

# First adelgids bug into Knox

Arborist finds woolly insects in client's hemlock trees

BY MORGAN SIMMONS  
simmons@knews.com

An exotic insect that feeds on hemlock trees has spread from its stronghold in Great Smoky Mountains National Park onto private lands in East Tennessee, area tree experts said.

Knox County's first documented sighting of the hem-

lock woolly adelgid occurred last week when an arborist spotted the tiny insects while removing downed trees for a homeowner in East Knoxville.

Sam Adams, general manager of Cortese Tree Specialists Inc., said the hemlock woolly adelgids were in a hemlock tree on the customer's lawn.

"They looked like tiny fluffs of cotton; I noticed them just walking by," Adams said. "The tree appeared fairly healthy, so I'd say it was the first season of infestation."

Adams said other hemlocks on the same property also were infested by the adelgids.

The hemlock woolly adelgid is a tiny aphidlike insect that kills hemlock trees by sucking the sap from the needles. A native of Asia, the hemlock woolly adelgid has been in the United States since 1924, and in the last 40 years it has spread throughout hemlock forests from southern New England to North Carolina.

The first hemlock woolly

See **BUG** on A7

## ADELGID WATCH

Landowners should look for the conspicuous white woolly wax that covers the young adelgids as they grow. Foresters suggest a check every six months.

U.S. Forest Service surveys found infection in 58 percent of Blount County hemlocks, 31 percent of Sevier County hemlocks, 15-18 percent in Monroe and Cocke counties, and 55 percent in Carter and Johnson counties.



7 49377 10030 Inside: Business C1 | Classified F1 | Comics E6 | Crossword E7 | Editorials B4 | Faith & Family E1 | Geo

## BUG

from A1

adelgid outbreak in the Smokies was reported in 2002 just north of Fontana Dam. Today the insect has spread to hemlocks throughout some of the most-visited areas of the park, including Cades Cove, Greenbrier and Cataloochee.

While insecticides and aerial soap spraying are effective in treating individual trees, foresters are relying on another Asian import called the predator beetle to act as a biological control against hemlock woolly adelgids in remote hemlock forests.

This spring forestry officials released thousands of predator beetles in the Smokies. More recently, predator beetles were released in the Martha Sundquist State Forest in Cocke County to combat the spread of hemlock woolly adelgids. Both releases used predator beetles reared at a new facility at the University of Tennessee.

Outside the park, recent surveys conducted by the U.S. For-

est Service found trees infested with hemlock woolly adelgids all the way from Johnson County in Northeastern Tennessee to Polk County along the Tennessee-Georgia state line.

Bruce Kauffman, forest entomologist for the Forest Service, said the surveys were conducted along roadside corridors that contained streams and hemlock trees.

"It is amazing how fast the insect appears to be moving right now," Kauffman said. "They're traveling in the understory away from the thick hemlock stands. They're in places you don't normally think about."

Fifty-eight percent of the hemlocks surveyed along roads in Blount County were infested with hemlock woolly adelgids. In Sevier County, the infestation rate was 31 percent. Monroe and Cocke counties had infestation levels of 15-18 percent, and in Johnson and Carter counties adelgids were found in about 55 percent of the hemlock trees surveyed.

An infestation of hemlock woolly adelgids begins after the eggs or crawlers are deposited on a tree,

typically by wind or birds. Within a year the crown of the tree is usually infested, and dieback of major limbs usually occurs within two years, progressing from the bottom of the tree upward.

Kauffman said hemlock trees around Watauga Lake, in Carter County, are showing obvious signs of hemlock woolly adelgid infestation, but that for the most part, the damage is hard to spot at this early stage.

He said the hemlock woolly adelgid appears to be in portions of almost every county in East Tennessee, and that private landowners should check their trees every six months and look for the conspicuous white woolly wax that covers the young adelgids as they grow.

"The biggest problem right now is that most of the trees don't look sick," Kauffman said. "Until we start seeing trees with dying branches and no new shoots growing, the average person is not going to notice anything wrong."

Morgan Simmons may be reached at 865-342-6321.