



Alabama Forestry Commission

Forest Health Highlights

October 1,2023-September 30,2024

Drew Metzler-Forest Health Coordinator

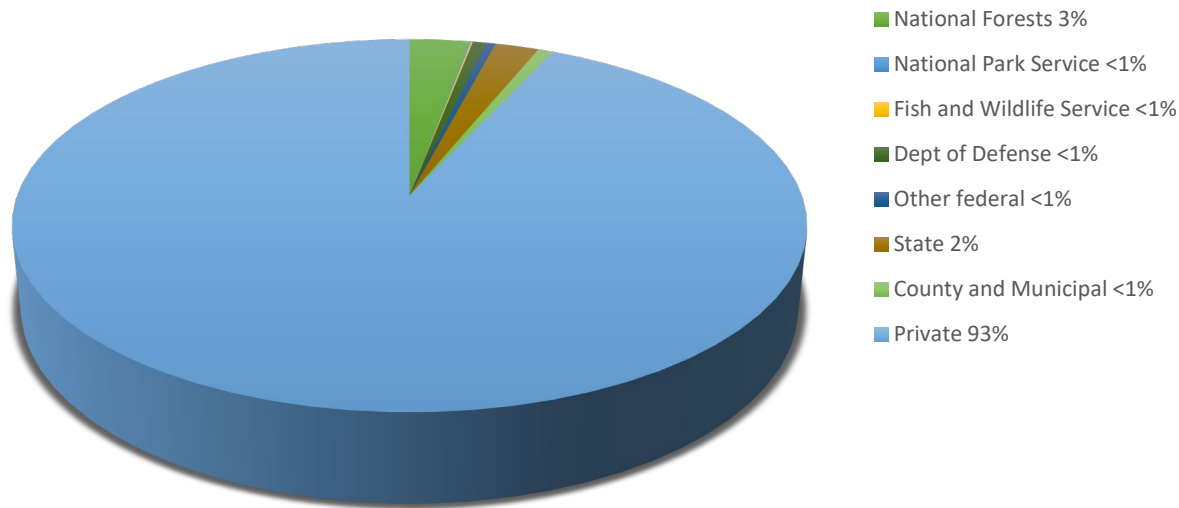
The Resource:

Alabama timberland covers 22.95 million acres, the third largest commercial forestland in the nation. If you include 'reserved' timber, such as National Wildlife Refuges and defined Wilderness Areas, Alabama forestland covers 23.03 million acres. Approximately 93.4 percent of Alabama's timberland is privately-owned and 6.6 percent of timberland is publicly owned. Forest industries (companies that own a wood-processing plant) own approximately 5.9 percent of Alabama's timberland while 87.2 percent is owned by the non-industrial private sector.

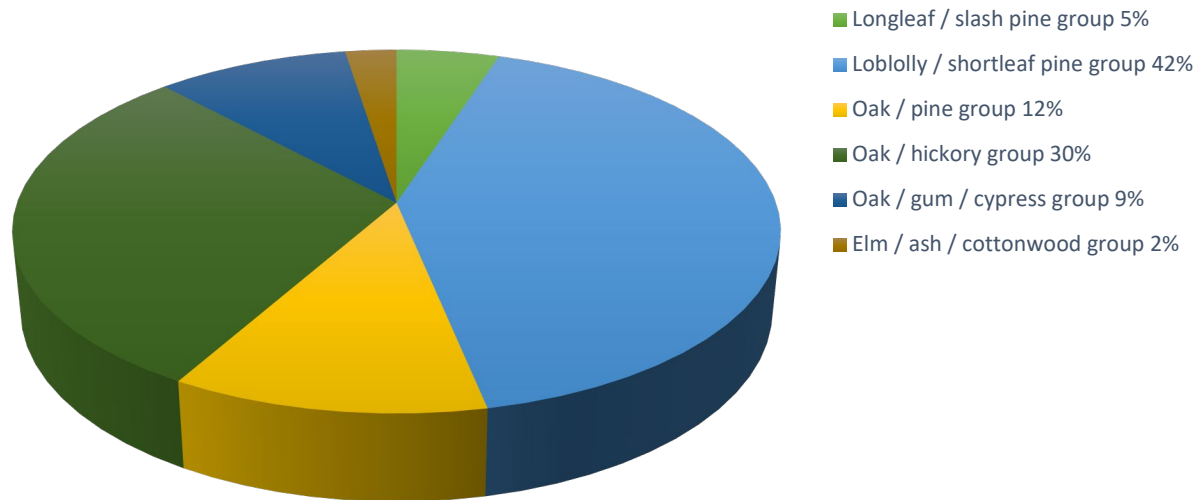
In January 2024, the Alabama Forestry Commission hired Drew Metzler as the new forest health coordinator to lead the agency's efforts to provide forest health assistance and recommendations to landowners throughout the state. Due to the chronic drought conditions experienced across 2023 and 2024, pine bark beetle outbreaks were heavy and persistent across the state, fueling a demand for landowner outreach and technical assistance. Forest health information, particular southern pine beetle management was prepared and disseminated widely in the form of press releases, news interviews, magazine articles, landowner workshops, webinars, social media posts and videos, and direct one on one meetings with individual landowners. Together, there were at least 45 outreach presentations conducted statewide pertaining to forest health. In addition, the forest health section provided training for all new agency employees in 2024 as well as full day regional trainings for existing staff.



Alabama Forested Acres by Ownership Classes



Alabama Forested Acres by Forest Type Group





Alabama Forestry Commission

August 29 · 🌐

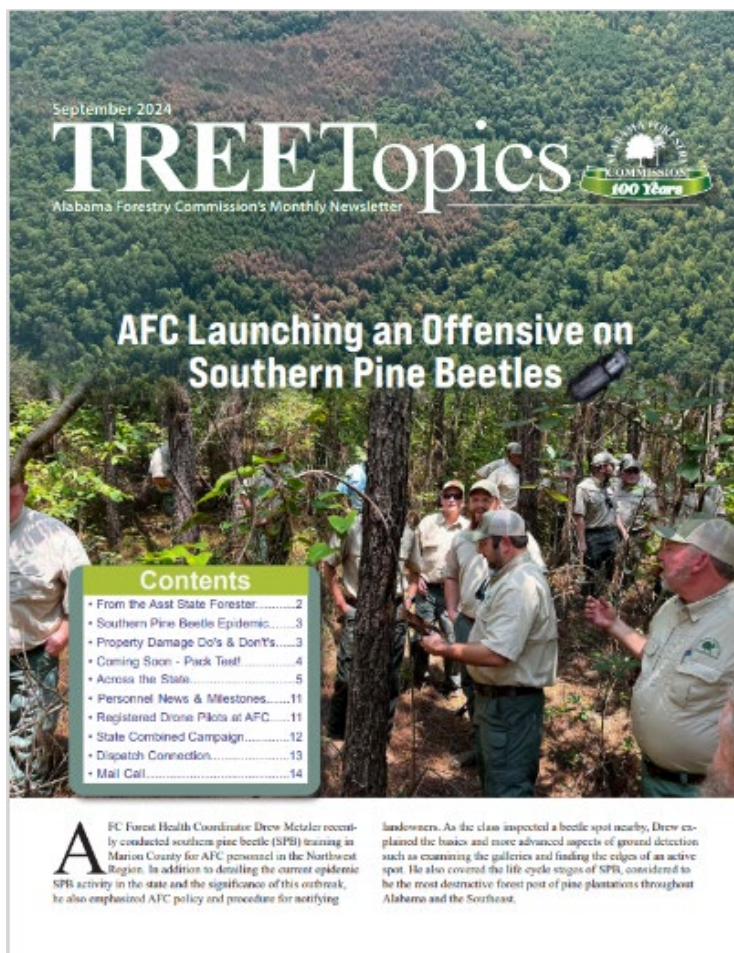
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SPB Training ⚠️

Drew Metzler conducted a Southern Pine Beetles training yesterday for many of our field personnel. For information on SPB, visit our website at the link below.

https://www.forestry.alabama.gov/.../Southern_Pine_Bark.aspx





Simply Southern TV
September 23 · 🌐

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Alabama is ranked third in the contiguous U.S. for forested land, but there's a tiny bug that's wrecking havoc on pine stands this year. The [Alabama Forestry Commission](#) is doing everything they can to inform landowners about this year's pine beetle infestation and the steps they need to follow to lessen their losses.

Plus, we're getting close to wrapping up our reflections on 10 seasons of Alabama. Our longtime reporter Melissa Bowman discusses all her favorite highlights from her time with the show.



2024 SPB Pheromone Trapping:

Southern pine beetle (SPB) pheromone traps were deployed only in four counties – Lowndes, Bullock, Tallapoosa, and Choctaw. The traps were deployed on March 21, 2024 and remained until they were retrieved on April 23, 2024. Baited with a lure, SPB pheromone (frontalin and *endo*-brevicomin) and a polyethylene blue sleeve (primarily *alpha*-pinene), the traps were checked once a week by retrieving the insects from the traps' collection cups and counting the number of adult southern pine beetles as well as their predators, clerid beetles. The results of the number of SPBs and clerid beetles caught each week were used to obtain estimated population levels and predict infestation trends for the state. Based on the number of SPBs and clerid beetles caught in the traps, paired with the results from the US Forest Service, Alabama was predicted to see a major increase of southern pine beetle infestations in fiscal year 2024

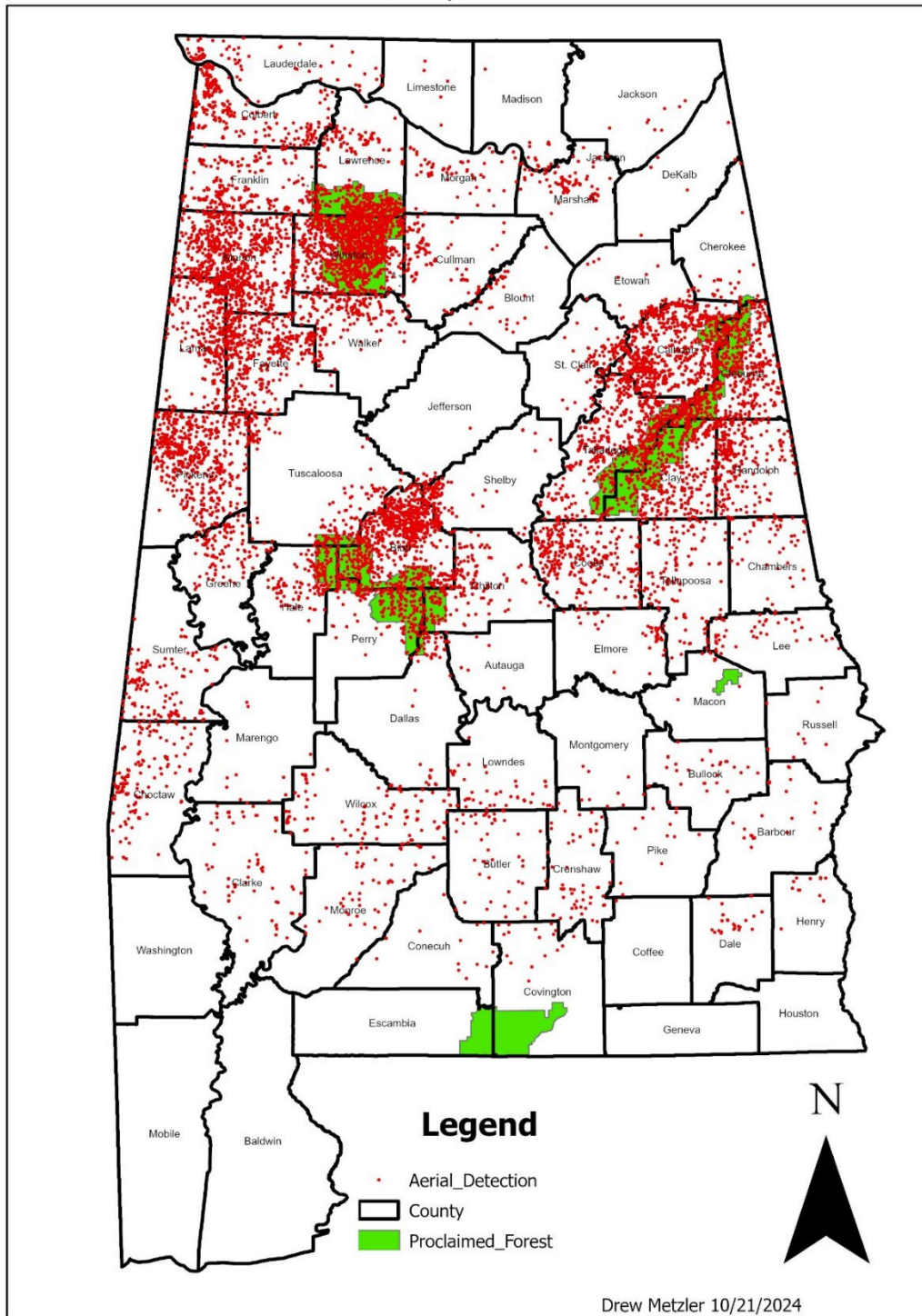
2024 Summer Pine Beetle Aerial Survey:

The number of southern pine beetle infestations exploded in 2024 following drought conditions in the 4th quarter of 2023. Fiscal year 2024 saw a 1,496% increase in SPB spots in comparison to 2023. Dry, hot early summer conditions added further stress to pine stands and likely aided rapid SPB infestation.

AFC pilots surveyed 65 out of 67 counties for SPB spots. Every National Forest in Alabama was surveyed as well. The annual aerial surveys began on July 8, 2024 and continued through the end of the fiscal year using both traditional aerial reconnaissance and satellite imagery surveillance. From the aerial surveys, 10,253 spots were detected affecting an estimated 3.1 million pine trees, the most beetle related mortality in Alabama history.



Alabama SPB Spot Locations



Southern Pine Beetle Prevention Program:

Alabama utilizes funding from the USDA Forest Service to provide incentives for landowners to mitigate pine beetle risk. The 2023-2024 SPB Prevention Cost-share Program was implemented for non-industrial private forest landowners. This cost-share program offered financial assistance for commercial first thinning for existing loblolly that are at least 10 acres in size. Additional prevention practices offered for financial assistance under this program were prescribed burning for loblolly stands as well as incentives for low-density loblolly planting. The announcement for the 2023-2024 SPB Prevention Cost-share Program was released in July 14th, 2023. A total of 184 non-industrial private forest landowners applied for the cost-share program. After the initial site visits were completed a total of 68 landowners were accepted into the program.

Brown Spot Needle Blight in Loblolly:

A particular pathogen that has been troublesome this year and in recent years is brown spot needle blight (BSNB). This disease is a fungal pathogen historically closely tied to longleaf pines, and especially detrimental to young longleaf pines in the grass stage. It has also infected many other species of pines, especially non-native pines used for ornamental and Christmas tree production. Over the past few years, BSNB has been infecting loblolly pine, our most economically important species for wood fiber production. The fungus thrives on mild humid conditions, typical of our spring and early summer weather patterns. Severe infections were noted in many stands throughout the state this spring as humid conditions and rainfall allowed the fungus to rapidly spread.

Typically, the bottom canopy of loblolly is where the infection begins, and through splashing rainfall, spores are moved upward through the canopy. The first sign of infection is the discoloration of needles. Infected needles will contain circular lesions with a brown spot surrounded by a yellow halo. Over time, the infected area will turn brown with a dark red or dark green border. Strategies for controlling BSNB in longleaf pine are well documented and prescribed fire is the gold standard for controlling the disease by burning infected needles still attached as well as needle litter and vegetation on the ground. This not only physically removes the fungus, but also increases the aeration at ground level, which helps reduce the humidity at which the fungus prefers. Control in planted loblolly stands is much less defined, as our ability to use prescribed fire in loblolly is typically at lower intensities and longer return intervals.

Multiple universities including Auburn and Mississippi State are studying the disease and the myriad of biotic and abiotic factors such as tree genetics, soil type, and stand density that may be causing the disease to be more infectious in some locations. On August 13th-14th, the Auburn Forest Health Cooperative hosted both its annual brown spot needle blight (BSNB) workshop in Cullman, AL. This meeting brought together university researchers and forest

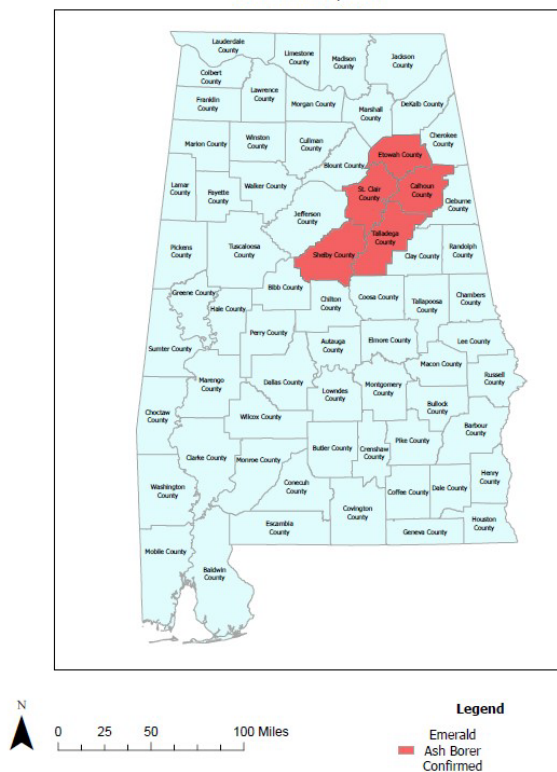
health staff from Alabama, Mississippi, and Georgia to discuss the ongoing research concerning the pathogen.

Emerald Ash Borer:

The insect was first detected in the state back in 2016 in the northeastern county of Calhoun. In June 2024, Emerald Ash Borer was detected by the forest health coordinator in Shelby County on private land near the Coosa River. This detection was later positively identified by entomologists at Auburn University. This marks a continued expansion of the invasive insect along the Coosa River and associated drainages. To date, EAB has been confirmed in Calhoun, Talladega, St. Clair, Etowah, and now Shelby County.

Emerald Ash Borer in Alabama

As of June 25, 2024



Shelby Co. Infested Ash

Hemlock Woolly Adelgid:

In October 2023 HWA was found in Jackson County, marking the 2nd county they have infested hemlock in Alabama. AFC personnel visited this site in January 2024 and noted extensive damage along the Guest creek drainage. Previously in June 2020, the hemlock woolly adelgid was reported in Dekalb County, Alabama by a Cooperative Extension System agent. After confirmation from two laboratory analyses, the hemlock woolly adelgid was confirmed for the first time in Alabama. Several hemlock trees in Dekalb County were infested with this non-native insect. Natural spread down the Appalachian mountain range into the northeastern corner of DeKalb County was assumed to be the cause of the ultimate presence of this pest in the state.



New detection of HWA in Jackson Co.

Cogongrass Program:

Cogongrass a non-native, invasive plant that has been spreading aggressively in Alabama for many decades. It takes over native grasses and vegetation and is a fire hazard in pine systems. The severity and extent of infestations have increased dramatically, especially following land disturbances such as tornadoes and hurricane events. The three person Cogongrass crew treated 3,051 acres of cogongrass infestations in 2024.

References

- Alabama Forest Resource Information – Alabama Forestry Commission, Forest Inventory and Analysis (FIA) Data

Forest Health Assistance in Alabama

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