

Georgia Forestry Commission Forest Health Highlights October 1, 2021 - September 30, 2022 Lynne Womack – Forest Health Coordinator Chris Barnes, Mark McClure, Brandon Merz – Forest Health Specialists

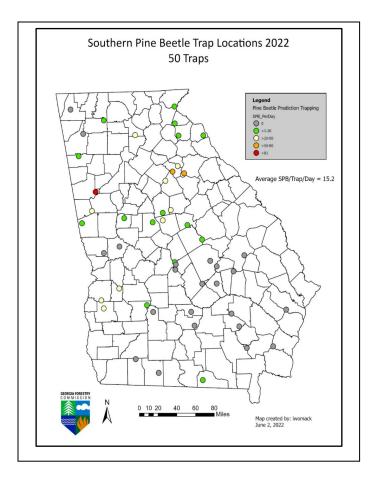
Summary:

Georgia is one of the top forestry states in the U.S, with an estimated 24.5 million acres of forestland (approximately 64% of the state) and 91% of that privately owned. Only about 10% of Georgia's commercially available timber resources are under federal and state ownership. Georgia leads all other states in the volume of timber harvested, while overall tree volume in Georgia has been increasing since 1953.

Georgia Forestry Commission's Forest Health Group and management foresters assist Georgia's landowners with forest health issues across the state. This includes insect and disease trapping, invasive plant control and management advice to keep Georgia's forestlands healthy and productive. In FY22, GFC's foresters incorporated insect, disease, and invasive species advice in 659 management cases involving over 20,000 acres. Our forest health personnel incorporated a wide variety of outreach methods to continue serving the landowners in Georgia. This outreach includes landowner field days, inperson and virtual training sessions and social media posts and videos. In FY22, outreach was provided to 56,000 Georgia citizens during 35 sessions.

Pine Beetle Pheromone Trapping:

In FY22, the Georgia Forestry Commission followed the USFS's SPB Prediction Trapping protocol, with the three lure system: Frontalin, Sirex and the endo-brevicomin flexlure. Fifty traps were placed across the state in 50 counties and six weekly samples were collected from each trap. The results from the 2022 survey predicted that overall SPB activity would be low across the state. Carroll and Heard Counties had the highest probability of having any spots, with 10-20% chance. Dawson County had the next highest probability of having any SPB spots, at approximately 8-10%. The remaining 47 counties with traps had a less than 6% chance of having any SPB spots. The best advice is for landowners to manage for healthy forests with techniques such as thinning, prescribed burning and invasive species control.



Pine Beetle Aerial Survey:

The Georgia Forestry Commission continues to monitor locations of pine beetle spots throughout the year. All reported pine beetle activity is surveyed and monitored to mitigate damage for landowners. GFC also uses an annual aerial survey to locate any possible pine beetle spots. Any new possible infestations found from these aerial surveys are investigated using ground surveys. All infestations are reported to the landowner and GFC foresters work with the landowner to limit damage and control infestations.

Based on two-mile visibility on each side of the plane, FY22 survey flights provided visual observations on approximately 13,614,358 acres. From these surveys and landowner reports, eleven SPB spots were detected on approximately 23 acres across the state. The majority of these spots (75%) were less than one acre in size but did have active SPB during field checks. GFC foresters reported one Black Turpentine Beetle (BTB) spots on less than one acre, while reporting seven Ips engraver beetle spot on less than one acre. The map below shows the pine beetle spots and flight lines in Georgia for 2022. Each spot was visited by a GFC forester, and the landowner was advised to harvest the spot or continue monitoring it to determine if the spot was actively spreading.



Southern Pine Beetle Prevention and Restoration Grant (2003-2022):

The USDA Forest Service has provided federal grants in this program area for 19 consecutive years. These grants are primarily utilized for direct cost share payments to Georgia landowners to implement several prevention practices to treat high risk stands and forest restoration practices. Of these grants totaling \$13.25 million, \$8.1 million has been allocated directly to landowner payments under cost share practices treating approximately 350,871 acres. SPB cost share funds for 2021 were used for southern pine beetle prevention and restoration practices.

During 2022, GFC foresters serviced 400 contracts covering 28,722 acres. Landowners worked directly with their county GFC forester for all phases of the program. This process has been widely accepted and streamlines the procedures from start to finish.

Hemlock Woolly Adelgid:

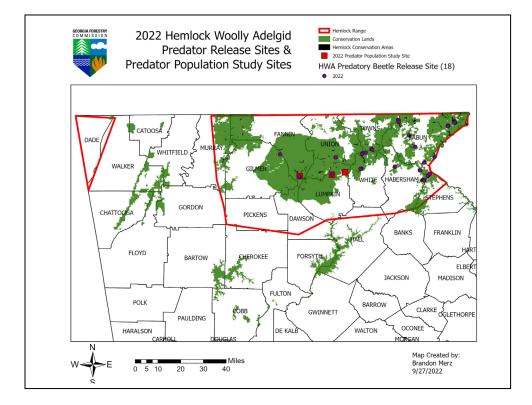
The Georgia Forestry Commission provided assistance to the predator beetle rearing labs at the University of Georgia, University of North Georgia and Young Harris College. Activities included scouting for and collecting foliage for rearing, surveying and preparing beetle release locations, and releasing beetles. The GFC played a critical role in the logistics of delivering foliage to the labs and getting beetles to the selected release areas.

In FY22, GFC scouted twenty-three potential sites. Eighteen predator beetle release areas were selected, all in the Chattahoochee National Forest. The GFC conducted 62 predator beetle releases on these sites, with additional releases done by the University of North Georgia. A total of 12,902 *Laricobius nigrinus (Ln)* and 8,445 *Sasajiscymnus tsugae (St)* were released. The *St* and *Ln* releases included both adult

beetles and eggs. Many of the GFC release areas represent excellent potential for field insectary sites and will continue to be a major focus in FY23.

The Georgia Forestry Commission continues to serve in an advisory capacity, working with the Georgia Department of Natural Resources to help survey and protect hemlocks on state lands. This year, the GFC provided chemicals for treatment of hemlocks in Vogel, Fort Mountain and Tallulah Gorge State Parks. On Lula Lake Land Trust properties, the GFC continues to work with staff and a contractor to delineate current and future predator beetle release areas and to coordinate releases with chemical treatment.

The soil injector and soil drench kit loan programs continue to be extremely popular with homeowners. During peak application times, there is a waitlist in several counties for use of the injectors. The total number of injectors available to landowners is now 16 and soil drench kits are available in 10 offices. The GFC public website postings are continuously updated in an effort to relay this information. <u>Hemlock Woolly Adelgid Information</u>.

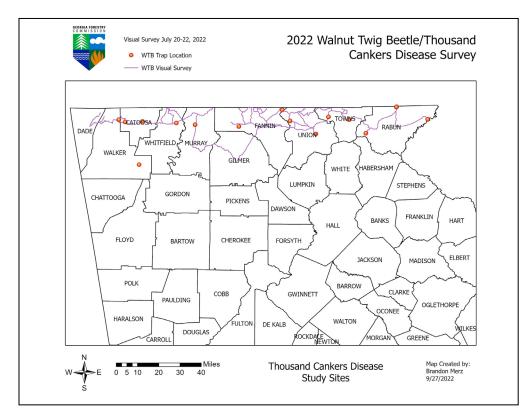


Thousand Cankers Disease:

Since its introduction near Knoxville, TN in 2009, GFC's Forest Health staff has been concerned about the spread of the walnut twig beetle (*Pityophthorus juglandis*) and the associated thousand cankers disease. The Georgia Forestry Commission has been deploying pheromone traps for walnut twig beetle in north Georgia counties since 2012 (except 2018), placing traps in 15 locations in counties bordering Tennessee and North Carolina. Trapping continued in north Georgia in 2022, with 15 traps in this area. To date, no walnut twig beetle has been found in Georgia.

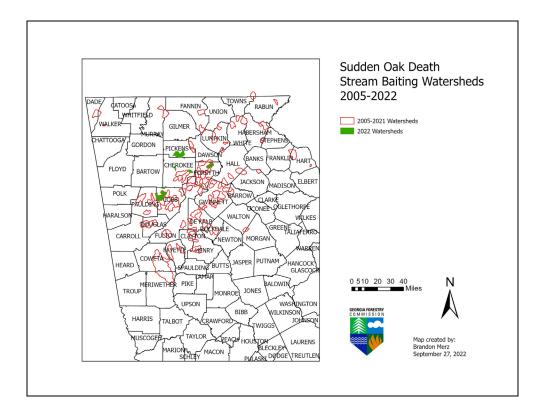
Visual surveys for thousand cankers disease were also conducted on three days in July 2022 on various routes in the northern tier of Georgia counties. The routes were chosen for their abundance of creek and river bottom landscapes with black walnut. Routes total 385 miles, with 2,144 black walnut trees noted

along the routes. Trees showing multiple twig or branch level die-back were inspected more carefully. No suspected TCD was found on these routes.



Sudden Oak Death:

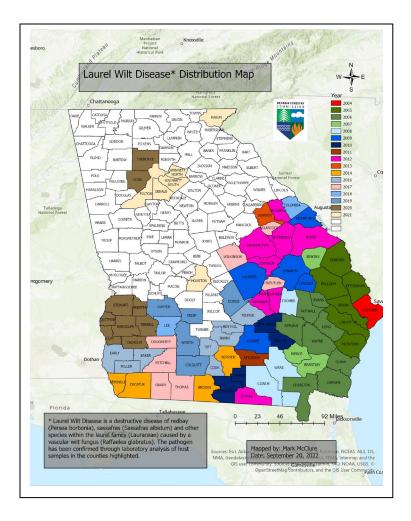
In FY22, the Georgia Forestry Commission continued its early detection surveys for sudden oak death (SOD) for the 18th year. Ten north Georgia watersheds were sampled for the presence of the pathogen *Phytopthora ramorum*. This year, early detection focused on watersheds in the northern and northwest metro Atlanta area suburbs. Watersheds with increases in new development containing both residential and commercial landscaping were chosen. This is the third consecutive year that these 10 watersheds have been sampled. Of these 10 watersheds, two watersheds have produced multiple positive stream samples in previous years. Both of these watersheds have nurseries that had positive plants and soil in the past. There were no positive samples in these two watersheds in FY21, and results are still pending for FY22 sampling.



Laurel Wilt Disease:

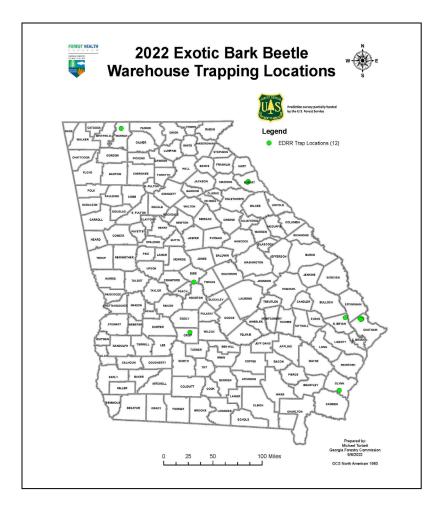
The first redbay ambrosia beetle identified in the U.S. was collected in an Early Detection Rapid Response monitoring trap in Garden City, GA in 2002. The associated laurel wilt disease (LWD) was evident in dead redbay trees near the coast in GA and SC by 2004. The spread of laurel wilt disease throughout the southeastern United States has been charted since 2005, with updates made quarterly to the USDA Forest Service Southern Region website under Forest and Grassland Health (Spot Lights).

As of September 2022, LWD had been confirmed in 79 counties in Georgia. Forest Health staff continued to survey counties along the advancing front in Georgia during the summer of 2021. Laurel Wilt was not detected in any new counties in 2022. Additional information on LWD can be found at the Georgia Forestry Commission home page: Laurel Wilt Disease Information.



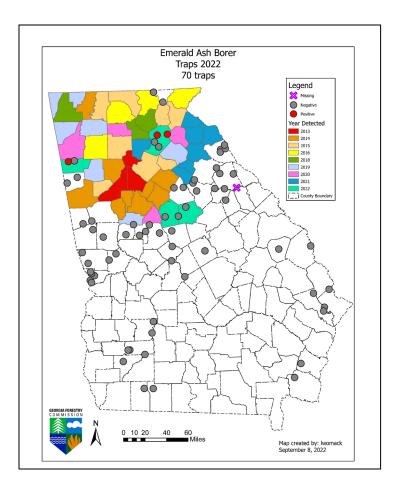
Early Detection Rapid Response:

In FY22, the Georgia Forestry Commission performed early detection insect trapping around facilities accepting international cargo with solid wood packing material (SWPM). During the annual warehouse survey, 12 sites were selected across the state to establish a total of 48 Early Detection Rapid Response (EDRR) traps. These 12 sites were scattered in six Georgia locations, including the areas of Macon, Cordele, Elberton, Savannah, Crandall and Brunswick, for the detection of nonnative exotic bark and ambrosia beetles. In 2022, 82 warehouse visits were conducted across the state. There were no new suspect pests collected in 2022.



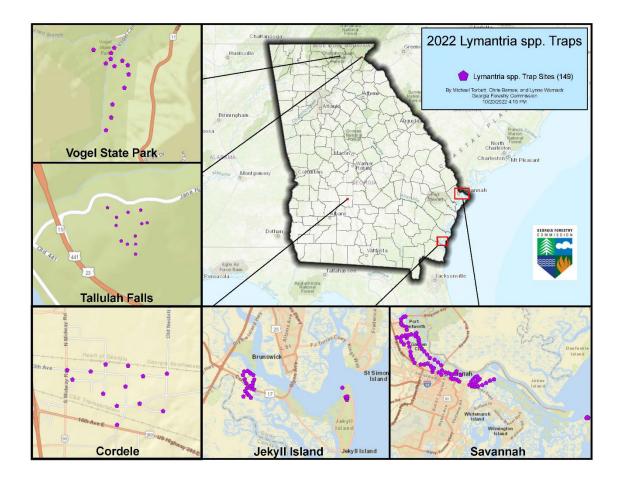
Emerald Ash Borer:

Emerald ash borer (EAB) was first discovered in Georgia in DeKalb and Fulton Counties in July 2013 and has been detected in new counties every year since (except for 2017), In 2022, two new positive EAB identifications in Hall and Polk Counties were found in purple prism traps and two new positive EAB identifications were found in Jasper and Putnam Counties from a sample collected from bark. This brings the total number of EAB positive counties in Georgia to 48.



Lymantria spp. (formerly known as Gypsy Moth) Survey:

In FY22, a total of 146 *Lymantria spp*. traps were placed in high-risk areas across the state. With the continuous threat of *Lymantria spp*. coming in through the Port of Savannah, 76 traps were installed around the outside of the port in May 2022. In addition to trapping in the Savannah area, the Forest Health team also established 26 traps for *Lymantria spp*. inside the Port of Brunswick and on Jekyll Island. Another 32 traps were installed at key campgrounds in north Georgia and Tybee Island to catch possible "hitch hikers" coming from other states. Twelve additional traps were installed at the intermodal yard in Cordele, which receives containers from the port in Savannah. Forest Health staff monitored these traps every three weeks until the beginning of October 2022. There were two *Lymantria dispar* caught (one at the campground on Jekyll Island and one in Savannah) and no *Lymantria dispar asiatica* were detected in 2022.



Asian Longhorned Beetle:

Asian longhorned beetle has not yet been identified in Georgia. Upon its identification in South Carolina in May 2020, a Georgia Longhorned Beetle Working Group was formed. This group has members from Georgia Forestry Commission, Georgia Department of Agriculture, University of Georgia, Georgia Ports Authority and U.S. Customs and Border Patrol. Each agency will play a critical role in education, identification, and eradication when Asian longhorned beetle reaches Georgia. The group meets quarterly and has produced outreach materials including lookalike documents and a powerpoint presentation. In September of 2021, the materials were updated and presented to UGA Extension agents to inform them about the identification of ALB and who to contact if a suspected ALB is found in GA. The brochures and powerpoint presentation can be found here: https://www.invasive.org/browse/subinfo.cfm?sub=2178.

Storm Damage:

In FY22, there was one storm events in Georgia large enough to have timber damage. This storm included multiple tornadoes on April 5 in Brooks, Bryan, Dooly, Early, Houston, Macon, Taylor, and Twigs Counties. In total, this storm caused damage on 2,007 acres for an estimated total of \$1,830,333 in timber damage.