Mississippi





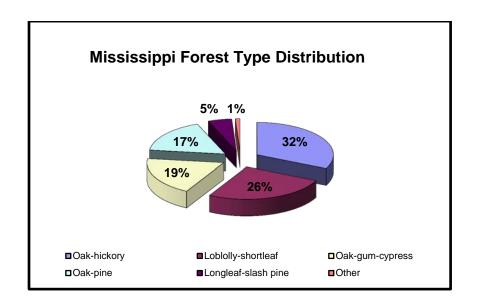
Forest Health Highlights 2014

The Resource

Mississippi's forests cover 19.9 million acres, more than 65% of the state's land area. Some 13.1 million acres of the states forested land is in non-industrial private ownership, while approximately 1.1 million acres are in national forests. Mississippi's forests are prized for their scenic beauty, supporting tourism and outdoor recreation and providing wildlife habitat throughout the state. Major forest types in the state include oak-hickory, loblolly and shortleaf pine, longleaf and slash pine, mixed oak-pine, and oak-gum-cypress.



USDA Forest Service



Mississippi Forest Health Highlights

Loblolly Pine Sawfly

Northeast Mississippi and northwest Alabama forests experienced a large loblolly pine sawfly (*Neodiprion taedae linearis* Ross) outbreak during spring and early summer of 2014. The majority of the infestations occurred in Itawamba County, MS and Marion County, Alabama. The affected areas are estimated to encompass more than 10,000 acres of pine plantations in Mississippi and Alabama. The loblolly pine sawfly is one of the most severe important defoliators of pine in the central southern states. The larvae are capable of causing 100% defoliation, resulting in significant growth and vigor reductions, but rarely mortality. Affected trees in Mississippi during 2014 were inspected in late spring and were already beginning to sprout new needles.



Don't Move Firewood Campaign

The MS Forestry Commission continued to spread the word about the "Don't Move Firewood" campaign through presentations, distribution of educational items and billboards, as illustrated to the right. The MS Forestry Commission was awarded another \$75,000 matching grant to



continue spreading the word on the dangers of moving firewood and transporting non-native insects within the wood. Promotional items will be purchased and distributed among the MS State Parks, MS Wildlife Extravaganza in Jackson, Garden and Patio Shows across the State and other venues, where we can contact campers and hunters and educate them about the campaign.

Redbay Ambrosia Beetle was detected for the first time in Jackson County, MS in July, 2009. This insect carries the



fungus that causes Laurel Wilt Disease. Since its introduction to the Southeast, it has caused considerable mortality to redbay, swamp bay, sassafras, avocado, and other species of trees and shrubs in the Lauraceae. Current distribution records indicate the disease is present from North Carolina to Florida on the east coast, as well as coastal Mississippi and Alabama. During the summer of 2011 the disease was also discovered in Marengo Co., AL (east of Meridian, MS). The infestation in Mississippi continues to expand, and is now present throughout the majority of Jackson Co., and portions of George and Harrison Counties in redbay, swamp bay, sassafras, as well as camphor tree. Collaborative research between MSU, MFC, and the USDA Forest Service has led to the

conclusion that the beetle was spread to Mississippi by human movement of infested materials from beetles along the Atlantic Coast of the U.S., rather than through a separate introduction through a local port. Initial research into cold tolerance suggests that redbay ambrosia beetle may be able to spread through sassafras trees well into southern Canada.

Southern pine beetle (SPB) has historically been Mississippi's most significant forest insect pest. Populations statewide were very low from the mid 1990's-2011. However, in 2012, activity began to pick up. Over 1,000 SPB spots were detected on federal, state, and private lands in 2012, mostly in and around the Homochitto National Forest, and secondarily in and around the Bienville and Tombigbee National Forests. More than 1,100 acres were affected. The Homochitto outbreak collapsed in 2013, but 153 SPB spots affecting 210 acres were detected in 2013, mostly in and around Hommochitto, Bienville, and especially Tombigbee National Forests. Thus far during 2014, 143 SPB spots have been detected in Mississippi, affecting about 108 acres mostly in and around the Trace Unit of Tombigbee National Forest, near Houston, MS.



<u>Southern pine beetle (SPB) Prevention Program</u> The MFC, in cooperation with Mississippi State University (Mississippi State University Extension Service, Forestry and Wildlife Research Center, and Mississippi Agricultural and

Forestry Experiment Station), and the USDA Forest Service Forest Health Protection Southern Region continues to administer a comprehensive SPB Prevention/Education Program to teach landowners about the benefits of thinning for the reduction of SPB hazard. In addition to the educational aspects of this program, there is an associated statewide cost-share program to assist landowners in getting the pre-commercial and 1st commercial thinning accomplished.

Presently, we have four active grants under the SPB prevention program.

- 2011 grant presently paid \$665,250 to landowners, thinned 8828 acres.
- 2012 grant presently paid \$144,600 to landowners, signed up 2478 acres for thinning.
- 2013 grant presently paid \$27,750 to landowners, signed up 2576 acres for thinning.
- 2014 grant was awarded \$250,000 grant, proposed \$213,182 for cost share to landowners and to thin 2646 acres.

Kudzu is a non-native, invasive weed that aggressively spreads and outcompetes desirable plants, including trees forests in the Southeast. A kudzu control project was funded by the USFS to the MFC in 2012. A grant was awarded to the North Central MS RC&D to carry out this project in North MS. This project was funded in the amount of \$250,000 for a two year project where the cost share covers 75% of the cost of treatment. The kudzu control will take place in the following counties on private lands: Benton, Carroll, Desoto, Grenada, Lafayette, Marshall, Panola, Pontotoc, Tallahatchie, Tate, Tippah, Tishomingo, Union and Yalobusha. In 2014, 100 landowners participated in the treatment program; 759 acres were treated, with \$75,710.25 paid to landowners to cover 75% of the costs. (As of 11/6/2014).



Cogongrass is a non-native, invasive plant that has been spreading aggressively in Mississippi in recent years. It takes over native grasses and vegetation and is a fire hazard under pine plantations. The severity and extent of infestations have increased considerably in the disturbed forests following hurricane Katrina in 2005. The MS Forestry Commission has been funded for several years by the USFS under their redesign grants to continue the fight against this invasive weed. During 2014, we retreated cogongrass in only Jones and Covington counties from the original treatments in 2013. To date, we have treated 16,609 cogongrass spots for 2014 acres under the ARRA program, 4,833 cogongrass spots for 584.79 acres under the cooperative forest health grants and 3,063 cogongrass spots for 575.93 acres in Jones and Covington counties under the 2012 and 2013 USFS redesign grants. The grand total is 24,510 cogongrass spots, 3175.11 acres



J.R. Meeker, Florida Division of Forestry, Bugwood.org

treated. The cost for treating this invasive plant is about \$400 per acre, so the average MS landowner cannot afford this cost and is very grateful for the assistance in controlling this pest.

Forest Health Assistance in Mississippi

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