Oklahoma’s Forest Resources

The Oklahoma Department of Agriculture - Forestry Services
The Department of Forestry, Division of Agricultural Sciences and Natural Resources, Oklahoma State University
The U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station
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About the cover: Oklahoma is much more than rolling wheat fields and cattle. This scene along the Mountain Fork River in McCurtain County provides evidence of the rich diversity of the state’s renewable forest resources. Photo by Todd Johnson.
The Forests of Oklahoma: A Valuable Renewable Resource

Many Americans picture Oklahoma as a place of vast wheat fields, prairies, and range-land. While this description is accurate for parts of the state, particularly in the western half, there is a significant section of Oklahoma that doesn’t fit this popular image. The eastern third of the state contains hills, mountains, streams, and large areas of pine and hardwood forests.

In fact, almost a fifth of the land area of Oklahoma is covered by forests, with almost three-fourths of that land capable of producing commercial crops of timber. Thus, forests are a significant factor in the Oklahoma economy, particularly in eastern Oklahoma, where 70 percent of Oklahoma’s forest land is located.

The forest is not static and unchanging. Both man and nature affect the forest and its growth. In the past, Oklahoma’s forests were often exploited extensively. However, good management practices by many forest landowners have resulted in a renewal of the forest in many areas.

Forests also provide abundant opportuni-

The majority of Oklahoma’s forests are in the eastern part of the state, although central and western Oklahoma also have significant forest resources.
One important use of the forest does fit with Oklahoma’s traditional image as a beef-producing state. The forest can also provide forage for cattle, and grazing forest rangeland results in estimated economic benefits of $30 million annually for Oklahoma’s economy.

The value of recreation—and the quality of life enjoyed by Oklahomans as a result of the state’s forests—represents another important economic figure. The Oklahoma Department of Tourism and Recreation has estimated the total annual expenditure for outdoor recreation in Oklahoma at over $1.5 billion. In addition, hunting and fishing, including leasing land for those activities, bring in over $562 million annually, with approximately one-fifth coming from out-of-state residents.

ties for recreation and leisure activities, with the accompanying economic and social benefits—many of them difficult to measure but nonetheless very real.

Statewide, the total value of timber products exceeds $64 million annually. As an agricultural crop, timber ranks third in value in the state, behind wheat and hay. In eastern Oklahoma, timber is the second most valuable agricultural crop, slightly behind hay, with timber accounting for 38 percent of annual agricultural revenue.

The forest industry in eastern Oklahoma, along with supporting industries, accounts for nearly 78 percent of manufacturing employment in that region of the state. The total manufacturing output of the forest products industry in eastern Oklahoma is approximately $454.8 million, with paper and paperboard bringing in the greatest amount (31 percent of the total value of shipments).
The Composition of Oklahoma's Forests

Statewide, Oklahoma's forests can be described as four major species associations:

1. The pine-mixed hardwoods of southeastern Oklahoma,
2. The oak-hickory forests concentrated primarily in the northeastern corner of the state,
3. The post oak-blackjack woodlands of eastern and central Oklahoma, stretching from Texas to Kansas, and
4. The bottomland forests that grow along rivers and streams across the state.

The **pine-mixed hardwoods** of southeastern Oklahoma, consisting of planted pine, natural pine, oaks, and hickory, cover 1.7 million acres of forest land.

The **oak-hickory forests** of the northeastern part of the state are made up of red oak, white oak, black oak, post oak, pin oak, blackjack oak, pignut hickory, black hickory, butternut hickory, and others. These forests are found on 2.8 million acres of forest land.

The **post oak-blackjack oak forests**, generally classed as woodland, occupy 2.1 million acres in the Cross Timbers, where thick brush and woodlands are interspersed with areas of open grasslands.

The **bottomland forests** range from scattered stands of willows and cottonwoods in the west to baldcypress, blackgum, and sweetgum in the southeast. Pecan, black oak, sycamore, and black walnut are common in the south and east.
Ownership Characteristics

Most Oklahoma forests are owned by private landowners. The many "nonindustrial" private owners account for 74 percent of Oklahoma's forest land and own land for widely diverse reasons. Forest industries own land primarily to produce timber, which accounts for 14 percent of the forest land. Only 12 percent of Oklahoma's woodland is owned publicly, with three percent in the Ouachita National Forest and nine percent in other public holdings.

Since 1977, there has been an increase in timberland in Oklahoma, with most of this increase attributed to the reversion of crop and pasture land to forest. This has resulted, too, in an increase in the number of farmers listed as owners of timberland in Oklahoma.

The demand for timber products in the United States is expected to continue to increase, in spite of the use of nonwood substitutes. The main uses of wood are for lumber, paper and paperboard, panel products, and fuelwood. Programs in education and technology transfer should enable owners of timberland to increase supplies through improved management.

The forest industry owns 14% of the state's forest land.

Nonindustrial private landowners own 74% of Oklahoma's forests.

Public lands account for 12% of Oklahoma's forests.
Economic Opportunities

As significant as the forest industry is to Oklahoma, the state’s forests are capable of making an even greater contribution to the economy. Forest improvement could increase the annual growth of Oklahoma’s forests by as much as 90.4 million cubic feet, more than double its current annual removal rate. Some treatments, among others, that would increase timber growth include regeneration of the forest through planting seedlings; conversion to preferred species; precommercial thinning; thinning of commercial stands; and harvesting overmature timber, followed by prompt regeneration and salvaging damaged timber, with regeneration of the forest.

In addition, almost 500,000 acres of crop and pasture land could be profitably converted to timber production, increasing the owners’ income and improving soil stability. In all, management and conversion of land with the potential to produce timber could increase the value of Oklahoma’s forest products by as much as 150 percent.

The result of increased production for Oklahoma’s forest lands would be more jobs for Oklahomans and increased income for the forest industry and forest landowners.

Well-managed forests result in economic benefits for the entire state.
The Importance of Technical Assistance and Education

Technical assistance and education are basic to improving the forest resources of Oklahoma. In order to make use of the most efficient and productive management practices, forest landowners must have access to the best information available. For example, through landowner meetings, field demonstrations, and a variety of publications and videotapes, OSU’s Cooperative Extension forestry, wildlife, and aquaculture program provides research-based information for Oklahoma’s forest landowners. The Oklahoma Department of Agriculture Forestry Services provides technical assistance to landowners and the forest products industry.

Similarly, the Oklahoma Department of Agriculture Forestry Services and OSU Extension programs provide assistance for entrepreneurs to evaluate investment opportunities. With technical assistance, Oklahoma producers of forest products can compete more effectively in American and international markets, as well as develop new products and better utilize existing materials.

Technical assistance can also help individual forest landowners develop the best management techniques for their particular situations. The forest can support multiple uses, but careful planning is needed to ensure that the uses are mutually beneficial.

Education of the public can help to create a more favorable environment for improving Oklahoma’s forests through an understanding of forest management and the need for tax laws that promote long-term investments.

Continuing education and technical assistance provide a means for ensuring that the benefits of research are fully realized.
The Future of Oklahoma’s Forest Resources

Oklahoma is a state of diversity. From the plains and mesas of the Panhandle to the mountains of the southeast, Oklahoma includes many different ecosystems. Even the forests differ, from primarily hardwoods in the northeast and in the bottomlands to pines in the southeast.

These forests and the diverse products of the timber industry make a significant contribution to the economy of Oklahoma, particularly in the eastern part of the state, where one out of every five jobs directly depends on the forest industry.

The forest industry makes a significant contribution to the economy of Oklahoma.

The future of that industry depends in part on the effectiveness of programs in research, education, extension, and technical assistance provided by such agencies as the Oklahoma Department of Agriculture—Forestry Services and the Department of Forestry at Oklahoma State University.
The value of Oklahoma’s forests is more than an economic one, though. The social, as well as economic, benefits of our state’s forest lands, with their scenic beauty, wildlife, high-quality water, and recreational opportunities, are benefits that should be preserved and enhanced for all of the state’s citizens. These benefits will continue to be high priorities that go hand in hand with providing increases in timber production. The forests of Oklahoma are truly a valuable renewable resource.

Good forest management ensures that our forests are protected, yet remain productive.
For More Information

For more information about Oklahoma's renewable forest resources, contact your local office of the Oklahoma Department of Agriculture—Forestry Services; USDA Forest Service; OSU Extension Center, or:

Oklahoma Department of Agriculture—Forestry Services
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Oklahoma City, OK 73105
(405) 521-3864

USDA Forest Service, Southern Forest Experiment Station
701 Loyola Avenue
New Orleans, LA 70113
(504) 589-6800

Oklahoma Cooperative Extension Service, Forestry Program
Oklahoma State University, 239 Agricultural Hall
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Recommended reading:

*Forest Trees of Oklahoma*
Revised by Dr. Elbert L. Little, Jr.
For sale ($4.00) from:
Oklahoma Department of Agriculture—Forestry Services
2800 North Lincoln Boulevard
Oklahoma City, OK 73105

*The South's Fourth Forest: Oklahoma*
By David K. Lewis and Jeffrey P. Goodier
Available from:
Department of Forestry, Oklahoma State University
008 Agricultural Hall
Stillwater, OK 74078

*Back cover:* This woodland scene near Ripley, in Payne County, shows that Central Oklahoma has beautiful forests, too.