Alabama ranks third in the nation in commercial forestland. Georgia and Oregon are first and second.

68 percent of Alabama is timberland, which accounts for 23 million acres.

Alabama forests generate over $21 billion in revenue and provide over 122,000 jobs.

**Forest Types in Alabama**

**Softwood Trees**
Softwood trees produce bare seeds, which means the seeds fall to the ground with no covering. These include the cones of pines, cedars and cypress trees in Alabama.

**Hardwood Trees**
Hardwood trees produce seeds with some sort of covering. In Alabama, common seeds include acorns, pecans and hickory nuts.

**Oak/Hickory**
Oak and hickory trees are hardwoods. The oak-hickory forest has the largest range of any deciduous forest ecosystem in eastern and central North America.

**Loblolly/Shortleaf Pine**
Loblolly and shortleaf pines are softwood trees. Loblolly is the most commercially important pine of the Southeast.

**Did you know?**
The southern pine is Alabama’s state tree.
From Forests to Furnished

A lumber or saw mill turns trees into the wood products we use every day. Softwood lumber is used mainly in building construction, while hardwood lumber is used for furniture, cabinets and decorative trim.

1.) Log trucks bring logs into a saw mill where they are unloaded, sorted by species and grade and stored in a log yard.

2.) During primary breakdown, the log is positioned on a moving carriage and passed through a single-edged band saw. The log is then cut into boards.

3.) During secondary breakdown, the boards are edged, or cut to a preset width and trimmed to a preset length. Boards go to edger saws, which cut edges off and square up sides. The boards then go to trimmer saws, which trim them to the correct lengths.

4.) Sorting and drying are the last steps in the process. Sorting: Boards are moved to the “green chain,” where they are stacked according to grade and length. Drying: The stacks are loaded in dry kilns where the boards are dried. When the boards are removed, they are graded again and trimmed as necessary. The dry lumber is stacked and sold as lumber.

5.) The boards are stored in air dry sheds and yards, where they are left to dry for two weeks to three months.

Did you know?

Americans use over 5,000 wood products daily! Examples are boats, paper, pencils and homes.

Did you know?

One acre of trees can remove around 13 tons of dust and greenhouse gases every year from the surrounding environment.

Recycle

Recycling is an important part of conservation. When you recycle paper, it can be used to make new paper products.

Recycled paper accounts for 37 percent of the fiber used to make paper in the country. Nearly 80 percent of paper mills use recovered fiber to make some or all of their products.

Every recycled ton of paper saves 3.3 cubic yards of landfill space.

Wildlife

Forests are home to 1.4 million of the nation’s 18 million white-tailed deer and 350,000 of its 4 million wild turkeys! Our forests are also home to gray and fox squirrels, bobwhite quail, mourning doves and rabbits.

A Breath of Fresh Air

Trees produce oxygen that is necessary to our survival. They also remove carbon dioxide from the air. This process reduces greenhouse gases.

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Harvesting

Trees are harvested at different stages of growth for different products. Some trees are harvested early to make room for more trees to grow. This is called “thinning.” These trees are usually made into paper products.

The Making of Paper

The average American uses 749 pounds of paper each year. Where does all that paper come from? The forests in Alabama and other states!

Timber – Timber for papermaking comes from well-managed forests where more trees are planted than harvested to ensure sustainable growth.

De-Barker – Bark is stripped from the logs by knife, drum, abrasion or hydraulic barker.

Equipment in the Forestry Industry

Bulldozer
Bulldozers are used to build a landing and clear a large area so other equipment can enter.

Feller-Buncher
A feller-buncher is used to cut the timber. It then carries a “bunch” of trees to a pile.

Skidder
A skidder makes its way through the cut timber and drags the trees to the landing for the de-limber.

Log Loader
A log loader pulls the trees through a de-limber, which removes limbs and cuts off the top of the tree. The trees are then placed in a pile to be loaded onto trucks.

Log Truck
Log trucks are loaded by a loading machine, and harvested trees are taken to a paper mill.

De-Barker — Bark which cannot be used for papermaking is stripped from the logs and used for energy. Stripped logs are chipped into small pieces and recovered.

Mechanical Pulping
Woodchips are ground to separate the fibers. Pulp is used to make high volume commodity printing products such as newspaper and magazine paper.

Headbox
The headbox squirts a mixture of water and fiber through a thin horizontal slit across the machine’s width onto an endless moving wire mesh.

De-inking
Adhesives and ink are removed using a flotation process.

Pulping
Paper for recycling is dissolved into pulp to separate the component fibers.

Chemical Pulping
The woodchips are cooked to remove lignin. Burning of the process by-products enables the whole pulping process to be energy self-sufficient.

Wood
Wood is a renewable raw material for the pulp and paper industry and comes from sustainably managed forests.

Drying
A series of cast-iron cylinders, heated to a temperature in excess of 212 F. When the web of sheets pass through and drying takes place.

Press Section
The press section squeezes the web of wet paper and lowers water content to 30 percent.

Calendering
After coating, the paper can be calendered. A calendar is a device with two or more rollers through which the paper is run, the compression of the rollers and the application of heat give the paper its smooth and glossy properties, like ironing shirts.

Coating
In the coating process, coating color is spread onto the paper surface. The coating color contains pigments, binding agents, and various additives. Coating the paper several times often improve its printing properties. High-grade printing paper is coated up to 3 times.

De-Inking
Adhesives and ink are removed using a flotation process.

Wood for Recycling
Paper for recycling is an important material for the pulp and paper industry.

Finishing
Reels and Sheets — The papers are then wound into a reel or cut into sheets, ready for printing and converting.
Did you know?

One acre of healthy trees can generate approximately 5,600 pounds of wood in one year.

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