

# Tennessee Forest Health Highlights 2015

Emerald ash borer: USDA-APHIS, Tennessee Department of Agriculture, and UT Extension deployed an estimated 1,153 traps statewide this spring. No regulatory traps were deployed in quarantined counties. Eight new counties have been quarantined due to detection of EAB this year: Bledsoe, Cumberland, Trousdale, Franklin, Williamson, Rutherford, Wilson, and Marshall Counties. Public information meetings were conducted in each county that came under quarantine.



## Tennessee Emerald Ash Borer Quarantine



 Emerald Ash Borer Quarantined Areas

In Tennessee, EAB quarantines exist for 47 counties. They include **Anderson, Bledsoe, Bradley, Campbell, Carter, Claiborne, Clay, Cocke, Cumberland, Davidson, Blount, Fentress, Franklin, Grainger, Greene, Hamblen, Hamilton, Hancock, Hawkins, Jackson, Jefferson, Johnson, Knox, Loudon, Macon, Marshall, McMinn, Meigs, Monroe, Morgan, Overton, Pickett, Polk, Putnam, Rhea, Roane, Sevier, Smith, Sullivan, Trousdale, Unicoi, Union, Washington, Williamson and Wilson Counties.**

The following are regulated articles:

- (a) Emerald Ash Borer; firewood of all hardwood (non-coniferous) species; nursery stock, green lumber, and other material living, dead, cut, or fallen, including logs, stumps, roots, branches, mulch and composted and uncomposted chips of the genus *Fraxinus*.
- (b) Any other article, product, or means of conveyance not listed in paragraph (a) of this section may be designated as a regulated article if the Commissioner determines that it presents a risk of spreading Emerald Ash Borer and notifies the person in possession of the article, product, or means of conveyance that it is subject to these regulations.

Oct. 6, 2015

<http://www.tn.gov/agriculture/topic/ag-businesses-eab>

TDF Forest Health Unit is working with University of Tennessee and the Army Corps of Engineers in Smith County to release three species of parasitoid wasps that prey on EAB. During this first year, TDF personnel released 47,111 wasps in 21 release events at this site; which is one of several areas throughout the infested zone of TN where EAB parasitoids are being released. Recovery operations will be conducted and monitoring traps will be installed each year to test the efficacy of the release and the success of the predation. TDF is actively looking for more appropriate release sites.

Southern pine beetle & other bark beetles: No SPBs were detected in the 8 monitoring traps deployed by TDF personnel April 2015 in Chester, Wayne, Marion, and Rhea Counties. There are 9 isolated spots in and around the Great Smoky Mountains NP that have been verified as active SPB infestations. USFS and park personnel are working to manage infestations within their respective areas. TDF personnel delimited any infestations on private lands in the area. Aerial surveillance operations conducted in August identified less than 10 spots that needed further investigation. SPB populations are on the rise but not major outbreaks have been detected.

Hemlock woolly adelgid: TDF was awarded a USFS grant to establish a hemlock woolly adelgid strike team. This team will chemically treat HWA on public lands, provide support to the HWA predator beetle program, and facilitate events sponsored by the Tennessee Hemlock Conservation Partnership. This grant was awarded in cooperation with the Kentucky Division of Forestry, Forest Health Unit to treat and manage HWA on a regional scale. The Team was put in place in late October and has so far treated 30 acres on state property, installed one field insectary, and facilitated one private landowner HWA workshop.

Gypsy moth: TDA, USFS, and ORNL installed 7,267 gypsy moth traps statewide this year. 34 gypsy moths were captured in 15 counties. Even though this number is up from 2014 captures, there are no active infestations of gypsy moths in Tennessee. Each location where a moth was captured will be intensively trapped in 2016 to ensure no breeding populations are present.

Thousand Cankers Disease: 191 walnut twig beetles were trapped this year. The greatest numbers of beetles were found in Rhea County near Spring City, TN at 139 beetles. No new counties were added to the quarantine this year.

Weather Related Events: In February, an ice storm damage thousands of acres of forest land nearly 20 counties scattered across the state. Aerial surveillance operations were conducted in March and mapped a variety of damage across a total of 251,241 acres. Damage was mostly noted in Loudon, Morgan, Roane, Scott, Cumberland, Fentress, Overton, Putnam, and White Counties and included crown damage, branch breakage, and uprooting.

#### Forest Health Trends:

- Pine sawfly populations were high this spring and defoliation was reported statewide. Repeated years of defoliation can cause severe stress to a pine stand. Sawflies have been active in TN for the past three years so it is important to monitor pine forests for symptoms of stress.
- Brood XXIII (23) of the Periodical Cicadas made their 13 year presence known across west TN this spring. No forest damage was observed.

- In late May, TDF personnel received a call from a veteran's cemetery grounds manager in Johnson City who reported major defoliation of several pin oaks around the cemetery. TDF Area Forester Neal White contacted Urban Forester Tom Simpson and Forest Health Unit Leader Heather Slayton for technical assistance. Plant pathologists from the USFS were also notified as the symptoms closely resembled **oak wilt**. Oak wilt is caused by a fungus (*Ceratocystis fagacearum*) and kills all species of oak. It has been present in TN for several decades but has not been observed on a large scale since the early 1980s. TDF and USFS personnel conducted a site visit to the cemetery on June 10. Thankfully these trees were suffering from an over application of herbicide and were not positive for oak wilt.
- Fall webworm populations increased this year. This insect generally does not cause any damage to the tree although the public reported it as aesthetically displeasing.
- The wet spring and wet summer has created a favorable environment for many leaf diseases this year. The leaves generally are infected in the spring with the most obvious symptoms (defoliation, browning leaves, leaf curl) displaying in August. Widespread infection has been observed in higher elevations but is not thought to cause any long term damage to the forest.

Outreach & Education: This spring, the Great Smoky Mountains National Park announced a ban on all firewood from entering the park that does not bear a certification seal from the USDA or a state agency as heat treated firewood. Soon after the announcement, TDF spearheaded the development of a State Lands Firewood Policy committee to discuss state owned property firewood policies. This committee is comprised of representatives from TDA, TDF, TDEC, TWRA, USDA-APHIS, and The Nature Conservancy (TNC). The proposal currently on the table is to enforce a similar firewood policy as the GSMNP on our state lands. In order to properly vet a change in current firewood policies (which are not consistent across state land ownership or location), TNC funded a summer intern to collect pertinent data that helped this committee understand the firewood situation 'on the ground' as well as visitor behavior and experience. The target date to complete the vetting process and (hopefully) have a new firewood policy in place is January 2016.

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