

1-1973

Texas Forestry Paper No. 18

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TEXAS FORESTRY PAPER

NO. 18 - JANUARY 1973



SCHOOL OF FORESTRY

STEPHEN F. AUSTIN STATE UNIVERSITY

Nacogdoches, Texas

GREEN AND DRY WEIGHT YIELDS FOR UNTHINNED OLD-FIELD LOBLOLLY PINE PLANTATIONS IN THE INTERIOR WEST GULF COASTAL PLAIN

J. David Lenhart¹

Increasing familiarity with weight-scaling at mills is alerting foresters, wood procurement personnel, and mill management to advantages of timber estimates presented in terms of product weight. This paper presents schedules of merchantable green weight and oven-dry weight yields per acre for unthinned old-field loblolly pine (*Pinus taeda* L.) plantations in the Interior West Gulf Coastal Plain.

MERCHANTABLE GREEN WEIGHT PER ACRE

Recent mensurational work by Hicks, Lenhart and Somberg (1972) has produced equations for predicting green weight of merchantable stems of planted loblolly pine trees. Using these equations in conjunction with schedules of number of trees and total heights by diameter classes developed by Lenhart (1972), tables showing the expected merchantable green weight per acre were calculated. These yields are presented in Tables 1 through 6.

OVENDRY BARK-FREE WEIGHT PER ACRE

Equations for predicting the dry weight of planted loblolly pine trees have been developed by Hyink, Lenhart and Somberg (1972). A procedure similar to that used for green weight yields was followed to calculate the expected oven-dry bark-free weight per acre. These yields are presented in Tables 7 through 10.

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Table 2. Estimated merchantable green weight yield per acre, excluding bark, to a 2.0-inch top d.o.b., of trees 4.6 d.b.h. or larger, for old-field loblolly pine plantations.

		WEIGHT PER ACRE (pounds)										WEIGHT PER ACRE (pounds)								
Trees per Acre (yrs)	Age	by 1-inch diameter classes								TOTAL	Age	by 1-inch diameter classes								TOTAL
		5	6	7	8	9	10	11	12			5	6	7	8	9	10	11	12	
SITE INDEX 40																				
500	10										10	75666	8418	20529	29054	17291	374			
	15										15	137109	7127	19086	33605	40566	31759	4966		
	20										20	176782	7006	19369	34636	45247	44070	25575	879	
	25										25	204087	6986	19981	35485	47390	50030	36560	7655	
600	10	22053	11706	9799	348						10	79049	12860	26880	29672	9617				
	15	60627	12177	21905	21532	5013					15	145841	11025	26533	40864	43345	23453	621		
	20	87051	11224	23540	30290	20125	1872				20	189784	10954	27176	42912	51167	42656	14919		
	25										25	218472	11215	27390	44439	54225	50633	28656	1914	
700	10	19477	12672	6805							10	79927	17166	31124	27405	4252				
	15	61338	15604	25342	18637	1755					15	154602	15581	33956	47321	42597	15147			
	20	90380	14855	28860	31114	15166	385				20	201623	15539	34339	51298	55177	38166	7104		
	25	111206	15019	29537	36657	26249	3744				25	234711	15701	35514	53390	60303	49666	20137		
800	10	17112	12726	4386							10	81461	22056	33953	23994	1458				
	15	60863	18813	26695	14837	518					15	160607	20048	40147	51448	39982	8982			
	20	92872	19204	32539	31213	9916					20	212053	20603	41980	57554	56470	32553	2893		
	25	114748	18888	35100	38007	21505	1248				25	246665	20792	42845	60486	63550	46600	12392		
900	10	15130	12746	2384							10	82273	26058	36813	19110	292				
	15	60782	22608	26941	11233						15	166444	25320	45775	54199	36659	4491			
	20	93685	22890	35368	29302	6125					20	220691	25419	48653	62559	56470	26867	723		
	25										25	259679	25811	50720	67805	86562	41695	7086		
1000	10	12638	11494	1144							10	80824	29704	37106	14014					
	15	60109	23120	27313	7676						15	171269	29813	52090	55575	31695	1996			
	20	94489	26319	38420	26542	3208					20	229818	30369	54681	67963	56226	20579			
	25										25									
1100	10	10378	9901	477							10	79194	32906	36521	9767					
	15	57953	27175	25910	4868						15	176120	35444	56704	57124	26349	499			
	20										20	236886	36028	61570	70834	53591	14863			
	25										25									
1200	10	8232	8137	95							10	78351	36855	34914	6582					
	15	55712	28850	23867	2995						15	178063	40041	60740	56280	21002				
	20										20	241999	40959	66848	73387	50516	10289			
	25										25									
SITE INDEX 50																				
500	10	47700	9245	19004	17341	2108					10	105288	7588	20310	33955	34264	9171			
	15	97160	7471	19289	30360	29881	10139				15	180761	6921	19381	35639	47649	46584	23867		
	20	128211	6919	18607	32036	37349	28539	4761			20	227901	7190	20409	36745	50313	55409	44590	13245	
	25	150184	6904	18665	32464	40839	36426	14866			25	258490	7174	21174	37423	51889	58480	52499	28506	1345
600	10	48478	13455	21507	13274	242					10	111842	12006	27971	39971	29074	2620			
	15	101246	11517	25167	34633	26185	3744				15	194137	11104	27556	44730	53884	44588	12295		
	20	138379	10915	25717	38443	39656	21053	393			20	245347	11235	28183	46734	59801	57342	37258	1094	
	25	180291	10769	25889	39893	44678	32599	6463			25	282146	11546	29795	48518	62371	64298	48940	16678	
700	10	47981	16801	22971	8209						10	119610	16585	34224	42409	21935	437			
	15	109621	15479	31373	38432	21305	832				15	205603	15385	34875	53285	37984	38871	5063		
	20	144506	15358	31799	44373	38943	14035				20	261753	16065	36641	56269	66038	57611	28075	1031	
	25	171273	14893	32253	46994	47198	26996	1939			25	300110	16582	38041	58765	69898	65711	43326	7783	
800	10	45931	19659	21905	4367						10	119641	11830	40765	42409	14637				
	15	108171	20117	35887	37681	13496					15	215600	20548	42879	59986	59301	31440	3448		
	20	149927	19576	38351	47387	36083	8130				20	276941	21244	45141	64256	70526	55647	20323		
	25	178808	19785	39404	51778	48808	20374	639			25	317373	22147	46820	67446	75813	85711	36105	3336	
900	10	44693	22823	19774	2098						10	121791	26553	45332	40703	8203				
	15	110782	24727	39604	36325	10436					15	224113	23480	49916	65410	58862	24445			
	20	155216	24610	43524	49887	32891	4304				20	290329	26555	52707	72753	74217	51719	12578		
	25	185514	24260	45171	56673	46857	14551				25									
1000	10	42131	24590	16932	699						10	123500	31371	48715	38501	9113				
	15	113499	29071	43659	36444	6323					15	233791	31243	57474	70927	56888	17461			
	20	159828	29065	44407	50937	28508	1913				20									
	25										25									
1100	10	40022	25448	14393	181						10	124805	36645	51253	34501	2386				
	15	113429	32914	45738	31208	3569					15	240978	36490	63535	74180	54591	12222			
	20	163386	33296	53433	57424	23735	478				20									
	25										25									
1200	10	37008	25813	11195							10									
	15	114081	36462	47178	28494	1947					15									
	20	166140	38608	56910	51618	19004					20									
	25										25									

Table 3. Estimated merchantable green weight yield per acre, including bark, to a 3.0-inch top d.o.b., of trees 4.6 d.b.h. or larger, for old-field loblolly pine plantations.

WEIGHT PER ACRE (pounds)										WEIGHT PER ACRE (pounds)										
Trees per Acre (yrs)		by 1-inch diameter classes								Trees per Acre (yrs)		by 1-inch diameter classes								
Age (yrs)	TOTAL	5	6	7	8	9	10	11	12	Age (yrs)	TOTAL	5	6	7	8	9	10	11	12	
SITE INDEX 40										SITE INDEX 60										
500	10									500	10	79634	8593	21468	30752	18420	401			
	15										15	146084	7391	20128	35767	43382	34077	5339		
	20										20	189043	7307	20501	36946	48475	47340	27526	948	
	25										25	218407	7306	21190	37897	50822	53782	39367	8253	
600	10	22188	11556	10059	573					600	10	82975	13158	28143	31407	10267				
	15	63153	12331	22779	22715	5328					15	155127	11434	28001	43493	46367	25165	667		
	20	91579	11458	24617	32061	21440	2003				20	202680	11425	28780	45774	54817	45827	16057		
	25										25	233739	11739	29048	47459	58141	54430	30859	2063	
700	10	19495	12510	6985						700	10	83666	17544	32586	29007	4529				
	15	63721	15801	26394	19661	1865					15	164242	16179	35857	50386	45568	16252			
	20	94891	15165	30217	32933	16164	412				20	215100	16222	36365	54737	59126	41004	7646		
	25	117321	15430	30991	38877	28013	4010				25	250901	16434	37680	57034	64671	53397	21685		
800	10	17077	12563	4514						800	10	85133	22616	35549	25414	1554				
	15	63057	19050	27803	15653	551					15	170402	20818	42395	54780	42770	9639			
	20	97347	19649	34088	33061	10569					20	226019	21528	44479	61412	60512	34974	3114		
	25	120866	19406	36864	40308	22951	1337				25	263452	21779	45459	64615	68153	50101	13345		
900	10	15184	12651	2453						900	10	85857	26719	38586	20241	311				
	15	62881	22960	28060	11661						15	176416	26323	48338	57709	39226	4820			
	20	98016	23421	37030	31037	6528					20	235022	26560	51550	66753	60512	28869	778		
	25										25	277180	27037	53836	72453	71396	44827	7631		
1000	10	12587	11409	1178						1000	10	84194	30458	38892	14844					
	15	62105	25511	28489	8105						15	181369	31098	55041	59174	33914	2142			
	20	98732	26930	40270	28113	3419					20	244586	31732	57937	72541	60263	22113			
	25										25									
1100	10	10318	9827	491						1100	10	82367	33741	38280	10346					
	15	59763	27599	27024	5140						15	186384	36890	59916	60848	28194	536			
	20										20	251960	37678	65267	75606	57439	15970			
	25										25									
1200	10	8175	8077	98						1200	10	81432	37865	36395	6972					
	15	57356	29299	24894	3163						15	188277	41674	64181	59949	22473				
	20										20	257225	42835	70861	78330	54143	11056			
	25										25									
SITE INDEX 50										SITE INDEX 70										
500	10	49524	9298	19728	18260	2738				500	10	111651	7824	21351	36053	36594	9829			
	15	102832	7880	20239	32199	31877	10857				15	192810	7225	20525	38049	51273	50048	25690		
	20	136445	7145	19592	34066	39917	30608	5117			20	244408	7543	21680	39283	53985	39595	48037	14285	
	25	160225	7160	19697	34567	43720	39092	15989			25	277548	7540	22523	40043	55719	62933	56581	30754	1453
600	10	50154	13580	22326	13990	258				600	10	118384	12399	29429	42463	31265	2808			
	15	106913	13813	28406	38711	27913	4010				15	207413	11603	29197	47728	57740	47911	13234		
	20	144884	11289	27100	40878	42396	23580	840			20	262846	11786	29938	49962	63961	61674	40031	3494	
	25	170749	11182	27339	42476	47807	34893	8952			25	302698	12143	31703	51926	66984	69201	52745	17994	
700	10	49497	16958	23887	8652					700	10	122106	17128	36008	45033	23449	468			
	15	111333	15803	32949	38639	22951	891				15	219267	16076	36952	56875	62147	41768	5449		
	20	153308	15907	33509	47207	41632	15053				20	280196	16865	38037	60170	70891	61971	30246	1116	
	25	182239	15465	35137	50057	50516	28978	3084			25	321726	17450	40481	62909	75068	70722	46499	8397	
800	10	47224	19843	22779	4602					800	10	126149	22578	42923	45053	15633				
	15	114910	20706	37680	39986	16558					15	229888	21489	45454	64026	83559	53783	1557		
	20	158855	20276	40443	50839	38376	8721				20	294243	22316	47988	68710	75688	59858	21683		
	25	190037	20569	41637	53153	50099	21870	709			25	340007	23314	49838	72198	81420	70722	38916	1599	
900	10	45882	23111	20562	2209					900	10	128270	27463	47734	43240	9833				
	15	116419	24926	41595	38760	11138					15	238733	26646	52913	69816	63088	28270			
	20	164287	25523	45899	53073	35175	4617				20	310583	27895	56030	77814	79658	55623	13552		
	25	198976	25221	47730	60390	48011	15624				25									
1000	10	43152	24809	17667	736					1000	10	129970	32239	51296	40922	3463				
	15	119171	29974	45895	36552	6750					15	248899	32721	60952	75727	60734	18763			
	20	169010	30143	52139	54191	30485	2052				20									
	25										25									
1100	10	40951	25769	14991	191					1100	10	131162	37973	53968	36670	2549				
	15	118945	33936	48081	33118	3830					15	256389	38150	67381	79200	58523	13135			
	20	172633	34532	56387	55797	25404	513				20									
	25										25									
1200	10	37797	26138	11659						1200	10									
	15	119520	37594	49594	30254	2078					15									
	20	175408	40090	60057	54938	20323					20									
	25										25									

Table 4. Estimated merchantable green weight yield per acre, excluding bark, to a 3.0-inch top d.o.b., of trees 4.6 d.b.h. or larger, for old-field loblolly pine plantations.

		WEIGHT PER ACRE (pounds)										
Trees per Acre	Age (yrs)	by 1-inch diameter classes										
		TOTAL	5	6	7	8	9	10	11	12		
SITE INDEX 40												
500	10											
	15											
	20											
	25											
600	10	18239	9175	8561	503							
	15	59069	10251	19807	20213	4797						
	20	81120	9661	21602	28676	19368	1821					
	25											
700	10	15877	9932	5945								
	15	55320	13137	23009	17495	1679						
	20	83797	12787	26566	29456	14613	375					
	25	104401	13152	27340	34880	25376	3653					
800	10	13834	9974	3860								
	15	34500	15838	24238	13928	496						
	20	85743	16633	29952	29603	9555						
	25	107284	16541	32571	36164	20790	1218					
900	10	12246	10148	2098								
	15	54218	19187	24461	10570							
	20	86074	19826	32556	27790	5902						
	25											
1000	10	10158	9151	1007								
	15	53436	21319	24894	7223							
	20	86526	22796	35467	25172	3091						
	25											
1100	10	8303	7883	420								
	15	51258	23063	23615	4580							
	20											
	25											
1200	10	6562	6478	84								
	15	49056	24484	21753	2819							
	20											
	25											
SITE INDEX 70												
500	10	100151	6708	18892	32404	33187	8960					
	15	175255	6322	18373	34457	46733	45795	23575				
	20	223033	6652	19499	35678	49302	54621	44135	13146			
	25	253737	6671	20303	36418	50944	57728	52018	28316	1339		
600	10	105845	10660	26075	38196	28354	2560					
	15	188167	10168	26155	43223	52627	43849	12145				
	20	239487	10394	26927	45377	58428	56526	36779	5056			
	25	276389	10753	28593	47239	61256	63487	48491	16570			
700	10	108846	14725	31904	40525	21265	427					
	15	198611	14088	33103	51530	56661	38228	5001				
	20	254979	14889	35041	54668	64757	56808	27789	1027			
	25	293423	15467	36507	57249	68649	64882	42937	7732			
800	10	112243	19459	38082	40525	14177						
	15	207913	18858	40749	58009	57949	30919	1429				
	20	269296	19723	43210	62427	69139	54872	19925				
	25	309786	20683	44967	65701	74458	64882	35781	3314			
900	10	113035	23669	42349	38895	8922						
	15	215644	23384	47436	63255	57520	24049					
	20	282064	24654	50452	70723	72784	50998	12453				
	25											
1000	10	115089	27785	45509	36838	4957						
	15	224628	28753	54682	68641	55374	17178					
	20											
	25											
1100	10	116008	32805	47879	33011	2313						
	15	231161	33524	60450	71789	53374	12024					
	20											
	25											
1200	10											
	15											
	20											
	25											
SITE INDEX 60												
500	10	70594	7246	18839	27505	16640	364					
	15	131996	6399	17899	32265	39420	31121	4892				
	20	171763	6384	18337	33442	44168	43306	25255	871			
	25	199133	6412	19011	34365	46355	49255	36143	7592			
600	10	73247	11138	24743	28091	9275						
	15	139085	9899	24927	39235	42151	22982	611				
	20	183789	9982	25762	41433	49947	41933	14732				
	25	212537	10315	26060	43037	53041	49849	28337	1898			
700	10	73537	14851	28649	25945	4092						
	15	147740	14036	31955	45481	41425	14843					
	20	194741	14195	32552	49570	53890	37519	7015				
	25	227848	14441	33826	51741	59015	48913	19912				
800	10	74627	19212	31254	22756	1405						
	15	152977	18061	37781	49448	38881	8806					
	20	204339	18866	39846	55615	55153	32001	2858				
	25	238929	19162	40810	58618	62192	45693	12254				
900	10	75088	22699	33984	18124	281						
	15	158126	22880	43077	52092	35674	4403					
	20	212196	23276	46180	60451	55153	26422	714				
	25	251144	23788	48362	65755	65169	41062	7008				
1000	10	73420	25875	34254	13291							
	15	162365	27031	49099	53414	30844	1957					
	20	220615	27808	51902	65723	54944	20238					
	25											
1100	10	71641	28664	33714	9263							
	15	166660	32124	53447	54959	25641	489					
	20	227062	33065	58512	68500	52369	14616					
	25											
1200	10	70749	32275	32231	6243							
	15	168127	36290	57252	54146	20439						
	20	231570	37591	63527	70969	49364	10119					
	25											
SITE INDEX 50												
500	10	42950	7638	17106	16196	2010						
	15	91992	6507	17855	28888	28857	9885					
	20	123073	6143	17382	30689	36238	27935	4686				
	25	145066	6199	17535	31202	39762	35713	14659				
600	10	43249	11227	19360	12430	232						
	15	95275	10086	23295	32954	25287	3653					
	20	130329	9730	24072	36827	38506	20608	586				
	25	154233	9701	24363	38342	43478	31977	6372				
700	10	42476	14019	20770	7687							
	15	98935	13555	29112	34666	20790	812					
	20	137614	13741	29765	42557	17813	13730					
	25	164326	13416	31344	45212	45961	26481	1912				
800	10	40300	18404	19807	4089							
	15	101885	17704	31292	35908	14981						
	20	142310	17515	35965	45831	35037	7962					
	25	171051	17879	37141	49815	45581	19985	650				
900	10	39057	19214	17880	1963							
	15	102957	21311	36751	36806	10089						
	20	146937	22097	40817	47845	31963	4215					
	25	177040	21923	4								

Table 5. Estimated merchantable green weight yield per acre, including bark, to a 4.0-inch top d.o.b., of trees 4.6 d.b.h. or larger, for old-field loblolly pine plantations.

		WEIGHT PER ACRE (pounds)										WEIGHT PER ACRE (pounds)									
Trees per Acre	Age (yrs)	TOTAL	by 1-inch diameter classes								Trees per Acre	Age (yrs)	TOTAL	by 1-inch diameter classes							
			5	6	7	8	9	10	11	12				5	6	7	8	9	10	11	12
SITE INDEX 40																					
500	10										500	10	65228	5234	16652	26373	16597	372			
	15											15	131757	5311	16759	32004	40204	32338	5141		
	20											20	175116	5533	17582	33610	43505	45275	26684	927	
	25											25	204959	5669	18451	34778	47977	51706	38282	8096	
600	10	11240	4280	6515	445						600	10	66465	8225	22055	26934	9251				
	15	47287	6806	16786	18974	4721						15	138162	8216	23446	38917	43060	23880	643		
	20	74745	6978	19094	27495	19318	1860					20	185975	8651	24782	41640	51458	43878	15566		
	25											25	217301	9174	25293	43554	54897	52325	30030	2024	
700	10	9157	4633	4524							700	10	65462	10966	25538	24877	4081				
	15	46532	8721	19736	16423	1652						15	144917	11766	30185	45225	42318	15423			
	20	76160	9236	23680	28244	14617	383					20	195873	12389	31314	49910	55589	39259	7412		
	25	98020	10085	24739	33862	25575	3759					25	231836	12843	32920	52444	61143	51384	21102		
800	10	7661	4653	3008							800	10	65650	14471	27859	21915	1405				
	15	44869	10514	20790	13075	490						15	148876	15140	35688	49169	39719	9160			
	20	77047	12282	26693	28510	9557						20	204421	16575	38450	55997	56892	33486	3021		
	25	99669	12684	29671	35108	20953	1253					25	241903	17138	39716	59415	64436	48212	12986		
900	10	6821	5186	1635							900	10	65362	17097	30529	17455	281				
	15	44111	13149	20981	9981							15	152927	19357	40691	51798	36501	4580			
	20	76327	14640	29020	26764	5903						20	211197	20450	44363	60866	56892	27671	755		
	25											25	253367	21275	47188	66749	67587	43137	7431		
1000	10	5462	4677	785							1000	10	63062	19490	30772	12800					
	15	43017	14610	21587	6820							15	156143	22868	46568	53113	31558	2036			
	20	76030	16833	31862	24243	3092						20	218745	24432	50084	66292	56742	21195			
	25											25									
1100	10	4355	4028	327							1100	10	60798	21590	30287	8921					
	15	40607	15805	20477	4325							15	159623	27411	50692	54776	26235	509			
	20											20	224365	29233	56630	69093	54082	15307			
	25											25									
1200	10	3376	3311	65							1200	10	59716	24749	28955	6012					
	15	38304	16779	18863	2662							15	160145	30966	54300	53967	20912				
	20											20	227877	33234	61484	71583	50979	10597			
	25											25									
SITE INDEX 50																					
500	10	33956	4686	14306	15002	1962					500	10	97147	5306	17317	31680	33594	9250			
	15	88275	4902	16156	28045	29015	10157					15	178936	5518	17674	34694	48206	47919	24925		
	20	122019	4925	16114	30280	36827	28957	4916				20	231087	6011	19118	36320	51229	57498	46869	14042	
	25	145929	5146	16493	31026	40684	37151	15429				25	264658	6111	20077	37262	53157	60951	55363	30298	1439
600	10	35198	7186	16191	11594	227					600	10	101397	8547	24042	37464	28701	2643			
	15	89988	7734	21078	31992	25425	3759					15	190739	8933	25239	43519	54286	45922	12840		
	20	127846	7899	22431	36336	39204	21361	615				20	246715	9392	26401	46194	60765	59504	39058	5401	
	25	153765	8132	23014	38125	44486	33300	6708				25	286988	9891	28329	48390	63966	67068	51609	17735	
700	10	33746	8973	17603	7170						700	10	102936	11806	29416	39748	21526	460			
	15	92356	10394	26520	33654	20953	835					15	200133	12378	31943	51975	58515	40035	5287		
	20	133863	11285	27736	42104	38497	14241					20	261473	13519	34434	55726	67348	59839	29510	1097	
	25	162723	11247	29728	45062	47097	27577	2012				25	303384	14283	36170	38709	71686	68542	45717	8277	
800	10	31099	10499	16786	3814						800	10	105202	15798	35305	39748	14151				
	15	94209	13798	30327	34986	15098						15	208360	16673	39439	58511	59845	32381	1511		
	20	137339	14384	33676	45343	35672	8264					20	275033	17989	42554	63636	71906	57799	21169		
	25	168207	15125	35227	49649	46708	20813	685				25	319122	19172	44635	67377	77752	68542	38097	3547	
900	10	29739	12755	15153	1831						900	10	105674	19216	39260	38149	9049				
	15	94169	16610	33478	33913	10168						15	214995	20674	45911	63802	59402	25206			
	20	140868	18341	38218	47336	32598	4375					20	287068	22486	49686	72185	75762	53719	13230		
	25	173095	18547	40382	54516	44762	14888					25									
1000	10	27278	13693	12975	610						1000	10	106017	22558	42190	36242	5027				
	15	95698	20329	37225	31981	6163						15	223188	25572	53073	69352	57186	18005			
	20	143847	21661	43659	48332	28251	1944					20									
	25											25									
1100	10	25590	14222	11209	159						1100	10	106151	26941	44387	32477	2346				
	15	94480	23017	38998	28976	3489						15	228804	29815	58671	72533	55182	12603			
	20	145987	24815	47216	49927	23543	486					20									
	25											25									
1200	10	23144	14426	8718							1200	10									
	15	94210	25497	40225	26585	1903						15									
	20	147436	29155	50288	49159	18834						20									
	25											25									

Table 6. Estimated merchantable green weight yield per acre, excluding bark, to a 4.0-inch top d.o.b., of trees 4.6 d.b.h. or larger, for old-field loblolly pine plantations.

		WEIGHT PER ACRE (pounds)									
Trees per Acre (yrs)	Age	by 1-inch diameter classes									
		TOTAL	5	6	7	8	9	10	11	12	
SITE INDEX 40											
500	10										
	15										
	20										
	25										
600	10	8604	2773	5441	390						
	15	41068	5389	14527	16912	4260					
	20	66283	5717	16734	24446	17492	1694				
	25										
700	10	6780	3002	3778							
	15	40177	6905	17143	14638	1491					
	20	67281	7567	20804	25316	13245	349				
	25	87371	8446	21827	30451	23217	3430				
800	10	5548	3015	2533							
	15	38480	8325	18038	11654	443					
	20	67847	10147	23456	25384	8660					
	25	88587	10622	26229	31572	19021	1143				
900	10	4956	3579	1377							
	15	37686	10551	18225	8910						
	20	66957	12094	25496	24018	5349					
	25										
1000	10	3888	3227	461							
	15	36624	11723	18812	6089						
	20	66518	13906	28055	21755	2802					
	25										
1100	10	3055	2780	275							
	15	34388	12682	17845	3861						
	20										
	25										
1200	10	2340	2285	55							
	15	32279	13464	18439	2376						
	20										
	25										
SITE INDEX 50											
500	10	31000	3579	12331	13323	1767					
	15	79142	4079	14255	25220	26326	9264				
	20	110317	4188	14314	27342	33500	26467	4506			
	25	132413	4424	14709	28072	37069	33985	14154			
600	10	30075	5599	13955	10316	205					
	15	80342	6477	18598	28769	23068	3430				
	20	115274	6744	19953	32811	35678	19525	363			
	25	139215	7014	20547	36495	40534	30471	6254			
700	10	28664	6991	15234	6379						
	15	82195	8705	23443	30284	19021	782				
	20	120439	9670	24872	38046	35035	13076				
	25	147073	9700	26570	40795	42929	25233	1846			
800	10	26100	8180	14527	1393						
	15	83627	11620	26809	31491	13707					
	20	123313	12326	29995	40973	32464	7555				
	25	151762	13083	31485	44948	42574	19044	628			
900	10	24842	10099	13114	1629						
	15	83338	13988	29594	30525	9231					
	20	126264	15770	34041	42774	29679	4000				
	25	155941	16042	36092	49381	40800	13626				
1000	10	22614	10842	11229	543						
	15	84552	17207	32964	28787	3594					
	20	128734	18625	38935	43874	25712	1778				
	25										
1100	10	21139	11261	9736	142						
	15	83267	19482	34534	26082	3169					
	20	130466	21336	42107	45146	21435	444				
	25										
1200	10	18995	11422	7573							
	15	82880	21582	35620	23950	1728					
	20	131591	25146	44847	44490	17148					
	25										
SITE INDEX 60											
500	10	57889	4288	14594	23640	15028	339				
	15	119327	4567	14928	28939	36604	29574	4715			
	20	159420	4821	15760	30490	41531	41466	24500	852		
	25	187019	4968	16592	31604	43836	47401	35169	7449		
600	10	58691	6795	19377	24143	8376					
	15	124813	7065	20909	35190	38220	21710	589			
	20	168998	7538	22233	37775	46965	40195	14292			
	25	197961	8054	22744	39579	50159	47972	27591	1862		
700	10	57489	9059	22436	22299	3695					
	15	130665	10148	26950	40918	38544	14105				
	20	177729	10818	28093	45298	50750	35964	6806			
	25	210957	11276	29623	47676	55879	47114	19389			
800	10	57459	12042	24476	19667	1274					
	15	133964	13058	31863	44486	36177	8380				
	20	185234	14501	34523	50822	51939	30675	2774			
	25	219847	15071	35738	54013	58888	44206	11931			
900	10	57028	14227	26882	15664	255					
	15	137387	16743	36330	46865	33259	4190				
	20	191129	17891	40011	55241	51939	25353	694			
	25	230066	18709	42490	60702	61784	39552	6829			
1000	10	54799	16217	27095	11487						
	15	140074	19780	41622	48055	28755	1862				
	20	197772	21375	44968	60192	51817	19420				
	25										
1100	10	52639	17965	26668	8006						
	15	143040	23772	45308	49389	23905	466				
	20	202655	25622	50883	62735	49388	14025				
	25										
1200	10	51615	20725	25495	5393						
	15	143298	26855	48533	48856	19054					
	20	205637	29129	55247	64996	44555	9710				
	25										
SITE INDEX 70											
500	10	87344	4491	15335	28541	30530	8447				
	15	162957	4818	18556	31488	44010	43897	22888			
	20	211195	5302	17236	33053	46851	52745	43083	12925		
	25	242258	5410	18140	33951	48663	55952	50917	27899	1326	
600	10	90867	7267	21324	33779	26084	2413				
	15	173402	7816	22661	39498	49560	42076	11791			
	20	225167	8284	23802	42038	55584	54585	35903	4971		
	25	262419	8767	25608	44104	58568	61575	47463	16332		
700	10	91934	10039	26091	33839	19543	402				
	15	181676	10829	28681	47193	33437	36661	4855			
	20	238375	11940	31062	50730	41606	54901	27126	1010		
	25	277129	12674	32696	53523	65837	62928	42049	7622		
800	10	93730	13488	31361	35839	13042					
	15	188885	14613	35438	53127	54651	29669	1387			
	20	250511	15908	38408	57930	65775	53029	19461			
	25	291249	17030	40367	61426	71191	62928	35041	3266		
900	10	93906	16406	34875	34397	8228					
	15	194649	18120	41253	57931	54246	23099				
	20	261230	19885	44845	65714	69317	49286	12163			
	25										
1000	10	94010	19259	37477	32703	4571					
	15	201894	22451	47724	62997	52222	16500				
	20										
	25										
1100	10	93953	23086	39429	29305	2133					

Table 7. Estimated total oven-dry bark-free weight yield per acre, of trees 4.6 d.b.h. or larger, for old-field loblolly pine plantations.

		WEIGHT PER ACRE (pounds)									
Trees per Acre	Age (yrs)	by 1-inch diameter classes									
		TOTAL	5	6	7	8	9	10	11	12	
SITE INDEX 40											
500	10										
	15										
	20										
	25										
600	10	11018	6049	4715	254						
	15	28343	6013	10276	9807	2247					
	20	39883	5458	10918	13701	8978	828				
	25										
700	10	9822	6548	3274							
	15	28831	7705	11851	8488	787					
	20	41580	7224	13353	14074	6755	170				
	25	50647	7215	13606	16511	11665	1650				
800	10	8675	6576	2099							
	15	28763	9289	12484	6758	2					
	20	42869	9298	15055	14097	441					
	25	52437	9074	16137	17119	955	550				
900	10	7665	6524	1141							
	15	28808	11102	12599	5107						
	20	43410	11083	16364	13234	2729					
	25										
1000	10	6431	5883	548							
	15	28562	12336	12736	3490						
	20	43897	12744	17736	11987	1430					
	25										
1100	10	5296	5068	228							
	15	27639	13345	12081	2213						
	20										
	25										
1200	10	4211	4185	46							
	15	26659	14168	11129	1362						
	20										
	25										
SITE INDEX 50											
500	10	22449	4622	8946	7933	948					
	15	43927	3602	8886	13675	13291	4473				
	20	57322	3291	8508	14348	16546	12546	2083			
	25	66789	3256	8496	14499	18054	15990	6494			
600	10	22974	6683	10124	6058	109					
	15	48022	5533	12593	15599	11647	1650				
	20	61205	5176	11741	17217	17556	9255	260			
	25	71521	5066	11768	17817	19742	14304	2824			
700	10	22869	8346	10776	3747						
	15	48193	7436	14423	16410	9557	367				
	20	65043	7262	14517	19854	17240	6170				
	25	78608	7007	15095	20970	20843	12848	847			
800	10	22034	9765	10276	1985						
	15	49962	9630	16494	16951	8887					
	20	67666	9257	17482	21381	15974	3572				
	25	80177	9286	17888	23105	20670	8940	208			
900	10	21504	11270	9277	957						
	15	50869	11592	18208	16431	4638					
	20	70711	11867	19840	22321	14552	1891				
	25	83352	11386	20505	25269	19809	6383				
1000	10	20360	12098	7943	319						
	15	52210	13870	20034	15495	2811					
	20	72440	13708	22489	22791	12611	841				
	25										
1100	10	19379	12566	6731	82						
	15	52315	15703	20988	14039	1585					
	20	74179	15704	24322	23434	10509	210				
	25										
1200	10	17981	12746	5235							
	15	52711	17396	21648	12803	864					
	20	75549	18163	25904	23074	8408					
	25										
SITE INDEX 60											
500	10	34637	4094	9521	13142	7714	166				
	15	61149	3361	8700	15022	17947	13948	2171			
	20	78221	3267	8761	15409	19939	19307	11156	382		
	25	89971	3240	9001	15745	20846	21882	15931	3326		
600	10	36384	6227	12437	13421	4299					
	15	65280	5200	12078	18267	19164	10300	271			
	20	84215	5109	12279	19091	22548	18681	6507			
	25	96562	5193	12338	19718	23852	22146	12484	831		
700	10	36996	8302	14401	12396	1897					
	15	69385	7330	15455	21134	18834	6652				
	20	89670	7233	15515	22806	24303	16714	3099			
	25	103931	7270	15982	23676	26515	21716	8772			
800	10	37833	10636	15710	10837	650					
	15	72278	9432	18249	22977	17677	3943				
	20	94497	9572	18947	25587	24873	14256	1262			
	25	109432	9611	19282	26823	27943	20375	5398			
900	10	38322	12566	16995	8631	130					
	15	75066	11884	20807	24206	16198	1971				
	20	98530	11809	21959	27812	24873	11762	315			
	25	115361	11931	22805	30052	29256	18231	3086			
1000	10	37782	14324	17129	6329						
	15	77388	14039	23647	24821	14005	876				
	20	102746	14109	24680	30194	24754	9009				
	25										
1100	10	37139	15868	16860	4411						
	15	79691	16598	25741	25491	11642	219				
	20	106040	16708	27761	31470	23594	6507				
	25										
1200	10	36796	17705	16118	2973						
	15	80718	18751	27573	25134	9280					
	20	108486	18996	30141	32604	22240	4505				
	25										
SITE INDEX 70											
500	10	47437	3620	9320	15257	15202	4038				
	15	79716	3221	8757	15853	21076	20401	10408			
	20	100207	3314	9161	16266	22097	24207	19409	5751		
	25	113353	3292	9476	16536	22751	25517	22830	17368	583	
600	10	30603	5710	12812	17939	12988	1154				
	15	86097	5159	12437	19885	23734	19520	5362			
	20	108123	5178	12651	20690	26167	23051	16174	2212		
	25	123949	5292	13324	21429	27338	28049	21282	7235		
700	10	52530	7888	15676	19033	9741	192				
	15	91316	7148	15741	23671	25528	17018	2208			
	20	115558	7393	16434	24889	29001	23162	12220	449		
	25	132065	7592	17012	25945	30637	28665	18838	3376		
800	10	34520	10352	18641	19033	6494					
	15	96017	9530	19334	26650	26108	13764	631			
	20	122453	9743	20231	28433	30964	24304	8758			
	25	139865	10125	20924	29776	33230	28665	15698	1447		
900	10	55668	12591	20729	18268	4080					
	15	99997	11817	22507	29060	25915	10298				
	20	128637	12204	23421	32177	32572	22589	5474			
	25										
1000	10	56585	14781	22276	17261	2267					
	15	104444	14474	25889	31491	24948	7642				
	20										
	25										
1100	10	57300	17338	25436	15488	1058					
	15	107804	16876	28620	32935	24024	5349				
	20										
	25										
1200	10										
	15										
	20										
	25										

Table 9. Estimated oven-dry bark-free weight yield per acre, to a 3.0-inch top d.o.b., of trees 4.6 d.b.h. or larger, for old-field loblolly pine plantations.

WEIGHT PER ACRE (pounds)											
Trees per Acre	Age (yrs)	TOTAL	by 1-inch diameter classes								
			5	6	7	8	9	10	11	12	
SITE INDEX 40											
500	10										
	15										
	20										
	25										
600	10	9241	4891	4146	234						
	15	25796	5176	9314	9206	2150					
	20	37180	4739	10031	12969	8637	805				
	25										
700	10	8163	5284	2879							
	15	26072	6569	10782	7969	752					
	20	38572	6273	12304	13320	6510	165				
	25	47548	6357	12603	15705	11273	1610				
800	10	7165	5307	1858							
	15	25844	7920	11358	6344	222					
	20	39611	8116	13872	13366	4257					
	25	49034	7995	14982	16284	9236	537				
900	10	6336	5326	1010							
	15	25796	9528	11463	4805						
	20	39529	9674	15078	12548	2629					
	25										
1000	10	5286	4803	485							
	15	25497	10586	11628	3283						
	20	40253	11123	16387	11366	1377					
	25										
1100	10	4339	4137	202							
	15	24564	11452	11030	2082						
	20										
	25										
1200	10	3440	3400	60							
	15	23600	12158	10161	1281						
	20										
	25										
SITE INDEX 50											
500	10	20271	3882	8075	7410	904					
	15	41589	9160	8230	13008	12831	4360				
	20	55003	2934	7950	13739	16050	12280	2050			
	25	64493	2933	7982	13930	17566	15678	6404			
600	10	20574	5657	9139	5674	104					
	15	43305	4875	10738	14038	11244	1610				
	20	58468	4632	10991	16447	17043	9059	256			
	25	68795	4377	11074	17118	19208	14032	2784			
700	10	20341	7064	9288	3509						
	15	45146	6552	13391	15609	9236	350				
	20	61920	6521	13590	19034	16736	6039				
	25	73472	6329	14227	20168	20293	11430	835			
800	10	19446	8266	9314	1866						
	15	46638	8521	15314	16148	6655					
	20	64210	8311	16395	20498	15507	3699				
	25	76670	8412	16858	22221	20125	6770	284			
900	10	18912	9608	8408	896						
	15	47296	10257	16905	15652	4482					
	20	66449	10454	18567	21399	14137	1852				
	25	79517	10315	19325	24325	19267	6265				
1000	10	17813	10314	7200	299						
	15	48440	12321	18642	14761	2716					
	20	68399	12346	21128	21850	12252	823				
	25										
1100	10	16914	10713	6124	77						
	15	48387	13930	19530	13374	1533					
	20	69901	14144	22849	22492	10210	206				
	25										
1200	10	15629	10866	4763							
	15	48647	15434	20144	12213	836					
	20	71058	16408	24336	22146	8168					
	25										
SITE INDEX 60											
500	10	32322	3554	8748	12438	7421	161				
	15	58848	3027	8160	14418	17436	13668	7139			
	20	75983	2982	8292	14873	19462	18975	11020	379		
	25	87777	2977	8561	15244	20390	21548	15756	3301		
600	10	33734	5435	11460	12703	4136					
	15	62555	4683	11346	17532	18633	10094	267			
	20	81529	4663	11637	18426	22008	18367	6428			
	25	93920	4781	11735	19091	23331	21807	12350	825		
700	10	34073	7246	13269	11733	1825					
	15	66281	6622	14524	20305	18311	6519				
	20	86581	6617	14704	22030	23735	16434	3061			
	25	100868	6693	15218	22938	25948	21392	8679			
800	10	34705	9329	14475	10275	626					
	15	68821	8520	17172	22076	17187	3866				
	20	91028	8777	17979	24717	24291	14017	1247			
	25	105970	8866	18360	25987	27345	20071	5341			
900	10	35030	11021	15701	8183	125					
	15	71294	10765	19579	23257	15760	1933				
	20	94703	10828	20837	26866	24291	11569	312			
	25	111533	11006	21737	29135	28643	17958	3054			
1000	10	34391	12564	15826	6001						
	15	73336	12718	22286	23847	13626	859				
	20	98596	12937	23419	29190	24188	8862				
	25										
1100	10	33678	13918	15577	4183						
	15	75396	15077	24260	24516	11328	215				
	20	101604	15353	26374	30423	23054	6400				
	25										
1200	10	33310	15600	14891	2819						
	15	76201	17032	25987	24153	9029					
	20	103772	17454	28635	31520	21732	4431				
	25										
SITE INDEX 70											
500	10	45107	3216	8672	14554	14720	3945				
	15	79485	2947	8299	15314	20582	20059	10284			
	20	98065	3068	8749	15792	21654	23869	19221	5712		
	25	111277	3063	9083	16089	22338	25197	22633	12294	580	
600	10	47878	5092	11947	17136	12576	1127				
	15	83417	4730	11802	19709	23178	19200	1298			
	20	105529	4793	12062	20085	25655	24702	16017	2197		
	25	121422	4931	12782	20860	28852	27705	21099	7193		
700	10	49453	7034	14618	18181	9432	188				
	15	88242	6554	14937	22886	24944	16739	2162			
	20	112550	6856	15710	24185	28432	24819	12102	446		
	25	129116	7083	16320	25270	30093	28314	18679	2357		
800	10	51149	9263	17417	21111	6288					
	15	92561	8756	18368	25764	25511	13539	623			
	20	119047	9068	19358	27417	30356	23973	8675			
	25	136508	9460	20088	29001	32640	28316	15566	1439		
900	10	52041	11268	19369	17450	3954					
	15	96183	10838	21382	28094	25322	10527				
	20	124857	11336	22602	31272	31945	22280	5422			
	25										
1000	10	52747	13227	20814	16509	2197					
	15	100313	13326	24624	30447	24377	7519				
	20										
	25										
1100	10	53284	15567	21698	14794	1025					
	15	103373	15558	27221	31864	23487	5263				

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