2022

Timber Supply, Helena-West Helena, Arkansas





University of Arkansas at Monticello College of Forestry, Agriculture, and Natural Resources

14 January 2022

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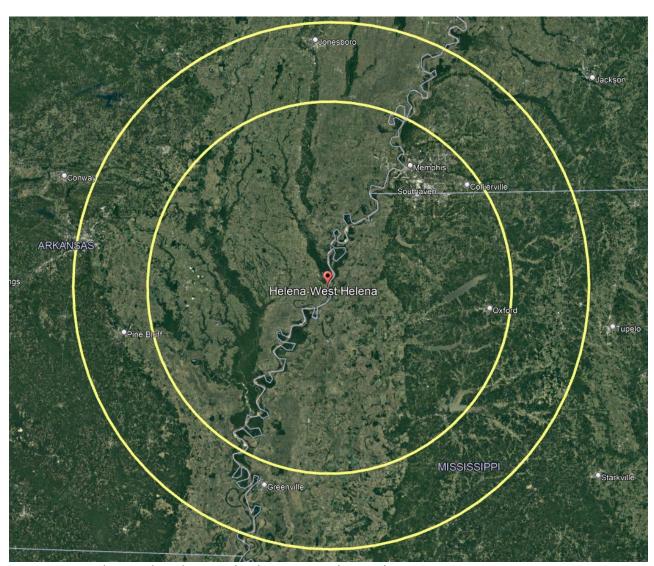


Figure 1. 70 and 100-mile radii around Helena-West Helena, Arkansas.

Summary

The timber resources in the 70-miles surrounding Helena-West Helena, Arkansas can support additional harvests greater than 819 thousand tons per year in pine saw logs and 11 thousand tons in pine pulpwood and top wood. Within 100 miles, these values increase to 4.3 and 7.9 million tons per year in saw logs and pulpwood/top wood, respectively. Annual hardwood surplus within 70 miles is 2.1 million tons of sawtimber and 0.4 million tons of pulpwood. When the supply area is increased to a 100-mile radius, the annual surplus in hardwood sawtimber is 4.1 million tons, but there is a DEFICIT of 2.0 million tons in pulpwood and topwood.

This data comes from the most recent FIA data (AR-2020, MS-2019, and TN-2017) 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 2.8 and 6.9 million acres of timber land within 70 and 100 miles, respectively, of Helena-West Helena, Arkansas
- Bottomland hardwood is the dominant forest type in the region (36%) followed by upland hardwoods (30%) and pine (25%)
- Naturally regenerated forests cover account for 77% of all forestland in the region, but 71% of pine forests are artificially regenerated. Only 8% of non-pine forests are artificially regenerated
- 89% of the timberland is privately owned. Forest growing stock, growth, and removals are generally proportional to ownership.
- Within 70 miles of Helena-West Helena
 - 25.2 million tons of pine growing stock, 20.6 million tons of which is pine saw timber and 4.6 million tons of pulpwood and top wood
 - 134 million tons of hardwood growing stock, 101 million tons of which is saw timber and 33 million tons is pulpwood and top wood
 - Annual surplus in pine growth is 0.8 million tons in saw timber and 0.01 million tons in pulpwood
 - Annual surplus in hardwood growth is 2.1 million tons in saw timber and 0.4 million tons in pulpwood
- Within 100 miles of Helena-West Helena
 - 128 million tons of pine growing stock, 92 million tons of which is pine saw timber and 36 million tons of pulpwood and top wood
 - 330 million tons of hardwood growing stock, 185 million tons of which is saw timber and 145 million tons is pulpwood and top wood
 - Annual surplus in pine growth is 4.3 million tons in saw timber and 7.9 million tons in pulpwood
 - Annual surplus in hardwood growth is 4.1 million tons in saw timber, but there is an annual deficit of 2.0 million tons in hardwood pulpwood and topwood.
 - Hardwood resources consist primarily of various oak species, beech, sweetgum, and tupelo/blackgum. 27% of the hardwood sawtimber would be considered high-grade trees suitable for factory grade lumber production.

Hardwood resources are plentiful in the region, but only 27% of the resources are considered "high quality" (Grades 1 and 2) which will produce substantial proportions of grade lumber (Figure 2). Grade 3 trees represent 58% of the sawtimber resource in the region and will produce some factory lumber but the majority of grade 3 and lower trees will largely produce crossties and pallet wood.

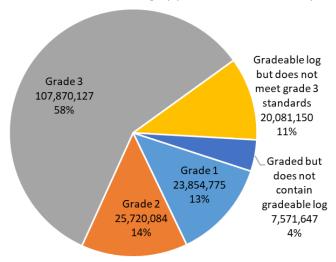


Figure 2. Hardwood saw timber resources by tree trade within a 100-mile radius of Helena-West Helena, Arkansas. Volumes are saw timber in green short tons.

The species groups present in the region are largely red and white oaks and sweetgum, which combined make up 87% of the total hardwood saw timber. Select red oak (15%) and select white oak (18%) are present as well. Select species are generally those preferred for factory grade lumber production.

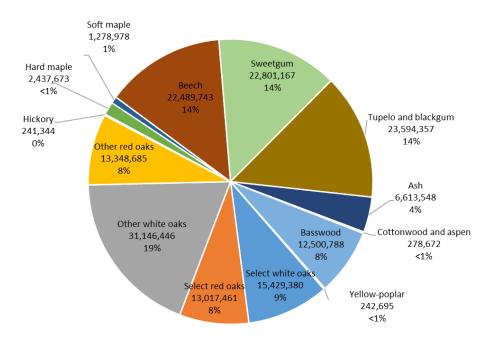


Figure 3. Major hardwood species groups present within a 100-mile radius of Helena-West Helena, Arkansas. Volume numbers are saw timber in green short tons.

Many species present could sustain substantial increases in their sustainable harvest levels. Most of these species are bottomland hardwoods. (Figure 4).

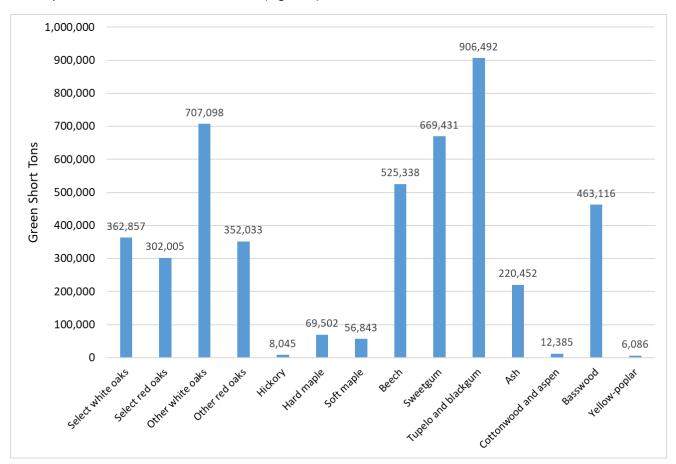


Figure 4. Sustainable annual allowable increase in saw timber harvesting in various species groups. Values are in saw timber green short tons per year within a 100-mile radius of Helena-West Helena, Arkansas.

Purpose/Objectives

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

- Timberland area within 70 and 100 miles aerial radius of Helena-West Helena, Arkansas by ownership and forest type group (Tables 1 and 2)
- Timberland area within 100 miles aerial radius of Helena-West Helena, Arkansas by forest type group and stand origin (Table 3)
- Within 70 miles and 100 miles for major species groups and ownership groups:
 - Current growing stock for merchantable bole, saw logs, and pulpwood/top wood (Table 4 and 8)
 - Annual net growth for merchantable bole, saw logs, and pulpwood/top wood (Table 5 and 9)
 - Annual removals group for merchantable bole, saw logs, and pulpwood/top wood
 (Table 6 and 10)
 - Annual net surplus for merchantable bole, saw logs, and pulpwood/top wood (Table 7 and 11)
- Hardwood saw timber growing stock by grade and estimates of sustainable surplus (or deficit) by species group (Table 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 (2020), Louisiana (2018), and Mississippi (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 34.5291 degrees north latitude and -90.59 degrees west longitude (Helena-West Helena, Arkansas)
- The results show acre and tonnages based on timberland 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 timber resources. The Arkansas Center for Forest Business upon request can provide more detailed analysis and information regarding the region.

Table 1. Timberland acres by forest type group and ownership within a 70-mile radius of Helena-West Helena, Arkansas.

	O۱	wnership group	
Forest type group	Total	Public	Private
Total	2,769,326	379,585	2,389,741
Loblolly / shortleaf pine group	326,208	23,610	302,597
Other eastern softwoods group	9,201	0	9,201
Oak / pine group	83,328	20,922	62,406
Oak / hickory group	807,236	93,685	713,551
Oak / gum / cypress group	708,273	136,972	571,301
Elm / ash / cottonwood group	759,444	99,964	659,480
Exotic hardwoods group	3,364	0	3,364
Nonstocked	72,274	4,432	67,842

Table 2. Timberland acres by forest type group and ownership within a 100-mile radius of Helena-West Helena, Arkansas.

		Ownership gro	oup
Forest type group	Total	Public	Private
Total	6,941,348	762,889	6,178,460
Loblolly / shortleaf pine group	1,745,549	126,982	1,618,567
Other eastern softwoods group	36,188	0	36,188
Oak / pine group	434,489	41,924	392,565
Oak / hickory group	2,061,800	187,020	1,874,780
Oak / gum / cypress group	1,321,080	242,497	1,078,583
Elm / ash / cottonwood group	1,212,216	155,205	1,057,012
Other hardwoods group	11,277	0	11,277
Exotic hardwoods group	3,364	0	3,364
Nonstocked	115,387	9,261	106,126

Table 3. Stand origin by acres and forest cover type within 100-mile radius of Helena-West Helena, Arkansas.

Stand origin

Forest type group	Total	Natural stands	Clear evidence of artificial regeneration
Total	6,941,348	5,343,115	1,598,233
Loblolly / shortleaf pine group	1,745,549	512,324	1,233,224
Other eastern softwoods group	36,188	34,611	1,577
Oak / pine group	434,489	357,074	77,415
Oak / hickory group	2,061,800	2,024,984	36,816
Oak / gum / cypress group	1,321,080	1,130,775	190,304
Elm / ash / cottonwood group	1,212,216	1,173,980	38,236
Other hardwoods group	11,277	11,277	0
Exotic hardwoods group	3,364	3,364	0
Nonstocked	115,387	94,725	20,662

Table 4. Growing stock of merchantable bole biomass, saw log portion, and pulpwood/top wood portion in green tons by major species group and major ownership group within 70 miles of Helena-West Helena, Arkansas.

TOTAL MERCHANTABLE BOLE GROWING STOCK IN TONS

		group		
Species group	Total	Public	Private	Not available
Total	168,140,243	37,538,781	130,601,462	0
Pines	25,272,830	4,192,841	21,079,989	0
Other softwoods	9,060,097	2,094,329	6,965,768	0
Soft hardwoods	53,157,347	13,101,735	40,055,612	0
Hard hardwoods	80,649,969	18,149,876	62,500,093	0

SAWLOG PORTION OF GROWING STOCK IN TONS

Ownership group

			• .	
Species group	Total	Public	Private	Not available
Total	130,383,800	31,798,676	98,585,124	0
Pines	20,623,757	3,971,634	16,652,123	0
Other softwoods	8,728,260	1,913,292	6,814,968	0
Soft hardwoods	38,821,736	10,665,268	28,156,469	0
Hard hardwoods	62,210,047	15,248,483	46,961,564	0

PULPWOOD and TOPWOOD PORTION OF GROWING STOCK IN TONS

Ownership group

Species group	Total	Public	Private	Not available
Total	37,756,443	5,740,105	32,016,338	0
Pines	4,649,073	221,207	4,427,866	0
Other softwoods	331,837	181,037	150,800	0
Soft hardwoods	14,335,611	2,436,467	11,899,143	0
Hard hardwoods	18,439,922	2,901,393	15,538,529	0

Table 5. Annual net growth of merchantable bole biomass, saw log portion, and pulpwood/top wood portion in green tons by major species group and major ownership group within 70 miles of Helena-West Helena, Arkansas.

MERCHANTABLE BOLE BIOMASS NET ANNUAL GROWTH IN TONS

	Ownership group				
Species group	Total	Public	Private	Not available	
Total	5,570,797	749,849	4,812,827	8,122	
Pines	1,724,122	132,265	1,585,872	5,985	
Other softwoods	299,950	58,400	241,551	0	
Soft hardwoods	1,471,641	203,699	1,266,275	1,667	
Hard hardwoods	2,075,084	355,485	1,719,129	470	

SAWLOG PORTION OF NET ANNUAL GROWTH IN TONS

Species group		Own	ership group	
	Total	Public	Private	Not available
Total	4,747,009	713,760	4,026,949	6,300
Pines	1,532,632	131,556	1,396,174	4,902
Other softwoods	299,060	56,349	242,710	0
Soft hardwoods	1,100,119	186,348	912,373	1,398
Hard hardwoods	1,815,198	339,507	1,475,692	0

PULPWOOD and TOPWOOD PORTION OF NET ANNUAL GROWTH IN TONS

Species group		Own	ership group	
	Total	Public	Private	Not available
Total	823,788	36,089	785,878	1,822
Pines	191,490	710	189,698	1,083
Other softwoods	891	2,050	-1,160	0
Soft hardwoods	371,522	17,351	353,902	269
Hard hardwoods	259,886	15,978	243,438	470

Table 6. Annual removals of merchantable bole biomass, saw log portion, and pulpwood/top wood portion in green tons by major species group and major ownership group within 70 miles of Helena-West Helena, Arkansas.

MERCHANTABLE BOLE BIOMASS ANNUAL REMOVALS IN TONS

	Ownership group			
Species group	Total	Public	Private	Not available
Total	1,908,045	326,534	1,524,442	57,069
Pines	894,322	0	857,323	36,999
Other softwoods	851	0	851	0
Soft hardwoods	503,195	266,439	219,648	17,108
Hard hardwoods	509,677	60,095	446,620	2,963

SAWLOG PORTION OF ANNUAL REMOVALS IN TONS

	Ownership group			
Species group	Total	Public	Private	Not available
Total	1,492,052	231,679	1,216,273	44,100
Pines	713,903	0	682,095	31,808
Other softwoods	0	0	0	0
Soft hardwoods	347,834	177,834	157,708	12,293
Hard hardwoods	430,315	53,845	376,470	0

PULPWOOD and TOPWOOD PORTION OF ANNUAL REMOVALS IN TONS

		Owner	ship group	
Species group	Total	Public	Private	Not available
Total	415,993	94,855	308,169	12,969
Pines	180,419	0	175,228	5,191
Other softwoods	851	0	851	0
Soft hardwoods	155,361	88,605	61,941	4,815
Hard hardwoods	79,362	6,250	70,149	2,963

Table 7. Annual surplus of merchantable bole biomass, saw log portion, and pulpwood/top wood portion in green tons by major species group and major ownership group within 70 miles of Helena-West Helena, Arkansas.

MERCHANTABLE BOLE BIOMASS ANNUAL NET SURPLUS IN TONS

Species group		Own	ership group	
	Total	Public	Private	Not available
Total	3,662,752	423,315	3,288,385	-48,947
Pines	829,801	132,265	728,549	-31,014
Other softwoods	299,099	58,400	240,699	0
Soft hardwoods	968,446	-62,740	1,046,627	-15,441
Hard hardwoods	1,565,407	295,390	1,272,510	-2,492

SAWLOG PORTION OF ANNUAL NET SURPLUS IN TONS

		Own	ership group	
Species group	Total	Public	Private	Not available
Total	3,254,957	482,081	2,810,676	-37,800
Pines	818,730	131,556	714,079	-26,905
Other softwoods	299,060	56,349	242,710	0
Soft hardwoods	752,285	8,514	754,665	-10,895
Hard hardwoods	1,384,883	285,662	1,099,221	0

PULPWOOD and TOPWOOD PORTION OF ANNUAL NET SURPLUS IN TONS

Species group		Owne	ership group	
	Total	Public	Private	Not available
Total	407,795	-58,766	477,708	-11,147
Pines	11,071	710	14,470	-4,108
Other softwoods	39	2,050	-2,011	0
Soft hardwoods	216,161	-71,254	291,961	-4,546
Hard hardwoods	180,524	9,728	173,288	-2,492

Table 8. Growing stock of merchantable bole biomass, saw log portion, and pulpwood/top wood portion in green tons by major species group and major ownership group within 100 miles of Helena-West Helena, Arkansas.

TOTAL MERCHANTABLE BOLE GROWING STOCK IN TONS

Species Group		Owners	ship group	
	Total	Public	Private	Not available
Total	477,815,709	79,562,567	398,253,142	0
Pines	128,638,414	15,319,472	113,318,942	0
Other softwoods	19,185,914	4,749,798	14,436,116	0
Soft hardwoods	126,821,780	23,650,408	103,171,372	0
Hard hardwoods	203,169,601	35,842,889	167,326,712	0

SAWLOG PORTION OF GROWING STOCK IN TONS

Ownership group

Species Group	Total	Public	Private	Not available
Total	291,994,313	57,612,830	234,381,483	0
Pines	92,286,985	12,993,713	79,293,272	0
Other softwoods	14,620,163	3,738,214	10,881,950	0
Soft hardwoods	62,524,479	14,377,363	48,147,117	0
Hard hardwoods	122,562,685	26,503,540	96,059,144	0

PULPWOOD and TOPWOOD PORTION OF GROWING STOCK IN TONS

Ownership group

Species Group	Total	Public	Private	Not available
Total	185,821,396	21,949,737	163,871,659	0
Pines	36,351,429	2,325,759	34,025,670	0
Other softwoods	4,565,751	1,011,584	3,554,166	0
Soft hardwoods	64,297,301	9,273,045	55,024,255	0
Hard hardwoods	80,606,916	9,339,349	71,267,568	0

Table 9. Annual net growth of merchantable bole biomass, saw log portion, and pulpwood/top wood portion in green tons by major species group and major ownership group within 100 miles of Helena-West Helena, Arkansas.

MERCHANTABLE BOLE BIOMASS NET ANNUAL GROWTH IN TONS

Species Group		Owne	rship group	
	Total	Public	Private	Not available
Total	33,968,985	3,095,224	30,738,268	135,492
Pines	17,497,396	1,705,174	15,729,256	62,966
Other softwoods	11,062,551	737,186	10,281,710	43,655
Soft hardwoods	756,600	149,871	606,592	137
Hard hardwoods	4,652,438	502,994	4,120,710	28,734

SAWLOG PORTION OF NET ANNUAL GROWTH IN TONS

Ownership group

			101	
Species Group	Total	Public	Private	Not available
Total	14,263,304	1,709,267	12,502,751	51,285
Pines	7,811,453	637,618	7,131,684	42,151
Other softwoods	518,155	127,252	390,903	0
Soft hardwoods	2,070,131	324,139	1,741,108	4,883
Hard hardwoods	3,863,565	620,258	3,239,056	4,251

PULPWOOD and TOPWOOD PORTION OF NET ANNUAL GROWTH IN TONS

Ownership group

Species Group	Total	Public	Private	Not available
Total	19,705,681	1,385,957	18,235,517	84,207
Pines	9,685,943	1,067,556	8,597,572	20,815
Other softwoods	10,544,396	609,934	9,890,808	43,655
Soft hardwoods	-1,313,531	-174,268	-1,134,517	-4,746
Hard hardwoods	788,873	-117,264	881,654	24,483

Table 10. Annual removals of merchantable bole biomass, saw log portion, and pulpwood/top wood portion in green tons by major species group and major ownership group within 100 miles of Helena-West Helena, Arkansas.

MERCHANTABLE BOLE BIOMASS ANNUAL REMOVALS IN TONS

		Own	ership group	
Species Group	Total	Public	Private	Not available
Total	8,559,507	746,661	7,267,194	545,651
Pines	5,170,328	57,923	4,825,014	287,390
Other softwoods	57,155	2,607	2,044	52,504
Soft hardwoods	1,268,503	517,102	622,430	128,970
Hard hardwoods	2,063,522	169,029	1,817,706	76,787

SAWLOG PORTION OF ANNUAL REMOVALS IN TONS

Species Group		Own	ership group	
	Total	Public	Private	Not available
Total	5,347,654	456,802	4,564,009	326,844
Pines	3,430,035	45,886	3,174,535	209,613
Other softwoods	45,263	2,181	0	43,082
Soft hardwoods	609,021	286,968	273,597	48,455
Hard hardwoods	1,263,336	121,767	1,115,876	25,694

PULPWOOD and TOPWOOD PORTION OF ANNUAL REMOVALS IN TONS

Species Group		Own	ership group	ip group		
	Total	Public	Private	Not available		
Total	3,211,853	289,860	2,703,186	218,807		
Pines	1,740,293	12,037	1,650,479	77,777		
Other softwoods	11,892	426	2,044	9,422		
Soft hardwoods	659,482	230,134	348,833	80,515		
Hard hardwoods	800,186	47,263	701,830	51,093		

Table 11. Annual surplus of merchantable bole biomass, saw log portion, and pulpwood/top wood portion in green tons by major species group and major ownership group within 100 miles of Helena-West Helena, Arkansas.

MERCHANTABLE BOLE BIOMASS ANNUAL NET SURPLUS IN TONS

	Ownership group					
Species Group	Total	Public	Private	Not available		
Total	25,409,478	2,348,563	23,471,074	-410,159		
Pines	12,327,068	1,647,250	10,904,242	-224,424		
Other softwoods	11,005,396	734,579	10,279,667	-8,849		
Soft hardwoods	-511,903	-367,231	-15,839	-128,833		
Hard hardwoods	2,588,916	333,965	2,303,004	-48,053		

SAWLOG PORTION OF ANNUAL NET SURPLUS IN TONS

	Ownership group				
Species Group	Total	Public	Private	Not available	
Total	8,915,649	1,252,466	7,938,742	-275,558	
Pines	4,381,418	591,732	3,957,148	-167,462	
Other softwoods	472,892	125,072	390,903	-43,082	
Soft hardwoods	1,461,110	37,171	1,467,511	-43,572	
Hard hardwoods	2,600,229	498,491	2,123,180	-21,442	

PULPWOOD and TOPWOOD PORTION OF ANNUAL NET SURPLUS IN TONS

	Ownership group					
Species Group	Total	Public	Private	Not available		
Total	16,493,828	1,096,097	15,532,331	-134,601		
Pines	7,945,650	1,055,518	6,947,094	-56,962		
Other softwoods	10,532,504	609,507	9,888,764	34,233		
Soft hardwoods	-1,973,013	-404,402	-1,483,350	-85,261		
Hard hardwoods	-11 313	-164 527	179 824	-26 610		

Table 12. Hardwood saw timber growing stock and sustainable harvest increase in green tons of saw log portion of growing stock on timberland within 70 miles of Helena-West Helena, Arkansas.

Growing Stock Volume in green short tons

Species group					Gradeable log but	Graded but does	Annual Sustainable
	Total	Grade 1	Grade 2	Grade 3	does not meet	not contain	Harvest Increase
					grade 3 standards	gradeable log	
Total	185,097,783	23,854,775	25,720,084	107,870,127	20,081,150	7,571,647	5,261,760
Select white oaks	15,429,380	3,381,535	2,415,577	6,958,246	2,397,700	276,321	362,857
Select red oaks	13,017,461	1,565,347	2,463,303	7,587,857	1,270,563	130,390	302,005
Other white oaks	31,146,446	2,780,166	3,444,482	20,760,724	3,269,519	891,555	707,098
Other red oaks	13,348,685	1,418,204	2,263,301	7,675,444	1,887,666	104,071	352,033
Hickory	241,344	0	0	185,126	56,218	0	8,045
Hard maple	2,437,673	149,818	89,149	1,268,404	656,421	273,881	69,502
Soft maple	1,278,978	0	565,954	678,758	34,266	0	56,843
Beech	22,489,743	1,642,828	3,775,491	14,107,168	1,752,162	1,212,094	525,338
Sweetgum	22,801,167	3,764,297	4,370,726	13,394,143	413,279	858,722	669,431
Tupelo and blackgum	23,594,357	5,072,320	1,769,250	13,625,283	1,869,994	1,257,510	906,492
Ash	6,613,548	2,030,420	152,362	3,176,392	353,205	901,169	220,452
Cottonwood and aspen	278,672	278,672	0	0	0	0	12,385
Basswood	12,500,788	1,220,086	2,218,625	6,101,884	2,534,378	425,815	463,116
Yellow-poplar	242,695	0	60,398	182,298	0	0	6,086
Black walnut	19,676,845	551,080	2,131,466	12,168,400	3,585,780	1,240,119	477,157
Other eastern soft hardwoods	2,765,688	0	471,522	1,821,612	420,855	51,699	122,919

GLOSSARY OF TERMS

Average annual net growth of growing stock: The annual change in volume of sound wood in live sawtimber and poletimber trees, and the total volume of trees entering these classes through ingrowth, less volume losses resulting from natural causes, over the last 5 years of inventory. Annual net growth is annual gross growth – annual mortality.

Average annual removals from growing stock: The average net growing-stock volume in growing-stock trees removed annually for roundwood forest products and the volume of removals for other purposes (i.e. land conversion).

Annual net surplus: The difference between average annual net growth and average annual net removals.

Forest type: A classification of forestland based upon and named for the tree species that forms the plurality of live-tree stocking. A forest type classification for a field location indicates the predominant live-tree species cover for the field location; hardwoods and softwoods are the first group to be determine predominant group, and Forest Type is selected from the predominant group.

Forest type group: A combination of forest types that share closely associated species or site requirements.

Growing stock tree: All live trees 5.0 inches (12.7) cm) DBH or larger that meet (now or prospectively) regional merchantability requirements in terms of saw-log length, grade, and cull deductions. Excludes rough and rotten cull trees.

Log grade: A log classification based on external characteristics as indicators of quality or value. Also see Tree grade. (See USDA, 2003 on tree grading field techniques.)

Merchantable: Refers to a pulpwood or sawlog section that meets pulpwood or sawlog specifications, respectively.

Net annual growth: The average annual net increase in the volume of trees during the period between inventories. Components include the increment in net volume of trees at the beginning of the specific year surviving to its end, plus the net volume of trees reaching the minimum size class during the year, minus the volume of trees that died during the year, and minus the net volume of trees that became cull trees during the year.

Net volume in cubic feet: The gross volume in cubic feet less deductions for rot, roughness, and poor form. Volume is computed for the central stem from a 1-foot stump to a minimum 4.0-inch top diameter outside bark, or to the point where the central stem breaks into limbs.

Nonstocked: Forestland stocked with less than 10 percent of full stocking with all live trees. Examples are recently cutover areas or recently reverted agricultural fields.

Other red oaks: A group of species in the genus *Quercus* that includes scarlet oak, northern pin oak, southern red oak, bear oak, shingle oak, laurel oak, blackjack oak, water oak, pin oak, willow oak, and black oak.

Other white oaks: A group of species in the genus *Quercus* that includes overcup oak, chestnut oak, and post oak.

Other softwoods: softwood species other than pines. Will include redcedar, bald cypress, and cypress

Pulpwood: Roundwood, whole-tree chips, or wood residues used for the production of wood pulp.

Saw log: A log meeting minimum standards of diameter, length, and defect, including logs at least 8 feet long, sound and straight, and with a minimum diameter inside bark of 6 inches for softwoods and 8 inches for hardwoods, or meeting other combinations of size and defect specified by regional standards.

Sawtimber tree: A live tree of commercial species containing at least a 12-foot sawlog or two noncontiguous saw logs 8 feet or longer, and meeting regional specifications for freedom from defect. Softwoods must be at least 9.0 inches d.b.h. Hardwoods must be at least 11.0 inches diameter outside bark (d.o.b.).

Select red oaks: A group of species in the genus *Quercus* that includes cherrybark oak, northern red oak, and Shumard oak.

Select white oaks: A group of species in the genus *Quercus* that includes white oak, swamp white oak, bur oak, swamp chestnut oak, and chinkapin oak.

Timberland: Forestland that is producing or is capable of producing crops of industrial wood and not withdrawn from timber utilization by statute or administrative regulation. (Note: Areas qualifying as timberland are capable of producing in excess of 20 cubic feet per acre per year of industrial wood in natural stands. Currently inaccessible and inoperable areas are included.)

Tons: Tons expressed in this report are short tons (2000 pounds) and are expressed in green weight. Tons in this report are calculated from net volume in cubic feet, which excludes bark.

Topwood: Merchantable pulpwood that is found above the sawlog portion of sawtimber trees.

Adapted from Forest Inventory and Analysis Glossary of Terms. Last accessed July 3, 2021.

https://www.nrs.fs.fed.us/fia/data-tools/state-reports/glossary/

