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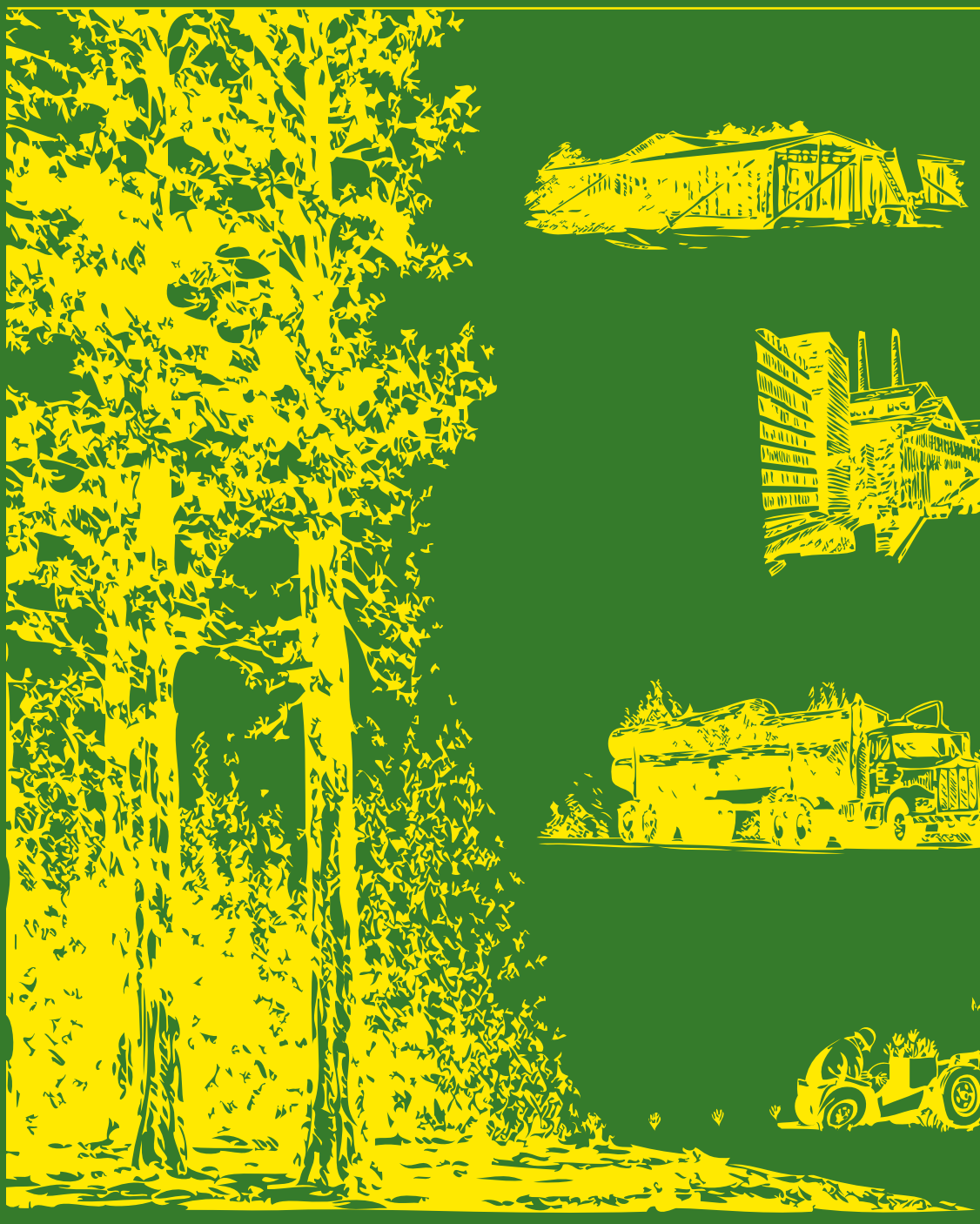
Alabama's Timber Industry—An Assessment of Timber Product Output and Use, 2009

**James W. Bentley,
Tony G. Johnson, and
Brian Hendricks**



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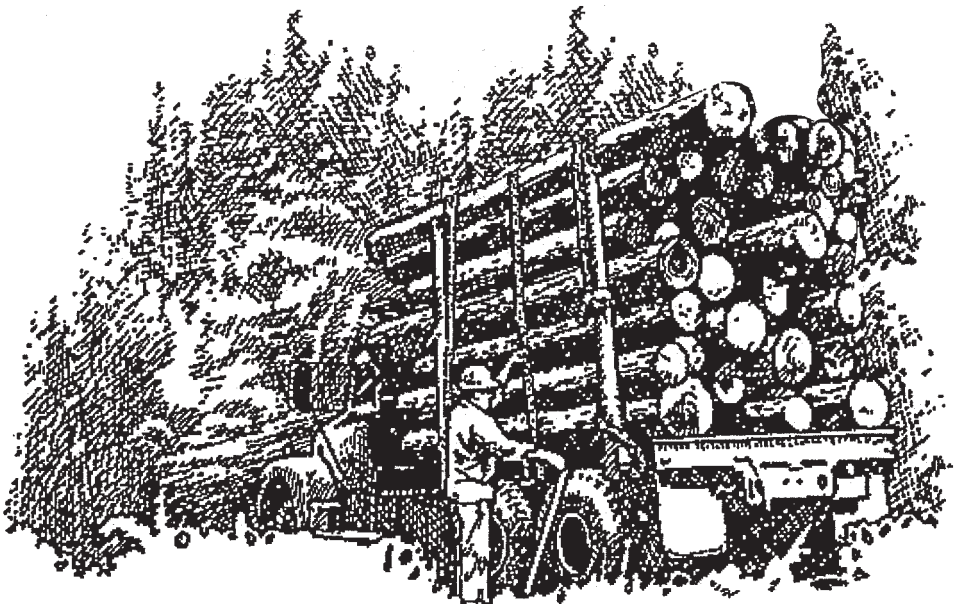

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Foreword

This report contains the findings of a 2009 canvass of all primary wood-using plants in Alabama, and presents changes in product output and residue use since 2007. It complements the Forest Inventory and Analysis annual inventory of volume and removals from the State's timberland. The canvass was conducted to determine the amount and source of wood receipts and annual timber product drain, by county, in 2009 and to determine interstate and cross-regional movement of industrial roundwood. Only primary wood-using mills were canvassed. Primary mills are those that process roundwood in log or bolt form or as chipped roundwood. Examples of industrial roundwood products are saw logs, pulpwood, veneer logs, poles, and logs used for composite board products. Mills producing products from residues generated at primary and secondary processors were not canvassed. Trees chipped in the woods were included in the estimate of timber drain only if they were delivered to a primary domestic manufacturer.

A 100-percent canvass of all wood processors in Alabama was conducted in 2010 to obtain information for 2009. In addition, roundwood from out-of-State mills known to be using logs or bolts harvested from Alabama timberland was incorporated into Alabama production estimates. Each mill was canvassed by mail or through personal contact at plant locations. Telephone contacts followed mailed questionnaire responses when additional information or clarification of a response was necessary. In the event of a nonresponse, data collected in previous surveys were updated using current data collected for mills of similar size, product type, and location. Surveys for all timber products other than pulpwood began in 1961, and are currently conducted every 2 years.

Pulpwood production data were taken from an annual canvass of all southern pulpmills. Medium density fiberboard, insulating board, and hardboard plants were included in this survey.

Acknowledgments

The Southern Research Station (SRS) gratefully acknowledges the tremendous cooperation and assistance provided by the Alabama Forestry Commission in collecting mill data. Appreciation is also extended to forest industry and mill managers for providing timber products information.

The authors thank Gene Quick and Jim Gober for review and comments; Carolyn Steppleton and Michael Howell for their tireless efforts in processing and accuracy of the data; Helen Beresford for timber product output database maintenance and support; Anne Jenkins, Janet Griffin, Sharon Johnson, and Charlene Walker for tables, graphs, statistical checking, and styling; and the SRS Technical Publications Team for editorial review and publication of this report.

Timber Product Output Database Retrieval System

The Forest Inventory and Analysis (FIA) Research Work Unit of the USDA Forest Service developed the Timber Product Output (TPO) Database Retrieval System to help customers answer questions about timber harvesting and use in the Southern Region. This system acts as an interface to a standard set of consistently coded TPO data for each State and county in the region and Nation. This regional and national set of TPO data consists of 11 variables that describe for each county the roundwood products harvested, logging residues left in the woods, other timber removals (i.e. land clearing and reserved timber removals), and wood and bark residues generated by the county's primary wood-using mills. The system is available through the FIA Web site: http://srsfia2.fs.fed.us/.

The database is well documented and easy to use. The retrieval system allows the user to select the TPO variables of interest and generate a standard set of timber products, removals, and mill residue tables for the specified resource area, State, or region. The system has been logically divided into two sections to assist the user in making specific data requests. In section 1, the user is asked to define the resource area, and section 2 generates tables for the specified area. In each section, the user is asked to supply specific options that will serve to customize the database retrieval.

There are four options available for defining the geographic area of interest. Each option provides an increasing level of detail. The region, subregion, State, or county defines an area. The user selects the option that best suits the level of detail required. Users who select county as an option should be aware that some counties have been combined due to data sensitivity. These combined counties are identified with asterisks in the output tables.

The TPO contacts are listed for each region to provide additional explanation or clarification.

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Contents

[a]All tables in this report are available in Microsoft® Excel workbook files. Upon request, these files will be supplied in the format the customer requests.

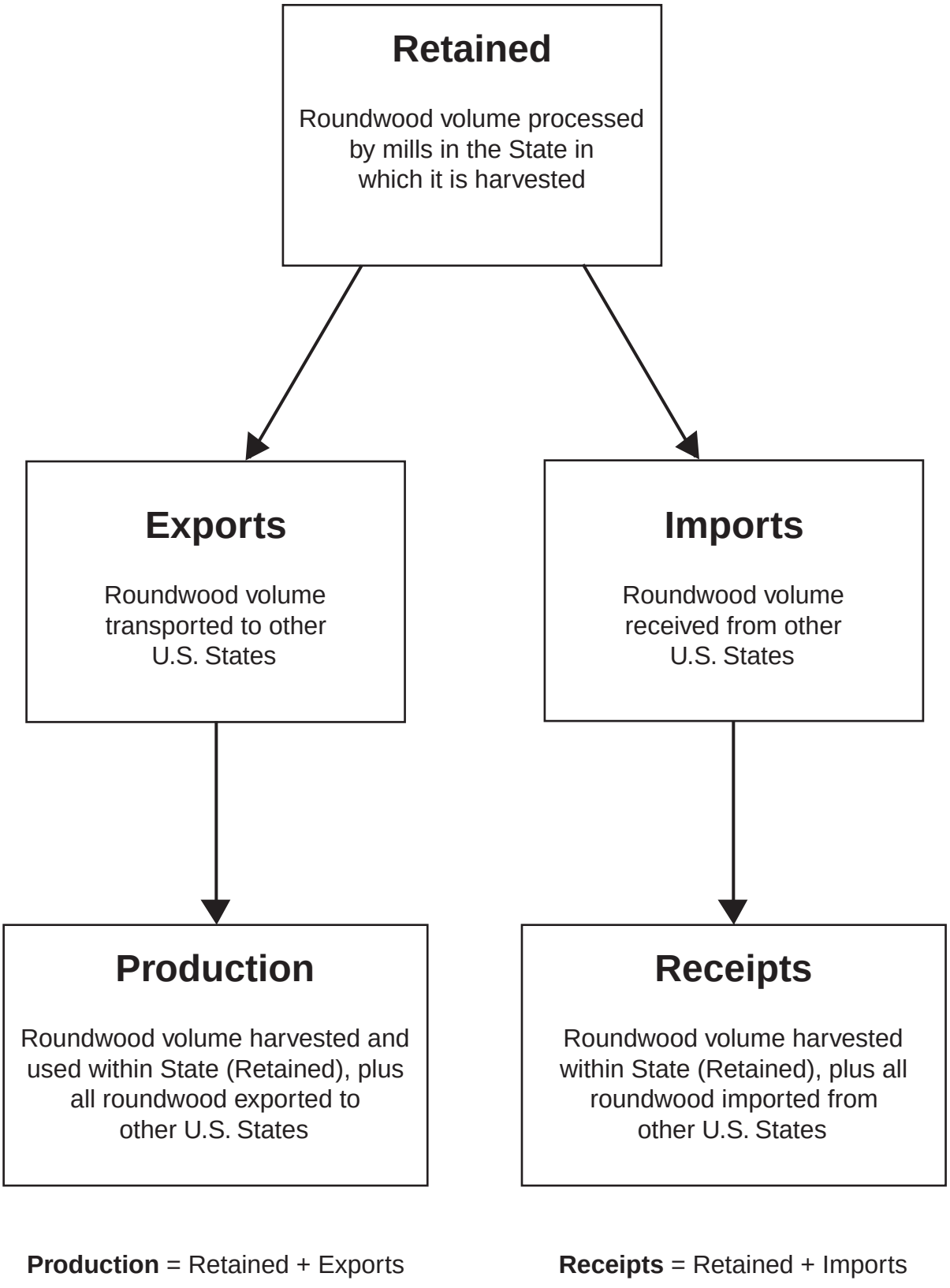

Figure 1—Movement of roundwood exports and imports within the United States.

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Output of Industrial Timber Products

Note: Certain terms used in this report—retained, export, import, production, and receipts—have specialized meanings and relationships unique to the Forest Inventory and Analysis Units across the country that deal with timber product output (TPO) (fig. 1). Unless otherwise indicated, the context for production and receipts comparisons (increases, decreases, and stabilizations) throughout the report is from 2007 to 2009.

All Products

- TPO from roundwood was down 298.7 million cubic feet, or 27 percent, to 803.3 million cubic feet.
- Output of softwood roundwood products decreased 28 percent to 597.0 million cubic feet, while output of hardwood roundwood products declined 25 percent to 206.3 million cubic feet (fig. 2).
- Pulpwood and saw logs were the principal roundwood products in 2009. Combined output of these products totaled 743.4 million cubic feet and accounted for 92 percent of Alabama's total roundwood output (fig. 3).
- Total receipts at Alabama mills, which included roundwood harvested and retained in the State as well as roundwood imported from other States, decreased 24 percent to 847.6 million cubic feet, while output of utilized plant byproducts was down 162.2 million cubic feet to 216.6 million cubic feet.
- The number of primary roundwood-using plants in Alabama totaled 120 in 2009, a loss of 24 mills since 2007 (fig. 4).
- Across all products, 85 percent of roundwood harvested was retained for processing at Alabama mills. Exports of roundwood to other States amounted to 121.2 million cubic feet, while imports of roundwood amounted to

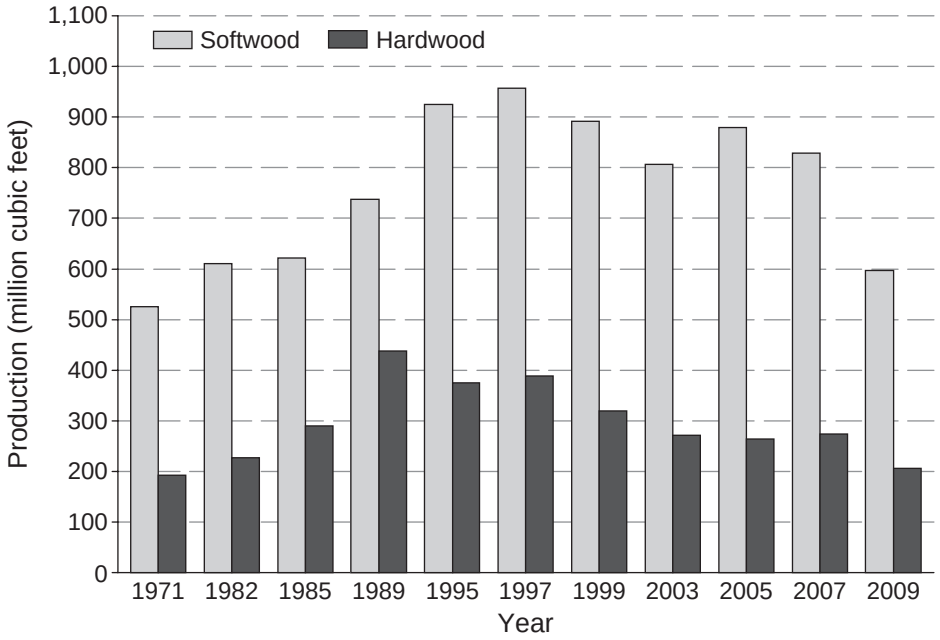

Figure 2—Roundwood production for all products by species group and year, (see page 7 for references for individual years), Alabama.

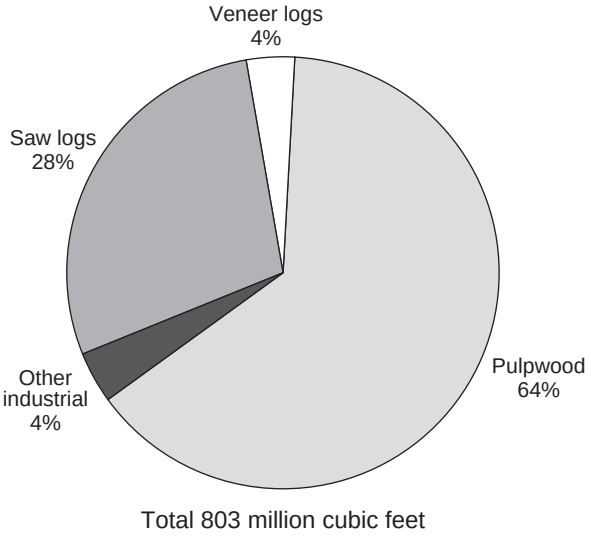

Figure 3—Roundwood production by type of product, Alabama, 2009.

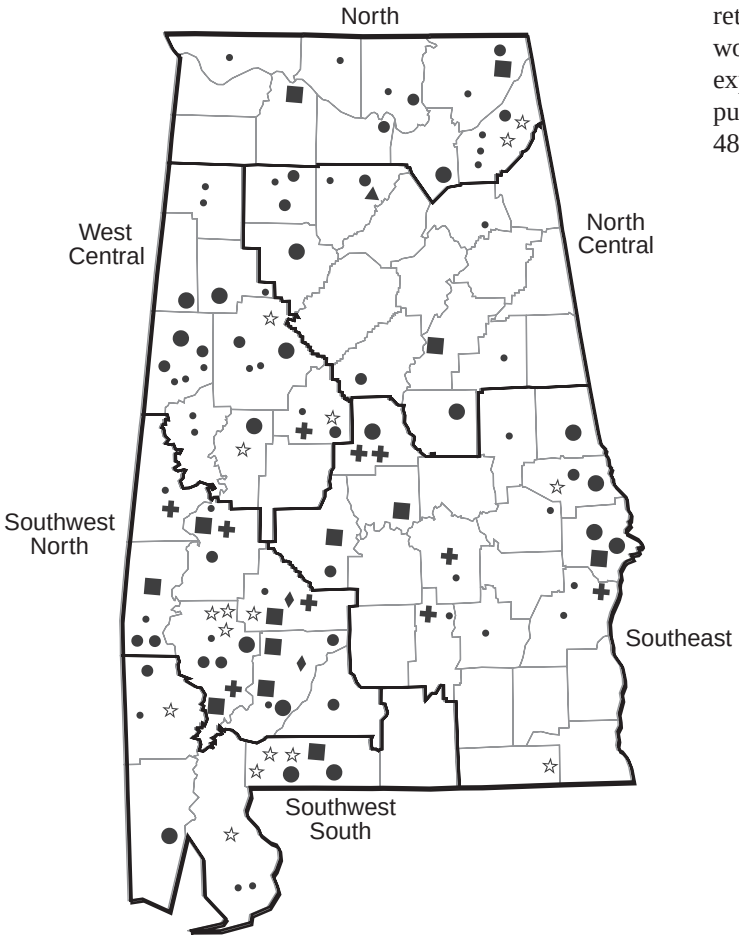

Figure 4—Primary wood-using mills by region, Alabama, 2009.

165.4 million cubic feet making the State a net importer of roundwood. Tables A.8 to A.11 show exports to and imports from other States by individual product type.

Pulpwood

- Total pulpwood production, including chipped roundwood, decreased 59.0 million cubic feet to 515.1 million cubic feet and accounted for 64 percent of the State's total roundwood TPO. Softwood output decreased 4 percent to 360.3 million cubic feet (5.07 million cords); hardwood output decreased 22 percent to 154.8 million cubic feet (2.06 million cords) (fig. 5).

- Thirteen pulpmill facilities were operating and receiving roundwood in Alabama in 2009, one less than in 2007. Total pulpwood receipts for these mills decreased 40.8 million cubic feet to 563.3 million cubic feet, accounting for 66 percent of total receipts for all mills.

- Eighty-five percent of roundwood cut for pulpwood was retained for processing at Alabama pulpmills. Roundwood pulpwood accounted for 65 percent of total known exports and 77 percent of total imports. Roundwood pulpwood imports amounted to 126.6 million cubic feet, 48.2 million cubic feet more than was exported.

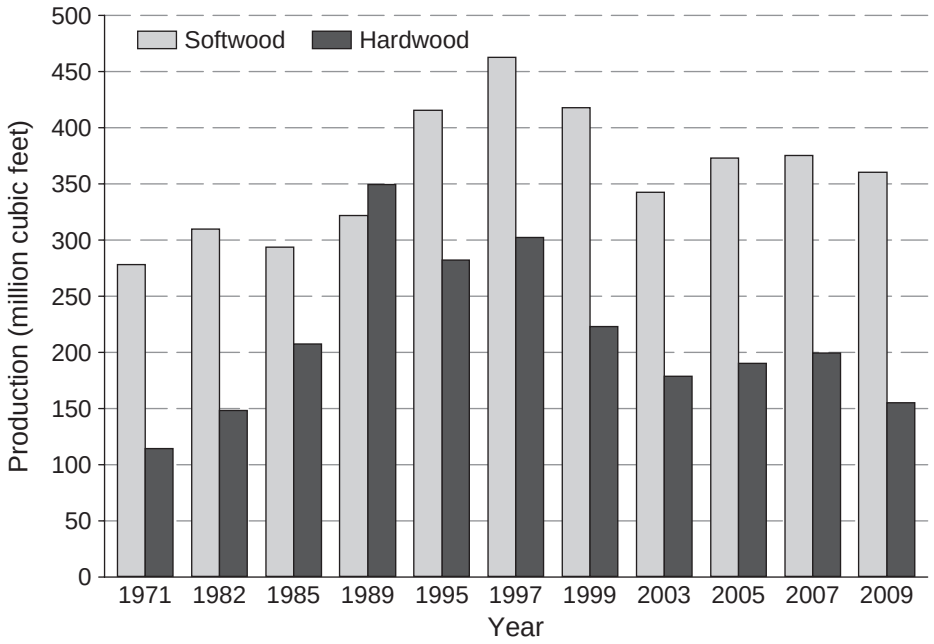

Figure 5—Roundwood pulpwood production by species group and year (see page 7 for references for individual years), Alabama.

Saw Logs

- Saw logs accounted for 28 percent of the State's total roundwood products. Output of softwood saw logs decreased 47 percent to 187.9 million cubic feet (1.04 billion board feet, International ¼-inch rule), while that of hardwood saw logs declined 31 percent to 40.4 million cubic feet (240 million board feet, International ¼-inch rule) (fig. 6).

- In 2009, Alabama had 78 sawmills, a loss of 15 mills since 2007. Total saw-log receipts decreased 168.4 million cubic feet to 225.6 million cubic feet. Softwood saw-log receipts were down 44 percent to 187.8 million cubic feet, while those of hardwoods decreased 37 percent to 37.7 million cubic feet. Of the operating mills in 2009, 21 percent had receipts of <1 million board feet, while 37 percent had receipts >10 million board feet. These 29 mills, however, accounted for 89 percent of total saw-log receipts.

- Alabama retained 85 percent of its saw-log production for in-State manufacture; saw-log exports exceeded imports by 2.7 million cubic feet in 2009.

Veneer Logs

- Output of veneer logs in 2009 totaled 29.0 million cubic feet and accounted for 4 percent of the State's total roundwood TPO volume. Softwood veneer production decreased 65 percent to 21.2 million cubic feet (124 million board feet, International ¼-inch rule); output of hardwood veneer logs declined 48 percent to 7.9 million cubic feet (48 million board feet, International ¼-inch rule) (fig. 7).

- Twelve veneer mills were operating in Alabama in 2009. Total receipts of veneer logs decreased 69 percent to 22.1 million cubic feet. Softwood veneer receipts decreased 43.1 million cubic feet to 14.5 million cubic feet.

- Alabama retained 75 percent of its veneer-log production for processing at in-State veneer mills. Imports amounted to 392,000 cubic feet, and exports totaled 7.3 million cubic feet, making the State a net exporter of roundwood veneer logs.

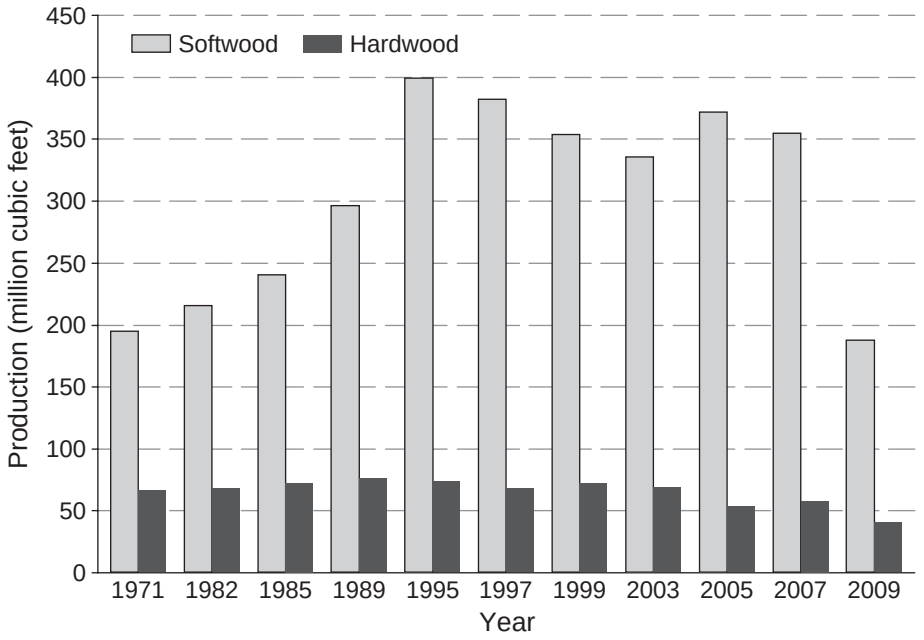

Figure 6—Roundwood saw-log production by species group and year (see page 7 for references for individual years), Alabama.

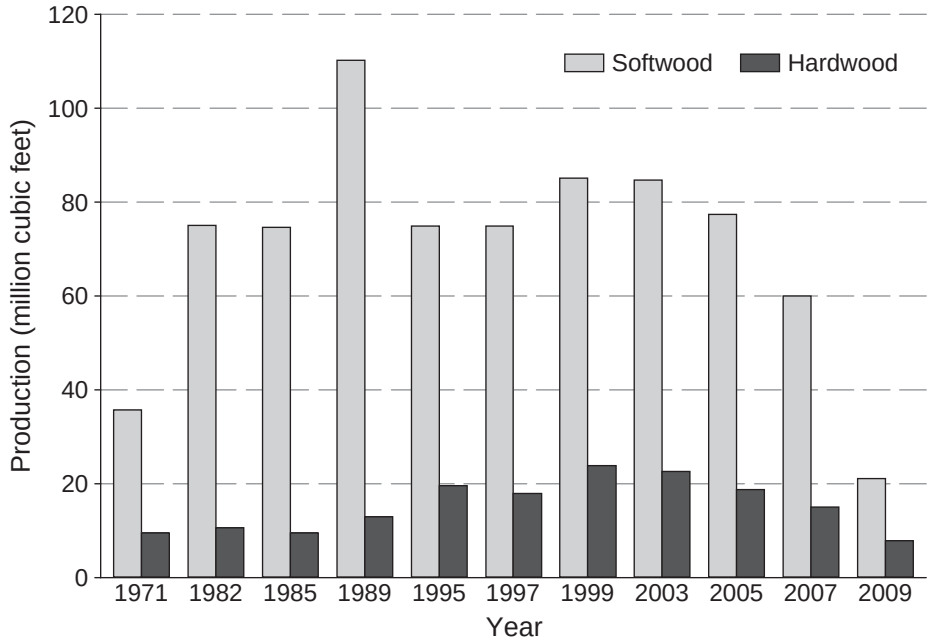

Figure 7—Roundwood veneer-log production by species group and year (see page 7 for references for individual years), Alabama.

Other Industrial Products

- Roundwood harvested for other industrial uses, such as poles, posts, composite panels, mulch, firewood, and all other industrial products, decreased 22 percent to 30.9 million cubic feet. Other industrial product volume accounted for 4 percent of the State's total TPO volume. Softwood output accounted for 89 percent of the industrial product volume.

Plant Byproducts

- In 2009, processing of primary products in Alabama mills generated 216.8 million cubic feet of wood and bark residues. Bark residues from all primary products were 88.1 million cubic feet, while coarse volume totaled 70.8 million cubic feet. Sawdust and shavings made-up 26 percent of total residues, or 57.9 million cubic feet (fig. 8).

- The processing of saw logs generated 136.9 million cubic feet of mill residues, accounting for 63 percent of the total residues produced (fig. 9).

- Virtually all of the wood and bark residues were used for a product; <1 percent were not used, while 60 percent of the residues were used for industrial fuel (fig. 10). Ninety-five percent, or 67.1 million cubic feet, of the coarse residues were used to manufacture fiber products. Most of the bark was used for industrial fuel or other miscellaneous products, while 75 percent of the sawdust and shavings were used for industrial fuel.

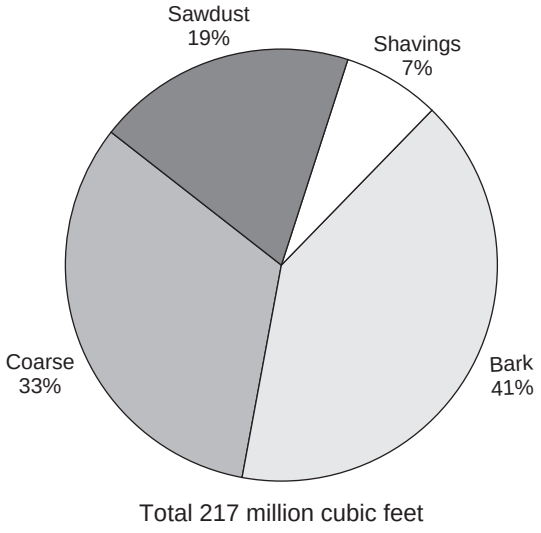

Figure 8—Primary mill residue by residue type, Alabama, 2009.

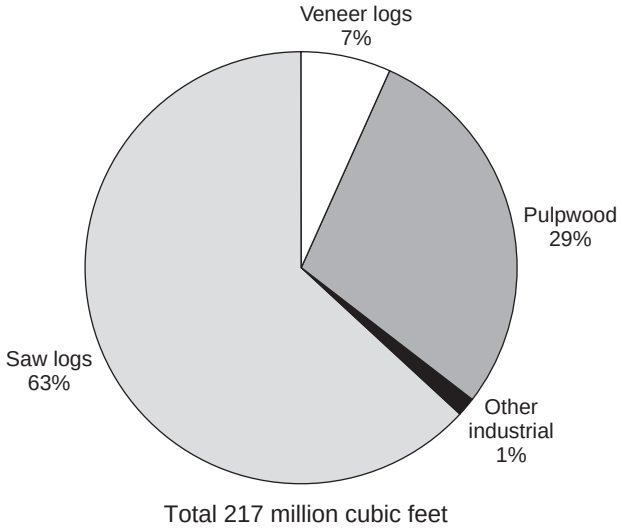

Figure 9—Primary mill residue produced by roundwood type, Alabama, 2009.

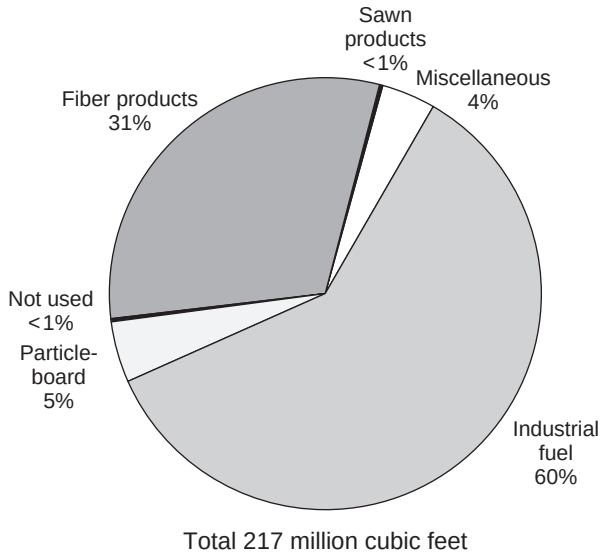

Figure 10—Disposal of residue by product, Alabama, 2009.

County Data

- Table A.14 shows softwood and hardwood product output by county and individual product type. All 67 counties in Alabama had softwood and hardwood output. Nine counties (Barbour, Choctaw, Clarke, Conecuh, Marengo, Monroe, Sumter, Washington, and Wilcox) had combined softwood and hardwood product output of >20 million cubic feet each. These nine counties total product output amounted to 254.1 million cubic feet and accounted for 32 percent of the State's total product output.

Total Roundwood Output

Using the most recent inventory data for Alabama, product output by source, ownership, and detailed species group was estimated.

Source

- In addition to the 803.3 million cubic feet of roundwood output for industrial roundwood products, an estimated 32.6 million cubic feet was harvested for residential fuelwood, bringing Alabama's total roundwood output to 835.9 million cubic feet.

- Ninety-one percent of total roundwood output was considered growing-stock volume (sawtimber and poletimber) from timberland sources. Other sources (such as saplings; stumps, tops, and limbs of trees on timberland; and trees on nonforest land) contributed an estimated 73.4 million cubic feet, or 9 percent of total roundwood output (fig. 11).

Ownership

- An estimated 621.6 million cubic feet, or 74 percent, of the total roundwood output came from nonindustrial private forest lands. Forest industry lands contributed 188.3 million cubic feet, or 23 percent of the output. Public lands made-up the remaining 3 percent, or 26.0 million cubic feet (fig. 12).

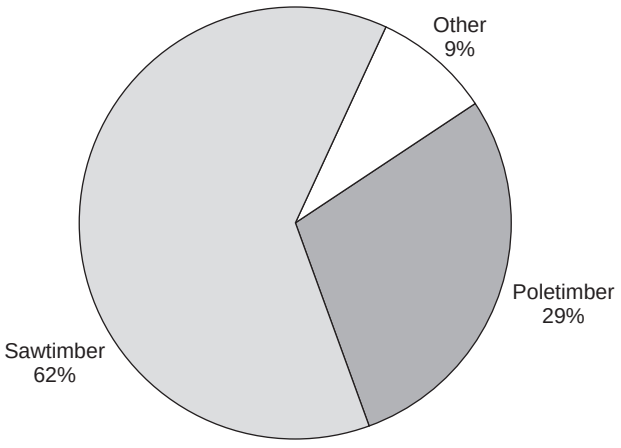

Figure 11—Roundwood output by source, Alabama, 2009.

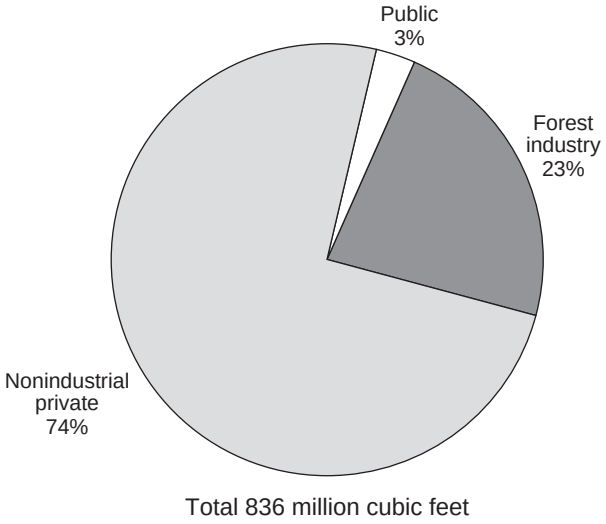

Figure 12—Roundwood output by ownership, Alabama, 2009.

Species

- The loblolly and shortleaf pine group provided more volume than any other softwood species group, accounting for 87 percent of the total softwood output (fig. 13). The longleaf and slash pine type accounted for 10 percent of the softwood output. The red oak and white oak groups combined accounted for 101.4 million cubic feet, or 43 percent of total hardwood output (fig. 14).

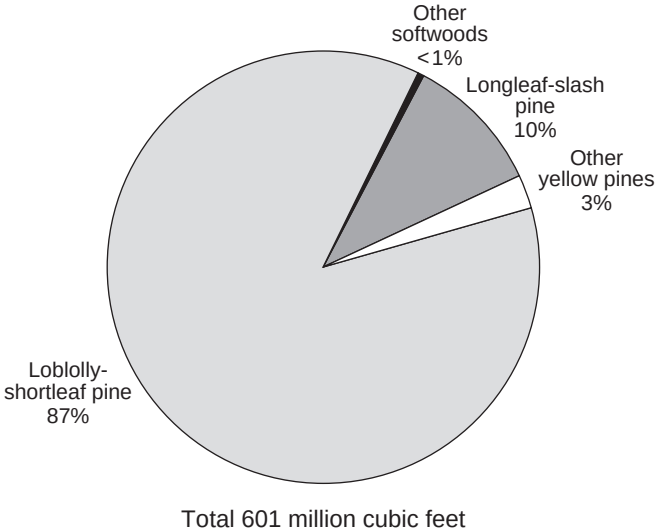

Figure 13—Roundwood output by softwood species group, Alabama, 2009.

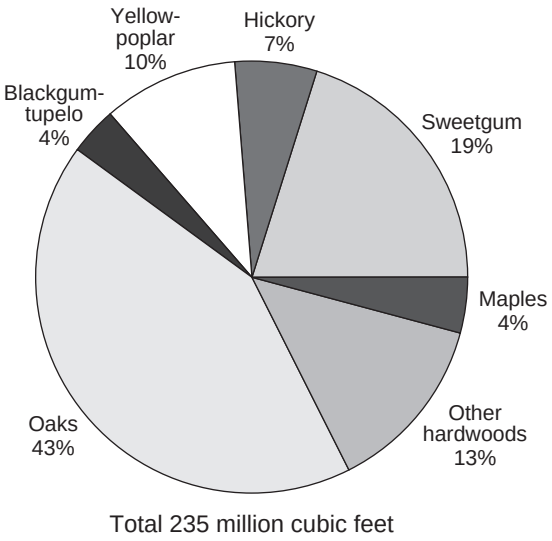

Figure 14—Roundwood output by hardwood species group, Alabama, 2009.

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Glossary

Board foot. A unit of measure applied to lumber that is 1-foot long, 1-foot wide, and 1-inch thick (or its equivalent) and also associated with roundwood as to its potential yield of such products.

Byproducts. Primary wood products, e.g., pulp chips, animal bedding, and fuelwood, recycled from mill residues.

Composite panels. Roundwood products manufactured into chips, wafers, strands, flakes, shavings, or sawdust and then reconstituted into a variety of panel and engineered lumber products.

Consumption. The quantity of a commodity, such as pulpwood, utilized by a particular mill or group of mills.

Drain. The volume of roundwood removed from any geographic area where timber is grown.

Exports. The volume of domestic roundwood utilized by mills outside the State where timber was cut.

Fiber products. Byproducts used in the manufacture of pulp, paper, paperboard, and composite products, such as chipboard.

Growing-stock removals. The growing-stock volume removed from poletimber and sawtimber trees in the timberland inventory. (Note: Includes volume removed for roundwood products, logging residues, and other removals.)

Growing-stock trees. Living trees of commercial species classified as sawtimber, poletimber, saplings, and seedlings. Growing-stock trees must contain at least one 12-foot or two 8-foot logs in the saw-log portion, currently or potentially (if too small to qualify). The log(s) must meet dimension and merchantability standards and have, currently or potentially, one-third of the gross board-foot volume in sound wood.

Growing-stock volume. The cubic-foot volume of sound wood in growing-stock trees at least 5.0 inches d.b.h. from a 1-foot stump to a minimum 4.0-inch top d.o.b. of the central stem.

Hardwoods. Dicotyledonous trees, usually broadleaf and deciduous.

Soft hardwoods. Hardwood species with an average specific gravity of ≤ 0.50, such as gums, yellow-poplar, cottonwoods, red maple, basswoods, and willows.

Hard hardwoods. Hardwood species with an average specific gravity > 0.50, such as oaks, hard maples, hickories, and beech.

Imports. The volume of domestic roundwood delivered to a mill or group of mills in a specific State but harvested outside that State.

Industrial fuelwood. A roundwood product, with or without bark, used to generate energy at a manufacturing facility such as a wood-using mill.

Industrial roundwood products. Any primary use of the main stem of a tree, such as saw logs, pulpwood, veneer logs, intended to be processed into primary wood products such as lumber, wood pulp, sheathing, at primary wood-using mills.

International ¼-inch rule. A log rule or formula for estimating the board-foot volume of logs, allowing ½-inch of taper for each 4-foot length. The rule appears in a number of forms that allow for kerf. In the form used by FIA, a ¼-inch of kerf is assumed. This rule is used as the U.S. Forest Service standard log rule in the Eastern United States.

Log. A primary forest product harvested in long, primarily 8-, 12-, and 16-foot lengths.

Logging residues. The unused portion of trees cut or destroyed during logging operations.

Merchantable portion. That portion of live trees 5.0 inches d.b.h. and larger between a 1-foot stump and a minimum 4.0-inch top d.o.b. on the central stem. That portion of primary forks from the point of occurrence to a minimum 4.0-inch top d.o.b. is included.

Merchantable volume. Solid-wood volume in the merchantable portion of live trees.

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

Nonforest land. Land that has never supported forests and land formerly forested where timber production is precluded by development for other uses.

Nongrowing-stock sources. The net volume removed from the nongrowing-stock portions of poletimber and sawtimber trees (stumps, tops, limbs, cull sections of central stem) and from any portion of a rough, rotten, sapling, dead, or nonforest tree.

Other forest land. Forest land other than timberland and productive reserved forest land. It includes available and reserved forest land that is incapable of producing annually 20 cubic feet per acre of industrial wood under natural conditions because of adverse site conditions such as sterile soils, dry climate, poor drainage, high elevation, steepness, or rockiness.

Other products. A miscellaneous category of roundwood products, e.g., cooperage, excelsior, shingles, and mill residue byproducts (charcoal, bedding, mulch, etc.).

Other removals. The growing-stock volume of trees removed from the inventory by cultural operations such as timber stand improvement, land clearing, and other changes in land use, resulting in the removal of the trees from timberland.

Other sources. (See: Nongrowing-stock sources.)

Ownership. The property owned by one ownership unit, including all parcels of land in the United States.

National forest land. Federal land that has been legally designated as national forests or purchase units, and other land under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III land.

Forest industry land. Land owned by companies or individuals operating primary wood-using plants.

Nonindustrial private forest (NIPF) land. Privately owned land excluding forest industry land.

Corporate. Owned by corporations, including incorporated farm ownerships.

Individual. All lands owned by individuals, including farm operators.

Other public. An ownership class that includes all public lands except national forests.

Miscellaneous Federal land. Federal land other than national forests.

State, county, and municipal land. Land owned by States, counties, and local public agencies or municipalities, or land leased to these governmental units for 50 years or more.

Plant residues. Wood material generated in the production of timber products at primary manufacturing plants.

Coarse residues. Material, such as slabs, edgings, trim, veneer cores and ends, which is suitable for chipping.

Fine residues. Material, such as sawdust, shavings, and veneer residue, which is not suitable for chipping.

Plant byproducts. Residues (coarse or fine) used in the further manufacture of industrial products for consumer use, or as fuel.

Unused plant residues. Residues (coarse or fine) that are not used for any product, including fuel.

Poletimber-size trees. Softwoods 5.0 to 8.9 inches d.b.h. and hardwoods 5.0 to 10.9 inches d.b.h.

Posts, poles, and pilings. Roundwood products milled (cut or peeled) into standard sizes (lengths and circumferences) to be put in the ground to provide vertical and lateral support in buildings, foundations, utility lines, and fences. May also include nonindustrial (unmilled) products.

Primary wood-using plants. Industries that convert roundwood products (saw logs, veneer logs, pulpwood, etc.) into primary wood products, such as lumber, veneer or sheathing, wood pulp.

Production. The total volume of known roundwood harvested from land within a State, regardless of where it is consumed. Production is the sum of timber harvested and used within a State, and all roundwood exported to other States.

Pulpwood. A roundwood product that will be reduced to individual wood fibers by chemical or mechanical means. The fibers are used to make a broad generic group of pulp products that includes paper products, as well as fiberboard, insulating board, and paperboard.

Receipts. The quantity or volume of industrial roundwood received at a mill or by a group of mills in a State, regardless of the geographic source. Volume of roundwood receipts is equal to the volume of roundwood retained in a State plus roundwood imported from other States.

Residential fuelwood. The volume of roundwood harvested to produce heat for residential settings.

Retained. Roundwood volume harvested from and processed by mills within the same State.

Rotten trees. Live trees of commercial species not containing at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of rot or missing sections, and with less than one-third of the gross board-foot tree volume in sound material.

Rough trees. Live trees of commercial species not containing at least one 12-foot saw log, or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, primarily because of roughness, poor form, splits, and cracks, and with less than one-third of the gross board-foot tree volume in sound material; and live trees of noncommercial species.

Roundwood (roundwood logs). Logs, bolts, or other round sections cut from trees for industrial manufacture or consumer uses.

Roundwood chipped. Any timber cut primarily for industrial manufacture, delivered to nonpulpmills, chipped, and then sold to pulpmills for use as fiber. Includes tops, jump sections, whole trees, and pulpwood sticks.

Roundwood product drain. That portion of total drain used for a product.

Roundwood products. Any primary product, such as lumber, veneer, composite panels, poles, pilings, pulp, or fuelwood that is produced from roundwood.

Salvable dead trees. Standing or downed dead trees that were formerly growing stock and considered merchantable. Trees must be at least 5.0 inches d.b.h. to qualify.

Saplings. Live trees 1.0 to 5.0 inches d.b.h.

Saw log. A roundwood product, usually 8 feet in length or longer, processed into a variety of sawn products such as lumber, cants, pallets, railroad ties, and timbers.

Saw-log portion. The part of the bole of sawtimber trees between a 1-foot stump and the saw-log top.

Saw-log top. The point on the bole of sawtimber trees above which a conventional saw log cannot be produced. The minimum saw-log top is 7.0 inches d.o.b. for softwoods and 9.0 inches d.o.b. for hardwoods for FIA standards.

Sawtimber-size trees. Softwoods 9.0 inches d.b.h. and larger and hardwoods 11.0 inches d.b.h. and larger.

Sawtimber volume. Growing-stock volume in the saw-log portion of sawtimber-sized trees in board feet (International ¼-inch rule).

Seedlings. Trees < 1.0 inch d.b.h. and > 1 foot tall for hardwoods, > 6 inches tall for softwoods, and > 0.5 inch in diameter at ground level for longleaf pine.

Select red oaks. A group of several red oak species composed of cherrybark, Shumard, and northern red oaks. Other red oak species are included in the "other red oaks" group.

Select white oaks. A group of several white oak species composed of white, swamp chestnut, swamp white, chinkapin, Durand, and bur oaks. Other white oak species are included in the "other white oaks" group.

Softwoods. Coniferous trees, usually evergreen, having leaves that are needles or scale like.

Standard cord. A unit of measure applied to roundwood, usually bolts or split wood. It is a stack of wood 4 feet high, 4 feet wide, and 8 feet long encompassing 128 cubic feet of wood, bark, and air space. This usually translates to approximately 75.0 to 81.0 cubic feet of solid wood for pulpwood, because pulpwood is more uniform.

Standard unit. A unit measure applied to roundwood timber products. Board feet (International ¼-inch rule) is the standard unit used for saw logs and veneer; cords are used for pulpwood, composite panel, and fuelwood; hundred pieces for poles; thousand pieces for posts; and thousand cubic feet for all other miscellaneous forest products.

Timberland. Forest land capable of producing 20 cubic feet of industrial wood per acre per year and not withdrawn from timber utilization.

Timber product output. The total volume of roundwood products from all sources plus the volume of byproducts recovered from mill residues (equals roundwood product drain).

Timber products. Roundwood products and byproducts.

Timber removals. The total volume of trees removed from the timberland inventory by harvesting, cultural operations such as stand improvement, land clearing, or changes in land use. (Note: Includes roundwood products, logging residues, and other removals.)

Tree. Woody plants having one erect perennial stem or trunk at least 3 inches d.b.h., a more or less definitely formed crown of foliage, and a height of at least 13 feet (at maturity).

Upper-stem portion. The part of the main stem of sawtimber trees above the saw-log top and the minimum top diameter of 4.0 inches outside bark, or to the point where the main stem breaks into limbs.

Utilization studies. Studies conducted on active logging operations to develop factors for merchantable portions of trees left in the woods (logging residues), logging damage, and utilization of the unmerchantable portion of growing-stock trees and nongrowing-stock trees.

Veneer log. A roundwood product either rotary cut, sliced, stamped, or sawn into a variety of veneer products such as plywood, finished panels, veneer sheets, or sheathing.

Weight. A unit of measure for mill residues, expressed as oven-dry tons (2,000 oven-dry pounds).

Conversion Factors[a]

Saw logs	
Softwood	0.18018 cubic foot = 1 board foot
	5.55 board feet = 1 cubic foot
Hardwood	0.16807 cubic foot = 1 board foot
	5.95 board feet = 1 cubic foot
Veneer logs	
Softwood	0.17094 cubic foot = 1 board foot
	5.85 board feet = 1 cubic foot
Hardwood	0.16260 cubic foot = 1 board foot
	6.15 board feet = 1 cubic foot
Pulpwood[b]	
Softwood	71 cubic feet per cord
Hardwood	75 cubic feet per cord

[a]Conversion factors vary with stem size (d.b.h.) and species. The factors shown are for trees of average diameters removed in Alabama during the most recent survey period.

[b]Cubic feet of solid wood per cord.

Species List[a]

Common name	Scientific name[b]
Softwoods	
Atlantic white-cedar	*Chamaecyparis thyoides* (L.) B.S.P.
Southern redcedar	*Juniperus silicicola* (Small) Bailey
Eastern redcedar	*J. virginiana* L.
Shortleaf pine	*Pinus echinata* Mill.
Slash pine	*P. elliottii* Engelm.
Spruce pine	*P. glabra* Walt.
Longleaf pine	*P. palustris* Mill.
Pond pine	*P. serotina* Michx.
Eastern white pine	*P. strobus* L.
Loblolly pine	*P. taeda* L.
Virginia pine	*P. virginiana* Mill.
Baldcypress	*Taxodium distichum* (L.) Rich.
Pondcypress	*T. distichum* var. *nutans* (Aiton) Sweet
Eastern hemlock	*Tsuga canadensis* (L.) Carr.
Hardwoods	
Florida maple	*Acer barbatum* Michx.
Boxelder	*A. negundo* L.
Red maple	*A. rubrum* L.
Silver maple	*A. saccharinum* L.
Sugar maple	*A. saccharum* Marsh.
Buckeye	*Aesculus* spp. L.
Ohio buckeye	*A. glabra* Willd.
Ailanthus	*Ailanthus altissima* (Mill.) Swingle
Tung-oil tree	*Aleurites fordii* Hemsl.
Serviceberry	*Amelanchier* spp. Med.
River birch	*Betula nigra* L.
American hornbeam	*Carpinus caroliniana* Walt.
Hickory	*Carya* spp. Nutt.
Water hickory	*C. aquatica* (Michx. f.) Nutt.
Bitternut hickory	*C. cordiformis* (Wangenh.) K. Koch
Pignut hickory	*C. glabra* (Mill.) Sweet
Pecan	*C. illinoensis* (Wangenh.) K. Koch
Shellbark hickory	*C. laciniosa* (Michx. f.) Loud.
Nutmeg hickory	*C. myristiciformis* (Michx. f.) Nutt.
Shagbark hickory	*C. ovata* (Mill.) K. Koch
Black hickory	*C. texana* Buckl.
Mockernut hickory	*C. tomentosa* (Poir.) Nutt.
Allegheny chinkapin	*Castanea pumila* Mill.
Chinkapin	*Castanopsis* (D. Don) Spach
Catalpa	*Catalpa* spp. Scop.
Sugarberry	*Celtis laevigata* Willd.
Hackberry	*C. occidentalis* L.
Eastern redbud	*Cercis canadensis* L.
Flowering dogwood	*Cornus florida* L.
Hawthorn	*Crataegus* spp. L.
Common persimmon	*Diospyros virginiana* L.
American beech	*Fagus grandifolia* Ehrh.
White ash	*Fraxinus americana* L.
Pumpkin ash	*F. profunda* (Bush) Bush
Blue ash	*F. quadrangulata* Michx.
Waterlocust	*Gleditsia aquatica* Marsh.
Honeylocust	*G. triacanthos* L.
Kentucky coffeetree	*Gymnocladus dioicus* (L.) K. Koch

Common name	Scientific name[b]
Hardwoods (continued)	
American holly	*Ilex opaca* Ait.
Black walnut	*Juglans nigra* L.
Sweetgum	*Liquidambar styraciflua* L.
Yellow-poplar	*Liriodendron tulipifera* L.
Osage-orange	*Maclura pomifera* (Raf.) Schneid.
Cucumbertree	*Magnolia acuminata* L.
Southern magnolia	*M. grandiflora* L.
Bigleaf magnolia	*M. macrophylla* Michx.
Sweetbay	*M. virginiana* L.
Apple	*Malus* spp. Mill.
Chinaberry	*Melia azedarach* L.
White mulberry	*Morus alba* L.
Red mulberry	*M. rubra* L.
Water tupelo	*Nyssa aquatica* L.
Blackgum	*N. sylvatica* Marsh.
Swamp tupelo	*N. sylvatica* var. *biflora* (Walt.) Sarg.
Eastern hophornbeam	*Ostrya virginiana* (Mill.) K. Koch
Sourwood	*Oxydendrum arboreum* (L.) DC.
Redbay	*Persea borbonia* (L.) Spreng.
American sycamore	*Platanus occidentalis* L.
Cottonwood	*Populus* spp. L.
Black cherry	*Prunus serotina* Ehrh.
White oak	*Quercus alba* L.
Scarlet oak	*Q. coccinea* Muenchh.
Durand oak	*Q. durandii* Buckl.
Southern red oak	*Q. falcata* Michx.
Cherrybark oak	*Q. falcata* var. *pagodifolia* Ell.
Bluejack oak	*Q. incana* Bartr.
Turkey oak	*Q. laevis* Walt.
Laurel oak	*Q. laurifolia* Michx.
Overcup oak	*Q. lyrata* Walt.
Swamp chestnut oak	*Q. michauxii* Nutt.
Chinkapin oak	*Q. muehlenbergii* Engelm.
Water oak	*Q. nigra* L.
Nuttall oak	*Q. nuttallii* Palmer
Pin oak	*Q. palustris* Muenchh.
Willow oak	*Q. phellos* L.
Chestnut oak	*Q. prinus* L.
Northern red oak	*Q. rubra* L.
Shumard oak	*Q. shumardii* Buckl.
Post oak	*Q. stellata* Wangenh.
Black oak	*Q. velutina* Lam.
Live oak	*Q. virginiana* Mill.
Black locust	*Robinia pseudoacacia* L.
Willow	*Salix* spp. L.
Sassafras	*Sassafras albidum* (Nutt.) Nees
American basswood	*Tilia americana* L.
White basswood	*T. heterophylla* Vent.
Winged elm	*Ulmus alata* Michx.
American elm	*U. americana* L.
Cedar elm	*U. crassifolia* Nutt.
Slippery elm	*U. rubra* Muhl.
September elm	*U. serotina* Sarg.
Rock elm	*U. thomasii* Sarg.

[a] Scientific and common names of tree species ≥1.0 inch d.b.h. occurring in the FIA sample.
[b] Little (1979).

Appendix

Index of Tables

Table A.1—Output of industrial products by product and species group, Alabama, 2007 and 2009

Product and species group	Year		Change	Change
	2007	2009		
	- - - - - - thousand cubic feet - - - - - -			*percent*
Saw logs				
Softwood	354,977	187,930	-167,047	-47.1
Hardwood	58,030	40,352	-17,678	-30.5
Total	413,007	228,282	-184,725	-44.7
Veneer logs				
Softwood	60,069	21,166	-38,903	-64.8
Hardwood	15,100	7,861	-7,239	-47.9
Total	75,169	29,027	-46,142	-61.4
Pulpwood[a]				
Softwood	374,966	360,279	-14,687	-3.9
Hardwood	199,131	154,809	-44,322	-22.3
Total	574,097	515,088	-59,009	-10.3
Other industrial[b]				
Softwood	38,083	27,638	-10,445	-27.4
Hardwood	1,710	3,282	1,572	91.9
Total	39,793	30,920	-8,873	-22.3
All industrial				
Softwood	828,095	597,013	-231,082	-27.9
Hardwood	273,971	206,304	-67,667	-24.7
Total	1,102,066	803,317	-298,749	-27.1

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (4,084,000 cubic feet in 2007 and 4,894,000 cubic feet in 2009).
[b] Includes poles, posts, and composite panels.

Table A.2—Roundwood receipts by product and species group, Alabama, 2007 and 2009

Product and species group	Year		Change	Change
	2007	2009		
	thousand cubic feet			*percent*
Saw logs				
Softwood	333,878	187,837	-146,041	-43.7
Hardwood	60,099	37,740	-22,359	-37.2
Total	393,977	225,577	-168,400	-42.7
Veneer logs				
Softwood	57,619	14,476	-43,143	-74.9
Hardwood	14,399	7,598	-6,801	-47.2
Total	72,018	22,074	-49,944	-69.3
Pulpwood[a]				
Softwood	339,975	340,082	107	0.0
Hardwood	264,147	223,200	-40,947	-15.5
Total	604,122	563,282	-40,840	-6.8
Other industrial[b]				
Softwood	44,471	32,712	-11,759	-26.4
Hardwood	1,448	3,941	2,493	172.2
Total	45,919	36,653	-9,266	-20.2
Total output				
Softwood	775,943	575,107	-200,836	-25.9
Hardwood	340,093	272,479	-67,614	-19.9
Total	1,116,036	847,586	-268,450	-24.1

0.0 = a value > 0.0 but < 0.05.

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (4,477,000 cubic feet in 2007 and 5,837,000 cubic feet in 2009).

[b] Includes poles, posts, composite panels, and 13,709,000 cubic feet used as industrial fuel in 2009.

Table A.3—Number of primary wood-using plants by type of mill, Alabama, 1962 to 2009

Type of mill	Year										
	1962	1971	1982	1985	1995	1997	1999	2003	2005	2007	2009
	number										
Sawmills	555	323	239	250	148	145	121	118	93	93	78
Veneer mills	34	32	28	28	23	26	23	23	19	18	12
Pulpmills	9	15	16	16	16	16	15	14	14	14	13
Composite panel mills	0	0	0	0	1	1	1	2	2	2	1
Other mills	47	36	35	47	23	24	21	21	17	17	16
All plants	645	406	318	341	211	212	181	178	145	144	120

Table A.4—Roundwood receipts by sawmill size, Alabama, 2007 and 2009

Sawmill size class[a]	2007			2009		
	Mills	Volume		Mills	Volume	
mmbf	*number*	*mbf*	*percent*	*number*	*mbf*	*percent*
< 1.0	16	5,130	0	16	4,029	0
1.0–4.99	22	64,613	3	22	62,978	5
5.0–9.99	25	107,722	5	11	71,599	6
10.0–49.99	14	656,061	30	22	525,446	41
> 50	16	1,379,376	62	7	604,457	48
Total	93	2,212,902	100	78	1,268,509	100

[a] Based on volume received as opposed to actual capacity.

Table A.5—Roundwood receipts by species and type of mill, Alabama, 2009

Species	All mills	Type of mill				
		Sawmills	Veneer mills		Pulpmills[a]	Other mills[b]
			Pine plywood	Other veneer		
	thousand cubic feet					
Softwood						
Yellow pine	234,438	187,250	9,049	5,427	NA	32,712
White pine	0	0	0	0	NA	0
Cedar	368	368	0	0	NA	0
Cypress	219	219	0	0	NA	0
Other softwood	0	0	0	0	NA	0
Unclassified	340,082	0	0	0	340,082	0
Total softwoods	575,107	187,837	9,049	5,427	340,082	32,712
Hardwood						
Blackgum and tupelo	786	497	0	31	NA	258
Soft maple	745	217	0	6	NA	522
Sweetgum	6,110	3,887	0	1,528	NA	695
Yellow-poplar	8,784	5,269	0	2,190	NA	1,325
Other soft hardwood	329	180	0	6	NA	143
Hickory	2,278	1,940	0	192	NA	146
Red oak	17,335	14,473	0	2,575	NA	287
White oak	10,921	9,775	0	744	NA	402
Other hard hardwood	1,991	1,502	0	326	NA	163
Unclassified	223,200	0	0	0	223,200	0
Total hardwoods	272,479	37,740	0	7,598	223,200	3,941
All species	847,586	225,577	9,049	13,025	563,282	36,653

NA = not applicable.

[a] Only collected by softwood and hardwood and includes roundwood chipped.

[b] Includes poles, posts, composite panels, and 13,709,000 cubic feet used as industrial fuel in 2009.

Table A.6—Industrial roundwood movement by year and species group, Alabama, 2007 and 2009

Year	Production	Exported to other States	Retained	Imported from other States	Receipts
			thousand cubic feet		
			Softwood		
2007	828,095	157,057	671,038	104,905	775,943
2009	597,013	110,914	486,099	89,008	575,107
			Hardwood		
2007	273,971	14,337	259,634	80,459	340,093
2009	206,304	10,236	196,068	76,411	272,479
			All species		
2007	1,102,066	171,394	930,672	185,364	1,116,036
2009	803,317	121,150	682,167	165,419	847,586

Table A.7—Industrial roundwood movement by product and species group, Alabama, 2009

Product and species group	Production	Exported to other States	Retained	Imported from other States	Receipts
			thousand cubic feet		
Saw logs					
Softwood	187,930	29,702	158,228	29,609	187,837
Hardwood	40,352	5,559	34,793	2,947	37,740
Total	228,282	35,261	193,021	32,556	225,577
Veneer logs					
Softwood	21,166	6,690	14,476	0	14,476
Hardwood	7,861	655	7,206	392	7,598
Total	29,027	7,345	21,682	392	22,074
Pulpwood[a]					
Softwood	360,279	74,414	285,865	54,217	340,082
Hardwood	154,809	4,011	150,798	72,402	223,200
Total	515,088	78,425	436,663	126,619	563,282
Other industrial[b]					
Softwood	27,638	108	27,530	5,182	32,712
Hardwood	3,282	11	3,271	670	3,941
Total	30,920	119	30,801	5,852	36,653
All products					
Softwood	597,013	110,914	486,099	89,008	575,107
Hardwood	206,304	10,236	196,068	76,411	272,479
Total	803,317	121,150	682,167	165,419	847,586

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills.

[b] Includes poles, posts, composite panels, and 13,709,000 cubic feet used as industrial fuel in 2009.

Table A.8—Saw-log volume by destination, source, and species group, Alabama, 2009

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
Alabama (retained)	193,021	158,228	34,793
Exports to			
Florida	4,529	4,529	0
Georgia	12,618	11,492	1,126
Mississippi	14,180	13,680	500
Tennessee	3,934	1	3,933
Total	35,261	29,702	5,559
Imports from			
Florida	2,091	2,089	2
Georgia	13,566	13,526	40
Mississippi	16,330	13,764	2,566
Tennessee	569	230	339
Total	32,556	29,609	2,947

Table A.9—Veneer volume by destination, source, and species group, Alabama, 2009

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
Alabama (retained)	21,682	14,476	7,206
Exports to			
Florida	871	871	0
Georgia	2,893	2,238	655
Mississippi	3,581	3,581	0
Total	7,345	6,690	655
Imports from			
Georgia	4	0	4
Mississippi	388	0	388
Total	392	0	392

Table A.10—Pulpwood volume by destination, source, and species group, Alabama, 2009[a]

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
Alabama (retained)	436,663	285,865	150,798
Exports to			
Florida	28,248	28,177	71
Georgia	24,900	22,849	2,051
Kentucky	610	0	610
Mississippi	15,273	15,273	0
Tennessee	9,393	8,115	1,278
Texas	1	0	1
Total	78,425	74,414	4,011
Imports from			
Florida	3,904	2,755	1,149
Georgia	33,542	24,490	9,052
Mississippi	57,937	21,047	36,890
Tennessee	31,236	5,925	25,311
Total	126,619	54,217	72,402

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills.

Table A.11—Other industrial volume by destination, source, and species group, Alabama, 2009[a]

Destination and source	All species	Species group	
		Softwood	Hardwood
	thousand cubic feet		
Alabama (retained)	30,801	27,530	3,271
Exports to			
Georgia	44	33	11
Mississippi	75	75	0
Total	119	108	11
Imports from			
Florida	398	398	0
Georgia	4,666	4,190	476
Mississippi	788	594	194
Total	5,852	5,182	670

[a] Includes composite panels, poles, posts, mulch, firewood, log homes, charcoal, and all other industrial products.

Table A.12—Primary mill residue volume by roundwood type, species group, and residue type, Alabama, 2009

Roundwood type and species group	All types	Residue type			
		Bark	Coarse	Sawdust	Shavings
		thousand cubic feet			
Saw logs					
Softwood	114,640	16,923	53,950	28,163	15,604
Hardwood	22,305	4,313	9,875	7,920	197
Total	136,945	21,236	63,825	36,083	15,801
Veneer logs					
Softwood	9,204	1,374	4,084	3,746	0
Hardwood	5,408	897	2,195	2,316	0
Total	14,612	2,271	6,279	6,062	0
Pulpwood					
Softwood	37,124	37,124	0	0	0
Hardwood	25,074	25,074	0	0	0
Total	62,198	62,198	0	0	0
Other industrial[a]					
Softwood	2,974	2,287	687	0	0
Hardwood	85	85	0	0	0
Total	3,059	2,372	687	0	0
Total					
Softwood	163,942	57,708	58,721	31,909	15,604
Hardwood	52,872	30,369	12,070	10,236	197
Total	216,814	88,077	70,791	42,145	15,801

[a] Includes poles, pilings, posts, composite panels, and other industrial products.

Table A.13—Disposal of residue at primary wood-using plants by product, species group, and type of residue, Alabama, 2007 and 2009

Product and species group	All types		Bark		Coarse		Sawdust		Shavings	
	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009
	thousand cubic feet									
Fiber products										
Softwood	104,125	57,278	0	0	104,125	57,278	0	0	0	0
Hardwood	15,404	9,838	0	0	15,404	9,838	0	0	0	0
Total	119,529	67,116	0	0	119,529	67,116	0	0	0	0
Particleboard										
Softwood	17,956	9,321	0	0	0	0	4,742	1,940	13,214	7,381
Hardwood	536	600	0	0	0	60	536	540	0	0
Total	18,492	9,921	0	0	0	60	5,278	2,480	13,214	7,381
Sawn products										
Softwood	2,925	533	0	0	2,925	533	0	0	0	0
Hardwood	52	0	0	0	52	0	0	0	0	0
Total	2,977	533	0	0	2,977	533	0	0	0	0
Industrial fuel										
Softwood	155,021	88,945	82,726	53,698	9,158	709	54,367	28,980	8,770	5,558
Hardwood	58,017	41,328	40,482	30,099	1,704	2,110	15,511	8,949	320	170
Total	213,038	130,273	123,208	83,797	10,862	2,819	69,878	37,929	9,090	5,728
Miscellaneous										
Softwood	21,956	7,770	9,517	3,933	893	187	5,907	985	5,639	2,665
Hardwood	2,809	1,004	1,474	251	315	14	926	712	94	27
Total	24,765	8,774	10,991	4,184	1,208	201	6,833	1,697	5,733	2,692
Not used										
Softwood	18	95	3	77	10	14	5	4	0	0
Hardwood	275	102	186	19	63	48	26	35	0	0
Total	293	197	189	96	73	62	31	39	0	0
All products										
Softwood	302,001	163,942	92,246	57,708	117,111	58,721	65,021	31,909	27,623	15,604
Hardwood	77,093	52,872	42,142	30,369	17,538	12,070	16,999	10,236	414	197
Total	379,094	216,814	134,388	88,077	134,649	70,791	82,020	42,145	28,037	15,801

Table A.14—Roundwood timber product output by county, product, and species group, Alabama, 2009

County	All products		Saw logs		Veneer logs		Pulpwood[a]		Other industrial[b]	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	thousand cubic feet									
Autauga	11,399	4,223	1,782	69	217	16	9,270	4,138	130	0
Baldwin	13,233	969	2,420	6	0	263	10,239	700	574	0
Barbour	18,648	3,681	6,943	314	0	162	9,402	3,205	2,303	0
Bibb	7,874	3,639	3,280	1,096	163	228	3,919	2,315	512	0
Blount	4,067	2,822	1,194	538	0	0	189	2,135	2,684	149
Bullock	10,188	1,728	3,123	100	89	26	6,976	1,602	0	0
Butler	14,114	2,673	2,620	341	177	117	11,297	2,215	20	0
Calhoun	1,788	479	756	185	0	0	1,032	294	0	0
Chambers	6,590	1,581	2,427	598	492	46	3,671	927	0	10
Cherokee	6,611	1,749	2,611	273	0	0	3,984	1,476	16	0
Chilton	7,413	3,009	2,541	620	1,086	145	3,786	2,244	0	0
Choctaw	24,731	10,317	6,560	1,338	972	393	16,781	8,586	418	0
Clarke	36,907	15,954	10,258	1,341	3,906	1,610	21,174	12,333	1,569	670
Clay	6,537	2,880	1,531	775	361	20	4,585	2,075	60	10
Cleburne	7,922	590	3,437	171	255	1	4,230	418	0	0
Coffee	9,023	1,527	161	86	0	94	8,845	1,347	17	0
Colbert	2,622	1,982	1,154	417	0	0	1,468	1,565	0	0
Conecuh	16,329	4,894	2,691	647	443	21	12,697	4,226	498	0
Coosa	9,438	2,638	1,056	649	271	15	7,993	1,974	118	0
Covington	18,245	1,349	6,138	181	222	31	11,344	1,137	541	0
Crenshaw	13,823	3,774	2,881	112	532	159	10,311	3,503	99	0
Cullman	2,664	2,047	572	472	0	0	808	1,504	1,284	71
Dale	3,053	1,582	210	48	206	128	2,613	1,406	24	0
Dallas	10,231	4,916	947	293	54	0	9,086	4,623	144	0
De Kalb	3,241	3,001	1,029	1,519	0	0	1,344	1,476	868	6
Elmore	4,128	1,800	565	519	271	29	3,232	1,252	60	0
Escambia	12,563	1,678	5,982	181	0	0	5,930	1,497	651	0
Etowah	2,348	1,374	873	113	54	0	733	1,229	688	32
Fayette	8,163	1,835	4,075	737	0	125	2,696	902	1,392	71
Franklin	5,072	1,498	1,288	40	0	0	3,784	1,458	0	0
Geneva	7,503	629	2,787	0	0	0	4,689	629	27	0
Greene	10,616	3,786	7,760	1,706	0	209	2,683	1,871	173	0
Hale	11,084	4,521	7,202	1,126	108	316	3,654	3,079	120	0
Henry	5,897	2,524	459	3	213	39	4,385	1,947	840	535
Houston	3,850	956	1,840	0	317	135	1,666	821	27	0
Jackson	1,667	8,452	518	3,616	0	0	894	4,823	255	13
Jefferson	3,611	2,157	1,705	912	54	107	867	1,093	985	45
Lamar	8,117	1,776	5,083	574	0	0	2,918	1,196	116	6
Lauderdale	714	2,543	0	1,264	0	0	714	1,279	0	0
Lawrence	510	1,185	0	468	0	0	510	717	0	0
Lee	9,036	2,023	4,099	707	636	98	4,301	1,208	0	10
Limestone	427	1,031	200	543	0	0	227	488	0	0
Lowndes	8,106	1,773	749	453	0	184	7,097	1,136	260	0
Macon	9,413	1,566	3,565	36	290	64	5,558	1,466	0	0
Madison	680	1,710	314	1,006	0	0	366	704	0	0
Marengo	13,616	7,613	3,040	1,425	875	645	9,482	5,543	219	0
Marion	10,520	3,554	3,980	836	0	0	6,540	2,718	0	0

continued

Table A.14—Roundwood timber product output by county, product, and species group, Alabama, 2009 (continued)

County	All products		Saw logs		Veneer logs		Pulpwood[a]		Other industrial[b]	
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
	thousand cubic feet									
Marshall	1,273	1,207	426	502	0	0	54	673	793	32
Mobile	10,281	2,232	3,374	162	1,165	52	5,364	2,018	378	0
Monroe	20,263	6,698	3,536	560	1,825	186	14,344	5,624	558	328
Montgomery	2,707	1,333	396	118	197	39	2,114	1,176	0	0
Morgan	1,050	1,196	581	309	0	0	353	881	116	6
Perry	10,528	3,578	3,242	389	108	142	7,149	3,047	29	0
Pickens	11,792	3,523	6,665	1,740	0	345	5,014	1,438	113	0
Pike	8,160	2,209	316	326	88	97	7,739	1,786	17	0
Randolph	6,917	1,856	2,759	148	201	47	3,957	1,174	0	487
Russell	11,176	1,062	4,391	280	201	44	4,572	738	2,012	0
St. Clair	5,645	3,634	974	725	923	2	2,348	2,830	1,400	77
Shelby	8,025	2,502	886	698	869	107	5,976	1,691	294	6
Sumter	17,099	7,724	7,151	1,133	0	325	9,618	6,266	330	0
Talladega	4,966	1,326	92	523	434	3	4,380	800	60	0
Tallapoosa	10,093	3,972	3,387	593	306	79	6,400	3,145	0	155
Tuscaloosa	13,182	6,775	8,002	1,969	108	326	4,063	4,448	1,009	32
Walker	7,079	1,110	4,153	350	0	0	1,232	670	1,694	90
Washington	21,158	6,511	9,741	531	203	263	10,346	5,435	868	282
Wilcox	16,091	5,852	2,143	496	2,274	378	11,515	4,825	159	153
Winston	5,196	2,016	1,309	346	0	0	3,771	1,664	116	6
All counties	597,013	206,304	187,930	40,352	21,166	7,861	360,279	154,809	27,638	3,282

[a] Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (4,894,000 cubic feet in 2009).

[b] Includes poles, posts, and composite panels.

Table A.15—Total roundwood output by product, species group, and source of material, Alabama, 2009

Product and species group	All sources	Growing-stock trees		Other sources
		Total	Sawtimber	Poletimber	
	thousand cubic feet				
Saw logs					
Softwood	187,930	183,872	174,679	9,193	4,058
Hardwood	40,352	38,407	36,487	1,920	1,945
Total	228,282	222,279	211,166	11,113	6,003
Veneer logs and bolts					
Softwood	21,166	20,525	19,488	1,037	641
Hardwood	7,861	7,725	7,725	0	136
Total	29,027	28,250	27,213	1,037	777
Pulpwood					
Softwood	360,279	345,314	188,560	156,754	14,965
Hardwood	154,809	122,842	59,772	63,070	31,967
Total	515,088	468,156	248,332	219,824	46,932
Poles and posts					
Softwood	8,880	8,519	8,184	335	361
Hardwood	0	0	0	0	0
Total	8,880	8,519	8,184	335	361
Other miscellaneous[a]					
Softwood	18,758	9,142	5,340	3,801	9,616
Hardwood	3,282	1,885	1,111	774	1,397
Total	22,040	11,027	6,451	4,575	11,013
Total industrial products					
Softwood	597,013	567,371	396,252	171,120	29,642
Hardwood	206,304	170,859	105,095	65,764	35,445
Total	803,317	738,231	501,347	236,884	65,086
Residential fuelwood					
Softwood	4,329	1,969	1,343	626	2,360
Hardwood	28,238	22,308	19,438	2,870	5,930
Total	32,567	24,277	20,780	3,496	8,290
All products					
Softwood	601,342	569,340	397,594	171,746	32,002
Hardwood	234,542	193,167	124,533	68,634	41,375
Total	835,884	762,507	522,127	240,380	73,377

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

[a] Includes composite panels.

Table A.16—Total roundwood output by species group, survey region, and ownership class, Alabama, 2009

Species group and survey region	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
	thousand cubic feet			
Softwoods				
Southwest South	76,029	3,396	15,177	57,456
Southwest North	146,088	4,351	48,702	93,035
Southeast	185,889	4,322	43,514	138,053
West Central	92,542	593	25,953	65,996
North Central	83,412	885	17,772	64,755
North	17,382	427	0	16,955
Total softwoods	601,342	13,974	151,117	436,251
Hardwoods				
Southwest South	14,483	630	1,789	12,064
Southwest North	67,135	6,135	15,642	45,359
Southeast	55,187	45	3,416	51,727
West Central	37,501	435	4,587	32,479
North Central	33,173	3,177	5,662	24,334
North	27,063	1,591	6,131	19,431
Total hardwoods	234,542	12,012	37,225	185,304
All species	835,884	25,986	188,343	621,555

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

Table A.17—Total roundwood output by species group, detailed species group, and product, Alabama, 2009

Species group and detailed species group	Total	Product					
		Saw logs	Veneer logs	Pulpwood	Poles and posts	Other miscellaneous[a]	Residential fuelwood
		thousand cubic feet					
Softwood							
Cedar	2,094	708	33	1,317	17	4	15
Longleaf-slash pine	62,388	19,444	2,426	37,606	1,731	730	450
Loblolly-shortleaf pine	521,016	162,455	18,155	313,123	6,860	16,674	3,749
Other yellow pines	15,145	5,100	525	7,809	258	1,344	109
Cypress	585	171	25	369	12	3	4
Hemlock	115	53	1	56	2	3	1
Total softwoods	601,342	187,930	21,166	360,279	8,880	18,758	4,329
Hardwood							
Soft maple	8,828	1,644	349	5,659	0	112	1,063
Hard maple	760	203	22	435	0	9	92
Other birch	881	81	29	664	0	0	106
Hickory	15,265	3,039	402	9,858	0	128	1,838
Beech	1,917	269	78	1,326	0	13	231
Ash	1,837	505	79	1,022	0	9	221
Black walnut	100	11	3	73	0	0	12
Sweetgum	45,728	7,040	1,761	30,621	0	802	5,505
Yellow-poplar	23,937	4,759	637	15,415	0	245	2,882
Blackgum-tupelo	8,615	1,072	323	5,994	0	189	1,037
Sycamore	813	120	10	570	0	16	98
Cottonwood	546	272	3	205	0	0	66
Black cherry	3,231	438	80	2,228	0	96	389
Select white oaks	19,713	4,967	417	11,737	0	220	2,373
Other white oaks	12,786	2,469	447	8,229	0	102	1,540
Select red oaks	3,610	776	205	2,162	0	32	435
Other red oaks	65,281	9,741	2,263	44,484	0	933	7,860
Basswood	44	1	2	36	0	0	5
Elm	3,913	885	158	2,363	0	35	471
Other eastern hardwoods	16,738	2,060	592	11,730	0	342	2,015
Total hardwoods	234,542	40,352	7,861	154,809	0	3,282	28,238
All species	835,884	228,282	29,027	515,088	8,880	22,040	32,567

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

[a] Includes composite panels.

Table A.18—Total roundwood output by species group, detailed species group, and ownership class, Alabama, 2009

Species group and detailed species group	Total	Ownership class		
		Public	Forest industry	Nonindustrial private
	thousand cubic feet			
Softwood				
Cedar	2,094	27	436	1,631
Longleaf-slash pine	62,388	2,646	14,951	44,740
Loblolly-shortleaf pine	521,016	10,919	133,311	376,785
Other yellow pines	15,145	351	2,385	12,409
Cypress	585	30	35	520
Hemlock	115	0	0	115
Total softwoods	601,342	13,974	151,117	436,251
Hardwood				
Soft maple	8,828	299	1,376	7,153
Hard maple	760	49	260	452
Other birch	881	10	145	726
Hickory	15,265	526	2,651	12,088
Beech	1,917	58	123	1,736
Ash	1,837	112	94	1,631
Black walnut	100	0	1	99
Sweetgum	45,728	1,713	6,963	37,053
Yellow-poplar	23,937	664	4,992	18,281
Blackgum-tupelo	8,615	1,082	1,207	6,326
Sycamore	813	250	42	521
Cottonwood	546	0	0	546
Black cherry	3,231	258	620	2,353
Select white oaks	19,713	385	4,019	15,310
Other white oaks	12,786	924	2,412	9,450
Select red oaks	3,610	118	614	2,878
Other red oaks	65,281	4,435	9,088	51,758
Basswood	44	0	0	44
Elm	3,913	222	529	3,162
Other eastern hardwoods	16,738	908	2,090	13,739
Total hardwoods	234,542	12,012	37,225	185,304
All species	835,884	25,986	188,343	621,555

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

Bentley, James W.; Johnson, Tony G.; **Hendricks, Brian**. 2011. Alabama's timber industry—an assessment of timber product output and use, 2009. Resour. Bull. SRS–176. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 31 p.

In 2009, roundwood output from Alabama's forests totaled 803.3 million cubic feet. Mill byproducts generated from primary manufacturers amounted to 216.8 million cubic feet. Almost all plant residues were used primarily for fuel and fiber products. Pulpwood was the leading roundwood product at 515.1 million cubic feet; saw logs ranked second at 228.3 million cubic feet; other industrial was third at 30.9 million cubic feet. The number of primary processing plants was 120. Total receipts amounted to 847.6 million cubic feet.

Keywords: FIA, pulpwood, residues, roundwood, saw logs, veneer logs, wood movement.

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