

Kentucky



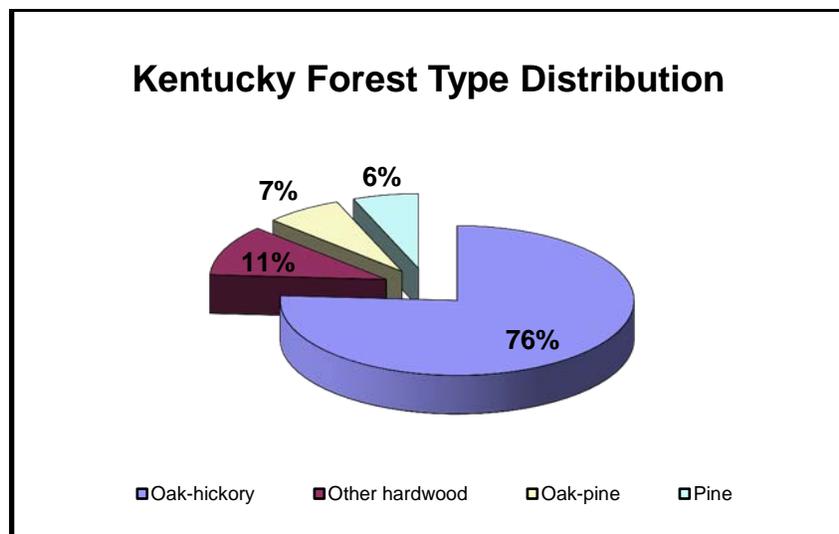
Forest Health Highlights

2012

The Resource



Kentucky's forests cover more than 12.6 million acres, almost half of the state's land area. The majority of the state's forested land, some 11.2 million acres, is in non-industrial private ownership, while approximately 699,000 acres are in national forest. Forestry is an important industry in Kentucky, providing 29,400 jobs and producing \$468 million in annual revenue. Kentucky's forests are also 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. Major forest types in the state include oak-hickory, pine, and mixed oak-pine. Other hardwoods comprise 11% of the state's forests.



Forest Influences and Programs

Emerald Ash Borer (EAB): The emerald ash borer has been confirmed in 21 Kentucky counties. These counties are Anderson, Boone, Boyd, Boyle, Bracken, Campbell, Fayette, Franklin, Garrard, Greenup, Hardin, Henry, Jefferson, Jessamine, Kenton, Oldham, Owen, Pike, Shelby, Scott, and Woodford. All states surrounding Kentucky, with Tennessee being the most recent, have some level of EAB infestation. The north central region of Kentucky and two disjunct counties in the northeastern part of the state are under quarantine. The state continues to have a regional quarantine. More information can be found at <http://pest.ca.uky.edu/EXT/EAB/welcome.html>

Additional EAB locations are found in adjacent states within adjacent counties or within two counties of Kentucky on all sides of the state.

The University of Kentucky, Department of Entomology contracts the placement of the EAB traps which are placed statewide. The coordinates of all confirmation sites as well as positive traps are available from the University of Kentucky, Department of Entomology. The state contact is Joe Collins (Joe.Collins@uky.edu).

KDF is working in collaboration with the University of Kentucky, Department of Entomology to increase the number of billboards throughout the state displaying EAB messages. The Dept of Entomology currently has billboards and other advertisements placed for EAB. Additionally, KDF is working with partners in the 3 most populated areas of the state on EAB outreach/treatment projects.

Hemlock Woolly Adelgid (HWA): HWA infestations occur in 22 counties in southeastern Kentucky. The counties include Bell, Breathitt, Clay, Floyd, Harlan, Knott, Knox, Laurel, Lee, Leslie, Letcher, Martin, McCreary, Menifee, Morgan, Owsley, Perry, Pike, Powell, Rowan, Whitley and Wolf.

Infestations occur on private, non-profit, state and federal lands with treatment occurring on each of these property types. The agencies and organizations are TNC, KY Natural Lands Trust, Division of Forestry, Division of Water, Dept of Fish and Wildlife Resources, Nature Preserves Commission, University of Kentucky, Eastern Kentucky University, Cumberland Gap NP, Big South Fork NRR, and the Daniel Boone NF. Bell and Harlan Counties have areas with trees approaching mortality due to HWA.

HWA continues to spread throughout the hemlock range.

There is scattered hemlock decline in some areas but not to a significant degree that would indicate HWA effects. The decline is what would be expected from dry conditions. Overall, hemlocks in many areas still appear healthy. However, infestation levels are quickly increasing, and with added environmental stresses, uniform hemlock decline due to HWA is likely in the very near future.

KDF and the Daniel Boone NF continue to collaborate on treating important hemlock sites on the NF and adjacent state owned and non-profit lands. This partnership occurs through a USFS/Daniel Boone grant that enabled KDF to hire an interim treatment crew who will treat hemlock conservation areas on the NF in select counties. Additionally, treatment can occur on important conservation areas outside of the NF but within the select counties.

KDF provides presentations and training regularly for the public and state personnel. These occur in collaboration with other state agencies, extension offices, public groups and universities.

Gypsy Moth: Gypsy moth continues to remain at bay even though it is found in adjacent states.

Asian Longhorned Beetle (ALB): ALB is not known from Kentucky. It is within 10 miles of the state line in Ohio. Many calls and site visits have occurred due to public concern. Most site visits are made by extension agents in the northernmost counties. The areas in Ohio known to have ALB have been a source of recreational firewood brought to Kentucky parks over the years.

Thousand Cankers Disease (TCD): TCD has not been found in Kentucky. 46 TCD traps were placed in cooperation with The University of Kentucky Dept of Entomology. The traps were monitored July through September with no positive samples. No large scale walnut decline has been noticed or reported.

Other Pests: Jumping oak gall infestations on white oak were significantly heavier than normal. These infestations occurred statewide. This may lead to further white oak decline in affected areas due to the combined effect of droughts and gall induced defoliation.

Diseases: The University of Kentucky Plant Disease Diagnostic Lab reports no unusual occurrence of pathogens. The most noticeable occurrences however were bacterial leaf scorch on oak, fire blight on landscape crabapples and pears, and spider mite injury on many different hosts. Each of these conditions is exacerbated by stressed tree conditions such as drought and reduced root function due to other typical landscape stresses.

Invasive Plants: KDF in collaboration with the KY-EPPC is increasing its invasive plant outreach in the Kentucky. Grant funded projects with Olmsted Conservancy and Jefferson Memorial Forest near Louisville as well as Bernheim Forest to restore infested areas include public outreach about the projects.

Additionally, planning for upcoming 2013 Bioblitzes (rapid bioinventories) that include large scale public involvement will include invasive plant inventory and education teams.

Drought: Dry conditions during the summer further stressed trees throughout Kentucky. Decline of mature maples and conifers is seen in urban areas throughout the state. The effects are seen in numerous species, but decline of urban maples and conifers was notable.

Bernheim Forest has a significant problem with white oak decline. No noticeable insect or disease occurrence but a history of multiple, severe drought events over several years indicates is that the condition is drought induced.

Other Notable Conditions: Black locust suffered a higher than usual level of defoliation during the summer. Although many attributed it to locust leaf miner, it seems more likely to be due to excessive heat from nearby road and edge situations. Upon examination of the yellowing trees from central Kentucky to northeastern Kentucky, significant leaf miner activity was not apparent at the time. Also, the trees were nearly always in a situation above or next to a paved road with few to no yellowing trees found away from the roads.

Forest Health Assistance in Kentucky

<p>Kentucky Division of Forestry 627 Comanche Trail Frankfort, KY 40601 502-564-4496 http://www.nrstate.ky.us/nrepc/dnr/forestry/dnrdof.html</p>	<p>USDA Forest Service Southern Region, State & Private Forestry Forest Health Protection 200 W.T. Weaver Road Asheville, NC 28804 828-257-4320 http://www.fs.fed.us/r8/foresthealth/</p>
---	--