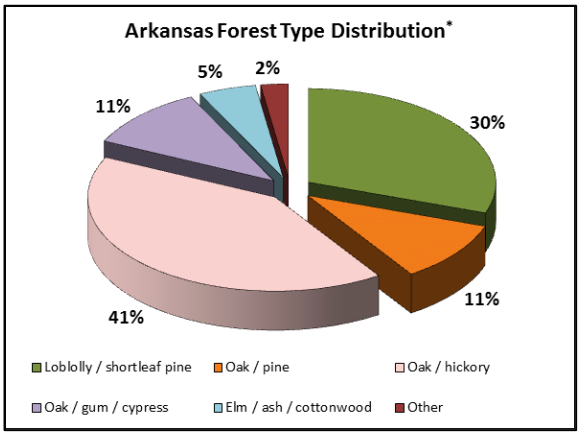
Arkansas

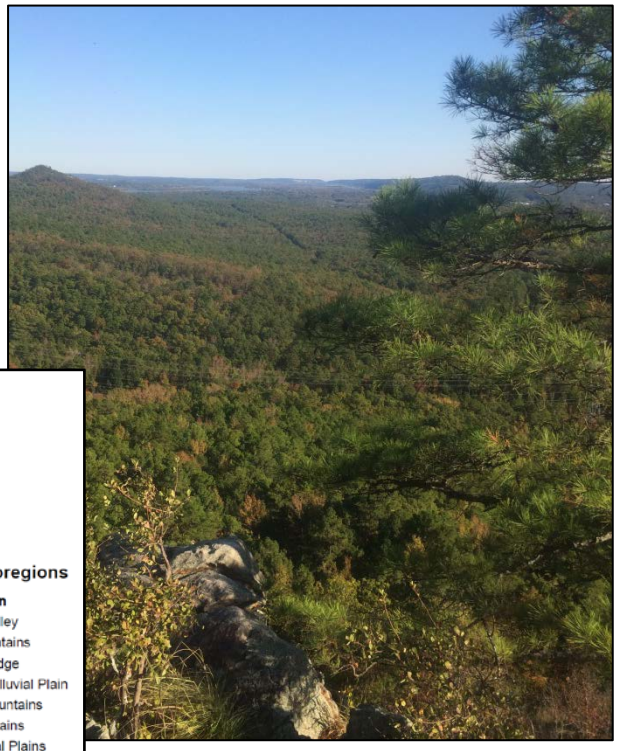
Forest Health Highlights

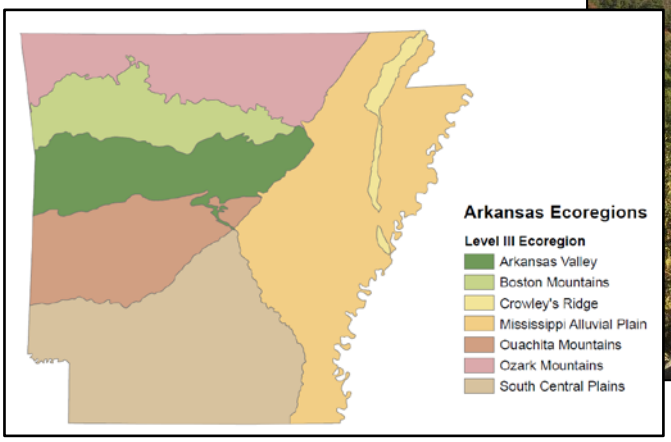
2014

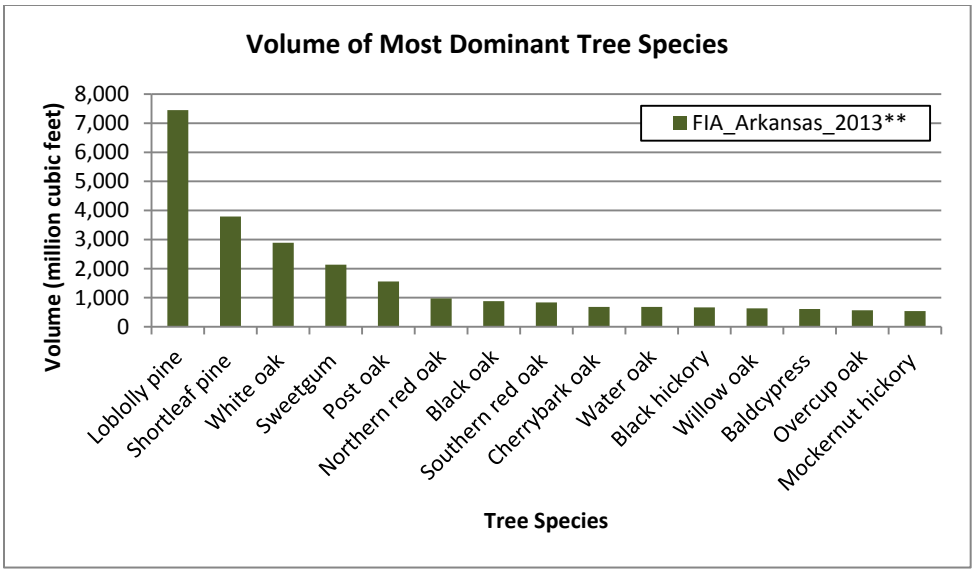
Arkansas's Forest Resource

Arkansas's forests cover 19 million acres, more than 56% percent of the state's land area. The majority of the state's forested land, some 12.5 million acres, is in non-industrial private ownership, while approximately 2.5 million acres is national forest. Scenic beauty is showcased in the Ozark, Boston, and Ouachita Mountain ranges. Tourism and outdoor recreation opportunities are plentiful within the state's diverse landscape. Major forest types in the state include oak-hickory, loblolly-shortleaf pine, oak-pine, and bottomland hardwood.







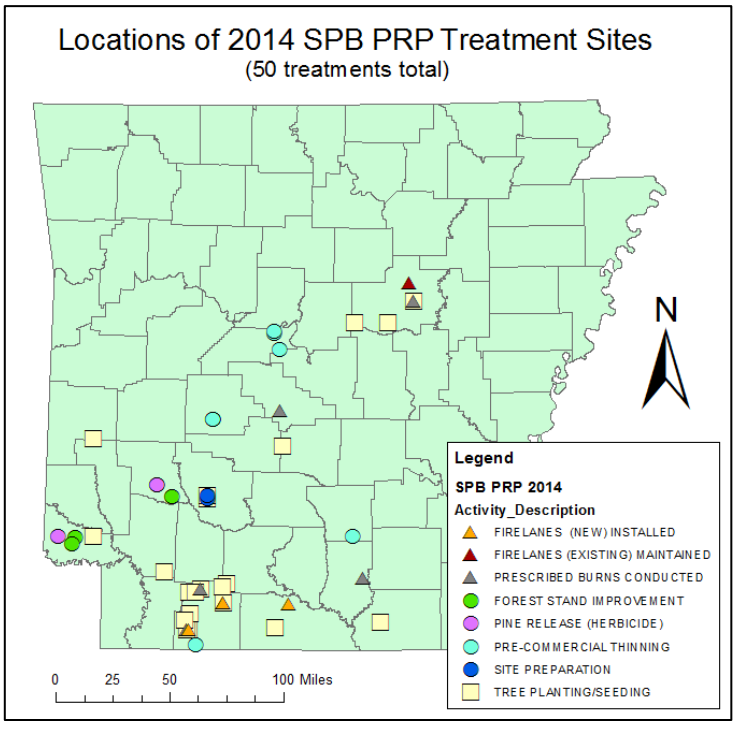


Forest Influences

Southern Pine Beetle (SPB) is, historically, Arkansas's most significant forest insect pest. In 2014, trapping continued in the southern portion of the state. Only one SPB adult was captured in Arkansas. No SPB activity was reported, a trend that has lasted for more than 17 years.

SPB Prevention and Restoration Program (SPB PRP)

The Arkansas Forestry Commission (AFC) continues to offer cost-share incentives to landowners for thinning and restoration work as part of this effort. This program is eagerly sought and well received by landowners. In 2014, AFC responded to nearly 150 landowner assists related to the program, and 50 treatments were completed, e.g. pre-commercial thinnings, prescribed burns, and plantings. The state is also making special effort to reach out to minority and underserved landowners. In addition to a landowner incentive, a logger incentive is offered to thin small stands between 10-20 acres. The thinning of these pines stands encourages resiliency to future insect and disease damages.



Ips Beetles

These bark beetles are often attracted to trees stressed by drought or damaged during harvest operations. Statewide, dry conditions during 2011 and 2012 increased the abundance of these insects. However, the abundance of *Ips* beetles declined and associated damages were rare in 2014. It should be noted that high population densities of *Ips* are a recurring feature in southeastern pine forests and their effects may be observed again in the near future.

Pine Sawflies

In 2014, pine sawflies were prevalent in the southwestern region of the state. Loblolly pine sawfly, *Neodiprion taedae linearis*, was the primary culprit behind more than 300 hundred acres of defoliation within the counties of Dallas and Clark. Trees are expected to recover from what can be described as a growth and aesthetic loss.

Oak Mortality

Conditions favorable for the development of oak decline events persist over thousands of acres. Many reports of noticeable oak mortality occurred on private lands, but national forests also faced episodic drought, advanced age, overstocked stands and poor site quality. Mortality in the state's oak forests create a serious and persistent problem that should be addressed in the near future. Hypoxylon canker killed many red oaks in late 2013 due to drought stress in the previous years, and this was observed in 2014 as well.

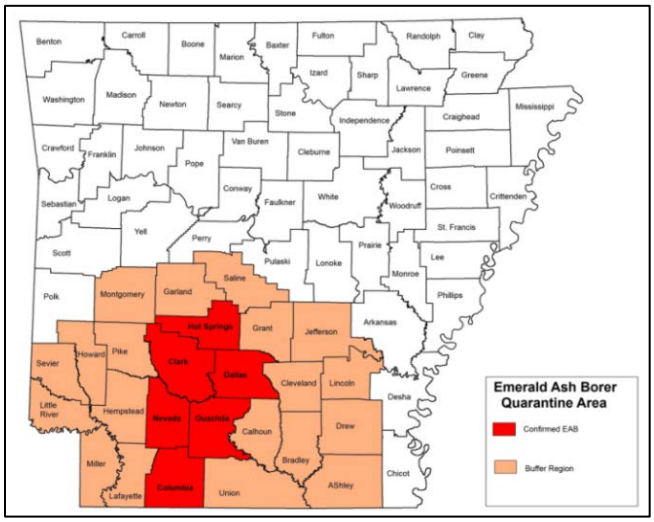
Redbay Ambrosia Beetle and Laurel Wilt Disease

Laurel wilt disease and its vector, the redbay ambrosia beetle, have not yet been discovered in Arkansas. However, the disease and beetle were detected in Louisiana's Union and Claiborne Parishes a few miles from the Arkansas border. In 2015, detection methods will be implemented to discover if the disease and vector are present in Arkansas. This disease is a threat to sassafras and a few rarer members of the Lauraceae family. As these trees are a scarce component of Arkansas's forests, its effects are uncertain at this time.

Emerald Ash Borer

Recently, the Arkansas Department of Agriculture/Arkansas State Plant Board has confirmed that the emerald ash borer (EAB), an invasive beetle from Asia that attacks and kills ash trees, has been confirmed in six south Arkansas counties. The Arkansas State Plant Board has enacted an Emergency Quarantine that expires in December of 2014, and a more permanent quarantine will be established following a period of public council. The Arkansas Forestry Commission continued to educate the public on the dangers of moving firewood from area to area. Many invasive forest pests can be moved long distances in a matter of days via firewood and any unprocessed wood.

Overall, ash trees represent 2-3% of Arkansas's forests. However, in the bottomland hardwoods found in the eastern and southern parts of the states, they represent closer to 6-8% of the forest. Ash is also a popular yard planting and is prevalent in the urban landscape. The loss of high-grade ash in bottomland sites will have economic concerns, especially for sawmills that specialize in hardwood products.



Gypsy Moth

In 2014, one suspect adult male was found in a pheromone trap located in Nevada County in southern Arkansas. As one of the United States' most important invasive forest pests, this insect poses a serious threat to Arkansas's hardwood forests. Though establishment success is expected to be low in southern Arkansas, detection surveys will likely be increased in the surrounding area.

Notes:

*****Forest type data based on FIA forest type groups; figure uses area estimations derived from surveys of 2007-2013.

**Volume of dominant tree species credited to:

Rosson, James F., Jr. 2014. Forests of Arkansas, 2013. Resource Update FS–12. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 4 p.

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