

**Sartain-Williams Timberlands
Tract 5573****30°53'38.0"N
93°50'0.0"W**

A 200 acre tract located northwest of Netwon off CR 1022 in Newton County along Melholmes Creek. Approximatley 80% of the acreage is young plantation. The remaing 41 acres consist of predominanlty hardwood SMZs (Streamside Management Zones).

The natural timber acreage contains a total of 2,118 tons with an estimated value of \$16,205. The pine component accounts for 16% of the total volume and 37% of the value.

Data were collected from 7 sample points distributed across the subject area.

The GPS coordinates reference a location on the pipeline near the center of the tract.

5573— Merchantable Timber (41 acres)

<i>PRODUCT</i>	<i>TONS</i>	<i>DOLLARS</i>	<i>\$/TON</i>
pine pulpwood	110	\$771	\$7.00
pine topwood	28	\$199	\$7.00
pine chip-n-saw	57	\$942	\$17.00
pine small sawlogs (11.5" to 13.5" dbh)	148	\$4,133	\$28.00
pine sawlogs (>13.5" dbh)			\$40.00
Total Pine	343	\$6,075	\$17.71
hardwood pulpwood	1,492	\$5,967	\$4.00
hardwood topwood	42	\$167	\$4.00
hardwood sawlogs	241	\$3,996	\$16.58
Total Hardwood	1,775	\$10,130	\$5.71
TOTAL	2,118	\$16,205	\$7.65

Tree Abundance

The stand is 9% pine and 81% hardwood. HARDWOOD PULPWOOD comprises 85% of the trees. **The average total number of trees is 179 per acre**, indicating high stocking.

Stand Density

Stand density is an indication of crowding and is measured by basal area (defined as the sum of the cross-sectional area of all trees on one acre). The calculation of basal area is a function of the **number and size** of trees in the forest.

Pine trees comprise 13% of the average stand density, hardwood 87%. **The average total basal area for all trees in the merchantable stands is 67 square feet per acre**, indicating moderate stand density. HARDWOOD PULPWOOD accounts for 70% of the stand density.

The average tree measures 7.9" dbh. Pine trees average 9.7" and hardwood trees average 7.7".

Timber Volume

Tree height and form are added to the function to calculate timber volume. Pine timber accounts for 16% of the total timber volume, hardwood 84%. HARDWOOD PULPWOOD continues as the most prominent product category accounting for 70% of the total timber volume. PINE SMALL SAWLOGS comprises only 7% of the total volume.

PINE & HARDWOOD TOPWOOD area added to the analysis for the timber volume and value distributions. Topwood is derived from the sawlog trees (and chip-n-saw) and is the portion of the tree that is utilized for pulpwood after sawtimber is merchandized. Pine sawlog trees typically generate more topwood than hardwood sawlog trees.

The average total timber volume is 51.7 tons per acre, the equivalent of 1¾ truck loads per acre.

Timber Value

Timber value is assigned to the timber volume in a stair-stepped manner. That is, value increases at an uneven rate with jumps that are triggered by product thresholds rather than by gradual gradations. Some smoothing of the value to volume and tree size ratio is realized in "log sorts" offered (or required) by certain mills but "blended" pricing is more applicable for inventory and appraisal studies.

Pine trees account for 38% of the timber value, hardwoods 62%. The HARDWOOD PULPWOOD accounts for 37% of the total timber value. PINE SMALL SAWLOG trees (including topwood) comprise 26% of the total volume with only 7% of the trees.

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The average total timber value for all trees in the merchantable stands is \$395.20 per acre.

Timber Inventory Summary for 5573

Sartain-Williams Timberlands 5573 41 acres		<i>per acre</i>				avg dbh
		trees	basal area	tons	stumpage	
Loblolly	pine pulpwood	8.6	2.9	2.7	\$18.80	7.8
	pine topwood			0.7	\$4.80	
	chip-n-saw	2.2	1.4	1.4	\$23.70	11.0
	pine small sawlogs (12-13")	5.2	4.3	3.6	\$100.80	12.3
	pine sawlogs (>13")					
	total pine	16.0	8.6	8.4	\$148.10	9.7
Hardwood	hardwood pulpwood	151.3	47.1	36.4	\$145.50	7.3
	hardwood sawlogs	10.5	11.4	5.9	\$97.50	14.0
	hardwood topwood			1.0	\$4.10	
	total hardwood	161.8	58.5	43.3	\$247.10	7.7
Total		177.8	67.1	51.7	\$395.20	7.9

Sartain-Williams Timberlands 5573 41 acres		<i>tract total</i>			
		trees	basal area	tons	stumpage
Loblolly	pine pulpwood	352	117	110	\$771
	pine topwood			28	\$199
	chip-n-saw	89	59	57	\$972
	pine small sawlogs (12-13")	213	176	148	\$4,133
	pine sawlogs (>13")				
	total pine	654	352	343	\$6,075
Hardwood	hardwood pulpwood	6202	1933	1492	\$5,967
	hardwood sawlogs	431	469	241	\$3,996
	hardwood topwood			42	\$167
	total hardwood	6633	2402	1775	\$10,130
Total		7287	2754	2118	\$16,205

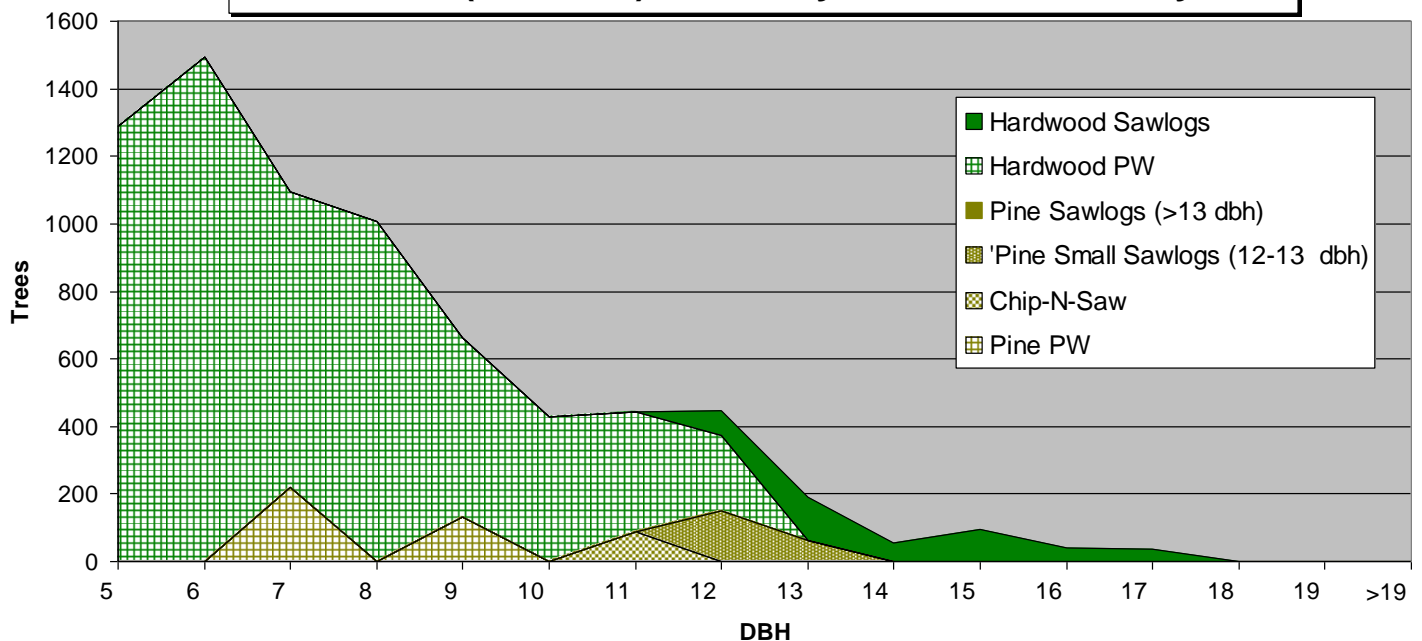
Sartain-Williams Timberlands

Tract 5573

Pine Stock & Stand Table

DBH	Total Pine		Pine PW			Chip-N-Saw			Pine Small Logs (12-13" dbh)			Pine Sawlogs (>13" dbh)			Pine Tops
	trees	tons	trees	tons	avg. total height	trees	tons	avg. total height	trees	tons	avg. log height	trees	tons	avg. log height	tons
5	0	0													
6	0	0													
7	219	44	219	44	35										
8	0	0													
9	133	66	133	66	64										
10	0	0													
11	89	65				89	57	78							8
12	149	114							149	94	37				20
13	64	54							64	54	44				0
14	0	0													
15	0	0													
16	0	0													
17	0	0													
18	0	0													
19	0	0													
>19	0	0													
total	654	343	352	110		89	57		213	148		0	0		28

SWT - 5573 (41 acres)- Trees by Timber Product by DBH



Sartain-Williams Timberlands

Tract 5562

Hardwood Stock & Stand Table

DBH	Total Hdwd		Hdwd PW		Hdwd Sawlogs		Hdwd Tops
	trees	tons	trees	tons	trees	tons	tons
5	1289	118	1289	118			
6	1492	199	1492	199			
7	877	158	877	158			
8	1007	268	1007	268			
9	530	201	530	201			
10	430	201	430	201			
11	355	199	355	199			
12	299	191	224	148	75	33	10
13	127	55			127	55	0
14	55	65			55	33	32
15	95	55			95	55	0
16	42	39			42	39	0
17	37	26			37	26	0
18	0	0					
19	0	0					
>19	0	0					0
total	6635	1775	6202	1492	431	241	42

