBH(I)=I	L1983I
	DLOWER = DBH(I) - .5	L1983I
	DUPPER = DLOWER + 1.	L1983I
	CUMF = CDF(DBH(I))	L1983I
	X2=ALOG(CUMF+1.0)	L1983I
	H(I)=HDOM*(0.6046+0.0449*X1+(0.7385-0.0862*X1)*X2)	L1983I
	FR(I)=(CDF(DUPPER) - CDF(DLOWER)) * D	L1983I
	COUNT = COUNT + FR(I)	L1983I
	DIFF = D - COUNT	L1983I
	IF(DIFF.GT..5.AND.I.LT.20)GO TO 20	L1983I
	FR(I) = FR(I) + DIFF	L1983I
	GO TO 30	L1983I
	20 CONTINUE	L1983I
C		L1983I
	30 RETURN	L1983I
	END	L1983I
C		L1983I
C	*****	L1983I
C		L1983I
	FUNCTION CDF(DBH)	L1983I
C		L1983I
C	THIS SUBPROGRAM CALCULATES THE WEIBULL CUMULATIVE	L1983I
C	DISTRIBUTION FUNCTION VALUE ASSOCIATED WITH THE	L1983I
C	DIAMETER VALUE "DBH"	L1983I
C		L1983I
	COMMON/WPARM/ALPHA,BETA,GAMMA	L1983I
C		L1983I
	IF(ALPHA.LT.0.)ALPHA=0.	L1983I
	IF(DBH.GT.ALPHA)GO TO 10	L1983I
	CDF = 0.	L1983I
	RETURN	L1983I
C		L1983I
	10 IF(BETA.LE.0.)BETA=.01	L1983I

```

IF (GAMMA.LE.0.) GAMMA=.01
Q = (DBH-ALPHA)/BETA
Q1 = ALOG(Q)*GAMMA
IF (Q1.GT.174.) GO TO 20
Q2 = Q**GAMMA
IF (Q2.GT.187.) GO TO 20
CDF = 1.-EXP(-Q2)
RETURN
C
C AVOIDING POSSIBLE PROBLEMS FROM EXPONENT OUT OF RANGE
C
20 CDF=1.
RETURN
END
C
C*****
C*****
C INDIVIDUAL TREE VOLUME AND WEIGHT EQUATIONS
C
C THE FOLLOWING SET OF FUNCTION SUBPROGRAMS
C PREDICTS INDIVIDUAL TREE VOLUMES, GREEN WEIGHTS
C (WITH BARK) AND DRY WEIGHTS (WITHOUT BARK) FOR
C BOTH THE TOTAL STEM AND MERCHANTABLE STEM. THE
C EQUATIONS WERE DEVELOPED FROM DATA COLLECTED
C IN SITE-PREPARED LOBLOLLY PINE PLANTATIONS IN THE
C COASTAL PLAIN OF NORTH AND SOUTH CAROLINA, GEORGIA
C AND NORTH FLORIDA.
C
C VARIABLES USED AS ARGUMENTS ARE:
C D = TREE DBH
C H = TOTAL TREE HEIGHT
C TOPD = MERCHANTABLE-TOP DIAMETER (OUTSIDE BARK)
C
C THE SUBPROGRAMS AVAILABLE ARE:
C VOLOBT - RETURNS TOTAL OUTSIDE-BARK VOLUME
C WITH D AND H AS INPUTS
C VOLIBT - RETURNS TOTAL INSIDE-BARK VOLUME
C WITH D AND H AS INPUTS
C VOLOBM - RETURNS MERCHANTABLE OUTSIDE-BARK VOLUME
C WITH D,H AND TOPD AS INPUTS
C VOLIBM - RETURNS MERCHANTABLE INSIDE-BARK VOLUME
C WITH D,H AND TOPD AS INPUTS
C GWTOT - RETURNS TOTAL GREEN WEIGHT
C WITH D AND H AS INPUTS
C GWMER - RETURNS MERCHANTABLE GREEN WEIGHT
C WITH D,H AND TOPD AS INPUTS
C DWTOT - RETURNS, TOTAL DRY WEIGHT
C WITH D AND H AS INPUTS
C DWMER - RETURNS MERCHANTABLE DRY WEIGHT
C WITH D,H AND TOPD AS INPUTS
C
C ALL VOLUMES ARE EXPRESSED IN CUBIC FEET.
C ALL WEIGHTS ARE EXPRESSED IN POUNDS.
C
C*****
C*****
C FUNCTION VOLOBT(D,H)
DATA B0,B1,B2/-5.5326,1.8945,0.9288/

```

```

C
C*****
C      VOLIBT=EXP(B0+B1*ALOG(D)+B2*ALOG(H))
C      RETURN
C      END
C*****
C
C      FUNCTION VOLIBT(D,H)
C      DATA B0,B1,B2/-6.5143,1.9229,1.1105/
C      VOLIBT=EXP(B0+B1*ALOG(D)+B2*ALOG(H))
C      RETURN
C      END
C*****
C
C      FUNCTION VOLOBM(D,H,TPPD)
C      DATA B1,B2,B3/0.4724,3.3559,3.1135/
C      VOLOBM=VOLIBT(D,H)*(1.0-B1*(TPPD*B2/D**B3))
C      IF(VOLOBM.LT.0.)VOLOBM=0.
C      RETURN
C      END
C*****
C
C      FUNCTION VOLIBM(D,H,TPPD)
C      DATA B1,B2,B3/0.5694,3.4304,3.2395/
C      VOLIBM=VOLIBT(D,H)*(1.0-B1*(TPPD*B2/D**B3))
C      IF(VOLIBM.LT.0.)VOLIBM=0.
C      RETURN
C      END
C*****
C
C*****
C
C      FUNCTION GWTOT(D,H)
C      DATA B0,B1,B2/-2.0153,1.9159,1.0481/
C      GWTOT = EXP(B0+B1*ALOG(D)+B2*ALOG(H))
C      RETURN
C      END
C*****
C
C*****
C
C      FUNCTION GWMER(D,H,TPPD)
C      DATA B1,B2,B3/0.4819,3.3208,3.0622/
C      GWMER = GWTOT(D,H) *(1.0-B1*(TPPD*B2/D**B3))
C      IF(GWMER.LT.0.)GWMER=0.
C      RETURN
C      END
C*****
C
C*****
C
C      FUNCTION DWTOT(D,H)
C      DATA B0,B1,B2/-3.5428,1.8721,1.2273/
C      DWTOT=EXP(B0+B1*ALOG(D)+B2*ALOG(H))
C      RETURN
C      END
C*****
C
C*****
C
C      FUNCTION DWMER(D,H,TPPD)
C*****

```



```

C      AT A POINT "HTAG" FEET ABOVE THE GROUND FOR A TREE WITH A      L1983I
C      BREAST-HEIGHT DIAMETER OF "DBH" INCHES AND A TOTAL HEIGHT      L1983I
C      OF "TOTHT" FEET.                                              L1983I
C                                                                    L1983I
C                                                                    L1983I
C                                                                    L1983I
C      DATA B1,B2,B3,B4/1.129318,.899034,-.685006,.737518/      L1983I
C                                                                    L1983I
C      TFDDB = B1 * DBH**B2 * TOTHT**B3 * (TOTHT-HTAG)**B4      L1983I
C                                                                    L1983I
C      RETURN                                                        L1983I
C      END                                                            L1983I
C*****                                                              L1983I
C      FUNCTION TFHTOB(DBH,TOTHT,DOB)                                L1983I
C                                                                    L1983I
C      THIS FUNCTION RETURNS THE PREDICTED HEIGHT ABOVE GROUND      L1983I
C      TO A POINT ON THE STEM WHERE THE OUTSIDE-BARK DIAMETER      L1983I
C      IS "DOB" INCHES FOR A TREE WITH A BREAST-HEIGHT DIAMETER      L1983I
C      OF "DBH" INCHES AND A TOTAL HEIGHT OF "TOTHT" FEET.        L1983I
C                                                                    L1983I
C      DATA B1,B2,B3,B4/.84798,-1.2190,.9288,1.3559/            L1983I
C                                                                    L1983I
C      TFHTOB = TOTHT - (B1 * DBH**B2 * TOTHT**B3 * DOB**B4)      L1983I
C                                                                    L1983I
C      RETURN                                                        L1983I
C      END                                                            L1983I
C*****                                                              L1983I
C      FUNCTION TFDIB(DBH,TOTHT,HTAG)                                L1983I
C                                                                    L1983I
C      THIS FUNCTION RETURNS THE PREDICTED INSIDE-BARK DIAMETER      L1983I
C      AT A POINT "HTAG" FEET ABOVE THE GROUND FOR A TREE WITH A      L1983I
C      BREAST-HEIGHT DIAMETER OF "DBH" INCHES AND A TOTAL HEIGHT      L1983I
C      OF "TOTHT" FEET.                                              L1983I
C                                                                    L1983I
C      DATA B1,B2,B3,B4/.770783,.883723,-.619672,.764991/      L1983I
C                                                                    L1983I
C      TFDIB = B1 * DBH**B2 * TOTHT**B3 * (TOTHT-HTAG)**B4      L1983I
C                                                                    L1983I
C      RETURN                                                        L1983I
C      END                                                            L1983I
C*****                                                              L1983I
C      FUNCTION TFHTIB(DBH,TOTHT,DIB)                                L1983I
C                                                                    L1983I
C      THIS FUNCTION RETURNS THE PREDICTED HEIGHT ABOVE GROUND      L1983I
C      TO A POINT ON THE STEM WHERE THE INSIDE-BARK DIAMETER      L1983I
C      IS "DIB" INCHES FOR A TREE WITH A BREAST-HEIGHT DIAMETER      L1983I
C      OF "DBH" INCHES AND A TOTAL HEIGHT OF "TOTHT" FEET.        L1983I
C                                                                    L1983I
C      DATA B1,B2,B3,B4/1.405410,-1.155207,.810039,1.307206/      L1983I
C                                                                    L1983I

```

TFHTIB = TOTHT - (B1 * DBH**B2 * TOTHT**B3 * DIB**B4)	L1983I
C	L1983I
RETURN	L1983I
END	L1983I
C	L1983I
C*****	L1983I
C	L1983I
SUBROUTINEKILLEM(S,A1,A2,T1,T2)	L1983I
C	L1983I
S = SITE INDEX BASE AGE 25	L1983I
C	L1983I
A1 = INITIAL AGE	L1983I
C	L1983I
A2 = ENDING AGE	L1983I
C	L1983I
T1 = NUMBER OF TREES PER ACRE AT AGE A1	L1983I
C	L1983I
T2 = NUMBER OF TREES PER ACRE AT AGE A2	L1983I
C	L1983I
DATA B1,B2,B3,B4/-2.029625,.00261778,3.683674,-.0933325/	L1983I
C	L1983I
T2=100.*((T1/100.)*B1+(B2+B4/S)*((A2/10.)*B3-(A1/10.)*B3))	L1983I
1 ** (1./B1)	L1983I
RETURN	L1983I
END	L1983I
C	L1983I
C*****	L198 ³ I
C*****	L198 ³ I

Gfütter, Jérôme L.; Harms, William R.; Brister, Graham, H.;
Reney, John W.

Stand structure and yields of site-prepared loblolly
pine plantations in the lower coastal plain of the
Carolinas, Georgia, and north Florida. Gen. Tech. Rep.
SE-27. Asheville, NC: U.S. Department of Agriculture,
Forest Service, Southeastern Forest Experiment Station;
1984. 173 pp.

Equations and tables are presented for estimating total
and merchantable volumes and weights of loblolly pine
planted on prepared sites in the Lower Atlantic Coastal
Plain. The equation system can be used to predict cur-
rent and projected yields in cubic feet and green and
dry weights.

KEYWORDS: ~~Pinus taeda~~, taper equations, volume equations,
forest management in Southeastern States.

Gfütter, Jérôme L.; Harms, William R.; Brister, Graham, H.;
Reney, John W.

Stand structure and yields of site-prepared loblolly
pine plantations in the lower coastal plain of the
Carolinas, Georgia, and north Florida. Gen. Tech. Rep.
SE-27. Asheville, NC: U.S. Department of Agriculture,
Forest Service, Southeastern Forest Experiment Station;
1984. 173 pp.

Equations and tables are presented for estimating total
and merchantable volumes and weights of loblolly pine
planted on prepared sites in the Lower Atlantic Coastal
Plain. The equation system can be used to predict cur-
rent and projected yields in cubic feet and green and
dry weights.

KEYWORDS: Pinus taeda, taper equations, volume equations,
forest management in Southeastern States.



The Forest Service, U.S. Department of Agriculture, is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives --as directed by Congress--to provide increasingly greater service to a growing Nation.

USDA policy does not permit discrimination because of race, color, national origin, sex or religion. Any person who believes he or she has been discriminated against in any USDA-related activity should write immediately to the Secretary of Agriculture, Washington, D.C. 20250.