



# Allegheny Brambles

An informational article about the Allegheny National Forest

United States  
Department of Agriculture

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FOR IMMEDIATE RELEASE

## BE ON THE LOOKOUT!

The Pennsylvania state tree is under attack! Spreading at a rate of twelve to eighteen miles a year, the Hemlock Woolly Adelgid, *adelges tsugae*, is attacking our state tree. A survey done by the Forest Service in the first weeks of June showed no signs of the pest on the Allegheny National Forest, yet. However, this 1/8 in. long black pest is a mere 45 miles away coming from Centre County and 96 miles away coming from Clarion County.

To help us protect our forest we are asking you to be on the lookout for this forest menace while hiking, hunting, fishing or just sitting in your own backyard.



Egg  
stage

Originally from Asia, the adelgid first appeared in the Western States in the 1920's. Capable of walking short distances and carried by wind, birds, deer and humans longer distances, the adelgid was able to spread quickly over mountains and rivers towards the Eastern regions of the country by the 1950's.

In part, their ability to travel at such a rapid rate was due to their previous adaptation to the higher elevations in Japan. This has enabled them to remain active during winter months. All Hemlock Woolly Adelgids are female and capable of producing two generations of up to 300 eggs a year. This means that 1 female can produce 600 offspring a year, which in turn will produce 1200 offspring, which will produce 2400 new pests, and so on.



Larvae Stage

This greater mobility and regeneration capability makes them a year-round threat to the trees they invade.

They exclusively feed on needles, twigs, limbs, trunks or inside galls of conifers. Their favorite foods in the northeastern region are the Carolina Hemlock and Eastern Hemlock, which have no resistance to the small insect. While the Allegheny does not have Carolina Hemlocks, Eastern Hemlock makes up nearly 8.5% of the forest area (Forest Health Conditions Report, 2001).



Crawler Stage

After the adelgid has entered an area, it will take three to five years for the trees attacked to die. However, during the early stages the conifers' needles will dry up and become yellowish or gray/green in color. The tree will then experience needle loss and a lack or quick loss of buds/cones will be noticed. When this happens no new growth is produced. After a longer period of time, the dieback of major limbs will occur, along with the tree becoming susceptible to wind, other insects and diseases. At this stage, there are noticeable pockets of dead and dying trees.

The Woolly Adelgid can be killed if they are found in time. During the egg and larvae period there is a 60 - 80% potential rate of death. The mortality rate falls to 50 – 60 % when they become crawlers, and even lower after that.

Treatments that have been tried in other areas, with some degree of success, are limited foliar and systemic chemical control (pesticides), biological control (introduced predators) and specific Silvicultural practices (removing infected trees).



Adult Stage

As of this time, no natural predator has been found in Pennsylvania.

To obtain more information on Hemlock Woolly Adelgid go to <http://www.fs.fed.us/na/morgantown/fhp/hwa/>. If you find signs of an infestation, please contact Bob White at the ANF Supervisors Office (814-723-5150) or Rick Turcotte at the USDA Forest Health Protection Morgantown Field Office (304-285-1544).



Magnified view of an adult

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