

Alabama



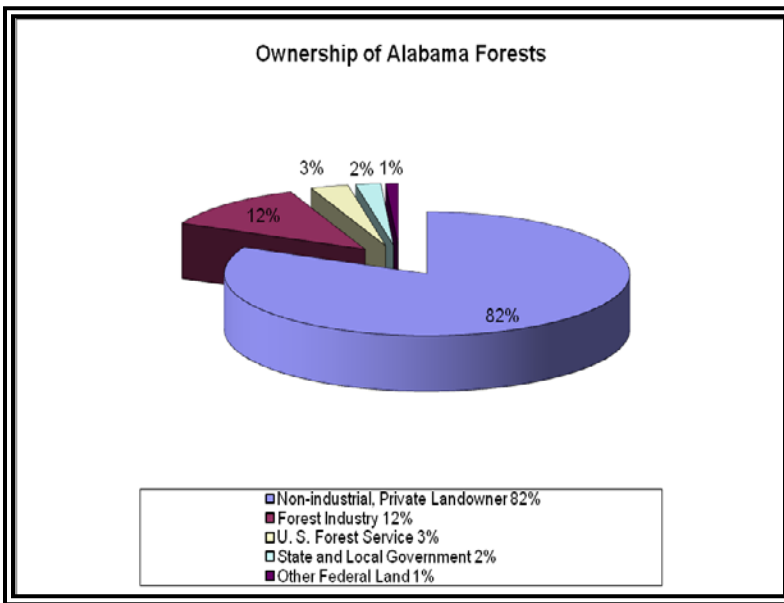
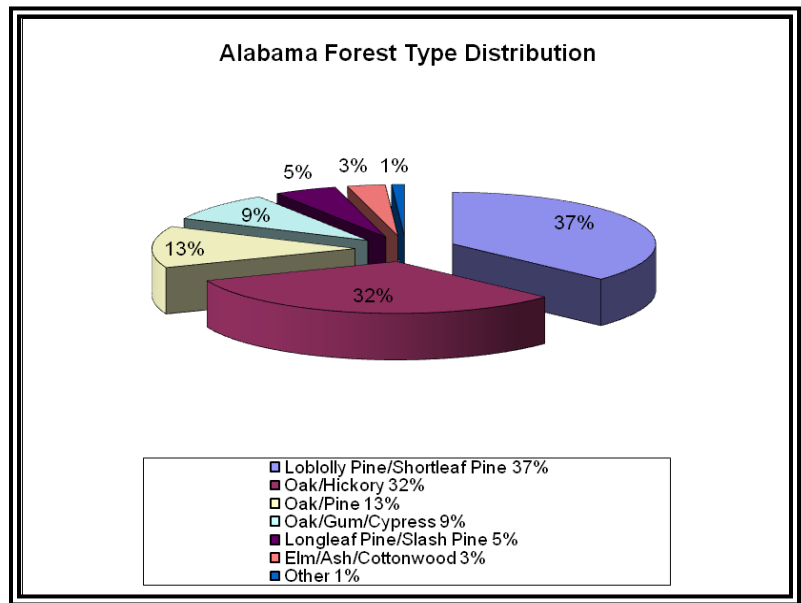
Forest Health Highlights

2012

The Resource

In Alabama, forests cover 22.8 million acres, approximately 68% of the total land mass. From the high elevations of the Appalachian Mountain plateau, in the unique soils of the Black Belt region, and in the sandy areas of the coastal plain, forests thrive in practically every known ecological environment in the state. Robust hardwood species of the north are flourishing on mountain slopes next to streams while the tall pine plantations of the south are growing on well-managed sites. Even naturally regenerated stands bloom on unforgotten lands providing a gamut of trees and flora.

Because of this diversity, there are several different types of forest ecosystems in Alabama, all very important to the state's livelihood. With over 200 different trees species, both native and non-native, the main forest categories in the state comprise of just a small percentage of this total. Virtually unchanged since last year, the accompanying graph illustrates the major forest types in the state.



Alabama is considered one of the most forested states in the nation. Flourishing in local parks, national forests, urban communities, and rural environments, these forests provide the state with outdoor recreation, wildlife habitat, scenic aesthetics, and tourism opportunities. There are other contributions the forests provide for Alabama as well. The state depends immensely on the forest for its economy. With its millions of forested acres, Alabama has the third largest commercial timberland in the country. In fact, the timber industry is the second largest manufacturing industry in the state, producing several billion dollars worth of products a year.

The ownership of the state's forestland, however, is quite interesting. With the number of public forest places to enjoy, the majority of this land type is owned by non-industrial private landowners. Forestry industry, a major component of Alabama's economy, only owns a small percentage of property in the state. Moreover, forest

industry in the last few years continues to decrease the amount of land ownership by slowly divesting its property. Federal lands that are not readily available for public use have the least amount of ownership in the state. Based on the accompanying chart, land ownership in Alabama is relatively the same, changing little over the last few years.

With a marginal increase in total forestland from the previous year, Alabama illustrates its effectiveness in growing and expanding the state's forests. Most of these forest ecosystems are sustainable because of work implemented in public education and land management. Promoting the concept of good land stewardship is also a factor in perpetuating the existence of this natural resource.

Forest Influences and Programs

Southern Pine Bark Beetles (southern pine beetle, *Dendroctonus frontalis*; pine engraver beetle, *Ips* spp.; and black turpentine beetle, *Dendroctonus terebrans*);

The results from the 2012 southern pine beetle (SPB) trapping survey predicted that Alabama will once again experience a low number of infestations. Based on the number of catches, the population of the southern pine beetle was low and has remained so over the last few years. In fact, the population of the SPB has been declining since 2005. The SPB population cycle is generally from 7 to 9 years, suggesting that in 2012 there should be a noticeable increase in the number of southern pine beetles;



however, this was not the situation. Similarly, neither the pine engraver beetle nor the black turpentine beetle, had a significant number of reported infestations this year. By the summer, however, there were a few identified infestations caused by the SPB. Aerial surveys were, therefore, conducted in selected counties from June to September, detecting a total of 57 spots, infesting 1,620 pines. Even though the total appeared quite concerning, this amount is still rather low

compared to historical data of beetle infestations in the state.

Laurel Wilt Disease (*Raffaelea lauricola* ; and the redbay ambrosia beetle, *Xyleborus glabratus*); Unfortunately, laurel wilt disease has spread rather quickly in



Marengo County. Since the confirmation of this disease near Linden in 2011, seven other symptomatic sassafras stands have been identified as far as 12 miles away from the initial site. With laurel wilt disease rapidly approaching Demopolis and the county line, traps were placed in neighboring Sumter County to detect the presence of the redbay ambrosia beetle, the insect associated with laurel wilt disease. No redbay ambrosia beetles were captured in the traps and no visible symptoms of wilt on host trees were observed in Sumter County. In Mobile County, however, disease spread was rather moderate, basically staying confined around the Grand Bay area. Neighboring counties were periodically monitored, only to result in a negative find for this disease. Other efforts were initiated to curtail the spread of laurel wilt disease and other non-native invasive pests. The Alabama Forestry Commission along with 11 other southeastern states implemented the “Don’t Move Firewood” campaign. Training sessions and workshops were conducted to inform agency personnel and the public about the association of forest pests and firewood movement.



Emerald Ash Borer, *Agrilus planipennis*: Since its confirmation near Knoxville, TN in 2010, the emerald ash borer has spread quickly, becoming detected this year for the first time in the **Great Smoky Mountains National Park**. Because of this rapid spread in the neighboring state of Tennessee, Alabama has become more cognizant of a possible emerald ash borer infestation in this state. To be proactive, Alabama implemented the “Early Detection, Rapid Response” system for this exotic invasive pest. The Alabama Department of Agriculture and Industries and the USDA Animal and Plant Inspection Service deployed over 400 emerald ash borer traps statewide primarily in areas with ash trees. No emerald ash borers were found in any of the traps and there were no reports of infestations existing in the state.



Sudden Oak Death Disease, *Phytophthora ramorum*: Auburn University conducted the sudden oak death (SOD) fall and spring surveys for Alabama. Traps for the fall survey were deployed in October, 2011 and traps for the spring survey were deployed in March, 2012 outside 8 selected nursery sites in the state. Based on the latest results from the survey, the sites that previously had a positive reading for the pathogen that causes SOD continue to have a positive reading.



Hemlock Woolly Adelgid, *Adelges tsugae*: The USDA Forest Service in Alabama has completed a proposal to implement an environmental assessment on the Bankhead National Forest. In January, 2012, the hemlock woolly adelgid was reported in Franklin County, Tennessee approximately 60 miles from this national forest. Since the eastern hemlocks on the Bankhead National Forest exist on the southwestern-most portion of the range, proactive measures were discussed by a committee of research scientists and forestry specialists. Based on this information, the Forest Service drafted an action plan that prioritizes areas on the Bankhead National Forest for integrated treatments to prevent a complete loss of eastern hemlocks in case of an infestation.



Cogongrass, *Imperata cylindrica*: The ARRA Cogongrass Grant ended in May of this year, a grant that funded control efforts of cogongrass infestations on private lands in the state. During the 3-year period, more than 24,000 cogongrass spots were treated under this grant. To continue the efforts in controlling cogongrass infestations in the state, the Alabama Forestry Commission collaborated with South Carolina, Georgia, Florida, and Mississippi on the second Redesign Cogongrass Grant. Like the first grant, Alabama continued work in public education, spot location, infestation assessment, and data entry. A portion of the funding from this grant was also used in a cost-share program for County Road Departments to control infestations along rights-of-way.

The cost-share program was designed to reimburse the cost of herbicides, equipment use, and accrued hours. This year, 11 County Road Departments were approved to participate in the cogongrass cost-share program.



Kudzu, *Pueraria montana*: In collaboration with Mississippi, the Alabama Forestry Commission was awarded funding for the Redesign Kudzu Grant. With the extent of kudzu infestations in the state, funding was allocated for control of this exotic vine only at Red Mountain State Park and selected forests in Alabama. A portion of the funding was also permitted to be used for regenerating these kudzu-treated areas with native vegetation.



Weather: During the last few years, unfavorable weather patterns persisted, especially systematic tornadoes and drought conditions that caused a substantial number of trees to decline. These declining trees became very vulnerable to existing pests. As a result, tree mortality occurred periodically throughout the state, especially from pine engraver beetle and oak decline. This year, however, the climate was quite normal for Alabama. Despite the slightly high temperatures during the summer months, the state received a sufficient amount of rainfall. The consistent precipitation did not completely alleviate the effects of the previous era of drought; however, there were some positive outcomes in forest health this year. As a result, there were few severe outbreaks reported of any type of forest pest. There were only a small number of documented cases of infestations from the pine engraver beetle, southern pine beetle, and black turpentine beetle. The linden looper did not make a significant presence in oak stands this year.

Alabama did experience some adverse weather conditions during the early part of 2012. Several tornadoes spawned from ravaging storms, causing severe destruction to property and forestland in affected areas throughout the state. Even though the havoc was minimal in comparison to the April tornadoes of 2011, two storms in particular caused significant impairment that warranted survey flights to assess damages.



The ForWarn monitoring system was used for the first time in Alabama this year, detecting two forest disturbances in the state. In May, the system detected a possible defoliation of hardwoods in a significantly large area of the Mobile River Basin. After a reconnaissance flight to assess the situation was completed, the area was found already recovering from the disturbance. Soon afterwards in July, the system detected another possible forest change in West Jefferson County. The reconnaissance flight and ground assessment indicated that most of the disturbed areas were caused by damage sustained during the April 2011 tornadoes.

Apparently the tranquil normal climate in Alabama had an effect on the total number of wildfires. This fiscal year, Alabama had 1,549 wildfires statewide, encompassing 29,545 acres, a significant decrease from last year with 3,665 wildfires, burning 69,764 acres. In fact, the total number of wildfires in 2012 was the second lowest number in Alabama during the last 13 years.

For more information on Alabama's forest health program, go to the Alabama Forestry Commission's website:
<http://www.forestry.alabama.gov>

Forest Health Assistance in Alabama

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