

Cruise Details

Tract Name----- Pence Springs 2011

Number of Sample Points----- 199

Cruised Acres----- 1,269

Total Acres----- 1,269

Volume Scale----- DOYLE

Form Class----- 78



Cruise Summary - Sawtimber

Species	Sawtimber Trees	Total BF Volume	Average BF/Tree	BF/Acre	Average DBH	Average MHT	% Total Volume	Basal Area /Acre
AB	2,670	256,361	96.0	202.0	15.4	1.6	3.6	2.8
BB	516	29,995	58.1	23.6	13.3	1.4	0.4	0.4
BC	373	22,142	59.4	17.4	13.6	1.3	0.3	0.3
BG	412	36,398	88.3	28.7	14.8	1.5	0.5	0.4
BL	731	27,248	37.3	21.5	13.8	1.5	0.4	0.6
BO	2,423	207,161	85.5	163.2	14.4	1.9	2.9	2.2
BSW	3,300	345,903	104.8	272.6	14.6	2.4	4.9	3.1
BUC	191	27,840	145.4	21.9	15.5	3.2	0.4	0.2
BW	164	9,980	61.0	7.9	16.9	0.5	0.1	0.2
CO	9,920	764,850	77.1	602.7	14.4	1.6	10.9	9.1
CUC	1,237	131,569	106.4	103.7	14.0	2.6	1.9	1.1
HE	1,102	137,257	124.6	108.2	14.9	2.1	2.0	1.1
HI	3,772	336,137	89.1	264.9	14.5	2.0	4.8	3.5
HM	9,530	746,542	78.3	588.3	14.2	1.7	10.6	8.4
MXH	58	17,363	297.0	13.7	20.0	3.0	0.2	0.1
POP	12,828	1,849,467	144.2	1,457.4	15.3	2.9	26.3	13.5
RO	4,012	480,170	119.7	378.4	15.5	1.8	6.8	4.4
SM	3,752	247,315	65.9	194.9	14.1	1.4	3.5	3.3
SO	3,475	312,711	90.0	246.4	14.5	2.0	4.4	3.2
SYC	160	53,429	333.0	42.1	20.6	2.7	0.8	0.3
WA	2,774	262,662	94.7	207.0	14.6	2.0	3.7	2.6
WO	8,270	658,675	79.6	519.1	14.3	1.7	9.4	7.5
WP	385	74,065	192.1	58.4	17.4	2.9	1.1	0.5
Summary	72,056	7,035,240	98	5,544	14.7	2.0	100	69.0

Saw Timber Stand

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Saw Timber Stock

Species	DBH Inches												26	28
	10	12	14	16	18	20	22	24	26	28	30	32		
AB	0	22,571	25,293	70,152	78,524	36,831	5,411	17,579	0	0			0	0
BB	0	10,555	5,727	0	13,713	0	0	0	0	0			0	0
BC	0	2,598	8,948	10,596	0	0	0	0	0	0			0	0
BG	0	2,111	7,397	0	9,527	17,363	0	0	0	0			0	0
BL	0	2,111	21,118	4,019	0	0	0	0	0	0			0	0
BO	0	20,460	57,507	69,056	46,984	13,154	0	0	0	0			0	0
BSW	0	33,939	90,914	88,695	92,741	20,227	0	0	0	0			0	19,387
BUC	0	0	11,096	0	16,744	0	0	0	0	0			0	0
BW	0	0	0	4,567	5,413	0	0	0	0	0			0	0
CO	0	115,457	204,613	150,172	195,660	54,720	16,620	0	6,676	0			0	0
CUC	5,846	13,316	21,118	41,288	0	33,381	16,620	0	0	0			0	0
HE	0	16,239	17,896	27,220	0	0	75,902	0	0	0			0	0
HI	0	45,795	97,237	69,055	76,142	0	35,559	0	12,349	0			0	0
HM	0	113,670	221,793	160,767	141,314	55,128	53,870	0	0	0			0	0
MXH	0	0	0	0	0	17,363	0	0	0	0			0	0
POP	18,708	102,144	199,962	456,557	554,068	247,986	188,198	81,844	0	0			0	0
RO	0	43,520	68,363	81,204	15,517	112,596	35,559	29,474	56,627	0			0	0
SM	0	38,972	78,863	65,584	29,374	17,363	14,253	0	2,906	0			0	0
SO	0	33,777	102,844	63,484	94,041	13,154	5,411	0	0	0			0	0
SYC	0	0	0	0	13,713	15,258	0	0	0	24,458				
WA	0	33,777	43,786	83,671	93,536	7,892	0	0	0	0			0	0
WO	0	90,287	177,053	250,468	27,354	38,935	45,755	0	15,878	12,945				
WP	0	0	0	25,668	31,034	17,363	0	0	0	0			0	0
Total	24,554	741,299	1,461,528	1,722,223	1,535,399	718,714	493,158	128,897	94,436	56,790				

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Cruise Summary - Pulp

Species	Pulp Trees	Total Tons	Average Tons/Tree	Tons/Acre	Average DBH	Average PHT	% Total Tons	Basal Area /Acre
AB	7,599	1,133.2	0.15	0.9	7.1	2.3	4.0	1.8
BB	3,503	863.9	0.25	0.7	7.8	3.5	3.1	1.0
BC	1,746	254.1	0.15	0.2	7.3	2.6	0.9	0.4
BG	1,533	131.6	0.09	0.1	6.6	1.3	0.5	0.3
BL	2,383	492.4	0.21	0.4	7.4	3.5	1.7	0.6
BO	1,702	900.8	0.53	0.7	10.3	5.5	3.2	0.8
BSW	3,849	1,134.2	0.29	0.9	8.6	3.7	4.0	1.3
BUC	1,483	359.9	0.24	0.3	7.8	3.6	1.3	0.4
BW	2,090	364.6	0.17	0.3	7.7	2.2	1.3	0.6
CO	12,266	3,065.3	0.25	2.4	8.4	3.3	10.8	3.9
CUC	2,951	947.0	0.32	0.7	9.1	3.6	3.3	1.1
HE	3,534	537.9	0.15	0.4	7.1	2.4	1.9	0.8
HI	9,287	2,219.8	0.24	1.7	8.1	3.1	7.9	2.8
HM	29,479	5,157.7	0.17	4.1	7.5	2.7	18.2	7.5
MXH	6,127	1,136.4	0.19	0.9	7.8	2.6	4.0	1.7
POP	8,081	1,664.5	0.21	1.3	7.4	3.3	5.9	2.0
RO	2,487	908.5	0.37	0.7	9.6	4.2	3.2	1.0
SAS	1,096	168.2	0.15	0.1	8.0	2.3	0.6	0.3
SM	12,243	2,887.8	0.24	2.3	8.1	3.2	10.2	3.6
SO	1,432	428.0	0.30	0.3	9.0	3.8	1.5	0.5
SYC	599	203.2	0.34	0.2	8.8	4.0	0.7	0.2
WA	3,594	539.1	0.15	0.4	7.5	2.4	1.9	0.9
WO	9,757	2,426.5	0.25	1.9	8.3	3.2	8.6	3.0
WP	2,192	342.9	0.16	0.3	7.1	2.6	1.2	0.5
Summary	131,013	28,267.5	0.2	22.2	7.9	3.0	100	37.0

DBH Inches

Landmark Forestry LLC

DBH Inches

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Species Codes

Code	Name	Form Class
AB -----	AMERICAN BEECH	78
BB -----	BLACK BIRCH	78
BC -----	BLACK CHERRY	78
BG -----	BLACK GUM	78
BL -----	BLACK LOCUST	78
BO -----	BLACK OAK	78
BSW -----	BASSWOOD	78
BUC -----	YELLOW BUCKEYE	78
BW -----	BLACK WALNUT	78
CO -----	CHESTNUT OAK	78
CUC -----	CUCUMBER	78
HE -----	EASTERN HEMLOCK	78
HI -----	HICKORY	78
HM -----	SUGAR MAPLE	78
MXH -----	MISCELLANEOUS	78
POP -----	YELLOW-POPLAR	78
RO -----	RED OAK	78
SAS -----	SASSAFRAS	78
SM -----	RED MAPLE	78
SO -----	SCARLET OAK	78
SYC -----	SYCAMORE	78
WA -----	WHITE ASH	78
WO -----	WHITE OAK	78
WP -----	WHITE PINE	78

Statistical Overview

<i>Confidence Level</i>		99%	98%	95%	90%	80%	70%	67%
<i>Confidence Limits</i>	<i>(As Percentage)</i>	13.3	12.0	10.1	8.5	6.6	5.3	5.2
<i>Confidence Limits</i>	<i>(BF/ACRE)</i>	736.1	664.7	560.1	470.1	366.3	296.0	285.7
<i>Confidence Limits</i>	<i>(Tract Volume)</i>	934,100	843,446	710,728	596,504	464,874	375,671	362,617
<i>Coefficient of Variation</i>	72.7							

These statistical predictions are made by the following calculations:

- 1. Calculation of the average board foot volume per sample point.*
- 2. Calculation of the standard deviation of these individual observations.*
- 3. Calculation of the coefficient of variation by establishing a ratio of the standard deviation to the mean.*
- 4. Calculation of the standard error of the mean*
- 5. Expression of the standard error as confidence limits based on desired confidence (or probability) level.*

Product Summary

Species	PRIME	1	2	3	PEELER	LOW GRADE	NP	Total
AB (% of Species) (% of Total)	0 (0%) (0.0%)	11,784 (5%) (0.2%)	29,793 (12%) (0.4%)	56,320 (22%) (0.8%)	0 (0%) (0.0%)	158,464 (62%) (2%)	0 (0%) (0.0%)	256,361 (100%) (3.6%)
BB (% of Species) (% of Total)	0 (0%) (0.0%)	0 (0%) (0.0%)	0 (0%) (0.0%)	18,447 (62%) (0.3%)	0 (0%) (0.0%)	11,548 (38%) (0%)	0 (0%) (0.0%)	29,995 (100%) (0.4%)
BC (% of Species) (% of Total)	0 (0%) (0.0%)	0 (0%) (0.0%)	14,902 (67%) (0.2%)	7,240 (33%) (0.1%)	0 (0%) (0.0%)	0 (0%) (0%)	0 (0%) (0.0%)	22,142 (100%) (0.3%)
BG (% of Species) (% of Total)	0 (0%) (0.0%)	0 (0%) (0.0%)	0 (0%) (0.0%)	19,032 (52%) (0.3%)	0 (0%) (0.0%)	17,366 (48%) (0%)	0 (0%) (0.0%)	36,398 (100%) (0.5%)
BL (% of Species) (% of Total)	0 (0%) (0.0%)	0 (0%) (0.0%)	0 (0%) (0.0%)	4,019 (15%) (0.1%)	0 (0%) (0.0%)	23,229 (85%) (0%)	0 (0%) (0.0%)	27,248 (100%) (0.4%)
BO (% of Species) (% of Total)	4,567 (0%) (0.1%)	40,439 (20%) (0.6%)	64,834 (31%) (0.9%)	44,936 (22%) (0.6%)	0 (0%) (0.0%)	52,384 (25%) (1%)	0 (0%) (0.0%)	207,161 (100%) (2.9%)
BSW (% of Species) (% of Total)	0 (0%) (0.0%)	37,958 (11%) (0.5%)	135,267 (39%) (1.9%)	70,892 (20%) (1.0%)	0 (0%) (0.0%)	101,786 (29%) (1%)	0 (0%) (0.0%)	345,903 (100%) (4.9%)
BUC (% of Species) (% of Total)	0 (0%) (0.0%)	0 (0%) (0.0%)	2,148 (8%) (0.0%)	23,545 (85%) (0.3%)	0 (0%) (0.0%)	2,148 (8%) (0%)	0 (0%) (0.0%)	27,840 (100%) (0.4%)
BW (% of Species) (% of Total)	0 (0%) (0.0%)	5,413 (54%) (0.1%)	0 (0%) (0.0%)	0 (0%) (0.0%)	0 (0%) (0.0%)	4,567 (46%) (0%)	0 (0%) (0.0%)	9,980 (100%) (0.1%)
CO (% of Species) (% of Total)	0 (0%) (0.0%)	114,847 (15%) (1.6%)	224,305 (29%) (3.2%)	236,870 (31%) (3.4%)	0 (0%) (0.0%)	188,829 (25%) (3%)	0 (0%) (0.0%)	764,851 (100%) (10.9%)
CUC (% of Species) (% of Total)	0 (0%) (0.0%)	0 (0%) (0.0%)	42,880 (33%) (0.6%)	7,490 (6%) (0.1%)	72,466 (55%) (1.0%)	8,733 (7%) (0%)	0 (0%) (0.0%)	131,569 (100%) (1.9%)
HE (% of Species) (% of Total)	0 (0%) (0.0%)	0 (0%) (0.0%)	0 (0%) (0.0%)	0 (0%) (0.0%)	0 (0%) (0.0%)	0 (0%) (0%)	137,257 (100%) (2.0%)	137,257 (100%) (2.0%)
HI (% of Species) (% of Total)	0 (0%) (0.0%)	15,624 (5%) (0.2%)	56,465 (17%) (0.8%)	83,083 (25%) (1.2%)	0 (0%) (0.0%)	180,965 (54%) (3%)	0 (0%) (0.0%)	336,136 (100%) (4.8%)
HM (% of Species) (% of Total)	0 (0%) (0.0%)	82,818 (11%) (1.2%)	245,441 (33%) (3.5%)	206,717 (28%) (2.9%)	0 (0%) (0.0%)	211,566 (28%) (3%)	0 (0%) (0.0%)	746,542 (100%) (10.6%)
MXH (% of Species) (% of Total)	0 (0%) (0.0%)	0 (0%) (0.0%)	0 (0%) (0.0%)	0 (0%) (0.0%)	0 (0%) (0.0%)	0 (0%) (0%)	17,363 (100%) (0.2%)	17,363 (100%) (0.2%)

Product Summary

Landmark Forestry LLC

Future Yield in 2 Years at 4%/yr

Species	Sawtimber Trees	Current BF Volume	Estimated Future BF Volume	Estimated Future BF/Acre	Average DBH	Average MHT	% Total Volume	Basal Area /Acre
AB	2,670	256,361	277,280	218.5	15.4	1.6	3.6	2.8
BB	516	29,995	32,443	25.6	13.3	1.4	0.4	0.4
BC	373	22,142	23,949	18.9	13.6	1.3	0.3	0.3
BG	412	36,398	39,368	31.0	14.8	1.5	0.5	0.4
BL	731	27,248	29,471	23.2	13.8	1.5	0.4	0.6
BO	2,423	207,161	224,065	176.6	14.4	1.9	2.9	2.2
BSW	3,300	345,903	374,129	294.8	14.6	2.4	4.9	3.1
BUC	191	27,840	30,112	23.7	15.5	3.2	0.4	0.2
BW	164	9,980	10,794	8.5	16.9	0.5	0.1	0.2
CO	9,920	764,850	827,262	651.9	14.4	1.6	10.9	9.1
CUC	1,237	131,569	142,305	112.1	14.0	2.6	1.9	1.1
HE	1,102	137,257	148,457	117.0	14.9	2.1	2.0	1.1
HI	3,772	336,137	363,566	286.5	14.5	2.0	4.8	3.5
HM	9,530	746,542	807,460	636.3	14.2	1.7	10.6	8.4
MXH	58	17,363	18,780	14.8	20.0	3.0	0.2	0.1
POP	12,828	1,849,467	2,000,384	1,576.3	15.3	2.9	26.3	13.5
RO	4,012	480,170	519,352	409.3	15.5	1.8	6.8	4.4
SM	3,752	247,315	267,496	210.8	14.1	1.4	3.5	3.3
SO	3,475	312,711	338,228	266.5	14.5	2.0	4.4	3.2
SYC	160	53,429	57,789	45.5	20.6	2.7	0.8	0.3
WA	2,774	262,662	284,095	223.9	14.6	2.0	3.7	2.6
WO	8,270	658,675	712,423	561.4	14.3	1.7	9.4	7.5
WP	385	74,065	80,109	63.1	17.4	2.9	1.1	0.5
Summary	72,056	7,035,240	7,609,316	5,996	14.7	2.0	100	69.0