

Hemlock Woolly Adelgid Initiative

Protecting the hemlock resource in the East

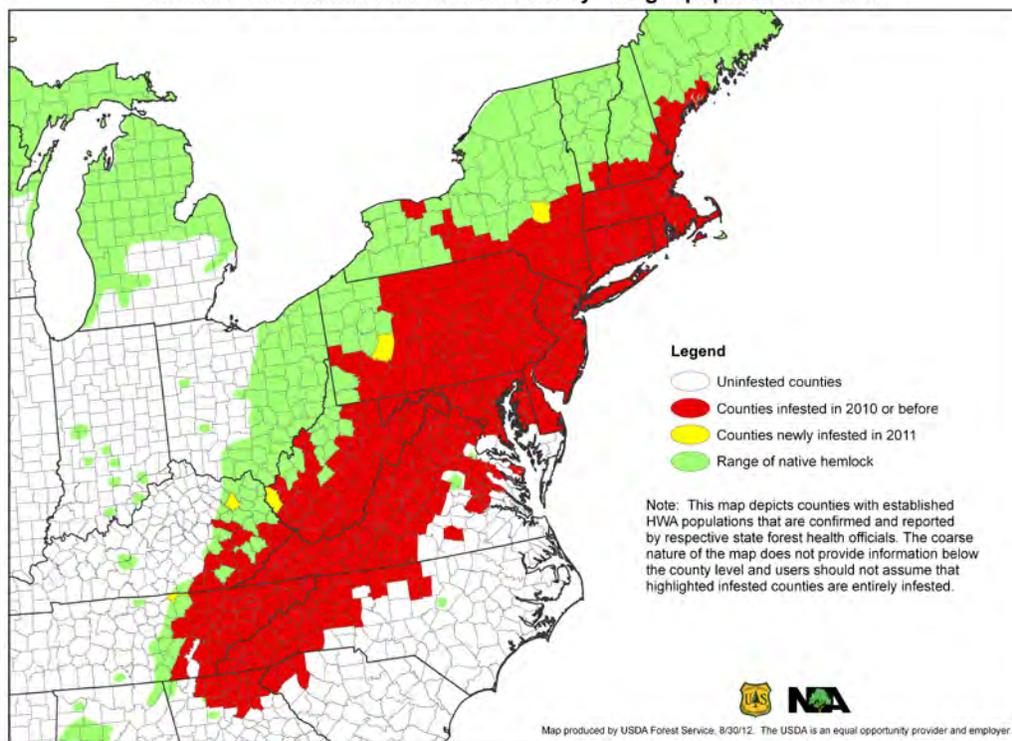
USDA Forest Service
Northeastern Area
State and Private Forestry



Description: The hemlock woolly adelgid (HWA), a nonnative insect, is a major threat to the survival and sustainability of eastern and Carolina hemlocks, and to the wildlife species that depend on them. HWA was first reported in the Eastern United States near Richmond, VA, in 1951. It has since been found in 18 States from southeastern Maine to northeastern Georgia and west to eastern Kentucky and Tennessee. Tree decline and deaths are common in Virginia, North Carolina, Georgia, Tennessee, New Jersey, New York, Connecticut, and parts of Pennsylvania; similar conditions have been detected in Massachusetts and southern New Hampshire. HWA currently infests about one-half of the hemlock's native range in the Eastern United States. HWA could spread across the entire hemlock range in the next few decades.

The HWA strategic plan is a multiagency, integrated effort among a variety of cooperators and nongovernmental organizations with assistance and support by the National Association of State Foresters and the National Plant Board. The goal is to develop and use management tools to slow the spread of HWA and minimize its negative effects.

Counties with established hemlock woolly adelgid populations - 2011



HWA was established in all or parts of 18 States by FY 2011. New records of HWA were confirmed in 5 States: Kentucky, New York, Pennsylvania, Tennessee, and West Virginia.

Key Issues:

- The contribution of hemlocks to biodiversity and old growth in the East is irreplaceable. HWA threatens hemlock health and the future establishment of hemlock stands in infested areas.
- The economic impact on nurseries and other wood product businesses is already substantial in places, and could become more serious if HWA is not controlled.
- HWA is spreading rapidly in the southern Appalachians, killing both eastern and Carolina hemlocks. Its impacts are expected to intensify and spread.

- Controlling HWA with soil and trunk injections of insecticides is effective for individual high-value trees in accessible areas, but this treatment is neither practical nor affordable for large areas in remote forests.
- State foresters, State plant pest regulatory officials, and the Forest Service consider HWA a high priority.
- Biocontrol trials are promising; natural enemies tested at release sites have survived winters, reproduced, and dispersed. Rearing and releasing predators on a larger scale is expected to pay dividends in the future.

Accomplishments:

- Released HWA predators in multiple locations in seven States: PA, VT, MD, MA, NJ, NH, and WV.
- Collected more than 20,000 HWA predatory beetles (*L. nigrinus*) from established release sites and distributed them to other infested areas.
- Collected wild populations of the more cold hardy Idaho strain of the *L. nigrinus* beetle to rear in lab colonies for release in New England and higher elevations to the south.
- Prepared and ratified the *Coordinated Commitment Plan for 2012-2016* among the Northeastern Area State and Private Forestry, Forest Service Region 8, and the Forest Service Northern and Southern Research Stations.
- Provided technical and financial assistance to Federal, State, and tribal land managers in MA, NH, ME, VT, NY, OH, MD, MI, NJ, PA, and WV to eradicate or suppress HWA infestations.
- Surveyed to detect HWA spread along the leading edge of the known infested area in OH, MI, WV, PA, NY, NH, ME, and VT.
- Completed a 10-year change detection project with the New York State Department of Environmental Conservation in the Catskill Park using hyperspectral remote sensing.

Budget History:

Hemlock Woolly Adelgid Initiative			
<i>(Dollars, thousands)</i>			
FY 2010	FY 2011	FY 2012	FY 2013
\$1,015	\$1,532	\$1,259	TBD

Future Direction:

- Continue to carry out the HWA management initiative.
- Continue to establish and evaluate HWA natural enemies throughout the range of HWA.
- Gain executive approval of the new HWA Initiative 5-year strategic plan and charter for the HWA Steering Committee.
- Continue to evaluate landscape-level treatments to manage HWA infestations in forests.

Tony L. Ferguson, Director
 11 Campus Blvd., Suite 200
 Newtown Square, PA 19073
 610-557-4103 (-4177 FAX)
tferguson@fs.fed.us

www.na.fs.fed.us

Mark Buccowich, Asst. Director
 11 Campus Blvd., Suite 200
 Newtown Square, PA 19073
 610-557-4129 (-4177 FAX)
mbuccowich@fs.fed.us

Noel Schneeberger,
 Entomologist
 11 Campus Blvd., Suite 200
 Newtown Square, PA 19073
 610-557-4121 (-4177 FAX)
nschneeberger@fs.fed.us



01/31/20131