

Insect Infestation

Hemlock Woolly Adelgid

On the Chattahoochee National Forest



U.S. Department of Agriculture
Forest Service
Southern Region

Hemlocks in Georgia in Danger

The hemlock woolly adelgid, a non-native insect, is killing the two eastern US species of native hemlock; the Carolina hemlock and the Eastern hemlock in Georgia. Without active intervention, the forecast is for 90-percent of existing hemlock to be dead within five to ten years. The absence of hemlocks on the banks of North Georgia's cold-water streams will significantly impact stream temperatures and could have a tremendous impact on trout populations and stream health.

The adelgid was first discovered in Georgia in the Chattooga River gorge on the South Carolina-Georgia border in 2002. Since that time, the adelgid has spread southward and westward across the Blue Ridge Divide crest into the Little Tennessee, Hiawassee, and Chattahoochee River drainages. Tree death is already occurring in the Ellicott Rock Wilderness near the common corner of the South Carolina, Georgia and North Carolina state lines and in the upper reaches of the Chattooga Wild and Scenic River. Survey results indicated that the beetles are present in about 60% of the hemlock range in Georgia.

No natural resistance to the adelgid has been found in eastern hemlock to date, unlike western US species of hemlock. One control method currently being used is to release predatory beetles in affected areas. The release of tens of thousands of predator beetles occurred on many areas in the eastern portion of the Chattahoochee National Forest last year. Several hundred to several thousand beetles are released per area within larger hemlock conservation areas. The Forest Service has been working closely with the University of Georgia, Clemson, and Young Harris College where predator beetles are being raised to be released on the national forest as a control method.

The Forest Service last year treated about 65 areas with direct soil injection of imidicloprid, a systemic insecticide which kills the beetle as it feeds on the hemlock.

*90% of hemlocks in north Georgia could be dead in 5-10 years.

*Potential for significant impact on trout streams in north Georgia.

*99% of all cold water trout streams located on the Chattahoochee National Forest.

*Hemlock Woolly Adelgid present in 60% of hemlocks in Georgia.

*Control methods include predator beetle and direct soil injection.



Adelgid infestation on hemlock bough

For additional information on the HWA, call Ray Ellis at (770) 297-3099.

Insect Infestation

Southern Pine Beetle

On the Oconee National Forest



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A recent Southern Pine Beetle (SPB) epidemic began on the Oconee National Forest at the end of May, 2007. Older pine trees and overstocked pine stands are typically the most susceptible to SPB infestation. Conditions on the Oconee were exacerbated by the severe drought occurring in the region creating an infestation more severe than any experienced in the area in the last several decades. Infestation occurred on federal, state and private property, the majority of which was on the Oconee National Forest. Over 800 spots of significant size were identified and treated, primarily in Putnam, Jones, Jasper and, to a lesser degree, Greene counties. Average spot size was 10 acres.

Three treatment methods were used:

- ✚ salvage of the infested timber through commercial timber sales
- ✚ cutting infested trees and a buffer and leaving the trees on site (some of these were subsequently salvaged)
- ✚ monitoring spots where activity was light or growth was slow

Prognosis for 2008

The U.S. Forest Service Forest Health Unit from Asheville, NC has predicted that the Oconee infestation will continue in 2008 at levels potentially exceeding those experienced in 2007. Activity is expected to continue into 2009. The SPB is currently dormant with limited activity noted during periods of warm weather. SPB activity is expected to pick up by April or May. Timber markets are currently depressed; two area mills are currently not operating. A continuation of this trend will likely deter commercial timber sale of infested trees in 2008.

Current activities and plans

Approximately 45,000 longleaf pine seedlings will be planted this year. The Forest is in the midst of a collaborative approach to determining the future of the Oconee National Forest that will continue through the year. The objective will be to establish a framework for protecting and enhancing RCW across federal, state and private ownerships and preventing recurrence of an SPB infestation of this magnitude.

*800 SPB spots identified and treated on the Oconee National Forest in 2007

*Average spot size is 10 acres

*2,400 acres salvaged, 900 acres treated by cut and leave

*Prognosis for 2008, SPB infestation will continue at or above 2007 levels.



A southern pine beetle



Southern Pine Beetle spot on Oconee National Forest.

For additional information on this issue, contact Ray Ellis at (770) 297-3099.