

## **FOREST STOCKING AND YIELD TABLES**

- ◆ **Hardwood Stocking Guide and Yield Tables**
- ◆ **Yields Per Acre for Upland Oak**
- ◆ **Explanation of Hardwood Tables**
- ◆ **Potential Yields Per Acre and Estimated Stocking and Development (Tables)**
  - Upland Oaks –Doyle & Scribner
  - Lowland Hardwoods (Oak-Gum) – International, Doyle, & Scribner
  - Tupelos – Doyle
  - Yellow-poplar – International & Doyle
  - Cottonwood – International & Doyle
  - Sweetgum – Doyle
  - Eastern Redcedar – International Revision
  - Shortleaf Pine – International & Doyle
  - Loblolly Pine – International, Doyle, Scribner, & Pulpwood
  - Slash Pine – Doyle, Scribner, & Pulpwood
  - Loblolly Pine-Slash Pine – Scribner
  - Eastern White Pine – International & Scribner

**GUIDELINES FOR USING UPLAND HARDWOODS STOCKING GUIDE AND YIELD TABLES**

The oak-hickory forest type is the most prevalent of the upland hardwood types. The oaks are most abundant in this type, usually occupying dominant and co-dominant positions within the stand. The oaks are favored for management in the oak-hickory type as well as being highly favored in the other mixed-hardwood types. These guidelines assume intensive management of well-stocked stands with periodic thinning. Thinning throughout the rotation will be from below, leaving the best crop trees until the final harvest. Individual trees can be grown to larger diameters in less time by the use of well planned thinning operations, thus producing a higher quality product in a shorter rotation period.

**ACTUAL AND POTENTIAL DIAMETER GROWTH OF SELECTED UPLAND HARDWOOD SPECIES**

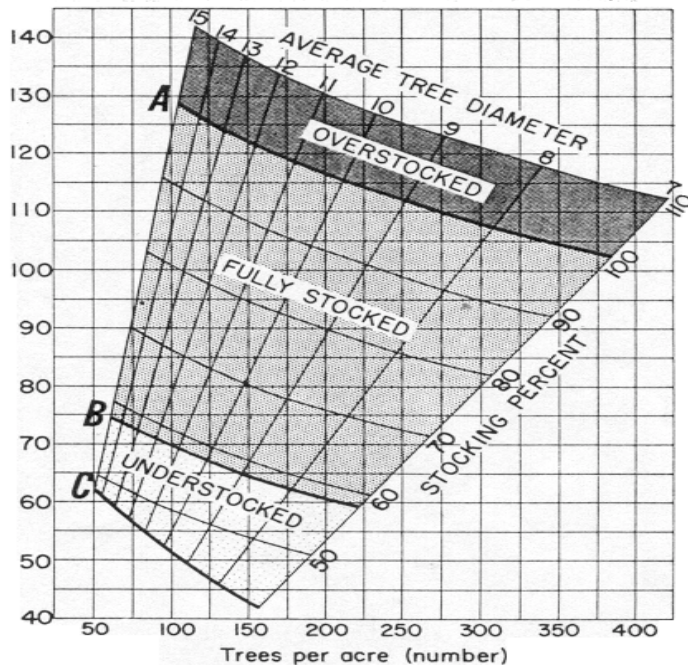
Species	Potential growth rate in managed stand	Age of 16" tree		Age of 22" tree	
		Unmanaged Stands	Managed Stands	Unmanaged Stands	Managed Stands
	(rings per inch)	years	years	years	years
Yellow-poplar	5	67	40	90	55
Black Walnut	5	76	40	104	55
Scarlet Oak	6	82	48	108	66
Red Oak	6	87	48	113	66
White Ash	7	90	56	119	77
Black Oak	7	90	56	121	77
Sugar Maple	8	104	64	137	88
White Oak	8	114	64	146	88
Beech	8	114	64	151	88
Hickory	10	126	80	168	110
Chestnut Oak	10	129	80	164	110

Basically, two stand condition classes should be considered. The first assumes the availability of even-aged stands of various ages that contain levels of growing stock, which adequately occupy the site. The second condition assumes that growing stock levels are below that which would allow the stand to be carried at satisfactory stocking and must be regenerated. Because of the past "high grading" cutting practices or wildfires, many upland hardwood stands are under-stocked with desirable trees, contain many "cull" trees and need regeneration. See Section IV – Technical Guide Code 666, Forest Stand Improvement; and Code 490, FOREST SITE PREPARATION.

Source: S.F. Gingrich, USDA-Forest Service, Northeastern Forest Experiment Station; and "Investment, Analysis of Upland Oak Stands," Forestry Report SA-FR12, June 1981, USDA-FS.

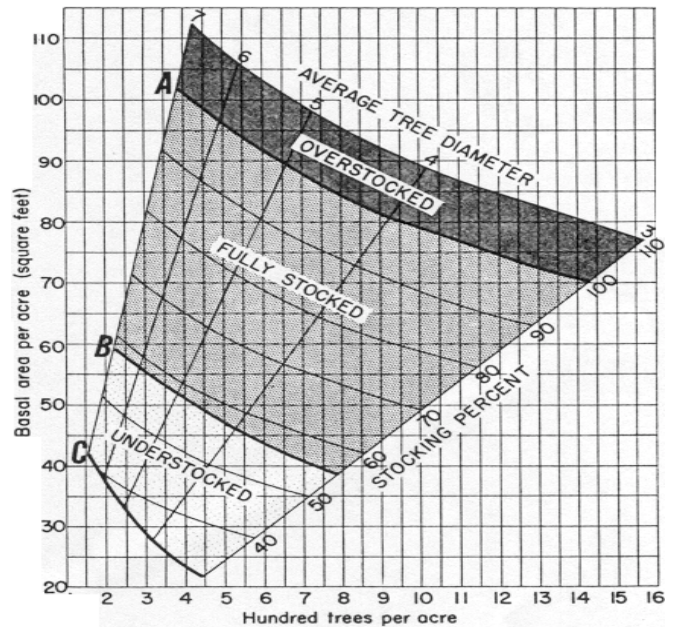
Gingrich's stocking guides (below) are used to determine whether existing stands have (1) sufficient basal area in growing stock trees to carry through rotation, or (2) whether the stands should be regenerated.

**Relation of basal area, number of trees, and average tree diameter to stocking percent for upland central hardwoods. Tree-diameter range 7-15 (left), 3-7 (right). The area between curves A and B indicates the range of stocking where**  
 (continued on next page)



USDA, Forest Service Ag. handbook 355

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 trees can fully utilize the site. Curve C shows the lower limit of stocking necessary to reach the B level in 10 years on average sites. (Average tree diameter is the diameter of the tree of average basal area.)



USDA, Forest Service Ag. handbook 355

The C level of stocking is used as a minimum of basal area required to carry existing stands. Stands at the C level of stocking will fully occupy the site in an average of 10 years and are worth saving. Thinning would not be carried out unless the stocking of desirable trees is above the B level, which is near 60 percent of full stocking. This means that total basal area would need to be substantially above the residual B-level shown on the tables for existing stands before thinning to this level would be practical. The key to using this growth and yield data is the appraisal of stocking conditions and the use of subsequent cultural treatments to maximize growth and quality of growing stock trees, and thus maximize rates of returns from investments. This depends on the skill of the user in classifying growing stock trees and stand conditions. Do not count cull trees or unacceptable species in basal area.

The standards used to determine growing stock trees are critical. The time to begin thinning in young stands is also important because early investments must be carried for a long period. Thinning should be delayed until trees capable of maintaining dominant crown positions can be identified in the stand. Research indicates that attempts to pre-commercially thin before this natural selection takes place usually result in wasted money and effort.

Table 1.---Yields per acre for upland oak; First thinning at age 20												
Age	Residual Stand					Cut Stand				Cumulative total yields (cut stand plus residual stand)		
	Basal Area	Average Tree Diameter	Yield			Basal Area	Yield					
Years	Square Feet	Inches	Cubic Feet	Cords	Board Feet	Square Feet	Cubic Feet	Cords	Board Feet	Cubic Feet	Cords	Board Feet
<b>SITE INDEX 55</b>												
20	34	2.3	60	0.6	----	---	----	----	----	60	0.6	----
30	49	4.2	600	5.1	----	15	----	0.9	----	600	6.0	----
40	58	6.1	1,220	12.2	880	16	300	2.9	----	1,520	16.0	880
50	66	8.6	1,750	16.0	2,350	15	300	3.2	150	2,350	23.0	2,500
60	71	10.6	1,980	18.6	3,960	15	360	3.2	570	2,940	28.8	4,680
70	74	12.1	2,170	20.0	5,810	14	370	3.8	820	3,500	34.0	7,350
<b>SITE INDEX 65</b>												
20	37	2.8	160	1.6	----	----	18	----	----	178	1.6	----
30	50	4.6	750	7.4	----	20	132	1.2	----	900	8.6	----
40	63	7.7	1,760	16.0	1,320	15	290	3.2	----	2,200	20.4	1,320
50	69	9.8	2,150	19.7	3,500	19	625	4.1	400	3,215	28.2	3,900
60	73	12.0	2,460	22.5	6,120	18	515	4.4	1,160	4,040	35.4	7,680
70	77	14.6	2,730	24.2	9,030	16	520	4.9	2,010	4,830	42.0	12,600
<b>SITE INDEX 75</b>												
20	46	3.6	476	4.4	----	----	218	2.0	----	694	6.4	----
30	57	5.6	1,275	13.0	----	26	307	3.6	----	1,800	18.6	----
40	66	8.4	2,140	19.8	2,160	21	535	4.8	240	3,200	30.2	2,400
50	71	10.8	2,600	24.7	6,450	21	665	5.4	1,160	4,325	40.5	7,850
60	76	13.4	3,060	28.5	10,680	19	615	4.9	2,020	5,400	49.2	14,100
70	79	16.3	3,465	31.5	13,720	19	635	5.2	2,740	6,440	57.4	19,880

Table 2.---Yields per acre for upland oak; No thinning						
Age	Basal Area	Trees	Average Tree Diameter <sup>1/</sup>	Yields		
Years	Square Feet	No.	Inches	Cubic Feet	Cords	Board Feet
<b>SITE INDEX 55</b>						
20	55	2,500	2.0	60	0.6	----
30	75	1,260	3.3	583	5.3	----
40	87	790	4.5	1,320	12.1	----
50	97	480	6.1	2,150	19.7	400
60	104	357	7.3	2,520	22.9	900
70	108	295	8.2	2,730	24.4	2,800
80	112	242	9.2	2,880	25.6	5,400
<b>SITE INDEX 65</b>						
20	59	1880	2.4	178	1.6	----
30	81	930	4.0	1,200	10.6	----
40	96	505	5.9	1,840	18.2	440
50	105	342	7.5	2,800	26.9	2,150
60	111	262	8.8	3,300	30.8	5,160
70	115	215	9.9	3,700	33.3	7,200
80	117	187	10.7	3,950	35.6	8,200
<b>SITE INDEX 75</b>						
20	70	1,425	3.0	694	6.4	----
30	89	680	4.9	1,670	16.7	----
40	101	400	6.8	2,440	23.7	1,380
50	110	279	8.5	3,315	30.1	4,100
60	114	222	9.7	4,140	37.7	9288
70	117	187	10.7	4,760	43.0	11,200
80	120	166	11.5	5,160	46.5	12,500

<sup>1/</sup> The diameter of the tree of average basal area

## **EXPLANATION**

The information in these tables is generally applicable to well-stocked, managed, upland hardwood stands where various species of white oak, red oak, and black oak are the principal components.

Site index ratings for upland oaks on adapted soils are shown in Section II of the technical guide. Information is shown in these tables for site classes 50, 60, 70, and 80.

Cutting cycle represents the average number of years required for the “leave trees” after a periodic cutting, to grow to the next higher 2-inch diameter class. The cutting cycles vary by site, as indicated, in this table.

Average stand diameter is the average diameter in inches of the stand before a periodic cutting. The “leave trees” at the time of a periodic cutting, if properly selected, will usually average larger; the “cut trees” will average smaller.

Average stand age is the approximate age of the stand, by site class, at the average diameter in column 1. Proper stocking must be maintained by periodic cuttings, and improvement cuttings must be started at an early age, to maintain this diameter-age ratio.

Before cut is the approximate volume of all merchantable trees in the well-stocked stand at the average stand diameter shown in column 1.

After cut is the volume of “leave trees,” properly spaced and selected on the basis of species, form and vigor, to remain through the next cutting cycle.

This cut is the approximate volume of merchantable trees to be removed from the well-stocked stand to provide proper growing space for the selected “leave trees”.

Cumulative cut is the estimated total volume harvested through the designated age (the current “this cut” plus previous cuts).

Cumulative yield includes the volume of the remaining stand (after cut) as well as the volume harvested (cumulative cut) at the designated age.

Average yearly growth is the average annual increment up to the age shown in column 2. It is obtained by dividing “cumulative yield” by “stand age”.

**UPLAND HARDWOODS**  
**ESTIMATED POTENTIAL YIELDS PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**  
**SITES 50 through 80**

Average Volume Per Acre – Standards Cords and Board Feet (International) 1/							
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth
<b>SITE 80 (CUTTING CYCLE – 6 YEARS)</b>							
6	24	18 CDS	12 CDS	6 CDS	6 CDS	18 CDS	0.8 CDS
8	30	24 "	17 "	7 "	13 "	32 "	1.1 "
10	36	29 "	21 "	8 "	21 "	42 "	1.2 "
12	42	6,400 BF	4,900 BF	1,500 BF	1,500 BF	6,400 BF	150 BF
14	48	7,900 "	6,300 "	1,600 "	3,100 "	9,400 "	200 "
16	54	10,600 "	8,800 "	1,800 "	4,900 "	13,700 "	250 "
18	60	12,400 "	10,400 "	2,000 "	6,900 "	17,300 "	290 "
20	66	14,400 "	12,200 "	2,200 "	9,100 "	21,300 "	320 "
22	72	16,200 "	14,000 "	2,000 "	11,200 "	25,200 "	350 "
24	80	17,200 "	---	17,200 "	28,400 "	28,400 "	360 "
<b>SITE 70 (CUTTING CYCLE – 7 YEARS)</b>							
6	28	18 CDS	12 CDS	6 CDS	6 CDS	18 CDS	0.6 CDS
8	35	22 "	15 "	7 "	13 "	28 "	0.8 "
10	42	28 "	20 "	8 "	21 "	41 "	1.0 "
12	49	6,400 BF	4,900 BF	1,500 BF	1,500 BF	6,400 BF	130 BF
14	56	7,400 "	5,900 "	1,500 "	3,000 "	8,900 "	160 "
16	63	10,000 "	8,300 "	1,700 "	4,700 "	13,000 "	210 "
18	70	12,000 "	10,100 "	1,900 "	6,600 "	16,700 "	240 "
20	77	13,000 "	---	13,000 "	19,600 "	19,600 "	260 "
<b>SITE 60 (CUTTING CYCLE – 8 YEAR)</b>							
6	32	14 CDS	9 CDS	5 CDS	5 CDS	14 CDS	0.4 CDS
8	40	22 "	16 "	6 "	11 "	27 "	0.7 "
10	48	27 "	20 "	7 "	18 "	38 "	0.8 "
12	56	5,500 BF	4,200 BF	1,300 BF	1,300 "	5,500 BF	100 BF
14	64	7,000 "	5,600 "	1,400 "	2,700 BF	8,300 "	130 "
16	72	9,300 "	7,800 "	1,500 "	4,200 "	12,000 "	170 "
18	80	10,800 "	---	10,800 "	15,000 "	15,000 "	190 "
<b>SITE 50 (CUTTING CYCLE – 9 YEARS)</b>							
6	36	11 CDS	7 CDS	4 CDS	4 CDS	11 CDS	0.3 CDS
8	45	19 "	14 "	5 "	9 "	23 "	0.5 "
10	54	26 "	19 "	7 "	16 "	35 "	0.6 "
12	63	4,900 BF	3,700 BF	1,200 BF	1,200 BF	4,900 BF	80 BF
14	72	6,600 "	5,300 "	1,200 "	2,400 "	7,700 "	110 "
16	81	8,200 "	---	8,200 "	10,600 "	10,600 "	130 "

1/ Adapted from USDA Technical Bulletin 560 by S.F. Gingrich, W.J. Lloyd, and J. M. Case.

**UPLAND OAKS**  
**ESTIMATED POTENTIAL YIELDS PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS- SITE CLASSES 50, 60, 70, 80**  
**TABLE 1: AGE, VOLUME, AND YEARLY GROWTH 1/**

Average Volume Per Acre – Standard Cords and Board Feet (Doyle)									
Average Stand Diam.	Average Stand Age	Before Cut	After Cut	This Cut	Cumulative Cut	Cumulative Yield	Average Yearly Growth		
<b>SITE 80 (CUTTING CYCLE – 6 YEARS)</b>									
6	24	18 CDS	12 CDS	6 CDS	6 CDS	18 CDS	0.8 CDS		
8	30	24 "	17 "	7 "	13 "	32 "	1.1 "		
10	36	29 "	21 "	8 "	21 "	42 "	1.2 "		
12	42	3,500 BF	2,700 BF	800 BF	800 BF	3,500 BF	80 BF		
14	48	4,700 "	3,700 "	1,000 "	1,800 "	5,500 "	110 "		
16	54	7,000 "	5,800 "	1,200 "	3,000 "	8,800 "	160 "		
18	60	9,100 "	7,600 "	1,500 "	4,500 "	12,100 "	200 "		
20	66	10,900 "	9,300 "	1,600 "	6,100 "	15,400 "	230 "		
22	72	12,800 "	11,100 "	1,700 "	7,800 "	18,900 "	260 "		
24	80	14,300 "	14,300 "	14,300 "	22,100 "	22,100 "	280 "		
<b>SITE 70 (CUTTING CYCLE – 7 YEARS)</b>									
6	28	18 CDS	12 CDS	6 CDS	6 CDS	18 CDS	0.6 CDS		
8	35	22 "	15 "	7 "	13 "	28 "	0.8 "		
10	42	28 "	20 "	8 "	21 "	41 "	1.0 "		
12	49	3,500 BF	2,700 BF	800 BF	800 BF	3,500 BF	70 BF		
14	56	4,400 "	3,500 "	900 "	1,700 "	5,200 "	90 "		
16	63	6,600 "	5,500 "	1,100 "	2,800 "	8,300 "	130 "		
18	70	8,800 "	7,400 "	1,400 "	4,200 "	11,600 "	170 "		
20	77	9,900 "	9,900 "	9,900 "	14,100 "	14,100 "	180 "		
<b>SITE 60 (CUTTING CYCLE – 8 YEARS)</b>									
6	32	14 CDS	9 CDS	5 CDS	5 CDS	14 CDS	0.4 CDS		
8	40	22 "	16 "	6 "	11 "	27 "	0.7 "		
10	48	27 "	20 "	7 "	18 "	38 "	0.8 "		
12	56	3,000 BF	2,300 BF	700 BF	700 BF	3,000 BF	50 BF		
14	64	4,100 "	3,300 "	800 "	1,500 "	4,800 "	70 "		
16	72	6,100 "	5,100 "	1,000 "	2,500 "	6,600 "	90 "		
18	80	7,900 "	7,900 "	7,900 "	10,400 "	10,400 "	130 "		
<b>SITE 50 (CUTTING CYCLE – 9 YEARS)</b>									
6	36	11 CDS	7 CDS	4 CDS	4 CDS	11 CDS	0.3 CDS		
8	45	19 "	14 "	5 "	9 "	23 "	0.5 "		
10	54	26 "	19 "	7 "	16 "	35 "	0.6 "		
12	63	2,700 BF	2,000 BF	700 BF	700 BF	2,700 BF	40 BF		
14	72	3,900 "	3,100 "	800 "	1,500 "	4,600 "	60 "		
16	81	5,400 "	5,400 "	5,400 "	6,900 "	6,900 "	90 "		

1/ Adapted from USDA Technical Bulletin 560 by S.F. Gingrich, W.J. Lloyd, and J. M. Case

**UPLAND OAKS**  
**ESTIMATED POTENTIAL YIELDS PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS- SITE CLASSES 50, 60, 70, 80**  
**TABLE 1: AGE, VOLUME, AND YEARLY GROWTH 1/**

Average Volume Per Acre – Standard Cords and Board Feet (Scribner)									
Average Stand Diam.	Average Stand Age	Before Cut	After Cut	This Cut	Cumulative Cut	Cumulative Yield	Average Yearly Growth		
<b>SITE 80 (CUTTING CYCLE – 6 YEARS)</b>									
6	24	18 CDS	12 CDS	6 CDS	6 CDS	18 CDS	0.8 CDS		
8	30	24 "	17 "	7 "	13 "	32 "	1.1 "		
10	36	29 "	21 "	8 "	21 "	42 "	1.2 "		
12	42	5,400 BF	4,100 BF	1,300 BF	1,300 BF	5,400 BF	130 BF		
14	48	6,800 "	5,400 "	1,400 "	2,700 "	8,100 "	170 "		
16	54	9,300 "	7,700 "	1,600 "	4,300 "	12,000 "	220 "		
18	60	11,000 "	9,300 "	1,700 "	6,000 "	15,300 "	250 "		
20	66	13,000 "	11,000 "	2,000 "	8,000 "	19,000 "	290 "		
22	72	14,700 "	12,700 "	2,000 "	10,000 "	22,700 "	310 "		
24	80	15,800 "	-----	15,800 "	25,800 "	25,800 "	320 "		
<b>SITE 70 (CUTTING CYCLE – 7 YEARS)</b>									
6	28	18 CDS	12 CDS	6 CDS	6 CDS	18 CDS	0.6 CDS		
8	35	22 "	15 "	7 "	13 "	28 "	0.8 "		
10	42	28 "	20 "	8 "	21 "	41 "	1.0 "		
12	49	5,400 BF	4,100 BF	1,300 BF	1,300 BF	5,400 BF	110 BF		
14	56	6,400 "	5,100 "	1,300 "	2,600 "	7,700 "	140 "		
16	63	8,800 "	7,300 "	1,500 "	4,100 "	11,400 "	180 "		
18	70	10,700 "	9,000 "	1,700 "	5,800 "	14,800 "	210 "		
20	77	11,700 "	-----	11,700 "	17,500 "	17,500 "	230 "		
<b>SITE 60 (CUTTING CYCLE – 8 YEARS)</b>									
6	32	14 CDS	9 CDS	5 CDS	5 CDS	14 CDS	0.4 CDS		
8	40	22 "	16 "	6 "	11 "	27 "	0.7 "		
10	48	27 "	20 "	7 "	18 "	38 "	0.8 "		
12	56	4,600 BF	3,500 BF	1,100 BF	1,100 BF	4,600 BF	80 BF		
14	64	6,000 "	4,800 "	1,200 "	2,300 "	7,100 "	110 "		
16	72	8,200 "	6,900 "	1,300 "	3,600 "	10,500 "	140 "		
18	80	9,600 "	-----	9,600 "	13,200 "	13,200 "	160 "		
<b>SITE 50 (CUTTING CYCLE – 9 YEARS)</b>									
6	36	11 CDS	7 CDS	4 CDS	4 CDS	11 CDS	0.3 CDS		
8	45	19 "	14 "	5 "	9 "	23 "	0.5 "		
10	54	26 "	19 "	7 "	16 "	35 "	0.6 "		
12	63	4,100 BF	3,100 BF	1,000 BF	1,000 BF	4,100 BF	60 BF		
14	72	5,700 "	4,500 "	1,200 "	2,200 "	6,700 "	90 "		
16	81	7,200 "	-----	7,200 "	9,400 "	9,400 "	120 "		

1/ Adapted from USDA Technical Bulletin 560 by S.F. Gingrich, W.J. Lloyd, and J. M. Case



**LOWLAND HARDWOODS (OAK-GUM)  
 ESTIMATED POTENTIAL YIELDS PER ACRE  
 WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (Doyle)									
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth		
<b>SITE 100 (CUTTING CYCLE – 9 YEARS)</b>									
6	18	16 CDS	15 CDS	6 CDS	6 CDS	17 CDS	1.0 CDS		
10	27	25 "	18 "	7 "	13 "	31 "	1.1 "		
14	36	6,850 BF	5,610 BF	1,240 BF	1,240 BF	6,850 BF	190 BF		
18	45	11,450 "	9,610 "	1,850 "	3,080 "	12,690 "	282 "		
22	54	15,900 "	13,560 "	2,340 "	5,420 "	18,980 "	351 "		
26	63	19,600 "	16,540 "	3,060 "	8,480 "	25,020 "	397 "		
30	72	23,100 "	23,100 "	23,100 "	31,580 "	31,580 "	439 "		
<b>SITE 90 (CUTTING CYCLE –10 YEARS)</b>									
6	20	16 CDS	11 CDS	5 CDS	5 CDS	16 CDS	0.8 CDS		
10	30	24 "	17 "	5 "	12 "	29 "	1.0 "		
14	40	6,340 BF	5,190 BF	1,150 BF	1,150 BF	6,340 BF	159 BF		
18	50	10,620 "	8,920 "	1,700 "	2,850 "	11,770 "	235 "		
22	60	14,700 "	12,530 "	2,170 "	5,020 "	17,550 "	293 "		
26	70	18,240 "	18,240 "	18,240 "	23,260 "	23,260 "	332 "		
<b>SITE 80 (CUTTING CYCLE –11 YEARS)</b>									
6	22	14 CDS	10 CDS	5 CDS	5 CDS	15 CDS	0.7 CDS		
10	33	17 "	16 "	6 "	11 "	27 "	0.8 "		
14	44	5,380 BF	4,770 BF	1,060 BF	1,060 BF	5,830 "	133 BF		
18	55	9,750 "	8,190 "	1,560 "	2,620 "	10,810....."	196 "		
22	66	13,500 "	13,500 "	13,500 "	16,120 "	16,120 "	244 "		

Adapted from Table 7, Agriculture Handbook 181, and unpublished data provided by personnel of the Southern Hardwood Lab., U.S.F.S. Southern Forest Experiment Station.

**LOWLAND HARDWOODS (OAK-GUM)  
 POTENTIAL YIELDS PER ACRE  
 WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (International)											
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth				
<b>SITE 100 (CUTTING CYCLE – 9 YEARS)</b>											
6	18	17	CDS	6	CDS	6	CDS	16	CDS	0.8	CDS
10	27	25	"	7	"	13	"	31	"	1.1	"
14	36	11,600	BF	2,100	BF	2,100	BF	11,600	BF	322	BF
18	45	15,600	"	2,500	"	4,600	"	17,700	"	393	"
22	54	20,000	"	2,900	"	7,500	"	24,600	"	455	"
26	63	22,900	"	22,900	"	30,400	"	30,400	"	483	"
<b>SITE 90 (CUTTING CYCLE – 10 YEARS)</b>											
6	20	16	CDS	5	CDS	5	CDS	16	CDS	0.7	CDS
10	30	23	"	6	"	11	"	28	"	0.9	"
14	40	10,700	BF	1,900	BF	1,900	BF	10,700	BF	266	BF
18	50	14,400	"	2,300	"	4,200	"	16,300	"	326	"
22	60	18,500	"	18,500	"	22,700	"	22,700	"	378	"
<b>SITE 80 (CUTTING CYCLE – 12 YEARS)</b>											
6	24	15	CDS	5	CDS	5	CDS	15	CDS	0.6	CDS
10	36	22	"	6	"	11	"	27	"	0.8	"
14	48	9,900	BF	1,800	BF	1,800	BF	9,900	BF	206	BF
18	60	13,300	"	13,300	"	15,100	"	15,100	"	252	"

Adapted from Table 7, Agriculture Handbook 181, and unpublished data provided by personnel of the Southern Hardwood Laboratory, USFS Southern Forest Experiment Station.

Cutting cycles are average number of years to attain the next higher 4-inch DBH class on specified sites. Yields do not include topwood from sawlogs; this would add about one cord per MBF.

**LOWLAND HARDWOODS (OAK-GUM)  
 POTENTIAL YIELDS PER ACRE  
 WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (Scribner)							
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth
<b>SITE 100 (CUTTING CYCLE – 9 YEARS)</b>							
6	18	17 CDS	11 CDS	6 CDS	6 CDS	17 CDS	0.9 CDS
10	27	25 "	18 "	7 "	13 "	31 "	1.1 "
14	36	10,000 BF	7,900 BF	2,100 BF	2,100 BF	10,000 BF	278 BF
18	45	13,800 "	11,300 "	2,500 "	4,600 "	15,900 "	353 "
20	54	21,500 "	18,700 "	2,800 "	7,400 "	26,100 "	483 "
22	63	24,000 "	-----	24,000 "	31,400 "	31,400 "	498 "
<b>SITE 90 (CUTTING CYCLE – 10 YEARS)</b>							
6	20	16 CDS	11 CDS	5 CDS	5 CDS	16 CDS	0.9 CDS
10	30	24 "	17 "	7 "	12 "	29 "	1.0 "
14	40	9,300 BF	7,400 BF	1,900 BF	1,900 BF	9,300 BF	233 BF
18	50	12,800 "	10,500 "	2,300 "	4,200 "	14,700 "	294 "
22	60	16,900 "	-----	16,900 "	21,100 "	21,100 "	352 "
<b>SITE 80 (CUTTING CYCLE – 12 YEARS)</b>							
6	24	15 CDS	10 CDS	5 CDS	5 CDS	15 CDS	0.6 CDS
10	36	22 "	16 "	6 "	11 "	27 "	0.8 "
14	48	8,600 BF	6,900 BF	1,700 BF	1,700 BF	8,600 "	179 BF
18	60	11,800 "	-----	11,800 "	12,500 "	13,500 "	225 "

Adapted from Table 7, Agriculture Handbook 181, and unpublished data provided by personnel of the Southern Hardwood Lab., U.S.F.S. Southern Forest Experiment Station.

**LOWLAND HARDWOODS (OAK-GUM)  
 ESTIMATED STOCKING AND DEVELOPMENT PER ACRE  
 WELL-STOCKED EVEN – AGED MANAGED STANDS  
 AT THE END OF SUCCESSIVE GROWTH PERIODS (CUTTING CYCLES) <sup>1/</sup>**

**SITE 80-110**

All Trees	Average DBH (Inches)		Average Basal Area (Square Feet)			Average Number of Trees (Number)		
	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees
6	6.5	5.6	93	47	46	475	202	273
10	10.7	9.0	110	71	39	202	112	90
14	14.8	12.5	120	85	35	112	71	41
18	18.8	16.0	125	95	30	71	49	22
22	22.8	19.6	129	102	27	49	36	13
26	26.8	23.5	133	106	37	36	27	9
30	30.7	27.4	132	108	24	27	21	6
34	----	34.0	132	----	132	21	----	21

<sup>1/</sup>The above data extracted from Table 7, Agriculture Handbook 181, Management and Inventory of Southern Hardwoods, USDA Forest Service.

End of each growth period is signaled by attainment of specified average size.

Duration of growth period (cutting cycle) varies by site. See cutting cycles and potential yields by 10-foot site classes.

**TUPELOS**  
**POTENTIAL YIELDS PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (Doyle) <sup>2/</sup>							
Average DBH 1/ (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth
<b>SITE 90 (CUTTING CYCLE – 10 YEARS)</b>							
6	20	15 CDS	9 CDS	6 CDS	6 CDS	15 CDS	0.7 CDS
10	30	26 "	19 "	7 "	13 "	32 "	1.1 "
14	40	4,750 BF	3,900 BF	850 BF	850 BF	4,750 BF	119 BF
18	50	8,870 "	7,930 "	1,040 "	1,890 "	9,820 "	196 "
22	60	13,800 "	11,610 "	2,190 "	3,080 "	15,690 "	262 "
26	70	17,800 "	-----	17,800 "	19,990 "	19,990 "	286 "
<b>SITE 80 (CUTTING CYCLE – 12 YEARS)</b>							
6	24	14 CDS	8 CDS	6 CDS	6 CDS	14 CDS	0.6 CDS
10	36	24 "	18 "	18 "	6 "	12 "	0.8 "
14	48	4,370 BF	3,590 BF	780 BF	780 BF	4,370 BF	91 BF
18	60	8,250 "	7,300 "	950 "	1,730 "	9,030 "	150 "
22	72	12,700 "	-----	12,700 "	14,430 "	14,430 "	200 "
<b>SITE 70 (CUTTING CYCLE – 14 YEARS)</b>							
6	28	13 CDS	8 CDS	5 CDS	5 CDS	13 CDS	0.5 CDS
10	42	22 "	16 "	6 "	11 "	27 "	0.6 "
14	56	3,990 BF	3,280 BF	710 BF	710 BF	3,990 BF	71 BF
18	70	7,530 "	-----	7,530 "	8,240 "	8,240 "	118 "

Adapted from Table 8, Agriculture Handbook 181, and unpublished data provided by personnel of the Southern Hardwood Lab., U.S.F.S. Southern Forest Experiment Station.

<sup>1/</sup> Diameter above bottleneck

<sup>2/</sup> Saw-log volume includes all sound reasonably straight to a minimum 10-inch top, at least 12 feet above the stump.

**TUPELOS**  
**ESTIMATED STOCKING AND DEVELOPMENT PER ACRE**  
**WELL-STOCKED EVEN – AGED MANAGED STANDS**

**SITE 70-100**

Average DBH <u>1/</u> (Inches)			Average Basal Area (Square Feet)			Average Number of Trees (Number)		
All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees
6	6.5	5.5	119	51	68	605	259	346
10	10.7	8.9	141	79	62	259	146	113
14	14.8	12.5	156	102	54	146	95	51
18	18.8	16.0	168	118	50	95	67	28
22	22.8	19.6	177	131	46	67	50	17
26	26.8	23.5	183	140	43	50	38	12
30	----	30.0	185	----	185	38	----	38

1/ Diameter above bottleneck.

Data extracted from Table 8 Agriculture Handbook 181, Management and Inventory of Southern Hardwoods, USDA Forest Service.

Duration of growth period (cutting cycle) varies by site; see cutting cycles and potential yields by 10-foot site classes.

**YELLOW-POPLAR**  
**POTENTIAL YIELDS PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (International)									
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth		
<b>SITE 110 (CUTTING CYCLE – 8 YEARS)</b>									
6	16	22 CDS	13 CDS	9 CDS	9 CDS	22 CDS	1.4 CDS		
10	24	32 "	20 "	12 "	21 "	41 "	1.7 "		
14	32	12,900 BF	10,600 BF	2,300 BF	2,300 BF	12,900 BF	403 BF		
18	40	20,300 "	16,200 "	4,100 "	6,400 "	22,600 "	565 "		
22	48	25,300 "	21,100 "	4,200 "	10,600 "	30,700 "	640 "		
26	56	30,400 "	----	30,400 "	41,000 "	41,000 "	732 "		
<b>SITE 100 (CUTTING CYCLE – 9 YEARS)</b>									
6	18	21 CDS	13 CDS	8 CDS	8 CDS	21 CDS	1.2 CDS		
10	27	30 "	19 "	11 "	17 "	38 "	1.4 "		
14	36	12,000 BF	10,000 BF	2,200 BF	2,200 BF	12,000 BF	333 BF		
18	45	18,900 "	15,100 "	3,800 "	3,800 "	21,100 "	469 "		
22	54	23,500 "	-----	23,500 "	23,500 "	29,500 "	546 "		
<b>SITE 90 (CUTTING CYCLE – 10 YEARS)</b>									
6	20	19 CDS	12 CDS	7 CDS	7 CDS	19 CDS	0.9 CDS		
10	30	28 "	18 "	10 "	17 "	35 "	1.2 "		
14	40	11,100 BF	9,100 BF	2,000 BF	2,000 BF	11,100 BF	277 BF		
18	50	17,000 "	13,500 "	3,500 "	5,500 "	19,000 "	380 "		
22	60	21,800 "	-----	21,800 "	27,300 "	27,300 "	445 "		
<b>SITE 80 (CUTTING CYCLE – 12 YEARS)</b>									
6	24	18 CDS	12 CDS	6 CDS	6 CDS	18 CDS	0.8 CDS		
10	36	26 "	15 "	9 "	15 "	32 "	0.9 "		
14	48	10,200 BF	8,400 BF	1,800 BF	1,800 BF	10,200 BF	212 BF		
18	60	15,800 "	12,600 "	3,200 "	5,000 "	17,600 "	293 "		
22	72	20,100 "	-----	20,100 "	25,100 "	25,100 "	349 "		

Adapted from Table 7, USDA Agriculture Handbook 181, and unpublished data provided by personnel of the Southern Hardwood Lab., USFS Southern Forest Experiment Station. Cutting cycles are average number of years to attain next higher 4-inch DBH class on specified sites.

**YELLOW-POPLAR**  
**POTENTIAL YIELDS PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (Doyle)									
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth		
<b>SITE 100 (CUTTING CYCLE – 8 YEARS)</b>									
6	16	22 CDS	13 CDS	9 CDS	9 CDS	22 CDS	1.3 CDS		
10	24	32 "	20 "	12 "	21 "	41 "	1.7 "		
14	32	7,700 BF	6,300 BF	1,400 BF	1,400 BF	7,700 BF	241 BF		
18	40	15,000 "	12,000 "	3,000 "	4,400 "	16,400 "	410 "		
22	48	20,100 "	16,700 "	3,400 "	7,800 "	24,500 "	510 "		
26	56	26,000 "	22,300 "	3,700 "	11,500 "	33,800 "	604 "		
30	64	31,700 "	-----	31,700 "	43,200 "	43,200 "	675 "		
<b>SITE 100 (CUTTING CYCLE – 9 YEARS)</b>									
6	18	21 CDS	13 CDS	6 CDS	8 CDS	21 CDS	1.2 CDS		
10	27	30 "	19 "	11 "	19 "	38 "	1.4 "		
14	36	7,100 BF	5,800 BF	1,300 BF	1,300 BF	7,100 BF	197 BF		
18	45	13,900 "	11,100 "	2,800 "	4,100 "	15,200 "	338 "		
22	54	18,700 "	15,600 "	3,100 "	7,200 "	22,800 "	-----		
26	63	24,200 "	-----	24,200 "	31,400 "	31,400 "	-----		
<b>SITE 90 (CUTTING CYCLE – 10 YEARS)</b>									
10	20	19 CDS	12 CDS	7 CDS	7 CDS	19 CDS	0.9 CDS		
14	30	28 "	18 "	10 "	17 "	35 "	1.2 "		
18	40	6,600 BF	5,400 BF	1,200 BF	1,200 BF	6,600 BF	165 BF		
22	50	12,900 "	10,300 "	2,600 "	3,800 "	14,100 "	282 "		
26	60	17,300 "	-----	17,300 "	21,100 "	21,100 "	352 "		
<b>SITE 80 (CUTTING CYCLE – 12 YEAR)</b>									
6	24	17 CDS	16 CDS	6 CDS	6 CDS	18 CDS	0.8 CDS		
10	36	26 "	17 "	7 "	15 "	32 "	0.8 "		
14	48	6,100 "	5,000 BF	1,100 BF	1,100 BF	6,100 "	127 BF		
18	60	11,900 "	-----	11,900 "	13,000 "	13,000 "	217 "		

Adapted from Table 7, Agriculture Handbook 181, and unpublished data provided by personnel of the Southern Hardwood Lab., U.S.F.S. Southern Forest Experiment Station. Cutting cycles are average number of years to attain next higher 4-inch DBH class on specified sites.



**YELLOW POPLAR**  
**ESTIMATED STOCKING AND DEVELOPMENT PER ACRE**  
**WELL-STOCKED EVEN – AGED MANAGED STANDS**  
**AT THE END OF SUCCESSIVE GROWTH PERIODS (CUTTING CYCLES)**

**SITE 80-100**

Average DBH (Inches)		Average Basal Area (Square Feet)			Average Number of Trees (Number)			
All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees
6	6.5	5.6	102	51	51	520	220	300
10	10.7	9.0	120	76	44	220	120	100
14	14.8	12.5	128	93	35	120	78	42
18	18.8	16.0	138	105	33	78	54	24
22	22.8	19.6	142	114	28	54	40	14
26	26.8	23.5	147	121	26	40	31	9
30	----	30.0	152	----	152	31	----	31

Adapted from Table 7, Agriculture Handbook No. 181, USDA Forest Service. Stocking exceeds Table 7 by about 10 percent, as recommended by authors (page 80). End of each growth period (cutting cycle) is signaled by attainment of specified average size. Duration of growth period varies by site; see cutting cycles and potential yields by 10-foot site classes.

**COTTONWOOD PLANTATIONS  
 POTENTIAL YIELDS PER ACRE**

Average Volume Per Acre – Standard Cords and Board Feet (International)									
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees 3/	Cumulative Cut 3/	Cumulative Yield 3/	Average Yearly Growth 3/		
<b>SITE 120 (CUTTING CYCLE 4 YEARS) 1/2/</b>									
6	6	14.8 CDS	10.6 CDS	4.2 CDS	4.2 CDS	14.8 CDS	2.5 CDS		
10	10	29.3 "	17.0 "	12.3 "	16.5 "	33.5 "	3.4 "		
14	14	11,500 BF	9,300 "	2,200 BF	2,200 BF	11,500 BF	821 BF		
18	18	18,100 "	14,400 BF	3,700 "	5,900 "	20,300 "	1,128 "		
22	22	22,500 "	17,400 "	5,100 "	11,000 "	28,400 "	1,291 "		
26	26	26,800 "	-----	26,800 "	37,800 "	37,800 "	1,454 "		
<b>SITE 110 (CUTTING CYCLE – 5 YEARS)</b>									
6	7	13.9 CDS	9.9 CDS	4.0 CDS	4.0 CDS	13.9 CDS	2.0 CDS		
10	12	27.6 "	16.0 "	11.6 "	15.6 "	31.6 "	2.6 "		
14	17	10,800 BF	8,800 BF	2,000 BF	2,000 BF	10,800 BF	635 BF		
18	22	17,000 "	13,500 "	3,500 "	5,500 BF	19,000 "	864 "		
22	27	21,000 "	-----	21,000 "	26,500 "	26,500 "	981 "		
<b>SITE 100 (CUTTING CYCLE – 6 YEARS)</b>									
6	8	13.1 CDS	9.3 CDS	3.8 CDS	3.8 CDS	13.1 CDS	1.6 CDS		
10	14	25.8 "	15.0 "	10.8 "	14.6 "	29.6 "	2.1 "		
14	20	10,000 BF	8,200 BF	1,800 BF	1,800 BF	10,000 BF	677 BF		
18	26	15,800 "	12,600 "	3,200 "	5,000 "	17,600 "	677 "		
22	32	19,600 "	-----	19,600 "	24,600 "	24,600 "	769 "		
<b>SITE 90 (CUTTING CYCLE – 7 YEARS)</b>									
6	9	12.2 CDS	8.6 CDS	3.6 CDS	3.6 CDS	12.2 CDS	1.4 CDS		
10	16	24.1 "	14.0 "	10.1 "	13.7 "	27.7 "	1.7 "		
14	23	9,300 BF	7,700 BF	1,600 BF	1,600 BF	9,300 BF	404 BF		
18	30	14,600 "	-----	14,600 "	16,200 "	16,200 "	540 "		

1/ Site index = height at 30 years.

2/ Cutting cycle = number of years to attain next higher 4-inch DBH class.

3/ Yields do not include top wood from sawlog trees; this will average about 0.7 cords per MBF.

**COTTONWOOD PLANTATIONS  
 POTENTIAL YIELDS PER ACRE**

Average Volume Per Acre – Standard Cords and Board Feet (Doyle)									
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees <sup>3/</sup>	Cumulative Cut <sup>2/</sup>	Cumulative Yield <sup>2/</sup>	Average Yearly Growth <sup>3/</sup>		
<b>SITE 120 (CUTTING CYCLE 4 YEARS) <sup>1/2/</sup></b>									
6	6	14.8 CDS	10.6 CDS	4.2 CDS	4.2 CDS	14.8 CDS	2.5 CDS		
10	10	29.3 "	17.0 "	12.3 "	16.5 "	33.5 "	3.4 "		
14	14	6,800 BF	5,500 BF	1,300 BF	1,300 BF	6,800 BF	486 BF		
18	18	13,300 "	10,600 "	2,700 "	4,000 "	14,600 "	811 "		
22	22	17,900 "	13,800 "	4,100 "	8,100 "	21,900 "	995 "		
26	26	22,900 "	-----	22,900 "	31,000 "	31,000 "	1,192 "		
<b>SITE 110 (CUTTING CYCLE – 5 YEARS)</b>									
6	7	13.9 CDS	9.9 CDS	4.0 CDS	4.0 CDS	13.9 CDS	2.0 CDS		
10	12	27.6 "	16.0 "	11.6 "	15.6 "	31.6 "	2.6 "		
14	17	6,400 BF	5,200 BF	1,200 BF	1,200 BF	6,400 BF	376 BF		
18	22	12,500 "	9,900 "	2,600 "	3,800 "	13,700 "	623 "		
22	27	16,700 "	-----	16,700 "	20,500 "	20,500 "	759 "		
<b>SITE 100 (CUTTING CYCLE – 6 YEARS)</b>									
6	8	13.1 CDS	9.3 CDS	3.8 CDS	3.8 CDS	13.1 CDS	1.6 CDS		
10	14	25.8 "	15.0 "	10.8 "	14.6 "	29.6 "	2.1 "		
14	20	5,900 BF	4,800 BF	1,100 BF	1,100 BF	5,900 BF	295 BF		
18	26	11,600 "	9,200 "	2,400 "	3,500 "	12,700 "	489 "		
22	32	15,600 "	-----	15,600 "	19,100 "	19,100 "	597 "		
<b>SITE 90 (CUTTING CYCLE – 7 YEARS)</b>									
6	9	12.2 CDS	8.6 CDS	3.6 CDS	3.6 CDS	12.2 CDS	1.4 CDS		
10	16	24.1 "	14.0 "	10.1 "	13.7 "	27.7 "	1.7 "		
14	23	5,500 BF	4,500 BF	1,000 BF	1,000 BF	5,500 BF	239 BF		
18	30	10,700 "	-----	10,700 "	11,700 "	11,700 "	390 "		

<sup>1/</sup> Site index = height at 30 years.

<sup>2/</sup> Cutting cycle = number of years to attain next higher 4-inch DBH class.

<sup>3/</sup> Yields do not include top wood from sawlog trees; this will average about 0.7 cords per MBF.

**COTTONWOOD PLANTATIONS**  
**ESTIMATED DEVELOPMENT AND STOCKING PER ACRE**

**SITE CLASSES 90 through 120 1/**

Average DBH (Inches)			Average Basal Area (Square Feet)			Average Number of Trees (Number)		
All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees
6	6.4	5.6	65	42	23	330	190	140
10	10.7	9.1	104	62	43	190	100	90
14	14.8	12.5	107	78	29	100	65	35
18	18.9	16.0	115	87	28	65	45	20
22	22.9	19.6	119	94	25	45	33	12
26	----	26.0	122	----	122	33	----	33

Adapted from USDA-FS Research Paper SO-59 and unpublished data provided by personnel of the USFS Southern Hardwood Laboratory. Stocking at 6-inch DBH is based on an initial planting of 10 foot with 75 percent survival at age 6 to 9 years. Duration of growth period (cutting cycle) varies by site; see potential yields by 10-foot site classes.

**SWEETGUM**  
**POTENTIAL YIELDS PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (Doyle)									
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth		
<b>SITE 110 (CUTTING CYCLE – 8 YEARS)</b>									
6	16	22 CDS	13 CDS	9 CDS	9 CDS	22 CDS	1.4 CDS		
10	24	32 "	20 "	12 "	21 "	41 "	1.7 "		
14	32	7,700 BF	6,300 BF	1,400 BF	1,400 BF	7,700 BF	241 BF		
18	40	15,000 "	12,000 "	3,000 "	4,400 "	16,400 "	410 "		
22	48	20,100 "	16,700 "	3,400 "	7,800 "	24,500 "	510 "		
26	56	26,000 "	22,300 "	3,700 "	11,500 "	33,800 "	604 "		
30	64	31,000 "	---	31,700 "	43,200 "	43,200 "	675 "		
<b>SITE 100 (CUTTING CYCLE – 9 YEARS)</b>									
6	18	21 CDS	13 CDS	8 CDS	8 CDS	21 CDS	1.2 CDS		
10	27	30 "	19 "	11 "	19 "	38 "	1.4 "		
14	36	7,100 BF	5,800 BF	1,300 BF	1,300 BF	7,100 BF	197 BF		
18	45	13,900 "	11,100 "	2,800 "	4,100 "	15,200 "	338 "		
22	54	18,700 "	15,600 "	3,100 "	7,200 "	22,800 "	422 "		
26	63	24,200 "	-----	24,200 "	31,400 "	31,400 "	498 "		
<b>SITE 90 (CUTTING CYCLE – 10 YEARS)</b>									
10	20	19 CDS	12 CDS	7 CDS	7 CDS	19 CDS	0.9 CDS		
14	30	28 "	18 "	10 "	17 "	35 "	1.2 "		
18	40	6,600 BF	5,400 BF	1,200 BF	1,200 BF	6,600 BF	165 BF		
22	50	12,900 "	10,300 "	2,600 "	3,800 "	14,100 "	282 "		
26	60	17,300 "	-----	17,300 "	21,100 "	21,100 "	352 "		
<b>SITE 80 (CUTTING CYCLE – 12 YEARS)</b>									
6	24	18 CDS	12 CDS	6 CDS	6 CDS	18 CDS	0.8 CDS		
10	36	26 "	17 "	9 "	15 "	32 "	0.9 "		
14	48	6,100 BF	5,000 BF	1,100 BF	1,100 BF	6,100 BF	127 BF		
18	60	11,900 "	-----	11,900 "	13,000 "	13,000 "	217 "		

Adapted from Table 7, USDA Agriculture Handbook 181, and unpublished data provided by personnel of the Southern Hardwood Lab., USFS Southern Forest Experiment Station. Cutting cycles are average number of years to attain next higher 4-inch DBH class on specified sites.

**SWEETGUM**  
**ESTIMATED STOCKING AND DEVELOPMENT PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**  
**AT THE END OF SUCCESSIVE GROWTH PERIODS (CUTTING CYCLES)**

**SITES 80-110**

All Trees	Average DBH (Inches)		Average Basal Area (Square Feet)			Average Number of Trees (Number)		
	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees
<b>6</b>	<b>6.5</b>	<b>5.6</b>	<b>102</b>	<b>51</b>	<b>51</b>	<b>520</b>	<b>220</b>	<b>300</b>
<b>10</b>	<b>10.7</b>	<b>9.0</b>	<b>120</b>	<b>76</b>	<b>44</b>	<b>220</b>	<b>120</b>	<b>100</b>
<b>14</b>	<b>14.8</b>	<b>12.5</b>	<b>128</b>	<b>93</b>	<b>35</b>	<b>120</b>	<b>78</b>	<b>42</b>
<b>18</b>	<b>18.8</b>	<b>16.0</b>	<b>138</b>	<b>105</b>	<b>33</b>	<b>78</b>	<b>54</b>	<b>24</b>
<b>22</b>	<b>22.8</b>	<b>19.6</b>	<b>142</b>	<b>114</b>	<b>28</b>	<b>54</b>	<b>40</b>	<b>14</b>
<b>26</b>	<b>26.8</b>	<b>23.5</b>	<b>147</b>	<b>121</b>	<b>26</b>	<b>40</b>	<b>31</b>	<b>9</b>
<b>30</b>	-----	<b>30.0</b>	<b>152</b>	-----	<b>152</b>	<b>31</b>	-----	<b>31</b>

Adapted from Table 7, Agriculture Handbook No. 181, USDA Forest Service. Stocking exceeds Table 7 by about 10 percent, as recommended by authors (page 80). End of each growth period (cutting cycle) is signaled by attainment of specified average size. Duration of growth period varies by site; see cutting cycles and potential yields by 10-foot site classes.

**EASTERN REDCEDAR  
 POTENTIAL YIELDS PER ACRE  
 WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Posts and Board Feet (International Revision)							
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth
<b>SITE 50 (CUTTING CYCLE – 8 YEARS)</b>							
4	12	1,020 Posts	660 Posts	360 Posts	360 Posts	1,020 Posts	85 Posts
6	20	1,310 Posts	910 Posts	400 Posts	760 Posts	1,670 Posts	84 Posts
8	28	6,060 BF	4,400 BF	1,620 BF	1,620 BF	6,060 BF	216 BF
10	36	10,430 BF	7,990 BF	2,440 BF	4,060 BF	12,050 BF	335 BF
12	44	12,580 BF	9,920 BF	2,660 BF	6,720 BF	16,640 BF	378 BF
14	52	12,600 BF	-----	12,600 BF	19,320 BF	19,320 BF	372 BF
<b>SITE 40 (CUTTING CYCLE – 12 YEARS)</b>							
4	16	940 Posts	610 Posts	330 Posts	330 Posts	940 Posts	58 Posts
6	28	1,200 Posts	830 Posts	370 Posts	700 Posts	1,530 Posts	55 Posts
8	40	5,580 BF	4,090 BF	1,490 BF	1,490 BF	5,580 BF	140 BF
10	52	9,600 BF	7,360 BF	2,240 BF	3,730 BF	11,090 BF	213 BF
12	64	11,580 BF	-----	11,580 BF	15,310 BF	15,310 BF	239 BF
<b>SITE 30 (CUTTING CYCLE – 16 YEARS)</b>							
4	24	860 Posts	560 Posts	300 Posts	300 Posts	860 Posts	36 Posts
6	40	1,100 Posts	760 Posts	340 Posts	640 Posts	1,400 Posts	35 Posts
8	56	5,090 BF	3,730 BF	1,360 BF	1,360 BF	5,090 BF	91 BF
10	72	8,760 BF	-----	8,760 BF	10,120 BF	10,120 BF	141 BF

**EASTERN REDCEDAR**  
**ESTIMATED STOCKING AND DEVELOPMENT PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**  
**SITES 30 – 50**

Average DBH (In.)	Average Basal Area (Square Feet)			Average Number of Trees (Number)		
	All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees
4	59	38	21	680	436	244
6	86	59	27	436	303	133
8	106	76	30	303	222	81
10	122	93	29	222	170	52
12	134	105	29	170	134	36
14	143	---	143	134	---	134

The above are empirical data based on the D+ theory and attainable growth indicated in USDA-Forest Service Research Paper SO-37 (Managing Eastern Redcedar).

Periodic thinnings are to D+6 spacing. Duration of growth (Cutting cycle) varies by site. See age, cutting cycles, and volume yields by 10-foot site classes.



**SHORTLEAF PINE  
 POTENTIAL YIELDS PER ACRE  
 WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (International)									
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth		
<b>SITE 90 (CUTTING CYCLE – 5 YEARS)</b>									
6	15	25 CDS	20 CDS	5 CDS	5 CDS	25 CDS	1.7 CDS		
8	20	38 "	25 "	10 "	18 "	43 "	2.1 "		
10	25	41 "	30 "	11 "	28 "	58 "	2.3 "		
12	30	17,000 BF	14,100 BF	2,900 BF	2,900 BF	17,000 BF	567 BF		
14	35	19,700 "	16,500 "	3,200 "	6,200 "	22,600 "	646 "		
16	40	21,100 "	17,600 "	3,500 "	9,600 "	27,200 "	680 "		
18	45	22,300 "	-----	22,300 "	31,900 "	31,900 "	709 "		
<b>SITE 80 (CUTTING CYCLE – 6 YEARS)</b>									
6	16	23 CDS	19 CDS	4 CDS	4 CDS	23 CDS	1.4 CDS		
8	22	33 "	25 "	9 "	14 "	39 "	1.8 "		
10	28	37 "	27 "	10 "	24 "	51 "	1.8 "		
12	34	15,900 BF	13,200 BF	2,700 BF	2,700 BF	15,900 BF	468 BF		
14	40	18,300 "	15,500 "	2,800 "	5,500 "	21,000 "	525 "		
16	46	19,700 "	16,500 "	3,200 "	8,700 "	25,200 "	546 "		
18	52	21,000 "	-----	21,000 "	29,700 "	29,700 "	571 "		
<b>SITE 70 (CUTTING CYCLE – 7 YEARS)</b>									
6	18	21 CDS	17 CDS	4 CDS	4 CDS	21 CDS	1.2 CDS		
8	25	32 "	22 "	10 "	14 "	36 "	1.4 "		
10	32	35 "	26 "	9 "	23 "	49 "	1.5 "		
12	39	14,500 BF	12,000 BF	2,500 BF	2,500 BF	14,500 BF	372 BF		
14	46	17,100 "	14,500 "	2,600 "	5,100 "	19,600 "	426 "		
16	53	18,400 "	-----	18,400 "	23,500 "	23,500 "	443 "		
<b>SITE 60 (CUTTING CYCLE – 8 YEARS)</b>									
6	20	19 CDS	16 CDS	3 CDS	3 CDS	19 CDS	1.0 CDS		
8	28	30 "	21 "	9 "	12 "	33 "	1.1 "		
10	36	30 "	22 "	8 "	20 "	42 "	1.2 "		
12	44	13,200 BF	10,900 BF	2,300 BF	2,300 BF	13,200 BF	300 BF		
14	52	15,700 "	-----	15,700 "	18,000 "	18,000 "	346 "		
<b>SITE 50 (CUTTING CYCLE – 9 YEARS)</b>									
6	23	17 CDS	14 CDS	3 CDS	3 CDS	17 CDS	0.7 CDS		
8	32	27 "	19 "	8 "	11 "	30 "	0.9 "		
10	41	28 "	20 "	8 "	19 "	39 "	1.0 "		
12	50	12,000 BF	-----	12,200 BF	12,200 BF	12,200 BF	244 BF		

**SHORTLEAF PINE  
 POTENTIAL YIELDS PER ACRE  
 WELL-STOCKED EVEN-AGED MANAGED STANDS**

		Average Volume Per Acre – Standard Cords and Board Feet (Doyle)								
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth			
<b>SITE 90 (CUTTING CYCLE – 5 YEARS)</b>										
6	15	25 CDS	20 CDS	5 CDS	5 CDS	25 CDS	1.7 CDS			
8	20	39 "	26 "	13 "	18 "	44 "	2.2 "			
10	25	4,900 BF	4,000 BF	900 BF	900 BF	4,900 BF	196 BF			
12	30	8,200 "	6,800 "	1,400 "	2,300 "	9,100 "	303 "			
14	35	11,200 "	9,400 "	1,800 "	4,100 "	13,500 "	386 "			
16	40	13,200 "	11,000 "	2,200 "	6,300 "	17,300 "	433 "			
18	45	15,300 "	12,900 "	2,400 "	8,700 "	21,600 "	480 "			
20	50	16,400 "	-----	16,400 "	25,100 "	25,100 "	502 "			
<b>SITE 80 (CUTTING CYCLE – 6 YEARS)</b>										
6	16	23 CDS	19 CDS	4 CDS	4 CDS	23 CDS	1.4 CDS			
8	22	36 "	24 "	12 "	16 "	40 "	1.8 "			
10	28	4,500 BF	3,700 BF	800 BF	800 BF	4,500 BF	161 BF			
12	34	7,700 "	6,400 "	1,300 "	2,100 "	8,500 "	250 "			
14	40	10,400 "	8,800 "	1,600 "	3,700 "	12,500 "	312 "			
16	46	12,300 "	10,300 "	2,000 "	5,700 "	16,000 "	348 "			
18	53	14,400 "	-----	14,400 "	20,100 "	20,100 "	379 "			
<b>SITE 70 (CUTTING CYCLE – 7 YEARS)</b>										
6	18	21 CDS	17 CDS	4 CDS	4 CDS	21 CDS	1.2 CDS			
8	25	33 "	22 "	11 "	15 "	37 "	1.5 "			
10	32	4,100 BF	3,400 BF	700 BF	700 BF	4,100 BF	128 BF			
12	39	7,000 "	5,800 "	1,200 "	1,900 "	7,700 "	197 "			
14	46	9,700 "	8,200 "	1,500 "	3,400 "	11,600 "	252 "			
16	53	11,500 "	-----	11,500 "	14,900 "	14,900 "	281 "			
<b>SITE 60 (CUTTING CYCLE – 8 YEARS)</b>										
6	20	19 CDS	16 CDS	3 CDS	3 CDS	19 CDS	0.9 CDS			
8	28	31 "	21 "	10 "	10 "	34 "	1.2 "			
10	36	3,700 BF	3,100 BF	600 BF	600 BF	3,700 BF	103 BF			
12	44	6,400 "	5,300 "	1,100 "	1,100 "	7,700 "	159 "			
14	52	8,900 "	-----	8,900 "	8,900 "	10,600 "	204 "			
<b>SITE 50 (CUTTING CYCLE – 9 YEARS)</b>										
6	23	17 CDS	14 CDS	3 CDS	3 CDS	17 CDS	0.7 CDS			
8	32	28 "	19 "	9 "	12 "	31 "	1.0 "			
10	41	3,200 BF	2,400 BF	600 BF	600 BF	3,200 BF	78 BF			
12	50	5,900 "	-----	5,900 "	6,500 "	6,500 "	130 "			

**SHORTLEAF PINE**  
**ESTIMATED STOCKING AND DEVELOPMENT PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**  
**SITES 50 – 90**

Average DBH (Inches)			Average Number of Trees (Number)			Average Basal Area (Square Feet)		
All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees
6	6.4	5.0	520	360	160	102	80	22
8	8.5	7.3	360	203	157	126	80	46
10	10.5	9.0	203	133	70	111	80	31
12	12.5	10.6	133	94	39	104	80	24
14	14.5	12.4	94	70	24	100	80	20
16	16.4	14.8	70	55	15	98	80	18
18	18.3	16.8	55	44	11	97	80	17
20	-	20.0	44	-	44	96	-	96

Developed from information in "Growth and Yields of Natural Stands of the Southern Pines," F.X. Schumacher and T.S. Coile.

Periodic thinnings are to 80 square feet of basal area per acre.

Duration of growth period (cutting cycle) and age at 6 inches DBH varies by site. See age, cutting cycles, and yields by 10-foot site classes.

**LOBLOLLY PINE**  
**ESTIMATED POTENTIAL YIELDS PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (International)									
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth		
<b>SITE 100 (CUTTING CYCLE –5 YEARS)</b>									
6	12	24 CDS	19 CDS	5 CDS	5 CDS	24 CDS	2.0 CDS		
8	17	38 "	26 "	12 "	17 "	43 "	2.5 "		
10	22	41 "	30 "	11 "	28 "	58 "	2.6 "		
12	27	16,600 BF	13,700 BF	2,900 BF	2,900 BF	16,600 BF	615 BF		
14	32	19,700 "	16,500 "	3,200 "	6,100 "	22,600 "	706 "		
16	37	21,300 "	17,800 "	3,500 "	9,600 "	27,400 "	741 "		
18	42	22,400 "	18,900 "	3,500 "	13,100 "	32,000 "	762 "		
20	47	22,400 "	18,900 "	3,500 "	16,600 "	35,500 "	755 "		
22	52	22,400 "	---	22,400 "	39,000 "	39,000 "	750 "		
<b>SITE 90 (CUTTING CYCLE –5 YEARS)</b>									
6	13	23 CDS	19 CDS	4 CDS	4 CDS	23 CDS	1.8 CDS		
8	18	35 "	25 "	10 "	14 "	39 "	2.2 "		
10	23	37 "	27 "	10 "	24 "	51 "	2.2 "		
12	28	16,100 BF	13,400 BF	2,700 BF	2,700 BF	16,100 BF	575 BF		
14	33	18,100 "	15,300 "	2,800 "	5,500 "	20,800 "	630 "		
16	38	19,700 "	16,500 "	3,200 "	8,700 "	25,200 "	663 "		
18	43	21,000 "	17,600 "	3,400 "	12,100 "	29,700 "	690 "		
20	48	21,100 "	---	21,100 "	33,200 "	33,200 "	692 "		
<b>SITE 80 (CUTTING CYCLE –6 YEARS)</b>									
6	14	21 CDS	17 CDS	4 CDS	4 CDS	21 CDS	1.5 CDS		
8	20	32 "	22 "	10 "	14 "	36 "	1.8 "		
10	26	34 "	26 "	9 "	23 "	48 "	1.8 "		
12	32	14,700 BF	12,200 BF	2,500 BF	2,500 BF	14,700 BF	459 BF		
14	38	16,900 "	14,300 "	2,600 "	5,100 "	19,400 "	510 "		
16	44	18,600 "	15,600 "	3,000 "	8,100 "	23,700 "	539 "		
18	50	19,900 "	---	19,900 "	28,000 "	28,000 "	560 "		
<b>SITE 70 (CUTTING CYCLE –7 YEARS)</b>									
6	15	19 CDS	16 CDS	3 CDS	3 CDS	19 CDS	1.3 CDS		
8	22	30 "	21 "	9 "	12 "	33 "	1.5 "		
10	29	30 "	22 "	8 "	20 "	42 "	1.4 "		
12	36	13,300 BF	11,000 BF	2,300 BF	2,300 BF	13,300 BF	369 BF		
14	43	15,700 "	13,200 "	2,500 "	4,800 "	16,000 "	419 "		
16	50	17,000 "	-----	17,000 "	21,800 "	21,800 "	436 "		
<b>SITE 60 (CUTTING CYCLE –8 YEARS)</b>									
6	16	17 CDS	14 CDS	3 CDS	3 CDS	17 CDS	1.0 CDS		
8	24	27 "	19 "	8 "	11 "	30 "	1.2 "		
10	32	29 "	21 "	8 "	19 "	40 "	1.2 "		
12	40	12,200 BF	10,100 BF	2,100 BF	2,100 BF	12,200 BF	305 BF		
14	48	14,400 "	12,100 "	2,300 "	4,400 "	16,500 "	344 "		
16	56	15,700 "	-----	15,700 "	20,100 "	20,100 "	359 "		

**LOBLOLLY PINE**  
**ESTIMATED POTENTIAL YIELDS PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**  
**Average Volume Per Acre – Standard Cords and Board Feet (Doyle)**

Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth
<b>SITE 100 (CUTTING CYCLE –5 YEARS)</b>							
6	12	26 CDS	20 CDS	6 CDS	6 CDS	26 CDS	2.2 CDS
8	17	38 "	26 "	12 "	18 "	44 "	2.6 "
10	22	41 "	30 "	11 "	29 "	59 "	2.7 "
12	27	8,300 BF	6,900 BF	1,400 BF	1,400 BF	8,300 BF	307 BF
14	32	11,200 "	9,400 "	1,800 "	3,200 "	12,600 "	394 "
16	37	13,300 "	11,100 "	2,200 "	5,400 "	16,500 "	446 "
18	42	15,400 "	13,000 "	2,400 "	7,800 "	20,800 "	495 "
20	47	16,500 "	13,900 "	2,600 "	10,400 "	24,300 "	517 "
22	52	17,600 "	---	17,600 "	28,000 "	28,000 "	538 "
<b>SITE 90 (CUTTING CYCLE –5 YEARS)</b>							
6	13	24 CDS	19 CDS	5 CDS	5 CDS	24 CDS	1.8 CDS
8	18	35 "	24 "	11 "	16 "	40 "	2.2 "
10	23	38 "	28 "	10 "	26 "	54 "	2.3 "
12	28	7,800 BF	6,500 BF	1,300 BF	1,300 BF	7,800 BF	279 BF
14	33	10,300 "	8,700 "	1,600 "	2,900 "	11,600 "	352 "
16	38	12,300 "	10,300 "	2,000 "	4,900 "	15,200 "	400 "
18	43	14,400 "	12,100 "	2,300 "	7,200 "	19,300 "	449 "
20	48	15,500 "	---	15,500 "	22,700 "	22,700 "	473 "
<b>SITE 80 (CUTTING CYCLE –6 YEARS)</b>							
6	14	22 CDS	18 CDS	4 CDS	4 CDS	22 CDS	1.6 CDS
8	20	32 "	22 "	10 "	14 "	36 "	1.8 "
10	26	35 "	25 "	10 "	24 "	49 "	1.9 "
12	32	7,100 BF	5,900 BF	1,200 BF	1,200 BF	7,100 BF	222 BF
14	38	9,600 "	8,200 "	1,500 "	2,700 "	10,800 "	284 "
16	44	11,600 "	9,700 "	1,900 "	4,600 "	14,300 "	325 "
18	50	13,600 "	---	13,600 "	18,200 "	18,200 "	364 "
<b>SITE 70 (CUTTING CYCLE –7 YEARS)</b>							
6	15	19 CDS	15 CDS	4 CDS	4 CDS	19 CDS	1.3 CDS
8	22	30 "	21 "	9 "	13 "	34 "	1.5 "
10	29	32 "	23 "	9 "	22 "	45 "	1.6 "
12	36	6,400 BF	5,300 BF	1,100 BF	1,100 BF	6,400 BF	178 BF
14	43	8,900 "	7,500 "	1,400 "	2,500 "	10,000 "	233 "
16	50	10,600 "	-----	10,600 "	13,100 "	13,100 "	262 "
<b>SITE 60 (CUTTING CYCLE –8 YEARS)</b>							
6	16	17 CDS	14 CDS	3 CDS	3 CDS	17 CDS	1.0 CDS
8	24	27 "	19 "	8 "	11 "	30 "	1.2 "
10	32	29 "	20 "	8 "	19 "	40 "	1.2 "
12	40	5,900 BF	4,900 BF	1,000 BF	1,000 BF	5,900 BF	148 BF
14	48	8,200 "	-----	8,200 "	9,200 "	9,200 "	192 "

**LOBLOLLY PINE**  
**POTENTIAL YIELDS PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (Scribner)							
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth
<b>SITE 100 (CUTTING CYCLE – 5 YEARS)</b>							
6	12	24 CDS	19 CDS	5 CDS	5 CDS	24 CDS	2.0 CDS
8	17	38 "	26 "	12 "	17 "	43 "	2.5 "
10	22	41 "	30 "	11 "	28 "	58 "	2.6 "
12	27	13,900 BF	11,500 BF	2,400 BF	2,400 BF	13,900 BF	515 BF
14	32	16,800 "	14,100 "	2,700 "	5,100 "	19,200 "	636 "
16	37	20,200 "	17,200 "	3,000 "	8,100 "	25,300 "	684 "
18	42	20,600 "	----	20,600 "	28,700 "	28,700 "	683 "
<b>SITE 90 (CUTTING CYCLE – 5 YEARS)</b>							
6	13	23 CDS	19 CDS	4 CDS	4 CDS	23 CDS	1.8 CDS
8	18	35 "	25 "	10 "	14 "	39 "	1.9 "
10	23	37 "	27 "	10 "	24 "	51 "	2.2 "
12	28	13,300 BF	11,100 BF	2,200 BF	2,200 BF	13,300 BF	475 BF
14	33	15,400 "	13,000 "	2,400 "	4,600 "	17,600 "	533 "
16	38	17,100 "	14,300 "	2,800 "	7,400 "	21,700 "	571 "
18	43	18,900 "	----	18,900 "	26,300 "	26,300 "	612 "
<b>SITE 80 (CUTTING CYCLE – 6 YEARS)</b>							
6	14	21 CDS	17 CDS	4 CDS	4 CDS	21 CDS	1.5 CDS
8	20	32 "	22 "	10 "	14 "	36 "	1.8 "
10	26	34 "	25 "	9 "	23 "	48 "	1.8 "
12	32	12,100 BF	10,100 BF	2,000 BF	2,000 BF	12,100 BF	378 BF
14	38	14,400 "	12,100 "	2,300 "	4,300 "	16,400 "	432 "
16	44	16,100 "	-----	16,100 "	20,400 "	20,400 "	464 "
<b>SITE 70 (CUTTING CYCLE – 7 YEARS)</b>							
6	15	19 CDS	16 CDS	3 CDS	3 CDS	19 CDS	1.3 CDS
8	22	30 "	21 "	9 "	12 "	33 "	1.5 "
10	29	30 "	22 "	8 "	20 "	42 "	1.4 "
12	36	10,900 BF	9,000 BF	1,900 BF	1,900 BF	10,900 BF	303 BF
14	43	13,300 "	-----	13,300 "	15,200 "	15,200 "	353 "
<b>SITE 60 (CUTTING CYCLE – 8 YEARS)</b>							
6	16	17 CDS	14 CDS	3 CDS	3 CDS	17 CDS	1.1 CDS
8	24	27 "	19 "	8 "	11 "	30 "	1.1 "
10	32	29 "	21 "	8 "	19 "	40 "	1.2 "
12	40	10,000 BF	8,000 BF	10,000 BF	10,000 BF	10,000 BF	250 BF

**LOBLOLLY PINE**  
**ESTIMATED STOCKING AND DEVELOPMENT PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average DBH (Inches)			Average Basal Area (Square Feet)			Average Number Trees (Number)		
All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees
6	6.5	5.0	106	80	26	540	348	192
8	8.5	7.2	121	80	41	348	203	145
10	10.5	9.0	111	80	31	203	133	70
12	12.5	10.6	104	80	24	133	94	39
14	14.5	12.4	100	80	20	94	70	24
16	16.4	14.8	98	80	18	70	55	15
18	18.3	16.8	97	80	17	55	44	11
20	----	20.0	96	----	96	44	----	44

Developed from information in Growth and Yields of Natural Stands of the Southern Pines, F. X. Schumacher and T. S. Coile.

Periodic thinnings are to 80 square feet of basal area per acre.

Duration of growth period (cutting Cycle) varies by site. See cutting cycles and yields.

**LOBLOLLY PINE PLANTATIONS  
 POTENTIAL YIELDS PER ACRE  
 WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords 2/							
Average DBH (In.)	Average Age (Yrs.)	All Trees 1/	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth
<b>SITE 100 (7 YEAR CUTTING CYCLE)</b>							
6	12	26.0 CDS	13.0 CDS	13.0 CDS	13.0 CDS	26.0 CDS	2.2 CDS
9	19	45.0 "	22.5 "	22.5 "	35.5 "	58.0 "	3.1 "
12	26	46.5 "	-----	46.5 "	82.0 "	82.0 "	3.2 "
<b>SITE 90 (8 YEAR CUTTING CYCLE)</b>							
6	13	24.0 CDS	12.0 CDS	12.0 CDS	12.0 CDS	24.0 CDS	1.8 CDS
9	21	42.0 "	21.0 "	21.0 "	33.0 "	53.0 "	2.5 "
12	29	43.5 "	43.5 "	-----	76.5 "	76.5 "	2.6 "
<b>SITE 80 (9 YEAR CUTTING CYCLE)</b>							
6	14	20.0 CDS	11.0 CDS	11.0 CDS	11.0 CDS	22.0 CDS	1.6 CDS
9	23	39.0 "	19.5 "	19.5 "	30.5 "	50.0 "	2.2 "
12	32	40.5 "	-----	40.5 "	71.0 "	71.0 "	2.2 "
<b>SITE 70 (11 YEAR CUTTING CYCLE)</b>							
6	15	19.0 CDS	9.5 CDS	9.5 CDS	9.5 CDS	19.0 CDS	1.4 CDS
9	26	36.0 "	18.0 "	18.0 "	26.5 "	45.5 "	1.7 "
12	37	37.5 "	-----	37.5 "	65.0 "	65.0 "	1.8 "
<b>SITE 60 (14 YEAR CUTTING CYCLE)</b>							
6	18	18.0 CDS	8.5 CDS	8.5 CDS	8.5 CDS	17.0 CDS	0.9 CDS
9	32	33.0 "	17.5 "	16.5 "	25.0 "	41.5 "	1.3 "
12	46	34.5 "	-----	34.5 "	59.5 "	59.5 "	1.3 "

1/ Includes only trees 4.6 inches DBH and larger.

2/ Merchantable volume to a 4 inch top.

Yields are based on data in Forest Research Series Report No. 3 and No. 13, Clemson University, Clemson, South Carolina. Thinnings at 6 inches DBH and 9 inches DBH represent removal of 1/2 of the trees, either alternate rows or alternate trees in each row starting with a stand of 600 merchantable trees per acre at 6 inches DBH.



**LOBLOLLY PLANTATIONS  
 ESTIMATED STOCKING AND DEVELOPMENT PER ACRE  
 SITES 60 – 110**

Average DBH (inches)		Average Number of Trees (Number)			Average Basal Area (Square Feet)			
All Trees 1/	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees
6.0	6.0	6.0	600	300	300	117.6	58.8	58.8
9.0	9.0	9.0	300	150	150	132.6	66.3	66.3
12.0	12.0	12.0	150	-	150	117.7	-	117.7

1/ A Stand of 600 merchantable trees per acre, at 6 inches DBH is assumed. Thinnings at 6 inches and 9 inches DBH remove 50 percent of the stand, either alternate rows or alternate trees in each row.

The number of years required to attain the next higher 3 inches DBH class varies by site. See volume yields and cutting cycles, by site classes.

**SLASH PINE**  
**POTENTIAL YIELDS PER ACRE**  
**WELL-STOCKED EVEN-MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (Doyle)							
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees 3/4	Cumulative Cut 3/4	Cumulative Yield 3/4	Average Yearly Growth 3/4
<b>SITE 100 (CUTTING CYCLE –5 YEARS)</b>							
6	13	24 CDS	20 CDS	4 CDS	4 CDS	24 CDS	1.8 CDS
8	18	39 "	27 "	12 "	16 "	43 "	2.4 "
10	23	41 "	30 "	11 "	27 "	57 "	2.5 "
12	28	8,200 BF	6,700 BF	1,500 BF	1,500 BF	8,200 BF	293 BF
14	33	11,200 "	9,300 "	1,900 "	3,400 "	12,700 "	385 "
16	38	13,200 "	10,900 "	2,300 "	5,700 "	16,000 "	437 "
18	43	15,300 "	12,800 "	2,500 "	8,200 "	21,000 "	488 "
20	48	16,400 "	-----	16,400 "	24,600 "	24,600 "	513 "
<b>SITE 90 (CUTTING CYCLE –5 YEARS)</b>							
6	14	22 CDS	18 CDS	4 CDS	4 CDS	22 CDS	1.6 CDS
8	19	36 "	25 "	11 "	15 "	40 "	2.1 "
10	24	37 "	27 "	10 "	25 "	52 "	2.2 "
12	29	7,700 BF	6,300 BF	1,400 BF	1,400 BF	7,700 BF	266 BF
14	34	10,400 "	8,700 "	1,700 "	3,100 "	11,800 "	347 "
16	39	12,300 "	10,200 "	2,100 "	5,200 "	15,400 "	395 "
18	44	14,400 "	12,000 "	2,400 "	7,600 "	19,600 "	445 "
20	49	15,500 "	-----	15,500 "	23,100 "	23,100 "	471 "
<b>SITE 80 (CUTTING CYCLE –6 YEARS)</b>							
6	15	20 CDS	17 CDS	3 CDS	3 CDS	20 CDS	1.3 CDS
8	21	33 "	22 "	11 "	14 "	36 "	1.7 "
10	27	35 "	26 "	9 "	23 "	49 "	1.8 "
12	33	7,000 BF	5,700 BF	1,300 BF	1,300 BF	7,000 BF	212 BF
14	39	9,700 "	8,100 "	1,600 "	2,900 "	11,000 "	282 "
16	45	11,500 "	9,500 "	2,000 "	4,900 "	14,400 "	320 "
18	51	15,500 "	-----	13,600 "	18,500 "	18,500 "	363 "
<b>SITE 70 (CUTTING CYCLE –7 YEARS)</b>							
6	16	18 CDS	15 CDS	3 CDS	3 CDS	18 CDS	1.1 CDS
8	23	31 "	21 "	10 "	13 "	34 "	1.5 "
10	30	31 "	23 "	8 "	21 "	44 "	1.4 "
12	37	6,400 BF	5,200 BF	1,200 BF	1,200 BF	6,400 BF	173 BF
14	44	8,900 "	7,400 "	1,500 "	2,700 "	10,100 "	230 "
16	51	10,600 "	-----	10,600 "	13,300 "	13,300 "	261 "
<b>SITE 60 (CUTTING CYCLE –8 YEARS)</b>							
6	18	16 CDS	13 CDS	3 CDS	3 CDS	16 CDS	0.9 CDS
8	26	28 "	19 "	9...	12 "	31 "	1.2 "
10	34	28 "	20 "	8..	2 "	37 "	1.1 "
12	42	5,900 BF	4,800 BF	1,100 BF	1,100 BF	5,900 BF	140 BF
14	50	8,200 "	-----	8,200 "	9,300 "	9,300 "	186 "

Developed from information in "Growth and Yields of Natural Stands of the Southern Pines," F. X. Schumacher and T. S. Coile, 1960. Periodic thinnings are to 80 square feet of basal area per acre.

**SLASH PINE**  
**POTENTIAL YIELDS PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (Scibner)									
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth		
<b>SITE 100 (CUTTING CYCLE – 5 YEARS)</b>									
6	13	24 CDS	20 CDS	4 CDS	4 CDS	24 CDS	1.8 CDS		
8	18	40 "	27 "	12 "	16 "	43 "	2.4 "		
10	23	41 "	30 "	11 "	27 "	57 "	2.5 "		
12	28	13,900 BF	11,300 BF	2,600 BF	2,600 BF	13,900 BF	496 BF		
14	33	16,800 "	13,900 "	2,900 "	5,500 "	19,400 "	588 "		
16	38	18,300 "	15,100 "	3,200 "	8,700 "	23,800 "	626 "		
18	43	20,000 "	16,700 "	3,300 "	12,000 "	28,700 "	667 "		
20	48	10,500 "	-----	20,500 "	32,500 "	32,500 "	677 "		
<b>SITE 90 (CUTTING CYCLE – 5 YEARS)</b>									
6	14	22 CDS	18 CDS	4 CDS	4 CDS	22 CDS	1.6 CDS		
8	19	36 "	25 "	12 "	15 "	40 "	2.1 "		
10	24	37 "	27 "	10 "	27 "	52 "	2.2 "		
12	29	13,100 BF	10,700 BF	2,400 BF	2,400 BF	13,100 BF	452 BF		
14	34	15,600 "	13,000 "	2,600 "	5,000 "	18,000 "	529 "		
16	39	17,100 "	14,200 "	2,900 "	7,900 "	22,100 "	567 "		
18	44	18,900 "	-----	18,900 "	26,800 "	26,800 "	609 "		
<b>SITE 80 (CUTTING CYCLE – 6 YEARS)</b>									
6	15	21 CDS	17 CDS	3 CDS	3 CDS	20 CDS	1.3 CDS		
8	21	34 "	22 "	12 "	15 "	37 "	1.7 "		
10	27	35 "	26 "	9 "	23 "	49 "	1.8 "		
12	33	11,900 BF	9,700 BF	2,200 BF	2,200 BF	11,900 BF	361 BF		
14	39	14,600 "	12,200 "	2,400 "	4,600 "	16,800 "	431 "		
16	45	16,000 "	-----	16,000 "	20,600 "	20,600 "	458 "		
<b>SITE 70 (CUTTING CYCLE – 7 YEARS)</b>									
6	16	18 CDS	15 CDS	3 CDS	3 CDS	18 CDS	1.1 CDS		
8	23	31 "	22 "	11 "	13 "	35 "	1.5 "		
10	30	31 "	23 "	8 "	21 "	44 "	1.4 "		
12	37	10,900 BF	8,900 BF	2000 BF	2000 BF	10,900 BF	295 BF		
14	44	13,400 "	-----	13,400 "	15,500 "	15,500 "	352 "		
<b>SITE 60 (CUTTING CYCLE – 8 YEARS)</b>									
6	18	16 CDS	13 CDS	3 CDS	3 CDS	16 CDS	0.9 CDS		
8	26	28 "	19 "	10 "	12 "	31 "	1.2 "		
10	34	34 "	20 "	8 "	20 "	37 "	1.1 "		
12	42	42 "	-----	10,000 BF	10,000 BF	10,000 BF	238 BF		

**SLASH PINE PLANTATIONS  
 POTENTIAL YIELDS PER ACRE-PULPWOOD**

Average Volume Per Acre – Standard Cords							
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth
<b>SITE 80 (CUTTING CYCLE – 8 YEARS)</b>							
6	12	22.4	11.2	11.2	11.2	22.4	1.9
9	20	45.0	22.5	22.5	33.7	56.2	2.8
12	28	51.0	-----	51.0	84.7	84.7	3.0
<b>SITE 70 (CUTTING CYCLE – 10 YEARS)</b>							
6	13	21.8	10.9	10.9	10.9	21.8	1.7
9	23	42.0	21.0	21.0	31.9	52.9	2.3
12	33	45.0	-----	45.0	76.9	76.9	2.3
<b>SITE 60 (CUTTING CYCLE – 12 YEARS)</b>							
6	17	21.2	10.6	10.6	10.6	21.2	1.2
9	29	39.0	19.5	19.5	30.1	49.6	1.7
12	41	39.0	-----	39.0	69.1	69.1	1.7
<b>SITE 50 (CUTTING CYCLE – 15 YEARS)</b>							
6	24	20.4	10.2	10.2	10.2	20.4	0.8
9	39	36.0	18.0	18.0	28.2	46.2	1.2
12	54	33.0	-----	33.0	61.2	61.2	1.1

Adapted from information in U.S.F.S. Research Paper SE-60. Site index is height of trees at age 25. Thinnings at 6-inch DBH and 9-inch DBH represent removal of 1/2 of the stand, either alternate rows or alternate trees in each row, starting with a stand of 600 trees per acre at 6-inch DBH.

**SLASH PINE PLANTATIONS**  
**ESTIMATED STOCKING AND DEVELOPMENT PER ACRE**  
**SITES 50 – 80 (HEIGHT @ YEARS)**

Average DBH (inches)			Average number of Trees (Number)			Average Basal Area (Square Feet)		
All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees
6.0	6.0	6.0	600	300	300	117.6	58.8	58.8
9.0	9.0	9.0	300	150	150	132.6	66.3	66.3
12.0	12.0	12.0	150	-	150	117.7	-	117.7

1/ A stand of 600 merchantable trees per acre, at 6 inches DBH is assumed. Thinnings at 6 inches and 9-inches DBH remove 50 percent of the stand, either alternate rows or alternate trees in each row.

The number of years required to attain the next higher 3 inches DBH class varies by site. See volume yields and cutting cycle, by site classes.

**LOBLOLLY PINE – SLASH PINE  
 POTENTIAL YIELDS PER ACRE  
 WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (Scribner)							
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth
<b>SITE 100 (CUTTING CYCLE – 8 YEARS)</b>							
6	12	22 CDS	14 CDS	8 CDS	8 CDS	22 CDS	1.8 CDS
9	20	45 "	27 "	18 "	26 "	45 "	2.2 "
12	28	20,800 BF	13,800 BF	7,000 BF	7,000 BF	20,800 BF	742 BF
15	36	21,700 "	14,500 "	7,200 "	14,200 "	28,700 "	813 "
18	44	23,200 "	-----	23,200 "	37,200 "	37,200 "	845 "
<b>SITE 90 (CUTTING CYCLE – 8 YEARS)</b>							
6	13	21 CDS	14 CDS	7 CDS	7 CDS	21 CDS	1.6 CDS
9	21	41 "	26 "	15 "	22 "	49 "	2.3 "
12	29	16,600 BF	10,500 BF	6,100 BF	6,100 BF	16,600 BF	572 BF
15	37	19,200 "	13,000 "	6,200 "	12,300 "	25,300 "	667 "
18	45	20,700 "	-----	20,700 "	32,400 "	32,400 "	720 "
<b>SITE 80 (CUTTING CYCLE – 9 YEARS)</b>							
6	14	20 CDS	13 CDS	7 CDS	7 CDS	20 CDS	1.4 CDS
9	23	38 "	23 "	15 "	22 "	45 "	2.0 "
12	32	15,600 BF	10,000 BF	5,600 BF	5,600 BF	15,600 BF	487 BF
15	41	17,100 "	11,500 "	5,600 "	11,200 "	23,200 "	553 "
18	50	18,900 "	---	18,900 "	29,600 "	29,600 "	592 "
<b>SITE 70 (CUTTING CYCLE – 11 YEARS)</b>							
6	15	17 CDS	12 CDS	5 CDS	5 CDS	17 CDS	1.1 CDS
9	26	34 "	20 "	14 "	19 "	39 "	1.5 "
12	37	13,000 BF	8,500 BF	4,500 BF	4,500 BF	13,000 BF	351 BF
15	48	15,400 "	10,800 "	4,600 "	9,100 "	19,900 "	414 "
18	59	17,700 "	-----	17,700 "	26,800 "	26,800 "	454 "

1. Cutting cycles are number of years required to reach next highest 3-inch diameter class.

**LOBLOLLY – SLASH PINE  
 ESTIMATED STOCKING AND DEVELOPMENT PER ACRE  
 WELL-STOCKED EVEN-AGED MANAGED STANDS  
 SITES 60 – 110**

Average DBH (inches)			Average Number of Trees (Number)			Average Basal Area (Square Feet)		
All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees
6	6.5	5.3	540	304	236	106	70	36
9	9.5	8.3	304	163	141	134	80	54
12	12.5	11.3	163	94	69	128	80	48
15	15.5	14.0	94	61	33	115	80	35
18	-	18.0	61	-	61	108	80	108

Developed from information in (1) Southeastern For. Exp. Sta. Paper No. 107. U.S. Dept. Agr. For Serv. and, (2) Tables 3 and 7 of "Volume, Yield, and Stand Tables for Second Growth Southern Pines." Misc. Pub. 50 U.S. Dept. Agr. 1929 by W. J. Lloyd and W. P. Thompson

**EASTERN WHITE PINE  
 POTENTIAL YIELDS PER ACRE  
 WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (International)									
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth		
<b>SITE 100 (CUTTING CYCLE – 5 YEARS)</b>									
6	12	36 CDS	21 CDS	15 CDS	15 CDS	36 CDS	3.0 CDS		
8	17	39 "	30 "	9 "	24 "	54 "	3.2 "		
10	22	42 "	32 "	10 "	34 "	66 "	3.0 "		
12	27	21,590 BF	18,650 BF	2,940 BF	2,940 BF	21,590 BF	800 BF		
14	32	27,670 "	24,070 "	3,600 "	6,540 "	30,610 "	957 "		
16	37	31,900 "	27,430 "	4,470 "	11,010 "	38,440 "	1,039 "		
18	42	39,150 "	33,830 "	5,320 "	16,330 "	50,160 "	1,194 "		
20	47	40,500 "	----	40,500 "	56,830 "	56,830 "	1,209 "		
<b>SITE 90 (CUTTING CYCLE – 5 YEARS)</b>									
6	14	30 BD	18 CDS	12 CDS	12 CDS	30 CDS	2.1 CDS		
8	19	33 "	26 "	7 "	19 "	45 "	2.4 "		
10	24	37 "	29 "	8 "	27 "	56 "	2.3 "		
12	29	19,550 BF	16,870 BF	2,680 BF	2,680 BF	19,550 BF	674 BF		
14	34	26,320 "	22,800 "	3,520 "	6,200 "	29,000 "	853 "		
16	39	30,800 "	26,500 "	4,300 "	10,500 "	37,000 "	949 "		
18	44	36,900 "	31,870 "	5,030 "	15,530 "	47,400 "	1,077 "		
20	49	38,700 "	----	38,770 "	54,300 "	54,300 "	1,108 "		
<b>SITE 80 (CUTTING CYCLE – 6 YEAR)</b>									
6	17	24 CDS	15 CDS	9 CDS	9 CDS	24 CDS	1.4 CDS		
8	23	27 "	22 "	5 "	14 "	36 "	1.6 "		
10	29	33 "	27 "	6 "	20 "	47 "	1.6 "		
12	35	17,340 BF	14,850 BF	2,490 BF	2,490 BF	17,340 BF	495 BF		
14	41	24,970 "	21,800 "	3,170 "	5,660 "	27,460 "	670 "		
16	47	29,150 "	25,200 "	3,950 "	9,610 "	34,810 "	741 "		
18	53	34,470 "	-----	34,470 "	44,080 "	44,080 "	832 "		
<b>SITE 70 (CUTTING CYCLE – 7 YEARS)</b>									
6	20	18 CDS	12 CDS	6 CDS	6 CDS	18 CDS	0.9 CDS		
8	27	21 "	17 "	4 "	10 "	27 "	1.0 "		
10	34	29 "	24 "	5 "	15 "	39 "	1.1 "		
12	41	15,300 BF	12,820 BF	2,480 BF	2,480 BF	15,300 "	373 BF		
14	48	22,240 "	19,800 "	2,740 "	5,220 "	25,020 BF	521 "		
16	55	27,500 "	-----	27,500 "	32,720 "	32,720 "	595 "		



**EASTERN WHITE PINE  
 POTENTIAL YIELDS PER ACRE  
 WELL-STOCKED EVEN-AGED MANAGED STANDS**

Average Volume Per Acre – Standard Cords and Board Feet (Scribner)									
Average DBH (In.)	Average Age (Yrs.)	All Trees	Leave Trees	Cut Trees	Cumulative Cut	Cumulative Yield	Average Yearly Growth		
<b>SITE 90 (CUTTING CYCLE – 5 YEARS)</b>									
6	14	30 CDS	19 CDS	13 CDS	12 CDS	30 CDS	CDS	2.1	CDS
8	19	33 "	26 "	7 "	20 "	45 "	"	2.4	"
10	24	38 "	29 "	8 "	27 "	56 "	"	2.3	"
12	29	16,150 BF	14,250 BF	1,900 BF	1,900 "	16,150 BF	BF	557	BF
14	34	22,540 "	20,290 "	2,250 "	4,150 "	24,440 "	"	719	"
16	39	26,950 "	23,250 "	3,700 "	7,850 "	31,100 "	"	797	"
18	44	33,030 "	28,980 "	4,050 "	11,900 "	40,880 "	"	929	"
20	49	35,480 "	-----	35,480 "	47,380 "	47,380 "	"	967	"
<b>SITE 80 (CUTTING CYCLE – 6 YEARS)</b>									
6	17	24 CDS	15 CDS	17 CDS	9 CDS	24 CDS	CDS	1.4	CDS
8	23	27 "	22 "	5 "	14 "	36 "	"	1.6	"
10	29	33 "	29 "	6 "	21 "	47 "	"	1.6	"
12	35	14,280 BF	12,580 BF	1,700 "	1,700 BF	14,280 BF	BF	408	BF
14	41	21,330 "	19,330 "	2,000 "	3,700 "	23,030 "	"	562	"
16	47	25,520 "	22,200 "	3,320 "	7,020 "	29,220 "	"	622	"
18	53	30,870 "	-----	30,870 "	37,890 "	37,890 "	"	715	"
<b>SITE 70 (CUTTING CYCLE – 7 YEARS)</b>									
6	20	18 CDS	12 CDS	6 CDS	9 CDS	18 CDS	CDS	0.9	CDS
8	27	22 "	17 "	4 "	18 "	29 "	"	1.0	"
10	34	28 "	24 "	8 "	15 "	39 "	"	1.1	"
12	41	12,580 BF	11,080 "	1,500 BF	1,500 BF	12,580 "	BF	307	BF
14	48	19,300 "	17,550 "	1,750 "	3,250 "	20,800 "	"	433	"
16	55	21,900 "	-----	21,900 "	25,150 "	25,150 "	"	457	"

**EASTERN WHITE PINE**  
**ESTIMATED STOCKING AND DEVELOPMENT PER ACRE**  
**WELL-STOCKED EVEN-AGED MANAGED STANDS**  
**SITES 60-100**

Average DBH (inches)			Average Number of Trees (Number)			Average Basal Area (Square Feet)		
All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees	All Trees	Leave Trees	Cut Trees
6.0	6.4	5.6	600	300	300	117.6	66.9	50.7
8.0	8.5	6.4	300	220	80	104.7	86.7	18.0
10.0	10.5	8.1	220	170	50	119.9	102.2	17.7
12.0	12.5	9.8	170	135	35	133.4	115.0	18.4
14.0	14.5	11.5	135	110	25	144.3	126.2	18.1
16.0	16.4	14.1	110	90	20	153.6	132.0	21.6
18.0	18.3	16.4	90	75	15	159.0	137.0	22.0
20.0	-----	20.0	75	-----	75	163.6	-----	163.6

Developed from information in USFS Research Paper NE-40, the Mensurational Characteristics of Eastern White Pine, 1965.

Periodic thinnings are to approximately "D+6" spacing. Duration of growth period (cutting cycle) varies by site. See cutting cycles, age and volume yields by 10-foot classes.