Low Southern Pine Beetle Activity Predicted for Most Public and Private Forestlands in North Carolina in 2016

BACKGROUND. Considered the most destructive forest pest in the South, the southern pine beetle (SPB) surpasses all other forest pests for the amount of damage it causes to pine forests. Periodic outbreaks occur on a regular basis over the majority of our state, although the last outbreak occurred in the early 2000s. The North Carolina Forest Service (NCFS) attempts to predict SPB population levels each spring through pheromone-baited insect traps. Trap data is included in a model developed by the Texas A&M Forest Service to provide early SPB population predictions with 75-85% accuracy. The model is based on the ratio of SPB to their primary predator, the clerid beetle, as well as other factors.

THANK YOU!

We are very grateful for the NCFS Districts and Alligator River NWR that participated in trapping this year!

In 2015, SPB activity was again low with no confirmed spots reported in the state. Meanwhile, there was an increase in *Ips* engraver beetle activity for the second year running, causing scattered damage especially in the Sandhills region of the state.

This year, 2016 trapping data predicts another low year for SPB populations in most of North Carolina. The one exception is in Graham County, where trapping results indicate we may see increasing/low populations of SPB.

Low populations are also expected in most of the southern states as well, with a few exceptions. SPB activity is expected to increase in the following areas this year:

Mississippi:	Bienville National Forest, Homochito National Forest, Franklin County, Lincoln County, Smith County
Alabama:	Barbour County, Monroe County, Oakmulgee Ranger District

In addition, limited areas in Louisiana, Virginia, & South Carolina may see increased SPB activity this year.

In recent years, SPB activity in the northeastern U.S. has increased and expanded into uncharted territory for the beetle. In 2014, an SPB outbreak occurred on Long Island, NY for the first time in recorded history and last year, SPB activity was noticed for the first time in Connecticut. The 2016 trapping results predict increased SPB activity in Maryland.

Though low SPB populations are predicted, we need to continue to be on the lookout for localized and sporadic infestations, as they could occur anywhere in the state. Activity is most likely in pine stands that are overstocked, overmature or stagnant, or have poor soil drainage. Forests affected by littleleaf disease, annosus root rot, and other causes of tree stress may also be susceptible to SPB infestation.

The NCFS recommends the use of sound silvicultural practices to prevent SPB damage and encourages landowners to thin overcrowded pine stands. Proper stocking levels promote healthy stands that can better withstand attacks from SPB. The NCFS continues to provide Southern Pine Beetle Prevention Program (SPBPP) cost-share funds (funded through a grant from the USDA Forest Service) for pre-commercial thinning of pine stands. More information on the SPBPP cost-share is available on our website at http://www.ncforestservice.gov/forest_health/fh_spbpp.htm.
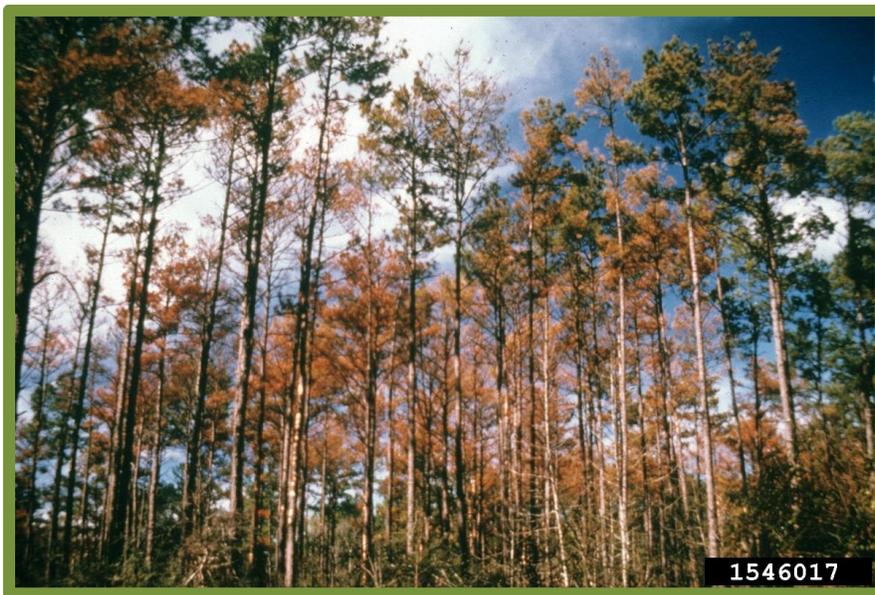
A southern pine beetle outbreak in eastern Texas.
Photo: Ron Billings, Texas A&M Forest Service, Bugwood.org.