

Defending Kentucky's Forests

by Jeff Stringer

This first issue of Kentucky Woodlands Magazine has a special focus on forest health. The articles on the emerald ash borer, sudden oak death, and invasive plants cover only some of the most pressing threats to Kentucky's woodlands. While there are other insects and diseases not covered in this issue, including gypsy moth and the Asian long-horned beetle, there are also a significant number of forest health issues not directly related to insects and disease. Many forest health issues are caused by human actions such as wildfire, development pressures, parcelization, grazing, and lack of good woodland management. These are significant threats because for the first time since the 1930s, inventories of Kentucky's forests have shown a decrease in overall forest acreage. This is largely due to development pressures, not agriculture. The parcelization and development in the forest and the clearing of forests for highways, shopping malls, and golf courses are starting to take a toll on Kentucky's forests. Even as they take away forest acreage, they also provide avenues for invasive plants and diseases to move into our native forests. These also decrease and fragment the interior forest habitats necessary for many of our wildlife species. The U.S. Forest Service indicates that forest fragmentation is one of the biggest, if not the biggest, threat to forests in the Southeast. Kentucky is no exception.

The U.S. Forest Service defines a healthy, sustainable forest as:

“A condition wherein a forest has the capacity across the landscape for renewal, for recovery from a wide range of disturbances, and for retention of its ecological resiliency while meeting current and future needs of people for desired levels of values, uses, products, and services.”

The aging of our forests is also an issue. The majority of trees that dominate the canopies of our forests were generated from agricultural abandonment and timber harvesting during the late 1800s and early 1900s. The large trees in these forests are typically of the same age, and many species are approaching or have passed biological maturity. When droughts and defoliations occur, we see the death of some of these trees. While this does not indicate that our forests are being lost, it does indicate that the overall health of many of our forests is not what it was several years ago.

The bottom line is that our forests in general, and some of our important forest species, are at risk from a variety of causes. Some are caused by humans, such as wildfire, and are thus ultimately avoidable. Some are due to the biological maturing of our forests and can be dealt with by good forest management. Unfortunately, some are due to the invasion by exotic pests.

Due to these pervasive issues, forest health will continue at the forefront of political, economic, and ecologic debates. In Kentucky, the health of our forests is extremely important. Our forests provide the backdrop for much of our recreation and provide habitat for our diverse wildlife species. They provide Kentuckians with important green space and a landscape that is a joy to live in and they are the basis for a \$7.1 billion dollar forest industry that provides significant revenues for our rural communities.

Author:

Jeff Stringer, PhD

Stringer is hardwood extension specialist at the University of Kentucky and is responsible for continuing education and research in hardwood silviculture and forest operations. His specialty is hardwood timber production and forestry best management practices. He is also an editor of the Kentucky Woodlands Magazine.

Cooperative Extension Service, Department of Forestry, University of Kentucky, 213 T.P. Cooper Building, Lexington, KY 40546-0073, E-mail: stringer@uky.edu, Phone: (859) 257-5994

Photo by Thomas G. Barnes