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Timber Supply, Monticello, Arkansas





College of Forestry,
Agriculture, and Natural
Resources

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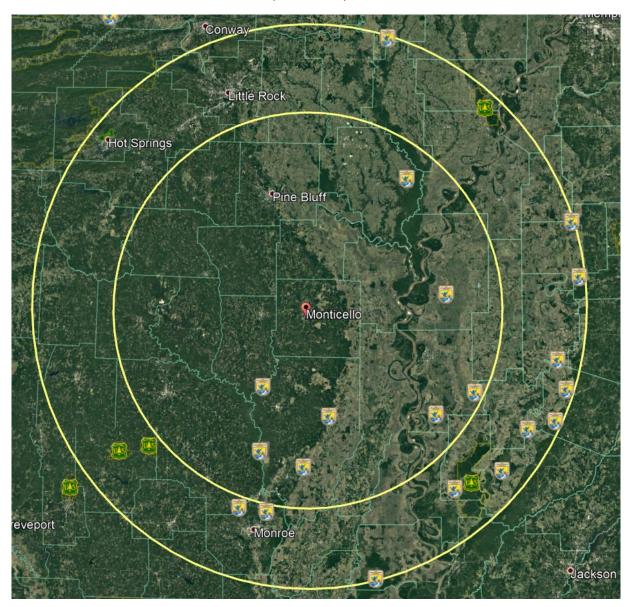


Figure 1. 70 and 100 mile radii around Monticello, Arkansas

Summary

The timber resources in the 70-miles surrounding Monticello, Arkansas can support additional harvests greater than 3.4 million tons per year in pine saw logs and 1.3 million tons in pine pulpwood and top wood. Within 100 miles, these values increase to 5.3 and 2.7 million tons per year in saw logs and pulpwood/top wood, respectively. Annual hardwood removals could increase by 1.5 million tons in saw logs and 0.5 million tons in pulpwood and top wood, with these values increasing to 3.5 and 1.3 million tons, respectively, in a 100-mile radius.

This data comes from the most recent FIA data (2018 – LA, 2019 – AR and MS) and does not reflect changes in forest cover, growth, or removals from that time to present. Changes in existing mill production and other forest disturbances could have a substantial effect on the values provided here, and those changes will likely increase over time.

Highlights of Tables

- There are 5.5 and 10.5 million acres of forest land within 70 and 100 miles, respectively, of Monticello, Arkansas.
- Pine is the dominant forest type in the region (41%) followed by bottomland hardwoods (32%) and upland hardwoods (17%).
- Naturally regenerated forests cover account for 69% of all forestland in the region, but 62% of pine covertypes are artificially regenerated. Only 11% of non-pine forests are artificially regenerated.
- 90% of the forest land is privately owned and forest growing stock, growth, and removals are generally proportional to ownership
- Within 70 miles of Monticello
 - 156 million tons of pine growing stock, 108 million tons of which is pine saw timber and
 48 million tons of pulpwood and top wood
 - 175 million tons of hardwood growing stock, 107 million tons of which is saw timber and
 68 million tons is pulpwood and top wood
 - Annual surplus in pine growth is 3.4 million tons in saw timber and 1.3 million tons in pulpwood
 - Annual surplus in hardwood growth is 1.5 million tons in saw timber and 0.5 million tons in pulpwood
- Within 100 miles of Monticello
 - 264 million tons of pine growing stock, 186 million tons of which is pine saw timber and
 78 million tons of pulpwood and top wood
 - 364 million tons of hardwood growing stock, 220 million tons of which is saw timber and
 144 million tons is pulpwood and top wood
 - Annual surplus in pine growth is 5.3 million tons in saw timber and 2.7 million tons in pulpwood and top wood
 - Annual surplus in hardwood growth is 3.4 million tons in saw timber and 1.3 million tons in pulpwood and top wood

Purpose/Objectives

The purpose of this analysis is to create a one-time snapshot of merchantable timber around Monticello Arkansas. The data tables attached will provide information on the following:

- Forest area within 70 and 100 miles aerial radius of Monticello, Arkansas by ownership and forest type group (Tables 1 and 2)
- Forest area within 100 miles aerial radius of Monticello, Arkansas by forest type group and stand origin (Table 3)
- Forest area within 100 miles aerial radius of Monticello, Arkansas by county/parish and forest type group (Table 4)
- Within 70 miles and 100 miles for major species groups and ownership groups:
 - Current growing stock for merchantable bole, sawlogs, and pulpwood/topwood (Table 5 and 9)
 - Annual net growth for merchantable bole, sawlogs, and pulpwood/topwood (Table 6 and 10)
 - Annual removals group for merchantable bole, sawlogs, and pulpwood/topwood (Table 7 and 11)
 - Annual net surplus for merchantable bole, sawlogs, and pulpwood/topwood (Table 8 and 12)

Methods

The USDA Forest Service Forest Inventory and Analysis (FIA) database is the source of the data for these tables. Data comes from the Arkansas (2019), Louisiana (2018), Oklahoma (2018) and east Texas (2019) inventories, which, at the time of this report are the most current available. The online software EVALIDATOR and DATIM processed the database queries for these reports. EVALIDATOR and DATIM can be accessed on the FIA National Program website (https://www.fia.fs.fed.us/tools-data/).

Some specifics to the database queries are important to note:

- The center of the analysis radii of 70 and 100 miles is 33.628997 degrees north latitude and 91.790964 degrees west longitude (center of Monticello, Arkansas)
- The results show acre and tonnages based on forestland based on FIA definition (FIADEF)
- Ownership categories are either PUBLIC or PRIVATE
- Areas are in acres
- Tree biomass is reported in GREEN SHORT TONS

This report is an initial survey of forestland resources. The Arkansas Center for Forest Business upon request can provide more detailed analysis and information regarding the region.

Table 1. Forest acres by forest type group and ownership within a 70-mile radius of Monticello, Arkansas in 2019.

Forest type group	Total	Public	Private
Total	5,515,786	477,778	5,038,008
Loblolly / shortleaf pine group	2,610,101	53,053	2,557,048
Oak / pine group	381,666	18,058	363,607
Oak / hickory group	704,901	31,302	673,599
Oak / gum / cypress group	1,137,117	288,151	848,965
Elm / ash / cottonwood group	567,040	82,441	484,600
Other hardwoods group	1,525	0	1,525
Exotic hardwoods group	4,918	0	4,918
Nonstocked	108,518	4,772	103,746

Table 2. Forest acres by forest type group and ownership within a 100-mile radius of Monticello, Arkansas in 2019.

Forest type group	Total	Public	Private
Total	10,449,620	1,106,499	9,343,121
Loblolly / shortleaf pine group	4,303,118	129,538	4,173,581
Oak / pine group	786,797	33,198	753,600
Oak / hickory group	1,780,037	141,138	1,638,899
Oak / gum / cypress group	2,352,205	626,760	1,725,444
Elm / ash / cottonwood group	1,034,385	158,390	875,995
Other hardwoods group	4,321	-	4,321
Exotic hardwoods group	10,983	3,003	7,980
Nonstocked	177,774	14,472	163,302

Table 3. Stand origin by forest cover type within 100-mile radius of Monticello, Arkansas in 2019.

Forest type group	Total	Natural stands	Clear evidence of artificial regeneration
Total	10,449,620	7,161,505	3,288,116
Loblolly / shortleaf pine group	4,303,118	1,641,743	2,661,375
Oak / pine group	786,797	677,356	109,441
Oak / hickory group	1,780,037	1,682,147	97,890
Oak / gum / cypress group	2,352,205	2,015,428	336,777
Elm / ash / cottonwood group	1,034,385	979,384	55,001
Other hardwoods group	4,321	4,321	0
Exotic hardwoods group	10,983	10,983	0
Nonstocked	177,774	150,142	27,632

Table 4. Forest area by county or parish and forest type group within 100-mile radius of Monticello, Arkansas in 2019

		m .	T 1 01	OLD		ype group a		0.77	D XX	
STATE	CountyGroup		LobSh	OkP		OkGC	EAC	OtHw		Nons
ALL	Total	10,449,620	4,303,118		1,780,037	235	1,034,385	4,321	10,983	177,77
AR	Arkansas	199,733	11,870	0)	101,011	46,314			2,95
AR	Chicot	127,791	11,491	0		22,232	86,006			8,00
AR	Desha	156,968	0	0	9,040	60,732	82,424	0	0	4,7
AR	Jefferson	208,388	69,783	8,236	59,730	35,715	28,989	0	0	5,9
AR	Lee	40,690	0	0	17,453	14,241	8,996	0	0	
AR	Lincoln	141,756	47,521	13,259	34,561	33,400	13,016	0	0	
AR	Lonoke	127,459	22,032	5,818	40,509	46,113	8,631	0	0	4,3
AR	Monroe	176,410	0	0	21,208	99,546	51,489	0	0	4,1
AR	Phillips	93,722	1,484	0	22,660	41,476	26,512	0	0	1,5
AR	Prairie	113,908	2,121	0	32,977	62,433	16,375	0	0	
AR	Woodruff	6,134	0	0	0	6,134	0	0	0	
AR	Ashley	416,452	283,568	12,216	25,615	73,703	6,062	0	0	15,2
AR	Bradley	367,484	233,960	13,328	58,478	49,595	0	0	0	12,1
AR	Calhoun	355,726	235,682	19,199	27,194	66,074	4,546			3,0
AR	Clark	426,020	249,787	37,956	78,928	50,541	8,809			-,-
AR	Cleveland	330,416	212,300	28,936		43,850	11,835			
AR	Columbia	416,248	256,436			47,855	4,576			
AR	Dallas	411,732	236,338			39,286	0			9,0
AR	Drew	420,390	274,778			48,836	6,071	1,525		,,0
AR	Grant	391,544	240,370			55,992	19,749	1,323		
AR	Hempstead	25,975	15,788	1,515	1,650	7,022	0			
AR	Hot Spring	240,304	113,552	39,246		24,247	0			8
AR	Lafayette	31,704	12,393	6,744		24,247	3,436			
	Nevada	329,380								<i>(</i> 1
AR			202,703	36,257	41,792	42,431	2.021			6,1
AR	Ouachita	393,475	204,144	56,281	83,822	46,196	3,031	0		
AR	Pike	14,678	14,678	25.702		114.070	0			10.6
AR	Union	634,635	356,631	35,783	109,988	114,979	6,574			10,6
AR	Garland	121,132	29,017	22,398	59,716	4,499	5,502	0		
AR	Pulaski	209,706	35,834	23,243	99,307	19,499	31,824			• •
AR	Saline	272,814	130,210	8,752	117,926	9,065	3,862	0		2,9
AR	Faulkner	28,985	0		17,512	0	0			
AR	White	10,177	1,008	0		5,815	0			
LA	East Carroll	70,919	0			20,632	34,247	0		3,0
LA	Franklin	50,340	17,498	0		7,676	12,329	0		
LA	Madison	139,603	0		-)	68,437	62,295	0		3,5
LA	Morehouse	247,678	88,262	20,019	17,297	85,331	33,719	0		1,4
LA	Richland	75,187	4,190	0	23,223	39,848	7,925	0	0	
LA	West Carroll	60,454	6,459	0	18,860	22,992	12,143	0	0	
LA	Bienville	14,503	6,124	6,124	2,256	0	0	0	0	
LA	Caldwell	17,892	12,247	0	0	5,645	0	0	0	
LA	Claiborne	372,235	177,864	65,580	76,403	38,744	10,848	2,796	0	
LA	Jackson	133,522	72,576	12,247	24,417	18,948	0	0	0	5,3
LA	Lincoln	233,699	126,020	23,850	43,705	29,408	0	0	0	10,7
LA	Ouachita	241,602	73,812	17,364	24,140	103,815	12,082	0	3,062	7,3
LA	Union	442,810	190,601	27,348		105,542	0			14,1
LA	Webster	24,937	13,875			0	0	0		
MS	Bolivar	152,144	0			36,257	107,061			8,8
MS	Coahoma	73,838	0			27,152	40,525			-,0
MS	Holmes	80,099	3,080			18,213	15,333			
MS	Humphreys	62,167	0			62,167	0			
MS	Issaquena	143,040	0			63,550	61,277	_		6,1
MS	Leflore	75,105	5,031	0		57,520	7,884			4,6
MS	Quitman	37,379	0,031		-	25,756	11,624			7,0
MS	Sharkey	114,765	0			84,169	30,596			
	· · · · · · · · · · · · · · · · · · ·	14,723				7,106	7,617			
MS	Sunflower		0							
MS	Tallahatchie	55,428	0			32,402	16,866			
MS	Tunica	13,490	0			0	13,490			
MS	Warren	59,352	0			22,504	27,607			
MS	Washington	55,972	0			31,202	17,874			6,8
MS	Yazoo	121,039	0		53,932	54,532	6,415			6,1
MS	Carroll	19,933	0	6,307	0	6,307	0	0	0	7,3
MS	Grenada	3,829	0	0	0	3,829	0	0	0	

Table 5. Growing stock of merchantable bole biomass, saw log portion, and pulpwood/topwood portion in green tons by major species group and major ownership group within 70 miles of Monticello, Arkansas in 2019.

TOTAL MERCHANTABLE BOLE GROWING STOCK IN TONS

	Ownership group					
Species group	Total	Public	Private	Not available		
Total	341,849,951	44,832,602	297,017,349	0		
Pines	155,963,857	6,098,493	149,865,365	0		
Other softwoods	11,350,353	3,161,608	8,188,745	0		
Soft hardwoods	56,709,086	10,049,392	46,659,694	0		
Hard hardwoods	117,826,655	25,523,109	92,303,545	0		

SAWLOG PORTION OF GROWING STOCK IN TONS

	Ownership group				
Species group	Total	Public	Private	Not available	
Total	224,487,697	33,778,183	190,709,514	0	
Pines	107,941,010	5,667,589	102,273,421	0	
Other softwoods	9,567,169	2,464,087	7,103,081	0	
Soft hardwoods	28,438,780	6,256,439	22,182,341	0	
Hard hardwoods	78,540,738	19,390,067	59,150,671	0	

PULPWOOD and TOPWOOD PORTION OF GROWING STOCK IN TONS

	Ownership group				
Species group	Total	Public	Private	Not available	
Total	117,362,254	11,054,419	106,307,835	0	
Pines	48,022,847	430,904	47,591,944	0	
Other softwoods	1,783,184	697,521	1,085,664	0	
Soft hardwoods	28,270,306	3,792,953	24,477,353	0	
Hard hardwoods	39,285,917	6,133,042	33,152,874	0	

Table 6. Annual net growth of merchantable bole biomass, saw log portion, and pulpwood/topwood portion in green tons by major species group and major ownership group within 70 miles of Monticello, Arkansas in 2019.

MERCHANTABLE BOLE BIOMASS NET ANNUAL GROWTH IN TONS

	Ownership group				
Species group	Total	Public	Private	Not available	
Total	17,445,099	791,208	16,638,019	15,872	
Pines	12,607,908	141,672	12,463,513	2,722	
Other softwoods	361,049	76,742	284,307	0	
Soft hardwoods	1,738,083	210,094	1,517,950	10,039	
Hard hardwoods	2,738,059	362,700	2,372,249	3,111	

SAWLOG PORTION OF NET ANNUAL GROWTH IN TONS

	Ownership group				
Species group	Total	Public	Private	Not available	
Total	12,046,849	689,879	11,353,830	3,140	
Pines	8,851,518	142,293	8,707,248	1,977	
Other softwoods	332,554	73,447	259,107	0	
Soft hardwoods	957,504	158,604	798,520	381	
Hard hardwoods	1,905,273	315,536	1,588,956	781	

PULPWOOD and TOPWOOD PORTION OF NET ANNUAL GROWTH IN TONS

	Ownership group				
Species group	Total	Public	Private	Not available	
Total	5,398,250	101,328	5,284,189	12,732	
Pines	3,756,390	-621	3,756,266	745	
Other softwoods	28,495	3,295	25,200	0	
Soft hardwoods	780,578	51,490	719,431	9,658	
Hard hardwoods	832,787	47,164	783,293	2,329	

Table 7. Annual removals of merchantable bole biomass, saw log portion, and pulpwood/topwood portion in green tons by major species group and major ownership group within 70 miles of Monticello, Arkansas in 2019.

MERCHANTABLE BOLE BIOMASS ANNUAL REMOVALS IN TONS

	Ownership group				
Species group	Total	Public	Private	Not available	
Total	10,328,805	112,286	10,066,514	150,005	
Pines	7,824,486	29,558	7,714,829	80,100	
Other softwoods	1,007	0	1,007	0	
Soft hardwoods	753,577	5,876	703,611	44,091	
Hard hardwoods	1,749,735	76,853	1,647,068	25,814	

SAWLOG PORTION OF ANNUAL REMOVALS IN TONS

	Ownership group				
Species group	Total	Public	Private	Not available	
Total	6,762,797	85,567	6,590,159	87,072	
Pines	5,404,615	20,961	5,311,590	72,065	
Other softwoods	0	0	0	0	
Soft hardwoods	267,800	2,002	258,093	7,705	
Hard hardwoods	1,090,382	62,605	1,020,476	7,302	

PULPWOOD and TOPWOOD PORTION OF ANNUAL REMOVALS IN TONS

	Ownership group			
Species group	Total	Public	Private	Not available
Total	3,566,007	26,719	3,476,355	62,933
Pines	2,419,871	8,597	2,403,239	8,035
Other softwoods	1,007	0	1,007	0
Soft hardwoods	485,777	3,874	445,518	36,386
Hard hardwoods	659,352	14,248	626,591	18,513

Table 8. Annual surplus of merchantable bole biomass, saw log portion, and pulpwood/topwood portion in green tons by major species group and major ownership group within 70 miles of Monticello, Arkansas in 2019.

MERCHANTABLE BOLE BIOMASS ANNUAL NET SURPLUS IN TONS

	Ownership group				
Species group	Total	Public	Private	Not available	
Total	7,116,294	678,921	6,571,506	-134,133	
Pines	4,783,421	112,115	4,748,685	-77,378	
Other softwoods	360,042	76,742	283,301	0	
Soft hardwoods	984,506	204,218	814,340	-34,052	
Hard hardwoods	988,325	285,847	725,181	-22,704	

SAWLOG PORTION OF ANNUAL NET SURPLUS IN TONS

	Ownership group			
Species group	Total	Public	Private	Not available
Total	5,284,052	604,312	4,763,672	-83,932
Pines	3,446,903	121,333	3,395,658	-70,088
Other softwoods	332,554	73,447	259,107	0
Soft hardwoods	689,705	156,602	540,427	-7,324
Hard hardwoods	814,890	252,931	568,480	-6,520

PULPWOOD and TOPWOOD PORTION OF ANNUAL NET SURPLUS IN TONS

	Ownership group			
Species group	Total	Public	Private	Not available
Total	1,832,242	74,609	1,807,834	-50,201
Pines	1,336,519	-9,218	1,353,027	-7,290
Other softwoods	27,488	3,295	24,193	0
Soft hardwoods	294,801	47,616	273,913	-26,728
Hard hardwoods	173,434	32,916	156,701	-16,183

Table 9. Growing stock of merchantable bole biomass, saw log portion, and pulpwood/topwood portion in green tons by major species group and major ownership group within 100 miles of Monticello, Arkansas in 2019.

TOTAL MERCHANTABLE BOLE GROWING STOCK IN TONS

Ownership group

Species group	Total	Public	Private	Not available
Total	647,490,071	97,928,891	549,561,180	0
Pines	264,483,794	14,106,412	250,377,381	0
Other softwoods	18,851,091	4,922,507	13,928,584	0
Soft hardwoods	122,000,744	22,782,593	99,218,151	0
Hard hardwoods	242,154,443	56,117,378	186,037,065	0

SAWLOG PORTION OF GROWING STOCK IN TONS

	Ownership group			
Species group	Total	Public	Private	Not available
Total	421,709,719	71,196,948	350,512,771	0
Pines	186,198,002	12,484,070	173,713,932	0
Other softwoods	15,799,541	4,046,831	11,752,710	0
Soft hardwoods	61,472,464	13,722,570	47,749,894	0
Hard hardwoods	158,239,713	40,943,477	117,296,236	0

PULPWOOD and TOPWOOD PORTION OF GROWING STOCK IN TONS

	Ownership group			
Species group	Total	Public	Private	Not available
Total	225,780,352	26,731,943	199,048,409	0
Pines	78,285,792	1,622,342	76,663,449	0
Other softwoods	3,051,550	875,676	2,175,874	0
Soft hardwoods	60,528,280	9,060,023	51,468,257	0
Hard hardwoods	83,914,730	15,173,901	68,740,829	0

Table 10. Annual net growth of merchantable bole biomass, saw log portion, and pulpwood/topwood portion in green tons by major species group and major ownership group within 100 miles of Monticello, Arkansas in 2019.

MERCHANTABLE BOLE BIOMASS NET ANNUAL GROWTH IN TONS

	Ownership group			
Species group	Total	Public	Private	Not available
Total	30,720,745	1,993,921	28,738,411	-11,587
Pines	20,415,819	423,967	19,981,369	10,482
Other softwoods	489,185	103,984	385,201	0
Soft hardwoods	3,708,383	486,663	3,235,382	-13,662
Hard hardwoods	6,107,358	979,307	5,136,458	-8,407

SAWLOG PORTION OF NET ANNUAL GROWTH IN TONS

		Ownership group			
Species group	Total	Public	Private	Not available	
Total	20,956,385	1,603,857	19,367,515	-14,987	
Pines	14,325,075	408,562	13,906,501	10,012	
Other softwoods	432,527	92,679	339,847	0	
Soft hardwoods	2,069,301	353,137	1,733,242	-17,078	
Hard hardwoods	4,129,482	749,479	3,387,924	-7,921	

PULPWOOD and TOPWOOD PORTION OF NET ANNUAL GROWTH IN TONS

	Ownership group			
Species group	Total	Public	Private	Not available
Total	9,764,360	390,063	9,370,896	3,400
Pines	6,090,744	15,405	6,074,868	470
Other softwoods	56,658	11,304	45,354	0
Soft hardwoods	1,639,082	133,525	1,502,140	3,416
Hard hardwoods	1,977,876	229,828	1,748,533	-486

Table 11. Annual removals of merchantable bole biomass, saw log portion, and pulpwood/topwood portion in green tons by major species group and major ownership group within 100 miles of Monticello, Arkansas in 2019.

MERCHANTABLE BOLE BIOMASS ANNUAL REMOVALS IN TONS

Ownership group

Species group	Total	Public	Private	Not available
Total	17,549,954	442,501	16,729,971	377,482
Pines	12,436,435	104,789	12,190,209	141,438
Other softwoods	50,296	0	1,768	48,528
Soft hardwoods	1,409,464	27,026	1,300,291	82,147
Hard hardwoods	3,653,759	310,686	3,237,703	105,369

SAWLOG PORTION OF ANNUAL REMOVALS IN TONS

	Ownership group			
Species group	Total	Public	Private	Not available
Total	11,807,857	343,415	11,212,508	251,934
Pines	9,017,237	84,874	8,811,750	120,613
Other softwoods	44,053	0	0	44,053
Soft hardwoods	428,597	6,652	396,262	25,683
Hard hardwoods	2,317,970	251,890	2,004,496	61,584

PULPWOOD and TOPWOOD PORTION OF ANNUAL REMOVALS IN TONS

	Ownership group			
Species group	Total	Public	Private	Not available
Total	5,742,096	99,086	5,517,462	125,548
Pines	3,419,198	19,915	3,378,458	20,825
Other softwoods	6,243	0	1,768	4,474
Soft hardwoods	980,867	20,374	904,029	56,464
Hard hardwoods	1,335,789	58,796	1,233,207	43,785

Table 12. Annual surplus of merchantable bole biomass, saw log portion, and pulpwood/topwood portion in green tons by major species group and major ownership group within 100 miles of Monticello, Arkansas in 2019.

MERCHANTABLE BOLE BIOMASS ANNUAL NET SURPLUS IN TONS

_	Ownership group			
Species group	Total	Public	Private	Not available
Total	13,170,791	1,551,420	12,008,440	-389,069
Pines	7,979,384	319,179	7,791,161	-130,956
Other softwoods	438,889	103,984	383,433	-48,528
Soft hardwoods	2,298,919	459,637	1,935,092	-95,809
Hard hardwoods	2,453,599	668,620	1,898,755	-113,776

SAWLOG PORTION OF ANNUAL NET SURPLUS IN TONS

	Ownership group			
Species group	Total	Public	Private	Not available
Total	9,148,528	1,260,442	8,155,007	-266,921
Pines	5,307,838	323,689	5,094,751	-110,601
Other softwoods	388,473	92,679	339,847	-44,053
Soft hardwoods	1,640,704	346,486	1,336,980	-42,762
Hard hardwoods	1,811,512	497,589	1,383,429	-69,505

PULPWOOD and TOPWOOD PORTION OF ANNUAL NET SURPLUS IN TONS

	Ownership group			
Species group	Total	Public	Private	Not available
Total	4,022,263	290,977	3,853,434	-122,148
Pines	2,671,546	-4,510	2,696,410	-20,354
Other softwoods	50,416	11,304	43,586	-4,474
Soft hardwoods	658,215	113,151	598,111	-53,048
Hard hardwoods	642,087	171,032	515,326	-44,271