



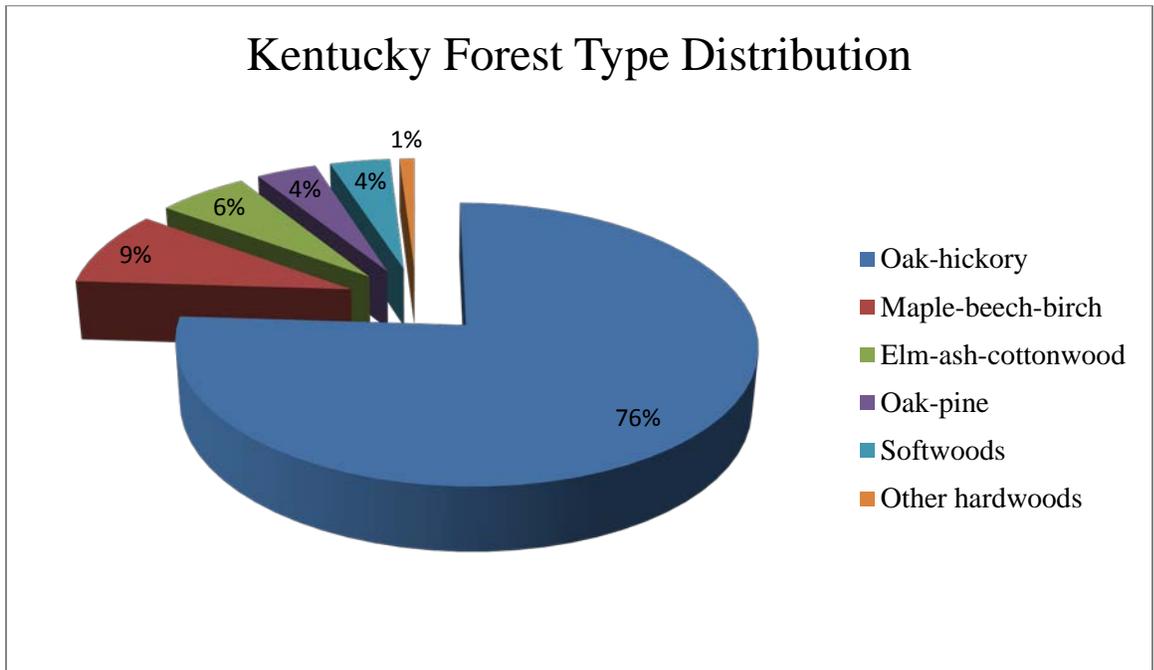
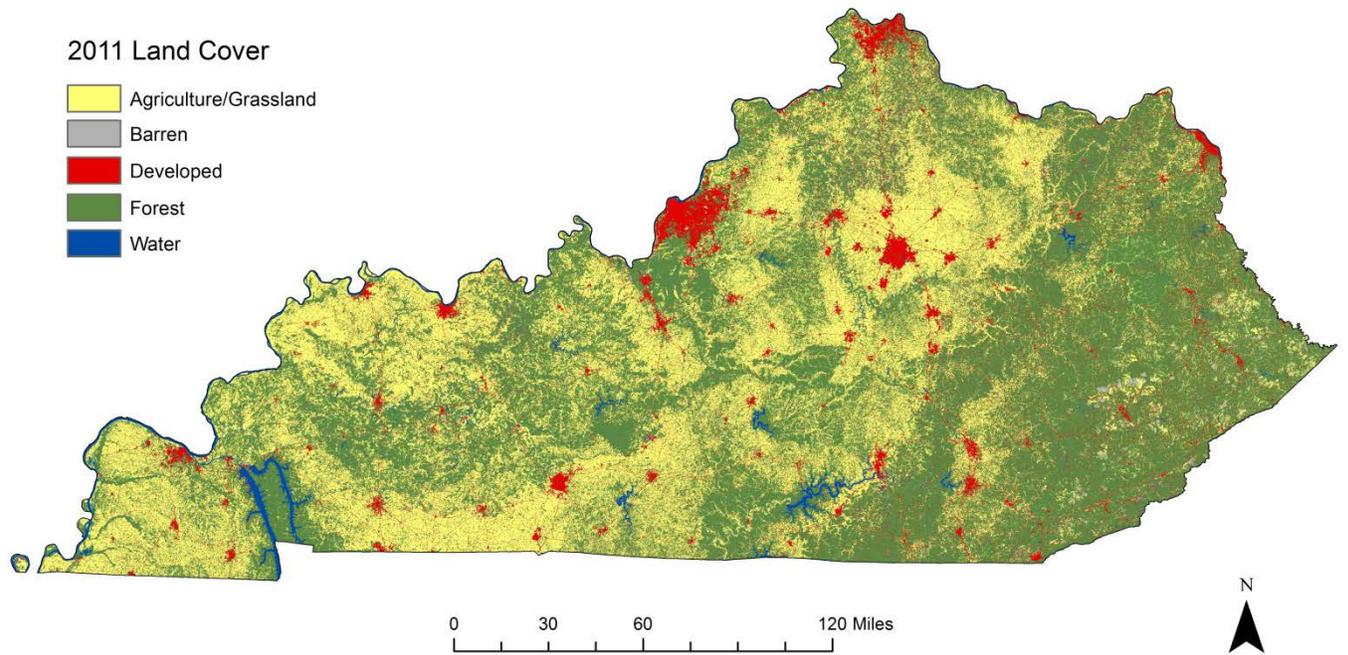
# Kentucky

## Forest Health Highlights 2015



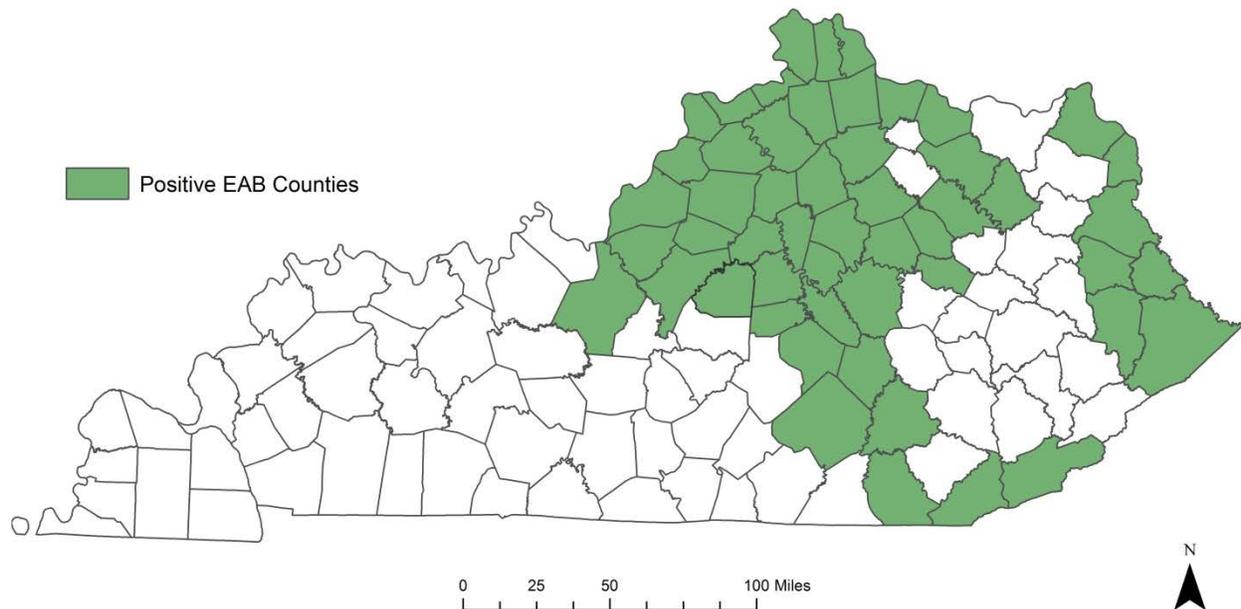
### The Resource

Kentucky's forests cover an estimated 12.4 million acres, nearly 49% of the state's land area. The Cumberland Plateau and the Appalachians in the eastern part of the state represent the most heavily forested areas, with forests covering more than 80% of the land area in many of these counties. The majority of the state's forested land (88.5%) is privately owned. Kentucky's forests are prized for their scenic beauty, supporting tourism and outdoor recreation and providing wildlife habitat from the Appalachian Mountains in the east to the Mississippi Valley in the west. The predominant forest type in Kentucky is oak-hickory, covering nearly 9.5 million acres (76% of the forested land). The most common species based on number of trees across all forest land is red maple, followed by sugar maple and yellow-poplar.



## Emerald Ash Borer

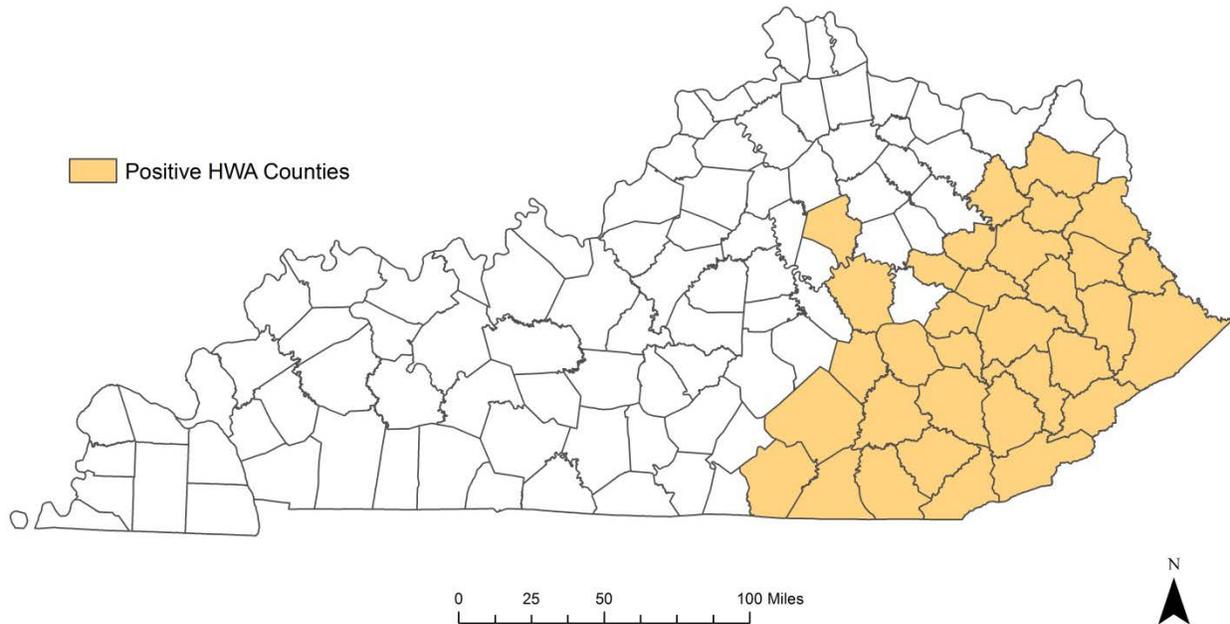
Infestations of the emerald ash borer (EAB) were first confirmed in Kentucky in 2009. An EAB quarantine of 20 counties located in the region between Louisville, Lexington, and northern Kentucky was initially established. In the following years, additional EAB infestations were found in nearby counties and the state quarantine was expanded. In April of 2014, the county quarantine system was rescinded and the entire state was added to the Animal and Plant Health Inspection Service (APHIS) list of regulated areas. Currently, EAB has been confirmed in 52 Kentucky counties. New confirmed counties for 2015 include: Bullitt, Clark, Floyd, Harlan, Lincoln, Madison, Martin, Mercer, Montgomery, Nelson, Spencer and Washington. The University of Kentucky Department of Entomology continues to partner with the USDA to release EAB parasitoid wasps. Three species of stingless wasps have been released since 2010, *Spathius agrilli*, *Tetrastichus planipennis* and *Oobius agrili*.



## Hemlock Woolly Adelgid

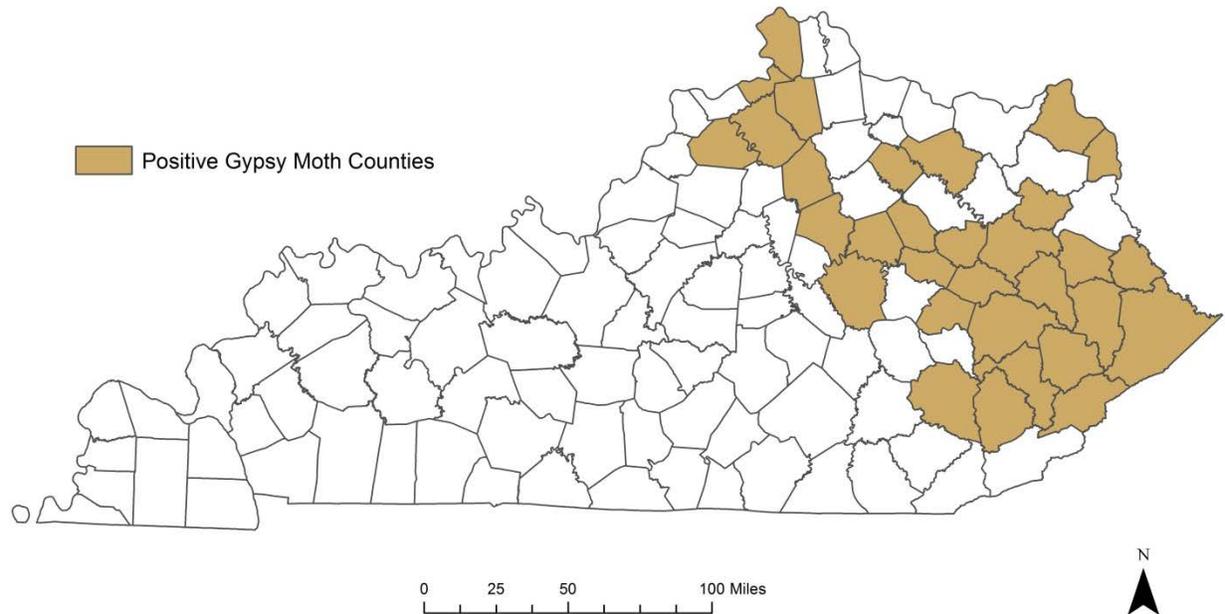
Hemlock woolly adelgid (HWA) was first discovered in Kentucky in 2006. Approximately 98% of Kentucky's hemlocks are found in the eastern one-third of the state. In this region, infestations currently occur in 33 counties. The counties include Bell, Breathitt, Carter, Clay, Elliott, Fayette, Floyd, Harlan, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Madison, Magoffin, Martin, McCreary, Menifee, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Rowan, Wayne, Whitley and Wolfe.

Kentucky Division of Forestry (KDF) has a three person treatment crew responsible for treating hemlocks across various ownership boundaries including private, non-profit, state and federal lands. KDF has treated hemlocks in HWA-priority areas on land including Kentucky State Park property (Carter Caves State Resort Park, Natural Bridge State Resort Park and Cumberland Falls State Resort Park), Daniel Boone National Forest districts, Nature Preserve Commission property (Bad Branch Falls and Blanton Forest) and Eastern Kentucky University property (Lilley Cornett Woods). In 2015, KDF chemically treated over 23,000 hemlocks.



## Gypsy moth

Kentucky's Office of the State Entomologist trapped for gypsy moth through USDA APHIS and Slow the Spread programs. Traps were placed in 94 counties across the state. 31 counties had positive traps, resulting in 171 moths captured. These numbers represent a large increase from 2014 where only three moths total were captured from three counties.



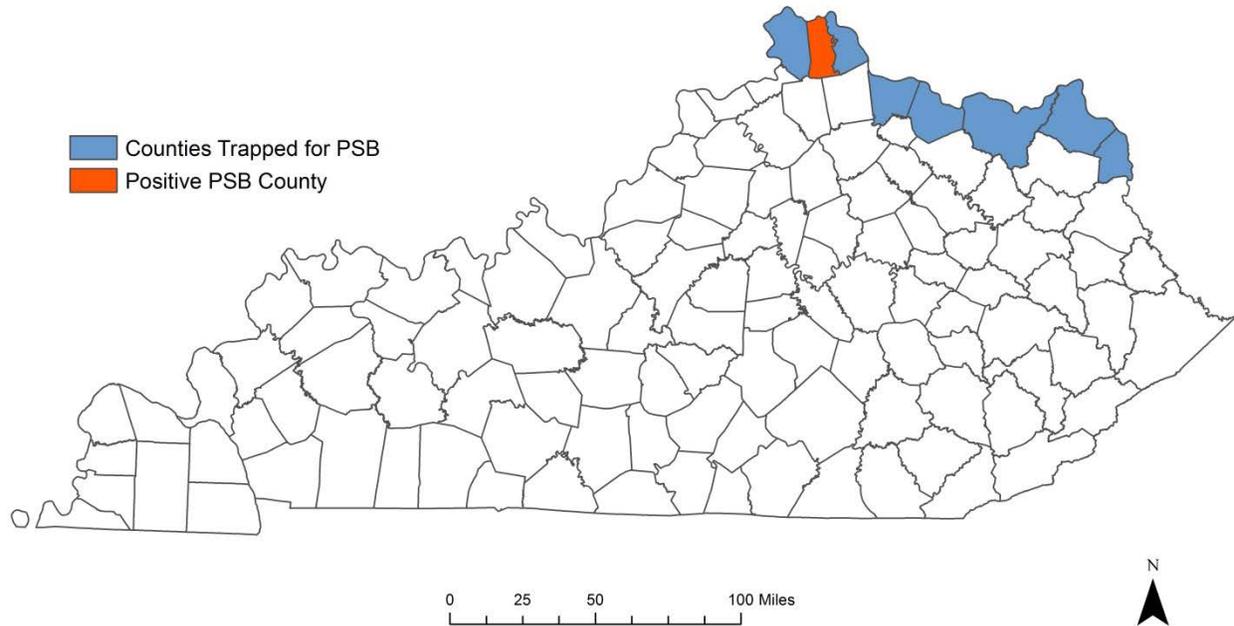
## Thousand Cankers Disease and the Walnut Twig Beetle

KDF along with Kentucky's Office of the State Entomologist placed funnel traps in 19 counties across the state to trap for the walnut twig beetle associated with thousand cankers disease (TCD). Kentucky is a neighbor to four states that have confirmed TCD infestations (Indiana, Ohio, Tennessee and Virginia), but to date it has not been found in Kentucky. Trapping for the walnut twig beetle will continue in 2016.



## Pine Shoot Beetle

Both larvae and adults of the pine shoot beetle (PSB) are damaging to a wide variety of pines. PSB, native to Europe, has spread through much of the northeastern United States, including neighboring states of Illinois, Indiana, Ohio and West Virginia. Kentucky's Office of the State Entomologist has surveyed parts of the state for this beetle for a number of years. In 2015, 29 traps were set in eight counties. This year for the first time, the pine shoot beetle was confirmed in Kentucky, as two beetles were found in Kenton County.



## Asian Longhorned Beetle

Asian longhorned beetle (ALB) has not been found in Kentucky. However, ALB was discovered in 2011 in Clermont County, Ohio, only 10 miles from the Kentucky border. KDF works with various agencies to educate the public on ALB identification and signs of infestation. Select urban areas of northern Kentucky will be surveyed for ALB in 2016.



## Sudden Oak Death

Kentucky's Office of the State Entomologist conducted foliar surveys for sudden oak death (SOD) in 30 nurseries and collected water baiting samples from nine of those nurseries. Counties with nurseries surveyed include: Boone, Boyle, Campbell, Carter, Christian, Clark, Fayette, Gallatin, Grayson, Greenup, Hardin, Henry, Jefferson, Jessamine, Kenton, Laurel, McCracken, Nelson, Oldham, Scott, and Warren. None of the samples tested positive for SOD.

## Yellow-Poplar Weevil

Kentucky experienced part of the region wide outbreak of yellow-poplar weevil, damaging many yellow-poplar trees in the eastern region of the state. Generally this native insect is considered a minor pest but the weevil was reported at higher than normal levels in states such as North Carolina, Tennessee, Maryland, West Virginia and Pennsylvania. The most recent outbreak of yellow-poplar weevil at a similar scale was reported in 1971.

## Weather

Winter temperatures approached all-time historical lows for many parts of Kentucky. Specifically, the month of February was 11.4 degrees colder than average for the state. In March, Kentucky experienced unusual amounts of snow, with some regions of the state recording over 20 inches from a single weather event. Many landscape trees and shrubs showed effects from this extreme winter period in spring and throughout the growing season.

Kentucky also experienced a wetter than average spring. Anthracnose infections were found on a large variety of hardwood species due in part to this increase in precipitation. Instances of oak anthracnose, fire blight and verticilium wilt on landscape trees appeared to be especially high.

### References:

- [Kentucky's Office of the State Entomologist](#) provided data from their gypsy moth, pine shoot beetle, thousand cankers disease, and sudden oak death surveys.
- 2011 Land Cover data was obtained from the [National Land Cover Database](#).

## Forest Health Assistance in Kentucky

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Asheville, North Carolina 28804  
828-257-4320  
<http://www.fs.fed.us/r8/foresthealth/>