Alabama





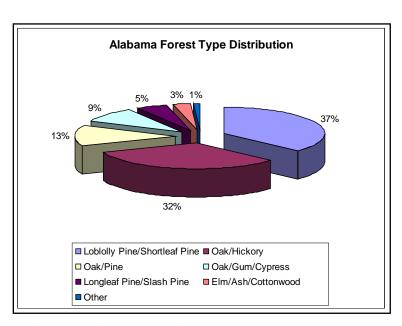
Forest Health Highlights 2010

The Resource

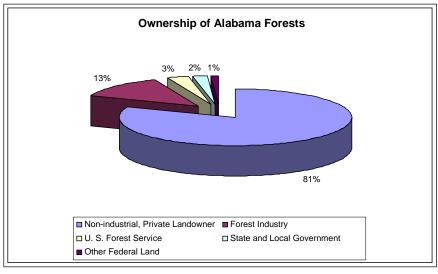
Alabama is one of the most breath-takingly scenic places in the nation. With its diverse forests of the northeast Appalachian Mountain plateaus transitioning to the flat, sandy beaches of the coastal plain, Alabama continues to captivate residents and visitors alike.

To illustrate the diversity that exists in the Alabama landscape, a graph here shows the distribution of the major forest types in the state.

As one of the most forested states in the U.S., Alabama has contrasting and sustainable ecosystems that are great for timber production, wildlife habitat, and recreational activities. The state contains 22,716,704 acres of forestland. Most of the forestland is owned by private, non-industrial landowners as shown in the second graph. The percentage of ownership by this



group appears to increase by 1 percent annually. Despite the divesting of property by forest industry owners, industrial or commercial ventures still maintain the second largest amount of forestland ownership in the state. Unlike the states out



west, Alabama has very few acres of forestland that is owned by state, local, or federal governments.

Forest Influences and Programs

Southern pine beetle (SPB) activity in 2010 was no surprise—a very low population resulted in very few infestations. Reconnaissance flights done this year detected very few SPB spots; even ground monitoring activities found few confirmed spots. A number of infestations were caused by *Ips* engraver beetles (see next). Later in the year, however, there was a sudden increase in SPB activity. By October of 2010, several counties were reporting infestations in their area. Much of this increase in activity is yet to be documented and may be a prediction for what to expect in 2011. Twenty-two SPB spots were confirmed on state and privates lands in 8 counties comprising minimal acreage. No activity was detected on federal lands.





Pine engraver beetle activity in the state was very low early, but in the latter part of the year, *Ips* beetle infestations began a sudden increase in the number of reported spots. By October of 2010, several counties confirmed *Ips* engraver beetle infestations in their area. Much of this late activity has yet to be documented. Only 5 spots were detected early in the year on state and private lands comprising minimal acreage. No activity was reported on federal lands.

<u>Linden loopers</u> made a dramatic appearance again this year in northeast Alabama. In early May, several landowners reported seeing patches of dead hardwood trees. Mainly oaks that were attacked, these trees were not dead, but were severely defoliated by the linden looper. Unlike the attack in May, 2009, this year the infestation was more intense, expanding its range in DeKalb County. The Alabama Forestry Commission's pilot conducted a reconnaissance flight of the impacted area to estimate the extent of the damage. Of the approximately 29,000 acres of scattered hardwoods that were affected by this defoliator, most made a rapid recovery. The agency's newsletter presented the best description of this phenomenon, "North Alabama Oaks Knocked for a Loop", which was also the title for the article. The final outcome, nevertheless, was a fortunate one; most of these host trees recovered with little damage, sprouting new leaves by June of 2010.



Sudden oak death surveys were completed in the spring of 2010 with results similar to 2009. Four drainages outside commercial nursery sites had stream bait samples that tested positive for the pathogen, *Phytophthora ramorum*. In order to determine if the pathogen has migrated from the contaminated streams to terrestrial vegetation, surveys need to be conducted. Such surveys were conducted along drainages at several of these sites in May, 2009 with negative results.

Cogongrass: The 3-year agreement the Alabama Forestry Commission established with the USDA Forest Service, State and Private Forestry Competitive Resource Allocation Grant has ended. Tremendous accomplishments were made in identifying, locating, assessing, and documenting cogongrass infestations in the state. Activities in cogongrass education and community outreach have also rendered huge success in public awareness of this potentially devastating forest problem. The American Recovery and Reinvestment Act (ARRA) - Cogongrass Grant was awarded to Alabama to assist with the state's cogongrass efforts. Contracted to Larson & McGowin, Inc., this firm has completed one year of the agreement by making accomplishments in the area of cogongrass assessment and control. Since August of 2010, over



1,500 cogongrass infestations in 22 counties in Alabama were treated.

Redbay ambrosia beetle/laurel wilt disease has advanced closer to the border of Alabama. Following the discovery of the ambrosia beetle and its associated wilt fungus in Jackson County, Mississippi in July of last year a positive identification comes from Bay County, Florida in August, 2010. Close monitoring of this disease is being done in and around Mobile County, Alabama.



Emerald ash borer a non-native invasive insect from Asia has moved a little closer to the Alabama

border. This wood borer, destroying ash trees along the way, has spread into 15 states since its introduction into Detroit, Michigan in 2002. In July of 2010, a news release announced a confirmed emerald ash borer infestation at a truck stop in Knox County, Tennessee.

Black walnut twig beetle and its associated fungus cause thousand cankers disease and was relatively unheard of in the eastern United States until recently. This beetle/fungus complex has caused mortality to thousands of walnut trees in the western part of the country. Several walnut tree species have been affected but the eastern black walnut tree is the most susceptible. Concern for the eastern black walnut resource if this disease reaches the eastern U.S. erupted in July, 2010, when several symptomatic eastern black walnut trees were tested positive for thousand cankers disease in a residential area near Knoxville, Tennessee.

<u>Weather</u> conditions in the early part of the year were cool, wet, and mild. The southern pine beetle population was extremely low and other forest pests were relatively inactive. The summer of 2010, however, came with a noticeable change in the climate. The weather conditions altered from cool and wet to hot and dry. This change had a significant effect on pest activity. Increases in both *Ips* engraver beetle and southern pine beetle infestations started to appear statewide. Wildfires in Alabama also increased in numbers.

Future Concerns

Because of the recent focus on renewable energy, environmental groups and corporate leaders were stressing the importance of biomass production and research. Since the southeast has vast non-industrial, private forests, several open forums were conducted this past year to persuade the public on accepting this new biofuel technology. Three plants in particular were discussed as a potential biofuel product: the jatropha tree (*Jatropha curcas*), a eucalyptus hybrid (*Eucalyptus grandis x Eucalyptus urophylla*), and a bamboo variety from Asia – all are non-native to this country. The information was very persuasive and positive, but there was a concern especially from foresters and ecologists of these non-native varieties possibly becoming invasive and detrimental to native forests.

Forest Health Assistance in Alabama

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