



Georgia Forestry Commission Forest Health Highlights

October 1, 2020 - September 30, 2021

Lynne Womack – Forest Health Coordinator

Chris Barnes, Mark McClure, Brandon Merz – Forest Health Specialists

Summary:

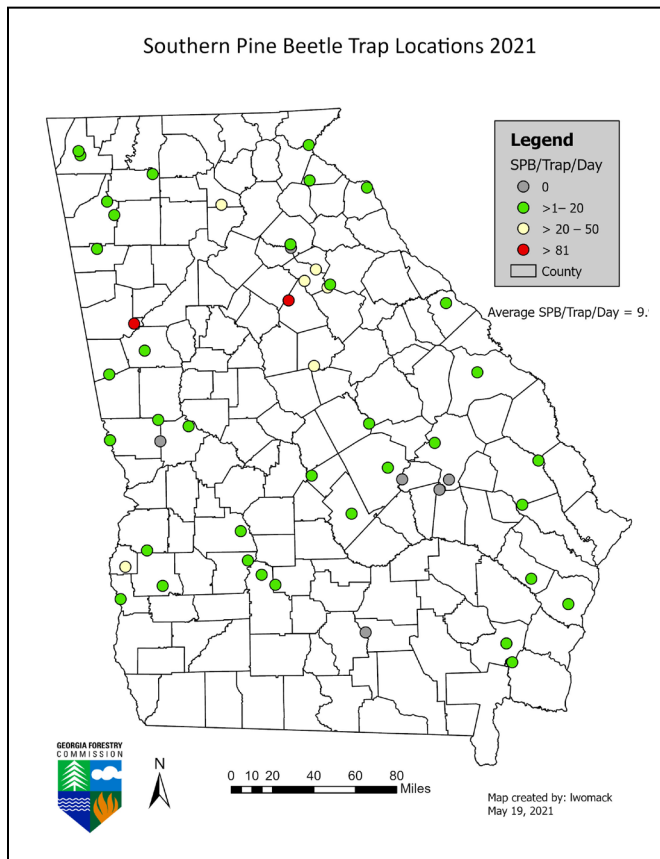
Georgia is one of the top forestry states in the U.S, with an estimated 24.5 million acres of forestland (approximately 64% of the state) and 91% of that privately owned. Only about 10% of Georgia’s commercially available timber resources are under federal and state ownership. Georgia leads all other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

With Covid-19 restrictions in place, 2021 continued to be a challenging year. We had limited in-person meetings and interactions with landowners, yet we moved forward and completed numerous projects. Using suggested social distancing protocols, modifying landowner interactions with virtual meetings and remote field visits, and limited and distanced landowner meetings allowed for safe forest health interactions. We also worked with new leadership at both state and program levels.

Georgia Forestry Commission foresters incorporated insect, disease, and invasive species advice in 269 management cases involving 15,160 acres. Training was provided to 1,169 Georgia citizens during 17 training sessions. Our forest health personnel incorporated a wide variety of outreach methods to continue serving the landowners in Georgia.

Pine Beetle Pheromone Trapping:

In 2021, the Georgia Forestry Commission followed the USFS's SPB Prediction Trapping protocol, with the three lure system: Frontalin, Sirex and the endo-brevicommin flexlure. Fifty-one traps were placed across the state in 43 counties and six weekly samples were collected from each trap. The results from the 2021 survey predicted that overall SPB activity would be low across the state. Carroll County had the highest probability of having any spots, at 57%. Heard, Morgan, and Oconee Counties had the next highest probability of having any SPB spots, at approximately 38%. The remaining 39 counties with traps had a less than 25% 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.

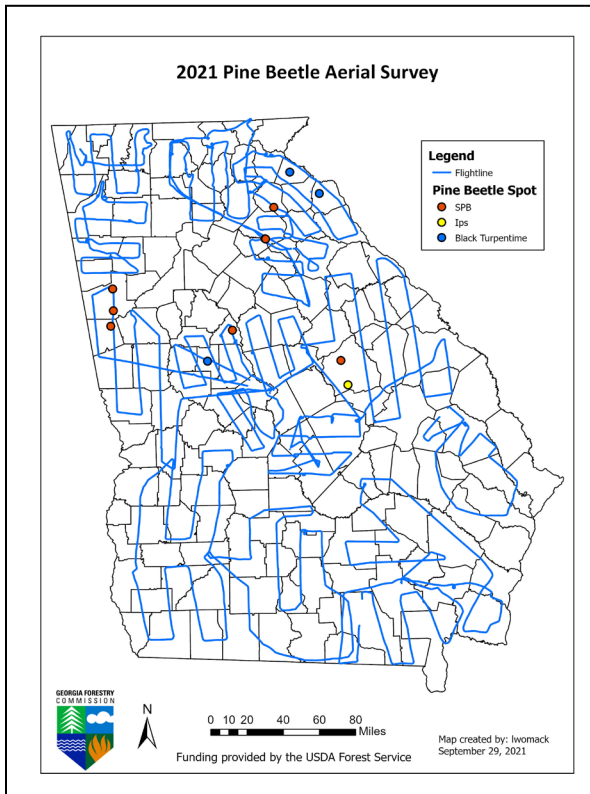


Pine Beetle Aerial Survey:

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 one-mile visibility on each side of the plane, FY21 survey flights provided visual observations on approximately 5,642,816 acres. From these surveys and landowner reports, eight SPB spots were detected on approximately 58 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 three Black Turpentine Beetle (BTB) spots on approximately three acres, while reporting only one Ips engraver beetle spot on less than one acre. The map below shows the pine beetle spots and flight lines in Georgia for 2021. 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 (2003-2021):

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 million, \$7.9 million has been allocated directly to landowner payments under cost share practices treating approximately 340,505 acres. SPB cost share funds for 2021 were used for southern pine beetle prevention and restoration practices.

During 2021, GFC foresters serviced 349 contracts covering 26,819 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:

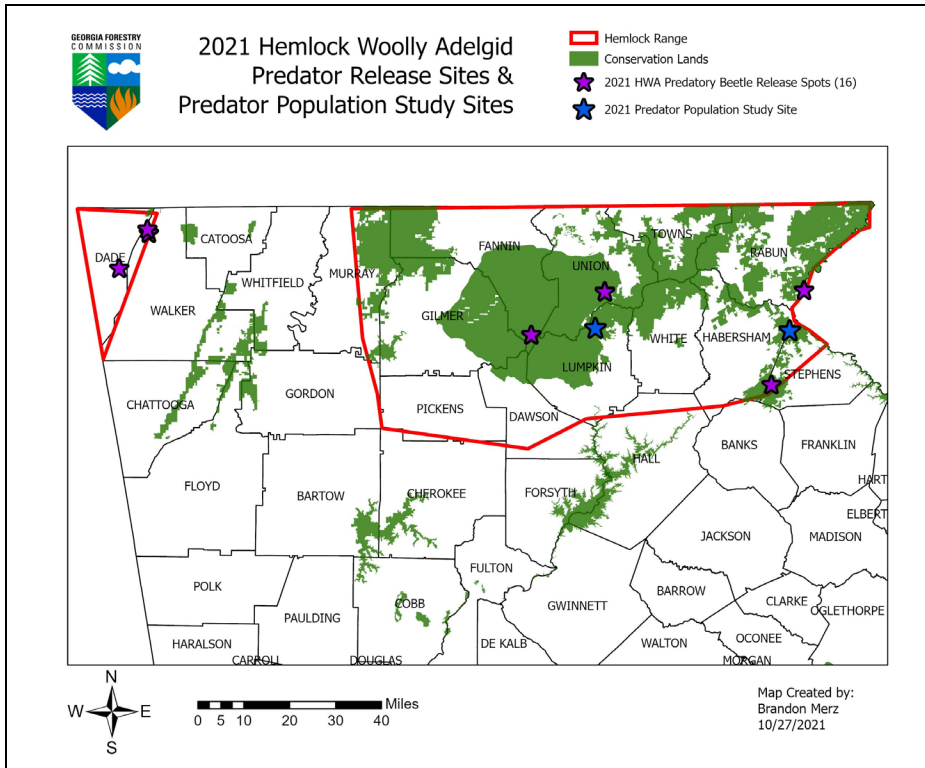
The Georgia Forestry Commission provided assistance to the predator beetle rearing labs at the University of Georgia, University of North Georgia and Young Harris College. Activities included scouting for and collecting foliage for rearing, surveying and preparing beetle release locations, and

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 FY21, GFC scouted nine potential sites. Six predator beetle release areas were selected, eight in the Chattahoochee National Forest and one on a private land trust. The GFC conducted 16 predator beetle releases on these sites, with additional releases done by the University of North Georgia. A total of 1,992 *Laricobius nigrinus* (*Ln*) and 4,692 *Sasajiscymnus tsugae* (*St*) were released. All of the *St* releases were adult beetles, and the *Ln* releases included both adult beetles and eggs. All of the GFC release areas represent excellent potential for field insectary sites. Predator population studies will be a major part of this program moving forward. In 2021, two sites were selected for recovery research. On all sites, it had been two years or more since beetle releases were made, and each site had two or three species of predator beetles released over the last decade: *Sasajiscymnus tsugae*, *Laricobius nigrinus* and *Scymnus coniferarum* (*Scw*).

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 Cloudland Canyon 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.

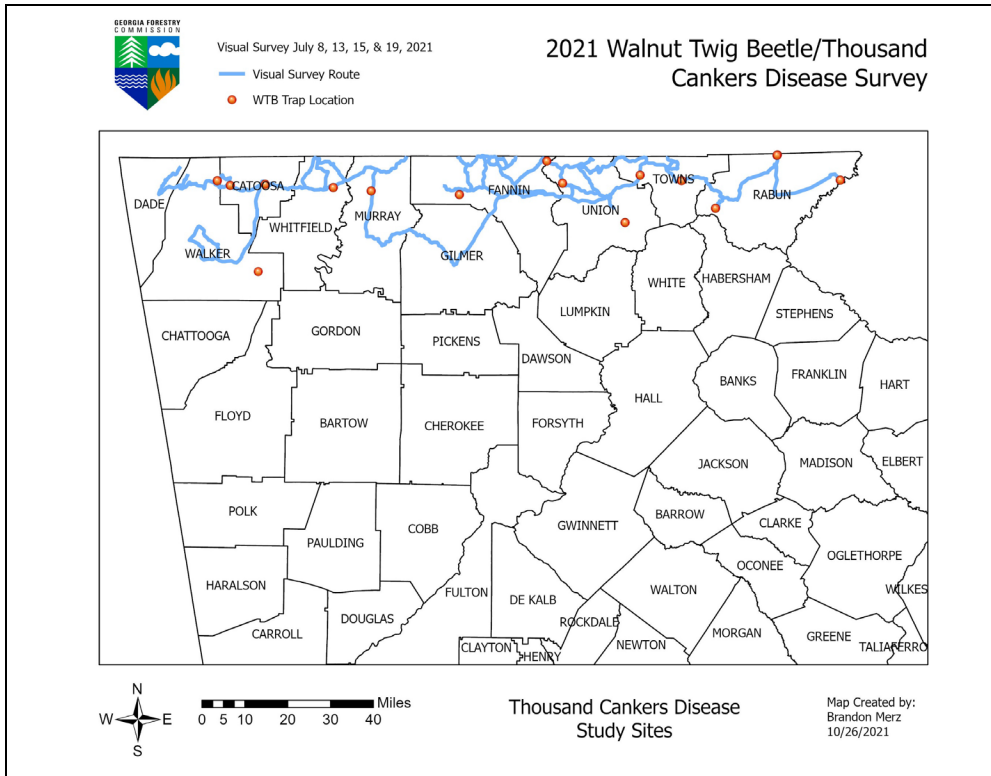
The soil injector and soil drench kit loan programs continue to be extremely popular with homeowners. During peak application times, there is a waitlist in several counties for use of the injectors. The total number of injectors available to landowners is now 16 and soil drench kits are available in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



Thousand Cankers Disease:

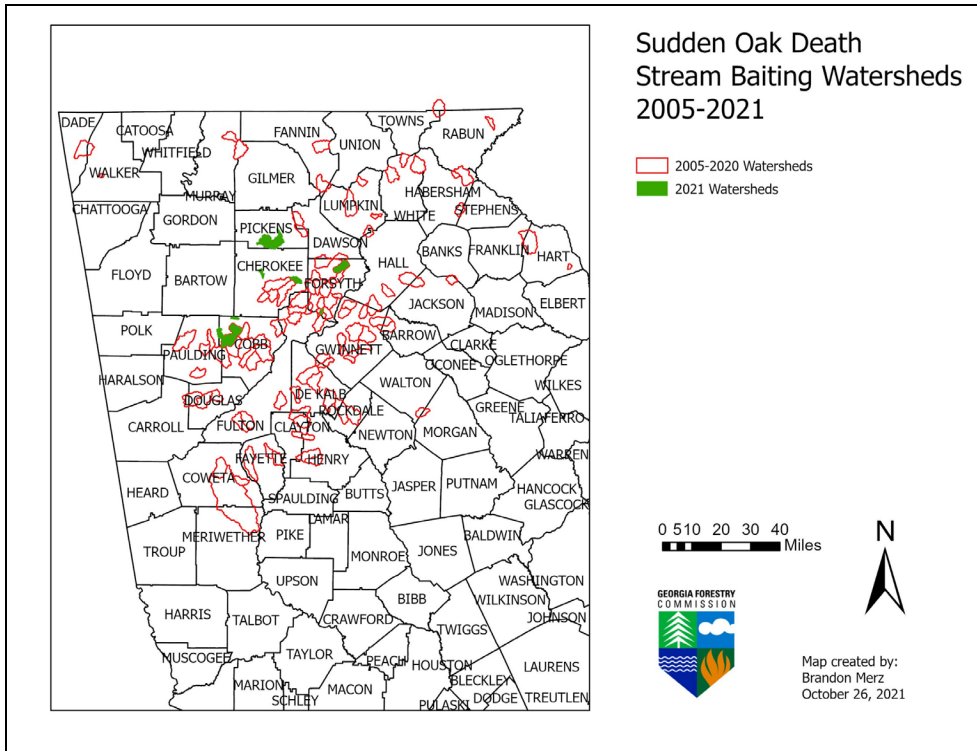
Since its introduction near Knoxville, TN in 2009, GFC’s Forest Health staff has been concerned about the spread of the walnut twig beetle (*Pityophthorus juglandis*) and the associated thousand cankers disease. The Georgia Forestry Commission has been deploying pheromone traps for walnut twig beetle 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 2021, 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 four days in July 2021 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 426 miles, with 2,331 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:

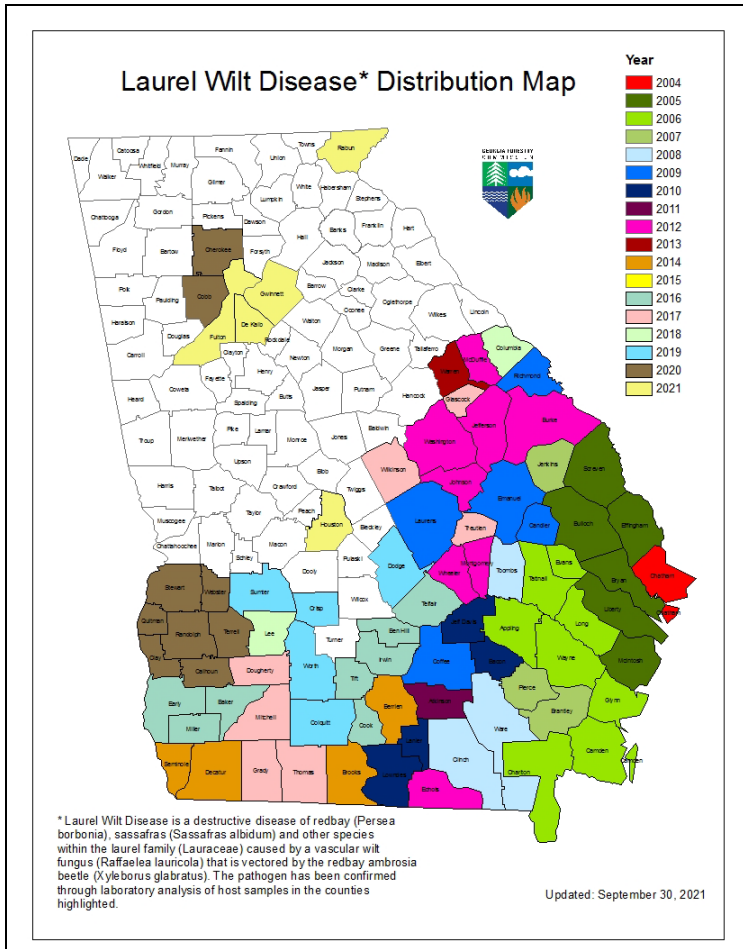
In FY21, the Georgia Forestry Commission continued its early detection surveys for sudden oak death (SOD) for the 17th year. Ten north Georgia watersheds were sampled for the presence of the pathogen *Phytophthora ramorum*. This year, early detection focused on watersheds in the northern and northwest metro Atlanta area suburbs. Watersheds with increases in new development containing both residential and commercial landscaping were chosen. This is the second 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 FY20, and results are still pending for FY21 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 2021, 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. New positive LWD detections were made in sassafras in five counties, including DeKalb, Fulton, Gwinnett, Houston and Rabun. Additional information on LWD can be found at the Georgia Forestry Commission home page: [Laurel Wilt Disease Information](#).



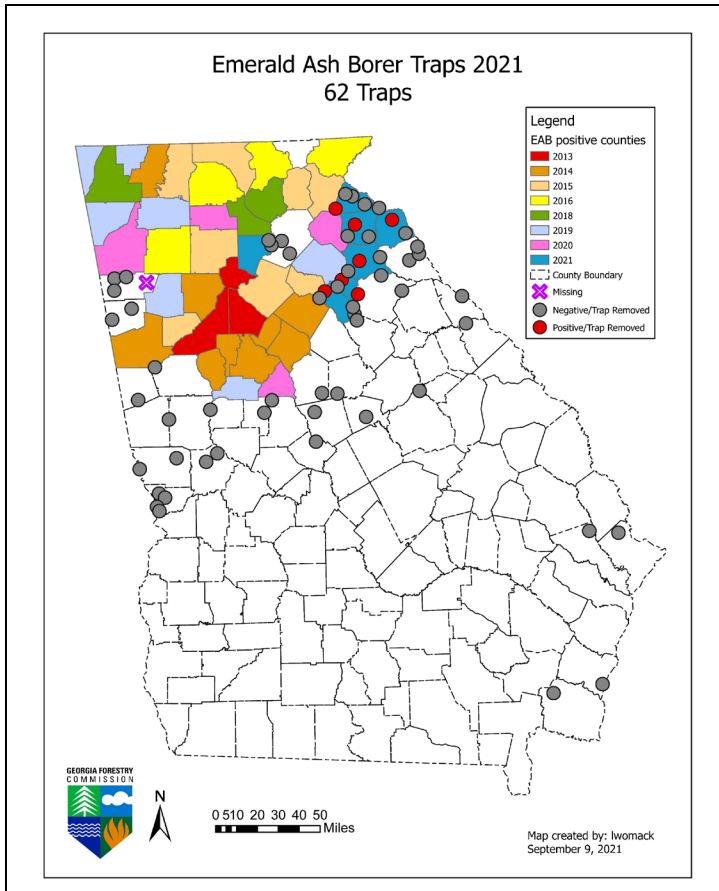
Early Detection Rapid Response:

In FY21, 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 2021, 89 warehouse visits were conducted across the state. There were no new suspect pests collected in 2021.



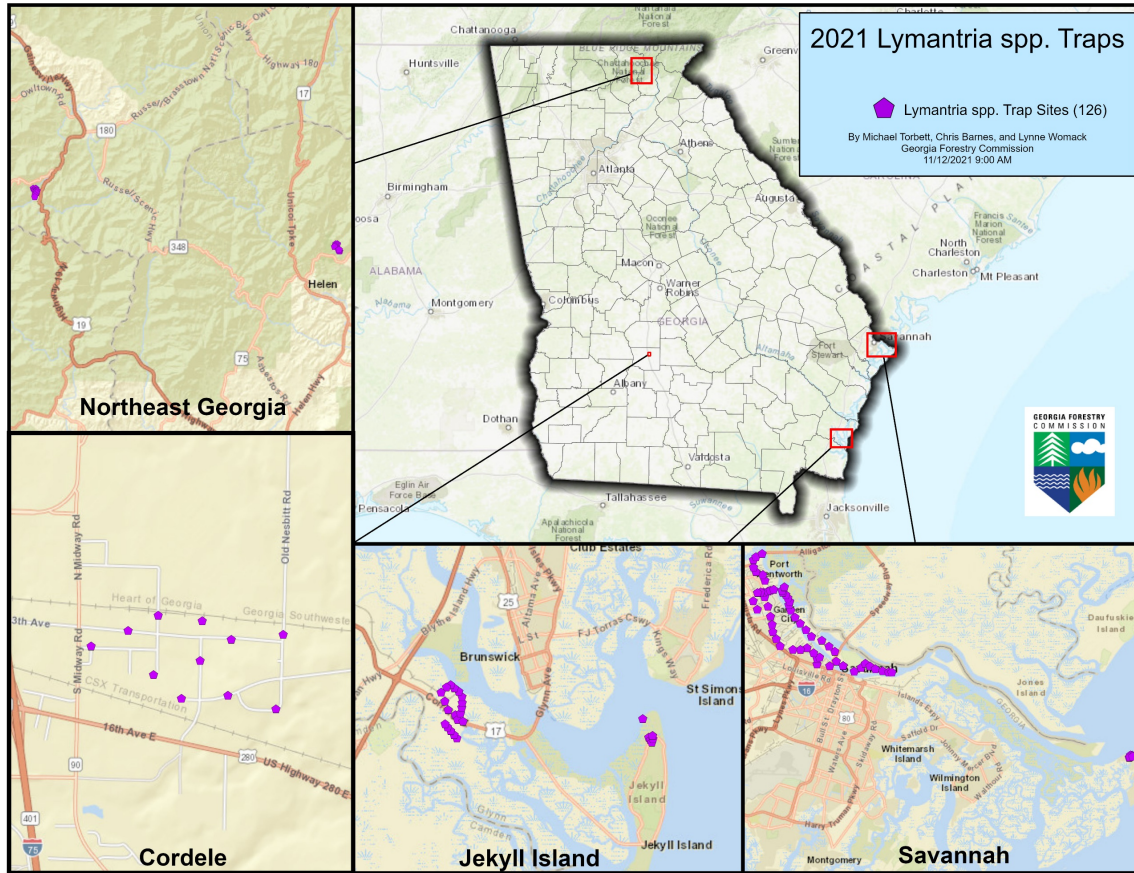
Emerald Ash Borer:

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 2021, six new positive EAB identifications in Clarke, Franklin, Hart, Madison, Oconee and Stephens Counties were found in purple prism traps and one new positive EAB identification was found in Forsyth County from a sample collected from bark. This brings the total number of EAB positive counties in Georgia to 44.



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

In FY21, a total of 126 *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, 55 traps were installed around the outside of the port in May 2021. In addition to trapping in the Savannah area, the Forest Health team also established 31 traps for *Lymantria spp.* inside the Port of Brunswick and on Jekyll Island. Another 30 traps were installed at key campgrounds in north Georgia and Tybee Island to catch possible “hitch hikers” coming from other states. Eleven 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 2021. There was one *Lymantria dispar* caught at the campground on Jekyll Island and no *Lymantria dispar asiatica* were detected in 2021.



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 FY 21, there were three storm events in Georgia large enough to have timber damage. Storms included an EF2 on February 15 in Early County, and EF 4 in Heard and Coweta Counties on March 25, and EF2 on April 24 in Early County. In total, these storms caused damage on 4,915 acres for an estimated total of \$2,945,464 in damage.