



Forest Service
U.S. DEPARTMENT OF AGRICULTURE

Southern Research Station | Resource Bulletin SRS-253 | August 2026

Mississippi's Forests, 2022



Sonja N. Oswalt
Rapeepan Kantavichai



ABOUT THE AUTHORS

Sonja N. Oswalt is a Forester with the Forest Inventory and Analysis Research Work Unit, Southern Research Station, U.S. Department of Agriculture, Forest Service, Knoxville, TN 37919.

Rapeepan Kantavichai is a Forester with the Forest Inventory and Analysis Research Work Unit, Southern Research Station, U.S. Department of Agriculture, Forest Service, Knoxville, TN 37919.

Cover photo: Oak (*Quercus* spp.) cap laying on moss-covered bark in Mississippi. Forest Service photo by Kyle Brooks.

Following page photo: A black bear (*Ursus americanus*) indicates their feelings about being photographed. Forest Service photo by Jennifer Kardiek.

August 2026

<https://doi.org/10.2737/SRS-RB-253>



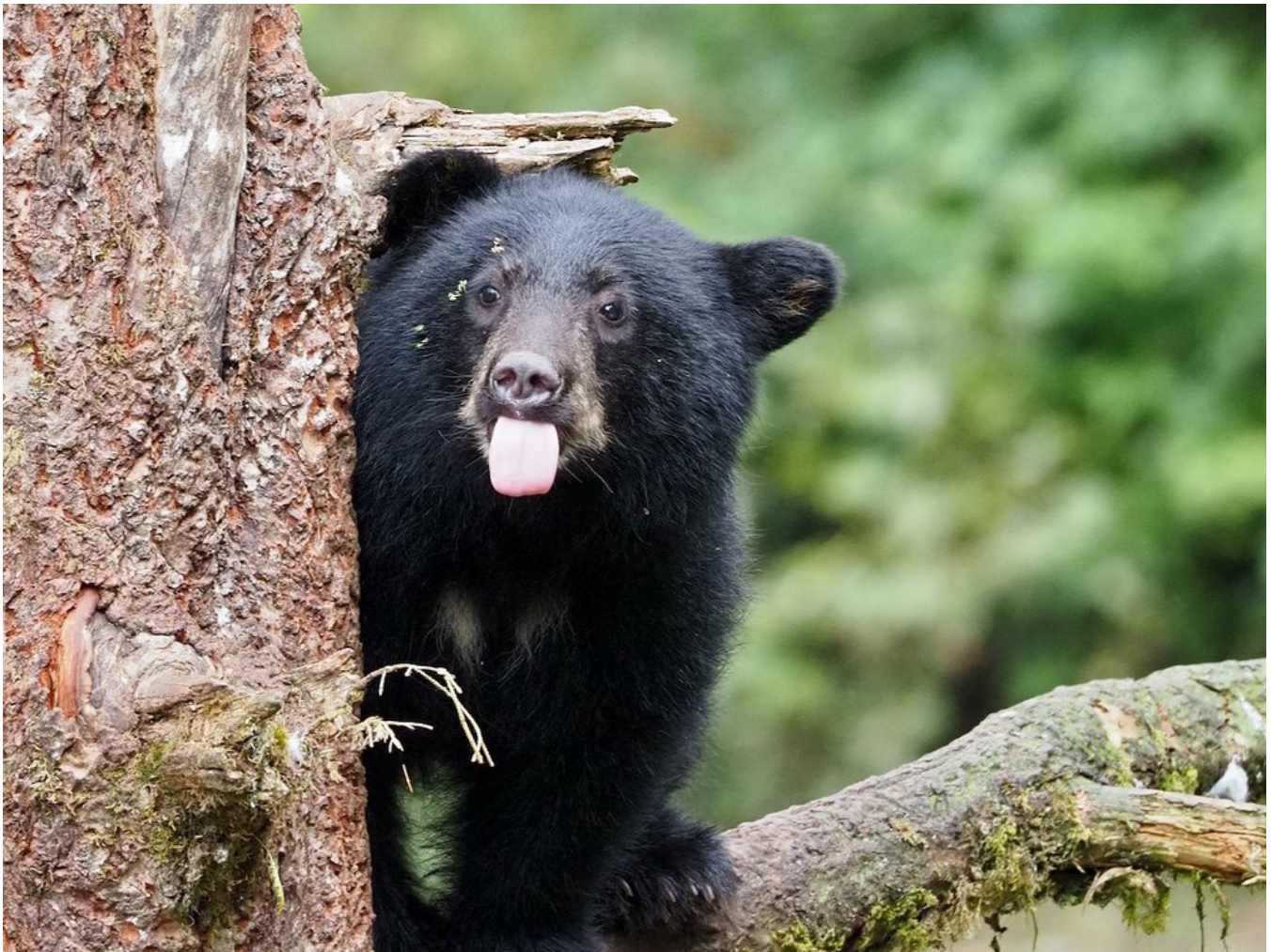
Forest Service
Research & Development
Southern Research Station
Resource Bulletin SRS-253



Southern Research Station
200 W.T. Weaver Blvd.
Asheville, NC 28804
<https://research.fs.usda.gov/srs>

Mississippi's Forests, 2022

Sonja N. Oswalt and Rapeepan Kantavichai



FOREWORD

The U.S. Department of Agriculture, Forest Service, Southern Research Station's (SRS) Forest Inventory and Analysis (FIA) research work unit and cooperating State forestry agencies conduct annual forest inventories of resources in the 13 Southern States (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia), the Commonwealth of Puerto Rico, and the U.S. Virgin Islands. To provide more frequent and nationally consistent information on America's forest resources, all research stations and their respective FIA work units conduct annual surveys with a common sample design. These surveys are mandated by law through the Agricultural Research Extension and Education Reform Act of 1998 (Farm Bill) (AREERA 1998) and updated in Title VIII of the 2014 Farm Bill (Agricultural Act of 2014).

The primary objective in conducting these inventories is to gather the multi-resource information needed to formulate sound forest policies, provide information for economic development, develop forest programs, and provide a scientific basis to monitor forest ecosystems. These data are used to provide an overview of forest resources that may include, but is not limited to, forest area, forest ownership, forest type, stand structure, timber volume, growth, removals, mortality, management activity, down woody material, carbon storage and sequestration, and invasive species. The information presented is applicable at the State and survey unit level; although it provides the background for more intensive studies of critical situations, it is not designed to reflect resource conditions at small scales.

More information about Forest Service resource inventories is available in *"Forest Resource Inventories: An Overview"* (USDA Forest Service 1992). More detailed information about sampling methodologies used in the annual FIA inventories can be found in *"The Enhanced Forest Inventory and Analysis Program—National Sampling Design and Estimation Procedures"* (Bechtold and Patterson 2005) and *"Sampling and Estimation Documentation for the Enhanced Forest Inventory and Analysis Program: 2022"* (Westfall et al. 2022).

Data tables included in FIA reports are designed to provide an array of forest resource estimates, but additional tables can be obtained from the "Data and Tools" section of the national FIA program website (USDA Forest Service 2025b). Additional information about the FIA program can be obtained at the Forest Service, Research and Development program website (USDA Forest Service 2025a).

Additional information about any aspect of Southern Research Station FIA surveys may be obtained from:

Forest Inventory and Analysis Research Work Unit

U.S. Department of Agriculture
Forest Service
Southern Research Station
2730 Cherokee Farm Way, Suite 101
Knoxville, TN 37920
Telephone: 865-862-2000

Ausley "Burl" Carraway, III
Program Manager

ACKNOWLEDGMENTS

The author gratefully acknowledges the individuals who graciously provided reviews and comments on an earlier draft of this report. In addition, this analysis would not be possible without the hard work and commitment of the information management and data editing team at FIA and their dedication to the American people: Jason Meade, David Morgan, and Cody Massery.

The following individuals made field measurements and quality control assessments for this survey. FIA appreciates their hard work in often brutal conditions, and their consistent efforts to obtain high-quality data. They are the real heroes in inventory work. Thank you to David Wall, Ben Bingham, Stephen Oglesby, Andy Edwards, Cade Hinton, Ben Holifield, Brenden Harrel, Garrett Harrell, and Jackson Moody.



Students spot a bald eagle at Mississippi National River and Recreation Area. National Park Service photo.

CONTENTS

FOREWORD.	.ii
ACKNOWLEDGMENTS.	.iii
HIGHLIGHTS FROM THE 2022 FOREST INVENTORY OF MISSISSIPPI.	.1
INTRODUCTION.	.2
Overview of Mississippi's Forest Inventory.	.2
Data Sources and Techniques.	.3
FOREST AREA.	.4
Land Status and Use.	.4
Forest-Type Distribution and Forest Land Productivity.	.7
Ownership.	.10
Stand Size, Age, and Origin.	.13
NUMBER OF TREES, VOLUME, AND COMPONENTS OF CHANGE.	.16
Number of Live Trees.	.16
Number of Dead Trees.	.17
Understory Regeneration.	.18
Tree Volume.	.19
Forest Growth.	.19
Forest Removals.	.20
Forest Mortality.	.20
SPECIAL TOPIC: SELECT WHITE OAKS.	.21
TIMBER PRODUCT OUTPUT AND UTILIZATION.	.22
Timber Products.	.22
Mill Residue.	.29
Logging Residue.	.32
TREE DAMAGE.	.35
REFERENCES.	.36
GLOSSARY.	.38
APPENDIX 1.	.52
APPENDIX 2—SUPPLEMENTAL TABLES.	.54

LIST OF FIGURES

Figure 1 —Mississippi counties and survey units used in this report.....	4
Figure 2 —Timberland area by inventory year, Mississippi. Sampling error bars represent a 95 percent confidence level. Sampling errors were not available in 1977, 1987, and 1994.	5
Figure 3 —Net change of forest land from 2017 to 2022 by aggregated nonforest land use, Mississippi. . .	6
Figure 4 —Mississippi hardwood forest land area divided into hardwood forest-type groups, 2022.	7
Figure 5 —Area of forest-type groups in Mississippi, 2022 with cumulative percentages expressed as a Pareto line.	7
Figure 7 —Area of forest land in Mississippi, 2022 by forest-type group and survey unit.	8
Figure 6 —Forest distribution in Mississippi, 2022 by broad forest-type group.	8
Figure 8 —Area of forest land by broad forest-type group and site productivity class, Mississippi, 2022. . .	9
Figure 9 —Proportion of forest land occupied by softwood or hardwood forest types in each site productivity class, Mississippi, 2022.	9
Figure 10 —Proportion of privately owned forest land by major forest-type group and landowner category, Mississippi, 2022.	11
Figure 11 —Proportion of publicly owned forest land by major forest-type group and landowner category, Mississippi, 2022.	11
Figure 12 —Proportion of family forest owners with more than 10 acres by size of forest holdings, Mississippi, 2022.....	12
Figure 14 —Proportion (percent) of family forest landowners that ranked each forest ownership reason as “very important” by reason for owning. Owners with less than 10 or more than 1,000 acres were omitted due to low response rates.	12
Figure 13 —Proportion of family forest owners with more than 10 acres by age category, Mississippi, 2022.	12
Figure 16 —Area of forest land by forest-type group and stand-size class, Mississippi, 2022.	13
Figure 15 —Proportion of forest land area by year and stand-size class, Mississippi. Data is not available for 2007 and 2008.....	13
Figure 17 —Forest land area by major forest-type group and stand-age class, Mississippi, 2022.	14
Figure 18 —Proportion of forest land by forest-type group and stand origin, Mississippi, 2022.	15
Figure 19 —Proportion of live trees (at least 1.0 inches diameter at breast height) by major species group, Mississippi, 2022.....	16
Figure 20 —Number of standing dead loblolly pine trees (at least 5.0 inches diameter at breast height) by cause of death, Mississippi, 2022.....	17
Figure 21 —Number of live seedlings (less than 1.0 inches diameter at breast height) on forest land by species, Mississippi, 2022. Sampling error bars represent a 95 percent confidence level.....	18

Figure 22 —Growth, removal, and mortality of five species groups on forest land in Mississippi, 2022. . .	19
Figure 23 —Sound bole volume of live select white oak trees (at least 5.0 inches diameter at breast height) by survey unit, Mississippi, 2022.. . . .	21
Figure 24 —Average annual net growth, removals, and mortality of select white oaks by survey unit as a proportion of total sound bole volume, Mississippi, 2022.. . . .	21
Figure 25 —Quarterly pulpwood stumpage prices and pulpwood removal weight for (A) hardwoods and (B) softwoods, Mississippi, 2018–2022. Prices were obtained from MSUES (2026). Quarterly removal weights were calculated by dividing annual green ton weights by four.. . . .	26

LIST OF TABLES

Table 1 —Number of sample plots by survey unit and land-use category, Mississippi, 2022	2
Table 2 —Area of sampled land and water by survey unit and land status, Mississippi, 2022	5
Table 3 —Forest land gains, losses, and net change from 2017 to 2022, Mississippi	6
Table 4 —Net land-use change from reporting years 2017 to 2022 by survey unit and broad land-use category, Mississippi, 2022	6
Table 5 —Area of forest land by forest-type group and ownership group, Mississippi, 2022	10
Table 6 —Number of live trees (at least 1.0 inches diameter at breast height) for the 10 most numerous species, Mississippi, 2022	16
Table 7 —Number of live trees (at least 1.0 inches diameter at breast height) for the 10 most numerous softwood species, Mississippi, 2022	16
Table 8 —Number of live trees (at least 1.0 inches diameter at breast height) for the 10 most numerous hardwood species, Mississippi, 2022	17
Table 9 —Number of standing dead trees (at least 5.0 inches diameter at breast height) by cause of death, Mississippi, 2022	17
Table 10 —Number of seedlings (less than 1.0 inches diameter at breast height) by species and stand origin, with associated 95 percent confidence interval values, Mississippi, 2022	19
Table 11 —Number of mills by species group and facility type, Mississippi	23
Table 12 —Output of industrial roundwood products by product, species group, and survey year, Mississippi	24
Table 13 —Output of industrial roundwood products by product, species group, and survey year, Mississippi	25
Table 14 —Average annual primary mill residue volume by roundwood type, species group, and residue type, Mississippi, 2018–2022	29
Table 15 —Average annual disposal of residue at primary wood-using plants by product, species group, and type of residue, Mississippi	31
Table 16 —Volume of timber removals by year, species group, removals class, and source, Mississippi	33
Table A1.1 —Tree species recorded in the Forest Inventory and Analysis inventory of Mississippi, 2022	52
Table A2.1 —Area of sampled land and water by survey unit and land status, Mississippi, 2022	54
Table A2.2 —Area of forest land by ownership class and land status, Mississippi, 2022	54
Table A2.3 —Area of forest land by forest-type group and site productivity class, Mississippi, 2022	55
Table A2.4 —Area of forest land by forest-type group and ownership group, Mississippi, 2022	55
Table A2.5 —Area of forest land by forest-type group and stand-size class, Mississippi, 2022	56
Table A2.6 —Area of forest land by forest-type group and stand-age class, Mississippi, 2022	57

Table A2.7 —Area of forest land by forest-type group and stand origin, Mississippi, 2022	58
Table A2.8 —Area of forest land disturbed annually by forest-type group and disturbance class, Mississippi, 2022	58
Table A2.9 —Area of forest land treated annually by forest-type group and treatment class (cutting), Mississippi, 2022	59
Table A2.10 —Area of forest land treated annually by forest-type group and treatment class (regeneration), Mississippi, 2022	60
Table A2.11a —Number of live trees on forest land by species group and diameter class, Mississippi, 2022	61
Table A2.11b —Number of live trees on forest land by species group and diameter class, Mississippi, 2022	62
Table A2.12a —Number of live trees on forest land by species group and diameter class, Mississippi, 2022	63
Table A2.12b —Number of live trees on forest land by species group and diameter class, Mississippi, 2022	64
Table A2.13 —Net merchantable bole wood volume ^a of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by ownership class and land status, Mississippi, 2022	65
Table A2.14 —Net merchantable bole wood volume ^a of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by forest-type group and stand-size class, Mississippi, 2022	65
Table A2.15 —Net merchantable bole wood volume ^a of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and ownership group, Mississippi, 2022	66
Table A2.16a —Net merchantable bole wood volume ^a of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and diameter class, Mississippi, 2022	67
Table A2.16b —Net merchantable bole wood volume ^a of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and diameter class, Mississippi, 2022	68
Table A2.17 —Net merchantable bole wood volume ^a of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by forest-type group and stand origin, Mississippi, 2022	69
Table A2.18a —Net merchantable bole wood volume ^a of growing-stock trees (at least 5.0 inches diameter at breast height) on timberland by species group and diameter class, Mississippi, 2022	70
Table A2.18b —Net merchantable bole wood volume ^a of growing-stock trees (at least 5.0 inches diameter at breast height) on timberland by species group and diameter class, Mississippi, 2022	71
Table A2.19a —Net sawlog wood volume ^a of sawtimber trees on timberland by species group and diameter class, Mississippi, 2022	72
Table A2.19b —Net sawlog wood volume ^a of sawtimber trees on timberland by species group and diameter class, Mississippi, 2022	73
Table A2.20 —Net sawlog wood volume ^a of sawtimber trees on timberland by species group and ownership group, Mississippi, 2022	74

Table A2.21 —Aboveground dry weight of live trees on forestland by ownership class and land status, Mississippi, 2022	75
Table A2.22a —Aboveground dry weight of live trees on forest land by species group and diameter class, Mississippi, 2022	76
Table A2.22b —Aboveground dry weight of live trees on forest land by species group and diameter class, Mississippi, 2022	77
Table A2.23a —Merchantable bole bark and wood biomass of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and diameter class, Mississippi, 2022.	78
Table A2.23b —Merchantable bole bark and wood biomass of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and diameter class, Mississippi, 2022.	79
Table A2.24 —Aboveground and belowground carbon in live trees (at least 1.0-inch diameter at breast height) on forest land by ownership class and land status, Mississippi, 2022	80
Table A2.25 —Average annual net growth of sound bole wood volume of trees (timber species at least 5.0 inches diameter at breast height) on forest land by forest-type group and stand-size class, Mississippi, 2022	80
Table A2.26 —Average annual net growth of sound bole wood volume of trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and ownership group, Mississippi, 2022	81
Table A2.27 —Average annual mortality of sound bole wood volume of trees (timber species at least 5.0 inches diameter at breast height) on forest land by forest-type group and stand-size class, Mississippi, 2022	82
Table A2.28 —Average annual mortality of sound bole wood volume of trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and ownership group, Mississippi, 2022	83
Table A2.29 —Average annual mortality of merchantable bole wood volume of growing-stock trees (at least 5.0 inches diameter at breast height) on forest land by species group and ownership group, Mississippi, 2022	84
Table A2.30 —Average annual mortality of sawlog wood volume of sawtimber trees on forest land by species group and ownership group, Mississippi, 2022	85
Table A2.31 —Average annual removals of sound bole wood volume of trees (timber species at least 5.0 inches diameter at breast height) on forest land by forest-type group and stand-size class, Mississippi, 2022	86
Table A2.32 —Average annual removals of sound bole wood volume of trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and ownership group, Mississippi, 2022	87
Table A2.33 —Average annual removals of sawlog wood volume of sawtimber trees on timberland by species group and ownership group, Mississippi, 2022	88

HIGHLIGHTS FROM THE 2022 FOREST INVENTORY OF MISSISSIPPI

- Mississippi's forest area remains stable in 2022, with fluctuations to and from agricultural uses resulting in a gain of about 5,000 acres of new forest land and transitions to developed land accounting for about 19,000 acres of forest loss.
- Forest land occupies 62 percent of Mississippi's total land area, and 99 percent of all forest land is available for timber production.
- The largest diversions of forest land are to developed lands, while gains in forest land are predominantly due to reversion from agricultural lands.
- While Mississippi is best known for its yellow pine production and bottomland hardwood forests, the composition of the forests in the State is evenly split between hardwoods and softwoods, with hardwood acreage slightly outnumbering softwood acreage.
- Most forest land falls under nonindustrial private ownership, most of which are owned by people over age 55.
- Landowners in Mississippi rank inheritance value and wildlife habitat as primary reasons for owning their forest land.
- Larger and older trees are increasing in Mississippi, with fewer trees in small diameter forests.
- Most hardwood forests in Mississippi are naturally regenerated, while most softwood forests are planted—a function of the importance of loblolly pine to the State's economy.
- Select white oaks, an important feature of Mississippi's timber industry, are growing at about four times the rate of harvest and other removals, combined.
- More than 80 percent of Mississippi roundwood outputs are softwood species, out of a total harvested roundwood volume of 975 million cubic feet in 2022.
- Disease-related stem damage including stem decay, fusiform rust, and heart rot (among others) were the most damaging agents to Mississippi's trees, impacting 782 million trees across 97 species.

INTRODUCTION

Overview of Mississippi's Forest Inventory

The first inventory of Mississippi's forests began in 1934. Prior to 2000, inventories were conducted on a periodic decadal basis. Seven periodic inventories were completed (1934, 1947, 1957, 1967, 1977, 1987, and 1994) and are reported in Forest Economics Staff (1946), USDA Forest Service (1949), USDA Forest Service (1958), van Sickle and van Hooser (1969), Renewable Resources Evaluation Research Work Unit (1978), Donner and Hines (1987), and Rosson (2001), respectively. Mississippi's inventory moved from a periodic to an annual system in 2003. The annual design divides the State into systematically distributed panels where a proportion of plots are measured each year, and an entire inventory remeasurement is completed every 5 to 7 years (Bechtold and Patterson 2005; Westfall et al.

2022). Full-measurement annualized reports for Mississippi have been published for 2006 (Oswalt et al. 2009) and 2017 (Oswalt 2019), with State factsheet updates published annually (USDA Forest Service 2024a).

This report summarizes the findings of data collected as part of the U.S. Department of Agriculture, Forest Service, Forest Inventory and Analysis (FIA) program in the State of Mississippi using data collected during inventory years spanning 2017 to 2023 (the 2022 inventory); a remeasurement of plots sampled between 2006 and 2017 (the 2017 inventory). The processed data summarizes 5,534 sample plots across the State of Mississippi, 3,983 (72 percent) of which were forested (table 1). A full list of tree species tallied in Mississippi's forests for the 2022 inventory is reported in appendix 1. Tabular summaries of the 2022 resource statistics for Mississippi are available in appendix 2 of this report.

Table 1—Number of sample plots by survey unit and land-use category, Mississippi, 2022

Survey unit	Census water	Non-census water	Nonforest	Other forestland	Reserved productive forestland	Timberland	Total plots
Central	14	17	345	—	4	891	1,061
Delta	33	25	635	—	17	361	960
North	35	35	661	1	4	1,043	1,455
South	98	20	387	—	7	1,000	1,279
Southwest	10	17	268	—	9	646	779
All units	190	114	2,296	1	41	3,941	5,534

Numbers in rows and columns may not sum to totals due to rounding.

— = no sample for the cell.



An alligator (*Alligator mississippiensis*) swims through the water at Noxubee Wildlife Refuge in Mississippi. Forest Service photo by Andrew J. Hartsell.

Data Sources and Techniques

The Forest Inventory and Analysis program was established by the U.S. Congress to “make and keep current a comprehensive inventory and analysis of the present and prospective conditions of and requirements of the forest and rangelands of the United States” (RPA 1974).

Nationwide Forest Inventory (NFI)

The Nationwide Forest Inventory (NFI) program of FIA is tasked with collecting, analyzing, and reporting information on the status, trends, and condition of America’s forests: how much forest exists, where it exists, who owns it, and how it is changing, as well as how the trees and other forest vegetation are growing and how much has died or has been removed in recent years. The NFI consists of a probabilistic sample of permanent plots installed across all forested lands (or lands capable of being forested) in the United States. The sample design consists of one field plot for every 6,000 acres of forest. Field crews collect information on forest types, site attributes such as ownership and terrain, tree species, tree size, and overall tree condition. On a subset of sample plots, FIA measures a broader suite of attributes including understory vegetation, down woody material, and soil information. Soil samples are sent to a laboratory for chemical analysis. Each plot is measured every 5 to 10 years, depending on the State the plot falls within. Each step of the inventory process, from field preparation to publication of data and reports, goes through quality assurance procedures to ensure high data quality. Remote sensing data are combined with the plot data, using an analysis method known as post-stratified estimation, which produces more precise estimates of forest conditions than using the plot data alone.

Introducing the New National-Scale Volume and Biomass Estimates

In 2023, the Forest Inventory and Analysis program adopted the national-scale volume and biomass estimators (NSVB; Westfall et al. 2024), delivering an updated national modeling framework for

estimating cubic-foot volume, carbon, and biomass. A result of collaborative research between Forest Service scientists and partners, the NSVB effort brings forth contemporary model-building techniques and extensive new data to deliver a more consistent accounting of structural components of trees across the United States. NSVB biomass and carbon equations were developed from detailed tree measurements, allowing for direct and more accurate modeling of nonmerchantable components and more accurate quantification of model uncertainty. Rather than adhering to administrative boundaries, NSVB models are constructed around ecological units, better reflecting environmental gradients that influence tree size, form, and growth. In addition, NSVB models offer greater accuracy in carbon estimation, converting biomass to carbon by applying species-specific carbon fractions. This report is based on the estimates produced using the new methodology. Estimates shown in this report for prior years have been updated to reflect the new methodology so that comparison is possible.

The NFI field protocols are described in the FIA national core field guide. The field guide covers the standards, codes, methods, and definitions for NFI field data that are consistent and uniform across all FIA regions. Visit the FIA program website (USDA Forest Service 2025b) for additional information.

National Woodland Owner Survey

Information about family forest owners is collected annually through the Forest Service’s National Woodland Owner Survey (NWOS). The NWOS was designed to increase our understanding of owner demographics and motivation. Individuals and private groups identified as forest owners by FIA are invited to participate in the NWOS. The data for NWOS are based on survey responses from randomly selected families and individuals who own forest land in Mississippi. Visit the National Woodland Owner Survey program page for more information (USDA Forest Service 2025d).

National Resource Use Monitoring

The FIA National Resource Use Monitoring (NRUM) program gathers information from active primary wood processing mills on locations of mills, volume received by roundwood product, species, and geographic origin, as well as mill residue by-product generation and use. These data are aggregated and reported at the county and State level. Through harvest utilization studies, FIA gathers information on harvested trees at active logging sites, with field crews recording various tree measurements (e.g., tree species, stump height, lower and upper diameters for each tree section that is created once the tree is cut). Crews also record the utilization status (utilized or not utilized) as well as the intended use (roundwood product) for each section of the tree that is utilized rather than left as residue. Tree utilization data are aggregated and used to calculate State-level utilization factors, and to report logging residue estimates for those portions of the trees that are not utilized. Visit the National Resource Use Monitoring page for more information (USDA Forest Service 2025c).



Harvested logs. USDA photo by Lance Cheung.

FOREST AREA

Land Status and Use

Mississippi occupies 31.0 million acres in the Southern United States, with the Mississippi River delineating its western border and the Gulf of Mexico its southern border (figure 1). Forest land totals 19.2 million acres, 99 percent of which is available for timber production (hereafter, timberland; table 2). Timberland area, for which we have the longest record, experienced an increase between 1977 and 2006 as some agricultural areas were allowed to revert to forest (figure 2), after which it has remained stable.



Figure 1—Mississippi counties and survey units used in this report.

MISSISSIPPI'S FORESTS, 2022

Table 2—Area of sampled land and water by survey unit and land status, Mississippi, 2022

Survey unit	Total area	All forest land	Unreserved forest land			Reserved forest land			Nonforest land	Census water
			Total	Timberland	Unproductive	Total	Productive	Unproductive		
thousand acres										
Central	5,924.4	4,441.2	4,421.4	4,421.4	—	19.8	19.8	—	1,418.8	64.4
Delta	5,593.5	1,856.0	1,762.8	1,762.8	—	93.2	93.2	—	3,569.9	167.6
North	8,410.4	5,209.5	5,186.2	5,181.8	4.4	23.3	23.3	—	3,027.2	173.6
South	6,668.7	4,457.7	4,434.3	4,434.3	—	23.3	23.3	—	1,636.3	574.8
Southwest	4,404.9	3,242.1	3,208.6	3,208.6	—	33.5	33.5	—	1,110.0	52.7
All units	31,001.9	19,206.5	19,013.3	19,008.9	4.4	193.1	193.1	—	10,762.2	1,033.1

Numbers in rows and columns may not sum to totals due to rounding.

— = no sample for the cell.

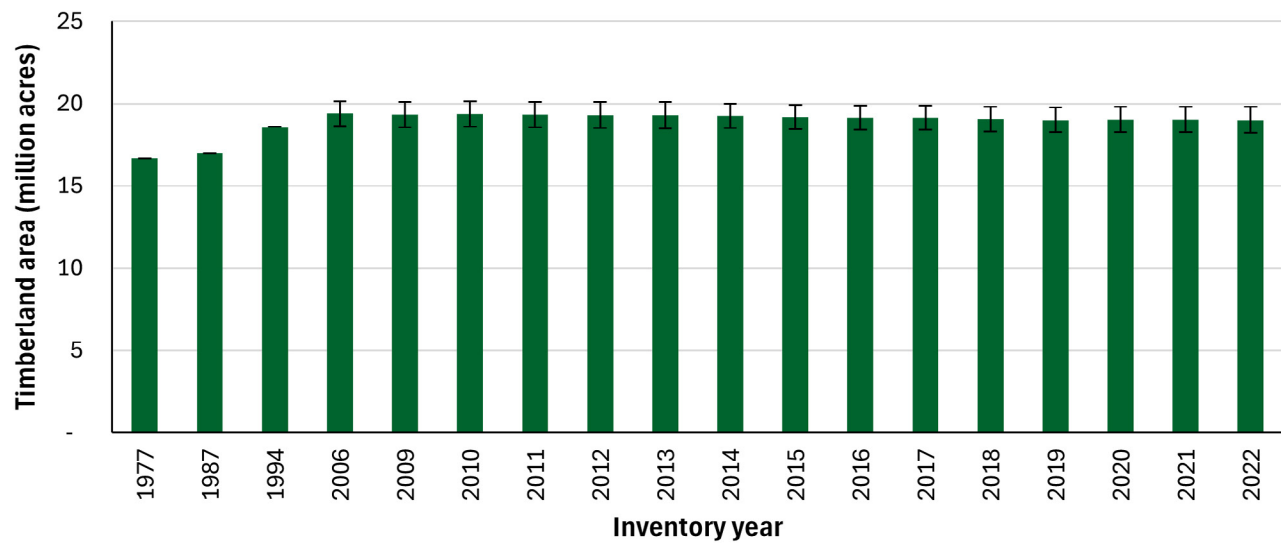


Figure 2—Timberland area by inventory year, Mississippi. Sampling error bars represent a 95 percent confidence level. Sampling errors were not available in 1977, 1987, and 1994.

While timberland has not changed significantly, crews recorded a small change in total forest land in the State. Remeasurements indicate that this change is primarily due to the development of previously forested land (figure 3). Forest land converted to agricultural use often reverts to forest land if economic conditions change (Gurgel et al. 2021). In Mississippi, remeasured plots showed that while some forest land converted to one of several agricultural uses (36,000 acres, table 3), reversion from agricultural uses into forest land was greater, resulting in an overall net gain of 5,409 acres of forest land from agriculture. In contrast, once forest land has been converted to developed land, studies suggest that it is unlikely

to ever return to a forested condition. Transitions to developed land led to a net loss of 19,000 acres (less than 0.1 percent of 2017 forest land area) in Mississippi between 2017 and 2022 (figure 3). The largest diversions to agriculture occurred in the Central and South survey units (12,988 acres and 12,751 acres, respectively) while the largest diversions to developed land occurred in the South survey unit (13,477; table 4). Overall, the South and Central survey units experienced negative net changes while all other survey units experienced positive change (table 4). All survey-unit gains in forest land use were due primarily to reversion from agriculture.

Total annual net change of forest land: -17,794 acres

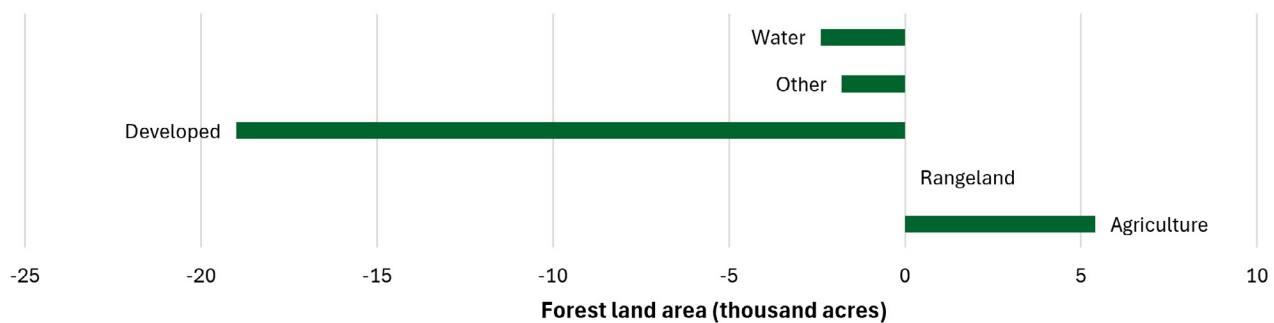


Figure 3—Net change of forest land from 2017 to 2022 by aggregated nonforest land use, Mississippi.

Table 3—Forest land gains, losses, and net change from 2017 to 2022, Mississippi

Land use	Forest gain	Forest loss	Net change
<i>acres</i>			
Agriculture ¹	41,411	36,001	5,409
Rangeland	0	0	–
Developed ²	16,371	35,376	-19,005
Other	120	1,917	-1,798
Water	1,980	4,380	-2,400

– = no sample for the cell, and 0 = a value of greater than 0.00 but less than 0.05.

¹ Agriculture includes cropland, pasture, idle farmland, and maintained wildlife openings.

² Developed includes development for business, manufacturing, residential, rights-of-way, and cultural uses.

Table 4—Net land-use change from reporting years 2017 to 2022 by survey unit and broad land-use category, Mississippi, 2022

Survey unit	Agriculture	Development	Other	Water	Total change	Net change
<i>thousand acres</i>					<i>net change (acres)</i>	<i>percent of forest land</i>
Central	-7,229	-3,964	120	-844	-11,918	-0.27
Delta	9,628	-1,717	-786	-1,747	5,378	0.29
North	5,486	-822	0	375	5,040	0.10
South	-6,255	-10,772	-1,131	-294	-18,452	-0.41
Southwest	3,778	-1,730	0	110	2,158	0.07

Numbers in rows and columns may not sum to totals due to rounding.

0 = a value of greater than 0.00 but less than 0.05.

Forest-Type Distribution and Forest Land Productivity

Forest-type Distribution

Hardwood forest-type groups combined make up the plurality of forest land in Mississippi, at 10.3 million acres (52 percent). Oak/hickory accounts for 44 percent of hardwood forest land (figure 4). Although hardwood forest types are a plurality of forest land acres when considered together, loblolly/shortleaf pine covers more acres as a solitary forest-type group (figure 5). Loblolly/shortleaf comprises 41 percent of all forest acres in the State, and over 80 percent of it is privately owned (See: Ownership).

Mississippi's hardwood forests are largely clustered around the State's rivers and overlooking bluffs (figure 6). The North unit has 5.2 million acres of forestland. While loblolly/shortleaf is the largest individual forest-type group in that unit, combined hardwood and mixed oak/pine forest-type groups comprise 58 percent of its forest land acres (figure 7). The South and Central units have about the same discrete area of forest land and are predominately covered by softwood forest-type groups. The South unit is home to the majority of the once widespread, but now relatively limited, longleaf pine forest-type acres (figure 7). Hardwood forest-type groups dominate the Southwest and Delta units, though the Delta unit has the least amount of forest land in the State at 1.9 million acres (figure 7).

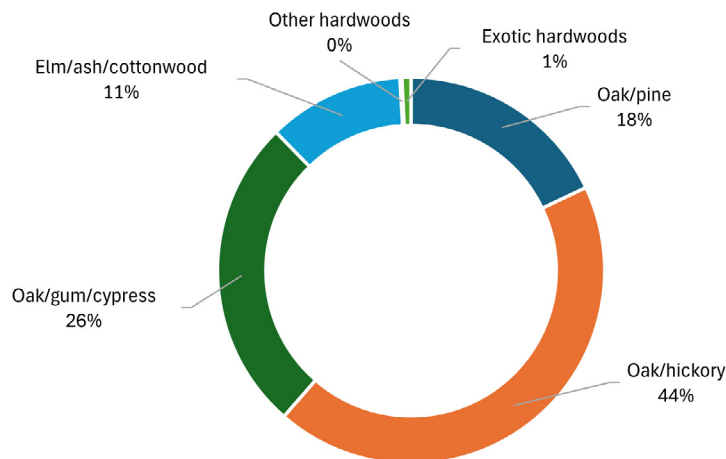


Figure 4—Mississippi hardwood forest land area divided into hardwood forest-type groups, 2022.

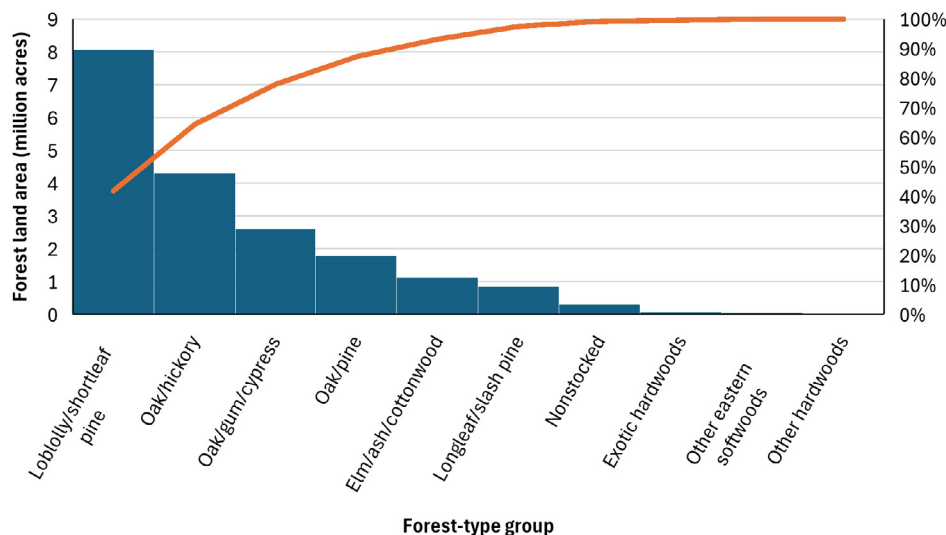


Figure 5—Area of forest-type groups in Mississippi, 2022 with cumulative percentages expressed as a Pareto line.

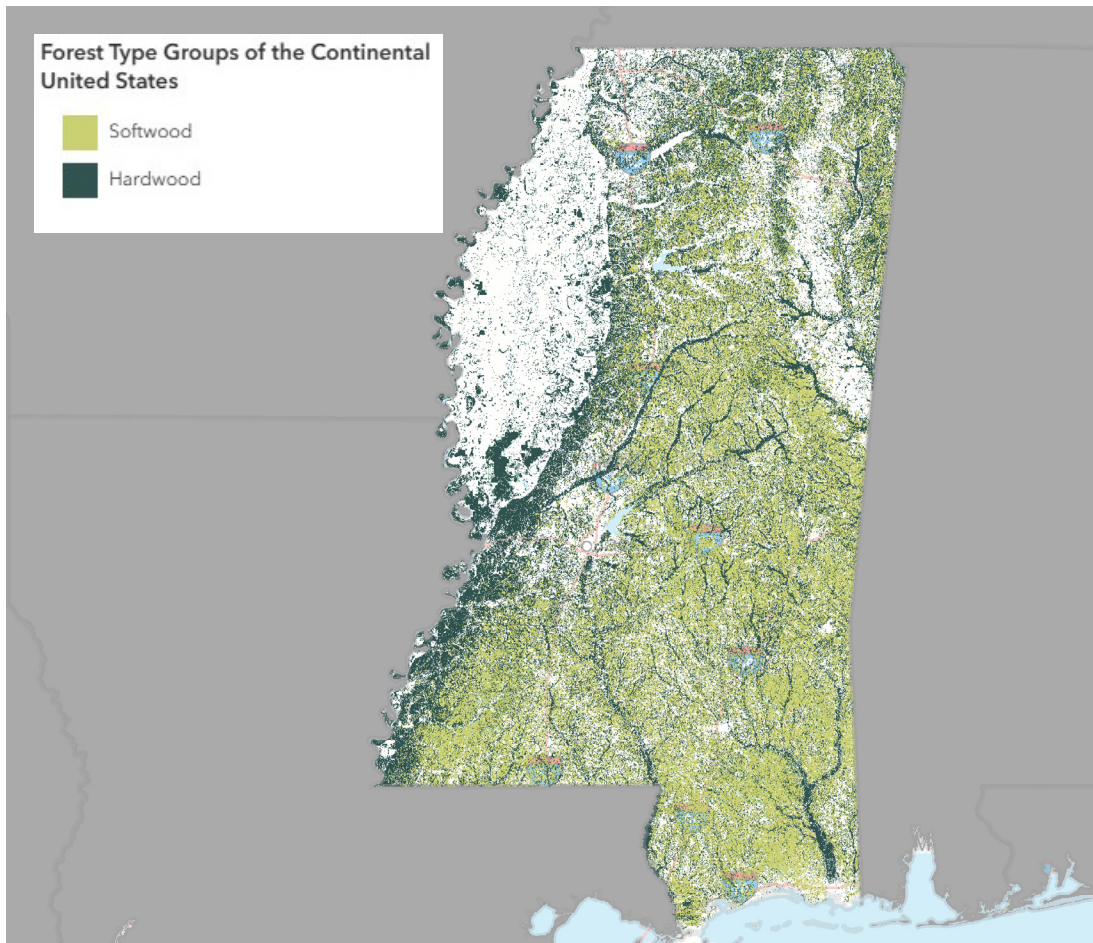


Figure 6—Forest distribution in Mississippi, 2022 by broad forest-type group.

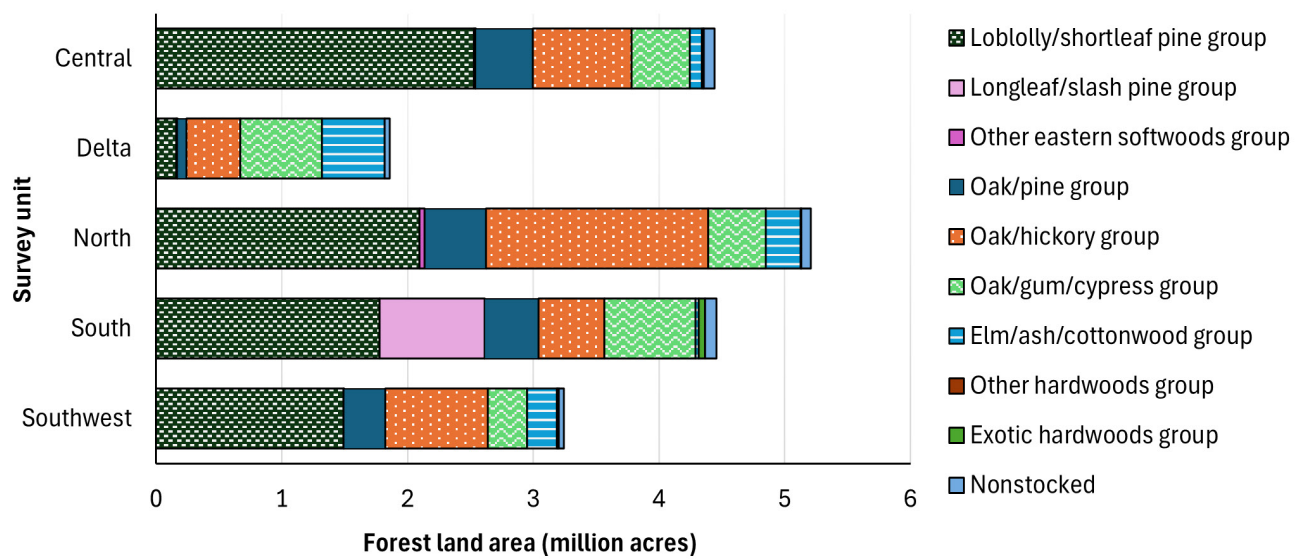


Figure 7—Area of forest land in Mississippi, 2022 by forest-type group and survey unit.

Forest Productivity

Most forests in Mississippi grow at moderate rates rather than extremely fast or slow, with most forest land falling into the 50–119 cubic feet per acre per year productivity classes (figure 8). Very low productivity sites are limited, with only a small amount of forest land in the lowest productivity ranges, meaning that sites with truly poor growth are uncommon. Site productivity drops sharply and sites with 225 cubic feet per acre per year or higher growth rates are extremely rare, suggesting that very high productivity sites are comparatively uncommon, possibly due to soil conditions or past land use (Arriaga and Lowery 2007).

Both hardwood and softwood forest-type groups are concentrated on moderate-to-highly productive sites (50–119 cubic feet per acre per year, though softwoods dominate high productivity sites in the 120–164 cubic feet per acre per year site productivity class; figure 9). This is unsurprising given that the primary softwood forest-type group in Mississippi, loblolly pine, is most common in stands managed for higher growth. Nevertheless, in sites with the highest productivity levels—greater than 165 cubic feet per acre per year—hardwoods outpace softwoods, reflecting the highly productive bottomland hardwood forests in the State.

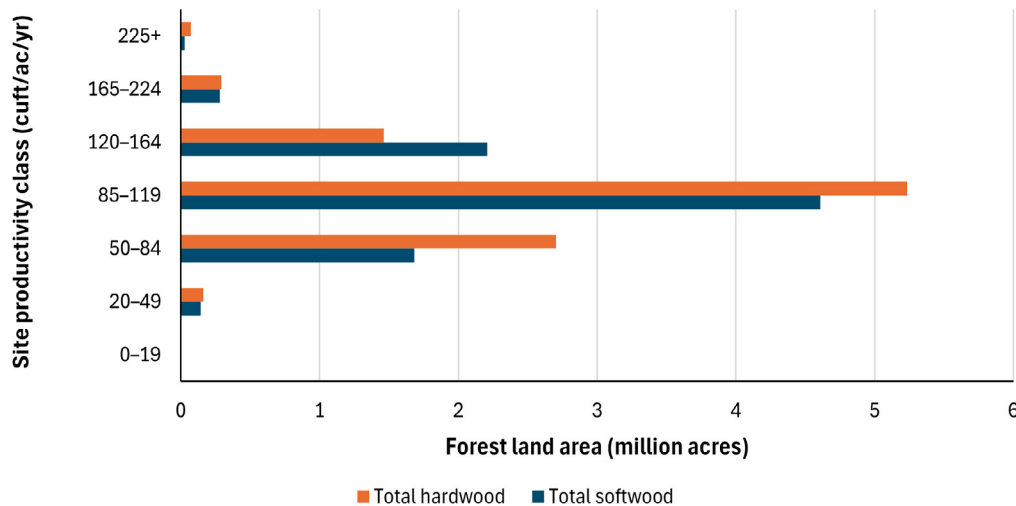


Figure 8—Area of forest land by broad forest-type group and site productivity class, Mississippi, 2022.

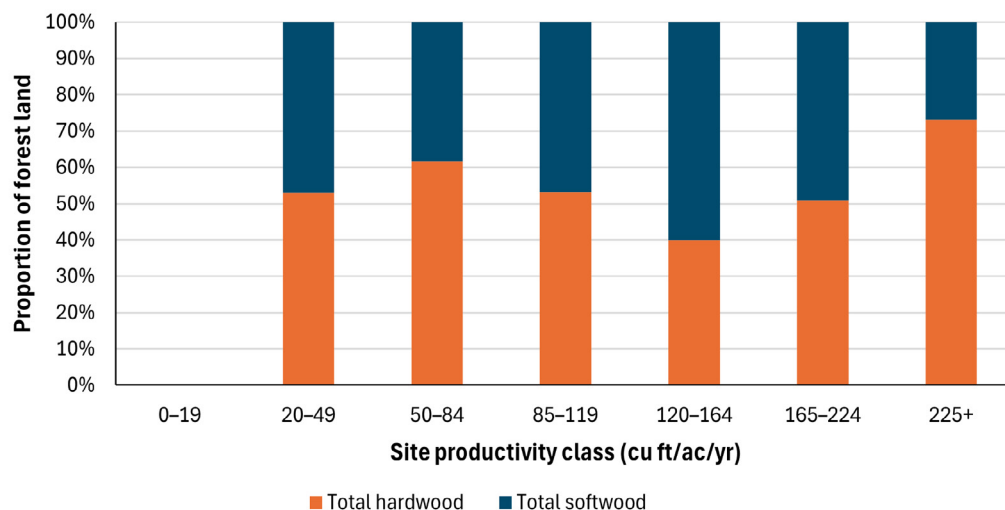


Figure 9—Proportion of forest land occupied by softwood or hardwood forest types in each site productivity class, Mississippi, 2022.

Ownership

Forest Landownership

Nonindustrial private landowners manage most of Mississippi's forest land, with 15.9 million acres of both softwood and hardwood forests—about 83 percent of the total forested area in the State (table 5). Forest industry owns just over 1 million acres or 6 percent of the State's forest land, of which 66 percent is softwoods (primarily loblolly pine). The Forest Service manages about 6 percent of Mississippi's forests, at 1.2 million acres. The softwood component of Forest Service forest land is split nearly evenly between the loblolly/shortleaf pine forest-type group and the longleaf/slash pine forest-type group (table 5). While nonindustrial private forest landowners manage more total acres of the ecologically important longleaf/slash pine forest-type group, the longleaf/slash forest-type group comprises a larger proportion of Forest Service softwood forest land holdings.

Privately owned forest land is dominated by nonindustrial landowners in both hardwood and softwood categories, with forest industry showing a slight preference for softwood forest-type groups (figure 10). This means that the people of Mississippi have a major influence on the State's forest management and the future trajectory of forest land composition. Softwoods exhibit faster growth rates and are used in a wide range of construction applications and paper products, aligning with industry goals. Ongoing declines in domestic hardwood markets likely contribute to this imbalance, though sourcing quality white oak for whiskey barrel production is an important industry priority in Mississippi (Brashaw et al. 2023, Gollihue et al. 2021). Federal ownership is also softwood-dominant apart from "other federal" landowners (e.g., U.S. Fish and Wildlife Service), where upland and bottomland hardwood forests may be prized for their unique features and wildlife habitat (Stanturf et al. 2000) (figure 11).

Table 5—Area of forest land by forest-type group and ownership group, Mississippi, 2022

Forest type	Forest-type group	All ownerships	Public ownership group			Private ownership group	
			U.S. Forest Service	Other Federal	State and local government	Forest industry	Nonindustrial private
thousand acres							
Softwood type	Longleaf/slash pine	845.3	320.0	10.5	49.5	20.1	445.2
	Loblolly/shortleaf pine	8,057.7	387.7	71.6	183.5	706.0	6,708.9
	Other eastern softwoods	48.8	0.0	0.0	0.0	0.0	48.8
	Total softwood	8,951.8	707.7	82.1	233.0	726.1	7,202.9
Hardwood type	Oak/pine	1,781.3	142.8	37.6	49.6	65.7	1,485.5
	Oak/hickory	4,317.5	171.1	59.7	51.1	158.9	3,876.7
	Oak/gum/cypress	2,609.6	113.8	246.5	128.6	84.2	2,036.6
	Elm/ash/cottonwood	1,129.8	32.5	66.5	39.2	44.2	947.4
	Other hardwoods	16.9	1.3	0.0	0.0	1.6	13.9
	Exotic hardwoods	75.0	0.0	6.4	0.0	0.0	68.6
	Total hardwood	9,930.0	461.5	416.7	268.5	354.6	8,428.7
Nonstocked	Total nonstocked	324.7	2.0	6.1	9.4	13.8	293.4
All types	All groups	19,206.5	1,171.3	504.9	510.8	1,094.5	15,925.0

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = a value of greater than 0.0 but less than 0.05.

MISSISSIPPI'S FORESTS, 2022

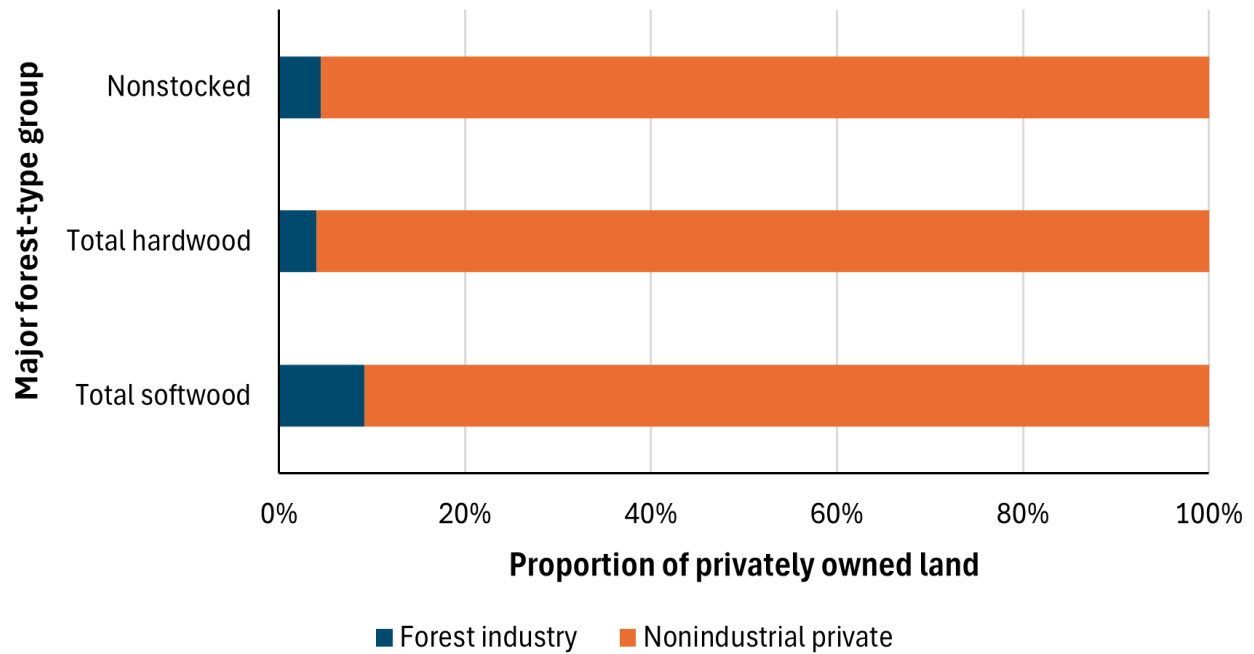


Figure 10—Proportion of privately owned forest land by major forest-type group and landowner category, Mississippi, 2022.

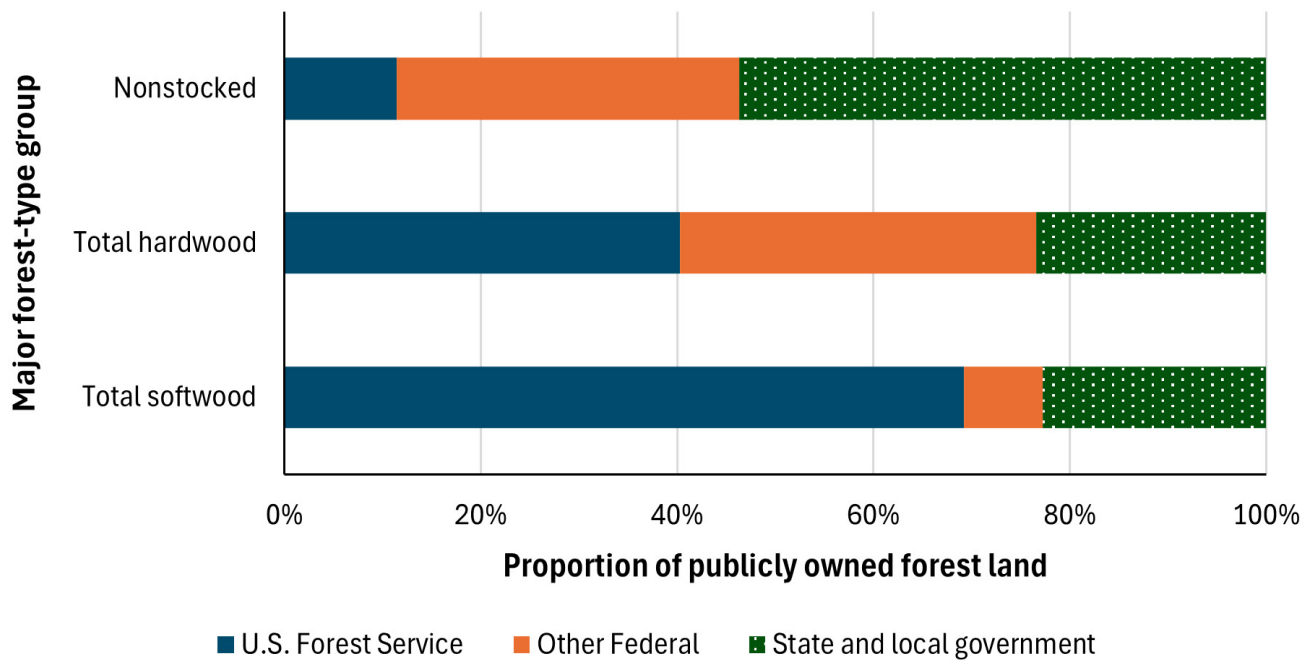


Figure 11—Proportion of publicly owned forest land by major forest-type group and landowner category, Mississippi, 2022.

National Woodland Owner Survey, Mississippi Results

The National Woodland Owner Survey (NWOS) cooperates with FIA to describe the demographics and social aspects of forest land ownership in Mississippi via voluntary surveys distributed to 829 family forest owners with greater than 1 acre of forest land (Butler et al. 2021). Responses in 2018 reflect a 33.5 percent cooperation rate of those who received the survey. The NWOS produces detailed reports of ownership at the end of each reporting period, so only a broad overview is included here.

Mississippi family forests greater than 10 acres in size total an estimated 11 million acres owned by an estimated 120,000 owners. The average forest land holding size of family forest owners is 92.3 acres ($\pm$ 9.6 acres) per ownership, with a median of 28 acres per ownership. The largest proportion of people with more than 10 acres of forest land own between 200 and 5,000 acres. Those owning

more than 5,000 acres are either very rare or are unresponsive to the survey questionnaires (figure 12).

Mississippi family forest landowners with more than 10 acres of forestland are typically over 55 years old (86 percent), and only 4 percent are less than 45 years old (figure 13). Most of these (84 percent of ownerships, 61 percent of acres) are individuals or individuals and their spouse.

Mississippi family forest owners have a variety of reasons for owning their land, many of which are considered “very important” or “important” to them. Passing on the land to heirs, improving wildlife habitat, beauty or scenery, and privacy were ranked as very important by the highest proportion of owners (figure 14). In contrast, owning forest land for firewood, recreation (other than hunting), and for non-timber forest products were ranked as least important by the largest proportion of owners.

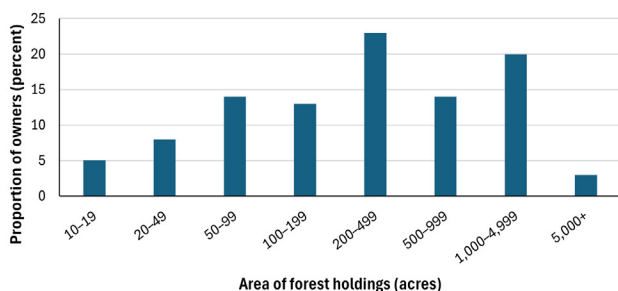


Figure 12—Proportion of family forest owners with more than 10 acres by size of forest holdings, Mississippi, 2022.

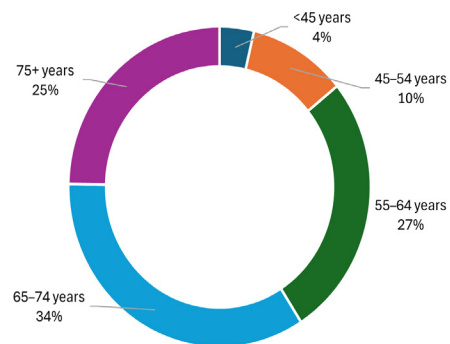


Figure 13—Proportion of family forest owners with more than 10 acres by age category, Mississippi, 2022.

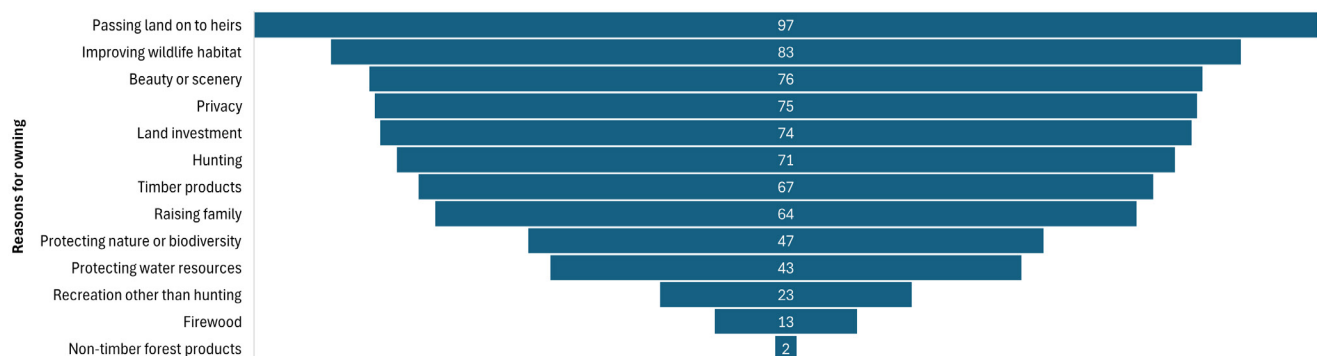


Figure 14—Proportion (percent) of family forest landowners that ranked each forest ownership reason as “very important” by reason for owning. Owners with less than 10 or more than 1,000 acres were omitted due to low response rates.

Stand Size, Age, and Origin

Stand Size

Large-diameter stands have steadily increased from 9.1 million acres in 2006 to 12.3 million acres in 2022; an increase of 3.5 million acres. Nearly 64 percent of Mississippi's current forest land is in the large-diameter category. This means that over 3 million acres of forest grew into the large-diameter category, while much less area was regenerated in younger (small and medium diameter) classes. With fewer acres in small-diameter forests, the conduit for future mature forests is shrinking (figure 15). Since total forest land has remained mostly stable across the 16-year period, the shifts are almost entirely due to stands aging without proportional investment in regeneration efforts. For landowners and investors, the large increase in large-diameter acreage indicates the possibility of higher-value sawtimber, particularly in the loblolly pine

and oak/hickory forest-type groups (figure 16). Additionally, larger diameter or older forests are appealing for carbon-offset programs because of their established sequestration rates (Mildrexler et al. 2020).

Though large-diameter stands may be advantageous in the short-term, decreases in the availability of small- and medium-diameter stands points to the potential for a future bottleneck in pulpwood, chipwood, and longer-term sawtimber availability. Fewer domestic mills following the 2008 market crash have resulted in reduced incentives to manage young stands, as opportunities to market timber fell (Conrad et al. 2010). The emergence of new infrastructure to process wood might provide landowners with incentives to manage land with both near-term and long-term goals in mind, maintaining both larger diameter growth while also harvesting enough wood to allow for the regeneration of future forests.

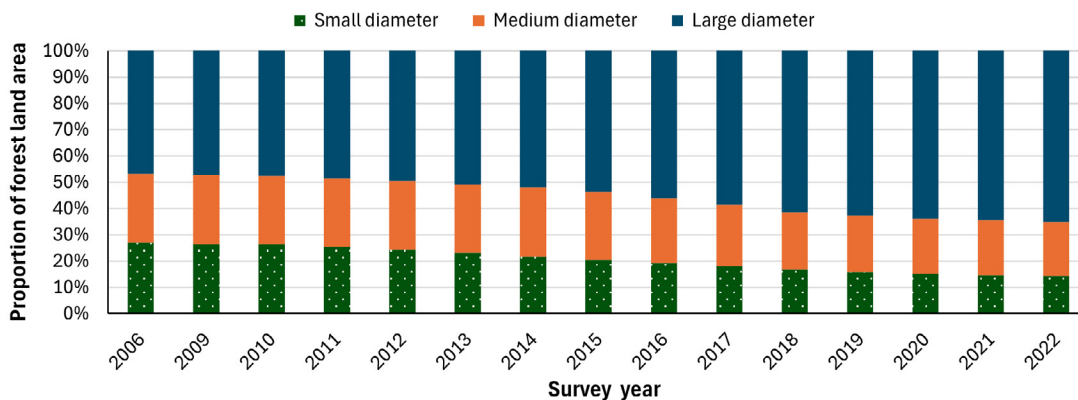


Figure 15—Proportion of forest land area by year and stand-size class, Mississippi. Data is not available for 2007 and 2008.

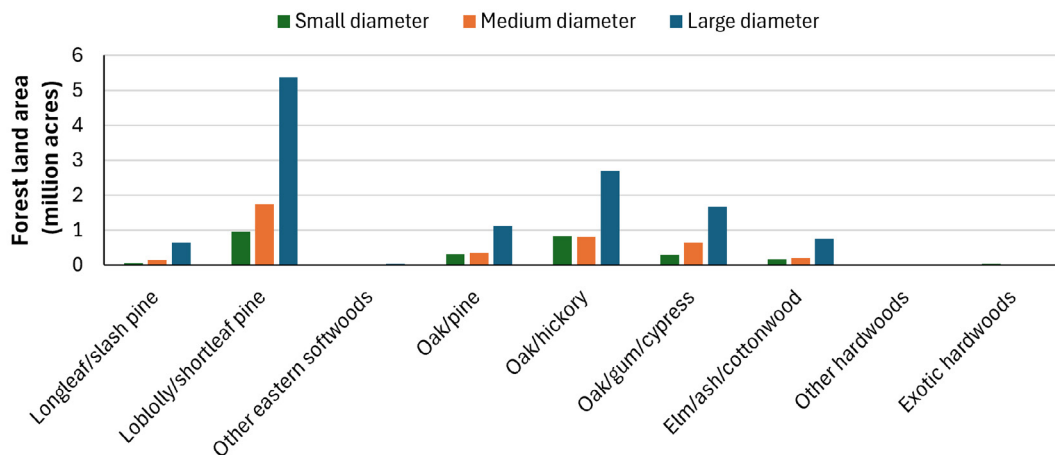


Figure 16—Area of forest land by forest-type group and stand-size class, Mississippi, 2022.

Stand Age

Stand age provides further insight into the condition and resilience of Mississippi's forests. Softwood age structure is highly skewed toward young and mid-rotation stands (figure 17). In fact, 65 percent of softwood stands, primarily loblolly pine, are under 40 years old. Peak softwood acreage falls in the 21–30 age class, which is an ideal age for sawtimber harvest or thinning in the loblolly/shortleaf pine forest-type group (Baldwin and Feduccia 1987).

There is very little softwood area in age classes 70 years or older (figure 17). Older loblolly/shortleaf pine forests are rare in Mississippi, but large-diameter trees prevail, illustrating that age and size are not necessarily direct correlates in any species. On productive sites, mid-rotation stands can house large diameter pine trees that are between 20 and 40 years, particularly when managed effectively. As with stand size, however, softwood stands have fewer acres entering the youngest age cohort (1–10 years) compared to other age classes, which may indicate a lag in reforestation and a subsequent decline in long-term supply.

Unlike softwood forest land, hardwood forest acreage peaks in the 61–70 age cohort. Overall, hardwood forests are older and more evenly distributed across age cohorts than softwood forests (figure 17). A large proportion of hardwood forest land is 51 to 80 years old, which means that much of the State's hardwood forests are reaching their mature structure and composition. However, unlike Mississippi's softwood forests, hardwood trees have a strong representation of acreage in younger age cohorts for future growth. Nevertheless, peak hardwood reforestation appears to have occurred between 51 and 80 years ago. That makes sense as forest land recovered after the timber needs of World War II combined with the reversion of agricultural land back to forest land through erosion reduction efforts and falling soybean prices in the 1960s and 1970s (Napton et al. 2010).

Ultimately, stand size and age data in Mississippi show that the State has a large area of older, larger forests, but there may not be enough young trees to produce thriving stands in the future. Continued lack of young trees could pose a challenge to continued production.

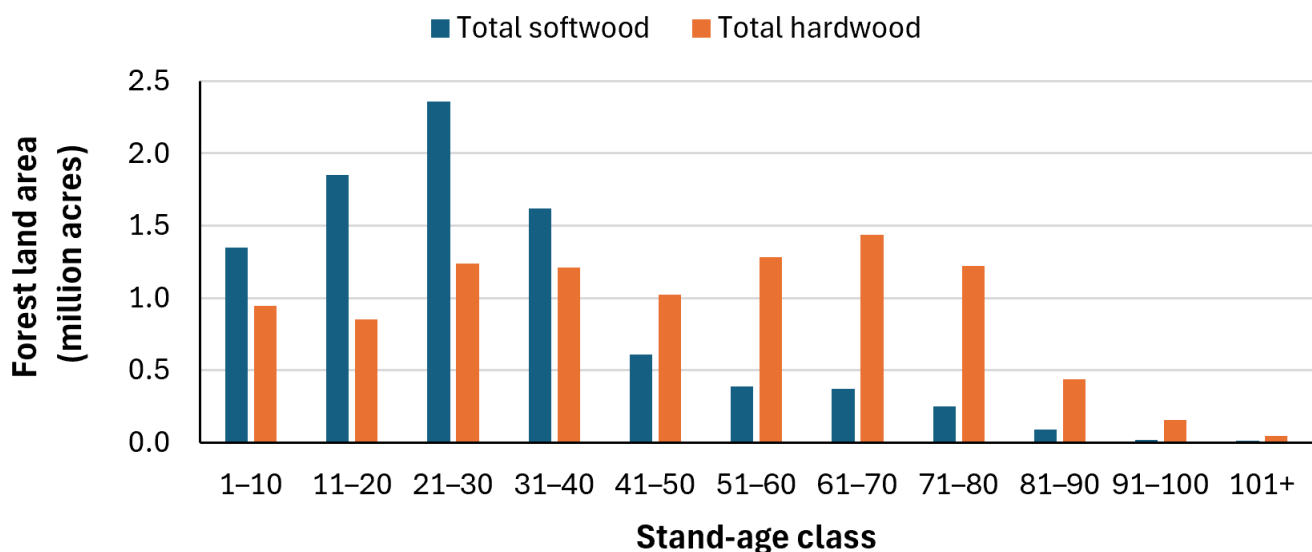


Figure 17—Forest land area by major forest-type group and stand-age class, Mississippi, 2022.



Spoonleaf sundew (*Drosera intermedia*). Licensed photo by James Henderson/Golden Light Honey/Bugwood.org.

Stand Origin

Mississippi's softwood forest-type groups, particularly loblolly-slash pine, are dominated by planted stands, while hardwood forest-type groups are primarily naturally regenerated (figure 18). Over 60 percent of softwood acreage is planted, and loblolly/shortleaf pine accounts for 86 percent of artificially regenerated forest land in the State. Planted softwood forests tend towards even-aged, quickly growing stands, which is reflected in the stand size and age breakdowns presented in prior sections.

In contrast, nearly all hardwood forest land (92 percent) is naturally regenerated (figure 18). Hardwood stands tend to be older, less uniform

in structure, and slower growing than pine forests. Mississippi's hardwood forests are mature and uneven-aged which offer valuable wildlife habitat, aesthetic beauty, and supports biodiversity but also present challenges in terms of regeneration. Particularly, economically and ecologically valuable oak species are ecologically vulnerable under shady conditions, pressure from deer browsing, invasive plant species influences, and changes in bottomland hydrology. Hardwood forest types are just 3.8 percent of all planted acreage in the State. Opportunities for regeneration investment may exist in the 325,000 acres of nonstocked forest land across the State, which may not have been replanted after a harvest or natural disaster.

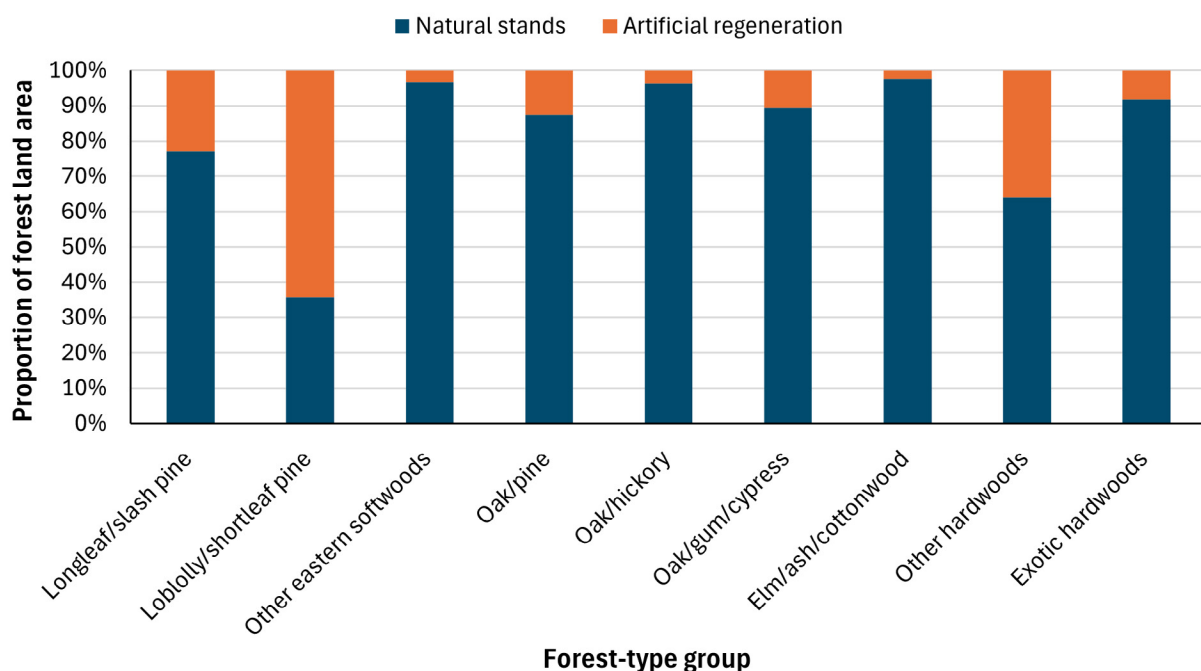


Figure 18—Proportion of forest land by forest-type group and stand origin, Mississippi, 2022.

NUMBER OF TREES, VOLUME, AND COMPONENTS OF CHANGE

Number of Live Trees

More than 12.3 billion live trees greater than 1.0-inch diameter at breast height (d.b.h.) grow on Mississippi's forest land, equivalent to 638 trees per acre. The relative diversity of uneven-aged hardwood forest stands is reflected in the number of live trees in each species group. The 10 most numerous species statewide are loblolly pine, sweetgum, water oak, red maple, winged elm, blackgum, American hornbeam, green ash, and black cherry (table 6). Loblolly pine and sweetgum are the most numerous individuals (2.4 and 2.0 million live trees, respectively), while total hardwood trees outnumber total softwood trees 3 to 1 (figure 19).

Table 6—Number of live trees (at least 1.0 inches diameter at breast height) for the 10 most numerous species, Mississippi, 2022

Species	Number of live trees
Loblolly pine (<i>Pinus taeda</i>)	2,362,485,592
Sweetgum (<i>Liquidambar styraciflua</i>)	2,033,111,024
Water oak (<i>Quercus nigra</i>)	922,574,924
Red maple (<i>Acer rubrum</i>)	812,622,798
Winged elm (<i>Ulmus alata</i>)	625,434,637
Blackgum (<i>Nyssa sylvatica</i>)	427,770,572
American hornbeam (<i>Carpinus caroliniana</i>)	330,483,475
Green ash (<i>Fraxinus pennsylvanica</i>)	304,696,418
Black cherry (<i>Prunus serotina</i>)	268,697,840
White oak (<i>Quercus alba</i>)	261,662,214

Loblolly pine far exceeds every other softwood species in Mississippi, with more than 15 times the next most abundant species (table 7). Other softwood species have tens of millions of individuals, but none approach the scale of loblolly pine. Cypress species are key components of wetland ecosystems and bottomland hardwood forests along Mississippi's rivers and along the Gulf Coast. Relatively small numbers of cypress trees reflect the linear and patchy nature of these systems. Small, scattered, or patchy ecosystems are difficult to capture using a systematically random grid-style sample design at the scale of FIA measurements and may be under-sampled as a result.

Table 7—Number of live trees (at least 1.0 inches diameter at breast height) for the 10 most numerous softwood species, Mississippi, 2022

Softwood species	Number of live trees
Loblolly pine (<i>Pinus taeda</i>)	2,362,485,592
Eastern redcedar (<i>Juniperus virginiana</i>)	155,830,064
Slash pine (<i>Pinus elliottii</i>)	123,376,376
Shortleaf pine (<i>Pinus echinata</i>)	87,777,957
Longleaf pine (<i>Pinus palustris</i>)	69,904,596
Baldcypress (<i>Taxodium distichum</i>)	24,154,219
Spruce pine (<i>Pinus glabra</i>)	14,490,628
Pondcypress (<i>Taxodium ascendens</i>)	11,431,066
Atlantic white-cedar (<i>Chamaecyparis thyoides</i>)	1,261,100
Virginia pine (<i>Pinus virginiana</i>)	76,086

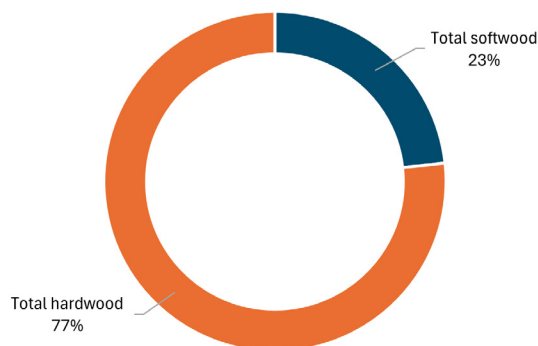


Figure 19—Proportion of live trees (at least 1.0 inches diameter at breast height) by major species group, Mississippi, 2022.

Like loblolly pine among softwood trees, sweetgum far outnumbers any other individual hardwood species in the State with more than twice the number of live trees with a diameter of at least 1.0-inch d.b.h. of the next most numerous species, water oak. The majority (85 percent) of hardwood species number fewer than 150 million individuals with a diameter of at least 1.0-inch d.b.h. The 10 most numerous hardwood species are sweetgum, water oak, red maple, winged elm, blackgum, American hornbeam, green ash, black cherry, white oak, and eastern hophornbeam (table 8).

Table 8—Number of live trees (at least 1.0 inches diameter at breast height) for the 10 most numerous hardwood species, Mississippi, 2022

Hardwood species	Number of live trees
Sweetgum (<i>Liquidambar styraciflua</i>)	2,033,111,024
Water oak (<i>Quercus nigra</i>)	922,574,924
Red maple (<i>Acer rubrum</i>)	812,622,798
Winged elm (<i>Ulmus alata</i>)	625,434,637
Blackgum (<i>Nyssa sylvatica</i>)	427,770,572
American hornbeam (<i>Carpinus caroliniana</i>)	330,483,475
Green ash (<i>Fraxinus pennsylvanica</i>)	304,696,418
Black cherry (<i>Prunus serotina</i>)	268,697,840
White oak (<i>Quercus alba</i>)	261,662,214
Eastern hophornbeam (<i>Ostrya virginiana</i>)	255,003,389

Number of Dead Trees

There are an estimated 464.6 million standing dead trees greater than 1.0-inch d.b.h. on Mississippi forestland. Reflecting its live-tree abundance across the State, loblolly pine dominates standing dead tree populations with 147 million estimated individuals—32 percent of all standing dead trees. Smaller trees are expected to die as stands mature. Across all species, competing vegetation was the number one identifiable cause of death documented for standing dead trees with a diameter of at least 5.0 inches d.b.h, followed by weather events (table 9).

Table 9—Number of standing dead trees (at least 5.0 inches diameter at breast height) by cause of death, Mississippi, 2022

Cause of death	Number of standing dead trees
Vegetation	81,350,145
Not available	19,421,868
Weather	10,053,767
Insect	7,765,109
Disease	4,815,073
Logging/human	3,098,994
Animal	522,874
Fire	522,606
Unknown/other	422,139

Likewise, the number of standing dead loblolly pine trees at least 5.0 inches d.b.h. fell to 53.1 million individuals, pointing to high rates of mortality for young saplings as trees compete for resources. Even as loblolly pine trees matured into the 5.0-inches and higher diameter classes, 35 million individuals were killed by competitive vegetation (e.g., light-limiting crown closure, invasive vines). Other leading causes of loblolly pine tree death were insects, weather events, and disease (figure 20).

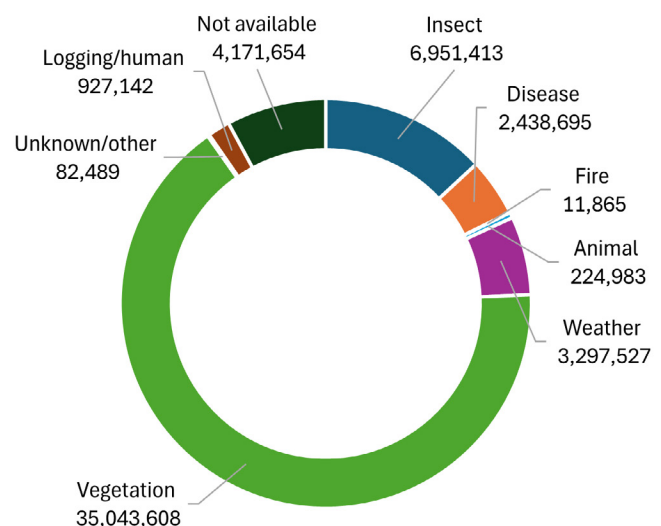


Figure 20—Number of standing dead loblolly pine trees (at least 5.0 inches diameter at breast height) by cause of death, Mississippi, 2022.

Understory Regeneration

There are 17 billion seedlings (less than 1.0-inch d.b.h.) representing 99 distinct seedling species on forest land in Mississippi. That equates to about 883 seedlings per acre of forest land. Seedling density is highest in the North unit at 1,123 seedlings per acre and is lowest in the South unit at 725 seedlings per acre. There are about 12 million seedlings (910 per acre) on naturally regenerated forest land and about 5 billion (825 per acre) on artificially regenerated forest land.

Loblolly pine is the largest contributor to artificial regeneration with 1 billion seedlings, 54 percent of its total regeneration, another nod towards the planting and management of the species in Mississippi. Sweetgum, with 2 billion seedlings, is the most numerous seedling in the State (figure 21). Most sweetgum seedlings occur on naturally regenerated land—only 37 percent occur on land with evidence of artificial regeneration.

Other notably abundant seedling species on naturally regenerated forest land include water oak (2 billion individuals, 74 percent naturally regenerated) and red maple (1.3 billion individuals, 67 percent naturally regenerated).

Loblolly pine also occurs in high numbers on naturally regenerated forest land, even though the majority occur on stands with evidence of regeneration (table 10). Species with entirely natural regeneration (were not recorded on any plots with evidence of artificial regeneration) include river birch, pondcypress, Ohio buckeye, paper birch, shagbark hickory, and bigleaf magnolia—a fact also tied to the relative rarity of these species in the sample.

Notably abundant seedling species (aside from loblolly pine) on artificially regenerated forest land include sweetgum (866 million individuals, 37 percent on artificially regenerated forest land), water oak (433 million individuals, 26 percent on artificially regenerated forest land), winged elm (412 million individuals, 32 percent on artificially regenerated forest land), red maple (400 million individuals, 30 percent on artificially regenerated forest land), and southern red oak (207 million individuals, 33 percent on artificially regenerated forest land). As with the naturally regenerated seedlings, the widespread occurrence on both planted and natural forest land reflects the overall abundance of these species in the State.

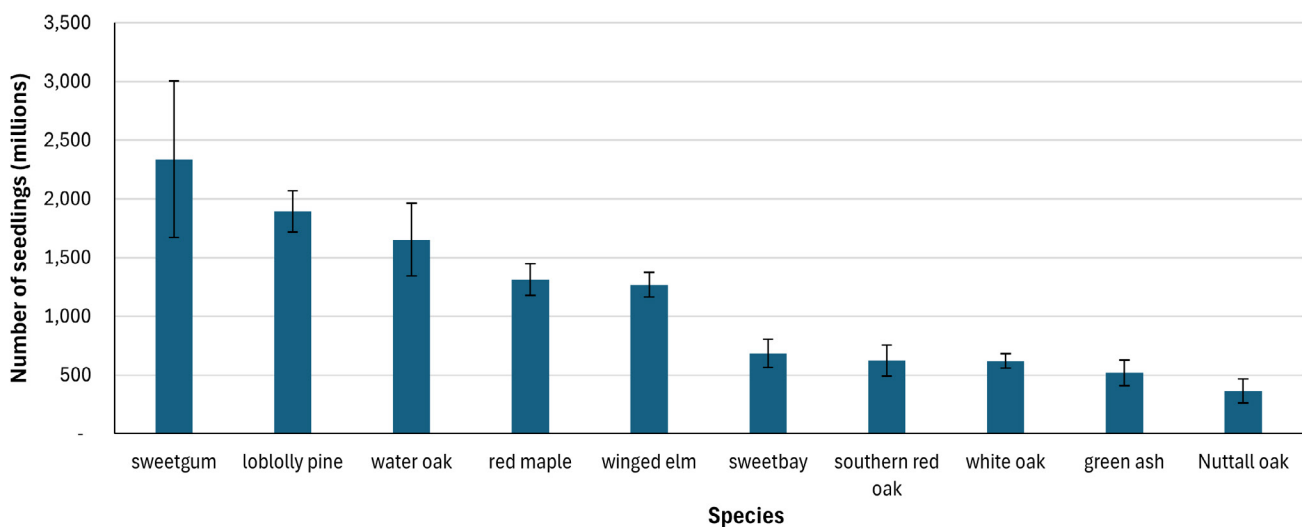


Figure 21—Number of live seedlings (less than 1.0 inches diameter at breast height) on forest land by species, Mississippi, 2022. Sampling error bars represent a 95 percent confidence level.

Table 10—Number of seedlings (less than 1.0 inches diameter at breast height) by species and stand origin, with associated 95 percent confidence interval values, Mississippi, 2022

Species	Clear evidence of artificial regeneration		Natural regeneration	
	Number of seedlings	95% confidence interval ($\pm$)	Number of seedlings	95% confidence interval ($\pm$)
Sweetgum (<i>Liquidambar styraciflua</i>)	866,069,685	102,216,386	1,471,332,167	149,348,307
Water oak (<i>Quercus nigra</i>)	432,926,511	60,655,914	1,220,055,080	123,020,035
Red maple (<i>Acer rubrum</i>)	400,346,721	60,220,232	912,375,731	89,630,782
Loblolly pine (<i>Pinus taeda</i>)	1,032,212,749	198,198,215	860,352,004	242,942,433
Winged elm (<i>Ulmus alata</i>)	412,176,913	74,463,800	857,218,926	96,908,737
Sweetbay (<i>Magnolia virginiana</i>)	65,737,451	34,610,032	617,257,907	125,144,293
White oak (<i>Quercus alba</i>)	67,661,966	18,268,714	551,468,319	107,691,188
Green ash (<i>Fraxinus pennsylvanica</i>)	98,013,535	33,996,435	419,066,268	97,116,878
Southern red oak (<i>Quercus falcata</i>)	207,099,523	33,696,905	415,027,468	51,751,672
Nuttall oak (<i>Quercus texana</i>)	72,984,507	109,359,422	293,318,422	180,647,163

Tree Volume

Total live tree volume on forest land in 2022 was approximately 46.1 billion cubic feet, 39 billion cubic feet of which was classified as growing stock. In addition to an abundant population of individuals, the loblolly/shortleaf pine forest-type group accounts for 47 percent of total live tree volume on Mississippi forest land with 21.7 billion cubic feet of all live tree volume and 20.6 billion cubic feet of growing-stock volume. While loblolly/shortleaf is ecologically and economically important, the State's hardwoods contribute significantly to total species diversity and wood volume. White oaks are of particular interest for wood markets in the State. Select

white oaks, yellow-poplar, and other red oaks have high volumes relative to tree counts, suggesting larger-than-average tree sizes valuable for timber products.

Forest Growth

Net annual growth of all live trees in Mississippi totaled 2.42 billion cubic feet in 2022 (figure 22), with 2.17 billion cubic feet classified as growing stock. Once again, loblolly and shortleaf pines dominate, contributing 1.61 billion cubic feet of annual growth, approximately two-thirds of total growth Statewide. Sweetgum, other red oaks, and yellow-poplar also represent significant contributions to net growth.

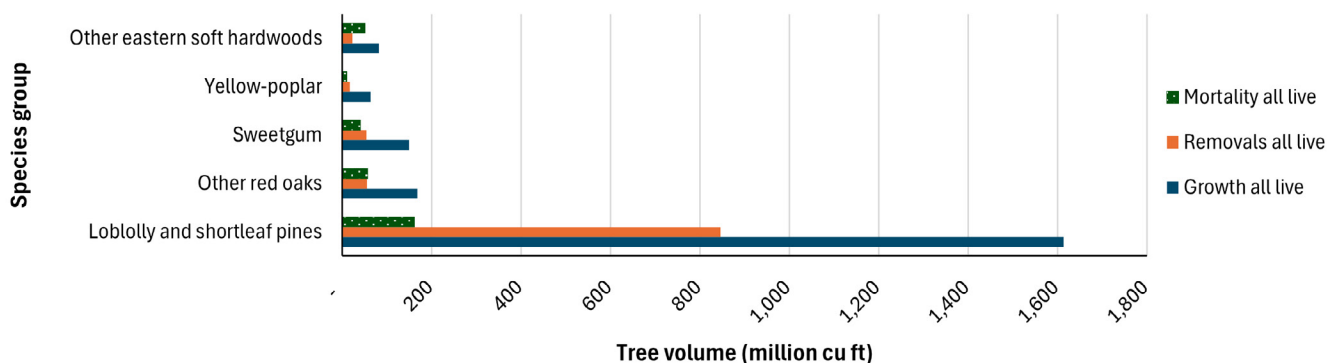


Figure 22—Growth, removal, and mortality of five species groups on forest land in Mississippi, 2022.

Forest Removals

Annual removals of all live trees for harvest and other removals (e.g., land-use change to development or agricultural uses) in 2022 totaled 1.10 billion cubic feet, with 1.01 billion cubic feet from growing stock. Harvest removals accounted for 93 percent of total removals on inventory plots. The majority of removals occurred in loblolly and shortleaf pine (846 million cubic feet total removals, 804 million cubic feet of harvest removals), reflecting their dominance in the State's industrial economy. Sweetgum, other red oaks, and yellow-poplar accounted for a smaller but notable share of removals at 126 million cubic feet of all removals and 112 million cubic feet of harvest removals, emphasizing their importance in hardwood and residual product markets. The balance between growth and removals is favorable, with Statewide growth exceeding removals, an indicator of sustainable forest management at the aggregate level.

Forest Mortality

Tree mortality Statewide accounted for 425 million cubic feet in 2022. Loblolly and shortleaf pine mortality was the largest at 162 million cubic feet, followed by other red oaks (57 million) and other eastern soft hardwoods (52 million). While mortality rates are substantially lower than growth rates, these figures underscore the importance of continued monitoring for forest health issues such as insects, diseases, and weather disturbances to protect Mississippi's economic investment in its forest resource.

The dominance of loblolly and shortleaf pine in Mississippi's forests underscores decades of investment in research and development in pine silviculture, which has produced a renewable and sustainable source of timber. Growth continues to exceed removals, ensuring long-term supply stability. Hardwoods such as red oaks, sweetgum, and yellow-poplar contribute to species diversity and provide important ecosystem services as well as market flexibility. High mortality in certain hardwood groups suggests areas for targeted forest health monitoring and potential silvicultural intervention as interest in hardwood industrial use is revitalized.



Silver maple (*Acer saccharinum*) in Mississippi. Licensed photo by Steven Katovich/Bugwood.org.

SPECIAL TOPIC: SELECT WHITE OAKS

Select white oak species are of particular interest in Mississippi because of their strength and rot resistance. They are widely sought for bourbon oak barrel stave production, wood flooring, furniture, and cabinetry. There are 289 million select white oak trees greater than 1.0-inch d.b.h., with the majority concentrated in the North, Central, and Southwest units. Select white oaks with diameter at least 5.0 inches d.b.h. contain 1.7 billion cubic feet of sound bole wood volume concentrated in the North, Central, and Southwest units (figure 23).

White oak annual net growth is about 3 percent of standing bole volume, while harvest removals are about 0.8 percent, other removals are 0.1 percent, and mortality is 0.4 percent (figure 24). The overall growth-to-removal ratio of select white oaks in the State is 3.86, which means that annual net growth is almost four times harvest and other removals, combined. In the North and South units, average annual net growth is six times higher than average annual removals.

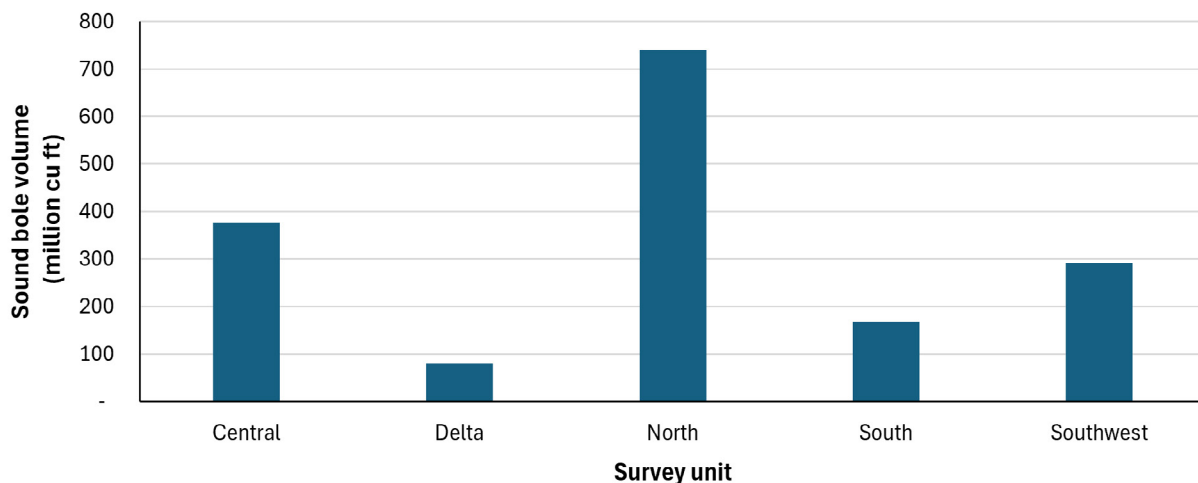


Figure 23—Sound bole volume of live select white oak trees (at least 5.0 inches diameter at breast height) by survey unit, Mississippi, 2022.

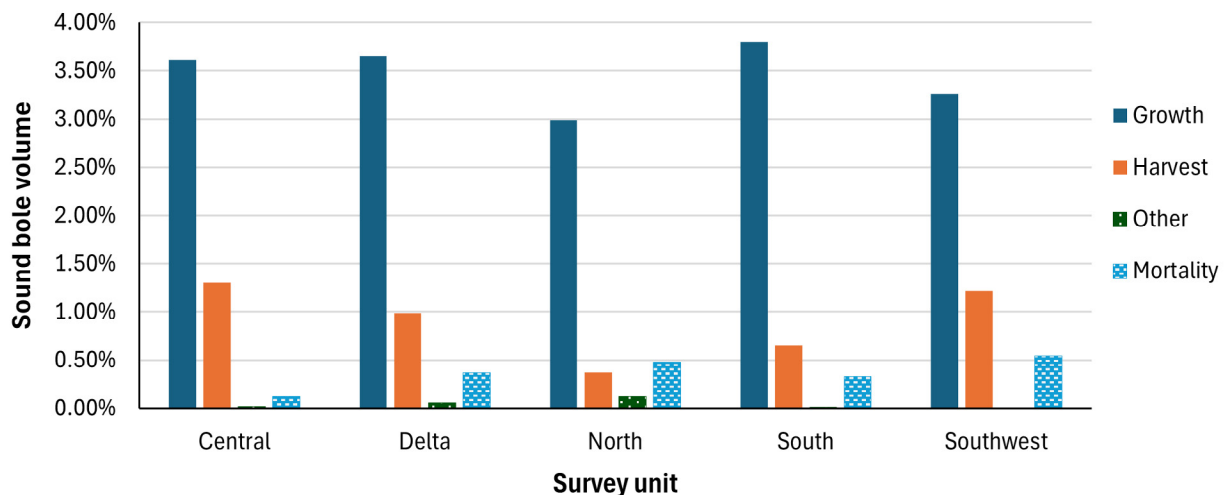


Figure 24—Average annual net growth, removals, and mortality of select white oaks by survey unit as a proportion of total sound bole volume, Mississippi, 2022.



Planted pine forest in east Mississippi. Forest Service photo by Andrew J. Hartsell.

TIMBER PRODUCT OUTPUT AND UTILIZATION

Timber Products

FIA's National Resource Use Monitoring (NRUM) program incorporates data from Mississippi's Timber Products Output (TPO) surveys and Harvest Utilization (HU) studies. TPO surveys are used to determine the types and amount of roundwood products received by primary wood using mills, the county of origin, species used, and how the mills disposed of wood residues produced. HU studies help determine the utilization of merchantable and nonmerchantable tree sections removed during harvest operations. The 2022 data used for this section was compiled using NRUM Toolkit-TPO Interactive Reporting Tool (USDA Forest Service 2025e) and NRUM Data Download (USDA Forest Service 2024b).

The diverse forest products industry in Mississippi is comprised of a variety of mills, ranging from small to large softwood and hardwood sawmills, pole mills, and other miscellaneous mills to very large pulpmills. The total number of sawmills, pulpwood mills, and other primary wood-processing plants distributed across the State has been relatively stable over recent years (table 11). In 2018, there were 92 primary wood using mills; this number slightly fluctuated to 91 in 2019, 85 in 2020, 80 in 2021, and 83 in 2022. More

than 80 percent of the Mississippi roundwood outputs were softwood species. In 2018, the volume harvested and delivered for products (including residential fuelwood) from all sources totaled 1 billion cubic feet (35.5 million green tons) (table 12). After a slight decrease in 2019 to 950 million cubic feet (33.6 million green tons), total roundwood production recovered to 975 million cubic feet by 2022 (34.4 million green tons). Pulpwood has been the leading product output in the State (table 13), accounting for 431 million cubic feet (15.3 million green tons) annually, while sawlog production totaled at 365 million cubic feet (12.9 million green tons) annually during 2018–2022. A slight decrease in pulpwood output was observed, from roughly 445 million cubic feet (15.9 million green tons) in 2018–2019 to 421 million cubic feet (14.9 million green tons) during 2020–2022, primarily due to a drop in hardwood pulpwood production. Meanwhile, softwood pulpwood output remained relatively stable, ranging from 347.3 to 360 million cubic feet (12.24 to 12.69 million green tons), although, stumpage price declined over the 5-year period (figure 25). This shows signs of declining demand or oversupply in softwood pulpwood during this period despite stable production while hardwood pulpwood production showed greater sensitivity to market dynamics, with sharper fluctuations in both quantity and price. Notably, prices spiked sharply in 2019 and 2022, reflecting more volatile supply and demand interactions.

Table 11—Number of mills by species group, facility type, and survey year, Mississippi

Species group	Type of primary roundwood facility	2018	2019	2020	2021	2022
Softwood type	Saw mill (includes cooperage/stave, handle mills)	28	28	27	26	26
	Veneer/plywood mill	5	5	6	4	5
	Pulp/paper mill	4	4	4	4	4
	Pole mill	9	9	8	8	7
	Biomass/energy plant	4	4	4	4	4
	Composite panel/engineered wood product (EWP) mill	1	1	1	1	1
	Miscellaneous mill	1	1	1	1	0
	Total	52	52	51	48	47
Hardwood/softwood	Saw mill (includes cooperage/stave, handle mills)	10	10	9	8	10
	Pulp/paper mill	1	1	1	1	1
	Biomass/energy plant	2	2	2	2	3
	Misc - concentration/export yard	2	1	2	1	0
	Total	15	14	14	12	14
Hardwood	Saw mill (includes cooperage/stave, handle mills)	24	24	19	19	21
	Veneer/plywood mill	1	1	1	1	1
	Total	25	25	20	20	22
Species group total		92	91	85	80	83

Numbers in rows and columns may not sum to totals due to rounding.

MISSISSIPPI'S FORESTS, 2022

Table 12—Output of industrial roundwood products by product, species group, and survey year, Mississippi

Product type	Species group	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
<i>thousand acres</i>						<i>green tons</i>					
Saw logs	Softwood	266,249	308,258	317,366	299,009	330,124	9,261,941	10,722,831	11,040,267	10,410,096	11,481,227
	Hardwood	100,441	48,697	52,485	48,402	54,287	3,817,145	1,853,924	1,997,363	1,842,722	2,066,038
	Total	366,690	356,955	369,852	347,411	384,411	13,079,086	12,576,755	13,037,631	12,252,818	13,547,265
Veneer logs	Softwood	87,106	52,554	77,785	61,406	62,947	3,029,263	1,827,722	2,705,133	2,135,548	2,189,110
	Hardwood	210	472	510	238	238	7,867	18,102	19,651	9,164	9,164
	Total	87,316	53,027	78,295	61,644	63,185	3,037,130	1,845,824	2,724,784	2,144,712	2,198,274
Pulpwood	Softwood	357,120	358,920	347,339	359,940	345,820	12,594,805	12,654,159	12,244,098	12,686,754	12,186,832
	Hardwood	90,623	84,654	70,869	66,994	72,868	3,351,962	3,136,264	2,623,361	2,480,578	2,695,273
	Total	447,743	443,575	418,209	426,934	418,688	15,946,767	15,790,423	14,867,459	15,167,332	14,882,105
Bioenergy/ fuelwood	Softwood	37,044	38,032	35,716	49,861	49,368	1,298,937	1,333,588	1,252,364	1,748,366	1,731,084
	Hardwood	4,575	902	106	63	825	169,672	33,438	3,941	2,336	30,602
	Total	41,619	38,934	35,822	49,924	50,193	1,468,609	1,367,026	1,256,305	1,750,702	1,761,686
Miscellaneous	Softwood	42,658	40,231	45,054	49,498	44,025	1,416,658	1,348,906	1,516,538	1,663,755	1,463,842
	Hardwood	464	3,699	0	0	0	17,329	138,093	0	0	0
	Total	43,122	43,930	45,054	49,498	44,025	1,433,988	1,486,999	1,516,538	1,663,755	1,463,842
Residential fuelwood	Undifferentiated	14,516	14,516	14,516	14,516	14,516	544,350	544,350	544,350	544,350	544,350
	Total	14,516	14,516	14,516	14,516	14,516	544,350	544,350	544,350	544,350	544,350
Product type totals	Softwood	790,175	797,995	823,260	819,714	832,283	27,601,604	27,887,205	28,758,400	28,644,519	29,052,094
	Hardwood	196,314	138,424	123,971	115,697	128,218	7,363,976	5,179,821	4,644,316	4,334,800	4,801,077
	Undifferentiated	14,516	14,516	14,516	14,516	14,516	544,350	544,350	544,350	544,350	544,350
	Total	1,001,006	950,936	961,747	949,926	975,018	35,509,930	33,611,376	33,947,066	33,523,669	34,397,521

Numbers in rows and columns may not sum to totals due to rounding.

0 = a value of greater than 0.00 but less than 0.05.

MISSISSIPPI'S FORESTS, 2022

Table 13—Output of industrial roundwood products by product, species group, and survey year, Mississippi

							Change from time 1 (2013–2017) to time 2 (2018–2022)		
Product type	Survey years	Softwood output	Hardwood output	Total output	Hardwood proportion	Proportion of total	Softwood output	Hardwood output	Total output
		thousand cubic feet			percent				
Saw logs	1998–2002	410,623	97,761	508,384	19.23	52.12	—	—	—
	2003–2007	366,725	94,318	461,042	20.46	47.20	—	—	—
	2008–2012	158,589	57,584	216,173	26.64	29.87	—	—	—
	2013–2017	226,942	52,452	279,394	18.77	31.04	—	—	—
	2018–2022	304,201	60,863	365,064	16.67	37.72	34.04	16.04	30.66
Veneer logs	1998–2002	68,590	5,924	74,514	7.95	7.64	—	—	—
	2003–2007	70,038	6,860	76,898	8.92	7.87	—	—	—
	2008–2012	46,073	2,396	48,469	4.94	6.70	—	—	—
	2013–2017	51,920	2,786	54,706	5.09	6.08	—	—	—
	2018–2022	68,359	334	68,693	0.49	7.10	31.66	-88.01	25.57
Pulpwood	1998–2002	197,727	147,662	345,389	42.75	35.41	—	—	—
	2003–2007	256,208	127,033	383,241	33.15	39.24	—	—	—
	2008–2012	321,107	96,972	418,079	23.19	57.78	—	—	—
	2013–2017	363,751	113,843	477,594	23.84	53.06	—	—	—
	2018–2022	353,828	77,202	431,030	17.91	44.54	-2.73	-32.19	-9.75
Other industrial	1998–2002	21,492	9,506	30,999	30.67	3.18	—	—	—
	2003–2007	37,684	4,565	42,249	10.80	4.33	—	—	—
	2008–2012	21,349	838	22,187	3.78	3.07	—	—	—
	2013–2017	64,667	4,863	69,529	6.99	7.72	—	—	—
	2018–2022	86,297	2,127	88,424	2.41	9.14	33.45	-56.26	27.18
Residential fuelwood	1998–2002	2,288	13,857	16,146	85.82	1.66	—	—	—
	2003–2007	2,278	11,061	13,340	82.92	1.37	—	—	—
	2008–2012	Undifferentiated	Undifferentiated	18,696	—	2.58	—	—	—
	2013–2017	Undifferentiated	Undifferentiated	18,899	—	2.10	—	—	—
	2018–2022	Undifferentiated	Undifferentiated	14,516	—	1.50	—	—	-23.19
Product type totals	1998–2002	700,722	274,711	975,433	28.16	—	—	—	—
	2003–2007	732,932	243,836	976,769	24.96	—	—	—	—
	2008–2012	547,118 ^a	157,790 ^a	723,604	21.81 ^a	—	—	—	—
	2013–2017	707,280 ^a	173,944 ^a	900,122	19.32 ^a	—	—	—	—
	2018–2022	812,686 ^a	140,525 ^a	967,727	14.52 ^a	—	14.90 ^a	-19.21 ^a	7.51 ^a

^aResidential fuelwood is not included in the estimate.

Numbers in rows and columns may not sum to totals due to rounding.

— = no sample for the cell.

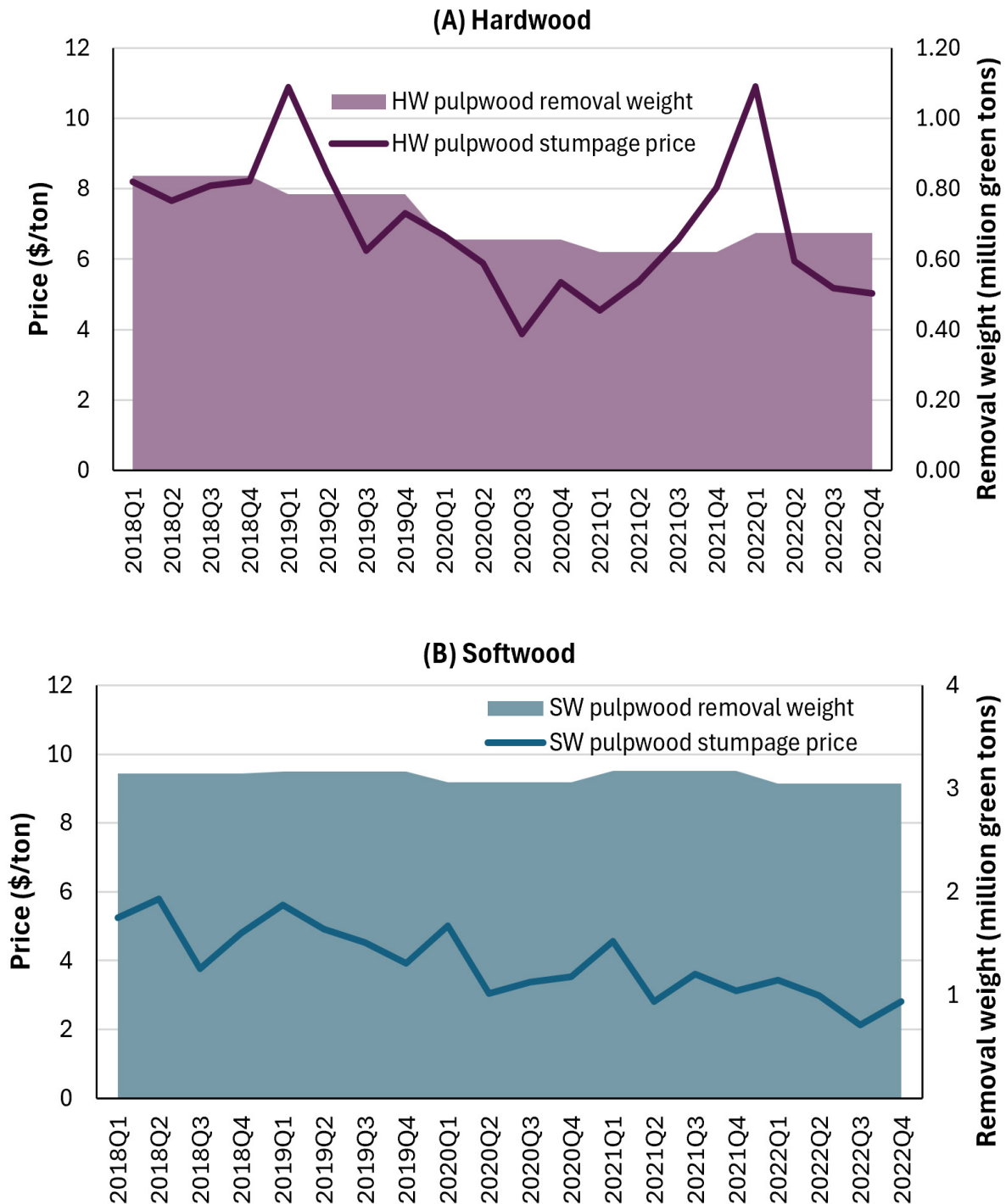


Figure 25—Quarterly pulpwood stumpage prices and pulpwood removal weight for (A) hardwoods and (B) softwoods, Mississippi, 2018–2022. Prices were obtained from MSUES (2026). Quarterly removal weights were calculated by dividing annual green ton weights by four.



Dense stand of loblolly pine in Mississippi. Licensed photo by Scott Roberts/ Mississippi State University/Bugwood.org.

Sawlog output peaked in 2022 at 384 million cubic feet (13.55 million green tons). Softwood sawlog output steadily increased over the period, rising from 266 million cubic feet (9.26 million green tons) in 2018 to 330 million cubic feet (11.48 million green tons) in 2022. As the price also remained stable (figure 26), this generally indicates sawtimber market is near a state of equilibrium with additional supply absorbed. In contrast, hardwood sawlog output experienced a sharp decline from 100 million cubic feet (3.8 million green tons) in 2018 to about 51 million cubic feet (2 million green tons), then remained relatively stable through 2022. Veneer production accounted for approximately 7 percent of the State's total harvested volume, primarily sourced from softwood. The volume of roundwood harvested for veneer products reached its highest level in 2018 at 87 million cubic feet (3 million green tons), dropped to 53 million cubic feet (1.8 million green tons) in 2019, and gradually recovered to 63 million cubic feet (2.2 million green tons) by 2022.

The growing trend in volume of roundwood used for bioenergy and commercial fuelwood is observed. In 2018, the volume totaled 41.6 million cubic feet (1.46 million green tons), accounting for 4 percent of the State's total

product output. There was a small decrease to 38.9 million cubic feet (1.37 million green tons) in 2019 and 35.8 million cubic feet (1.26 million green tons) in 2020. The roundwood production for bioenergy and commercial fuelwood rose to 50 million cubic feet (1.75 million green tons) in 2021 and 2022. The roundwood output for residential firewood was estimated at 14.5 million cubic feet (U.S. EIA, n.d.), representing 1.5 percent of total roundwood production. The use of roundwood for miscellaneous products including poles, post remained stable ranging from 43 to 49.5 million cubic feet (1.43 to 1.66 million green tons) annually.

In summary, pulpwood continued to be a key product in Mississippi's forestry sector, particularly softwood pulpwood. Additionally, softwood sawlog production increased during this period, despite a slight decline in veneer output. A growing trend in bioenergy and fuelwood production was also observed. Overall, total softwood production followed an upward trend, reaching 832 million cubic feet in 2022, while total hardwood production declined from 196 million cubic feet in 2018 to 128 million cubic feet in 2022. Total roundwood production remained stable, ranging from 950 million to 1 billion cubic feet in 2018 to 2022.

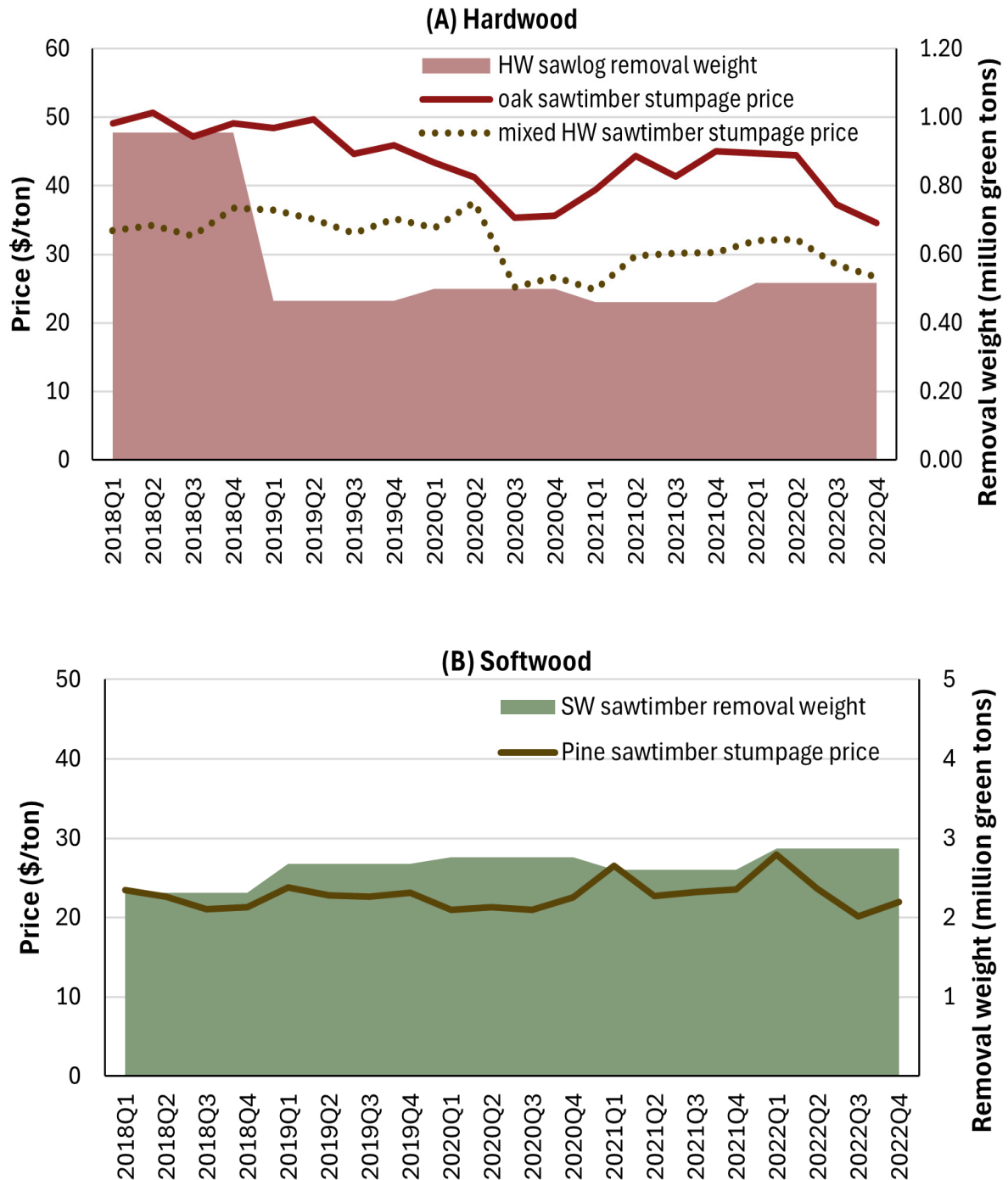


Figure 26—Quarterly sawtimber stumpage prices and sawlog removal weight, Mississippi, 2008–2022. Panel A shows hardwood (HW) prices for oak and other hardwoods, with total hardwood sawlog removal. Panel B shows pine sawtimber prices and softwood (SW) sawtimber removal. Prices were obtained from MSUES (2026). Quarterly removal weights were calculated by dividing annual green ton weights by four.

Mill Residue

Mill residues are wood materials generated during the processing of roundwood into timber products at primary manufacturing facilities. These residues fall into three main categories:

- Coarse residues, which includes materials like slabs, edgings, trim, veneer cores, and ends, which are suitable for chipping.
- Fine residues, which refers to materials such as sawdust, shavings, and veneer remnants, which are not suitable for chipping.
- Bark, primarily used as industrial fuel.

Mill residue produced has been utilized in various ways, including as raw materials for primary products like pulp and bioenergy, as

well as secondary products such as mulch and animal bedding, or as fuel in wood product mills. Table 14 depicts the average annual volume of mill residues by roundwood and residue type. Data on mill residue production and disposal from 2018 through 2022 surveys indicated 300 million cubic feet of wood and bark residues were generated annually from primary processors. Of this total, 265 million cubic feet (88 percent) came from softwood species. Most residues were generated from sawlog processing mills (220 million cubic feet), followed by veneer mills (50 million cubic feet) and pulp mills (25 million cubic feet). Coarse residues accounted for the largest share at 131 million cubic feet, with sawdust and bark following at 74 and 68 million cubic feet, respectively. Shaving residues totaled 27 million cubic feet annually.

Table 14—Average annual primary mill residue volume by roundwood type, species group, and residue type, Mississippi, 2018–2022

Product type	Species group	All types	Residue types			
			Bark	Coarse	Shavings	Sawdust
thousand cubic feet						
Saw logs	Softwood	187,408	26,356	90,805	26,386	43,861
	Hardwood	33,264	6,001	15,745	497	11,021
	Total	220,672	32,357	106,551	26,883	54,881
Veneer logs	Softwood	49,114	6,849	23,598	—	18,667
	Hardwood	203	33	86	—	85
	Total	49,317	6,882	23,684	—	18,751
Pulpwood	Softwood	23,658	23,658	—	—	—
	Hardwood	1,281	1,281	—	—	—
	Total	24,939	24,939	—	—	—
Bioenergy/fuelwood	Softwood	460	460	—	—	—
	Hardwood	—	—	—	—	—
	Total	460	460	—	—	—
Miscellaneous	Softwood	4,115	3,150	965	—	—
	Hardwood	103	103	—	—	—
	Total	4,218	3,253	965	—	—
Product type totals	Softwood	264,754	60,473	115,368	26,386	62,527
	Hardwood	34,852	7,418	15,831	497	11,105
	Total	299,606	67,890	131,199	26,883	73,633

Numbers in rows and columns may not sum to totals due to rounding.

— = no sample for the cell.



Improvement treatments in Mississippi. Licensed photo by John D. Hodges/Mississippi State University/Bugwood.org.

Sawmills generated all types of residues, with coarse material making up half of their output (106.5 million cubic feet) and sawdust about a quarter (55 million cubic feet). Bark and shavings accounted for 32 and 27 million cubic feet, respectively. Veneer mills produced similar proportions as sawmills on coarse and bark residues, with coarse residues at 24 million cubic feet, sawdust at 19, and bark at 7, but did not produce shavings. Bark residues from pulp mills and bioenergy facilities amounted to 25 million cubic feet and 0.5 million cubic feet annually, respectively. Other industrial products including poles, pilings, posts generated 3.4 million cubic feet of bark residue and 1 million cubic feet of coarse residue.

Coarse mill residue produced in Mississippi from 2018 to 2022 was used predominately for fiber or composite products at 98 million cubic feet (table 15). The balance of coarse residue was used as miscellaneous products (16 million cubic feet), industrial fuels at the mill (6 million cubic feet) or at other plants (5 million cubic feet), and bioenergy production (2.5 million cubic feet). About 4 million cubic feet of coarse residues were not utilized. Sawdust residues were mainly used as industrial fuel—26 million cubic feet at the plant and 17.5 at other facilities. Another 13 million cubic feet was utilized in bioenergy products, with smaller amounts used for animal bedding (2 million cubic feet) and mulch or soil additives (1.3 million cubic feet). Shaving residues were split between industrial fuel and bioenergy pellets (15 million cubic feet) and fiber products (10 million cubic feet). Bark residues were primarily utilized for fuel (48 million cubic feet, 70 percent), while 16 million cubic feet were utilized for mulch and soil additives. Overall, only 3.5 percent of wood and bark residues generated from 2018 to 2022 were not utilized.

MISSISSIPPI'S FORESTS, 2022

Table 15—Average annual disposal of residue at primary wood-using plants by product, species group, and type of residue, Mississippi

Product type	Species group	All types	Residue types			
			Bark	Coarse	Shavings	Sawdust
thousand cubic feet						
Fiber/composite products	Softwood	108,650	—	91,656	10,021	6,973
	Hardwood	6,041	—	6,041	—	—
	Total	114,690	—	97,696	10,021	6,973
Industrial fuel at this plant	Softwood	70,859	33,451	5,383	6,653	25,372
	Hardwood	3,906	2,196	414	33	1,262
	Total	74,765	35,648	5,796	6,687	26,634
Industrial fuel at other plants	Softwood	22,534	8,726	472	1,400	11,935
	Hardwood	14,134	4,104	4,325	140	5,565
	Total	36,668	12,830	4,797	1,541	17,499
Bioenergy pellets	Softwood	20,595	407	1,730	6,734	11,724
	Hardwood	1,309	—	—	257	1,052
	Total	21,904	407	1,730	6,991	12,776
Other bioenergy products	Softwood	99	22	76	—	—
	Hardwood	1,783	220	577	—	985
	Total	1,881	242	654	—	985
Residential fuelwood	Softwood	37	—	—	—	37
	Hardwood	404	—	—	—	404
	Total	441	—	—	—	441
Mulch/soil additive ¹	Softwood	17,257	15,890	33	35	1,298
	Hardwood	7	1	3	-	3
	Total	17,264	15,891	36	35	1,301
Animal bedding	Softwood	3,302	—	—	1,125	2,176
	Hardwood	—	—	—	—	—
	Total	3,302	—	—	1,125	2,176
Miscellaneous uses	Softwood	15,020	—	13,725	417	878
	Hardwood	3,238	—	2,628	67	543
	Total	18,258	—	16,353	484	1,421
Not used	Softwood	6,403	1,976	2,293	—	2,133
	Hardwood	4,030	896	1,844	—	1,291
	Total	10,433	2,872	4,137	—	3,424
Product type totals	Softwood	264,754	60,473	115,368	26,386	62,527
	Hardwood	34,852	7,418	15,831	497	11,105
	Total	299,606	67,890	131,199	26,883	73,633

¹ Mulch/soil additive includes biochar.

Numbers in rows and columns may not sum to totals due to rounding.

— = no sample for the cell.

Logging Residue

In 2022, the area of timber harvested annually in Mississippi amounted to nearly 512,900 acres. Of this area, 222,200 acres (43 percent) underwent a final harvest, while 52,200 acres (10 percent) had a partial harvest, and 231,000 acres (45 percent) had commercial thinning. The remaining 7,500 acres, or about 1 percent, received shelterwood, timber stand improvement, or salvage cutting. The removals volume attributed to timber products and logging residues are directly related to these treated acres. Based on these estimates, 2.25 thousand cubic feet per acre in the merchantable and nonmerchantable portion of trees were removed annually from Mississippi timberland. Of this, approximately 1.9 thousand cubic feet per acre could be utilized for products, while around 0.35 thousand cubic feet per acre were left as logging residues.

Woody material left on a logging site can be divided into two types: merchantable and nonmerchantable residues. Merchantable residues include whole trees with a diameter of at least 5.0 inches d.b.h., or portions of the merchantable boles of severed trees broken and left during the felling operation. Merchantable trees are further classified by size into poletimber-sized and sawtimber-sized categories. For poletimber-sized trees, softwoods have a diameter at least 5.0 inches d.b.h. and below 9.0 inches d.b.h., while

hardwoods have a diameter at least 5.0 inches d.b.h. and below 11.0 inches d.b.h. For sawtimber-sized trees, softwoods have a diameter at least 9.0 inches d.b.h., and hardwoods have a diameter of at least 11.0 inches d.b.h. Nonmerchantable residues include small trees less than 5.0 inches d.b.h., damaged, or killed during harvesting operations. Residual stump portions, tops, and limbs or forks are also nonmerchantable and not utilized because of insufficient size or quality to fit on logging trailers.

The logging residue volume in Mississippi remained constant in 2018 to 2020 at 163 million cubic feet and increased to 167 million cubic feet in 2021 and to 178 million cubic feet in 2022 (table 16). On average, softwood residues made up 99 million cubic feet annually, while hardwood residues accounted for 68 million cubic feet. About 70 percent of the total logging residues came from non-growing stock, while sawtimber and poletimber growing stocks contributed 12 percent and 17 percent, respectively. Considering all removals, the merchantable portion of logging residue represented approximately 3 percent of softwood removals and about 14 percent of hardwood removals. The merchantable portion of logging residue from poletimber grew slightly over years from 7.3 percent in 2018 (29.3 out of 404 million cubic feet of poletimber removals) to 7.9 percent in 2022 (30.2 out of 382 million cubic feet of poletimber removals).



Blackberries (*Rubus* spp.) growing on Noxubee Wildlife Refuge in Mississippi. Forest Service photo by Andrew J. Hartsell.

MISSISSIPPI'S FORESTS, 2022

Table 16—Volume of timber removals by year, species group, removals class, and source, Mississippi

Removals class	Year	Species group	All sources	Sawtimber growing stock	Poletimber growing stock	Non-growing stock
<i>thousand cubic feet</i>						
Roundwood products	2018	Softwood	790,175	405,314	306,752	78,110
		Hardwood	196,314	124,195	65,427	6,692
		Total	986,490	529,509	372,178	84,802
	2019	Softwood	797,995	419,205	299,253	79,538
		Hardwood	138,424	72,248	60,783	5,393
		Total	936,420	491,453	360,036	84,931
	2020	Softwood	823,260	444,635	301,182	77,444
		Hardwood	123,971	68,504	50,865	4,602
		Total	947,231	513,139	352,047	82,045
	2021	Softwood	819,714	424,178	307,997	87,539
		Hardwood	115,697	63,319	48,051	4,327
		Total	935,410	487,497	356,048	91,866
	2022	Softwood	832,283	450,378	296,339	85,565
		Hardwood	128,218	71,096	52,327	4,795
		Total	960,502	521,475	348,667	90,361
Logging residues	2018	Softwood	85,578	10,407	11,519	63,653
		Hardwood	77,737	9,217	17,857	50,664
		Total	163,315	19,623	29,376	114,316
	2019	Softwood	97,408	11,845	13,111	72,452
		Hardwood	65,919	7,816	15,142	42,961
		Total	163,326	19,661	28,253	115,413
	2020	Softwood	98,753	12,009	13,292	73,452
		Hardwood	64,748	7,677	14,873	42,198
		Total	163,502	19,686	28,165	115,651
	2021	Softwood	101,443	12,336	13,654	75,453
		Hardwood	65,666	7,786	15,084	42,797
		Total	167,109	20,121	28,738	118,250
	2022	Softwood	112,262	13,651	15,111	83,500
		Hardwood	65,549	7,772	15,057	42,720
		Total	177,810	21,423	30,167	126,220

Continued on next page.

MISSISSIPPI'S FORESTS, 2022

Table 16 (cont.)—Volume of timber removals by year, species group, removals class, and source, Mississippi

Removals class	Year	Species group	All sources	Sawtimber growing stock	Poletimber growing stock	Non-growing stock
<i>thousand cubic feet</i>						
Other removals	2018	Softwood	2,621	603	273	1,744
		Hardwood	9,863	2,311	2,463	5,089
		Total	12,484	2,914	2,736	6,833
	2019	Softwood	2,784	641	290	1,853
		Hardwood	5,721	1,341	1,429	2,952
		Total	8,505	1,982	1,719	4,805
	2020	Softwood	2,629	605	274	1,750
		Hardwood	10,590	2,481	2,645	5,464
		Total	13,219	3,087	2,919	7,214
	2021	Softwood	2,573	592	268	1,712
		Hardwood	9,435	2,211	2,356	4,868
		Total	12,008	2,803	2,624	6,580
	2022	Softwood	3,254	749	339	2,166
		Hardwood	10,154	2,379	2,536	5,239
		Total	13,409	3,129	2,875	7,405
All removals	2018	Softwood	878,374	416,324	318,544	143,507
		Hardwood	283,915	135,723	85,746	62,445
		Total	1,162,289	552,047	404,290	205,951
	2019	Softwood	898,187	431,691	312,654	153,842
		Hardwood	210,064	81,404	77,354	51,306
		Total	1,108,251	513,095	390,008	205,148
	2020	Softwood	924,643	457,248	314,749	152,646
		Hardwood	199,310	78,663	68,383	52,264
		Total	1,123,953	535,911	383,131	204,910
	2021	Softwood	923,730	437,106	321,920	164,704
		Hardwood	190,798	73,315	65,491	51,991
		Total	1,114,528	510,421	387,410	216,696
	2022	Softwood	947,799	464,779	311,789	171,231
		Hardwood	203,921	81,247	69,920	52,754
		Total	1,151,721	546,026	381,709	223,985

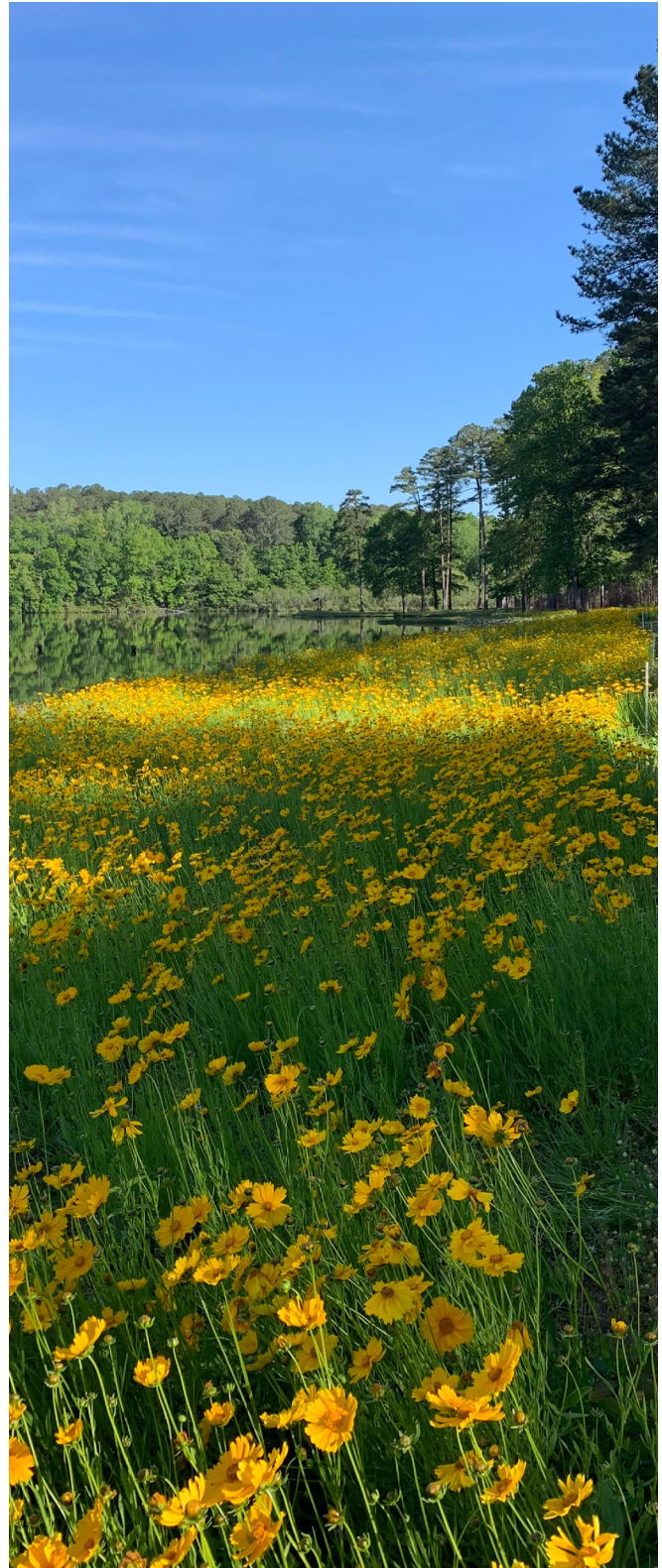
Numbers in rows and columns may not sum to totals due to rounding.

TREE DAMAGE

The overall health of trees can be impacted by various types of stressors. Biotic stressors can include native or introduced insects, diseases, invasive plant species, and animals. Abiotic stressors include storm damage, drought, flooding, cold temperatures, nutrient deficiencies, the physical properties of soils that affect moisture and aeration, and toxic pollutants.

Tree damage is assessed for all trees with a diameter of 5.0 inches d.b.h. or greater. Up to three of the following types of damage agents are recorded for each tree: abiotic/competition, animals, decay (diseases, cankers, and decay), fire, insects, and logging/human. If more than three types of damage are observed, the top three are recorded based on the relative abundance of the damaging agents.

Thirty-seven percent of live trees with a diameter of at least 5.0 inches d.b.h. in Mississippi showed signs of some form of damage. Stem decay impacts 307 million trees as either primary, secondary, or tertiary damage and makes up the most observed damage type across the State. Overall, disease-related damage (including stem decay, fusiform rust, and heart rot) affected 782 million trees spanning 97 species. Loblolly pine was the species most heavily impacted by disease-related damages with 150 million affected trees, followed by sweetgum (94 million trees) and water oak (74 million trees), a reflection of the overall abundance of those species in the State. Proportionally, only 11 percent of the loblolly pine population showed damage. In contrast, of all species with populations over 1 million trees, flowering dogwoods show the most disease-related damage to the overall population (78 percent), followed by live oak (72 percent). Logging damage (including broken tops) impacted 18 million trees, the second most observed broad damage category. Unsurprisingly, about a third of the trees experiencing logging damage were loblolly pine (6 million trees), with sweetgum the next most common (2 million trees).



Lanceleaf coreopsis (*Coreopsis lanceolata*) at Choctaw Lake on the Tombigbee Ranger District in Mississippi. Forest Service photo by Katie Hanson-Dorr.

REFERENCES

- Agricultural Act of 2014**; 128 Stat. 649; 7 U.S.C. 9001 (note).
- Agricultural Research, Extension, and Education Reform Act (AREERA) of 1998**; 112 Stat. 523; 105 U.S.C. 105–185.
- Arriaga, F.; and Lowery, B. 2007.** Erosion and productivity. In: Trimble, S.W. Encyclopedia of water science, 2nd ed. Boca Raton, LA: CRC Press: 262–264. <https://doi.org/10.1201/NOE0849396274>.
- Baldwin, V.C., Jr.; Feduccia, D.P. 1987.** Loblolly pine growth and yield prediction for managed west gulf plantations. Res. Pap. SO-236. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 27 p.
- Bechtold, W.A.; Patterson, P.L., eds. 2005.** The enhanced Forest Inventory and Analysis program - national sampling design and estimation procedures. Gen. Tech. Rep. SRS-80. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 85 p. <https://doi.org/10.2737/SRS-GTR-80>.
- Brashaw, B.K.; Brown, T.; Johnson, J. [et al.]. 2023.** Hardwood markets in 2020 and beyond. In: Kern, C.C.; Dickinson, Y.L., eds. Proceedings of the first biennial Northern Hardwood Conference 2021: bridging science and management for the future. Gen. Tech. Rep. NRS-P-211. Madison, WI: U.S. Department of Agriculture, Forest Service, Northern Research Station: 157–159. <https://doi.org/10.2737/NRS-GTR-P-211-paper31>.
- Butler, B.J.; Butler, S.M.; Caputo, J. [et al.]. 2021.** Family forest ownerships of the United States, 2018: results from the USDA Forest Service, National Woodland Owner Survey. Gen. Tech. Rep. NRS-199. Madison, WI: U.S. Department of Agriculture, Forest Service, Northern Research Station. 52 p. [plus 4 appendices] <https://doi.org/10.2737/NRS-GTR-199>.
- Conrad, J.L., IV; Bolding, M.C.; Aust, W.M.; Smith, R.L. 2010.** Wood-to-energy expansion, forest ownership changes, and mill closure: consequences for U.S. South's wood supply chain. Forest Policy and Economics. 12(6): 399–406. <https://doi.org/10.1016/j.forpol.2010.05.003>.
- Donner, B.L.; Hines, F.D. 1987.** Forest statistics for Mississippi counties - 1987. Resour. Bull. SO-129. New Orleans, Louisiana: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 84 p. <https://doi.org/10.2737/SO-RB-129>.
- Forest and Rangeland Renewable Resources Planning Act of 1974 [RPA]; 16 U.S.C. 1601 (note).
- Forest Economics Staff. 1946.** Basic data on forest area and timber volumes from the Southern forest survey, 1932–36. Forest Survey Release 54. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 26 p. <https://research.fs.usda.gov/treearch/26765>.
- Gollihue, J.; Pook, V.G.; DeBolt, S. 2021.** Sources of variation in bourbon whiskey barrels: a review. Journal of the Institute of Brewing. 127(3): 210–223. <https://doi.org/10.1002/jib.660>.
- Gurgel, A.C.; Reilly, J.; Blanc, E. 2021.** Agriculture and forest land use change in the continental United States: Are there tipping points? iScience. 24(7): 102772. <https://doi.org/10.1016/j.isci.2021.102772>.
- Mildrexler, D.J.; Berner, L.T.; Law, B.E. [et al.]. 2020.** Large trees dominate carbon storage in forests east of the Cascade Crest in the United States Pacific Northwest. Frontiers in Forests and Global Change. 3: 594274. <https://doi.org/10.3389/ffgc.2020.594274>.
- Mississippi State University Extension Service [MSUES]. 2026.** Timber prices. <https://extension.msstate.edu/natural-resources/forestry/forest-economics/timber-prices>. [Date accessed: 25 August 2025].
- Napton, D.E.; Auch, R.F.; Headley, R. [et al.]. 2010.** Land changes and their driving forces in the southeastern United States. Regional Environmental Change. 10: 37–53. <https://doi.org/10.1007/s10113-009-0084-x>.
- Oswalt, S.N. 2019.** Mississippi's forests, 2017. Resour. Bull. SRS-226. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 68 p. <https://doi.org/10.2737/SRS-RB-226>.
- Oswalt, S.N.; Johnson, T.G.; Coulston, J.W.; Oswalt, C.M. 2009.** Mississippi's forests, 2006. Resour. Bull. SRS-147. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 78 p. <https://doi.org/10.2737/SRS-RB-147>.
- Reineke, L. H. 1933.** Perfecting a stand density index for even-aged forest. Journal of Agricultural Research. 46(7): 627-638.
- Renewable Resources Evaluation Research Work Unit. 1978.** Forest statistics for Mississippi counties. Resour. Bull. SO-69. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 91 p. <https://research.fs.usda.gov/treearch/22667>.
- Rosson, J.F., Jr. 2001.** Forest resources of Mississippi - 1994. Resour. Bull. SRS-61. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 85 p. <https://doi.org/10.2737/SRS-RB-61>.
- Stanturf, J.A.; Gardiner, E.S.; Hamel, P.B. [et al.]. 2000.** Restoring bottomland hardwood ecosystems in the Lower Mississippi Alluvial Valley. Journal of Forestry. 98(8): 10–16. <https://doi.org/10.1093/jof/98.8.10>.
- U.S. Department of Agriculture, Forest Service [USDA Forest Service]. 1949.** Forest statistics for Mississippi: a report of the southern forest survey. Forest Survey Release 59. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 69 p.
- U.S. Department of Agriculture, Forest Service [USDA Forest Service]. 1958.** Mississippi forests. Forest Survey Release 81. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 52 p.
- U.S. Department of Agriculture, Forest Service [USDA Forest Service]. 1992.** Forest Service resource inventories: an overview. Washington, DC: U.S. Department of Agriculture, Forest Service, Forest Inventory, Economics, and Recreation Research. 39 p. <https://research.fs.usda.gov/treearch/123>.
- U.S. Department of Agriculture, Forest Service [USDA Forest Service]. 2024a.** Forest Inventory and Analysis one-click state factsheets. <https://research.fs.usda.gov/products/dataandtools/forest-inventory-and-analysis-one-click-state-factsheets>. [Date accessed: 4 March 2026].
- U.S. Department of Agriculture, Forest Service [USDA Forest Service]. 2024b.** National Resource Use Monitoring – data downloads. <https://research.fs.usda.gov/products/dataandtools/national-resource-use-monitoring-data-downloads>. [Date accessed: 27 February 2026].
- U.S. Department of Agriculture, Forest Service [USDA Forest Service]. 2025a.** Forest Inventory and Analysis. <https://www.fs.usda.gov/research/programs/fia>. [Date accessed: 20 February 2026].

- U.S. Department of Agriculture, Forest Service [USDA Forest Service]. 2025b.** Forest Inventory and Analysis data and tools. <https://research.fs.usda.gov/programs/fia#data-and-tools>. [Date accessed: 20 February 2026].
- U.S. Department of Agriculture, Forest Service [USDA Forest Service]. 2025c.** National Resource Use Monitoring (NRUM). <https://research.fs.usda.gov/programs/nrum>. [Date accessed: 20 February 2026].
- U.S. Department of Agriculture, Forest Service [USDA Forest Service]. 2025d.** National Woodland Owner Survey (NWOS). <https://research.fs.usda.gov/programs/nwos>. [Date accessed: 20 February 2026].
- U.S. Department of Agriculture, Forest Service [USDA Forest Service]. 2025e.** Timber Products Output (TPO) Interactive Reporting Tool. <https://research.fs.usda.gov/products/dataandtools/timber-products-output-tpo-interactive-reporting-tool>. [Date accessed: 27 February 2026].
- U.S. Energy Information Administration [U.S. EIA]. [N.d.]** Residential Energy Consumption Survey (RECS). <https://www.eia.gov/consumption/residential/>. [Data accessed: 25 August 2025].
- van Sickle, C.C.; van Hooser, D.D. 1969.** Forest resources of Mississippi - 1969. Resour. Bull. SO-17. New Orleans, Louisiana: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 34 p. <https://research.fs.usda.gov/treearch/837>.
- Westfall, J.A.; Coulston, J.W.; Gray, A.N. [et al.]. 2024.** A national-scale tree volume, biomass, and carbon modeling system for the United States. Gen. Tech. Rep. WO-104. Washington, DC: U.S. Department of Agriculture, Forest Service. 37 p. <https://doi.org/10.2737/WO-GTR-104>.
- Westfall, J.A.; Coulston, J.W.; Moisen, G.G.; Andersen, H.-E., comps. 2022.** Sampling and estimation documentation for the Enhanced Forest Inventory and Analysis Program: 2022. Gen. Tech. Rep. NRS-GTR-207. Madison, WI: U.S. Department of Agriculture, Forest Service, Northern Research Station. 129 p. <https://doi.org/10.2737/NRS-GTR-207>.

GLOSSARY

Adjustment factor—A value that adjusts the population estimates to account for partially nonsampled plots due to hazardous conditions, denied access, or portions outside of the population boundary. The adjustment factor is the inverse of the proportion of plots sampled.

Annual inventory (also annual sample design)—The current sampling strategy implemented by FIA. A fraction of all forested plots within a State are measured each year. A full annual inventory cycle is complete when all plots have been measured.

Average annual change—Change in the quantity of trees between measurements divided by the number of years between measurements. Growth, mortality, removals, and area change are available as average annual estimates.

Basal area (BA)—The cross-sectional area of a tree stem/bole (trunk) at the point where diameter is measured, inclusive of bark. BA is calculated for trees 1.0-inch and larger in diameter and is expressed in square feet. For timber species, the calculation is based on diameter at breast height (d.b.h.); for woodland species, it is based on diameter at root collar (d.r.c.). When the basal areas of all trees in a stand are summed, the result is usually expressed as square feet of basal area per acre.

Biomass—The quantity of organic material expressed in terms of green or oven-dry weight.

Board-foot volume—Amount of wood in an unfinished board that is 12-inches wide, 12-inches long, and 1-inch thick (144 cubic inches). Board-foot volume is computed for the sawlog portion of a sawtimber tree. All FIA work units compute board-foot estimates using the International ¼-inch Rule. Some FIA work units also compute board-foot volume estimates using the Scribner Rule or Doyle Rule.

Bole—For timber species, the main stem of a tree, represented by the stem with the most

merchantable volume extending from one foot above the ground to the point on the tree where the diameter outside bark (d.o.b.) reaches 4 inches. On trees with secondary forks above the diameter measurement point, the bole is represented by the stem with the most merchantable volume. If there is no merchantable volume within any of the potential stems, the bole is the stem with the most volume that is not rotten cull. Saplings are evaluated based on the stem with the best form and greatest volume of sound wood. For woodland species, which are often multi-stemmed, there is no defined bole.

Bole wood volume—See: Stem wood volume.

Canopy cover—The percentage of the ground surface area covered by a vertical projection of plant crowns.

Census water—Rivers and streams that are more than 200 feet wide and bodies of water that are greater than 4.5 acres in size.

Commercial species—Tree species suitable for industrial wood products.

Components of change—The different subdivisions of the changes that can occur to attributes based on tree measurements (e.g., volume, biomass) between measurements, such as growth, mortality, and removals.

Condition class—The combination of discrete landscape and forest attributes that identify and define different strata on the plot. Examples of such FIA Database (FIADB) attributes include RESERVED STATUS, OWNER GROUP, FOREST TYPE, STAND SIZE CLASS, REGENERATION STATUS, and TREE DENSITY.

A discrete combination of landscape attributes that describe the environment on all or part of the plot. These FIADB attributes include CONDITION CLASS STATUS, RESERVED STATUS, OWNER GROUP, FOREST TYPE, STAND SIZE CLASS, REGENERATION STATUS, and TREE DENSITY.

County and municipal—An ownership class of public lands owned by counties or local public agencies, or lands leased by these governmental units for more than 50 years.

Crown—The part of a tree or woody plant bearing live branches or foliage.

Cubic-foot volume (merchantable)—A unit of measure indicating the amount of wood contained in a cube 1 by 1 by 1 foot. Cubic foot volume is computed for the merchantable portion of timber and woodland species; the merchantable portion for timber species includes that part of a bole from a 1-foot stump to a minimum 4.0-inch top d.o.b., or above the place(s) of diameter measurement for any woodland tree with a single 5.0-inch stem or larger or a cumulative (calculated) d.r.c. of at least 5.0 inches to the 1.5-inch ends of all branches. Net cubic-foot volume is calculated as the gross cubic-foot volume in the merchantable portion of a tree, less deductions for cull.

Cull—Portions of a tree that are unusable for industrial wood products because of rot, form, or other defect.

Cutting—A type of silvicultural treatment involving removal of trees (See: Harvest removals) from a stand (e.g., shelterwood cutting, seed tree cutting, overstory removal, selection cutting, thinning smaller diameter trees, salvaging trees from a natural disturbance such as fire or insect infestation).

Cycle length—The period of time required to measure a complete set of panels (synonymous with measurement cycle). See: Panel for further details.

Diameter at breast height (d.b.h.)—The diameter of the bole of a tree measured at breast height (4.5 feet [1.37 m] above ground), measured outside the bark. The point of diameter measurement may vary for abnormally formed trees.

Diameter at root collar (d.r.c.)—The diameter of a tree stem(s) measured at root collar or at the point nearest the ground line (whichever is higher) represents the basal area of the tree, measured outside the bark. For multi-stemmed trees, d.r.c. is calculated from an equation that incorporates the individual stem diameter measurements. The point of diameter measurement may vary for woodland trees with stems that are abnormally formed. With the exception of seedlings, woodland stems qualifying for measurement must be at least 1.0 inch in diameter or larger and at least 1.0 foot in length.

Diameter class—A grouping of tree diameters (d.b.h. or d.r.c.) into classes of a specified range. Diameter classes are commonly in 2-inch (5 cm) increments, beginning with 2 inches (5 cm). Each class provides a range of values with the class name being the approximate midpoint. For example, the 6-inch class (15-cm class) includes trees 5.0 through 6.9 inches (12.7 cm through 17.5 cm) in diameter, inclusive.

Diameter outside bark (d.o.b.)—Tree diameter measurement inclusive of the outside perimeter of the tree bark. The d.o.b. measurement may be taken at various points on a tree (e.g., breast height, tree top) or log, and is sometimes estimated.

Diversions area—For forest land estimates, this includes land that changed from forest to nonforest land. For timberland estimates, this includes land that changed from timberland to reserved forest land and or other forest land, or nonforest land.

Diversions trees—See: Other removals.

Estimate—A statistic used to describe the population as a whole, based on sampled plots, and developed by a prescribed estimation process.

Estimation—The process of measuring samples and using them to infer the attributes of a population.

Estimation unit—A distinct subpopulation within a given population of interest that has a known area. For each evaluation, the target population may have one estimation unit or multiple non-overlapping estimation units. The sum of the area of all estimation units equals the area of the population. Estimation units are defined as part of the stratification of a population. Each estimation unit is divided into one or many mutually exclusive strata (such as land cover class).

Estimation units are declared for two main reasons. First, it is a subpopulation for which an independent estimate is desired, such as a particular park within a larger population. Second, estimation units are defined whenever there is a difference in sampling intensity between subpopulations. This constrains the difference in precision due to differing sampling intensities to the appropriate subpopulations. Estimates of the population are made by summing the totals and the variances of the totals for each estimation unit using the assumption that each estimation unit is independent.

EVALID—A unique identifier, in the FIA database (FIADB), that represents the population used to produce a type of estimate.

For the traditional FIADB, the EVALID is typically composed of a concatenation of a State code (2 digits), reporting year (last 2 digits), and a numeric code indicating the evaluation type (2 digits). For example, EVALID = 301901 represents the Montana 2019 evaluation for current area and condition-level estimates.

For the Urban FIADB, the EVALID is a short and descriptive name given to an evaluation that functions as a unique identifier (e.g., Houston2017All, Houston2017Curr). This name is an alpha-numeric identifier that typically follows a pattern of Population-Reporting year-Evaluation type.

EVALIDator—An online, publicly accessible FIA data retrieval tool that can be used to produce estimates.

Evaluation—The unique combination of a statistical sample, a target population, and a stratification for the purpose of producing estimates of a certain set of population attributes at a given point in time. The particular population attributes targeted by a given evaluation are a function of the statistical sample. Evaluations are a standard convention used by FIA to package data required to produce such estimates. Evaluations are the primary entity users will engage with during population estimation.

Expansion factor—See: Tree expansion factor.

Federal land—An ownership class of public lands owned by the U.S. Government.

FIA work unit (regional unit)—Any one of four regionally distributed work units of the national FIA program that are coordinated by a National Office in Washington, DC. The four FIA work units are named by the research station in which they reside and are defined as Northern Research Station (NRS), Pacific Northwest Research Station (PNWRS), Rocky Mountain Research Station (RMRS), and Southern Research Station (SRS). NRS was formed from the merger of North Central Research Station (NCRS) and Northeastern Research Station (NERS); some data items still retain these designations. Each FIA work unit is assigned a specific management area and has its own internal set of customers and partners who collaborate in program implementation.

FIADB—An acronym for the Forest Inventory and Analysis Database. The FIADB is a national FIA database, within which data are made publicly available and also used for producing tables and reports. The data contained within the FIADB are for the traditional FIA inventory. A separate FIA database, the Urban FIADB, is for the Urban FIA inventory.

Field plot/field location—A reference to the sample site or plot; an area containing the field location center and all sample points. A plot may sample more than one condition.

The FIA Nationwide Forest Inventory (NFI) annual inventory plot design consists of four 24-foot fixed radius subplots for trees ≥ 5 inches d.b.h./d.r.c., and four 6.8-foot fixed-radius microplots for seedlings and trees ≥ 1 and < 5 inches d.b.h./d.r.c. Four 58.9-foot fixed-radius macroplots are optional.

The FIA urban inventory plot design consists of one 48-foot fixed-radius subplot for trees ≥ 5 inches d.b.h./d.r.c., and four 6.8-foot fixed-radius microplots for seedlings and trees ≥ 1 and < 5 inches d.b.h./d.r.c.

Fixed-radius plot—A circular sample plot of a specified horizontal radius: 1/300 acre = 6.8-foot radius; 1/24 acre = 24.0-foot radius; 1/4 acre = 58.9-foot radius.

Forest industry land—An ownership class of private lands owned by a company or individual(s) operating a primary wood-processing (wood-using) plant.

Forest land—Forest land has at least 10 percent canopy cover of trees of any size, or has had at least 10 percent canopy cover of trees in the past, based on the presence of stumps, snags, or other evidence, and that will be naturally or artificially regenerated. Additionally, the land is not subject to nonforest use(s) that prevent normal tree regeneration and succession, such as regular mowing, intensive grazing, or recreation activities. Forest land includes transition zones, such as areas between heavily forested and nonforested lands that are at least 10 percent canopy cover with trees and forest areas adjacent to urban and built-up lands. Also included are pinyon-juniper and chaparral areas in the West and afforested areas. The minimum area for classification of forest land is 1 acre (0.4 ha) in size and 120 feet (36.6 m) wide measured stem-to-stem from the outer-most edge. Unimproved roads and trails, streams, and clearings in forest areas are classified as forest if less than 120 feet wide. This is a domestic reporting definition. The definition used for international reporting is different; it includes a minimum tree canopy height criterion.

Forest type—A classification of forest land 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 first grouped to 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.

Gross growth—The annual increase in volume of trees 5.0 inches d.b.h. and larger in absence of cutting and mortality. Gross growth includes survivor growth, ingrowth, growth on ingrowth, growth on removals before removal, and growth on mortality prior to death.

Gross volume—Volume including cull volume (rotten and missing wood and form defect).

Growing-stock tree—All live trees of commercial species that meet minimum merchantability standards. In general, these trees have at least one solid 8-foot section, are reasonably free of form defect on the merchantable bole, and at least 34 percent or more of the volume is merchantable. For the California, Oregon, Washington, and Alaska inventories, a 26 percent or more merchantable volume standard is applied, rather than 34 percent or more. Excludes rough or rotten cull trees.

Hardwood trees—Tree species belonging to the botanical subdivision Angiospermae, class Dicotyledonous, usually broad-leaved and deciduous.

Harvest removals—Trees removed from inventory by silvicultural or land clearing activity and not in areas of diversion. Trees may be utilized or not utilized.

Ingrowth—Trees that have reached a minimum size and or quality threshold between measurements.

Inventory year—The year in which a plot was scheduled to be completed. Inventory year may differ from measurement year.

Land—The area of dry land and land temporarily or partly covered by water, such as marshes, swamps, and river flood plains.

Land cover—The dominant vegetation or other kind of material that covers the land surface. A given land cover may have many land uses.

Land use—The classification of a land condition by use or type.

Log grade—A log classification based on external characteristics as indicators of quality or value.

Logging residue/products—The following is a list of logging residue/products:

Bolt—A short piece of pulpwood; a short log.

Coarse residue—Wood material suitable for chipping, such as slabs, edgings, and trim.

Fiber products—Products derived from wood and bark residues, such as pulp, composition board products, and wood chips for export.

Fine residue—Wood material unsuitable for chipping, such as sawdust and shavings.

Industrial wood—All commercial roundwood products, excluding fuelwood.

Logging residue—The unused portions of trees cut or destroyed during logging operations and left in the woods.

Mill or plant residue—Wood material from mills or other primary manufacturing plants that is not used for the mill's or plant's primary products. Mill or plant residue includes bark, slabs, edgings, trimmings, miscuts, sawdust, and shavings. Much of the mill and plant residue is used as fuel and as the raw material for such products as pulp, palletized fuel, fiberwood, mulch, and animal bedding.

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

Residues—Bark and woody materials that are generated in primary wood-processing (wood-using) mills when roundwood products are converted to other products. Examples are slabs, edgings, trimmings, miscuts, sawdust, shavings, veneer cores and clippings, and pulp screenings. Includes bark residues and wood residues (both coarse and fine materials) but excludes logging residues. See: Logging residue/products.

Roundwood—Logs, bolts, or other round sections cut from trees.

Veneer log—A roundwood product from which veneer is sliced or sawn and that usually meets certain standards of minimum diameter and length and maximum defect.

Mapped-plot design—A sampling technique that identifies (delineates or maps) and separately classifies distinct “conditions” on the field location sample area. Each condition must meet minimum size requirements. At the most basic level, condition class delineations include forest land, nonforest land, and water. Forest land conditions can be further subdivided into separate condition classes if there are distinct variations in reserved status, owner group, forest type, stand-size class, stand origin, and stand density, given that each distinct area meets minimum size requirements.

Measurement quality objectives

(MQOs)—Specific objectives that define the range of precision that is allowable for any given field measurement. These data quality goals are developed from knowledge of measurement processes in forestry and forest ecology. MQOs generally consist of two parts: a compliance standard and a measurement tolerance.

Measurement year—The measurement year of a plot visit. Measurement year may differ from inventory year.

Merchantable biomass—Biomass of wood in the merchantable bole.

Merchantable bole—See: Merchantable portion.

Merchantable portion—For trees measured at d.b.h. and 5.0 inches d.b.h. and larger, the merchantable portion (or “merchantable bole”) includes the part of the tree bole from a 1.0-foot stump to a 4.0-inch top (d.o.b.). For trees measured at d.r.c., the merchantable portion includes all qualifying segments above the place(s) of diameter measurement for any tree with a single 5.0-inch stem or larger or a cumulative (calculated) d.r.c. of at least 5.0 inches to the 1.5-inch ends of all branches; sections below the place(s) of diameter measurement are not included. Qualifying segments are stems or branches that are a minimum of 1.0 foot in length and at least 1.0 inch in diameter; portions of stems or branches smaller than 1.0 inch in diameter, such as branch tips, are not included in the merchantable portion of the tree.

Merchantable volume—Net volume in the merchantable bole.

Microplot—For the FIA national plot design, a circular, fixed-radius plot with a radius of 6.8 feet (0.003 acre) on which trees 1.0–4.9 inches in diameter (d.b.h./d.r.c.) are measured. The FIA national plot design consists of four subplots. Within each subplot is a nested microplot. See: Subplot.

Mortality—Trees that died from natural causes and are not in areas of diversion.

National Forest System (NFS) lands—Public lands administered by the U.S. Forest Service, such as national forests, national grasslands, and some national recreation areas.

National Park lands—Public lands administered by the United States Department of the Interior (USDI) National Park Service, such as national parks, national monuments, national historic sites (such as national memorials

and national battlefields), and some national recreation areas.

Nationwide Forest Inventory (NFI)—A national network of permanent plots that are remeasured every 5-10 years depending on location. Land use information is collected on all plots, with additional site and tree (live and standing dead) data collected on plot areas having forest land use present.

Net change—Net growth minus removals.

Net growth—Gross growth minus mortality.

Net volume—Volume excluding cull volume (rotten and missing wood and form defect).

Noncensus water—Bodies of water from 1 to 4.5 acres in size and water courses from 30 feet to 200 feet in width.

Noncommercial species—Tree species of typically small size, poor form, or inferior quality, which normally do not develop into trees suitable for industrial wood products.

Nonforest land—Land that does not support, or has never supported, forests, and lands formerly forested where tree regeneration is precluded by development for other uses. Includes areas used for crops, improved pasture, residential areas, city parks, improved roads of any width and adjoining rights-of-way, power line clearings of any width. If intermingled in forest areas, unimproved roads and nonforest strips must be more than 120 feet (36.6 m) wide, and clearings, etc., more than 1 acre (0.4 ha) in size, to qualify as nonforest land.

Nonindustrial private—An ownership class of private lands where the owner does not operate wood-processing (wood-using) plants.

Nonsampled (nonresponse)—A plot or condition is nonsampled when data are not collected on it for reasons such as the following: access was denied by a landowner or manager, the area is hazardous to access, the plot is in the

wrong location, or the plot visit was skipped with the intent to visit the plot in another inventory year. The statistical term for “nonsampled” is “nonresponse.”

Nonstocked areas—Timberland less than 10 percent stocked with all live trees.

Nonstocked stand—A formerly stocked stand that currently has less than 10 percent stocking but has the potential to again become 10 percent stocked. For example, recently harvested, burned, or windthrow-damaged areas.

Other Federal lands—Federal land other than national forests. These include lands administered by the USDI Bureau of Land Management, USDI National Park Service, USDI Fish and Wildlife Service, Department of Defense, Department of Energy, Army Corps of Engineers, and military bases.

Other forest land—Forest land other than timberland and reserved forest land. It includes available and reserved low-productivity forest land, which is incapable of producing 20 cubic feet of growing stock per acre annually under natural conditions because of adverse site conditions such as sterile soil, dry climate, poor drainage, high elevation, steepness, or rockiness.

Other public lands—Public lands administered by agencies other than the U.S. Forest Service. Includes lands administered by other Federal, State, county, and local government agencies, including lands leased by these agencies for more than 50 years.

Other removals (diversion removals)—Any trees that have survived or died in areas of diversion. Other removals includes live and dead trees.

Owner group—A variable that identifies broad categories of ownership. FIA recognizes four owner groups: Forest Service, Other Federal, State and Local Government, and Private.

Ownership—A legal entity having control of a parcel or group of parcels of land. An ownership may be an individual; a combination of persons; a legal entity such as corporation, partnership, club, or trust; or a public agency.

Panel—A sample in which the same elements are scheduled to be measured during the same inventory year. For the traditional FIA inventory, FIA typically divides plots into five panels (NRS and SRS) or ten panels (PNWRS and RMRS) that can be used to independently sample the population.

Partners—States, U.S. Forest Service regions, etc., which partially, or completely, fund portions of the FIA program.

Periodic survey (periodic inventory or periodic sample design)—A non-continuous inventory system whereby all plots within an estimation unit (typically a State or management unit) are measured over a short time frame (1 to 3 years), and are remeasured only periodically, often with many years between remeasurements. This technique was commonly implemented by FIA in the past. However, it is no longer the national plot design used for the traditional FIA inventory.

Plot (plot design)—For the traditional FIA inventory, the national plot design consists of four 24-foot fixed-radius subplots for trees ≥ 5 inches d.b.h., and four 6.8-foot fixed-radius microplots for seedlings and trees ≥ 1 and < 5 inches d.b.h. Subplot 1 is the center plot, and subplots 2, 3, and 4 are located 120.0 feet, horizontal, at azimuths of 360, 120, and 240, respectively. The microplot center is 12 feet east of the subplot center. Four 58.9-foot fixed-radius macroplots are optional. A plot may sample more than one condition.

Plot area expansion factor—The area, in acres, that a stratum represents divided by the number of sampled plots in that stratum. The plot area expansion factor is used to scale plot-level data to population-level estimates.

Plot status—A classification that describes the sampling status of the plot. For the traditional FIA inventory, all plots are assigned one of the following classifications: (1) sampled - at least one accessible forest land condition present on plot, (2) sampled - no accessible forest land condition present on plot, and (3) nonsampled.

Poletimber-size trees—For trees measured at d.b.h., softwoods 5.0 to 8.9 inches d.b.h. and hardwoods 5.0 to 10.9 inches d.b.h. For trees measured at d.r.c., all live trees 5.0 to 8.9 inches d.r.c.

Population—A defined geographic area for which estimates of population attributes are desired.

Primary wood-processing (wood-using) mill—A mill that processes roundwood products into a primary wood product, such as a sawmill that processes saw-logs into lumber or a pulp mill that processes pulpwood into wood pulp.

Private lands—All lands not owned or managed by a Federal, State, or other public entity, including lands owned by corporations, trusts, or individuals, as well as Tribal lands.

Productive forest land—Forest land capable of producing 20 cubic feet per acre per year of wood from trees classified as timber species (See: Timber species) and designated as a timber forest type.

Productivity—The potential yield capability of a stand calculated as a function of site index (expressed in terms of cubic-foot growth per acre per year at age of culmination of mean annual increment). Productivity values for forest land provide an indication of biological potential. Timberland stands are classified by the potential net annual growth attainable in fully stocked natural stands. For FIA reporting, productivity class is an attribute that groups stand productivity values into categories of a specified range. Productivity is sometimes referred to as “yield” or “mean annual increment.”

Productivity class—A classification of forest land in terms of potential annual cubic-foot volume growth per acre at culmination of mean annual increment in fully stocked natural stands.

Quality assessment (QA)—Evaluation of independent observations to determine whether measurement quality objectives (MQOs) are being met. Note: The acronym QA is used to indicate quality assurance and/or quality assessment.

Quality assurance (QA)—The total integrated program for ensuring that the uncertainties inherent in FIA data are known and do not exceed acceptable magnitudes, within a stated level of confidence. Quality assurance encompasses the plans, specifications, and policies affecting the collection, processing, and reporting of data. It is the system of activities designed to provide program managers and project leaders with independent assurance that total system quality control is being effectively implemented. Note: The acronym QA is used to indicate quality assurance and/or quality assessment.

Quality control (QC)—The routine application of prescribed field and laboratory procedures (e.g., random check cruising, periodic calibration, instrument maintenance, use of certified standards) to reduce random and systematic errors and ensure that data are generated within known and acceptable performance limits. Quality control also ensures the use of qualified personnel; reliable equipment and supplies; training of personnel; good field and laboratory practices; and strict adherence to standard operating procedures.

Ratio estimate—An estimate that is a value divided by another value. Ratio estimates use a basic estimate (See: Basic estimate) and applies a second attribute as a denominator. A common denominator is “area.” Ratio estimates help to show relative differences and can be interpreted as “how many per unit.”

Regeneration status—A stand descriptor that indicates whether a stand has been naturally or artificially regenerated. Regeneration status is either natural, with no clear evidence of planting or seeding, or artificial, having clear evidence of planting or seeding.

Regional attributes/variables—Attributes that are only collected by a single FIA work unit or that are collected using alternative methods that are defined by the region.

Regional unit—See: FIA work unit.

Removals—The net volume of sound (growing-stock) trees removed from the inventory by harvesting or other cultural operations (such as timber-stand improvement), by land clearing, or by changes in land use (such as a wilderness designation).

Reserved land—Land withdrawn from management for production of wood products through statute or administrative designation. Examples include designated Federal wilderness areas, national parks and monuments, and most State parks.

Reversion area—For forest land estimates, this includes land that changed from nonforest land to forest land. For timberland estimates, this includes land that changed from reserved forest land and or other forest land, or nonforest land to timberland.

Reversion trees—Trees in areas of reversion.

Rotten cull tree—All live trees with 67 percent or more of the merchantable volume cull, and more than half of this cull is due to rotten or missing cubic-foot volume loss. California,

Oregon, Washington, and Alaska inventories use a 75 percent cutoff. For dead trees, this classification indicates that the tree is nonsalvable (not sound).

Rough cull tree—All live trees that do not now, or prospectively, have at least one solid 8-foot section, reasonably free of form defect on the merchantable bole, or have 67 percent or more of the merchantable volume cull; and more than half of this cull is due to sound dead wood cubic-foot loss or severe form defect volume loss. For the California, Oregon, Washington, and Alaska inventories, 75 percent or more cull, rather than 67 percent or more cull, applies. This class also contains all trees of noncommercial species. It also contains the following species groups: woodland softwoods, woodland hardwoods, and eastern noncommercial hardwoods. For dead trees, this classification indicates that the tree is salvable (sound).

Salvable dead tree—A downed or standing dead tree considered currently or potentially merchantable by regional standards.

Sample—A subset of a larger population that is taken for measurement to generate population estimates.

Sample design—The framework for the selection of a survey sample from a population of interest. Characteristics of a sample design include the definition of the population and sample unit (in FIA, these are typically a State and a plot, respectively), the sample size, and the sampling strategy (e.g., simple random sample, systematic sample). Sample designs are selected to meet specific precision targets for a given attribute. FIA's sample design is semi-systematic, using a random sample applied to a systematic hexagonal grid, with plots typically measured in 5–10-year measurement cycles.

Sample tree—See: Tally tree species.

Sampling error—A statistical term used to describe the accuracy of the inventory estimates. Expressed on a percentage basis to enable comparisons between the precision of different

estimates. Sampling errors are computed by dividing the estimate into the square root of its variance.

Sampling unit—The basic unit of selection and observation.

For the traditional FIA inventory, all FIA work units use the center point of a 4-point cluster of subplots as the primary sample unit for point-based, plot-level observations. The collective area of the 4 subplots is the sample unit for inferring population attributes such as area and volume.

For FIAs TPO survey, active primary wood processing mills are the primary sample unit, based on roundwood type consumed.

Saplings—Live trees 1.0 to 4.9 inches (2.5-12.5 cm) in diameter (d.b.h./d.r.c.).

Sawlog—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.

Sawlog portion—The part of the bole of sawtimber-size trees between a 1.0-foot stump and the sawlog top.

Sawlog top—The point on the bole of sawtimber-size trees above which a sawlog cannot be produced. The minimum sawlog top is 7.0 inches d.o.b. (diameter outside of bark) for softwoods, and 9.0 inches d.o.b. for hardwoods.

Sawlog volume (sawtimber volume)—See: Sawtimber volume.

Sawtimber tree—A live tree of commercial species containing at least a 12-foot sawlog or two noncontiguous sawlogs 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 d.b.h.

Sawtimber volume—Net volume of the sawlog portion of live sawtimber in board feet, International 1/4-inch Rule (unless specified otherwise), from stump to a minimum 7.0 inches top d.o.b. for softwoods and a minimum 9.0 inches top d.o.b. for hardwoods.

Sawtimber-size tree—Trees larger than the poletimber-size class.

Seedlings—Live trees smaller than 1.0-inch (2.5 cm) d.b.h./d.r.c. that are at least 6 inches (15.2 cm) in height for softwoods and 12 inches (30.5 cm) in height for hardwoods.

Short ton—A unit of weight equal to 2,000 pounds.

Site index—A measure of forest productivity for a timberland tree/stand. Expressed in terms of the expected height (in feet) of trees on the site at an index age, which is typically 25 or 50 years (or 80 years for some hardwood species, such as quaking aspen and cottonwood). Calculated from height-to-age equations.

Site tree—A tree used to provide an index of site quality. Timber species selected for site index calculations must meet specified criteria with regards to age, diameter, crown class, and damage.

Snag—A standing dead tree. For tally qualifications, see: Standing dead tree.

Softwood trees—Coniferous trees, usually evergreen, having needles or scale-like leaves.

Sound dead—The net volume in salvable dead trees.

Sound volume—Volume excluding rotten or missing wood.

Stakeholders—Scientists and peers that actively collaborate with the FIA program and use FIA data.

Stand—A community of trees on a minimum of 1 acre (0.4 ha) that can be distinguished from adjacent communities due to similarities and uniformity in tree and site characteristics, such as age-class distribution, species composition, spatial arrangement, structure, etc.

Stand age—A stand descriptor that indicates the average age of the live dominant and codominant trees in the predominant stand-size class of a condition.

Stand density—A relative measure that quantifies the relationship between trees per acre, stand basal area, average stand diameter, and stocking of a forested stand.

Stand density index (SDI)—A widely used measure developed by Reineke (1933) and is an index that expresses relative stand density based on a comparison of measured stand values with some standard condition; relative stand density is the ratio, proportion, or percent of absolute stand density to a reference level defined by some standard level of competition. For FIA reporting, the SDI for a site is usually presented as a percentage of the maximum SDI for the forest type. Site SDI values are sometimes grouped into SDI classes of a specified percentage range. Maximum SDI values vary by species and region.

Standing dead tree—For timber species, a standing dead tree must be at least 1.0-inch d.b.h., have a bole that has an unbroken actual length of at least 4.5 feet, and lean less than 45 degrees from vertical (as measured from the base of the tree to 4.5 feet). For woodland species with single stems, a standing dead tree must be at least 1.0-inch d.r.c., be at least 1.0 foot in unbroken actual length, and lean less than 45 degrees from vertical. For woodland species with multiple stems, a tree is considered down if more than two-thirds of the volume is no longer attached or upright; cut and removed volume is not considered. Portions of dead trees that are more than 50 percent separated are considered severed and are included in down woody material (DWM) if they otherwise meet DWM tally criteria.

Stand-size class—A classification of forest land based on the predominant diameter size of live trees presently forming the plurality of live-tree stocking. Classes are defined as follows:

Sawtimber stand (large-tree stand)—A stand at least 10 percent stocked with live trees, in which half or more of the total stocking is from live trees 5.0 inches or larger in diameter, and with sawtimber (large tree) stocking equal to or greater than poletimber (medium tree) stocking.

Poletimber stand (medium-tree stand)—A stand at least 10 percent stocked with live trees, in which half or more of the total stocking is from live trees 5.0 inches or larger in diameter, and with poletimber (medium tree) stocking exceeding sawtimber (large tree) stocking.

Sapling/seedling stand—A stand at least 10 percent stocked with live trees, in which half or more of the total stocking is from live trees less than 5.0 inches in diameter.

Nonstocked stand—A formerly stocked stand that currently has less than 10 percent stocking but has the potential to again become 10 percent stocked. For example, recently harvested, burned, or windthrow-damaged areas.

State land—An ownership class of public lands owned by States or lands leased by States for more than 50 years.

Stem bark volume—Cubic-foot volume of bark in the central stem of timber species ≥ 5.0 inches d.b.h., from a 1-foot stump to a minimum 4-inch top diameter, or to where the central stem breaks into limbs all of which are < 4.0 inches in diameter. Stem bark volume is available as sound, net, and gross volume for live and standing dead trees

Stem wood volume (bole wood volume)—Cubic-foot volume of wood in the central stem of timber species ≥ 5.0 inches d.b.h., from a 1-foot stump to a minimum 4-inch top

diameter, or to where the central stem breaks into limbs all of which are <4.0 inches in diameter. Stem wood volume is available as sound, net, and gross volume for live and standing dead trees.

Stem-top bark volume—Cubic-foot volume of bark in the non-merchantable top of timber species ≥ 5.0 inches d.b.h. The top is the portion of the stem above the merchantable bole (i.e., above the 4-inch top diameter). Stem-top bark volume is available as sound and gross volume for live and standing dead trees.

Stem-top wood volume—Cubic-foot volume of wood in the non-merchantable top of timber species ≥ 5.0 inches d.b.h. The top is the portion of the stem above the merchantable bole (i.e., above the 4-inch top diameter). Stem-top wood volume is available as sound and gross volume for live and standing dead trees.

Stocking—An expression of the extent to which growing space is effectively utilized by live trees.

Tree-level stocking—The density value assigned to a sampled tree (usually in terms of numbers of trees or basal area per acre), expressed as a percent of the total tree density required to fully utilize the growth potential of the land.

Stand-level stocking—The sum of the stocking values of all trees sampled.

Stratification—A statistical tool or sampling strategy depending on the method implemented. As a statistical tool, stratification is the process of dividing members of the population into homogeneous subgroups (strata) to reduce variance among the attributes of interest. See: Post-stratified estimation.

Stump bark volume—Cubic-foot volume of bark in the stump of timber species ≥ 5.0 inches d.b.h. The stump is that portion of the tree from the ground line to the bottom of the merchantable bole (i.e., below 1 foot). Stump bark volume is available as sound and gross volume for live and standing dead trees.

Stump wood volume—Cubic-foot volume of wood in the stump of timber species ≥ 5.0 inches d.b.h. The stump is that portion of the tree from the ground line to the bottom of the merchantable bole (i.e., below 1 foot). Stump wood volume is available as sound and gross volume for live and standing dead trees.

Subplot—For the FIA national plot design, a circular, fixed-radius plot with a radius of 24.0 feet (1/24 acre) on which trees 5.0 inches and greater in diameter (d.b.h./d.r.c.) are measured. The FIA national plot design consists of four subplots. Within each subplot is a nested microplot. See: Microplot.

Subpopulation—A subdivision of a population for which the area and strata weights are known. Subpopulations are not necessarily a subset of one single population. Subpopulations in FIA are generally estimation units, which are defined by each FIA work unit.

Survivor growth—Change in the quantity of trees that have remained alive between measurements and maintained minimum size and quality thresholds.

Survivor trees—Trees that have remained alive between measurements and maintained minimum size and quality thresholds.

Tally tree species (sample tree)—Tree species listed on the FIA Master Tree Species List (available from an external Box site: <https://usfs-public.box.com/v/FIA-TreeSpeciesList>).

Timber products output (TPO)—All roundwood products from logging operations (See: Logging residue/products) and byproducts of primary wood processing mills. Roundwood products include logs, bolts, or other round sections cut from growing-stock trees, cull trees, salvable dead trees, noncommercial species, sapling-size trees, and limbwood. Byproducts from primary wood processing mills include slabs, edging, trimmings, miscuts, sawdust, shavings, veneer cores and clippings, and

screenings of pulpmills that are used as pulpwood chips or other products. See: Logging residue/products.

Timber species—Tally tree species that are measured for diameter at breast height (d.b.h.).

Timberland—Unreserved forest land capable of producing 20 cubic feet per acre per year of wood from trees classified as timber species (See: Timber species) and designated as a timber forest type.

Timber-stand improvement—A term comprising all intermediate cuttings or treatments, such as thinning, pruning, release cutting, girdling, weeding, or poisoning, made to improve the composition, health, and growth of the remaining trees in the stand.

Total stem—For timber species, this is the central stem from ground line to the tree tip. For woodland species, this is the portion of the tree from the d.r.c. measurement point(s) to a 1.5-inch top diameter, including branches that are at least 1.5 inches in diameter along the length of the branch.

Total-stem bark volume—Cubic-foot volume of bark in the central stem of timber species ≥ 1.0 -inch d.b.h., from ground line to the tree tip. Calculated for live and standing dead trees. Total-stem bark volume is available as sound and gross volume for live and standing dead trees.

Total-stem wood volume—For timber species ≥ 1.0 -inch d.b.h., this is the cubic-foot volume of wood in the central stem from ground line to the tree tip. For woodland species ≥ 1.5 inches d.r.c., this is the cubic-foot volume of wood and bark from the d.r.c. measurement point(s) to a 1.5-inch top diameter, including branches that are at least 1.5 inches in diameter along the length of the branch. Total-stem wood volume is available as sound and gross volume for live and standing dead trees.

Tree—A woody perennial plant, typically large, with a single well-defined stem carrying a more or less definite crown; sometimes defined as attaining a minimum diameter of 3 inches (7.6) and a minimum height of 15 ft (4.6 m) at maturity. See: Tally tree species.

Tree density—A relative classification based on the number of stems per unit area, basal area, tree cover, or stocking of all live trees, seedlings, and saplings in the condition that are not overtopped.

Tree expansion factor—A factor used to scale each sample tree on a plot to a per-unit basis (e.g., trees per acre). The expansion factor used is dependent on the plot design. For fixed-plot designs, scaling is straightforward, with the number of trees per acre (TPA) represented by one tree equal to the inverse of the plot area in acres. For the FIA national plot design, TPA expansion factors are as follows:

Subplot TPA = 6.018046; each tree (5.0 inches and greater in diameter) sampled on all four 24.0-foot radius subplots represents approximately 6 trees per acre.

Microplot TPA = 74.965282; each sapling (1.0–4.9 inches in diameter) sampled on all four 6.8-foot radius microplots represents approximately 75 trees per acre.

Macroplot TPA = 0.999188; each tree (5.0 inches and greater in diameter) sampled on all four 58.9-foot radius macroplots represents approximately 1 tree per acre.

Tree top—The wood of a tree above the merchantable height (or above the point on the stem 4.0 inches diameter outside bark [d.o.b.]).

Tree-size class—A classification of trees based on diameter at breast height, including sawtimber trees, poletimber trees, saplings, and seedlings.

Unreserved forest land—Forest land not withdrawn from management for production of wood products through statute or administrative designation.

Urban forest land—Land that would otherwise meet the criteria for timberland but is in an urban-suburban area surrounded by commercial, industrial, or residential development and not likely to be managed for the production of industrial wood products on a continuing basis. Wood removed would be for land clearing, fuelwood, or esthetic purposes. Such forest land may be associated with industrial, commercial, residential subdivision, industrial parks, golf course perimeters, airport buffer strips, and public urban parks that qualify as forest land.

User groups—Organizations that routinely use FIA data and regularly meet with FIA staff to discuss the evolving needs of data users. User groups include Federal agencies, State forestry departments, Native American tribes, academic partners/universities, and forest and timber industry groups.

Variable-radius plot—A point-based plot design, where the decision to measure each tree (i.e., whether the tree is “in”) is based on the size of the tree relative to a basal area factor (BAF) on a prism angle gauge and its distance from the center point. In variable-radius plot designs, the per-acre expansion factor is determined by the diameter of the tree, the basal area factor (BAF, or prism), and the number of subplots used in the plot design (usually 5, 7, or 10). Variable-radius plots were commonly used in FIA’s older periodic inventories, in contrast to FIA’s fixed-radius plot design currently in use, which measures every tree within a fixed radius, regardless of size or proximity to the center point.

Volume—Amount of space occupied by the form of a tree in cubic-foot or board-foot volume.

Weight—The weight of wood and bark. Weight can be expressed in terms of oven-dry (approximately 12 percent moisture content) or green weight.

Wilderness area—An area of undeveloped land currently included in the Wilderness System,

managed to preserve its natural conditions, and retain its primeval character and influence.

Woodland species—Tally tree species that are measured for diameter at root collar (d.r.c.). Most woodland trees are extremely variable in form. Woodland species are identified with a “w” under the “Woodland” column on the FIA Master Tree Species List (available from an external Box site: <https://usfs-public.box.com/v/FIA-TreeSpeciesList>).

APPENDIX 1

Table A1.1—Tree species recorded in the Forest Inventory and Analysis inventory of Mississippi, 2022

Common name	Species name	Common name	Species name
American basswood	<i>Tilia americana</i>	Cockspur hawthorn	<i>Crataegus crus-galli</i>
American beech	<i>Fagus grandifolia</i>	Common buckthorn	<i>Rhamnus cathartica</i>
American elm	<i>Ulmus americana</i>	Common persimmon	<i>Diospyros virginiana</i>
American holly	<i>Ilex opaca</i>	Common serviceberry	<i>Amelanchier arborea</i>
American hornbeam	<i>Carpinus caroliniana</i>	Cucumbertree	<i>Magnolia acuminata</i>
American plum	<i>Prunus americana</i>	Delta post oak	<i>Quercus similis</i>
American sycamore	<i>Platanus occidentalis</i>	Durand oak	<i>Quercus sinuata sinuata</i>
Atlantic white-cedar	<i>Chamaecyparis thyoides</i>	Eastern cottonwood	<i>Populus deltoides</i>
Baldcypress	<i>Taxodium distichum</i>	Eastern hophornbeam	<i>Ostrya virginiana</i>
Bigleaf magnolia	<i>Magnolia macrophylla</i>	Eastern redbud	<i>Cercis canadensis</i>
Bitternut hickory	<i>Carya cordiformis</i>	Eastern redcedar	<i>Juniperus virginiana</i>
Black cherry	<i>Prunus serotina</i>	Florida maple	<i>Acer barbatum</i>
Black hickory	<i>Carya texana</i>	Flowering dogwood	<i>Cornus florida</i>
Black locust	<i>Robinia pseudoacacia</i>	Green ash	<i>Fraxinus pennsylvanica</i>
Black oak	<i>Quercus velutina</i>	Gum bumelia	<i>Sideroxylon lanuginosum</i>
Black walnut	<i>Juglans nigra</i>	Hackberry	<i>Celtis occidentalis</i>
Black willow	<i>Salix nigra</i>	Hawthorn spp.	<i>Crataegus</i> spp.
Blackgum	<i>Nyssa sylvatica</i>	Honeylocust	<i>Gleditsia triacanthos</i>
Blackjack oak	<i>Quercus marilandica</i>	Kentucky coffeetree	<i>Gymnocladus dioica</i>
Bluejack oak	<i>Quercus incana</i>	Laurel oak	<i>Quercus laurifolia</i>
Boxelder	<i>Acer negundo</i>	Live oak	<i>Quercus virginiana</i>
Callery pear	<i>Pyrus calleryana</i>	Loblolly pine	<i>Pinus taeda</i>
Carolina basswood	<i>Tilia americana caroliniana</i>	Longleaf pine	<i>Pinus palustris</i>
Cedar elm	<i>Ulmus crassifolia</i>	Mimosa	<i>Albizia julibrissin</i>
Cherry laurel	<i>Prunus laurocerasus</i>	Mockernut hickory	<i>Carya alba</i>
Cherrybark oak	<i>Quercus pagoda</i>	Northern red oak	<i>Quercus rubra</i>
Chestnut oak	<i>Quercus prinus</i>	Nutmeg hickory	<i>Carya myristiciformis</i>
Chinaberrytree	<i>Melia azedarach</i>	Nuttall oak	<i>Quercus texana</i>
Chinese chestnut	<i>Castanea mollissima</i>	Ohio buckeye	<i>Aesculus glabra</i>
Chinese tallow	<i>Triadica sebifera</i>	Osage-orange	<i>Maclura pomifera</i>
Chinkapin oak	<i>Quercus muehlenbergii</i>	Other or unknown live tree	Tree unknown
Chokecherry	<i>Prunus virginiana</i>	Overcup oak	<i>Quercus lyrata</i>

Continued on next page.

Table A1.1 (cont.)—Tree species recorded in the Forest Inventory and Analysis inventory of Mississippi, 2022

Common name	Species name	Common name	Species name
Paper mulberry	<i>Broussonetia papyrifera</i>	Sugarberry	<i>Celtis laevigata</i>
Paulownia	<i>Paulownia tomentosa</i>	Swamp chestnut oak	<i>Quercus michauxii</i>
Pawpaw	<i>Asimina triloba</i>	Swamp tupelo	<i>Nyssa biflora</i>
Pecan	<i>Carya illinoensis</i>	Sweetbay	<i>Magnolia virginiana</i>
Pignut hickory	<i>Carya glabra</i>	Sweetgum	<i>Liquidambar styraciflua</i>
Planertree	<i>Planera aquatica</i>	Tungoil tree	<i>Vernicia fordii</i>
Pondcypress	<i>Taxodium ascendens</i>	Turkey oak	<i>Quercus laevis</i>
Post oak	<i>Quercus stellata</i>	Two-wing silverbell	<i>Halesia diptera</i>
Prunus	<i>Prunus</i> spp.	Virginia pine	<i>Pinus virginiana</i>
Red hickory	<i>Carya ovalis</i>	Water hickory	<i>Carya aquatica</i>
Red maple	<i>Acer rubrum</i>	Water oak	<i>Quercus nigra</i>
Red mulberry	<i>Morus rubra</i>	Water tupelo	<i>Nyssa aquatica</i>
Redbay	<i>Persea borbonia</i>	Waterlocust	<i>Gleditsia aquatica</i>
River birch	<i>Betula nigra</i>	White ash	<i>Fraxinus americana</i>
Sand hickory	<i>Carya pallida</i>	White mulberry	<i>Morus alba</i>
Sassafras	<i>Sassafras albidum</i>	White oak	<i>Quercus alba</i>
Sawtooth oak	<i>Quercus acutissima</i>	Willow oak	<i>Quercus phellos</i>
Scarlet oak	<i>Quercus coccinea</i>	Winged elm	<i>Ulmus alata</i>
Serviceberry spp.	<i>Amelanchier</i> spp.	Yellow-poplar	<i>Liriodendron tulipifera</i>
Shagbark hickory	<i>Carya ovata</i>		
Shellbark hickory	<i>Carya laciniosa</i>		
Shortleaf pine	<i>Pinus echinata</i>		
Shumard oak	<i>Quercus shumardii</i>		
Silver maple	<i>Acer saccharinum</i>		
Slash pine	<i>Pinus elliottii</i>		
Slippery elm	<i>Ulmus rubra</i>		
Sourwood	<i>Oxydendrum arboreum</i>		
Southern catalpa	<i>Catalpa bignonioides</i>		
Southern crab apple	<i>Malus angustifolia</i>		
Southern magnolia	<i>Magnolia grandiflora</i>		
Southern red oak	<i>Quercus falcata</i>		
Southern shagbark hickory	<i>Carya carolinae-septentrionalis</i>		
Spruce pine	<i>Pinus glabra</i>		

APPENDIX 2—SUPPLEMENTAL TABLES

Table A2.1—Area of sampled land and water by survey unit and land status, Mississippi, 2022

Survey unit	Total area	All forest	Unreserved forest land			Reserved forest land			Nonforest land	Census water
			Total	Timberland	Unproductive	Total	Productive	Unproductive		
thousand acres										
Central	5,924.4	4,441.2	4,421.4	4,421.4	0.0	19.8	19.8	0.0	1,418.8	64.4
Delta	5,593.5	1,856.0	1,762.8	1,762.8	0.0	93.2	93.2	0.0	3,569.9	167.6
North	8,410.4	5,209.5	5,186.2	5,181.8	4.4	23.3	23.3	0.0	3,027.2	173.6
South	6,668.7	4,457.7	4,434.3	4,434.3	0.0	23.3	23.3	0.0	1,636.3	574.8
Southwest	4,404.9	3,242.1	3,208.6	3,208.6	0.0	33.5	33.5	0.0	1,110.0	52.7
All survey units	31,001.9	19,206.5	19,013.3	19,008.9	4.4	193.1	193.1	0.0	10,762.2	1,033.1

Numbers in rows and columns may not sum to totals due to rounding.
 0.0 = no sample for the cell or a value between 0.00 and 0.05.

Table A2.2—Area of forest land by ownership class and land status, Mississippi, 2022

Ownership class	All forest land	Unreserved forest land			Reserved forest land		
		Total	Timberland	Unproductive	Total	Productive	Unproductive
thousand acres							
U.S. Forest Service	1,171.3	1,163.5	1,163.5	0.0	7.8	7.8	0.0
Other Federal	504.9	326.0	326.0	0.0	178.9	178.9	0.0
State and local government	510.8	504.3	504.3	0.0	6.6	6.6	0.0
Forest industry	1,094.5	1,094.5	1,094.5	0.0	0.0	0.0	0.0
Nonindustrial private	15,925.0	15,925.0	15,920.6	4.4	0.0	0.0	0.0
All classes	19,206.5	19,013.3	19,008.8	4.4	193.2	193.2	0.0

Numbers in rows and columns may not sum to totals due to rounding.
 0.0 = no sample for the cell or a value between 0.00 and 0.05.

MISSISSIPPI'S FORESTS, 2022

Table A2.3—Area of forest land by forest-type group and site productivity class, Mississippi, 2022

Forest type	Forest-type group	Site productivity class (cubic feet/acre/year)							
		All classes	0–19	20–49	50–84	85–119	120–164	165–224	225+
thousand acres									
Softwood types	Longleaf/slash pine	845.3	0.0	74.8	337.1	367.2	50.1	6.2	10.0
	Loblolly/shortleaf pine	8,057.7	0.0	58.9	1,325.9	4,228.4	2,159.2	268.4	16.9
	Other eastern softwoods	48.8	0.0	11.2	18.4	11.5	0.0	7.7	0.0
	Total softwood	8,951.8	0.0	145.0	1,681.3	4,607.1	2,209.3	282.3	26.8
Hardwood types	Oak/pine	1,781.3	0.0	40.5	390.4	929.4	364.4	50.4	6.2
	Oak/hickory	4,317.5	0.0	46.0	1,149.0	2,290.9	678.0	142.6	10.9
	Oak/gum/cypress	2,609.6	0.0	68.2	789.8	1,321.8	321.6	74.0	34.2
	Elm/ash/cottonwood	1,129.8	0.0	8.6	349.4	643.6	82.2	24.2	21.9
	Other hardwoods	16.9	0.0	0.0	0.0	9.2	7.7	0.0	0.0
	Exotic hardwoods	75.0	0.0	0.0	26.8	37.6	8.6	2.0	0.0
	Total hardwood	9,930.0	0.0	163.2	2,705.4	5,232.4	1,462.6	293.2	73.1
Nonstocked	Total nonstocked	324.7	4.4	3.1	93.2	171.6	48.4	2.4	1.6
All types	All groups	19,206.5	4.4	311.3	4,479.9	10,011.2	3,720.2	577.9	101.6

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

Table A2.4—Area of forest land by forest-type group and ownership group, Mississippi, 2022

Forest type	Forest-type group	All ownerships	Public ownership			Private ownership	
			U.S. Forest Service	Other Federal	State and local government	Forest industry	Nonindustrial private
thousand acres							
Softwood types	Longleaf/slash pine	845.3	320.0	10.5	49.5	20.1	445.2
	Loblolly/shortleaf pine	8,057.7	387.7	71.6	183.5	706.0	6,708.9
	Other eastern softwoods	48.8	0.0	0.0	0.0	0.0	48.8
	Total softwood	8,951.8	707.7	82.1	233.0	726.1	7,202.9
Hardwood types	Oak/pine	1,781.3	142.8	37.6	49.6	65.7	1,485.5
	Oak/hickory	4,317.5	171.1	59.7	51.1	158.9	3,876.7
	Oak/gum/cypress	2,609.6	113.8	246.5	128.6	84.2	2,036.6
	Elm/ash/cottonwood	1,129.8	32.5	66.5	39.2	44.2	947.4
	Other hardwoods	16.9	1.3	0.0	0.0	1.6	13.9
	Exotic hardwoods	75.0	0.0	6.4	0.0	0.0	68.6
	Total hardwood	9,930.0	461.5	416.7	268.5	354.6	8,428.7
Nonstocked	Total nonstocked	324.7	2.0	6.1	9.4	13.8	293.4
All types	All groups	19,206.5	1,171.3	504.9	510.8	1,094.5	15,925.0

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

MISSISSIPPI'S FORESTS, 2022

Table A2.5—Area of forest land by forest-type group and stand-size class, Mississippi, 2022

		Stand-size class				
Forest type	Forest-type group	All classes	Large diameter	Medium diameter	Small diameter	Nonstocked
		thousand acres				
Softwood types	Longleaf-slash pine	845.3	642.9	138.1	64.3	0.0
	Loblolly-shortleaf pine	8,057.7	5,366.2	1,727.8	963.7	0.0
	Other eastern softwoods	48.8	38.4	9.9	0.5	0.0
	Total softwood	8,951.8	6,047.5	1,875.8	1,028.4	0.0
Hardwood types	Oak-pine	1,781.3	1,116.1	353.4	311.7	0.0
	Oak-hickory	4,317.5	2,678.9	802.5	836.1	0.0
	Oak-gum-cypress	2,609.6	1,677.3	639.1	293.2	0.0
	Elm-ash-cottonwood	1,129.8	756.5	204.1	169.2	0.0
	Other hardwoods	16.9	0.0	7.7	9.2	0.0
	Exotic hardwoods	75.0	1.6	28.0	45.4	0.0
	Total hardwood	9,930.0	6,230.5	2,034.7	1,664.8	0.0
Nonstocked	Total nonstocked	324.7	0.0	0.0	0.0	324.7
All types	All groups	19,206.5	12,278.0	3,910.6	2,693.2	324.7

Numbers in rows and columns may not sum to totals due to rounding.
 0.0 = no sample for the cell or a value between 0.00 and 0.05.

MISSISSIPPI'S FORESTS, 2022

Table A2.6—Area of forest land by forest-type group and stand-age class, Mississippi, 2022

Forest type	Forest-type group	Stand-age class (years)												Non-stocked
		All classes	1–10	11–20	21–30	31–40	41–50	51–60	61–70	71–80	81–90	91–100	101+	
thousand acres														
Softwood types	Longleaf-slash pine	845.3	40.1	63.8	84.9	146.5	111.2	138.1	130.8	91.5	25.3	3.8	9.4	0.0
	Loblolly-shortleaf pine	8,057.7	1,310.2	1,778.6	2,265.8	1,466.7	492.4	233.1	239.1	157.5	65.7	15.7	2.6	30.3
	Other eastern softwoods	48.8	0.0	8.8	7.3	7.6	7.8	17.2	0.0	0.0	0.0	0.0	0.0	0.0
	Total softwood	8,951.8	1,350.3	1,851.2	2,358.0	1,620.8	611.4	388.5	370.0	249.0	90.9	19.5	12.0	30.3
Hardwood types	Oak-pine	1,781.3	240.7	148.5	320.0	302.9	130.5	223.0	214.6	119.7	54.6	17.4	3.0	6.3
	Oak-hickory	4,317.5	499.8	295.3	497.3	489.5	526.9	546.2	665.1	508.5	177.9	53.6	17.3	40.1
	Oak-gum-cypress	2,609.6	84.0	276.9	299.4	290.8	261.1	315.1	357.3	433.3	181.5	76.1	21.4	12.7
	Elm-ash-cottonwood	1,129.8	82.6	106.2	111.5	113.1	104.2	200.5	197.4	160.2	25.1	8.6	6.6	13.8
	Other hardwoods	16.9	0.0	0.0	7.4	3.2	1.5	0.0	0.0	0.0	0.0	0.0	0.0	4.7
	Exotic hardwoods	75.0	37.2	25.2	1.6	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total hardwood	9,930.0	944.4	852.0	1,237.2	1,210.6	1,024.2	1,284.8	1,434.4	1,221.7	439.1	155.7	48.2	77.7
Nonstocked	Total nonstocked	324.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	324.7
All types	All groups	19,206.5	2,294.7	2,703.2	3,595.2	2,831.3	1,635.6	1,673.3	1,804.3	1,470.7	530.0	175.2	60.2	432.7

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

MISSISSIPPI'S FORESTS, 2022

Table A2.7—Area of forest land by forest-type group and stand origin, Mississippi, 2022

Forest type	Forest-type group	Stand origin		
		All stands	Natural regeneration	Artificial regeneration
thousand acres				
Softwood types	Longleaf-slash pine	845.3	650.5	194.8
	Loblolly-shortleaf pine	8,057.7	2,888.8	5,168.8
	Other eastern softwoods	48.8	47.2	1.6
	Total softwood	8,951.8	3,586.6	5,365.2
Hardwood types	Oak-pine	1,781.3	1,557.8	223.5
	Oak-hickory	4,317.5	4,161.1	156.4
	Oak-gum-cypress	2,609.6	2,331.4	278.1
	Elm-ash-cottonwood	1,129.8	1,102.7	27.1
	Other hardwoods	16.9	10.8	6.1
	Exotic hardwoods	75.0	68.8	6.2
	Total hardwood	9,930.0	9,232.6	697.3
Nonstocked	Total nonstocked	324.7	286.8	37.9
All types	All groups	19,206.5	13,106.1	6,100.4

Numbers in rows and columns may not sum to totals due to rounding.

Table A2.8—Area of forest land disturbed annually by forest-type group and disturbance class, Mississippi, 2022

Forest type	Forest-type group ^a	Disturbance class ^b							
		Insects	Disease	Weather	Fire	Domestic animals	Wild animals	Human	Other natural
thousand acres									
Softwood types	Longleaf/slash pine	0.7	0.0	0.6	51.7	0.0	0.0	0.0	0.0
	Loblolly/shortleaf pine	14.9	0.0	8.9	125.8	3.1	3.0	2.3	11.4
	Other eastern softwoods	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
	Total softwood	15.6	0.0	9.5	177.5	3.3	3.0	2.3	11.4
Hardwood types	Oak/pine	0.7	0.0	4.8	14.1	1.2	0.0	0.6	0.0
	Oak/hickory	0.2	0.0	5.9	13.2	9.4	2.1	3.4	0.0
	Oak/gum/cypress	0.0	0.0	26.1	5.5	1.1	1.4	1.1	1.1
	Elm/ash/cottonwood	0.0	0.0	8.5	0.0	0.6	2.3	0.0	0.0
	Other hardwoods	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Exotic hardwoods	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
	Total hardwood	0.9	0.0	45.3	32.8	12.3	7.5	5.2	1.1
Nonstocked	Total nonstocked	0.0	0.0	1.3	1.5	0.3	2.1	0.0	0.7
All types	All groups	16.5	0.0	56.2	211.7	15.9	12.6	7.4	13.2

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Based on past conditions.^b Based on current conditions.

MISSISSIPPI'S FORESTS, 2022

Table A2.9—Area of forest land treated annually by forest-type group and treatment class (cutting), Mississippi, 2022

Forest type	Forest-type group ^a	Treatment class (cutting) ^b						
		All classes	Final harvest	Partial harvest	Seed-tree/ shelterwood harvest	Commercial thinning	Timber stand improvement	Salvage cutting ^c
thousand acres								
Softwood types	Longleaf/slash pine	11.3	5.1	0.0	0.2	4.9	1.1	0.0
	Loblolly/shortleaf pine	381.5	158.8	18.4	1.2	199.7	1.5	1.9
	Other eastern softwoods	0.6	0.6	0.0	0.0	0.0	0.0	0.0
	Total softwood	393.4	164.5	18.4	1.5	204.6	2.6	1.9
Hardwood types	Oak/pine	37.8	21.2	4.9	0.0	10.5	0.9	0.2
	Oak/hickory	44.7	25.0	11.8	0.0	7.4	0.4	0.0
	Oak/gum/cypress	18.5	6.4	7.0	0.0	5.1	0.0	0.0
	Elm/ash/cottonwood	15.0	2.1	10.0	0.0	2.8	0.0	0.0
	Other hardwoods	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Exotic hardwoods	1.2	1.2	0.0	0.0	0.0	0.0	0.0
	Total hardwood	117.1	55.9	33.8	0.0	25.8	1.4	0.2
Nonstocked	Total nonstocked	2.4	1.7	0.0	0.0	0.6	0.0	0.0
All types	All groups	512.9	222.2	52.2	1.5	231.0	4.0	2.1

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Based on past conditions.

^b Based on current conditions.

^c The "salvage cutting" attribute was not collected until the implementation of Southern Research Station Field Guide Manual version 4.0.

MISSISSIPPI'S FORESTS, 2022

Table A2.10—Area of forest land treated annually by forest-type group and treatment class (regeneration), Mississippi, 2022

		Treatment class (regeneration) ^a			
Forest type	Forest-type group ^a	Site preparation	Artificial regeneration	Natural regeneration	Other silvicultural
thousand acres					
Softwood types	Longleaf/slash pine	0.3	2.3	0.3	1.9
	Loblolly/shortleaf pine	39.0	96.9	5.5	9.3
	Other eastern softwoods	0.0	0.0	0.0	0.0
	Total softwood	39.3	99.2	5.8	11.2
Hardwood types	Oak/pine	5.8	12.0	5.6	2.4
	Oak/hickory	8.7	10.4	8.5	2.7
	Oak/gum/cypress	0.0	5.6	0.0	0.7
	Elm/ash/cottonwood	1.1	1.6	0.0	0.0
	Other hardwoods	0.0	0.7	0.0	0.0
	Exotic hardwoods	1.5	1.2	1.3	0.0
	Total hardwood	17.1	31.5	15.4	5.7
Nonstocked	Total nonstocked	2.6	2.7	0.3	0.5
All types	All groups	59.1	133.4	21.5	17.4

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^aBased on current conditions.

MISSISSIPPI'S FORESTS, 2022

Table A2.11a—Number of live trees on forest land by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)								
		All classes	1.0–2.9	3.0–4.9	5.0–6.9	7.0–8.9	9.0–10.9	11.0–12.9	13.0–14.9	15.0–16.9
million trees										
Softwood types	Longleaf and slash pines	193.3	49.3	43.1	26.4	21.8	17.7	13.6	9.4	5.8
	Loblolly and shortleaf pines	2,450.3	602.4	459.2	390.4	361.7	260.0	168.8	97.3	53.9
	Other yellow pines	14.6	6.9	1.4	2.0	1.4	0.8	0.6	0.3	0.3
	Cypress	35.6	8.8	10.7	5.0	2.7	1.9	1.5	1.2	0.8
	Other eastern softwoods	157.1	82.7	38.2	15.7	9.0	5.7	2.7	1.7	0.8
	Total softwood	2,850.8	750.1	552.5	439.4	396.7	286.1	187.2	110.0	61.6
Hardwood types	Select white oaks	289.0	169.3	46.4	23.1	14.1	9.8	6.9	5.5	4.0
	Select red oaks	134.0	67.1	24.4	12.3	7.5	5.4	3.9	2.5	2.3
	Other white oaks	115.0	58.4	18.8	9.7	7.1	5.9	4.3	3.1	2.4
	Other red oaks	1,343.9	868.0	228.8	86.8	53.6	30.0	20.3	15.2	11.7
	Hickory	462.9	329.0	62.2	24.5	15.6	10.7	6.8	4.9	3.3
	Hard maple	19.5	14.9	1.4	1.4	0.7	0.4	0.4	0.1	0.1
	Soft maple	816.3	636.9	116.1	34.2	14.7	7.0	3.6	1.7	0.9
	Beech	79.5	56.8	9.4	5.2	2.0	1.7	1.0	0.8	0.7
	Sweetgum	2,033.1	1,242.6	442.9	164.3	81.9	44.8	24.1	13.7	7.3
	Tupelo and blackgum	504.3	317.1	95.2	34.9	23.0	13.8	8.8	5.0	2.8
	Ash	341.4	217.4	70.1	23.9	11.9	6.3	4.2	2.4	1.8
	Cottonwood and aspen	6.8	2.4	0.9	0.4	0.4	0.5	0.3	0.3	0.4
	Basswood	4.2	1.4	1.9	0.2	0.2	0.1	0.2	0.1	0.0
	Yellow-poplar	174.8	71.4	36.8	19.5	13.2	10.4	7.6	4.8	3.3
	Black walnut	5.0	3.4	0.5	0.3	0.2	0.1	0.2	0.1	0.0
	Other eastern soft hardwoods	1,542.2	1,033.7	270.8	102.8	55.7	32.1	18.4	10.9	6.9
	Other eastern hard hardwoods	429.9	339.0	62.6	16.8	6.1	2.5	1.4	0.9	0.3
	Eastern noncommercial hardwoods	1,092.4	759.8	203.0	71.5	32.9	14.1	5.8	2.6	1.3
	Tropical and subtropical hardwoods	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Urban-specific hardwoods	4.9	3.7	0.5	0.3	0.1	0.2	0.0	0.0	0.0
	Total hardwood	9,399.6	6,192.6	1,692.9	632.2	340.9	195.6	118.4	74.7	49.6
All types	All groups	12,250.4	6,942.7	2,245.4	1,071.7	737.6	481.7	305.6	184.6	111.2

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

MISSISSIPPI'S FORESTS, 2022

Table A2.11b—Number of live trees on forest land by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)							
		All classes	17.0–18.9	19.0–20.9	21.0–24.9	25.0–28.9	29.0–32.9	33.0–36.9	37.0+
million trees									
Softwood types	Longleaf and slash pines	193.3	3.4	1.5	1.2	0.0	0.0	0.0	0.0
	Loblolly and shortleaf pines	2,450.3	26.7	13.4	12.4	2.9	0.7	0.2	0.0
	Other yellow pines	14.6	0.2	0.2	0.4	0.1	0.0	0.0	0.0
	Cypress	35.6	0.9	0.6	0.9	0.3	0.1	0.2	0.1
	Other eastern softwoods	157.1	0.4	0.2	0.0	0.0	0.0	0.0	0.0
	Total softwood	2,850.8	31.7	15.9	14.9	3.3	0.9	0.5	0.1
Hardwood types	Select white oaks	289.0	3.3	2.6	2.3	1.2	0.3	0.1	0.0
	Select red oaks	134.0	1.6	1.5	2.5	1.7	0.7	0.2	0.3
	Other white oaks	115.0	1.6	1.4	1.4	0.4	0.3	0.2	0.0
	Other red oaks	1,343.9	8.8	6.5	7.3	3.8	1.7	0.8	0.6
	Hickory	462.9	2.1	1.8	1.2	0.5	0.2	0.1	0.0
	Hard maple	19.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Soft maple	816.3	0.6	0.3	0.2	0.0	0.0	0.0	0.0
	Beech	79.5	0.4	0.5	0.6	0.2	0.3	0.0	0.0
	Sweetgum	2,033.1	5.3	2.8	2.6	0.6	0.2	0.1	0.0
	Tupelo and blackgum	504.3	1.7	1.0	0.7	0.1	0.1	0.0	0.0
	Ash	341.4	1.4	0.6	0.8	0.5	0.0	0.1	0.2
	Cottonwood and aspen	6.8	0.3	0.2	0.2	0.1	0.1	0.1	0.1
	Basswood	4.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	Yellow-poplar	174.8	2.7	2.3	1.7	0.8	0.4	0.1	0.0
	Black walnut	5.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	Other eastern soft hardwoods	1,542.2	4.9	2.4	2.5	0.7	0.3	0.2	0.0
	Other eastern hard hardwoods	429.9	0.1	0.0	0.2	0.0	0.0	0.0	0.0
	Eastern noncommercial hardwoods	1,092.4	0.8	0.3	0.2	0.0	0.0	0.0	0.0
	Tropical and subtropical hardwoods	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Urban-specific hardwoods	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total hardwood	9,399.6	35.5	24.3	24.5	10.7	4.4	2.1	1.3
All types	All groups	12,250.4	67.2	40.2	39.4	14.0	5.2	2.6	1.4

Numbers in rows and columns may not sum to totals due to rounding.
 0.0 = no sample for the cell or a value between 0.00 and 0.05.

MISSISSIPPI'S FORESTS, 2022

Table A2.12a—Number of live trees on forest land by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)							
		All classes	5.0–6.9	7.0–8.9	9.0–10.9	11.0–12.9	13.0–14.9	15.0–16.9	17.0–18.9
million trees									
Softwood types	Longleaf and slash pines	95.1	24.4	20.2	16.9	12.9	9.1	5.7	3.2
	Loblolly and shortleaf pines	1,304.1	365.1	338.6	243.9	160.2	92.5	50.9	25.2
	Other yellow pines	4.9	1.4	1.1	0.6	0.5	0.3	0.2	0.2
	Cypress	12.6	3.5	2.2	1.4	1.1	1.0	0.7	0.8
	Other eastern softwoods	19.4	8.6	5.4	2.9	1.2	0.9	0.4	0.0
	Total softwood	1,436.1	403.1	367.5	265.7	175.8	103.7	57.8	29.5
Hardwood types	Select white oaks	59.3	18.2	10.4	7.8	5.6	4.9	3.5	3.0
	Select red oaks	34.1	9.6	5.9	4.1	3.0	2.2	2.1	1.4
	Other white oaks	25.2	5.6	4.4	4.0	3.4	2.4	1.8	1.2
	Other red oaks	180.4	60.3	38.0	22.2	15.4	11.9	9.3	6.8
	Hickory	50.3	16.2	10.6	7.8	5.3	3.5	2.6	1.3
	Hard maple	1.6	0.7	0.3	0.2	0.2	0.1	0.1	0.0
	Soft maple	21.7	12.0	4.4	2.5	1.1	0.7	0.4	0.3
	Beech	7.9	2.8	1.1	1.0	0.7	0.5	0.4	0.3
	Sweetgum	256.7	116.6	61.3	33.5	19.0	11.2	5.8	4.4
	Tupelo and blackgum	56.8	19.5	14.4	8.8	5.9	3.6	2.1	1.2
	Ash	35.1	15.6	7.6	3.9	3.0	1.7	1.1	1.0
	Cottonwood and aspen	3.0	0.4	0.3	0.5	0.3	0.3	0.4	0.2
	Basswood	0.5	0.0	0.0	0.1	0.1	0.1	0.0	0.0
	Yellow-poplar	56.1	15.8	11.0	8.9	6.6	4.3	2.9	2.4
	Black walnut	0.4	0.1	0.0	0.0	0.2	0.0	0.0	0.0
	Other eastern soft hardwoods	112.7	44.6	25.5	16.3	9.5	6.1	4.4	2.7
	Other eastern hard hardwoods	9.9	5.6	2.0	1.0	0.5	0.4	0.1	0.1
	Urban-specific hardwoods	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.0
	Total hardwood	912.0	343.9	197.2	122.7	79.9	54.0	36.9	26.3
All types	All groups	2,348.1	746.9	564.7	388.4	255.8	157.7	94.7	55.8

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

MISSISSIPPI'S FORESTS, 2022

Table A2.12b— Number of live trees on forest land by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)						
		All classes	19.0–20.9	21.0–24.9	25.0–28.9	29.0–32.9	33.0–36.9	37.0+
million trees								
Softwood types	Longleaf and slash pines	95.1	1.5	1.1	0.0	0.0	0.0	0.0
	Loblolly and shortleaf pines	1,304.1	12.6	11.6	2.6	0.7	0.2	0.0
	Other yellow pines	4.9	0.1	0.4	0.1	0.0	0.0	0.0
	Cypress	12.6	0.5	0.7	0.3	0.0	0.2	0.0
	Other eastern softwoods	19.4	0.1	0.0	0.0	0.0	0.0	0.0
	Total softwood	1,436.1	14.8	13.9	3.0	0.8	0.4	0.1
Hardwood types	Select white oaks	59.3	2.5	2.1	0.9	0.2	0.1	0.0
	Select red oaks	34.1	1.2	2.2	1.5	0.5	0.2	0.2
	Other white oaks	25.2	0.9	1.0	0.3	0.1	0.1	0.0
	Other red oaks	180.4	5.6	5.9	2.9	1.2	0.5	0.4
	Hickory	50.3	1.5	0.9	0.3	0.2	0.0	0.0
	Hard maple	1.6	0.0	0.0	0.0	0.0	0.0	0.0
	Soft maple	21.7	0.2	0.1	0.0	0.0	0.0	0.0
	Beech	7.9	0.3	0.4	0.2	0.1	0.0	0.0
	Sweetgum	256.7	2.5	1.8	0.5	0.2	0.0	0.0
	Tupelo and blackgum	56.8	0.8	0.4	0.1	0.0	0.0	0.0
	Ash	35.1	0.4	0.5	0.4	0.0	0.1	0.0
	Cottonwood and aspen	3.0	0.1	0.2	0.1	0.1	0.1	0.0
	Basswood	0.5	0.1	0.0	0.0	0.0	0.0	0.0
	Yellow-poplar	56.1	2.0	1.5	0.5	0.3	0.1	0.0
	Black walnut	0.4	0.0	0.0	0.0	0.0	0.0	0.0
	Other eastern soft hardwoods	112.7	1.5	1.4	0.3	0.2	0.1	0.0
	Other eastern hard hardwoods	9.9	0.0	0.2	0.0	0.0	0.0	0.0
	Urban-specific hardwoods	0.3	0.0	0.0	0.0	0.0	0.0	0.0
	Total hardwood	912.0	19.6	18.5	8.0	3.1	1.3	0.7
All types	All groups	2,348.1	34.4	32.4	11.1	3.9	1.7	0.7

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

MISSISSIPPI'S FORESTS, 2022

Table A2.13— Net merchantable bole wood volume^a of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by ownership class and land status, Mississippi, 2022

Ownership class	All forest land	Unreserved forest land			Reserved forest land		
		Total	Timberland	Unproductive	Total	Productive	Unproductive
million cubic feet							
U.S. Forest Service	4,031.6	4,002.2	4,002.2	0.0	29.4	29.4	0.0
Other Federal	1,406.7	855.7	855.7	0.0	551.1	551.1	0.0
State and local government	1,310.7	1,282.6	1,282.6	0.0	28.1	28.1	0.0
Forest industry	2,160.3	2,160.3	2,160.3	0.0	0.0	0.0	0.0
Nonindustrial private	37,208.6	37,208.6	37,208.6	0.0	0.0	0.0	0.0
All classes	46,117.9	45,509.3	45,509.3	0.0	608.5	608.5	0.0

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Excludes rotten, missing, and form cull defects volume.**Table A2.14**— Net merchantable bole wood volume^a of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by forest-type group and stand-size class, Mississippi, 2022

		Stand-size class				
Forest type	Forest-type group	All classes	Large diameter	Medium diameter	Small diameter	Nonstocked
		million cubic feet				
Softwood types	Longleaf-slash pine	1,994.4	1,820.5	158.9	15.1	0.0
	Loblolly-shortleaf pine	22,012.9	19,065.2	2,822.2	125.5	0.0
	Other eastern softwoods	85.3	60.6	24.2	0.5	0.0
	Total softwood	24,092.6	20,946.2	3,005.3	141.1	0.0
Hardwood types	Oak-pine	4,006.2	3,368.0	533.4	104.8	0.0
	Oak-hickory	9,251.1	7,909.4	1,135.3	206.3	0.0
	Oak-gum-cypress	6,561.0	5,602.8	885.7	72.4	0.0
	Elm-ash-cottonwood	2,140.3	1,819.9	280.2	40.2	0.0
	Other hardwoods	8.3	0.0	5.8	2.5	0.0
	Exotic hardwoods	31.8	0.7	27.3	3.8	0.0
	Total hardwood	21,998.7	18,700.9	2,867.8	430.1	0.0
Nonstocked	Total nonstocked	26.6	0.0	0.0	0.0	26.6
All types	All groups	46,117.9	39,647.0	5,873.1	571.2	26.6

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Excludes rotten, missing, and form cull defects volume.

MISSISSIPPI'S FORESTS, 2022

Table A2.15— Net merchantable bole wood volume^a of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and ownership group, Mississippi, 2022

Species type	Species group	All ownerships	Public ownership			Private ownership	
			U.S. Forest Service	Other Federal	State and local government	Forest industry	Nonindustrial private
million trees							
Softwood types	Longleaf and slash pines	1,879.8	824.9	21.7	108.0	43.6	881.7
	Loblolly and shortleaf pines	21,735.5	1,767.4	301.4	489.4	1,371.9	17,805.4
	Other yellow pines	176.9	14.2	3.1	0.0	7.1	152.4
	Cypress	465.6	2.1	34.1	64.2	0.3	364.9
	Other eastern softwoods	298.6	7.5	8.5	14.1	4.1	264.3
	Total softwood	24,556.4	2,616.0	368.9	675.7	1,427.1	19,468.8
Hardwood types	Select white oaks	1,657.8	225.2	43.6	26.6	61.0	1,301.3
	Select red oaks	1,435.2	55.9	118.6	52.7	35.4	1,172.5
	Other white oaks	834.2	85.0	97.3	22.6	14.9	614.4
	Other red oaks	4,942.7	311.0	227.6	142.1	134.3	4,127.7
	Hickory	1,322.1	73.5	54.8	23.2	21.5	1,149.2
	Hard maple	32.6	1.0	0.7	0.8	2.4	27.7
	Soft maple	456.2	29.7	35.4	15.1	20.8	355.1
	Beech	292.5	24.5	0.5	15.6	20.5	231.4
	Sweetgum	3,674.9	176.4	198.1	137.5	127.4	3,035.5
	Tupelo and blackgum	1,005.7	88.6	38.3	26.4	21.7	830.8
	Ash	647.6	38.7	36.6	32.5	11.8	528.0
	Cottonwood and aspen	166.6	6.1	3.0	0.0	0.0	157.5
	Basswood	27.0	0.7	0.7	0.7	6.6	18.3
	Yellow-poplar	1,407.4	118.0	19.8	28.0	95.7	1,145.8
	Black walnut	20.3	0.1	0.0	0.0	7.5	12.7
	Other eastern soft hardwoods	2,639.2	102.2	130.4	85.9	107.3	2,213.4
	Other eastern hard hardwoods	182.3	14.2	11.9	9.3	5.0	141.9
	Eastern noncommercial hardwoods	811.8	64.6	20.6	16.0	39.3	671.2
	Urban-specific hardwoods	5.5	0.0	0.0	0.0	0.0	5.5
	Total hardwood	21,561.5	1,415.6	1,037.8	635.0	733.2	17,739.8
All types	All groups	46,117.9	4,031.6	1,406.7	1,310.7	2,160.3	37,208.6

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Excludes rotten, missing, and form cull defects volume.

MISSISSIPPI'S FORESTS, 2022

Table A2.16a— Net merchantable bole wood volume^a of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)							
		All classes	5.0–6.9	7.0–8.9	9.0–10.9	11.0–12.9	13.0–14.9	15.0–16.9	17.0–18.9
million cubic feet									
Softwood types	Longleaf and slash pines	1,879.8	75.3	162.7	254.2	316.2	317.3	277.4	217.8
	Loblolly and shortleaf pines	21,735.5	1,048.9	2,515.8	3,518.9	3,791.7	3,280.2	2,586.1	1,728.6
	Other yellow pines	176.9	5.4	9.9	9.9	15.7	11.6	12.1	17.2
	Cypress	465.6	11.3	14.9	21.5	27.6	36.3	32.4	57.6
	Other eastern softwoods	298.6	39.6	53.8	59.1	44.3	43.0	24.5	14.5
	Total softwood	24,556.4	1,180.6	2,757.1	3,863.7	4,195.6	3,688.4	2,932.4	2,035.6
Hardwood types	Select white oaks	1,657.8	65.9	99.6	124.4	143.3	170.0	172.1	190.6
	Select red oaks	1,435.2	36.2	52.3	67.5	84.1	78.2	97.9	99.4
	Other white oaks	834.2	25.0	45.1	66.2	83.0	83.9	93.1	76.3
	Other red oaks	4,942.7	248.6	356.1	367.1	398.0	431.6	469.8	462.6
	Hickory	1,322.1	74.2	116.2	149.7	154.3	164.0	156.1	126.2
	Hard maple	32.6	3.7	4.4	5.2	7.3	3.6	6.3	2.1
	Soft maple	456.2	96.8	92.2	76.6	63.9	39.8	30.0	25.1
	Beech	292.5	14.1	12.6	19.7	20.1	21.4	25.6	17.8
	Sweetgum	3,674.9	458.5	565.0	568.1	494.4	409.8	300.8	295.6
	Tupelo and blackgum	1,005.7	96.4	150.9	162.7	158.6	134.8	101.2	77.6
	Ash	647.6	74.7	78.9	70.9	72.9	55.9	60.0	59.8
	Cottonwood and aspen	166.6	1.5	3.2	6.9	7.2	9.7	17.8	15.6
	Basswood	27.0	0.6	1.4	1.4	4.1	3.1	0.0	0.0
	Yellow-poplar	1,407.4	60.1	98.4	138.7	160.0	151.7	140.3	152.8
	Black walnut	20.3	0.8	1.5	1.0	4.6	2.5	1.6	0.0
	Other eastern soft hardwoods	2,639.2	282.5	359.5	377.5	339.1	289.6	244.5	232.5
	Other eastern hard hardwoods	182.3	40.6	35.9	26.3	22.8	21.0	9.3	4.4
	Eastern noncommercial hardwoods	811.8	188.4	200.5	147.6	97.0	64.2	43.5	34.3
	Urban-specific hardwoods	5.5	0.6	0.6	1.5	0.6	0.9	1.3	0.0
	Total hardwood	21,561.5	1,769.2	2,274.3	2,379.1	2,315.3	2,135.5	1,971.2	1,872.8
All types	All groups	46,117.9	2,949.8	5,031.4	6,242.8	6,510.9	5,823.9	4,903.6	3,908.5

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Excludes rotten, missing, and form cull defects volume.

MISSISSIPPI'S FORESTS, 2022

Table A2.16b— Net merchantable bole wood volume^a of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)						
		All classes	19.0–20.9	21.0–24.9	25.0–28.9	29.0–32.9	33.0–36.9	37.0+
million cubic feet								
Softwood types	Longleaf and slash pines	1,879.8	123.2	126.6	1.6	7.4	0.0	0.0
	Loblolly and shortleaf pines	21,735.5	1,106.4	1,418.0	492.0	170.7	69.9	8.3
	Other yellow pines	176.9	16.1	41.1	14.7	10.0	13.2	0.0
	Cypress	465.6	42.0	91.0	45.2	14.6	51.0	20.1
	Other eastern softwoods	298.6	12.9	3.4	3.4	0.0	0.0	0.0
	Total softwood	24,556.4	1,300.6	1,680.1	556.9	202.7	134.2	28.4
Hardwood types	Select white oaks	1,657.8	190.4	242.0	159.2	55.3	30.2	14.8
	Select red oaks	1,435.2	110.9	261.9	249.5	142.1	50.3	104.8
	Other white oaks	834.2	87.6	117.0	48.8	46.2	47.3	14.7
	Other red oaks	4,942.7	436.0	658.1	460.4	270.8	171.5	212.1
	Hickory	1,322.1	134.3	126.8	66.1	31.9	22.3	0.0
	Hard maple	32.6	0.0	0.0	0.0	0.0	0.0	0.0
	Soft maple	456.2	16.3	12.1	3.4	0.0	0.0	0.0
	Beech	292.5	29.5	52.4	29.5	36.4	4.8	8.6
	Sweetgum	3,674.9	199.5	249.3	75.3	37.1	16.1	5.2
	Tupelo and blackgum	1,005.7	60.0	43.8	11.3	6.1	2.2	0.0
	Ash	647.6	33.2	52.9	44.8	1.3	14.3	28.1
	Cottonwood and aspen	166.6	10.8	15.2	16.9	13.0	27.1	21.8
	Basswood	27.0	5.9	4.0	6.6	0.0	0.0	0.0
	Yellow-poplar	1,407.4	159.4	176.2	95.6	64.3	10.0	0.0
	Black walnut	20.3	5.3	3.0	0.0	0.0	0.0	0.0
	Other eastern soft hardwoods	2,639.2	152.3	204.4	91.7	35.1	30.4	0.0
	Other eastern hard hardwoods	182.3	0.0	17.4	4.5	0.0	0.0	0.0
	Eastern noncommercial hardwoods	811.8	18.1	15.7	2.5	0.0	0.0	0.0
	Urban-specific hardwoods	5.5	0.0	0.0	0.0	0.0	0.0	0.0
	Total hardwood	21,561.5	1,649.6	2,252.3	1,365.9	739.7	426.4	410.1
All types	All groups	46,117.9	2,950.2	3,932.5	1,922.8	942.4	560.6	438.6

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Excludes rotten, missing, and form cull defects volume.

MISSISSIPPI'S FORESTS, 2022

Table A2.17— Net merchantable bole wood volume^a of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by forest-type group and stand origin, Mississippi, 2022

Forest type	Forest-type group	Stand origin		
		All stands	Natural regeneration	Artificial regeneration
million cubic feet				
Softwood types	Longleaf/slash pine	1,994.4	1,616.8	377.6
	Loblolly/shortleaf pine	22,012.9	9,440.5	12,572.4
	Other eastern softwoods	85.3	81.5	3.7
	Total softwood	24,092.6	11,138.8	12,953.8
Hardwood types	Oak/pine	4,006.2	3,718.8	287.4
	Oak/hickory	9,251.1	9,149.3	101.8
	Oak/gum/cypress	6,561.0	6,361.2	199.8
	Elm/ash/cottonwood	2,140.3	2,129.8	10.5
	Other hardwoods	8.3	3.3	5.0
	Exotic hardwoods	31.8	31.8	0.0
	Total hardwood	21,998.7	21,394.1	604.6
Nonstocked	Total nonstocked	26.6	26.4	0.1
All types	All groups	46,117.9	32,559.4	13,558.5

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Excludes rotten, missing, and form cull defects volume.

MISSISSIPPI'S FORESTS, 2022

Table A2.18a— Net merchantable bole wood volume^a of growing-stock trees (at least 5.0 inches diameter at breast height) on timberland by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)							
		All classes	5.0–6.9	7.0–8.9	9.0–10.9	11.0–12.9	13.0–14.9	15.0–16.9	17.0–18.9
million cubic feet									
Softwood types	Longleaf and slash pines	1,809.9	70.2	151.8	243.6	302.6	308.2	272.0	205.5
	Loblolly and shortleaf pines	20,539.3	981.4	2,357.5	3,316.8	3,609.6	3,122.7	2,447.0	1,645.0
	Other yellow pines	155.1	4.1	8.3	7.1	13.3	7.9	8.8	17.2
	Cypress	408.4	8.7	12.1	16.4	22.4	32.4	27.2	51.1
	Other eastern softwoods	155.4	24.0	34.8	34.7	19.9	25.2	11.8	2.2
	Total softwood	23,068.2	1,088.4	2,564.5	3,618.7	3,967.8	3,496.5	2,766.7	1,920.9
Hardwood types	Select white oaks	1,425.8	53.5	76.1	102.5	118.8	152.3	151.7	177.1
	Select red oaks	1,178.8	28.1	40.8	51.1	64.8	68.7	87.8	82.4
	Other white oaks	574.0	15.3	29.2	46.7	66.4	66.4	71.6	61.4
	Other red oaks	3,867.3	179.0	261.1	281.2	311.0	350.9	385.5	366.8
	Hickory	1,005.8	50.1	81.6	112.8	123.6	122.8	127.0	89.0
	Hard maple	18.5	1.9	2.2	2.4	4.0	2.6	3.3	2.1
	Soft maple	179.3	36.0	29.2	29.1	22.4	19.7	14.5	12.6
	Beech	195.3	7.8	7.0	11.8	14.6	14.7	16.5	13.9
	Sweetgum	2,906.1	333.2	433.4	435.1	395.4	339.3	243.9	250.0
	Tupelo and blackgum	697.8	55.7	99.5	106.6	110.0	99.1	79.7	57.2
	Ash	422.8	51.0	51.6	46.4	51.9	40.7	37.7	41.9
	Cottonwood and aspen	145.7	1.5	2.2	6.3	7.2	9.7	16.4	12.2
	Basswood	22.0	0.1	0.3	1.4	1.8	1.9	0.0	0.0
	Yellow-poplar	1,218.7	49.4	84.3	120.4	140.2	138.2	122.4	138.1
	Black walnut	5.9	0.4	0.1	0.5	3.3	0.0	1.6	0.0
	Other eastern soft hardwoods	1,497.6	130.6	176.1	204.1	188.8	171.8	165.5	132.7
	Other eastern hard hardwoods	83.7	14.7	12.9	13.0	10.3	10.2	3.9	3.4
	Urban-specific hardwoods	3.3	0.1	0.2	0.7	0.0	0.9	1.3	0.0
	Total hardwood	15,448.5	1,008.3	1,387.8	1,572.3	1,634.3	1,609.9	1,530.2	1,440.8
All types	All groups	38,516.6	2,096.8	3,952.3	5,191.0	5,602.2	5,106.4	4,296.9	3,361.7

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Excludes rotten, missing, and form cull defects volume.

MISSISSIPPI'S FORESTS, 2022

Table A2.18b— Net merchantable bole wood volume^a of growing-stock trees (at least 5.0 inches diameter at breast height) on timberland by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)						
		All classes	19.0–20.9	21.0–24.9	25.0–28.9	29.0–32.9	33.0–36.9	37.0+
million cubic feet								
Softwood types	Longleaf and slash pines	1,809.9	123.2	123.8	1.6	7.4	0.0	0.0
	Loblolly and shortleaf pines	20,539.3	1,046.4	1,327.8	453.0	165.9	57.7	8.3
	Other yellow pines	155.1	9.5	41.1	14.7	10.0	13.2	0.0
	Cypress	408.4	41.0	80.9	45.2	8.8	51.0	11.1
	Other eastern softwoods	155.4	2.9	0.0	0.0	0.0	0.0	0.0
	Total softwood	23,068.2	1,223.1	1,573.6	514.5	192.2	121.9	19.4
Hardwood types	Select white oaks	1,425.8	184.7	214.2	129.5	47.6	17.9	0.0
	Select red oaks	1,178.8	88.0	230.5	223.7	108.5	39.9	64.5
	Other white oaks	574.0	61.5	82.0	35.1	20.6	18.0	0.0
	Other red oaks	3,867.3	377.3	539.7	371.9	197.9	115.5	129.5
	Hickory	1,005.8	117.6	103.3	38.3	31.9	7.9	0.0
	Hard maple	18.5	0.0	0.0	0.0	0.0	0.0	0.0
	Soft maple	179.3	9.9	6.0	0.0	0.0	0.0	0.0
	Beech	195.3	20.9	41.4	20.6	17.5	0.0	8.6
	Sweetgum	2,906.1	175.9	179.2	69.2	37.1	9.3	5.2
	Tupelo and blackgum	697.8	46.8	33.3	10.0	0.0	0.0	0.0
	Ash	422.8	24.6	31.5	35.6	1.3	8.6	0.0
	Cottonwood and aspen	145.7	6.1	15.2	16.9	13.0	27.1	12.2
	Basswood	22.0	5.9	4.0	6.6	0.0	0.0	0.0
	Yellow-poplar	1,218.7	145.3	151.9	70.5	47.9	10.0	0.0
	Black walnut	5.9	0.0	0.0	0.0	0.0	0.0	0.0
	Other eastern soft hardwoods	1,497.6	101.3	127.4	47.2	30.6	21.4	0.0
	Other eastern hard hardwoods	83.7	0.0	15.3	0.0	0.0	0.0	0.0
	Urban-specific hardwoods	3.3	0.0	0.0	0.0	0.0	0.0	0.0
	Total hardwood	15,448.5	1,365.7	1,774.8	1,074.8	553.8	275.7	220.0
All types	All groups	38,516.6	2,588.7	3,348.4	1,589.3	745.9	397.6	239.5

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Excludes rotten, missing, and form cull defects volume.

MISSISSIPPI'S FORESTS, 2022

Table A2.19a— Net sawlog wood volume^a of sawtimber trees on timberland by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)						
		All classes	9.0–10.9	11.0–12.9	13.0–14.9	15.0–16.9	17.0–18.9	19.0–20.9
million board feet								
Softwood types	Longleaf and slash pines	8,470.4	933.3	1,415.9	1,628.0	1,564.6	1,253.3	784.9
	Loblolly and shortleaf pines	88,737.5	12,046.7	16,355.9	16,152.6	13,858.7	9,936.5	6,633.5
	Other yellow pines	850.4	28.6	63.6	41.6	48.1	100.2	57.5
	Cypress	2,073.1	49.7	85.3	141.6	130.8	261.7	219.8
	Other eastern softwoods	466.3	142.0	94.6	133.0	66.1	12.8	17.8
	Total softwood	100,597.7	13,200.3	18,015.3	18,096.7	15,668.2	11,564.4	7,713.5
Hardwood types	Select white oaks	5,766.2	0.0	405.1	612.6	676.2	851.8	937.0
	Select red oaks	6,043.3	0.0	219.2	284.6	408.6	423.6	476.9
	Other white oaks	2,368.4	0.0	240.2	279.5	335.7	303.2	321.8
	Other red oaks	16,374.5	0.0	1,175.6	1,513.1	1,817.7	1,843.6	1,994.2
	Hickory	3,580.4	0.0	429.8	497.6	578.7	435.0	606.8
	Hard maple	48.4	0.0	13.7	10.1	14.8	9.9	0.0
	Soft maple	345.0	0.0	73.8	76.0	61.2	57.2	47.1
	Beech	681.2	0.0	53.2	55.7	64.4	55.4	84.3
	Sweetgum	8,195.6	0.0	1,414.4	1,454.5	1,176.0	1,312.3	982.6
	Tupelo and blackgum	1,797.8	0.0	353.3	378.1	342.6	262.7	228.7
	Ash	1,237.2	0.0	165.8	156.2	165.5	196.6	122.0
	Cottonwood and aspen	761.6	0.0	25.1	40.2	76.4	61.1	32.2
	Basswood	100.0	0.0	5.8	7.8	0.0	0.0	29.2
	Yellow-poplar	5,059.9	0.0	500.3	601.0	601.1	739.1	832.6
	Black walnut	17.1	0.0	11.1	0.0	6.0	0.0	0.0
	Other eastern soft hardwoods	4,471.6	0.0	646.9	686.2	734.4	637.1	513.0
	Other eastern hard hardwoods	184.9	0.0	34.7	39.7	17.0	15.6	0.0
	Urban-specific hardwoods	9.5	0.0	0.0	3.5	6.0	0.0	0.0
	Total hardwood	57,042.8	0.0	5,767.8	6,696.3	7,082.2	7,204.2	7,208.5
All types	All groups	157,640.5	13,200.3	23,783.1	24,793.0	22,750.4	18,768.6	14,922.0

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Excludes rotten, missing, and form cull defects volume.

MISSISSIPPI'S FORESTS, 2022

Table A2.19b— Net sawlog wood volume^a of sawtimber trees on timberland by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)					
		All classes	21.0–24.9	25.0–28.9	29.0–32.9	33.0–36.9	37.0+
million board feet							
Softwood types	Longleaf and slash pines	8,470.4	825.1	11.3	54.0	0.0	0.0
	Loblolly and shortleaf pines	88,737.5	8,860.0	3,182.8	1,212.6	434.6	63.7
	Other yellow pines	850.4	256.4	96.0	67.5	90.9	0.0
	Cypress	2,073.1	457.3	271.7	55.7	326.4	73.3
	Other eastern softwoods	466.3	0.0	0.0	0.0	0.0	0.0
	Total softwood	100,597.7	10,398.9	3,561.7	1,389.8	852.0	137.0
Hardwood types	Select white oaks	5,766.2	1,156.3	739.2	280.5	107.6	0.0
	Select red oaks	6,043.3	1,364.4	1,389.3	726.8	278.0	471.9
	Other white oaks	2,368.4	448.9	203.9	124.1	111.3	0.0
	Other red oaks	16,374.5	3,020.4	2,198.1	1,221.3	741.4	849.1
	Hickory	3,580.4	566.3	222.8	193.2	50.2	0.0
	Hard maple	48.4	0.0	0.0	0.0	0.0	0.0
	Soft maple	345.0	29.8	0.0	0.0	0.0	0.0
	Beech	681.2	170.3	86.4	74.3	0.0	37.3
	Sweetgum	8,195.6	1,068.9	440.8	245.7	63.1	37.1
	Tupelo and blackgum	1,797.8	174.7	57.7	0.0	0.0	0.0
	Ash	1,237.2	165.8	204.5	7.9	53.1	0.0
	Cottonwood and aspen	761.6	86.8	102.0	81.0	174.3	82.7
	Basswood	100.0	20.7	36.5	0.0	0.0	0.0
	Yellow-poplar	5,059.9	929.2	458.8	327.3	70.5	0.0
	Black walnut	17.1	0.0	0.0	0.0	0.0	0.0
	Other eastern soft hardwoods	4,471.6	676.9	270.4	179.1	127.7	0.0
	Other eastern hard hardwoods	184.9	77.8	0.0	0.0	0.0	0.0
	Urban-specific hardwoods	9.5	0.0	0.0	0.0	0.0	0.0
	Total hardwood	57,042.8	9,957.1	6,410.4	3,461.1	1,777.1	1,478.1
All types	All groups	157,640.5	20,356.0	9,972.0	4,850.9	2,629.1	1,615.1

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Excludes rotten, missing, and form cull defects volume.

MISSISSIPPI'S FORESTS, 2022

Table A2.20— Net sawlog wood volume^a of sawtimber trees on timberland by species group and ownership group, Mississippi, 2022

Species type	Species group	All ownerships	Public ownership			Private ownership	
			U.S. Forest Service	Other Federal	State and local government	Forest industry	Nonindustrial private
million board feet							
Softwood types	Longleaf and slash pines	8,470.4	3,875.6	46.8	504.9	221.5	3,821.5
	Loblolly and shortleaf pines	88,737.5	9,467.4	1,035.6	2,358.1	4,877.0	70,999.5
	Other yellow pines	850.4	71.7	17.5	0.0	11.8	749.4
	Cypress	2,073.1	8.4	93.8	217.7	0.7	1,752.5
	Other eastern softwoods	466.3	15.6	13.2	16.2	16.0	405.3
	Total softwood	100,597.7	13,438.7	1,206.8	3,096.9	5,127.1	77,728.2
Hardwood types	Select white oaks	5,766.2	840.3	61.0	100.9	204.9	4,559.3
	Select red oaks	6,043.3	266.0	235.2	240.7	167.7	5,133.6
	Other white oaks	2,368.4	252.6	155.1	55.2	23.7	1,881.8
	Other red oaks	16,374.5	1,181.4	499.3	594.9	418.7	13,680.2
	Hickory	3,580.4	223.5	104.5	58.0	47.7	3,146.6
	Hard maple	48.4	1.2	0.0	0.0	0.0	47.3
	Soft maple	345.0	10.6	63.7	16.6	0.0	254.2
	Beech	681.2	66.5	0.0	18.8	42.7	553.3
	Sweetgum	8,195.6	572.0	369.4	333.2	368.7	6,552.3
	Tupelo and blackgum	1,797.8	124.1	86.8	28.7	33.0	1,525.2
	Ash	1,237.2	111.2	64.4	89.7	28.8	943.0
	Cottonwood and aspen	761.6	36.7	2.2	0.0	0.0	722.8
	Basswood	100.0	2.4	0.0	0.0	36.5	61.1
	Yellow-poplar	5,059.9	453.9	67.9	94.1	382.9	4,061.1
	Black walnut	17.1	0.0	0.0	0.0	0.0	17.1
	Other eastern soft hardwoods	4,471.6	192.1	183.8	152.8	220.2	3,722.8
	Other eastern hard hardwoods	184.9	10.6	3.1	0.0	0.0	171.2
	Urban-specific hardwoods	9.5	0.0	0.0	0.0	0.0	9.5
	Total hardwood	57,042.8	4,345.0	1,896.5	1,783.6	1,975.5	47,042.3
All types	All species groups	157,640.5	17,783.6	3,103.4	4,880.5	7,102.5	124,770.5

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Excludes rotten, missing, and form cull defects volume.

MISSISSIPPI'S FORESTS, 2022

Table A2.21— Aboveground dry weight of live trees on forestland by ownership class and land status, Mississippi, 2022

Ownership class	All forest land	Unreserved forest land			Reserved forest land		
		Total	Timberland	Unproductive	Total	Productive	Unproductive
thousand tons							
U.S. Forest Service	98,157.0	97,464.6	97,464.6	0.0	692.4	692.4	0.0
Other Federal	36,624.6	22,219.1	22,219.1	0.0	14,405.5	14,405.5	0.0
State and local government	33,500.2	32,773.6	32,773.6	0.0	726.6	726.6	0.0
Forest industry	54,613.4	54,613.4	54,613.4	0.0	0.0	0.0	0.0
Nonindustrial private	969,201.1	969,201.1	969,201.1	0.0	0.0	0.0	0.0
All classes	1,192,096.3	1,176,271.8	1,176,271.8	0.0	15,824.4	15,824.4	0.0

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

MISSISSIPPI'S FORESTS, 2022

Table A2.22a— Aboveground dry weight of live trees on forest land by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)							
		All classes	1.0–2.9	3.0–4.9	5.0–6.9	7.0–8.9	9.0–10.9	11.0–12.9	13.0–14.9
thousand tons									
Softwood types	Longleaf and slash pines	46,820.4	197.3	1,176.4	2,341.3	4,220.6	6,248.0	7,584.0	7,512.2
	Loblolly and shortleaf pines	451,201.8	2,073.1	10,148.2	28,581.4	53,891.1	70,155.1	74,814.3	64,424.5
	Other yellow pines	3,131.1	21.6	23.4	118.6	184.3	171.1	263.0	198.5
	Cypress	6,234.2	41.6	246.3	301.4	306.3	346.1	412.6	478.3
	Other eastern softwoods	8,139.1	300.6	950.4	1,105.9	1,263.0	1,324.6	979.8	925.0
	Total softwood	515,526.6	2,634.3	12,544.8	32,448.7	59,865.4	78,245.0	84,053.6	73,538.5
Hardwood types	Select white oaks	60,777.4	867.0	1,645.0	2,475.2	3,206.3	3,842.3	4,436.0	5,456.6
	Select red oaks	39,066.0	362.7	744.1	1,266.0	1,526.8	1,878.0	2,197.1	2,051.2
	Other white oaks	26,693.6	308.4	581.6	964.6	1,468.3	2,118.6	2,482.6	2,555.9
	Other red oaks	175,394.7	4,684.1	8,066.5	9,426.9	11,721.0	11,642.8	12,524.1	13,613.0
	Hickory	45,493.9	1,618.9	2,253.8	2,830.0	3,786.8	4,646.8	4,740.4	4,967.5
	Hard maple	913.2	46.1	25.0	108.5	115.1	131.9	184.4	88.0
	Soft maple	18,631.7	3,212.1	3,075.2	2,805.1	2,381.5	1,949.0	1,634.7	1,084.0
	Beech	10,470.3	130.4	220.5	410.0	346.2	555.7	583.4	648.8
	Sweetgum	97,814.4	3,945.4	9,864.7	11,885.4	12,642.2	12,353.3	10,764.0	9,040.2
	Tupelo and blackgum	27,394.1	1,192.9	2,361.8	2,706.3	3,605.1	3,703.5	3,664.3	3,078.6
	Ash	20,524.0	1,287.5	2,324.8	2,270.3	2,127.7	1,812.9	1,833.8	1,414.0
	Cottonwood and aspen	2,980.8	7.9	13.0	26.6	52.5	113.0	116.5	156.7
	Basswood	459.2	3.1	32.6	10.2	22.5	22.4	61.1	46.5
	Yellow-poplar	31,625.2	318.9	959.9	1,522.1	2,122.7	2,880.5	3,295.7	3,113.7
	Black walnut	604.0	8.8	26.2	31.0	45.1	32.1	127.2	66.8
	Other eastern soft hardwoods	77,482.9	4,181.8	7,187.1	8,475.2	9,216.2	9,193.4	8,056.3	6,995.4
	Other eastern hard hardwoods	8,637.7	1,322.9	1,833.8	1,405.3	1,054.6	742.7	639.0	621.6
	Eastern noncommercial hardwoods	31,411.8	3,645.6	5,723.2	6,034.1	5,478.2	3,907.7	2,385.9	1,488.8
	Tropical and subtropical hardwoods	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
	Urban-specific hardwoods	194.5	12.1	5.6	22.5	18.0	46.1	18.2	29.3
		Total hardwood	676,569.7	27,156.7	46,944.5	54,675.3	60,936.6	61,572.6	59,744.6
All types	All groups	1,192,096.3	29,791.0	59,489.2	87,123.9	120,801.9	139,817.6	143,798.2	130,055.2

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

MISSISSIPPI'S FORESTS, 2022

Table A2.22b— Aboveground dry weight of live trees on forest land by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)								
		All classes	15.0–16.9	17.0–18.9	19.0–20.9	21.0–24.9	25.0–28.9	29.0–32.9	33.0–36.9	37.0+
thousand tons										
Softwood types	Longleaf and slash pines	46,820.4	6,495.2	5,080.2	2,848.6	2,912.6	36.9	167.1	0.0	0.0
	Loblolly and shortleaf pines	451,201.8	50,699.6	33,691.0	21,474.8	27,128.9	9,402.6	3,224.3	1,327.3	165.6
	Other yellow pines	3,131.1	210.8	277.5	283.8	708.7	262.9	177.3	229.6	0.0
	Cypress	6,234.2	429.5	667.4	480.1	993.5	502.0	165.7	571.9	291.3
	Other eastern softwoods	8,139.1	540.6	317.3	276.5	74.7	81.0	0.0	0.0	0.0
	Total softwood	515,526.6	58,375.5	40,033.3	25,363.7	31,818.3	10,285.4	3,734.4	2,128.8	456.9
Hardwood types	Select white oaks	60,777.4	5,727.1	6,548.8	6,717.9	8,908.1	6,433.2	2,273.8	1,341.8	898.4
	Select red oaks	39,066.0	2,523.9	2,514.4	2,924.2	6,721.3	6,520.8	3,563.7	1,347.3	2,924.6
	Other white oaks	26,693.6	2,772.4	2,237.0	2,609.2	3,530.2	1,479.3	1,477.1	1,593.9	514.5
	Other red oaks	175,394.7	14,802.3	14,704.3	13,969.2	21,613.2	15,395.8	9,468.7	5,889.2	7,873.4
	Hickory	45,493.9	4,748.4	3,863.2	4,151.9	3,881.9	2,173.2	1,070.1	761.0	0.0
	Hard maple	913.2	159.4	54.9	0.0	0.0	0.0	0.0	0.0	0.0
	Soft maple	18,631.7	810.1	712.6	472.9	378.8	115.6	0.0	0.0	0.0
	Beech	10,470.3	805.1	611.3	993.2	1,858.5	1,107.1	1,571.6	280.1	348.4
	Sweetgum	97,814.4	6,722.8	6,717.6	4,627.9	5,889.9	1,891.4	902.6	439.7	127.5
	Tupelo and blackgum	27,394.1	2,307.0	1,793.7	1,362.7	1,036.6	262.8	253.4	65.2	0.0
	Ash	20,524.0	1,472.2	1,470.6	828.2	1,307.4	1,128.8	35.8	374.2	835.7
	Cottonwood and aspen	2,980.8	296.7	264.6	190.0	265.7	300.9	229.8	491.2	455.6
	Basswood	459.2	0.0	0.0	90.8	65.6	104.6	0.0	0.0	0.0
	Yellow-poplar	31,625.2	2,927.2	3,184.6	3,478.4	3,743.3	2,274.3	1,544.6	259.3	0.0
	Black walnut	604.0	42.4	0.0	143.2	81.2	0.0	0.0	0.0	0.0
	Other eastern soft hardwoods	77,482.9	6,074.4	5,502.2	3,722.3	4,895.5	2,247.9	990.2	745.1	0.0
	Other eastern hard hardwoods	8,637.7	271.3	124.3	0.0	486.9	135.1	0.0	0.0	0.0
	Eastern noncommercial hardwoods	31,411.8	1,001.7	842.8	446.4	388.5	69.0	0.0	0.0	0.0
	Tropical and subtropical hardwoods	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Urban-specific hardwoods	194.5	42.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total hardwood	676,569.7	53,507.3	51,146.9	46,728.5	65,052.8	41,639.7	23,381.4	13,587.9	13,978.2
All types	All groups	1,192,096.3	111,882.8	91,180.2	72,092.2	96,871.1	51,925.1	27,115.8	15,716.8	14,435.1

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

MISSISSIPPI'S FORESTS, 2022

Table A2.23a— Merchantable bole bark and wood biomass of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)							
		All classes	5.0–6.9	7.0–8.9	9.0–10.9	11.0–12.9	13.0–14.9	15.0–16.9	17.0–18.9
thousand tons									
Softwood types	Longleaf and slash pines	37,815.4	1,600.2	3,392.8	5,260.9	6,469.4	6,382.6	5,511.2	4,275.6
	Loblolly and shortleaf pines	359,834.5	18,005.1	41,934.4	58,190.3	63,202.9	54,636.5	43,000.2	28,463.5
	Other yellow pines	2,479.3	76.8	141.3	139.5	222.0	162.2	172.4	235.9
	Cypress	4,825.2	171.8	215.1	268.0	329.5	398.2	352.7	576.6
	Other eastern softwoods	5,140.5	690.0	928.5	1,008.9	763.0	739.1	422.9	246.0
	Total softwood	410,094.9	20,544.0	46,611.9	64,867.7	70,986.8	62,318.7	49,459.4	33,797.6
Hardwood types	Select white oaks	37,267.2	1,519.9	2,221.3	2,702.7	3,090.3	3,736.3	3,842.2	4,290.4
	Select red oaks	26,092.0	731.7	1,029.6	1,314.3	1,582.2	1,472.7	1,807.2	1,810.6
	Other white oaks	17,708.2	567.0	988.1	1,465.8	1,785.2	1,812.8	1,979.1	1,585.1
	Other red oaks	107,969.8	5,474.5	7,881.4	8,118.2	8,801.1	9,486.6	10,359.6	10,188.8
	Hickory	29,117.5	1,700.3	2,612.1	3,347.3	3,422.0	3,610.5	3,401.1	2,762.8
	Hard maple	587.7	69.6	82.7	95.9	132.5	62.2	108.7	36.1
	Soft maple	8,173.9	1,760.1	1,662.9	1,371.6	1,127.7	706.1	525.4	438.4
	Beech	6,079.1	251.3	235.3	382.9	397.1	433.7	524.9	381.9
	Sweetgum	63,046.0	7,634.9	9,517.6	9,666.6	8,481.5	7,088.8	5,237.2	5,147.5
	Tupelo and blackgum	16,991.9	1,595.5	2,499.2	2,711.2	2,696.3	2,295.4	1,717.0	1,338.9
	Ash	12,558.6	1,478.3	1,551.9	1,379.7	1,415.3	1,090.9	1,146.4	1,141.9
	Cottonwood and aspen	2,098.4	17.4	39.5	85.4	88.9	119.7	222.2	194.6
	Basswood	320.9	6.9	16.3	16.8	47.7	36.1	0.0	0.0
	Yellow-poplar	23,008.7	1,059.0	1,699.5	2,365.6	2,694.5	2,505.4	2,305.4	2,450.7
	Black walnut	369.8	17.4	29.0	19.9	86.3	46.2	28.3	0.0
	Other eastern soft hardwoods	45,836.4	5,114.9	6,409.7	6,598.4	5,810.6	5,002.8	4,292.5	3,862.0
	Other eastern hard hardwoods	3,763.2	816.9	733.9	546.9	467.2	446.7	202.4	94.0
	Eastern noncommercial hardwoods	14,639.2	3,489.3	3,653.0	2,699.2	1,718.7	1,102.9	740.6	608.1
	Urban-specific hardwoods	117.3	12.4	12.0	31.8	13.4	19.2	28.4	0.0
	Total hardwood	415,745.6	33,317.4	42,875.1	44,920.3	43,858.7	41,075.1	38,468.4	36,332.1
All types	All groups	825,840.5	53,861.4	89,487.0	109,788.0	114,845.5	103,393.8	87,927.8	70,129.7

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

MISSISSIPPI'S FORESTS, 2022

Table A2.23b— Merchantable bole bark and wood biomass of live trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and diameter class, Mississippi, 2022

Species type	Species group	Diameter class (inches)						
		All classes	19.0–20.9	21.0–24.9	25.0–28.9	29.0–32.9	33.0–36.9	37.0+
thousand tons								
Softwood types	Longleaf and slash pines	37,815.4	2,370.2	2,391.9	29.7	130.7	0.0	0.0
	Loblolly and shortleaf pines	359,834.5	18,047.5	22,668.9	7,831.3	2,667.4	1,073.2	113.2
	Other yellow pines	2,479.3	230.0	570.2	208.7	138.3	182.0	0.0
	Cypress	4,825.2	406.6	860.8	428.6	139.7	467.1	210.7
	Other eastern softwoods	5,140.5	224.7	58.5	58.9	0.0	0.0	0.0
	Total softwood	410,094.9	21,279.0	26,550.4	8,557.2	3,076.0	1,722.3	324.0
Hardwood types	Select white oaks	37,267.2	4,319.4	5,551.3	3,691.3	1,263.6	708.4	330.0
	Select red oaks	26,092.0	2,057.8	4,704.6	4,465.9	2,464.9	862.6	1,787.9
	Other white oaks	17,708.2	1,827.0	2,419.1	1,013.4	956.8	1,003.4	305.3
	Other red oaks	107,969.8	9,545.4	14,355.7	9,965.9	5,873.9	3,631.1	4,287.6
	Hickory	29,117.5	2,914.4	2,731.0	1,520.7	655.0	440.2	0.0
	Hard maple	587.7	0.0	0.0	0.0	0.0	0.0	0.0
	Soft maple	8,173.9	295.2	225.4	61.1	0.0	0.0	0.0
	Beech	6,079.1	613.3	1,113.0	620.9	827.9	130.8	166.1
	Sweetgum	63,046.0	3,506.5	4,396.0	1,352.1	640.7	287.9	88.7
	Tupelo and blackgum	16,991.9	1,020.5	757.2	180.4	142.6	37.6	0.0
	Ash	12,558.6	636.4	994.9	847.3	26.4	280.6	568.6
	Cottonwood and aspen	2,098.4	144.0	193.2	216.0	165.1	341.3	271.2
	Basswood	320.9	69.4	49.6	78.1	0.0	0.0	0.0
	Yellow-poplar	23,008.7	2,581.7	2,689.4	1,524.3	979.8	153.3	0.0
	Black walnut	369.8	90.9	51.8	0.0	0.0	0.0	0.0
	Other eastern soft hardwoods	45,836.4	2,616.7	3,361.2	1,612.1	649.1	506.4	0.0
	Other eastern hard hardwoods	3,763.2	0.0	359.3	95.8	0.0	0.0	0.0
	Eastern noncommercial hardwoods	14,639.2	316.5	273.4	37.5	0.0	0.0	0.0
	Urban-specific hardwoods	117.3	0.0	0.0	0.0	0.0	0.0	0.0
	Total hardwood	415,745.6	32,555.1	44,226.1	27,282.6	14,645.9	8,383.5	7,805.3
All types	All groups	825,840.5	53,834.2	70,776.5	35,839.8	17,721.9	10,105.7	8,129.2

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

MISSISSIPPI'S FORESTS, 2022

Table A2.24— Aboveground and belowground carbon in live trees (at least 1.0-inch diameter at breast height) on forest land by ownership class and land status, Mississippi, 2022

Ownership class	All forest land	Unreserved forest land			Reserved forest land		
		Total	Timberland	Unproductive	Total	Productive	Unproductive
thousand tons							
U.S. Forest Service	56,617.2	56,212.8	56,212.8	0.0	404.4	404.4	0.0
Other Federal	20,572.4	12,475.1	12,475.1	0.0	8,097.3	8,097.3	0.0
State and local government	19,094.0	18,685.1	18,685.1	0.0	408.8	408.8	0.0
Forest industry	31,100.4	31,100.4	31,100.4	0.0	0.0	0.0	0.0
Nonindustrial private	549,616.4	549,616.4	549,616.4	0.0	0.0	0.0	0.0
All classes	677,000.3	668,089.7	668,089.7	0.0	8,910.6	8,910.6	0.0

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

Table A2.25— Average annual net growth of sound bole wood volume of trees (timber species at least 5.0 inches diameter at breast height) on forest land by forest-type group and stand-size class, Mississippi, 2022

Forest type	Forest-type group ^a	Stand-size class ^a				
		All classes	Large diameter	Medium diameter	Small diameter	Nonstocked
million cubic feet						
Softwood types	Longleaf/slash pine	83.3	77.0	5.9	0.4	0.0
	Loblolly/shortleaf pine	1,642.9	1,522.1	118.0	2.8	0.0
	Other eastern softwoods	4.2	4.9	-0.7	0.0	0.0
	Total softwood	1,730.3	1,604.0	123.1	3.2	0.0
Hardwood types	Oak/pine	160.5	131.2	26.7	2.6	0.0
	Oak/hickory	279.6	248.6	42.7	-11.6	0.0
	Oak/gum/cypress	187.3	164.8	27.0	-4.5	0.0
	Elm/ash/cottonwood	60.9	52.7	9.6	-1.4	0.0
	Other hardwoods	-0.1	-1.0	0.6	0.3	0.0
	Exotic hardwoods	1.1	-2.8	4.2	-0.3	0.0
	Total hardwood	689.3	593.6	110.7	-15.0	0.0
Nonstocked	Total nonstocked	2.6	0.0	0.0	0.0	2.6
All types	All groups	2,422.2	2,197.5	233.8	-11.7	2.6

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Based on growth accounting method.

MISSISSIPPI'S FORESTS, 2022

Table A2.26—Average annual net growth of sound bole wood volume of trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and ownership group, Mississippi, 2022

Species type	Species group	All ownerships ^a	Public ownership ^a			Private ownership ^a	
			U.S. Forest Service	Other Federal	State and local government	Forest industry	Nonindustrial private
million cubic feet							
Softwood types	Longleaf and slash pines	72.4	24.4	0.3	3.2	5.0	39.4
	Loblolly and shortleaf pines	1,613.0	44.9	10.8	29.5	179.5	1,348.3
	Other yellow pines	8.2	0.6	0.3	0.0	1.3	5.9
	Cypress	5.8	0.1	0.8	2.4	-0.2	2.7
	Other eastern softwoods	9.5	0.1	0.2	0.6	0.5	8.2
	Total softwood	1,708.9	70.1	12.4	35.7	186.1	1,404.5
Hardwood types	Select white oaks	54.6	5.7	1.0	1.0	1.3	45.6
	Select red oaks	36.2	0.6	2.5	0.7	-1.0	33.3
	Other white oaks	22.3	1.6	2.1	0.5	1.5	16.6
	Other red oaks	168.1	5.8	6.9	3.5	9.3	142.7
	Hickory	26.3	0.5	0.7	-0.9	-0.9	26.8
	Hard maple	1.2	0.0	0.0	0.2	0.3	0.7
	Soft maple	13.6	0.2	0.6	0.8	1.0	11.0
	Beech	7.5	0.7	0.0	0.4	2.6	3.9
	Sweetgum	149.4	3.4	3.1	5.5	12.9	124.6
	Tupelo and blackgum	22.6	1.6	0.4	0.9	0.8	18.8
	Ash	21.1	1.0	1.8	2.5	-1.7	17.7
	Cottonwood and aspen	6.1	0.1	0.2	0.0	0.0	5.8
	Basswood	-0.1	0.0	0.0	0.0	-0.3	0.1
	Yellow-poplar	63.2	4.1	0.8	2.4	9.3	46.6
	Black walnut	0.8	0.0	0.0	0.0	0.8	0.0
	Other eastern soft hardwoods	81.5	2.4	3.0	4.1	-0.4	72.4
	Other eastern hard hardwoods	3.7	0.4	-0.1	0.5	0.2	2.8
	Eastern noncommercial hardwoods	34.4	1.8	0.9	0.6	3.6	27.5
	Tropical and subtropical hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Urban-specific hardwoods	0.8	0.0	0.0	0.0	0.0	0.8
	Total hardwood	713.3	29.9	24.0	22.7	39.2	597.6
All types	All groups	2,422.2	100.0	36.4	58.4	225.3	2,002.1

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Based on growth accounting method.

MISSISSIPPI'S FORESTS, 2022

Table A2.27— Average annual mortality of sound bole wood volume of trees (timber species at least 5.0 inches diameter at breast height) on forest land by forest-type group and stand-size class, Mississippi, 2022

Forest type	Forest-type group ^a	Stand-size class ^a				
		All classes	Large diameter	Medium diameter	Small diameter	Nonstocked
million cubic feet						
Softwood types	Longleaf/slash pine	12.4	10.3	1.9	0.2	0.0
	Loblolly/shortleaf pine	156.3	124.1	30.3	1.9	0.0
	Other eastern softwoods	0.5	0.2	0.3	0.0	0.0
	Total softwood	169.1	134.6	32.5	2.1	0.0
Hardwood types	Oak/pine	43.0	37.7	4.7	0.6	0.0
	Oak/hickory	85.6	68.7	12.0	4.9	0.0
	Oak/gum/cypress	84.7	73.8	9.1	1.8	0.0
	Elm/ash/cottonwood	40.7	34.4	5.5	0.8	0.0
	Other hardwoods	0.5	0.5	0.0	0.0	0.0
	Exotic hardwoods	0.5	0.1	0.3	0.1	0.0
	Total hardwood	255.0	215.2	31.6	8.2	0.0
Nonstocked	Total nonstocked	0.5	0.0	0.0	0.0	0.5
All types	All groups	424.6	349.8	64.1	10.3	0.5

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Based on past conditions.

MISSISSIPPI'S FORESTS, 2022

Table A2.28— Average annual mortality of sound bole wood volume of trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and ownership group, Mississippi, 2022

Species type	Species group	All ownerships ^a	Public ownership ^a			Private ownership ^a	
			U.S. Forest Service	Other Federal	State and local government	Forest industry	Nonindustrial private
			million cubic feet				
Softwood types	Longleaf and slash pines	11.3	5.1	0.1	1.1	0.0	5.0
	Loblolly and shortleaf pines	162.0	14.6	2.3	7.2	11.9	126.1
	Other yellow pines	0.7	0.0	0.0	0.0	0.0	0.7
	Cypress	0.2	0.0	0.0	0.0	0.0	0.1
	Other eastern softwoods	5.0	0.1	0.2	0.5	0.0	4.2
	Total softwood	179.1	19.8	2.6	8.8	11.9	136.1
Hardwood types	Select white oaks	6.4	0.5	0.0	0.6	0.9	4.4
	Select red oaks	16.2	0.8	0.5	2.6	2.2	10.1
	Other white oaks	3.2	0.3	0.2	0.0	0.1	2.6
	Other red oaks	57.2	2.9	3.0	2.6	0.9	47.9
	Hickory	13.8	0.8	0.2	1.2	0.2	11.5
	Hard maple	0.4	0.0	0.1	0.0	0.2	0.2
	Soft maple	10.3	0.7	0.6	0.4	0.5	8.1
	Beech	1.7	0.3	0.0	0.0	0.3	1.2
	Sweetgum	40.4	1.4	2.4	8.3	1.0	27.3
	Tupelo and blackgum	7.5	0.8	0.7	0.2	0.1	5.6
	Ash	7.8	0.3	0.6	0.4	0.0	6.5
	Cottonwood and aspen	1.0	0.0	0.0	0.0	0.0	0.9
	Basswood	0.8	0.0	0.0	0.0	0.0	0.8
	Yellow-poplar	10.0	0.8	0.0	0.0	1.5	7.7
	Black walnut	0.2	0.0	0.0	0.0	0.0	0.1
	Other eastern soft hardwoods	51.5	1.7	2.9	0.7	2.3	43.9
	Other eastern hard hardwoods	6.3	0.4	0.7	0.1	0.1	5.1
	Eastern noncommercial hardwoods	10.8	1.1	0.2	0.4	0.7	8.3
	Tropical and subtropical hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Urban-specific hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Total hardwood	245.5	12.7	12.2	17.5	11.0	192.2
All types	All groups	424.6	32.5	14.9	26.2	22.8	328.3

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Based on past conditions.

MISSISSIPPI'S FORESTS, 2022

Table A2.29— Average annual mortality of merchantable bole wood volume of growing-stock trees (at least 5.0 inches diameter at breast height) on forest land by species group and ownership group, Mississippi, 2022

Species type	Species group	All ownerships ^a	Public ownership ^a			Private ownership ^a	
			U.S. Forest Service	Other Federal	State and local government	Forest industry	Nonindustrial private
million cubic feet							
Softwood types	Longleaf and slash pines	10.6	4.9	0.0	1.0	0.0	4.7
	Loblolly and shortleaf pines	145.0	13.4	1.9	6.5	11.3	111.8
	Other yellow pines	0.5	0.0	0.0	0.0	0.0	0.5
	Cypress	0.1	0.0	0.0	0.0	0.0	0.1
	Other eastern softwoods	1.4	0.0	0.2	0.2	0.0	1.0
	Total softwood	157.5	18.3	2.1	7.7	11.3	118.2
Hardwood types	Select white oaks	5.6	0.4	0.0	0.6	0.9	3.7
	Select red oaks	14.0	0.8	0.5	2.6	2.1	7.9
	Other white oaks	1.7	0.1	0.2	0.0	0.0	1.4
	Other red oaks	38.3	1.8	0.7	1.1	0.6	34.0
	Hickory	8.4	0.6	0.0	1.2	0.0	6.6
	Hard maple	0.2	0.0	0.0	0.0	0.0	0.2
	Soft maple	3.3	0.2	0.4	0.2	0.1	2.4
	Beech	0.6	0.0	0.0	0.0	0.0	0.6
	Sweetgum	24.8	1.1	1.5	3.1	0.6	18.6
	Tupelo and blackgum	3.5	0.3	0.1	0.2	0.1	2.7
	Ash	3.6	0.1	0.2	0.2	0.0	3.1
	Cottonwood and aspen	0.8	0.0	0.0	0.0	0.0	0.8
	Basswood	0.7	0.0	0.0	0.0	0.0	0.7
	Yellow-poplar	7.9	0.7	0.0	0.0	1.4	5.8
	Black walnut	0.1	0.0	0.0	0.0	0.0	0.1
	Other eastern soft hardwoods	25.4	0.9	1.4	0.2	1.4	21.5
	Other eastern hard hardwoods	2.5	0.1	0.0	0.0	0.1	2.3
	Eastern noncommercial hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Tropical and subtropical hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Urban-specific hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Total hardwood	141.3	7.0	5.1	9.4	7.4	112.3
All types	All groups	298.8	25.4	7.2	17.0	18.7	230.5

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Based on past conditions.

MISSISSIPPI'S FORESTS, 2022

Table A2.30— Average annual mortality of sawlog wood volume of sawtimber trees on forest land by species group and ownership group, Mississippi, 2022

Species type	Species group	All ownerships ^a	Public ownership ^a			Private ownership ^a	
			U.S. Forest Service	Other Federal	State and local government	Forest industry	Nonindustrial private
million cubic feet							
Softwood types	Longleaf and slash pines	41.4	20.3	0.0	1.7	0.0	19.5
	Loblolly and shortleaf pines	476.3	53.3	9.7	40.6	36.8	335.8
	Other yellow pines	1.0	0.0	0.0	0.0	0.0	1.0
	Cypress	0.0	0.0	0.0	0.0	0.0	0.0
	Other eastern softwoods	3.4	0.1	0.8	0.0	0.0	2.6
	Total softwood	522.1	73.6	10.5	42.3	36.8	358.9
Hardwood types	Select white oaks	23.9	0.7	0.0	3.6	4.0	15.6
	Select red oaks	72.4	3.7	0.8	14.1	13.7	40.1
	Other white oaks	4.3	0.0	0.7	0.2	0.0	3.5
	Other red oaks	159.1	7.2	3.2	5.9	1.0	141.7
	Hickory	26.1	1.8	0.0	6.2	0.0	18.1
	Hard maple	0.3	0.0	0.0	0.0	0.0	0.3
	Soft maple	5.9	0.2	0.6	0.0	0.4	4.7
	Beech	2.2	0.0	0.0	0.0	0.0	2.2
	Sweetgum	82.2	2.6	7.7	17.2	0.9	53.8
	Tupelo and blackgum	8.6	0.6	0.3	0.7	0.0	7.0
	Ash	13.3	0.1	0.6	1.0	0.0	11.5
	Cottonwood and aspen	3.2	0.0	0.0	0.0	0.0	3.2
	Basswood	2.5	0.0	0.0	0.0	0.0	2.5
	Yellow-poplar	32.0	3.2	0.0	0.0	8.2	20.6
	Black walnut	0.3	0.0	0.0	0.0	0.0	0.3
	Other eastern soft hardwoods	86.3	2.7	5.7	0.4	4.0	73.4
	Other eastern hard hardwoods	7.6	0.2	0.0	0.0	0.0	7.5
	Eastern noncommercial hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Tropical and subtropical hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Urban-specific hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Total hardwood	530.2	22.9	19.7	49.4	32.3	405.9
All types	All groups	1,052.3	96.6	30.2	91.7	69.1	764.7

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Based on past conditions.

MISSISSIPPI'S FORESTS, 2022

Table A2.31— Average annual removals of sound bole wood volume of trees (timber species at least 5.0 inches diameter at breast height) on forest land by forest-type group and stand-size class, Mississippi, 2022

		Stand-size class ^a				
Forest type	Forest-type group ^a	All classes	Large diameter	Medium diameter	Small diameter	Nonstocked
		million cubic feet				
Softwood types	Longleaf/slash pine	25.5	20.6	4.3	0.6	0.0
	Loblolly/shortleaf pine	852.6	700.5	148.7	3.3	0.0
	Other eastern softwoods	1.0	0.0	0.9	0.1	0.0
	Total softwood	879.0	721.1	153.9	4.0	0.0
Hardwood types	Oak/pine	67.0	56.8	7.4	2.8	0.0
	Oak/hickory	95.8	76.4	14.4	5.1	0.0
	Oak/gum/cypress	38.3	36.5	1.8	0.0	0.0
	Elm/ash/cottonwood	15.7	11.8	3.8	0.1	0.0
	Other hardwoods	0.0	0.0	0.0	0.0	0.0
	Exotic hardwoods	1.4	0.0	1.4	0.0	0.0
	Total hardwood	218.3	181.5	28.9	7.9	0.0
Nonstocked	Total nonstocked	0.0	0.0	0.0	0.0	0.0
All types	All groups	1,097.4	902.7	182.7	11.9	0.0

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Based on past conditions.

MISSISSIPPI'S FORESTS, 2022

Table A2.32— Average annual removals of sound bole wood volume of trees (timber species at least 5.0 inches diameter at breast height) on forest land by species group and ownership group, Mississippi, 2022

Species type	Species group	All ownerships ^a	Public ownership ^a			Private ownership ^a	
			U.S. Forest Service	Other Federal	State and local government	Forest industry	Nonindustrial private
million cubic feet							
Softwood types	Longleaf and slash pines	29.0	3.5	0.0	0.0	0.2	25.3
	Loblolly and shortleaf pines	846.3	13.6	0.0	17.1	109.9	705.7
	Other yellow pines	1.9	0.0	0.0	0.0	0.0	1.9
	Cypress	0.2	0.0	0.0	0.0	0.0	0.1
	Other eastern softwoods	2.8	0.0	0.0	0.0	0.0	2.8
	Total softwood	880.2	17.1	0.0	17.1	110.1	735.8
Hardwood types	Select white oaks	14.1	0.1	0.0	0.0	0.9	13.1
	Select red oaks	13.7	0.0	0.0	0.1	1.5	12.1
	Other white oaks	4.2	0.3	0.0	0.0	0.0	4.0
	Other red oaks	55.3	0.5	0.0	1.7	1.8	51.2
	Hickory	10.9	0.0	0.0	0.0	1.0	9.9
	Hard maple	0.0	0.0	0.0	0.0	0.0	0.0
	Soft maple	3.9	0.0	0.0	0.1	0.4	3.4
	Beech	3.2	0.0	0.0	0.0	0.1	3.1
	Sweetgum	53.7	0.4	0.0	1.2	2.1	50.0
	Tupelo and blackgum	4.6	0.0	0.0	0.0	0.1	4.4
	Ash	4.9	0.0	0.0	1.1	0.1	3.8
	Cottonwood and aspen	2.9	0.3	0.0	0.0	0.0	2.6
	Basswood	0.0	0.0	0.0	0.0	0.0	0.0
	Yellow-poplar	17.1	0.1	0.0	0.5	1.5	15.0
	Black walnut	0.0	0.0	0.0	0.0	0.0	0.0
	Other eastern soft hardwoods	22.5	0.4	0.1	1.3	1.0	19.7
	Other eastern hard hardwoods	1.3	0.0	0.0	0.0	0.0	1.2
	Eastern noncommercial hardwoods	4.8	0.0	0.0	0.0	0.2	4.6
	Tropical and subtropical hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Urban-specific hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Total hardwood	217.2	2.2	0.1	6.0	10.7	198.2
All types	All groups	1,097.4	19.3	0.1	23.1	120.9	934.0

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Based on past conditions.

MISSISSIPPI'S FORESTS, 2022

Table A2.33— Average annual removals of sawlog wood volume of sawtimber trees on timberland by species group and ownership group, Mississippi, 2022

		Public ownership ^a				Private ownership ^a	
Species type	Species group	All ownerships ^a	U.S. Forest Service	Other Federal	State and local government	Forest industry	Nonindustrial private
million cubic feet							
Softwood types	Longleaf and slash pines	106.9	11.3	0.0	0.0	1.2	94.3
	Loblolly and shortleaf pines	3,367.3	53.7	0.0	83.8	458.1	2,771.7
	Other yellow pines	9.7	0.0	0.0	0.0	0.0	9.7
	Cypress	0.7	0.0	0.0	0.0	0.0	0.7
	Other eastern softwoods	3.6	0.0	0.4	0.0	0.0	3.1
	Total softwood	3,488.2	65.0	0.4	83.8	459.3	2,879.6
Hardwood types	Select white oaks	41.0	0.2	0.6	0.0	2.6	37.7
	Select red oaks	56.8	0.0	0.0	0.0	9.1	47.7
	Other white oaks	13.6	1.2	3.4	0.0	0.0	9.0
	Other red oaks	177.1	2.4	2.4	5.6	6.3	160.5
	Hickory	39.3	0.0	0.0	0.0	3.6	35.7
	Hard maple	0.0	0.0	0.0	0.0	0.0	0.0
	Soft maple	0.3	0.0	0.0	0.0	0.0	0.3
	Beech	5.8	0.0	0.0	0.0	0.0	5.8
	Sweetgum	133.3	0.0	0.0	3.0	2.0	128.4
	Tupelo and blackgum	7.8	0.0	0.0	0.0	0.0	7.8
	Ash	14.1	0.0	0.0	5.8	0.0	8.3
	Cottonwood and aspen	5.8	0.0	0.0	0.0	0.0	5.8
	Basswood	0.0	0.0	0.0	0.0	0.0	0.0
	Yellow-poplar	55.2	0.1	4.4	2.2	1.6	46.8
	Black walnut	0.0	0.0	0.0	0.0	0.0	0.0
	Other eastern soft hardwoods	31.6	0.4	0.0	2.1	2.0	27.2
	Other eastern hard hardwoods	0.5	0.0	0.0	0.0	0.0	0.5
	Eastern noncommercial hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Tropical and subtropical hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Urban-specific hardwoods	0.0	0.0	0.0	0.0	0.0	0.0
	Total hardwood	582.2	4.3	10.8	18.6	27.2	521.4
All types	All species groups	4,070.3	69.3	11.2	102.4	486.5	3,401.0

Numbers in rows and columns may not sum to totals due to rounding.

0.0 = no sample for the cell or a value between 0.00 and 0.05.

^a Based on past conditions.

Oswalt, S.N.; Kantavichai, R. 2026. Mississippi's forests, 2022. Resour. Bull. SRS–253. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 92 p. <https://doi.org/10.2737/SRS-RB-253>.

This report provides detailed estimates and highlights key findings from Forest Inventory and Analysis data collected across the State of Mississippi from 2017 to 2023; a remeasurement of plots sampled between 2006 and 2017. Estimates of forest area, volume, biomass, and timber product output are provided across land ownerships, forest types, and forest demographics throughout the State. Mississippi covers approximately 31 million acres, 19.2 million acres (62 percent) of which is considered forest land. This report evaluates trends in land-use change as well as current forest land conditions and summarizes them within the context of the overall Mississippi landscape.

Keywords: FIA, forest health, forest ownership, timber growth, timber removals, timber volume, timberland.



In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the State or local Agency that administers the program or contact USDA through the Telecommunications Relay Service at 711 (voice and TTY). Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Mail Stop 9410, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.

