

FOREST RESOURCE REPORT 2004





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ALABAMA FORESTRY COMMISSION

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FOREST RESOURCE REPORT 2004

By
Alabama Forestry Commission

This report contains several economic status indicators of the forest industry and natural resources in Alabama for 2004. Included in this report are the following indicators:

- 2004 Commercial Forestland Acres and Ownership
- 2004 Timber Harvests
- 2004 Timber Price Trends
- 2003 Timber and other Agricultural Commodities (*latest statistics available*)
- 2002 Labor, Payroll, and Number of Forestry-related Establishments (*latest statistics available*)
- 2004 Forest Products Investments in New & Expanding Businesses, and Business Closures
- 2004 Forest Inventory and Growth/Drain

HIGHLIGHTS

- Ø Alabama forestland covers 22.9 million acres, the second largest in the nation, an increase of one million acres since 1990. Private landowners own 78 percent of this commercial forestland composed of 46% hardwood, 35% pine and 19% mixed pine and hardwood.
- Ø Alabama's forests are growing more trees than ever recorded, supporting 50,000 people employed directly with forest-based companies and another 70,000 people employed indirectly with the forest industry. Overall, forest industry employs about 15% of Alabama's workforce, either directly or indirectly.
- Ø Combined harvests of all four major timber products (pine sawtimber, hardwood sawtimber, pine pulpwood, and hardwood pulpwood) increased by approximately 67% during 2004, with sawtimber harvests reaching a nine (9) year high. The forest industry sector responded well to improved domestic and international markets by increasing production levels, and buying and storing salvaged wood utilized in supplying materials needed to rebuild homes and businesses destroyed by Hurricane Ivan.
- Ø A massive coordinated effort by loggers, landowners, industry and clearing crews contributed to the successful salvage of over 23% of overall value and volumes as shown:

Product	Salvage Target	Actual Volume Salvaged	% of Target
Pine Sawtimber	133.2 MBF*	156.5 MBF	118%
Pine Pulpwood	226,000 tons	192,397 tons	531%
Hardwood Sawtimber	69.5 MBF	15.7 MBF	23%
Hardwood Pulpwood	19,000 tons	758,708 tons	3,993%

***MBF = Thousand Board Feet**

These large harvests were a result of the tremendous salvage efforts to recover timber damaged by Hurricane Ivan and added storage capacity at new and existing wet storage facilities.

- Ø Harvests of pine sawtimber in 2004 were approximately 1.8 billion board feet, up 76% from 2003, while hardwood sawtimber was 313 million board feet, a 74% increase from 2003. Sawtimber accounted for 34% of the total volume harvested. Pine sawtimber production across the South was up slightly during the year, while Alabama's production was 76% higher.
- Ø Harvests of pine and hardwood pulpwood increased by 61% and 57%, respectively, from the previous year. Pulpwood accounted for 66% of the total volume harvested. Pine pulpwood harvested in 2004 was approximately 6.8 million cords while hardwood pulpwood harvested was 3.3 million cords.
- Ø Average sawtimber stumpage prices across the South rose in 2004 as markets continued to improve with the economy, especially during the last half of the year. Alabama's stumpage prices increased slightly (+2%) along with the southern trend, except for oak sawtimber and pulpwood. Hurricane Ivan damaged large acreages in southwest Alabama, reducing sawtimber to pulpwood grade material. Pine plantations and natural stands were broken and uprooted, resulting in large volumes of pulpwood entering the markets from September 2004 through the present. This oversupply situation caused pulpwood prices to plummet, with pine pulpwood dropping nearly 12% and hardwood pulpwood dropping over 27%.
- Ø The Nation's sawtimber market continued to remain strong, mostly resulting from low mortgage interest rates and historical construction activity. Consequently, prices for lumber and OSB remain strong with good forecasts for 2005. The lumber and wood products industry output increased by 5.7% in 2004 to \$1.5 billion. New home sales are forecast to grow by 3.2% to 1.24 million units in 2005. At the same time, the National Association of Realtors forecasts housing starts to increase 3.4% to just over 2.02 million units, the highest level since 1973.

- Ø Solid Wood output nationwide reached 38 billion feet for the third time in history. Production in the South was expected to reach a record 17.6 billion feet, up 4% from the region's previous high mark obtained in 1999. Production in the West is expected to total 18.5 billion feet, the highest production level for that region since 1992. However, Canadian imports and business losses to overseas companies manufacturing high end furniture continue to hold the solid wood market in check. Alabama's furniture manufacturers located primarily in the north half of the State are in the process of adjusting to world markets.
- Ø The pulp and paper industry output increased by 2.7 % nationwide in 2004. Favorable exchange rates (i.e., a 17% decline in the U.S. dollar) helped pulp and paper exports, as this made U.S. producers more competitive in the world market.
- Ø In 2004, 33,353 tons of Kraft linerboard, 92,174 tons of paper and paper articles, and 1.4 million tons of wood pulp and passed through the Port of Mobile, with approximately 41% as exports (down 26% from 2003), and 59% as imports (up 26% from 2003). At the end of 2004, Northern Bleached Softwood Kraft pulp prices were up 11% from 2003 levels at \$621 per ton. Almost 389,000 tons of raw lumber were also shipped through Alabama ports.
- Ø The total estimated value of stumpage harvested in 2004 is \$969 million, which is up \$438 million or 82% from 2003 estimates. Once again, timber damaged by Hurricane Ivan had to be salvaged and led to the huge increase in harvested stumpage. Based on ownership patterns, approximately 77% of the total stumpage value was harvested from farm and non-farm, non-industrial private forest lands (NIPF), 18% from forest industry lands, and 5% from government lands.
- Ø Delivered value in 2004 was approximately \$1.6 billion, which is up \$833 million or 109% from 2003 estimates. This indicates a direct value from harvesting and logging operations of approximately \$631 million to Alabama's economy. Delivered value consisted primarily of pine sawtimber, poles, and pilings (53%), followed by pulpwood (40%), and hardwood sawtimber (7%).
- Ø Hale, Clarke, Monroe, Marengo and Wilcox counties were the top five producers of primary timber products, based on estimated stumpage values.
- Ø Timber ranks second in production of all agricultural commodities and accounts for 15 percent of all commodities, with broilers leading the state in agriculture cash receipts. Timber has consistently ranked second in cash receipts for agricultural commodities.
- Ø In 2002, (latest statistics available) forestry manufacturing amounted to approximately 17.5% of the total manufactures in Alabama, and directly employed 43,906 people (not counting private consultants and government employees) with a payroll of over \$1.6 billion at 885 establishments.
- Ø During 2004, there were 81 announcements of new and expanding investments, creating 3,308 new jobs, and investing \$317 million. This represents a 414% increase in investments and a 153% increase in new jobs over 2003.

- Ø For most species, growth is greater than removals. According to 2002 forest survey data, only 65,500 acres were considered non-stocked (0.3%), while 11.9 million acres are in sawtimber or pole timber-size classifications. The remaining 10.9 million acres consist of younger, but aggressively growing timber.
- Ø Alabama's forests are in good shape. Approximately 14.4 million acres (63%) of the commercial forest are under an identified certification program or are managed by government entities that require sound forest management.

ALABAMA'S COMMERCIAL FORESTLAND OWNERSHIP

Alabama's forestland covers 71% of the entire state. Table 1 shows the percent of commercial forestland by ownership category and county. This information is based on forest inventory data collected by the Alabama Forestry Commission and compiled by the U.S. Forest Service. Based on this information, there are 22.9 million acres of commercial forestland in Alabama. Commercial forestland increased by nearly one million acres between 1990 and 2000.

Non-industrial private landowners own approximately 78% of this commercial forestland, of which 13% is located on designated farms and 65% is not on farms. Forest-related industry owns 16% of the commercial forestland in Alabama. Government, primarily the U.S. Forest Service, owns the remaining 5% of forestland in Alabama.

Ownership of forests in the Southeast is very unique, in contrast to a recent United Nations report showing that 80% of the world's forests are under public ownership. Private ownership creates a diverse landscape and tends to bring people closer to the natural resource for more "hands on" management and recreational use.

PRODUCTION OF FOREST PRODUCTS

Table 2 shows the production of forest products as measured by severance taxes collected by the Department of Revenue. This information is summarized for fiscal

year 2004 by product classification and county, and consists of timber harvested and delivered to primary processing plants.

Pine sawtimber harvested in 2004 was approximately 1.8 billion board feet while hardwood sawtimber was 313 million board feet. Sawtimber volume harvested accounted for 34% of the total volume harvested. This represents an increase of 793 million board feet pine sawtimber (up 76%) and an increase of 133 million board feet hardwood sawtimber (up 74%) from 2003 (tables 2 & 3). Figures 1 & 2 graphically show the level of pine and hardwood sawtimber harvested by county.

Southwest and West Alabama continue to lead the state in volume harvested. Alabama's harvest volumes increased along with other southern states. This probably was due to strong lumber and panel markets fueled by national and world demand, with record high building starts in 2004. Also, rebuilding homes and businesses destroyed by four major hurricanes in Alabama, Florida, Georgia and the Caribbean created a strong regional demand for those products.

Approximately 6.8 million cords of pine pulpwood and 3.3 million cords of hardwood pulpwood were harvested from Alabama's forestland during fiscal year 2004 (tables 2 & 3). Figures 3 & 4 graphically show the level of pine and hardwood pulpwood harvested by county. This represents an increase of 2.6 million cords of pine pulpwood (up 61%) and 1.2 million cords of hardwood pulpwood (up 57%) from the previous year. These volumes are a direct result of salvaging and storing timber damaged by Hurricane Ivan in Southwest and West Alabama. Also, the

weak U.S. dollar allowed pulp and paper industries to be more competitive on world markets, so they were willing to buy and store more pulp to meet demands. The 2004 volumes were significant, at 66% of the total volume of wood products harvested.

In 2003, chip volumes decreased and accounted for just 1/3 of the total pulpwood volume harvested and delivered. This trend reversed in 2004, with chip volumes increasing to 2.9 million cords, and accounting for 40% of traditional roundwood. This was due to coordinated salvage efforts by loggers and industry to salvage as much hurricane damaged timber as possible in both roundwood and chips loaded on rail cars, trucks and barges. Large roundwood and chip volumes were transported away from the major impact zone to other facilities.

CURRENT TIMBER PRICES AND YEARLY TRENDS

Table 4 shows 2004 Alabama timber prices, stumpage and delivered, for the main forest products harvested and delivered to primary mills, as published by Timber Mart South (TMS). The graphs show the price trends of each product from 1993 to 2004. South-wide, sawtimber stumpage prices rose in 2004, as markets continued to improve with the economy, especially during the last half of the year. Alabama's sawtimber stumpage prices followed the southern trend, and continued to remain strong the first quarter of 2005. Pine and hardwood pulpwood stumpage prices dropped by 12% and 27%, respectively. This decline was due to an oversupply of pulpwood and increased harvesting costs due to Hurricane Ivan salvage operations.

The U.S. economy grew 3.8% during the fourth quarter, up from the originally reported 3.1%, according to the Department of Commerce. Exports were revised sharply higher, as was business investment, residential investment, and government spending. As a response, the Nation's sawtimber market continued to remain strong, mostly resulting from low mortgage interest rates and historical housing starts (1.948 million units, or a 5.7% increase over 2003 starts). This resulted in residential construction investments of \$538 billion with year end mortgage interest rates at 5.73%. Consequently, prices for lumber and OSB remain strong, with good forecasts for 2005.

However, business losses to overseas companies continue to hold the furniture market in check. The increased furniture imports from China and the corresponding closures of furniture manufacturing facilities in the U.S. finally prompted the initiation of a trade dispute, which will play out over the next few years. Alabama mills that provide low-cost furniture reportable are still doing well.

At the end of 2004, Northern Bleached Softwood Kraft pulp prices were \$621 per ton, up 11% from \$559 per ton at the end of 2003. (This rate increased again during the first quarter of 2005.) The American Forest and Paper Association expects pulpwood consumption to grow at an average rate of 0.8% annually during the next few years. However, soft demand and overcapacity still plague the industry. This is especially true with the linerboard and corrugated box industry.

Favorable exchange rates (i.e., a 17% decline in the U.S dollar, key against foreign currencies) helped pulp and paper exports, as

this made U.S. producers more competitive in the world market. The appreciation of the Canadian dollar, which rose more than 17% against the U.S. dollar, will make it more expensive for Canada to export products to the United States.

In 2004, 33,353 tons of Kraft linerboard, 92,174 tons of paper and paper articles, and 1.4 million tons of wood pulp and passed through the Port of Mobile, with approximately 41% as exports and 59% as imports. Ironically, exports were down 26%, with imports up 26% as international markets responded to the declining dollar.

During fiscal year 2004, the Alabama International Trade Center, provided export assistance to 51 wood product companies in Alabama. Companies received foreign market research, export training, and assistance with sales development for markets in Latin America and Asia. These activities created \$8.58 million in new export sales for Alabama wood product companies. The Center also helped firms secure \$1.3 million in export financing to support sales of wood products to customers overseas.

REVENUE FROM SALES OF FOREST PRODUCTS

Timber Mart South unit rate estimates were applied to the volume of timber harvested to estimate the stumpage revenues by product and county, as shown in table 5. Stumpage revenues by ownership and county are shown in table 6 and delivered revenues are shown in table 7.

The total estimated value of stumpage harvested in 2004 is \$969 million, which is

up \$438 million or 82% from 2003 estimates. Based on ownership patterns, approximately 77% of the total stumpage value was harvested from farm and non-farm, non-industrial private lands (NIPF), 18% from forest industry lands, and 5% from government lands.

Delivered value was approximately \$1.6 billion, which is up \$833 million or 109% from 2003 estimates. This indicates a direct value from harvesting and logging operations of approximately \$631 million to the Alabama economy. Delivered value consisted primarily of pine sawtimber and poles & pilings (53%), followed by pulpwood harvests (40%), and hardwood sawtimber (7%).

Figure 5 shows the total stumpage value for fiscal year 2004 by county while figure 6 shows the difference in stumpage value harvested from 2003 levels. Table 8 shows the county rankings by stumpage value. Hale, Clarke, Monroe, Marengo, and Wilcox counties were the top five producers of primary timber products, based on estimated stumpage values. Again, the southwestern portion of the State leads in production levels.

REVENUE FROM OUTDOOR RECREATIONAL ACTIVITIES

The forests also provide a setting for hunting, fishing, hiking, and other outdoor activities. It is home to a diversity of animal and plant species and contributes to the quality of life of Alabamians in countless other ways. These benefits from the forest are not easily quantified, but are increasingly important to Alabama's citizens and the state economy.

In 2001 (latest statistics available), the Census Bureau completed a survey to determine the economic importance of fishing, hunting, and wildlife-associated recreation in Alabama. According to the survey, 1.3 million people participated in some form of outdoor recreation. Trip-related expenditures for these associated activities amounted to \$633 million, which included food, lodging, transportation, and other costs. These individuals purchased \$1.1 billion in equipment. Over 30,000 jobs are supported by hunting and fishing, with an overall economic impact of \$2.8 billion.

TIMBER VERSUS OTHER AGRICULTURAL COMMODITIES

Table 9 shows the cash receipts of timber as compared to other agricultural commodities produced in Alabama (based on 2003 information). Forest Products rank second and accounts for 15% of all commodities, with broilers leading the state in agricultural cash receipts. Timber has consistently ranked second in cash receipts for agricultural commodities.

TIMBER VERSUS OTHER MANUFACTURING INDUSTRIES

Table 10 compares the forestry manufacturers with all other manufacturing industries in the State. This information is based on the latest statistics available from the U.S. Census Bureau.

In 2002, (latest statistics available) forestry manufacturing amounted to approximately 17.5% of the total manufacturing in Alabama, and directly employed 43,906

people (not counting private consultants, government employees, or logging operations) with a payroll of over \$1.6 billion at 885 establishments.

Value added is another indicator commonly used to measure economic importance of an industry. Value added is defined as the difference between the cost of raw materials purchased by a firm and the value of the products it sells. For example, a paper company turns pulpwood into paper. The difference between the value of the pulpwood and other raw materials purchased and the value of the paper sold is the value added by the manufacturing process. The value added for some forestry manufacturing sectors is shown in table 10 (the U. S. Census Bureau has not finished compiling data for pulp and paper manufacturers).

A final measure of economic activity is the “value of shipments”. The value of shipments is the total value of all materials sold by the forest products industry, whether they are sold within the state or shipped out of state. It includes the value of materials sold to consumers, as well as materials sold to other forest products firms for further manufacture.

The 1997 Census estimated \$12.2 billion dollars in value of shipments from the forestry manufacturers. (*Latest available statistics*)

FOREST INDUSTRY INVESTMENTS, EXPANSIONS, AND CLOSURES IN ALABAMA

Table 11 shows the new and expanding forest investments since 1993. From 1993 to 2004, approximately 5.2 billion dollars was

invested in new or expanding businesses by the forest industry. Investments slowed since 2000, but increased significantly last year. During 2004, there were 81 announcements of new and expanding investments, creating 3,308 new jobs, and investing \$317 million. Table 12 lists the specific investment announcements for 2004, as recorded by the Alabama Development Office. Some of the major forestry-related investments include:

- Louisiana Pacific Corporation announced the investment of \$130 million to locate a new oriented strand board (OSB) plant in Thomasville, Clarke County AL, and initially adding 130 new jobs directly and 300 jobs indirectly. With an annual production of 700 million square feet, the facility is expected to consume approximately 800,000 tons of pulpwood annually.
- Wellborn Cabinets will invest \$35 million to expand their kitchen cabinet plant in Ashland, Clay County, AL, creating 1,000 new jobs.
- SCA announced a \$25 million expansion of their sanitary paper products plant in Cherokee, Colbert County, AL, adding 400 new jobs.
- International Paper Company announced a \$22 million investment to improve their Kraft linerboard facility in Prattville, Autauga County, AL.
- Mannington Wood floors announced an investment of \$16.8 million to expand their hardwood flooring plant in Epes, Sumter County, AL, adding 25 new jobs.
- Rock-Tenn Converting Company announced an investment of \$15 million to improve their corrugated sheeting plant in Athens, Limestone County, AL.

- Mead Westvaco will invest \$10 million to expand and improve their Paperboard Packaging plant in Lanett, Chambers County, AL, adding 55 new jobs.
- Louisiana Pacific will invest \$8 million to improve their Oriented Strand Board (OSB) plant in Hanceville, Cullman County, AL.
- RussCorr LLC will invest \$7 million to build a corrugated sheet facility in Cullman, Cullman County, AL adding 40 new jobs.
- Paragon Decors Inc. will invest \$5 million to expand their framed pictures facility in Albertville, Marshall County, AL, adding 40 new jobs.
- Jim Bishop Cabinets Inc. will invest \$3 million to expand their wooden cabinet facility in Montgomery, Montgomery County, AL adding 50 new jobs.
- Alabama Venetian Blind Company will invest \$3 million to build a Polyvinyl Shutter facility in Foley, Baldwin County, AL, adding 75 new jobs.
- Falkville Wood Treating will invest \$3 million to build a Creosote Treated Wood facility at Falkville, Morgan County, AL, adding 5 new jobs initially.

Other mill announcements during 2004 that will affect Alabama's timber market are as follows:

- Georgia Pacific's mill in Hosford, Florida began production during the first quarter of 2005, and will draw timber from Southeast Alabama as well as the Florida Panhandle.
- Shuqualak Lumber Company will invest

\$100 million to build a TimTek mill near Meridian MS to produce high strength engineered lumber from small diameter trees. The mill will open in late 2006 and employ 140 people, drawing plantation thinning and other small wood from AL and MS.

In addition, several forest product companies have announced plans to sell some or all of their timberland holdings. From 2001 through 2003, approximately 4.3 million acres, totaling \$3.5 billion, of southeastern forestland was sold for an average price of \$814 per acre. Louisiana-Pacific announced plans to sell all of their land holdings. International Paper Company announced plans to sell 1.5 million acres in the South. Mead-Westvaco announced plans to sell 1.8 million acres. Weyerhaeuser Company announced plans to sell 344,000 acres in the South. Smurfit-Stone Container sold 81,000 acres in Alabama and Tennessee.

Companies continue to consolidate and close mills to reduce costs, gain a bigger share of their markets, and become more efficient. In 1998, the current top five U.S.-based companies had combined net sales of \$45.1 billion; in 2002, the top five companies had combined net sales of \$81.5 billion!

According to a recent Price-Waterhouse Coopers survey of the global forest and paper industry sector, 28 U.S. companies recorded sales of \$139.2 billion in 2002, representing 46% of the top 100 forest company's total sales in the world! Europe controls an additional 27% of the world market sales. In addition, Canada is the largest exporter and the U.S. is the largest importer of wood products. Emerging market influencers include China, Russia,

and South America.

The USDA Forest Service reports that in spite of reductions in capacity, the southeastern states still account for more than 70% of the U.S. pulping capacity, with Alabama and Georgia leading in both the number of operating mills and pulping capacity. The southeastern states also account for approximately 48% of the U.S. softwood sawmill capacity, with Alabama having the greatest number of operating mills. In summary – the Southeast forest industry is a huge producer of timber products in the world!

NATURAL RESOURCE SUSTAINABILITY

With all the demands on the natural resources of Alabama, the question of whether or not our forests can sustain themselves long term must be answered. Forest survey data, as summarized in tables 13-15 indicate that our forests are in good shape.

Table 13 presents a breakdown of the commercial forests by forest types. One-third of the forests consist of softwood stands and two-thirds are hardwood stands. According to 2002 forest survey data, only 65,500 acres were considered non-stocked (0.3%), while 11.9 million acres has sawtimber or pole timber-size timber currently growing on site (table 14). The remaining 10.9 million acres contains younger, but aggressively growing timber. For most species, growth is greater than removals (table 15), indicating that we are not running out of trees. In fact, the issue today seems to be finding markets for the trees that we are growing.

Alabama, along with most other states, is working hard to develop a new woody biomass to energy market. The Southern Alliance for the Utilization of Biomass Resources (SAUBR) with headquarters in Tuscaloosa, Alabama, was formed to develop partnerships and promote such an industry. With members from many States across the nation, the Alliance is growing and keeping members informed of legislation, grants, loans, research and other issues affecting the potential biomass-energy market opportunities in Alabama.

The Treasure Forest, Tree Farm, and Sustainable Forestry Initiative Programs measure on-the-ground accomplishments of active land management and indicate well-managed forests. Additionally, all government lands are properly managed for multiple-uses and long-term sustainability. Currently, 14.4 million acres (63%) of Alabama's commercial forestland are certified under these programs or are directly identified as being properly managed by government agencies.

Many other acres are appropriately managed, though not enlisted in one of these certification programs. Our professionals continue to work with these landowners to help them meet their objectives and ensure long-term sustainability of our natural resources and forest economy.

Forestry is a successful and growing commodity in Alabama. The Alabama Forestry Commission is committed to making Alabama a better place for people through forestry.

FORESTRY CASH RECEIPT REPORT METHODOLOGY

The following calculations were used in converting volume units reported from severance tax forms to the volumes shown in this report. This methodology is based on Forestry Cash Receipt Report, 1986, Dr. Bill McKee, Alabama Cooperative Extension Service.

I. Pine Sawtimber

- A. Pine Lumber Production (MBF Board Measure) * .88 = Lumber Production, MBF Scribner Log Rule.
- B. Pine Logs (MBF Doyle Rule) * 1.157 = Volume Pine Logs, MBF Scribner Log Rule.
- C. (A)+(B) = Total Pine Sawlog Harvest * Price per MBF Scribner Log Rule = Value of Pine Sawtimber in Scribner Log Rule.
- D. Conversion to cubic feet: 5.5 cubic feet per MBF, Scribner

II. Hardwood Sawtimber

- A. $((\text{Hardwood Lumber Production in MBF Board Measure} + ((\text{Switch Tie Pieces} * 60 \text{ BF per Piece}) + ((\text{Cross Ties} + \text{Mine Ties} + \text{Mine Props}) * 45 \text{ BF per Piece}))/1000)) * .70 =$ Lumber Production, MBF Doyle.
- B. (A) + Hardwood Logs, MBF Doyle Log Rule = Total Hardwood Sawlog Harvest in Doyle Rule * Price per MBF Doyle Rule = Hardwood Sawtimber Value.
- C. Conversion to cubic feet: 3.6 cubic feet per MBF, Doyle

III. Pine Pulpwood

- A. Harvest in Cords * Price per Cord = Pine Pulpwood Value.
- B. Conversion to cubic feet: 85 cubic feet per cord

IV. Hardwood Pulpwood

- A. Harvest in Cords * Price per Cord = Hardwood Pulpwood Value.
- B. Conversion to cubic feet: 80 cubic feet per cord

V. Poles and Piling

- A. Pole Production in MBF Doyle + Piling Production in MBF Doyle * Weighted price of Poles and Pilings per MBF Doyle = Value of Poles and Piling.
- B. Conversion to cubic feet: 3.6 cubic feet per MBF, Doyle

VI. Turpentine

- A. Turpentine in 400 Pound Barrels * Price per Barrel = Turpentine Value

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Table 1. Percent of Commercial Forestland by Ownership Category.

COUNTY	FARM PRIVATE	NON-FARM PRIVATE	FOREST INDUSTRY	GOVERNMENT	TOTAL ACRES (1000)
	----- (as a percent of all commercial forest land) -----				
Autauga	14.6%	46.4%	37.2%	1.8%	283.0
Baldwin	5.0%	53.7%	37.7%	3.6%	671.4
Barbour	15.3%	62.4%	16.9%	5.4%	450.6
Bibb	6.4%	51.9%	24.5%	17.3%	345.5
Blount	16.2%	76.7%	5.1%	2.0%	236.3
Bullock	21.1%	62.6%	16.3%	0.0%	316.5
Butler	11.3%	46.5%	41.3%	1.0%	417.3
Calhoun	10.4%	42.9%	19.0%	27.7%	252.9
Chambers	13.8%	65.4%	20.4%	0.5%	319.2
Cherokee	18.2%	55.2%	25.0%	1.7%	230.3
Chilton	11.2%	63.2%	18.6%	7.0%	324.9
Choctaw	7.4%	74.4%	17.4%	0.8%	520.1
Clarke	5.3%	81.2%	11.9%	1.5%	724.9
Clay	9.6%	58.1%	14.2%	18.0%	311.9
Cleburne	7.1%	40.5%	21.2%	31.2%	304.4
Coffee	22.4%	64.6%	10.8%	2.3%	301.9
Colbert	13.0%	78.9%	2.7%	5.4%	225.5
Conecuh	10.1%	52.8%	37.1%	0.0%	469.5
Coosa	5.8%	66.1%	28.1%	0.0%	356.0
Covington	15.0%	68.7%	6.0%	10.3%	505.8
Crenshaw	18.6%	65.6%	14.8%	1.0%	321.7
Cullman	21.5%	73.0%	5.5%	0.0%	229.6
Dale	22.3%	58.9%	3.6%	15.1%	238.2
Dallas	22.1%	60.1%	17.2%	0.5%	421.7
De Kalb	23.2%	69.0%	5.2%	2.6%	235.4
Elmore	15.5%	71.1%	11.2%	2.2%	271.7
Escambia	5.5%	56.3%	29.2%	9.0%	458.8
Etowah	12.9%	84.4%	0.0%	2.7%	231.0
Fayette	9.3%	65.1%	20.3%	5.4%	333.6
Franklin	15.8%	60.1%	21.9%	2.2%	296.5
Geneva	29.0%	65.0%	3.0%	3.0%	203.6
Greene	14.0%	66.3%	13.1%	6.6%	284.3
Hale	18.1%	53.4%	17.9%	10.7%	263.1
Henry	21.0%	67.2%	11.8%	0.0%	224.5
Houston	26.4%	70.4%	0.0%	3.2%	166.1
Jackson	14.7%	68.8%	8.3%	8.2%	450.7
Jefferson	3.6%	90.5%	0.0%	5.9%	439.4
Lamar	12.0%	71.0%	15.4%	1.7%	314.6
Lauderdale	24.2%	69.9%	6.0%	0.0%	200.9
Lawrence	19.7%	44.3%	0.7%	35.3%	194.4
Lee	14.0%	69.4%	14.5%	2.2%	273.6
Limestone	39.6%	44.6%	0.0%	15.8%	108.9
Lowndes	15.8%	46.5%	35.8%	1.9%	306.3
Macon	19.7%	71.0%	5.9%	3.4%	307.3
Madison	17.8%	62.4%	0.0%	19.8%	180.9
Marengo	17.0%	68.3%	14.7%	0.0%	452.4
Marion	11.7%	64.5%	23.4%	0.3%	365.9
Marshall	18.3%	74.1%	0.0%	7.7%	177.4
Mobile	7.9%	74.9%	8.9%	8.3%	531.8
Monroe	11.7%	57.0%	29.5%	1.8%	533.2
Montgomery	30.6%	57.3%	7.2%	4.9%	250.6
Morgan	21.3%	71.1%	0.0%	7.6%	175.2
Perry	15.4%	58.6%	16.9%	9.1%	357.0
Pickens	12.1%	60.8%	27.0%	0.1%	480.7
Pike	24.6%	69.3%	6.2%	0.0%	286.0

Table 1. Percent of Commercial Forestland by Ownership Category.

COUNTY	FARM PRIVATE	NON-FARM PRIVATE	FOREST INDUSTRY	GOVERNMENT	TOTAL ACRES (1000)
----- (as a percent of all commercial forest land) -----					
Randolph	16.7%	77.1%	4.4%	1.8%	289.5
Russell	16.0%	58.1%	19.2%	6.7%	309.4
Shelby	7.1%	50.7%	38.6%	3.7%	351.2
St Clair	6.3%	68.1%	23.8%	1.7%	302.4
Sumter	15.4%	73.6%	8.2%	2.9%	430.8
Talladega	9.6%	54.0%	17.5%	18.9%	325.5
Tallapoosa	10.9%	66.6%	21.0%	1.5%	379.6
Tuscaloosa	6.5%	69.9%	19.5%	4.0%	659.6
Walker	5.3%	90.7%	1.4%	2.5%	354.0
Washington	7.4%	89.7%	2.9%	0.0%	610.2
Wilcox	18.3%	65.7%	13.8%	2.2%	468.4
Winston	6.5%	54.5%	13.4%	25.6%	310.1
Percentage of Total	13.2%	65.1%	16.3%	5.4%	22,926

SOURCE: U.S. Forest Service 2000 Forest Survey and Bureau of the Census, 1997 Census of Agriculture for Alabama

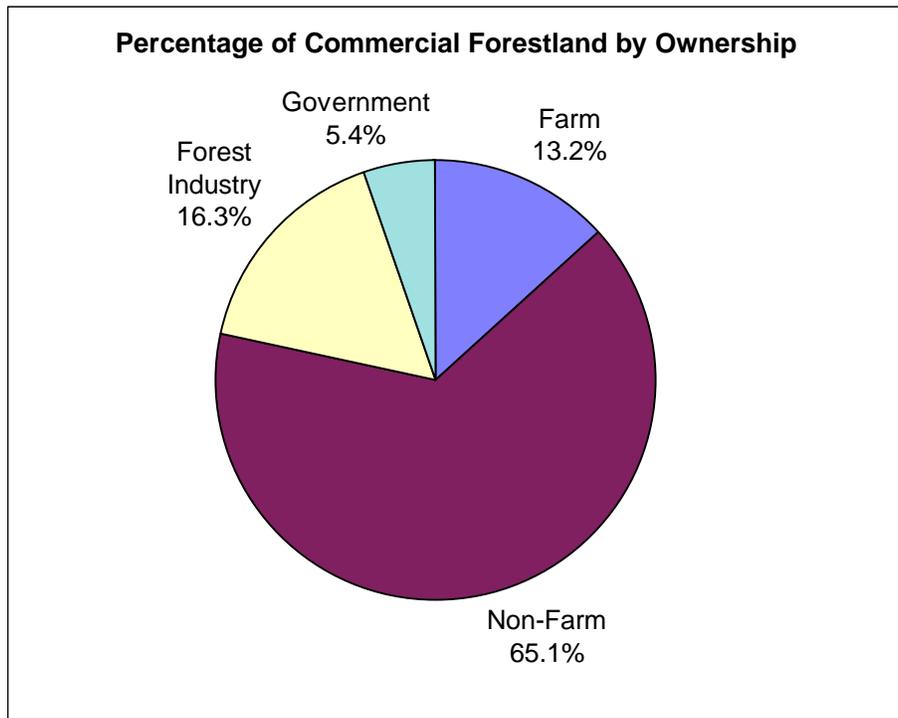


Table 2. Production of Forest Products by Product and County, 2004.

COUNTY	PINE SAWTIMBER <i>(mbf Scribner)</i>	HARDWOOD a/ SAWTIMBER <i>(mbf Doyle)</i>	PINE PULPWOOD <i>(cords)</i>	HARDWOOD PULPWOOD <i>(cords)</i>	POLES AND PILES <i>(mbf Doyle)</i>
Autauga	11,070	2,821	95,014	19,988	0
Baldwin	37,235	596	230,161	27,033	2,327
Barbour	19,492	1,829	186,108	73,644	166
Bibb	25,500	5,263	109,177	74,892	2,564
Blount	11,140	1,645	46,895	30,688	0
Bullock	12,179	1,436	143,237	35,307	39
Butler	40,754	2,067	246,722	50,747	269
Calhoun	12,010	1,177	42,406	26,015	70
Chambers	30,546	3,152	140,467	62,419	0
Cherokee	16,069	570	56,895	23,905	0
Chilton	15,506	2,756	69,002	41,921	2
Choctaw	72,295	7,812	216,546	99,019	2,048
Clarke	125,693	34,082	323,657	204,484	4,459
Clay	18,036	8,355	68,954	50,097	6
Cleburne	35,365	2,312	130,922	53,809	8
Coffee	13,841	309	108,194	41,305	80
Colbert	4,556	2,165	35,016	25,244	0
Conecuh	72,186	3,387	194,126	64,260	942
Coosa	31,287	2,245	144,732	63,687	0
Covington	32,541	751	156,651	37,483	2,602
Crenshaw	21,168	8,397	120,228	35,714	200
Cullman	9,903	1,806	51,733	32,517	0
Dale	5,759	218	47,499	32,981	57
Dallas	39,191	4,869	133,153	79,326	85
De Kalb	12,329	6,851	35,591	28,520	0
Elmore	10,221	2,233	70,996	38,538	0
Escambia	43,388	395	189,433	33,751	5,876
Etowah	19,199	3,462	43,943	45,305	5
Fayette	19,354	7,181	84,944	69,082	0
Franklin	4,565	2,490	29,681	41,453	0
Geneva	2,459	693	40,865	16,652	601
Greene	24,834	8,743	54,884	58,465	52
Hale	201,715	5,797	50,636	54,998	236
Henry	8,552	3,810	44,381	40,170	8
Houston	3,646	979	28,163	18,561	0
Jackson	4,742	12,099	37,371	87,009	0
Jefferson	11,521	2,733	28,710	40,812	0
Lamar	26,933	9,222	121,431	47,439	0
Lauderdale	5,887	1,622	6,148	26,265	0
Lawrence	2,823	2,060	11,114	24,303	0
Lee	11,637	2,910	112,685	34,601	0
Limestone	635	694	4,725	10,690	0
Lowndes	14,329	2,781	83,218	35,116	26
Macon	9,788	1,967	82,090	35,182	0
Madison	2,860	683	5,910	11,716	0
Marengo	70,915	44,752	150,609	78,969	1,229
Marion	13,943	6,539	86,558	48,486	0
Marshall	4,156	2,325	11,314	27,167	0
Mobile	36,058	1,453	99,465	29,795	2,077
Monroe	115,014	5,325	242,169	88,651	739
Montgomery	11,719	3,590	138,039	48,474	50
Morgan	2,981	1,566	13,181	31,853	0
Perry	20,479	4,583	100,922	46,286	32
Pickens	24,404	9,491	94,115	75,619	80
Pike	14,717	1,354	117,324	45,890	54
Randolph	14,214	1,563	107,868	25,927	0

Table 2. Production of Forest Products by Product and County, 2004.

COUNTY	PINE SAWTIMBER <i>(mbf Scribner)</i>	HARDWOOD a/ SAWTIMBER <i>(mbf Doyle)</i>	PINE PULPWOOD <i>(cords)</i>	HARDWOOD PULPWOOD <i>(cords)</i>	POLES AND PILES <i>(mbf Doyle)</i>
Russell	10,326	901	121,030	34,300	0
Shelby	12,779	3,182	61,824	50,453	0
St Clair	25,021	2,889	77,798	56,014	17
Sumter	24,534	7,268	167,505	87,402	990
Talladega	22,043	1,425	102,139	37,965	88
Tallapoosa	34,383	1,826	225,375	51,365	0
Tuscaloosa	39,539	7,665	114,728	122,478	0
Walker	13,013	1,892	70,480	52,004	0
Washington	66,820	1,644	184,566	75,009	1,662
Wilcox	91,066	12,050	122,505	61,999	2,044
Winston	14,967	9,807	79,577	52,067	0
2004 TOTAL	1,837,828	312,514	6,753,505	3,313,286	31,790
Cubic Foot Conversion (mmcf)	334.15	86.81	574.05	265.06	8.83
TOTAL HARVEST FOR 2004:	1,268.90 Million Cubic Feet				

a/ Includes--Sawtimber, Cross and Switch and Mine Ties, Mine Props.

MBF= Thousand Board Feet

SOURCE: Department of Revenue and Finance Department, Severance Tax Receipts

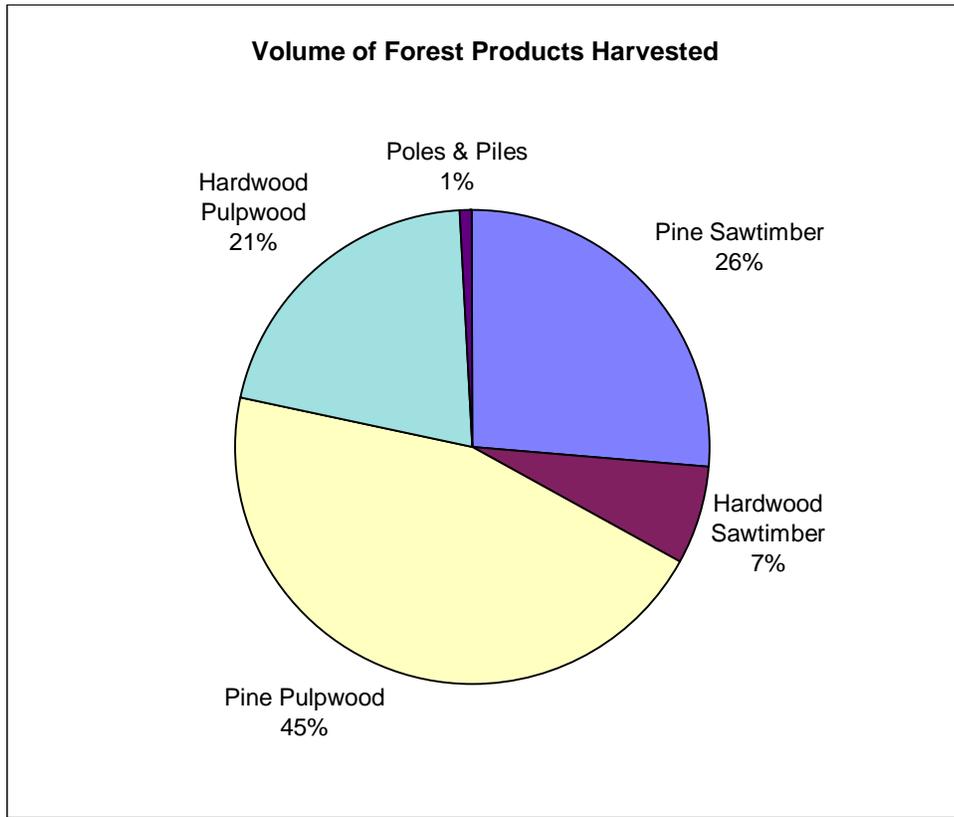
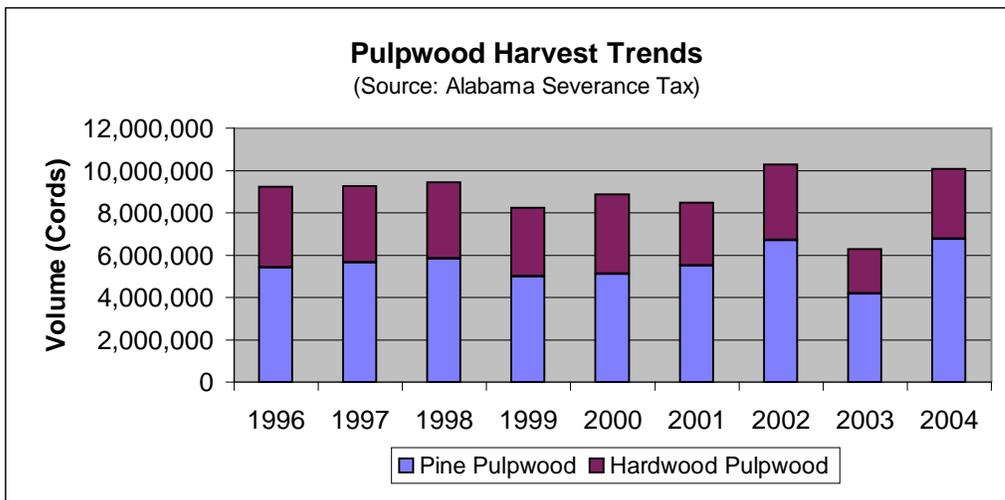
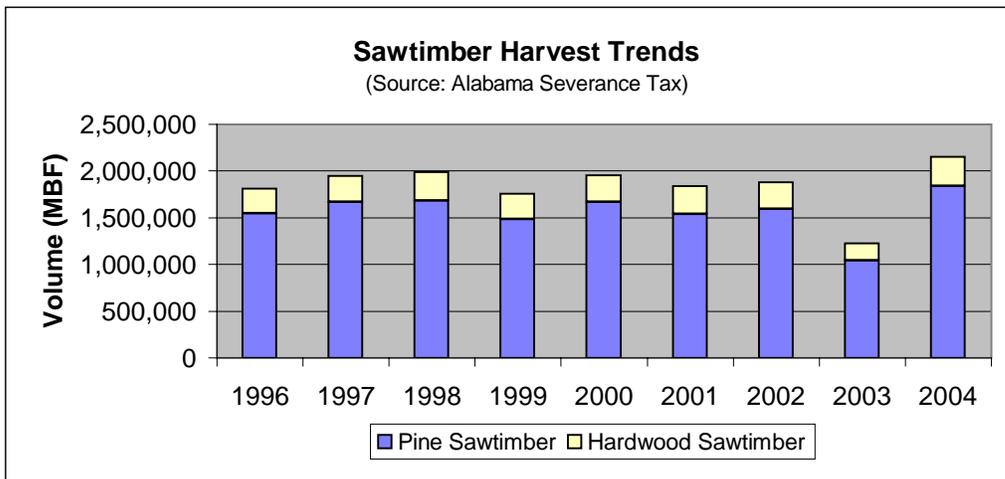
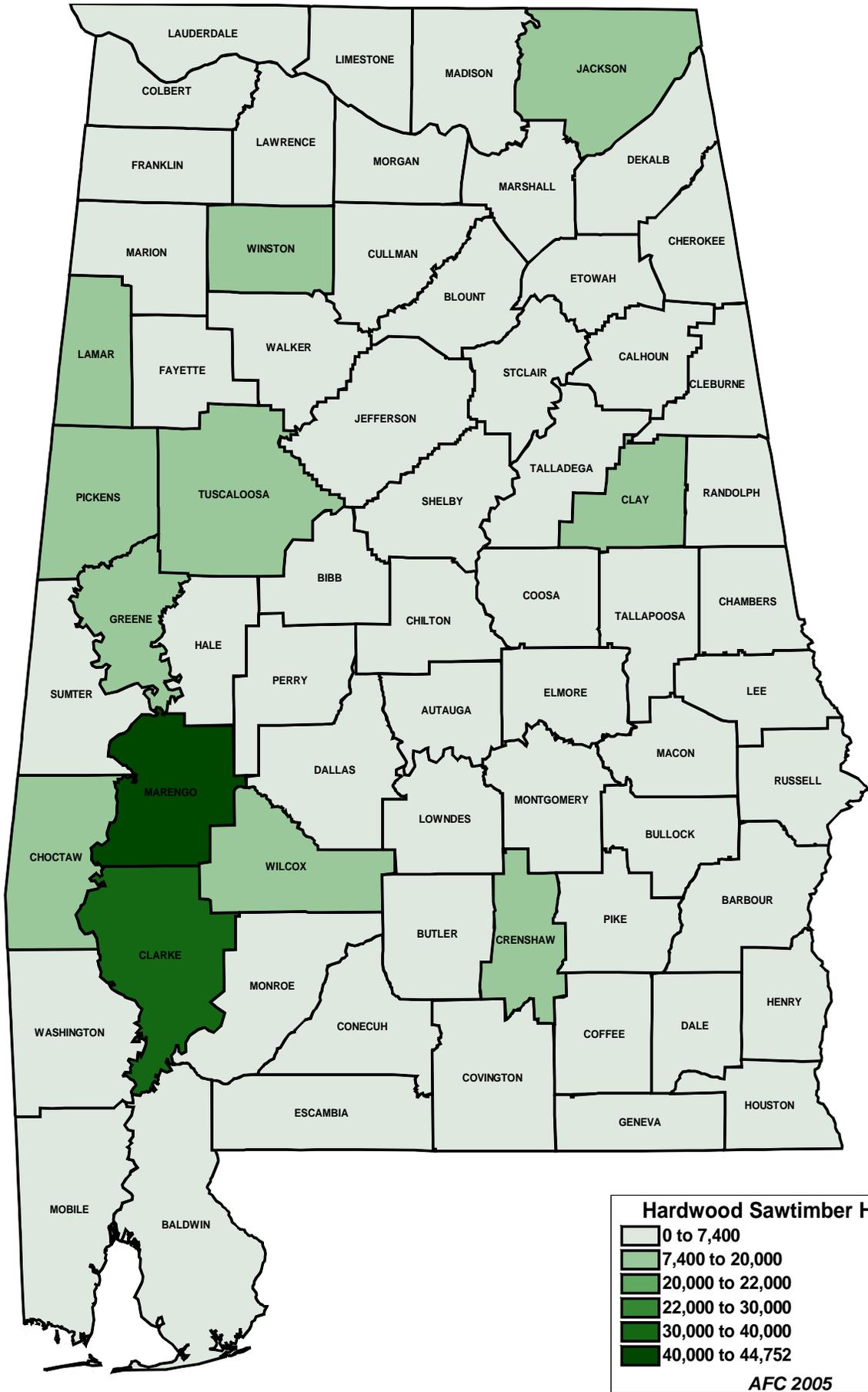


Table 3. Forest Products Harvests by Year

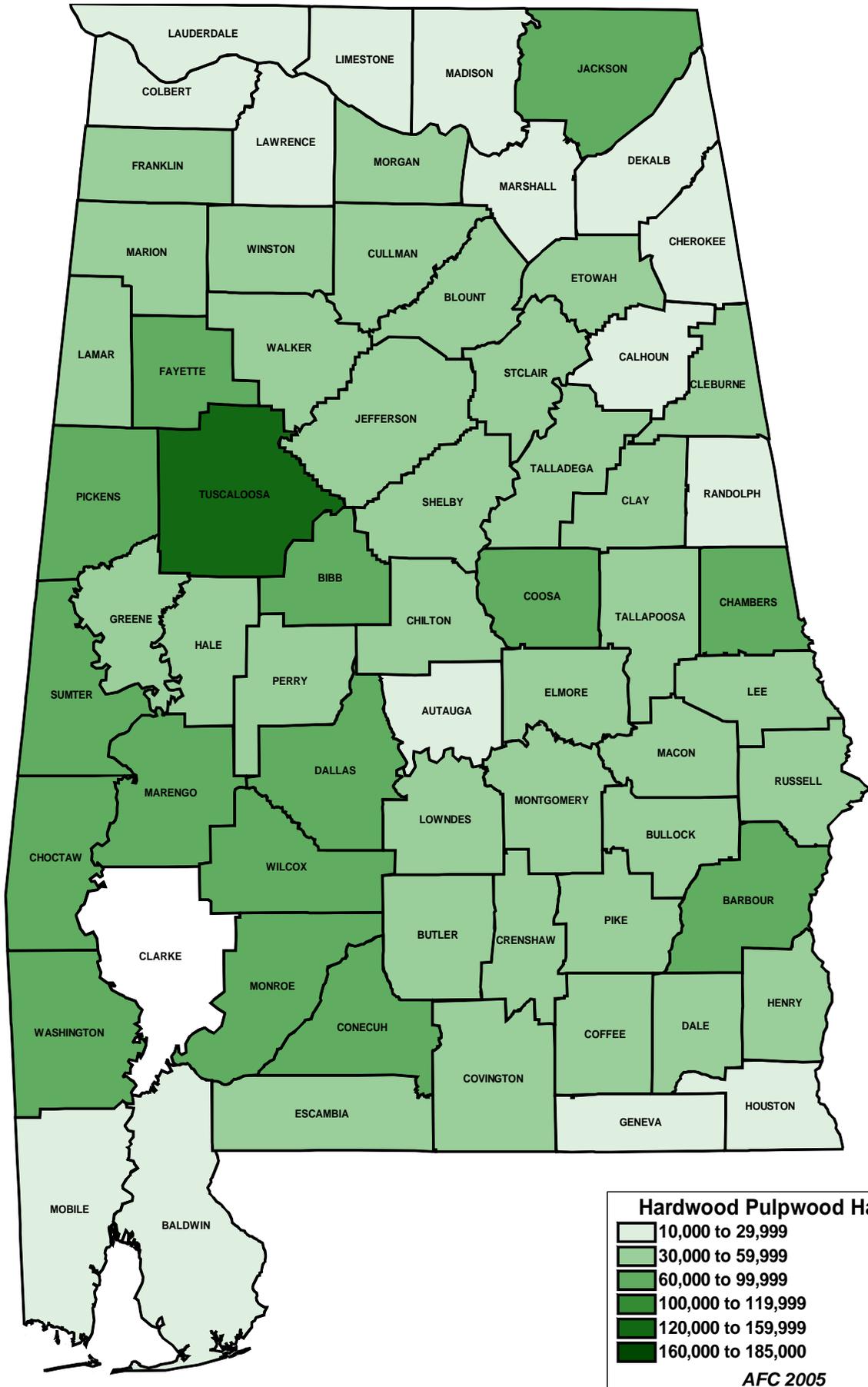
YEAR	PINE SAWTIMBER <i>(mbf Scribner)</i>	HARDWOOD SAWTIMBER <i>(mbf Doyle)</i>	PINE PULPWOOD <i>(cords)</i>	HARDWOOD PULPWOOD <i>(cords)</i>	
1996	1,543,241	270,395	5,427,060	3,799,505	
1997	1,672,058	274,883	5,663,781	3,596,780	
1998	1,683,977	305,659	5,845,848	3,602,648	
1999	1,487,871	268,412	4,983,089	3,245,549	
2000	1,671,304	283,098	5,126,587	3,752,076	
2001	1,540,799	300,857	5,497,703	2,990,148	
2002	1,593,112	284,160	6,708,523	3,579,703	Revised
2003	1,044,748	179,492	4,186,756	2,106,544	Revised
2004	1,837,828	312,514	6,753,505	3,313,286	
Percent Change 2003 to 2004:	75.9%	74.1%	61.3%	57.3%	67%



**Figure 2: Hardwood Sawtimber Harvests for FY 2004
(Total per County, reported in MBF, Doyle)**



**Figure 4: Hardwood Pulpwood Harvests for FY 2004
(Total per County, reported in Cords)**



Hardwood Pulpwood Harvests

- 10,000 to 29,999
- 30,000 to 59,999
- 60,000 to 99,999
- 100,000 to 119,999
- 120,000 to 159,999
- 160,000 to 185,000

AFC 2005

Table 4. Current Timber Prices and Yearly Trends

	Item	Region 1	Region 2
2004 Yearly Averages (Stumpage Prices)	Pine Sawtimber	\$339	\$369
	Hardwood Sawtimber	\$233	\$252
	Pine Pulpwood	\$17	\$20
	Hardwood Pulpwood	\$21	\$26
	Poles	\$409	\$481

	Item	Region 1	Region 2
2004 Yearly Averages (Delivered Prices)	Pine Sawtimber	\$447	\$437
	Hardwood Sawtimber	\$340	\$340
	Pine Pulpwood	\$57	\$60
	Hardwood Pulpwood	\$62	\$72
	Poles	\$609	\$609

SOURCE: Timber Mart South (Region 1 - North Alabama, Region 2 - South Alabama)

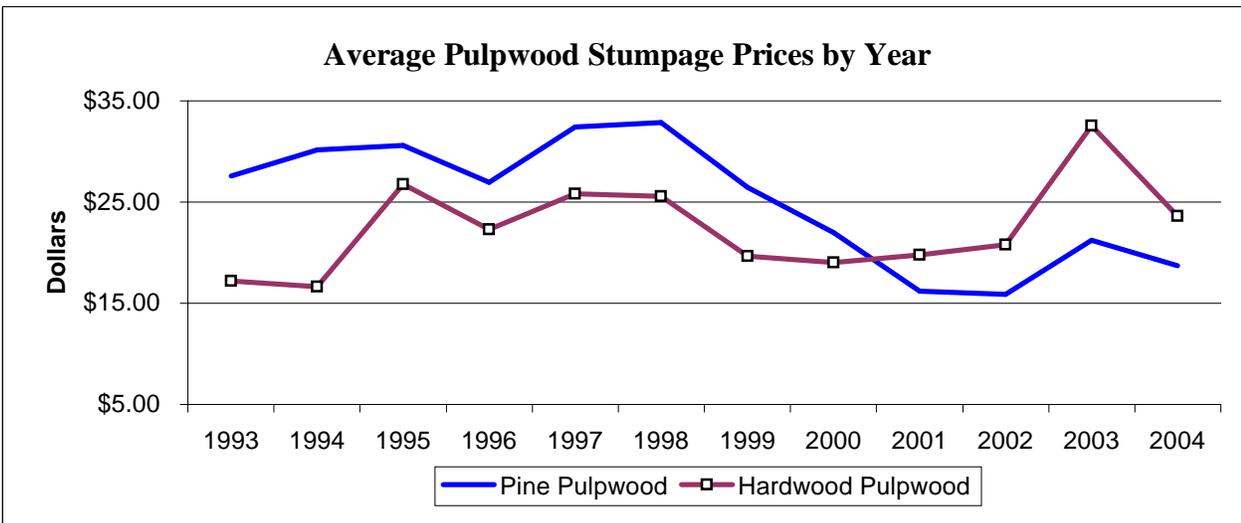
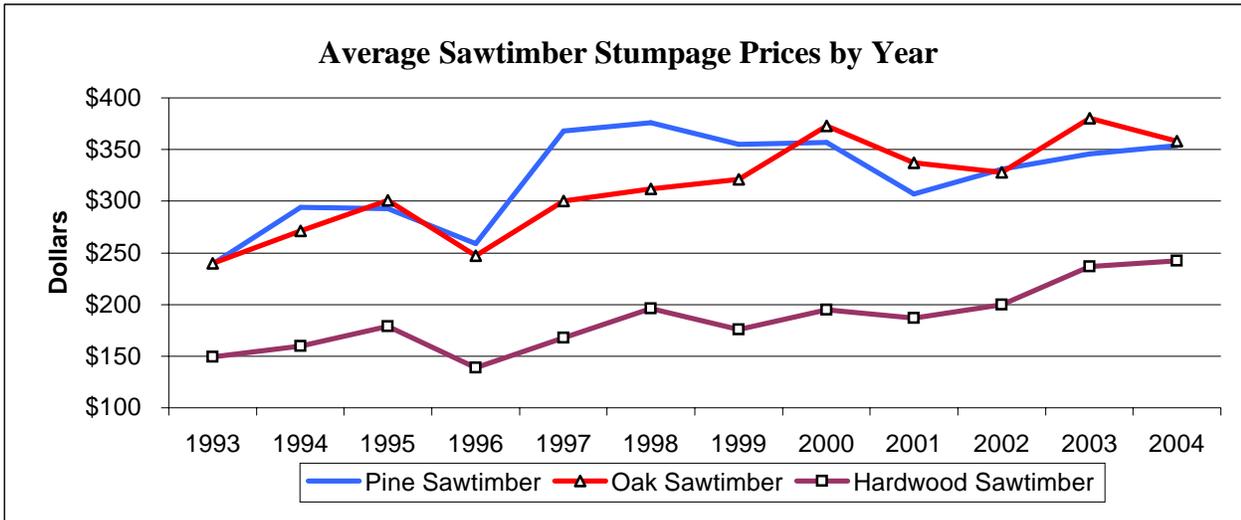


Table 5. Stumpage Revenue from Sale of Forest Products by Product and County, 2004.

COUNTY	PINE SAWTIMBER	HARDWOOD a/ SAWTIMBER	PINE PULPWOOD	HARDWOOD PULPWOOD	POLES AND PILES	TOTAL
	<i>(thousand dollars)</i>					
Autauga	\$4,085	\$711	\$1,934	\$517	\$0	\$7,247
Baldwin	\$13,740	\$150	\$4,684	\$700	\$1,119	\$20,393
Barbour	\$7,193	\$461	\$3,787	\$1,907	\$80	\$13,427
Bibb	\$9,410	\$1,326	\$2,222	\$1,939	\$1,233	\$16,130
Blount	\$3,777	\$383	\$802	\$656	\$0	\$5,619
Bullock	\$4,494	\$362	\$2,915	\$914	\$19	\$8,704
Butler	\$15,038	\$521	\$5,021	\$1,314	\$129	\$22,023
Calhoun	\$4,071	\$274	\$726	\$556	\$29	\$5,656
Chambers	\$11,271	\$794	\$2,859	\$1,616	\$0	\$16,540
Cherokee	\$5,447	\$133	\$973	\$511	\$0	\$7,065
Chilton	\$5,722	\$695	\$1,404	\$1,085	\$1	\$8,907
Choctaw	\$26,677	\$1,969	\$4,407	\$2,564	\$985	\$36,601
Clarke	\$46,381	\$8,589	\$6,586	\$5,294	\$2,145	\$68,995
Clay	\$6,655	\$2,105	\$1,403	\$1,297	\$3	\$11,464
Cleburne	\$11,989	\$539	\$2,240	\$1,151	\$3	\$15,922
Coffee	\$5,107	\$78	\$2,202	\$1,069	\$38	\$8,495
Colbert	\$1,544	\$504	\$599	\$540	\$0	\$3,188
Conecuh	\$26,637	\$854	\$3,950	\$1,664	\$453	\$33,557
Coosa	\$11,545	\$566	\$2,945	\$1,649	\$0	\$16,705
Covington	\$11,032	\$175	\$2,680	\$802	\$1,064	\$15,753
Crenshaw	\$7,811	\$2,116	\$2,447	\$925	\$96	\$13,394
Cullman	\$3,357	\$421	\$885	\$696	\$0	\$5,359
Dale	\$2,125	\$55	\$967	\$854	\$27	\$4,028
Dallas	\$14,461	\$1,227	\$2,710	\$2,054	\$41	\$20,492
De Kalb	\$4,179	\$1,596	\$609	\$610	\$0	\$6,995
Elmore	\$3,771	\$563	\$1,445	\$998	\$0	\$6,777
Escambia	\$16,010	\$100	\$3,855	\$874	\$2,826	\$23,665
Etowah	\$6,508	\$807	\$752	\$969	\$2	\$9,038
Fayette	\$6,561	\$1,673	\$1,453	\$1,478	\$0	\$11,165
Franklin	\$1,547	\$580	\$508	\$887	\$0	\$3,522
Geneva	\$907	\$175	\$832	\$431	\$289	\$2,634
Greene	\$9,164	\$2,203	\$1,117	\$1,514	\$25	\$14,023
Hale	\$74,433	\$1,461	\$1,030	\$1,424	\$114	\$78,462
Henry	\$3,156	\$960	\$903	\$1,040	\$4	\$6,063
Houston	\$1,345	\$247	\$573	\$481	\$0	\$2,646
Jackson	\$1,607	\$2,819	\$639	\$1,861	\$0	\$6,927
Jefferson	\$3,906	\$637	\$491	\$873	\$0	\$5,906
Lamar	\$9,130	\$2,149	\$2,078	\$1,015	\$0	\$14,371
Lauderdale	\$1,996	\$378	\$105	\$562	\$0	\$3,040
Lawrence	\$957	\$480	\$190	\$520	\$0	\$2,147
Lee	\$4,294	\$733	\$2,293	\$896	\$0	\$8,217
Limestone	\$215	\$162	\$81	\$229	\$0	\$686
Lowndes	\$5,287	\$701	\$1,693	\$909	\$13	\$8,603
Macon	\$3,612	\$496	\$1,671	\$911	\$0	\$6,689
Madison	\$969	\$159	\$101	\$251	\$0	\$1,480
Marengo	\$26,168	\$11,278	\$3,065	\$2,045	\$591	\$43,146
Marion	\$4,727	\$1,524	\$1,481	\$1,037	\$0	\$8,768
Marshall	\$1,409	\$542	\$194	\$581	\$0	\$2,725
Mobile	\$13,305	\$366	\$2,024	\$771	\$999	\$17,466
Monroe	\$42,440	\$1,342	\$4,928	\$2,295	\$355	\$51,361
Montgomery	\$4,324	\$905	\$2,809	\$1,255	\$24	\$9,317
Morgan	\$1,010	\$365	\$226	\$681	\$0	\$2,282
Perry	\$7,557	\$1,155	\$2,054	\$1,198	\$15	\$11,979

Table 5. Stumpage Revenue from Sale of Forest Products by Product and County, 2004.

COUNTY	PINE SAWTIMBER	HARDWOOD a/ SAWTIMBER	PINE PULPWOOD	HARDWOOD PULPWOOD	POLES AND PILES	TOTAL
			<i>(thousand dollars)</i>			
Pickens	\$8,273	\$2,212	\$1,610	\$1,617	\$33	\$13,745
Pike	\$5,431	\$341	\$2,388	\$1,188	\$26	\$9,373
Randolph	\$5,245	\$394	\$2,195	\$671	\$0	\$8,505
Russell	\$3,810	\$227	\$2,463	\$888	\$0	\$7,388
Shelby	\$4,332	\$741	\$1,058	\$1,079	\$0	\$7,211
St Clair	\$8,482	\$673	\$1,331	\$1,198	\$7	\$11,691
Sumter	\$9,053	\$1,831	\$3,409	\$2,263	\$476	\$17,032
Talladega	\$8,134	\$359	\$2,079	\$983	\$42	\$11,597
Tallapoosa	\$11,656	\$425	\$3,856	\$1,099	\$0	\$17,036
Tuscaloosa	\$13,404	\$1,786	\$1,963	\$2,620	\$0	\$19,773
Walker	\$4,411	\$441	\$1,206	\$1,112	\$0	\$7,171
Washington	\$24,657	\$414	\$3,756	\$1,942	\$799	\$31,568
Wilcox	\$33,603	\$3,037	\$2,493	\$1,605	\$983	\$41,721
Winston	\$5,074	\$2,285	\$1,362	\$1,114	\$0	\$9,834
Total	\$665,630	\$76,726	\$131,715	\$80,247	\$15,091	\$969,409

a/ Includes--Sawtimber, Cross and Switch and Mine ties, Mine props.
 MBF=Thousand Board Feet

SOURCE: Volumes from Severance Tax Receipts. Stumpage Price Rates from Timber Mart South.

**Table 6. Stumpage Revenue from Sales of Forest Products
by Forest Land Ownership, 2004.**

COUNTY	FARM PRIVATE	NON-FARM PRIVATE	FOREST INDUSTRY	GOVERNMENT	TOTAL
	<i>(thousand dollars)</i>				
Autauga	\$1,057	\$3,365	\$2,696	\$128	\$7,247
Baldwin	\$1,023	\$10,941	\$7,691	\$741	\$20,393
Barbour	\$2,051	\$8,373	\$2,271	\$730	\$13,427
Bibb	\$1,025	\$8,368	\$3,945	\$2,792	\$16,130
Blount	\$910	\$4,312	\$285	\$112	\$5,619
Bullock	\$1,837	\$5,448	\$1,419	\$0	\$8,704
Butler	\$2,479	\$10,235	\$9,088	\$222	\$22,023
Calhoun	\$591	\$2,424	\$1,074	\$1,568	\$5,656
Chambers	\$2,275	\$10,820	\$3,368	\$78	\$16,540
Cherokee	\$1,286	\$3,901	\$1,764	\$117	\$7,065
Chilton	\$998	\$5,631	\$1,653	\$625	\$8,907
Choctaw	\$2,713	\$27,231	\$6,369	\$289	\$36,601
Clarke	\$3,658	\$56,057	\$8,233	\$1,047	\$68,995
Clay	\$1,105	\$6,661	\$1,632	\$2,066	\$11,464
Cleburne	\$1,136	\$6,443	\$3,379	\$4,964	\$15,922
Coffee	\$1,902	\$5,484	\$914	\$191	\$8,495
Colbert	\$415	\$2,514	\$86	\$172	\$3,188
Conecuh	\$3,375	\$17,724	\$12,458	\$0	\$33,557
Coosa	\$962	\$11,050	\$4,692	\$0	\$16,705
Covington	\$2,369	\$10,824	\$941	\$1,623	\$15,753
Crenshaw	\$2,498	\$8,786	\$1,978	\$129	\$13,394
Cullman	\$1,150	\$3,914	\$294	\$0	\$5,359
Dale	\$899	\$2,374	\$145	\$607	\$4,028
Dallas	\$4,529	\$12,324	\$3,533	\$102	\$20,492
De Kalb	\$1,623	\$4,828	\$363	\$181	\$6,995
Elmore	\$1,053	\$4,816	\$761	\$150	\$6,777
Escambia	\$1,295	\$13,333	\$6,912	\$2,125	\$23,665
Etowah	\$1,165	\$7,630	\$0	\$243	\$9,038
Fayette	\$1,038	\$7,265	\$2,263	\$599	\$11,165
Franklin	\$558	\$2,116	\$770	\$78	\$3,522
Geneva	\$763	\$1,711	\$80	\$80	\$2,634
Greene	\$1,968	\$9,297	\$1,835	\$922	\$14,023
Hale	\$14,192	\$41,874	\$14,016	\$8,380	\$78,462
Henry	\$1,275	\$4,072	\$716	\$0	\$6,063
Houston	\$700	\$1,862	\$0	\$84	\$2,646
Jackson	\$1,016	\$4,768	\$575	\$570	\$6,927
Jefferson	\$215	\$5,345	\$0	\$347	\$5,906
Lamar	\$1,721	\$10,206	\$2,211	\$238	\$14,371
Lauderdale	\$735	\$2,126	\$182	\$0	\$3,040
Lawrence	\$423	\$951	\$14	\$759	\$2,147
Lee	\$1,147	\$5,700	\$1,192	\$177	\$8,217
Limestone	\$272	\$306	\$0	\$108	\$686
Lowndes	\$1,357	\$4,003	\$3,078	\$163	\$8,603
Macon	\$1,319	\$4,748	\$394	\$231	\$6,689
Madison	\$264	\$923	\$0	\$293	\$1,480

**Table 6. Stumpage Revenue from Sales of Forest Products
by Forest Land Ownership, 2004.**

COUNTY	FARM PRIVATE	NON-FARM PRIVATE	FOREST INDUSTRY	GOVERNMENT	TOTAL
	<i>(thousand dollars)</i>				
Marengo	\$7,342	\$29,481	\$6,323	\$0	\$43,146
Marion	\$1,027	\$5,659	\$2,054	\$29	\$8,768
Marshall	\$498	\$2,019	\$0	\$210	\$2,725
Mobile	\$1,377	\$13,074	\$1,560	\$1,455	\$17,466
Monroe	\$6,032	\$29,291	\$15,133	\$905	\$51,361
Montgomery	\$2,852	\$5,342	\$669	\$461	\$9,317
Morgan	\$486	\$1,623	\$0	\$173	\$2,282
Perry	\$1,844	\$7,018	\$2,030	\$1,087	\$11,979
Pickens	\$1,667	\$8,352	\$3,714	\$14	\$13,745
Pike	\$2,305	\$6,492	\$577	\$0	\$9,373
Randolph	\$1,424	\$6,561	\$370	\$150	\$8,505
Russell	\$1,185	\$4,291	\$1,416	\$497	\$7,388
Shelby	\$510	\$3,658	\$2,780	\$265	\$7,211
St Clair	\$736	\$7,966	\$2,788	\$201	\$11,691
Sumter	\$2,614	\$12,540	\$1,392	\$490	\$17,032
Talladega	\$1,112	\$6,266	\$2,024	\$2,195	\$11,597
Tallapoosa	\$1,860	\$11,347	\$3,581	\$251	\$17,036
Tuscaloosa	\$1,282	\$13,829	\$3,861	\$797	\$19,773
Walker	\$382	\$6,505	\$101	\$180	\$7,171
Washington	\$2,331	\$28,311	\$916	\$16	\$31,568
Wilcox	\$7,621	\$27,420	\$5,772	\$917	\$41,721
Winston	\$641	\$5,359	\$1,316	\$2,521	\$9,834
Total	\$123,470	\$625,485	\$173,645	\$46,845	\$969,409

**SOURCES: 2000 U.S. Forest Service Survey, Severance Tax Receipts
and Prices from Timber Mart South.**

**Table 7. Value of Forest Products at First Processing Point (delivered product)
by Product and County, 2004.**

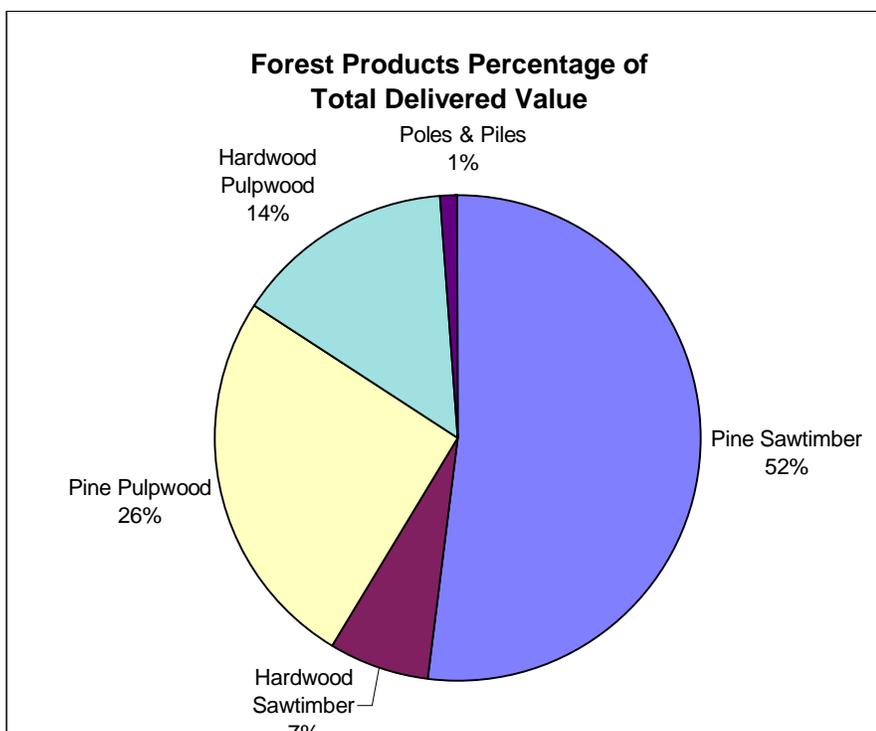
COUNTY	PINE SAWTIMBER	HARDWOOD a/ SAWTIMBER	PINE PULPWOOD	HARDWOOD PULPWOOD	POLES AND PILES	TOTAL
	(thousand dollars)					
Autauga	\$4,838	\$959	\$5,653	\$1,430	\$0	\$12,880
Baldwin	\$16,272	\$202	\$13,695	\$1,934	\$1,417	\$33,520
Barbour	\$8,518	\$622	\$11,073	\$5,268	\$101	\$25,583
Bibb	\$11,144	\$1,789	\$6,496	\$5,358	\$1,561	\$26,348
Blount	\$4,980	\$559	\$2,695	\$1,906	\$0	\$10,139
Bullock	\$5,322	\$488	\$8,523	\$2,526	\$24	\$16,883
Butler	\$17,809	\$703	\$14,680	\$3,630	\$164	\$36,986
Calhoun	\$5,368	\$400	\$2,437	\$1,616	\$43	\$9,863
Chambers	\$13,348	\$1,072	\$8,358	\$4,465	\$0	\$27,244
Cherokee	\$7,183	\$194	\$3,269	\$1,485	\$0	\$12,130
Chilton	\$6,776	\$937	\$4,106	\$2,999	\$1	\$14,819
Choctaw	\$31,593	\$2,656	\$12,884	\$7,084	\$1,247	\$55,465
Clarke	\$54,928	\$11,588	\$19,258	\$14,629	\$2,716	\$103,118
Clay	\$7,882	\$2,841	\$4,103	\$3,584	\$4	\$18,413
Cleburne	\$15,808	\$786	\$7,523	\$3,342	\$5	\$27,463
Coffee	\$6,049	\$105	\$6,438	\$2,955	\$49	\$15,595
Colbert	\$2,037	\$736	\$2,012	\$1,568	\$0	\$6,352
Conecuh	\$31,545	\$1,152	\$11,550	\$4,597	\$574	\$49,418
Coosa	\$13,673	\$763	\$8,612	\$4,556	\$0	\$27,604
Covington	\$14,546	\$255	\$9,001	\$2,328	\$1,585	\$27,715
Crenshaw	\$9,250	\$2,855	\$7,154	\$2,555	\$122	\$21,936
Cullman	\$4,427	\$614	\$2,973	\$2,019	\$0	\$10,033
Dale	\$2,517	\$74	\$2,826	\$2,359	\$35	\$7,811
Dallas	\$17,126	\$1,655	\$7,923	\$5,675	\$52	\$32,431
De Kalb	\$5,511	\$2,329	\$2,045	\$1,771	\$0	\$11,656
Elmore	\$4,467	\$759	\$4,224	\$2,757	\$0	\$12,207
Escambia	\$18,960	\$134	\$11,271	\$2,415	\$3,578	\$36,359
Etowah	\$8,582	\$1,177	\$2,525	\$2,813	\$3	\$15,100
Fayette	\$8,651	\$2,442	\$4,881	\$4,290	\$0	\$20,264
Franklin	\$2,040	\$847	\$1,705	\$2,574	\$0	\$7,167
Geneva	\$1,075	\$236	\$2,431	\$1,191	\$366	\$5,299
Greene	\$10,852	\$2,973	\$3,266	\$4,183	\$32	\$21,305
Hale	\$88,149	\$1,971	\$3,013	\$3,935	\$144	\$97,212
Henry	\$3,737	\$1,295	\$2,641	\$2,874	\$5	\$10,552
Houston	\$1,593	\$333	\$1,676	\$1,328	\$0	\$4,930
Jackson	\$2,119	\$4,114	\$2,147	\$5,403	\$0	\$13,784
Jefferson	\$5,150	\$929	\$1,650	\$2,534	\$0	\$10,263
Lamar	\$12,039	\$3,136	\$6,977	\$2,946	\$0	\$25,098
Lauderdale	\$2,631	\$551	\$353	\$1,631	\$0	\$5,167
Lawrence	\$1,262	\$700	\$639	\$1,509	\$0	\$4,110
Lee	\$5,086	\$990	\$6,705	\$2,475	\$0	\$15,255
Limestone	\$284	\$236	\$271	\$664	\$0	\$1,455
Lowndes	\$6,262	\$946	\$4,951	\$2,512	\$16	\$14,687
Macon	\$4,278	\$669	\$4,884	\$2,517	\$0	\$12,348
Madison	\$1,278	\$232	\$340	\$728	\$0	\$2,578
Marengo	\$30,990	\$15,216	\$8,961	\$5,649	\$748	\$61,565
Marion	\$6,232	\$2,223	\$4,974	\$3,011	\$0	\$16,440
Marshall	\$1,858	\$790	\$650	\$1,687	\$0	\$4,985
Mobile	\$15,757	\$494	\$5,918	\$2,132	\$1,265	\$25,566
Monroe	\$50,261	\$1,810	\$14,409	\$6,342	\$450	\$73,273
Montgomery	\$5,121	\$1,221	\$8,213	\$3,468	\$30	\$18,053
Morgan	\$1,332	\$533	\$757	\$1,978	\$0	\$4,600
Perry	\$8,949	\$1,558	\$6,005	\$3,311	\$19	\$19,843
Pickens	\$10,909	\$3,227	\$5,408	\$4,696	\$49	\$24,288
Pike	\$6,432	\$460	\$6,981	\$3,283	\$33	\$17,188

Table 7. Value of Forest Products at First Processing Point (delivered product) by Product and County, 2004.

COUNTY	PINE SAWTIMBER	HARDWOOD a/ SAWTIMBER	PINE PULPWOOD	HARDWOOD PULPWOOD	POLES AND PILES	TOTAL
(thousand dollars)						
Randolph	\$6,211	\$531	\$6,418	\$1,855	\$0	\$15,016
Russell	\$4,512	\$306	\$7,201	\$2,454	\$0	\$14,474
Shelby	\$5,712	\$1,082	\$3,552	\$3,133	\$0	\$13,480
St Clair	\$11,184	\$982	\$4,470	\$3,478	\$10	\$20,126
Sumter	\$10,721	\$2,471	\$9,967	\$6,253	\$603	\$30,014
Talladega	\$9,633	\$484	\$6,077	\$2,716	\$54	\$18,964
Tallapoosa	\$15,369	\$621	\$12,950	\$3,190	\$0	\$32,130
Tuscaloosa	\$17,674	\$2,606	\$6,592	\$7,606	\$0	\$34,478
Walker	\$5,817	\$643	\$4,050	\$3,229	\$0	\$13,739
Washington	\$29,200	\$559	\$10,982	\$5,366	\$1,012	\$47,119
Wilcox	\$39,796	\$4,097	\$7,289	\$4,435	\$1,245	\$56,862
Winston	\$6,690	\$3,334	\$4,572	\$3,233	\$0	\$17,830
Total	\$807,307	\$106,255	\$398,233	\$225,424	\$19,360	\$1,556,578

a/ Includes--Sawtimber, Cross and Switch and Mine ties, Mine props.

SOURCE: Volumes from Severance Tax Receipts. Delivered Price Rates from TIMBER MART SOUTH.



**Figure 6: Difference in Total Stumpage Value, FY03 to FY04
(Total per County, reported in Thousand Dollars)**

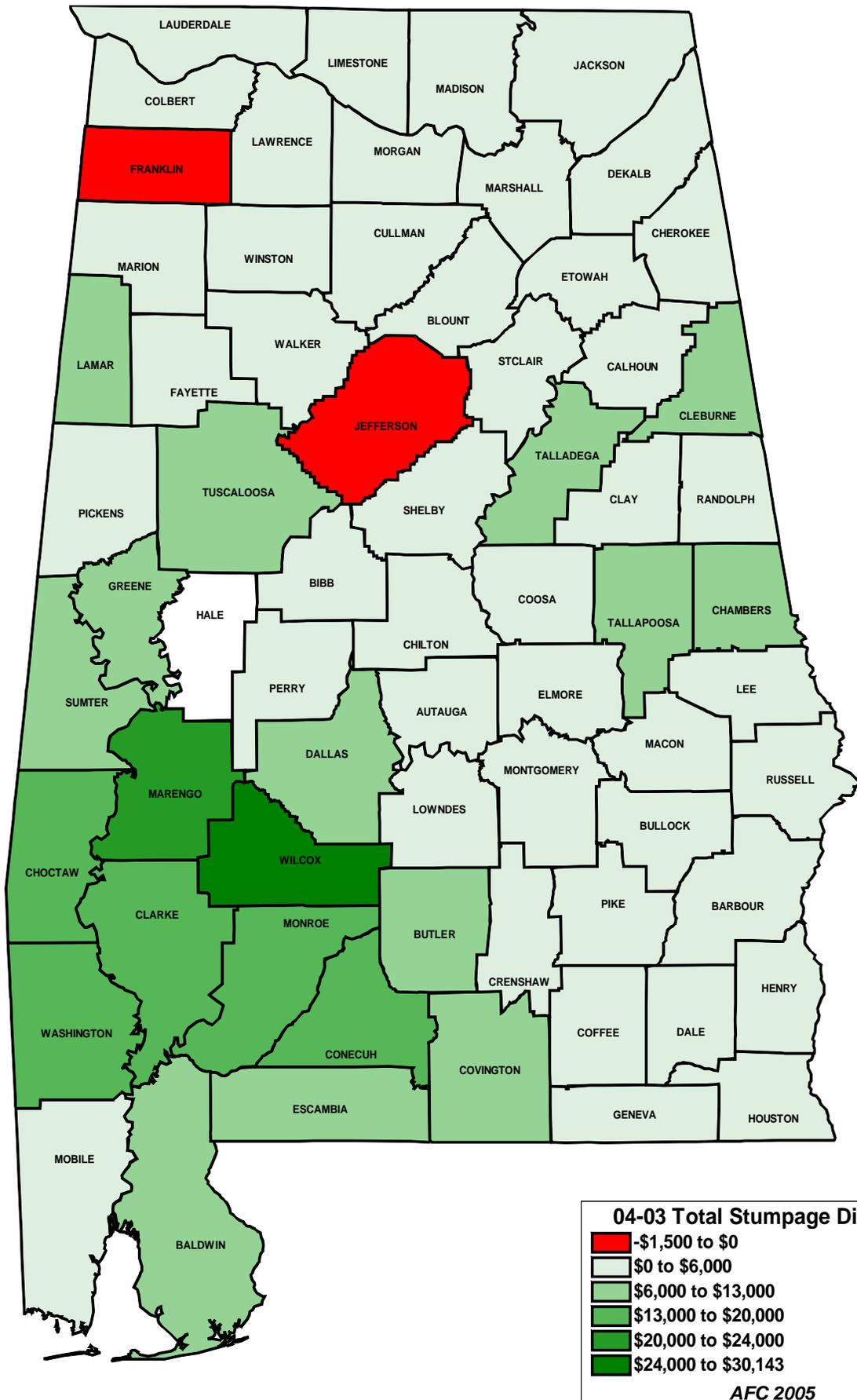
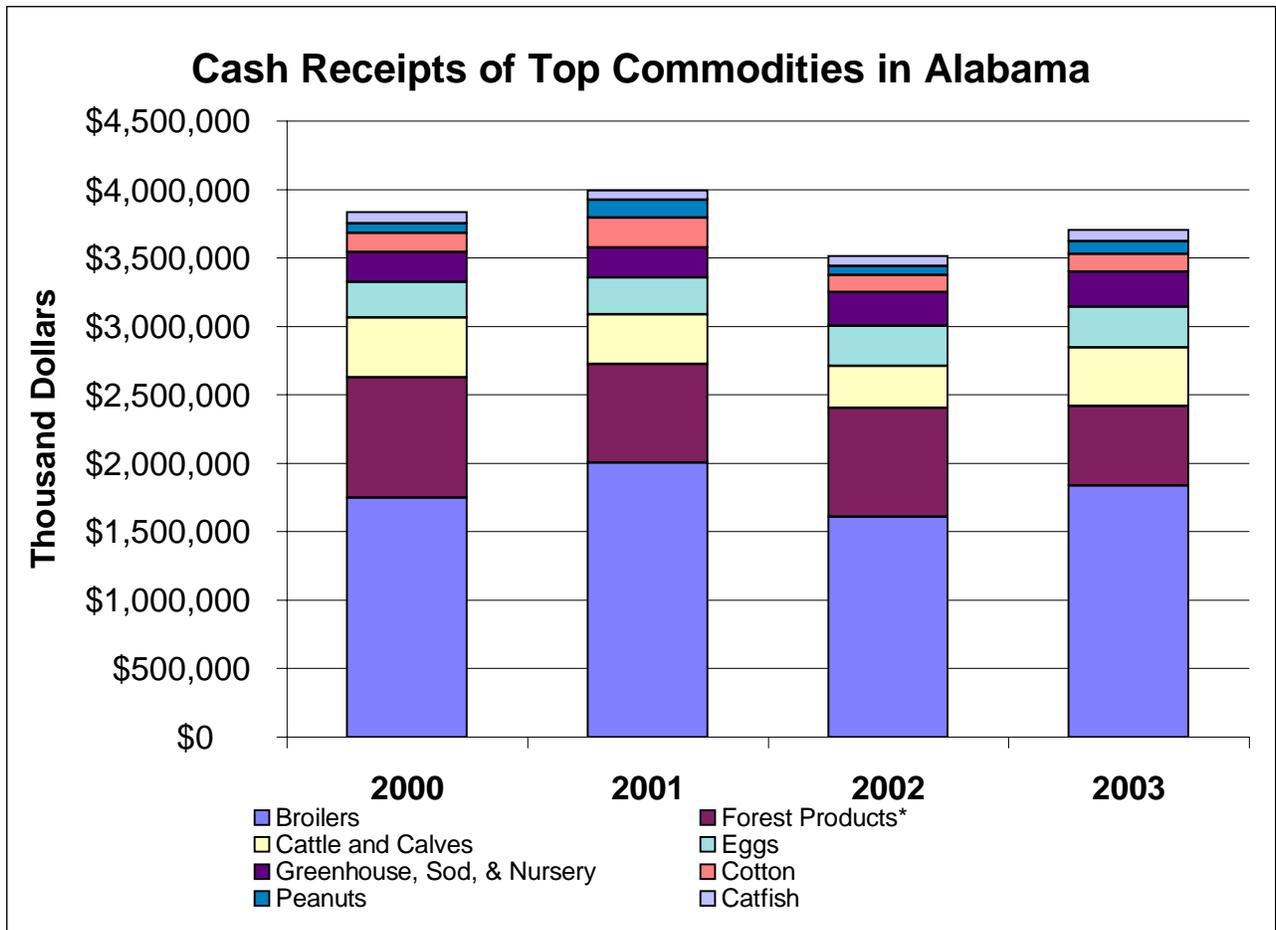


Table 8. Ranking of Total Stumpage Revenue from Sale of Forest Products by County as determined by 2004 Alabama Severance Tax Collections.

Rank	County	Stumpage Value (thousand dollars)	Rank	County	Stumpage Value (thousand dollars)
1	Hale	\$78,462	34	Montgomery	\$9,317
2	Clarke	\$68,995	35	Etowah	\$9,038
3	Monroe	\$51,361	36	Chilton	\$8,907
4	Marengo	\$43,146	37	Marion	\$8,768
5	Wilcox	\$41,721	38	Bullock	\$8,704
6	Choctaw	\$36,601	39	Lowndes	\$8,603
7	Conecuh	\$33,557	40	Randolph	\$8,505
8	Washington	\$31,568	41	Coffee	\$8,495
9	Escambia	\$23,665	42	Lee	\$8,217
10	Butler	\$22,023	43	Russell	\$7,388
11	Dallas	\$20,492	44	Autauga	\$7,247
12	Baldwin	\$20,393	45	Shelby	\$7,211
13	Tuscaloosa	\$19,773	46	Walker	\$7,171
14	Mobile	\$17,466	47	Cherokee	\$7,065
15	Tallapoosa	\$17,036	48	De Kalb	\$6,995
16	Sumter	\$17,032	49	Jackson	\$6,927
17	Coosa	\$16,705	50	Elmore	\$6,777
18	Chambers	\$16,540	51	Macon	\$6,689
19	Bibb	\$16,130	52	Henry	\$6,063
20	Cleburne	\$15,922	53	Jefferson	\$5,906
21	Covington	\$15,753	54	Calhoun	\$5,656
22	Lamar	\$14,371	55	Blount	\$5,619
23	Greene	\$14,023	56	Cullman	\$5,359
24	Pickens	\$13,745	57	Dale	\$4,028
25	Barbour	\$13,427	58	Franklin	\$3,522
26	Crenshaw	\$13,394	59	Colbert	\$3,188
27	Perry	\$11,979	60	Lauderdale	\$3,040
28	St Clair	\$11,691	61	Marshall	\$2,725
29	Talladega	\$11,597	62	Houston	\$2,646
30	Clay	\$11,464	63	Geneva	\$2,634
31	Fayette	\$11,165	64	Morgan	\$2,282
32	Winston	\$9,834	65	Lawrence	\$2,147
33	Pike	\$9,373	66	Madison	\$1,480
			67	Limestone	\$686
				Total	\$969,409

Table 9: Cash Receipts of Top Commodities for Alabama (2000 - 2003)

Commodity	2000	2001	2002	2003	2003 % of Total	2003 Ranking
<i>(Thousand Dollars)</i>						
Broilers	\$ 1,748,100	\$ 2,004,100	\$ 1,608,500	\$ 1,837,700	40.5%	1
Forest Products*	\$ 877,700	\$ 722,000	\$ 795,174	\$ 581,893	12.8%	2
Cattle and Calves	\$ 438,100	\$ 362,800	\$ 304,700	\$ 425,200	9.4%	3
Eggs	\$ 259,600	\$ 265,400	\$ 296,500	\$ 295,700	6.5%	4
Greenhouse, Sod, & Nursery	\$ 216,600	\$ 221,100	\$ 243,200	\$ 256,900	5.7%	5
Cotton	\$ 139,400	\$ 217,200	\$ 128,700	\$ 128,700	2.8%	6
Peanuts	\$ 72,100	\$ 128,800	\$ 63,700	\$ 94,100	2.1%	7
Catfish	\$ 81,600	\$ 70,000	\$ 76,000	\$ 85,200	1.9%	8
Total Value All Commodities	\$ 4,612,800	\$ 4,521,600	\$ 4,288,300	\$ 4,539,400		



Source: Alabama Agriculture Statistics 2004 (www.aces.edu/departments/nass/bulletin)

* Stumpage Values based on estimates by the Alabama Forestry Commission (Revised for 2002 and 2003).

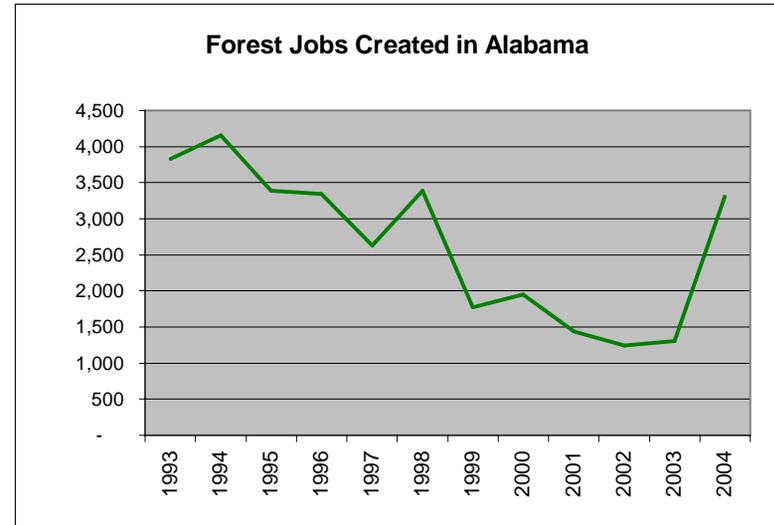
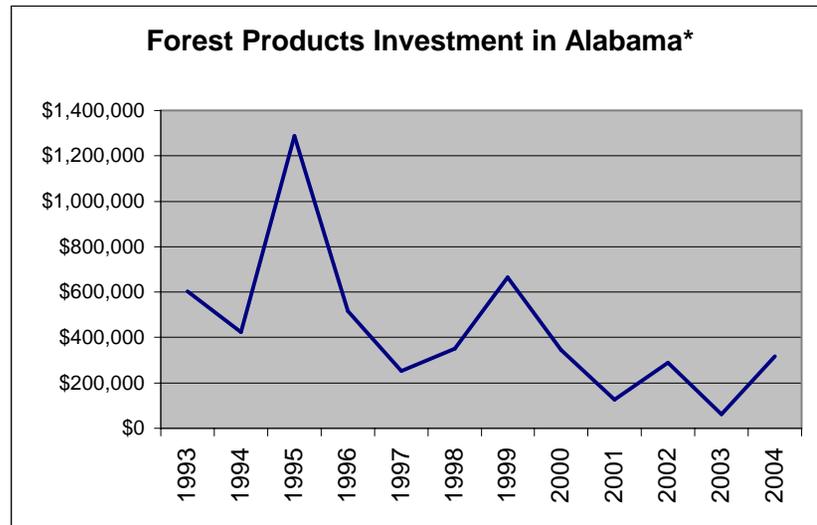
Table 10: Economic Forestry Indicators for Alabama (1997, 2002)
(Latest Bureau of Census Statistics available)

NAICS	Industry	1997					2002				
		Establish-ments	Number of Employees	Annual Payroll (\$1,000)	Value Added (\$1,000)	Value of Shipments (\$1,000)	Establish-ments	Number of Employees	Annual Payroll (\$1,000)	Value Added (\$1,000)	Value of Shipments (\$1,000)
113	Forestry & Logging	1,072	7,412	\$ 146,973	n/a	n/a	868	6,147	\$ 148,170	n/a	n/a
321	Lumber & Wood Products	487	25,949	\$ 625,499	\$ 1,484,453	\$ 4,381,779	448	20,498	\$ 576,696	\$ 1,177,398	\$ 3,603,491
321113	Sawmills	138	5,877	\$ 152,327	\$ 435,729	\$ 1,319,311	118	4,777	\$ 155,502	\$ 290,613	\$ 1,051,080
321114	Wood preservation	28	1,232	\$ 32,599	\$ 82,683	\$ 524,365	20	729	\$ 24,914	\$ 38,077	\$ 304,227
3212	Veneer, plywood & engineered wood product mfg	54	3,697	\$ 102,474	\$ 229,479	\$ 646,528	60	4,160	\$ 129,417	\$ 282,803	\$ 814,582
3219	Other wood product mfg	267	15,143	\$ 338,099	\$ 736,562	\$ 1,891,575	250	10,832	\$ 266,863	\$ 565,905	\$ 1,433,602
322	Pulp & Paper Products	89	19,091	\$ 966,527	\$ 2,953,766	\$ 6,287,709	81	14,178	\$ 799,943	n/a	n/a
3221	Pulp, paper & paperboard mills	19	14,788	\$ 848,928	\$ 2,651,918	\$ 5,489,047	20	10,479	\$ 672,163	n/a	n/a
3222	Converted paper product mfg	70	4,303	\$ 119,599	\$ 301,848	\$ 798,662	61	3,699	\$ 127,780	n/a	n/a
337	Furniture & Related Products	471	14,789	\$ 313,242	\$ 820,823	\$ 1,494,617	356	9,230	\$ 238,089	\$ 706,829	\$ 1,167,814
Forestry Manufacturing Total*		1,047	59,829	\$ 1,905,268	\$ 5,259,042	\$ 12,164,105	885	43,906	\$ 1,614,728	#VALUE!	#VALUE!
Forestry % of Total State Manufacturing*		19.2%	17.0%	18.7%	18.0%	17.9%	17.5%	15.5%	16.6%	#VALUE!	#VALUE!
State Manufacturing Total*		5,444	352,618	\$ 10,187,756	\$ 29,221,522	\$ 67,970,076	5,053	283,356	\$ 9,712,316	n/a	n/a
Source:		U.S. Census Bureau, 1997 Economic Census of Manufacturers (Does not include the Logging Sector). Forestry & Logging is based on Census Bureau's County Business Patterns, 1997.					U.S. Census Bureau, 2002 Economic Census of Manufacturers. State totals and NAICS sectors 113 and 322 information were not available at the time of this report. The 2002 County Business Patterns were used for this missing information (items in red).				

* Does not include Forestry & Logging.

Table 11: Forest Product* Investment in Alabama (1993 to 2004)
 (Source: Alabama Development Office Annual Announcement Survey)

	New Companies			Expanding Companies			Total Announcements		
	Firms	Number of Jobs	Capital Investments (Thousand Dollars)	Firms	Number of Jobs	Capital Investments (Thousand Dollars)	Firms	Number of Jobs	Capital Investments (Thousand Dollars)
1993	30	913	\$ 12,900	166	2,918	\$ 590,311	196	3,831	\$ 603,211
1994	23	624	\$ 14,795	142	3,532	\$ 409,570	165	4,156	\$ 424,365
1995	14	938	\$ 67,440	144	2,449	\$ 1,221,197	158	3,387	\$ 1,288,637
1996	22	1,747	\$ 80,100	81	1,599	\$ 437,135	103	3,346	\$ 517,235
1997	15	880	\$ 86,186	81	1,751	\$ 165,584	96	2,631	\$ 251,770
1998	10	492	\$ 17,280	94	2,898	\$ 332,145	104	3,390	\$ 349,425
1999	8	199	\$ 42,200	87	1,576	\$ 621,707	95	1,775	\$ 663,907
2000	11	1,105	\$ 163,565	60	846	\$ 181,266	71	1,951	\$ 344,831
2001	8	578	\$ 33,035	37	856	\$ 92,493	45	1,434	\$ 125,528
2002	7	658	\$ 252,032	39	584	\$ 36,947	46	1,242	\$ 288,979
2003	7	432	\$ 23,855	50	874	\$ 37,877	57	1,306	\$ 61,732
2004	10	377	\$ 146,582	71	2,931	\$ 170,841	81	3,308	\$ 317,423
Total	165	8,943	\$ 939,970	1,052	22,814	\$ 4,297,073	1,217	31,757	\$ 5,237,043
<i>Annual Average</i>	<i>14</i>	<i>745</i>	<i>\$ 78,331</i>	<i>88</i>	<i>1,901</i>	<i>\$ 358,089</i>	<i>101</i>	<i>2,646</i>	<i>\$ 436,420</i>



*SIC 24, 25, 26

Table 13: Alabama's Area of Timberland by Forest Type

FOREST TYPE	ACRES <i>(thousand acres)</i>	PERCENT
Longleaf-slash pine	1,074.1	4.7%
Loblolly-shortleaf pine	7,014.6	30.6%
SOFTWOOD TOTAL	8,088.7	35.3%
Oak-pine	4,193.5	18.3%
Oak-hickory	7,648.3	33.4%
Oak-gum-cypress	2,770.8	12.1%
Elm-ash-cottonwood	158.9	0.7%
HARDWOOD TOTAL	14,771.5	64.4%
Nontyped	65.5	0.3%
ALL TYPES	22,925.7	

SOURCE: FIA, May 2002

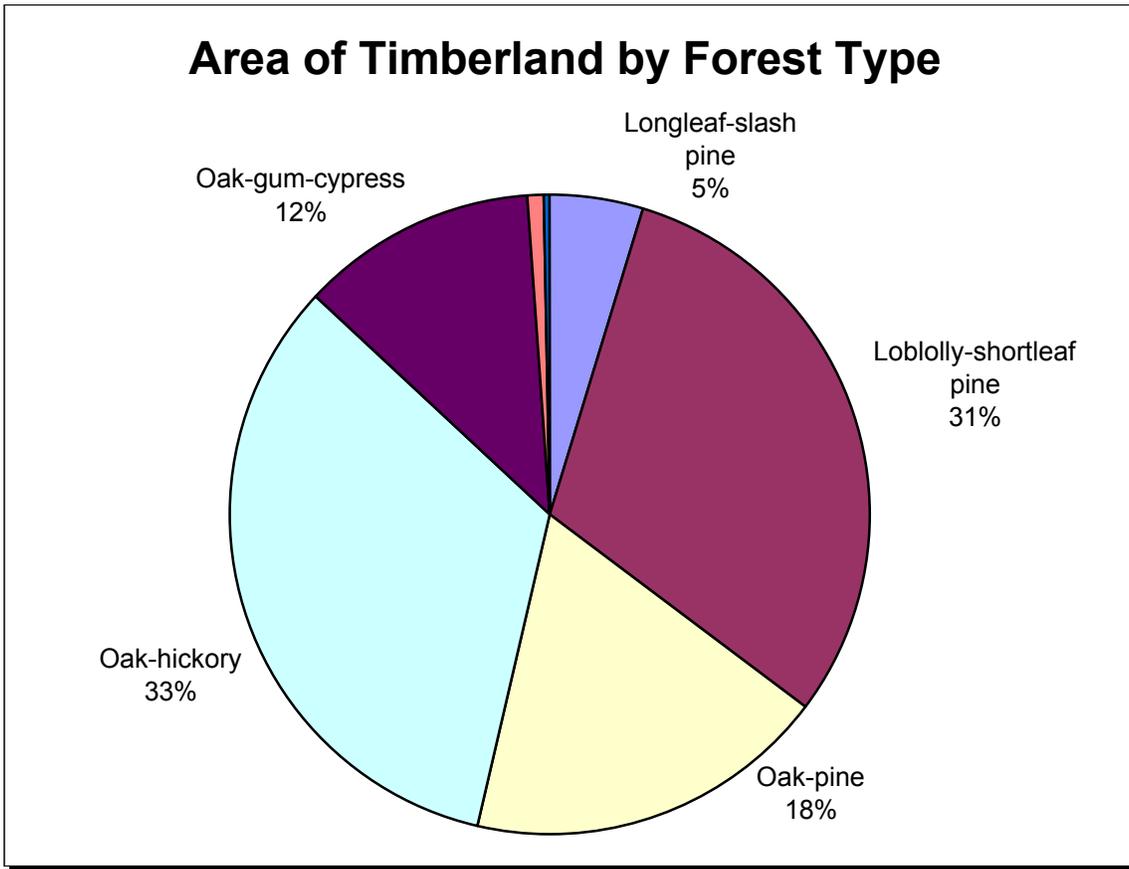


Table 14: Alabama's Area of Timberland by Stand Size

STAND SIZE	ACRES <i>(thousand acres)</i>	PERCENT
Sawtimber	7,060.9	30.8%
Pole Timber	4,883.5	21.3%
Sapling-seedling	10,915.9	47.6%
Nonstocked areas	65.5	0.3%
ALL TYPES	22,925.8	

SOURCE: FIA, May 2002

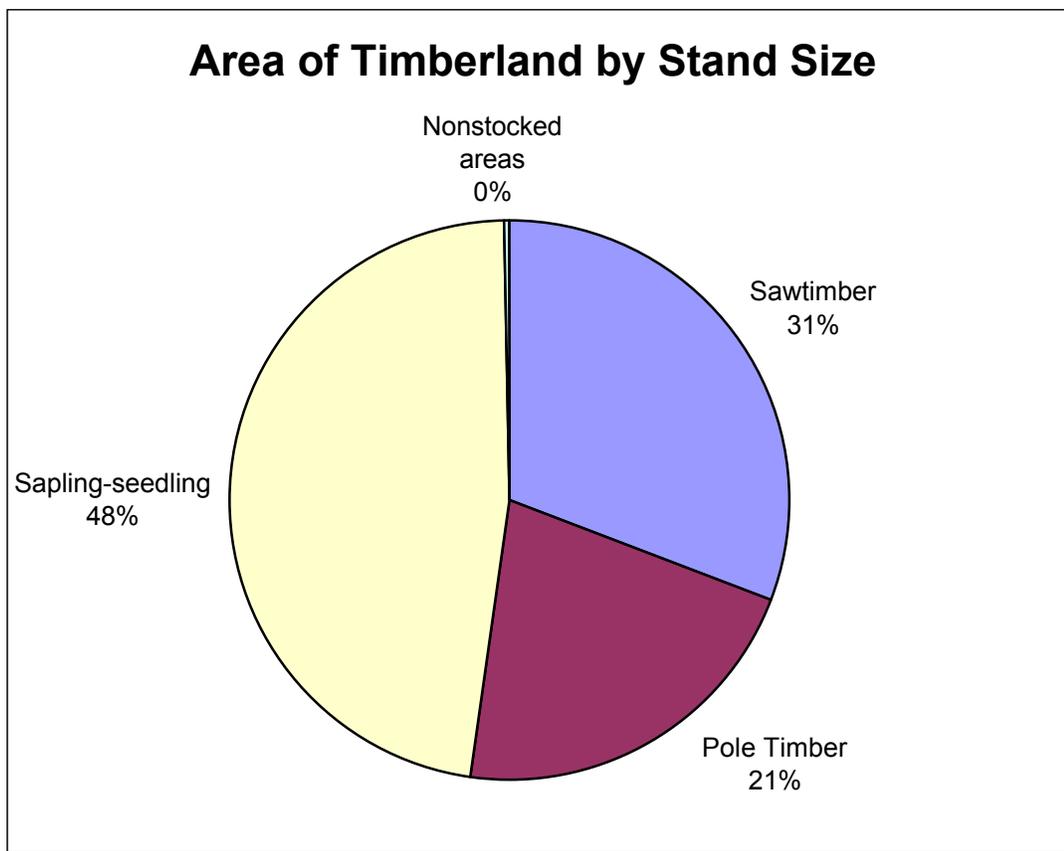


Table 15: Alabama Average Net Annual Growth and Removals by Species Group

SPECIES GROUP	GROWTH	REMOVALS	DIFFERENCE
	<i>(Million Cubic Feet)</i>		
Softwoods	884.1	-890.2	-6.1
Hardwoods	589.4	-406.8	182.6
ALL SPECIES	1,480.4	-1,297.0	183.4

SOURCE: FIA, May 2002

