



Mid-Atlantic Region Forest Health Summary for 2011

Delaware, New Jersey, Maryland, Ohio, Pennsylvania, West Virginia, District of Columbia

This summary is primarily generated from information provided by State Forest Health Programs within the Mid-Atlantic Region Forest Health Highlights (<http://fhm.fs.fed.us/fhh/fhmusamap.shtml>) and information presented at the 2011 Mid-Atlantic USDA Forest Service Cooperative Forest Health Program State Cooperators Meeting held September 13-15 in Morgantown, WV.

Emerald Ash Borer (EAB)

In June 2002, the emerald ash borer (EAB), *Agrilus planipennis* Fairmaire, was identified as the cause of ash tree decline and mortality in the Detroit metropolitan area. EAB kills stressed and healthy trees and is so aggressive that ash trees may die within 2 or 3 years after they become infested. Today, EAB infestations have been detected in the District of Columbia, Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, Virginia, West Virginia, and Wisconsin. Strategies to manage the pest currently focus on survey activities using a detection tool (panel trap) along with regulatory activities and public awareness campaigns to prevent human-assisted movement. Outreach efforts have emphasized “Don’t Move Firewood” because firewood movement is a primary way this pest is spread artificially.



Emerald ash borer

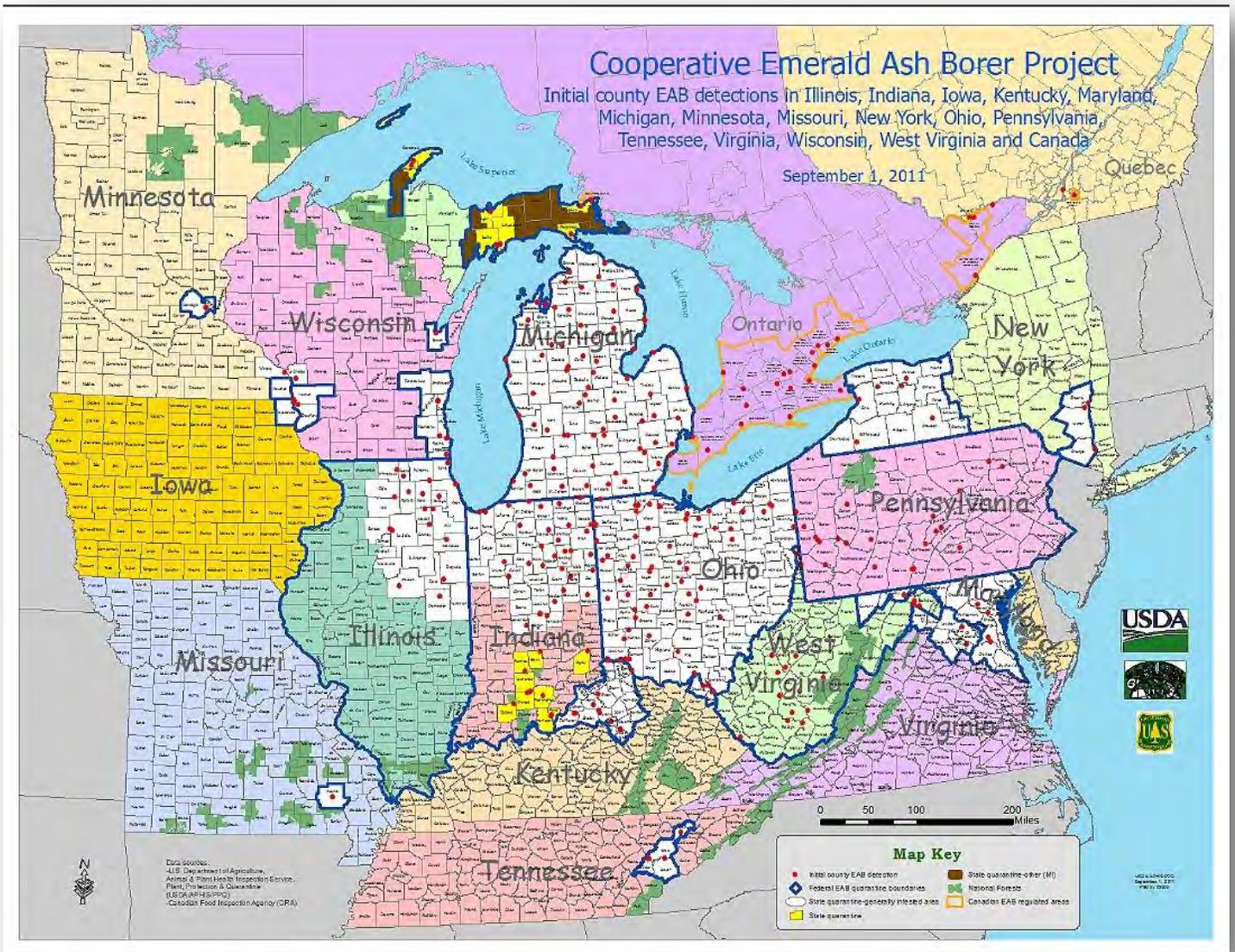
For information about EAB, visit the following Web sites:

<http://www.emeraldashborer.info/>

http://www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/index.shtml

<http://na.fs.fed.us/fhp/eab/>

http://www.youtube.com/watch?feature=player_embedded&v=Jc668J_TxYs



EAB status as of September 1, 2011

DISTRICT OF COLUMBIA: On August 10, 2011, the United States Department of Agriculture, Animal and Plant Health Inspection Service (APHIS) added the District of Columbia to the EAB quarantine area due to its proximity to EAB infestations and known movement patterns of regulated articles. The District Department of Transportation’s (DDOT) Urban Forestry Administration is responsible for planting, pruning, maintaining, and removing the District’s more than 140,000 street trees. DDOT is working with APHIS and the National Park Service to disseminate information about EAB in general and firewood movement through mobile billboards, the DDOT Web site, and DDOT public messaging, among other venues.

DELAWARE: Ash represents only about 1 percent of Delaware’s rural forests but is a significant component of the urban forest in some areas. The Delaware Forest Service assisted the Plant Industries Section with 250 purple prism EAB traps throughout the State. No EAB was detected. This was the second year that biosurveillance was used to survey EAB using colonies of the Buprestid-hunting wasp, *Cerceris fumipennis*. Visual surveys were carried out at rest areas on Interstate 95 and Route 1. No EAB was detected.

MARYLAND: EAB was originally discovered in 2003 resulting from infected nursery stock originating in Michigan. A large-scale detection and eradication project was initiated. It is ongoing and has gone from eradication to containment. On June 8, 2011, EAB was confirmed in Howard County, MD. As of July 11, 2011, the following areas in Maryland are under State quarantine: Allegany, Anne Arundel, Baltimore, Calvert, Carroll, Charles, Frederick, Garrett, Harford, Howard, Montgomery, Prince George's, St. Mary's, and Washington Counties; and Baltimore City, Maryland.

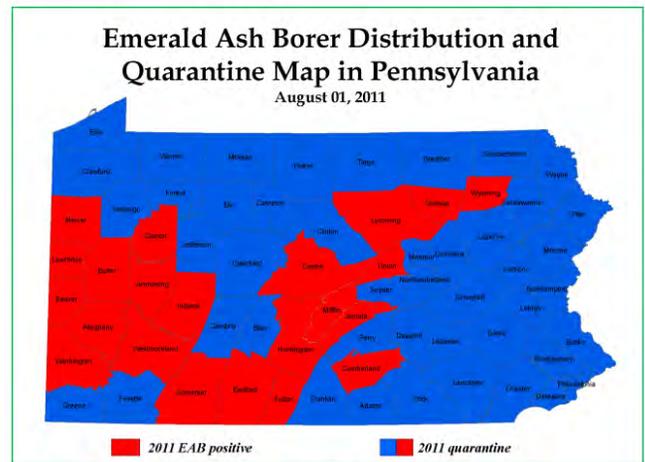
NEW JERSEY: In 2010, an EAB survey was initiated by deploying purple, triangular EAB traps in ash tree branches at four locations throughout the State. No EAB was caught. The New Jersey Forest Service is collaborating with the New Jersey Department of Agriculture, Division of Plant Industry on a 2011 intensive survey in the northern half of the State.

OHIO: In 2010, the entire State was quarantined, with known infestations occurring in 53 of the 88 counties. The Ohio Department of Natural Resources, Division of Forestry helps woodland owners manage their forest and utilize their ash resources. They also work to increase public awareness and help communities deal with current and future EAB issues.

PENNSYLVANIA: EAB is now found in 22 counties in the State of Pennsylvania. In 2010, a total of 51 potential *Cerceris fumipennis* colonies were identified in 24 counties across the State. For integrated pest management of EAB, chemical treatment with emamectin benzoate, limited tree removal, and biological control with three parasitoids have been



incorporated in 2011 at selected sites. So far, 17 infested ash trees have been removed, 249 trees have been chemically treated by trunk



Locations of the three EAB IPM study sites in Pennsylvania (North Park, Deer Lakes, and SGL252).

injection, and more than 14,000 parasitoids have been released in three study sites. An efficacy evaluation will be produced in 2012. Efforts are being made to protect the pumpkin ash resource in Erie County and at state-owned ash seed orchards.

WEST VIRGINIA: In 2010, EAB has now been found in six counties.

APHIS has released two parasitoids, *Spathius agrill* and *Tetrastichus planipennis*, as biological controls.

Asian Longhorned Beetle (ALB)

The Asian longhorned beetle, *Anoplophora glabripennis*, was discovered in 1996 on several hardwood trees in Brooklyn, New York. The Asian longhorned beetle grows and reproduces within healthy and stressed deciduous hardwood tree species such as maple, birch, horse chestnut, poplar, willow, elm, and ash. The beetle eventually kills the host tree.



Asian longhorned beetle

In 1998, a separate introduction of the beetle was discovered on trees in the suburbs of Chicago, IL. There are currently ALB infestations being eradicated in New York and Massachusetts. A recently discovered ALB infestation in and around Bethel, OH, is being surveyed for eradication. To date only 3,500 infested trees have been discovered.

For information about ALB visit the following Web sites:

http://www.aphis.usda.gov/plant_health/plant_pest_info/asian_lhb/index.shtml
<http://www.na.fs.fed.us/fhp/alb/>

NEW JERSEY: In 2004, ALB extended over four municipalities in two counties. Over 21,000 trees were removed. To date, over 5, 200 trees have been replanted. In 2008, ALB was declared eradicated from Hudson County. Middlesex and Union counties are still under quarantine. No new infestations have been found.

PENNSYLVANIA: A total of 84 campgrounds in 29 State Parks that were visited by campers from 23 ALB-infested zip codes in Massachusetts over the last 5 years were identified; host trees were visually examined for ALB signs. No ALB infestations were detected.



Locations of the 29 Pennsylvania State Parks included in the ALB zip-code based firewood

OHIO: In June 2011, the first Ohio infestation of ALB in trees was discovered near the village of Bethel in Clermont County, 30 miles southeast of Cincinnati. The insect was previously found associated with solid wood packing and crating materials in warehouses located in Cincinnati, Columbus, and Loudonville. However, an infestation of living host trees has never been detected in these cities. As of October 10, 2011, there have been 44,743 trees surveyed, of which 4,283 trees were positive for the presence of ALB. Preferred species in Ohio have been silver maple and boxelder, followed by elm, Ohio buckeye, and willow. Removal of positive trees may start as early this winter.



56-Square-Mile ALB Quarantine Area Established in Ohio

WEST VIRGINIA: Information from State and select Federal campgrounds that have been visited by campers from any of the 23 ALB-infested zip codes in Massachusetts over the last 5 years is being gathered. Campgrounds with such visits will have ALB host trees visually examined for

ALB signs this fall and winter. Currently no ALB infestations are known to exist in West Virginia.

Hemlock Woolly Adelgid (HWA)

The hemlock woolly adelgid (HWA), *Adelges tsugae*, was first described in Western North America in 1924 and first reported in the Eastern United States in 1951 near Richmond, VA. Hemlock woolly adelgid attacks both eastern (Canadian) and Carolina hemlock, which are often damaged and



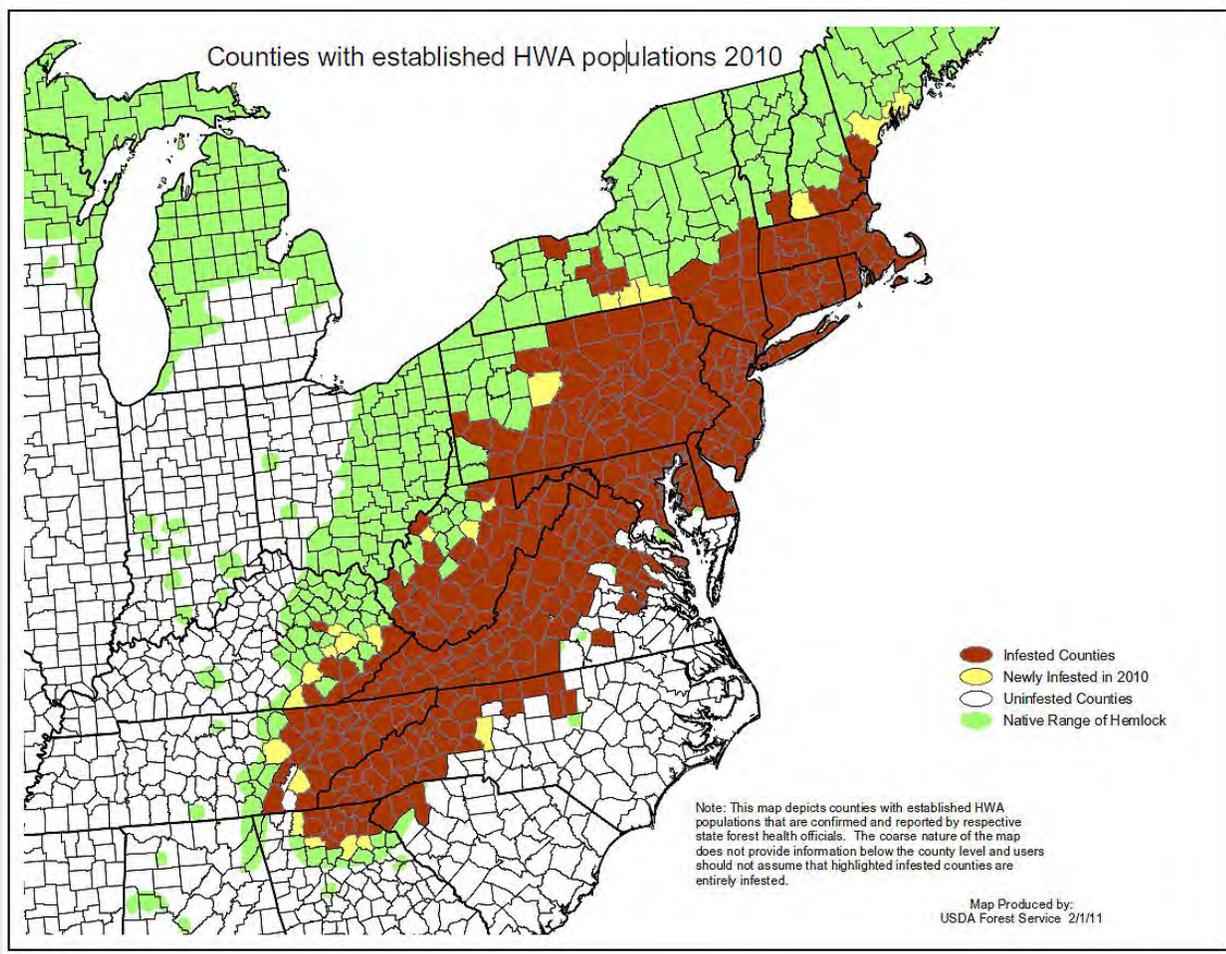
White hemlock woolly adelgid egg masses on hemlock branches

killed within a few years of becoming infested. HWA is now established from northeastern Georgia to southeastern Maine and as far west as eastern Kentucky and Tennessee.

For information about HWA, visit the following Web sites:

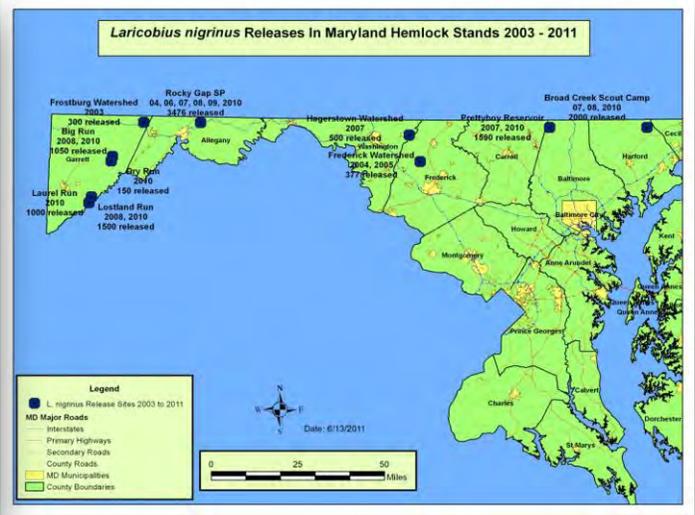
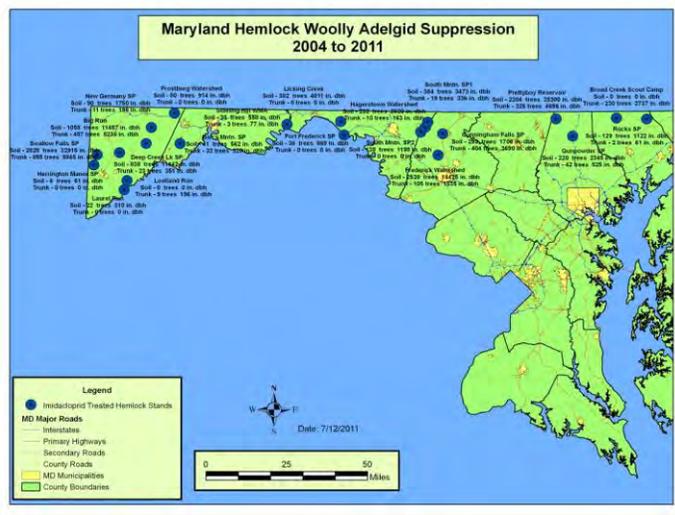
<http://www.na.fs.fed.us//fhp/hwa/>

http://www.nrs.fs.fed.us/disturbance/invasive_species/hwa/



Counties with established HWA populations in 2010

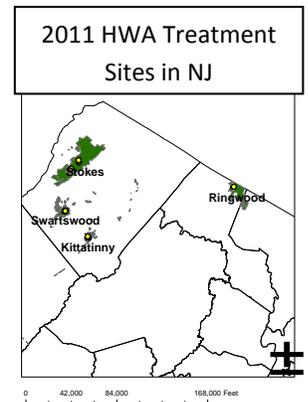
MARYLAND: Hemlocks infested with HWA occur in the metropolitan area between Baltimore and Washington and in natural stands from Harford to Garrett Counties. From 2004 to the end of 2010, Maryland Department of Agriculture personnel have treated 5,328 hemlock trees. A total of 8,162 predatory beetles, *Laricobius nigrinus*, have been released in Maryland. The Rocky Gap State Park release site has been



successful in beetle establishment. Two other predatory beetle species, *Scymnus sinuanodulus* and *Sasajiscymnus tsugae*, have been released at several different sites but no recoveries have been made.

NEW JERSEY: In 2011, 104 hemlock trees received chemical treatment on four State lands in northern New Jersey. Since 2005, *Laricobius nigrinus* has been released, and adult beetles have been recovered and observed to be successfully overwintering.

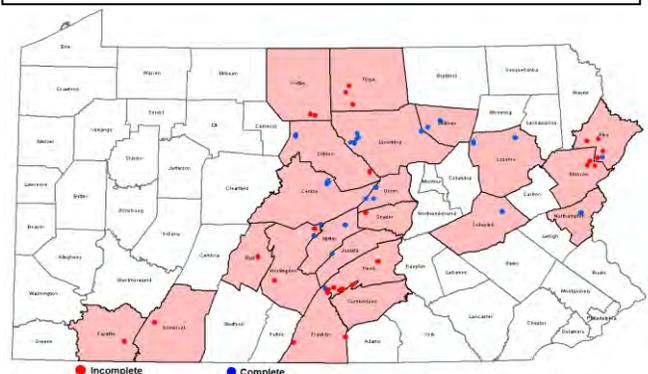
OHIO: In 2010, HWA was found on landscape trees in Cuyahoga and Franklin Counties. The Cuyahoga County tree is being treated and the Franklin County tree was destroyed. In 2011, surveys found no HWA. Additional surveys will be conducted this winter.



PENNSYLVANIA: In 2011, HWA detection surveys will be conducted in 16 counties along the leading edges in the western part of Pennsylvania. Also in 2011, HWA

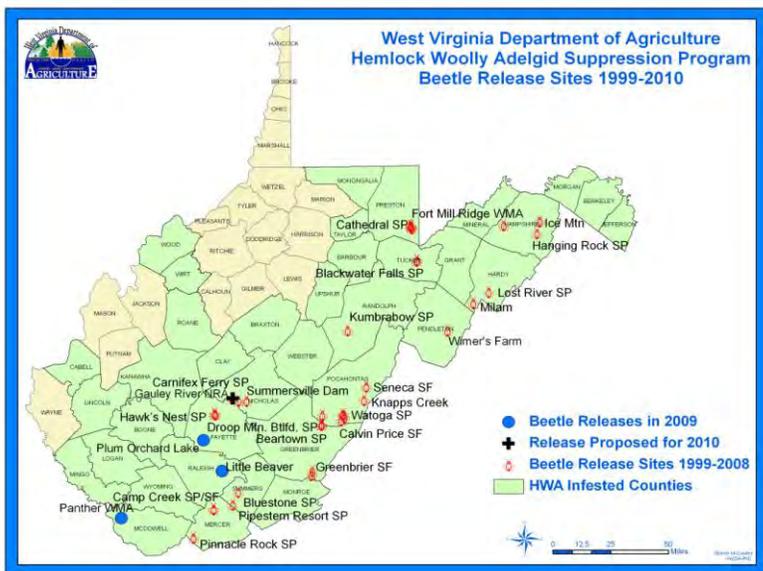
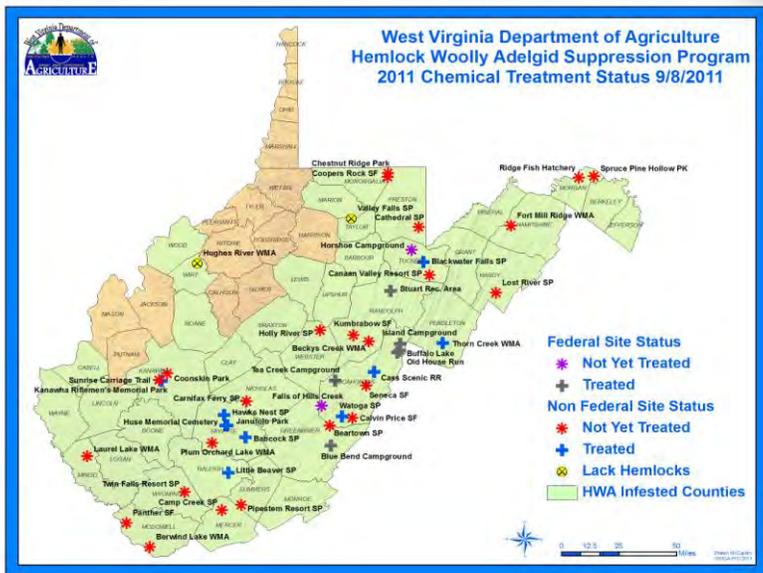
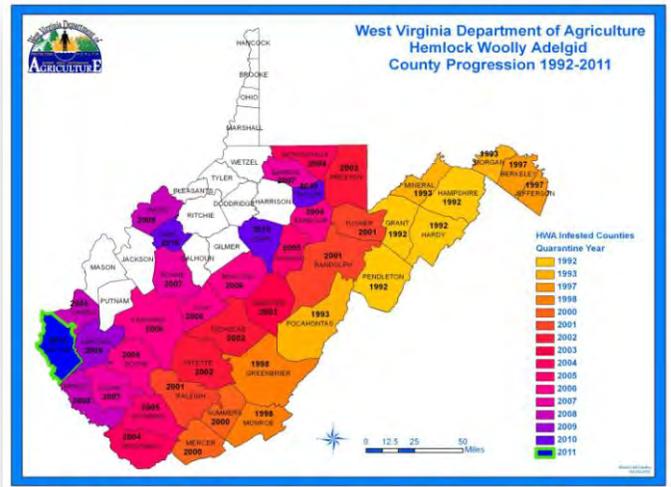
Pennsylvania Hemlock Sites Receiving HWA Chemical Treatments in 2011 (Sites Completed and Incomplete as of end of August 2011).

Pennsylvania Hemlock Woolly Adelgid Surveys 2010-2011 Targeted Counties Along Leading Edge (16)



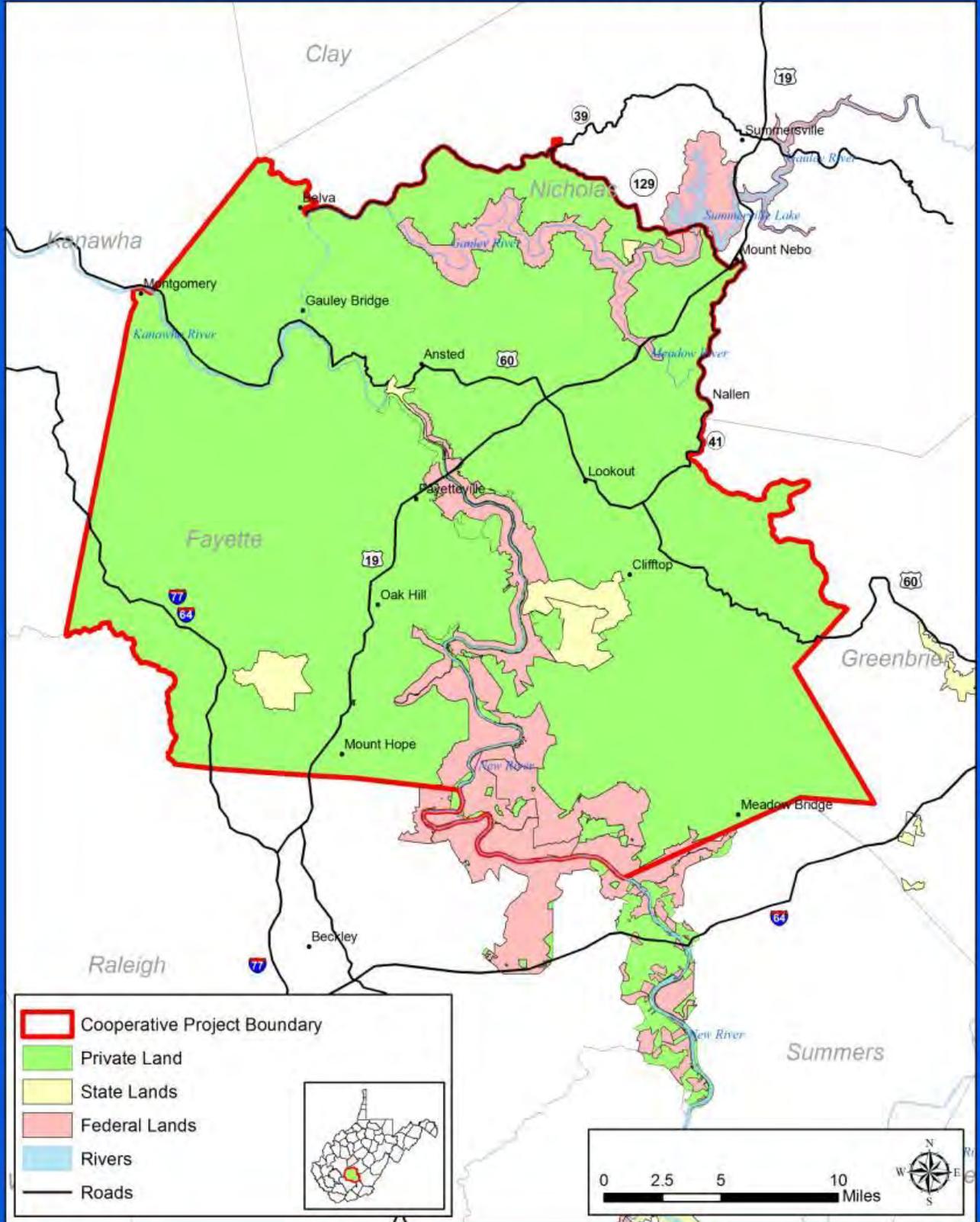
chemical treatments are planned at 74 selected sites in 33 Pennsylvania State Forests comprised of 1,200 acres of hemlock forests. By the end of the year, 11,000 hemlock trees will receive chemical treatments.

WEST VIRGINIA: HWA is now found in 40 of the 55 counties in West Virginia. In 2010, a total of 4,000 adult *Laricobius nigrinus* beetles were released in the Wolf Creek watershed within the New River Gorge National River, National Park Service boundary. This is the largest such release to take place in the State. A recovery of a *Laricobius nigrinus* beetle was made at a previous release site at Plum Orchard Lake WMA, marking the first such recovery by WVDA on State property. A total of 1,839 hemlocks have been treated in 2010 and 2011 so far, and treatments will continue into the fall.



West Virginia is going to be implementing a Hemlock Woolly Adelgid Cooperative Suppression “Pilot” Project this year. Landowner sign-up has begun and field evaluations of proposed treatment areas for HWA densities will begin this fall. Treatment implementation will take place in the spring and fall of 2012. Treatment efficacy will be measured and a Post Project Evaluation Report will be produced.

Cooperative Hemlock Suppression Project Area



	Cooperative Project Boundary
	Private Land
	State Lands
	Federal Lands
	Rivers
	Roads

Sirex Woodwasp

Sirex woodwasp, *Sirex noctilio*, is the most common species of exotic woodwasp detected at United States ports-of-entry associated with solid wood packing materials. Recent detections of sirex woodwasp outside of port areas in the United States have raised concerns because this insect has the potential to cause significant mortality of pines. Awareness of the symptoms and signs of a sirex woodwasp infestation increases the chance of early detection, and thus, the rapid response needed to contain and manage this exotic forest pest.

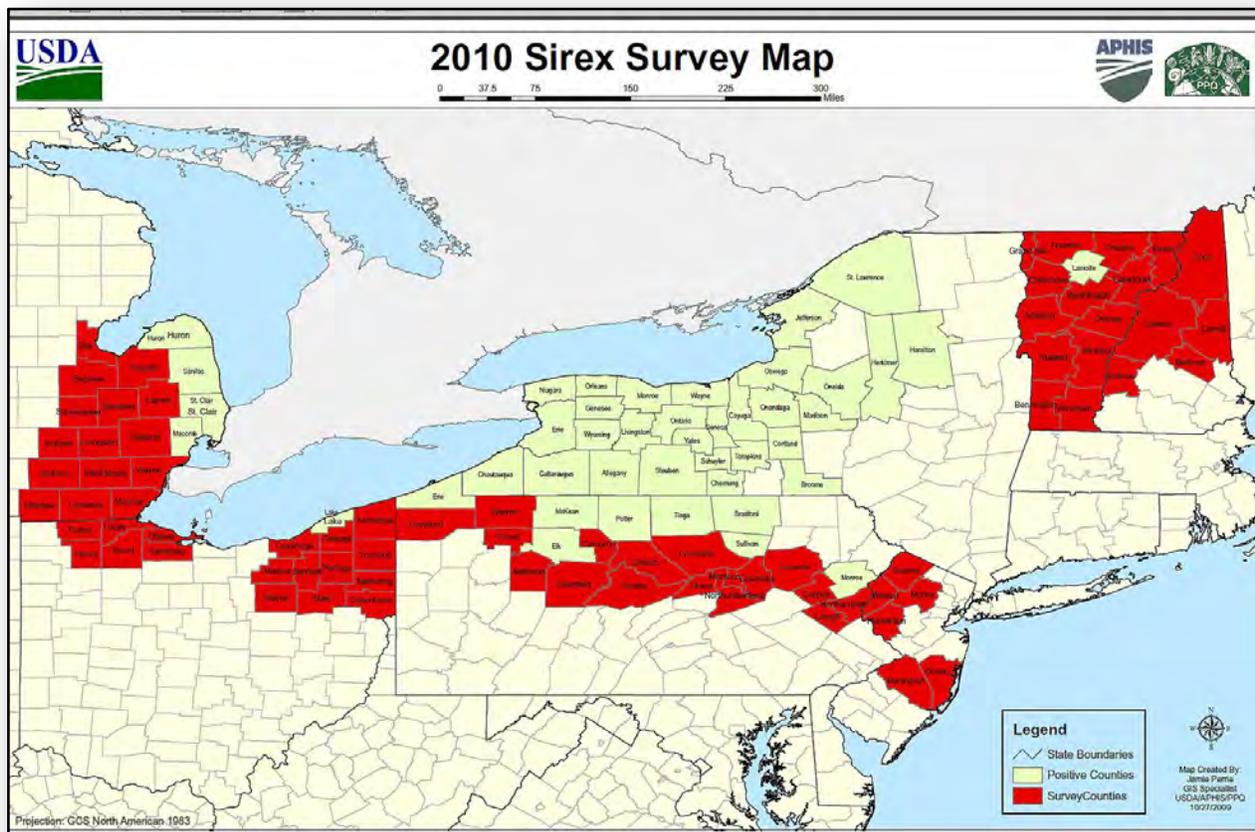


Sirex woodwasp

For information about sirex, visit the following Web sites:

<http://na.fs.fed.us/fhp/sww/>

http://www.aphis.usda.gov/plant_health/plant_pest_info/sirex/index.shtml

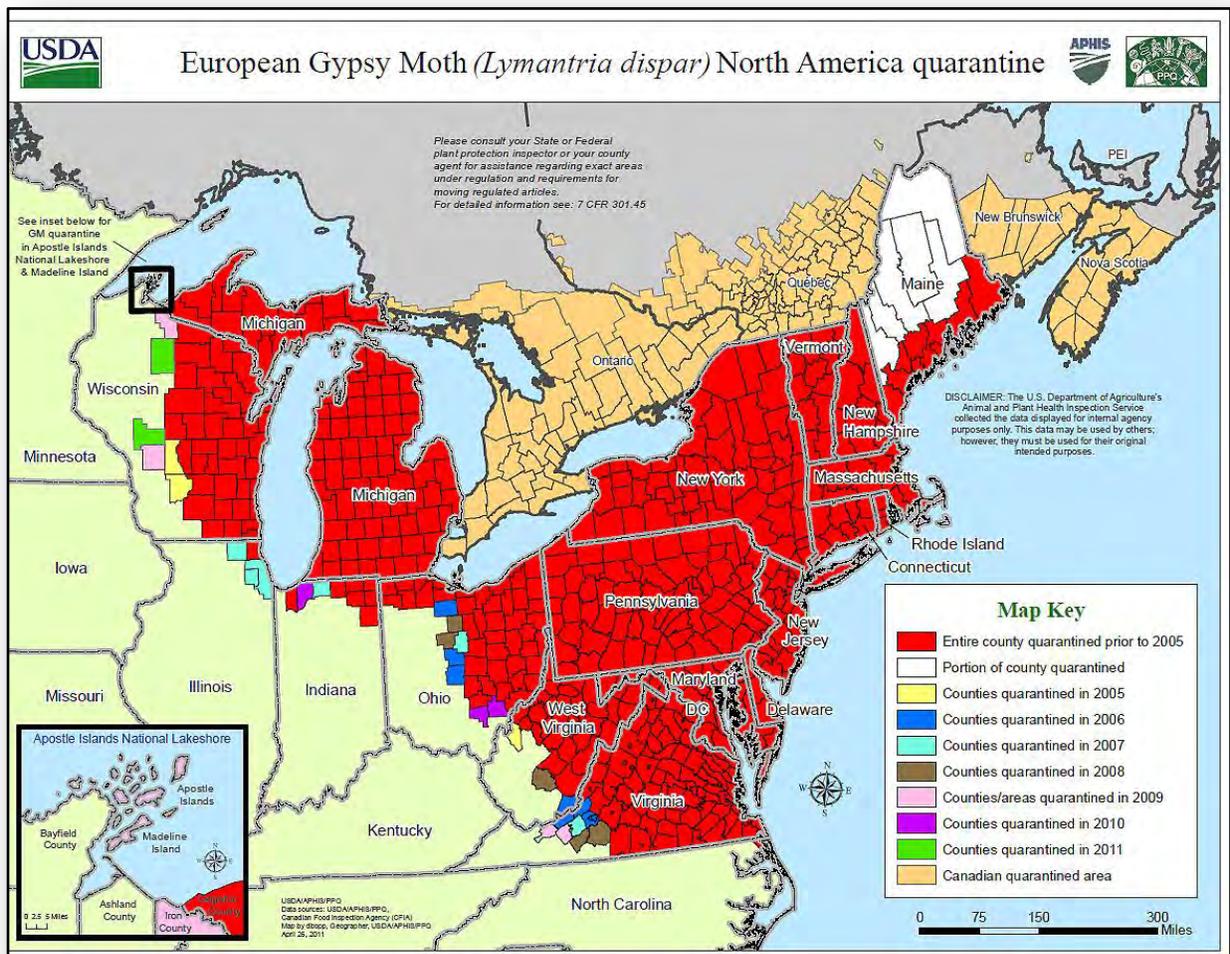


2010 Sirex survey map

For information about GM, please visit the following Web sites:

<http://www.gmsts.org/index.htm>

<http://na.fs.fed.us/fhp/gm/>



European gypsy moth North America quarantine map

DELAWARE: Aerial detection surveys have not detected any significant defoliation due to gypsy moth in recent years.

MARYLAND: In 2011, only 38 acres of gypsy moth defoliation was detected in St. Mary's County.

NEW JERSEY: There was no suppression program for 2011 on State lands. The New Jersey Department of Agriculture treated 274 acres in 2 municipalities for GM suppression. In 2011, based on the State's aerial detection survey, 1,317 acres were defoliated by gypsy moth. Many trees previously defoliated are showing signs of decline and mortality and resulting in hazardous conditions near areas of high public use. These trees are being salvaged and utilized using funding from the American Recovery and Reinvestment Act of 2009.

OHIO: Damage was observed during the aerial survey and ground-checking efforts are taking place.

PENNSYLVANIA: No gypsy moth defoliation was detectable in 2010. Ground checks revealed that few larvae were present. A total of 1,606 sites were surveyed across Pennsylvania. Approximately 10 percent revealed the presence of noticeable densities of egg masses; however, the potential of an outbreak occurring is low.

WEST VIRGINIA: Gypsy moth populations declined in 2010 due to a collapse caused by the fungus *Entomophaga maimaiga* in 2009. As part of the Slow the Spread (STS) Trapping Program (<http://www.gmsts.org/>), a total of 5,397 gypsy moth traps were set across the Action and Monitoring Areas in West Virginia. Initial results indicate that gypsy moth trap catches were up in 2010.

SOUTHERN PINE BEETLE (SPB)

The southern pine beetle (*Dendroctonus frontalis* Zimmermann) is a serious pest of pines in the Southern United States; however, SPB has also been found in Delaware, Maryland, and New Jersey. Recently, there has been a dramatic increase in SPB infestation in New Jersey.

For information about SPB, visit the following Web site:

<http://www.barkbeetles.org/spb/SPBFIDL49.htm>



Southern pine beetle and SPB damage



Southern pine beetle 2009 biological extent

DELAWARE: Delaware participated in the Southwide Southern Pine Beetle Pheromone Study. Beetle counts from four pheromone-baited Lindgren funnel traps indicate that the SPB population is at a low or declining level.

MARYLAND: SPB populations continue to remain low in the State, but two infestations have been discovered in Kent County, the farthest north SPB has been detected in Maryland.

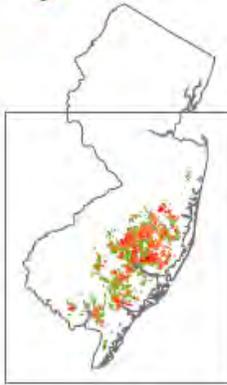
NEW JERSEY: The aerial survey conducted in 2010 detected approximately 14,100 acres infested with SPB in the State. This is an increase of 12,888 acres from 2009, the highest level since SPB monitoring in New Jersey was initiated in 2002. Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Monmouth, Ocean, and Salem Counties have various levels of active SPB populations. In addition to the aerial survey, the New Jersey Department of Environmental Protection (NJ DEP) performs trapping and ground surveys. Ground truthing of aerial survey data has determined areas that need to be suppressed, salvaged, and restored. The NJ DEP has developed a method for prioritizing areas for treatment, notifying municipalities, and notifying woodland owners who are enrolled in Farmland Assessment or Stewardship programs of potential cost-sharing opportunities.

OHIO: Surveys were conducted this past spring in 2 State forests. No SPB was detected.

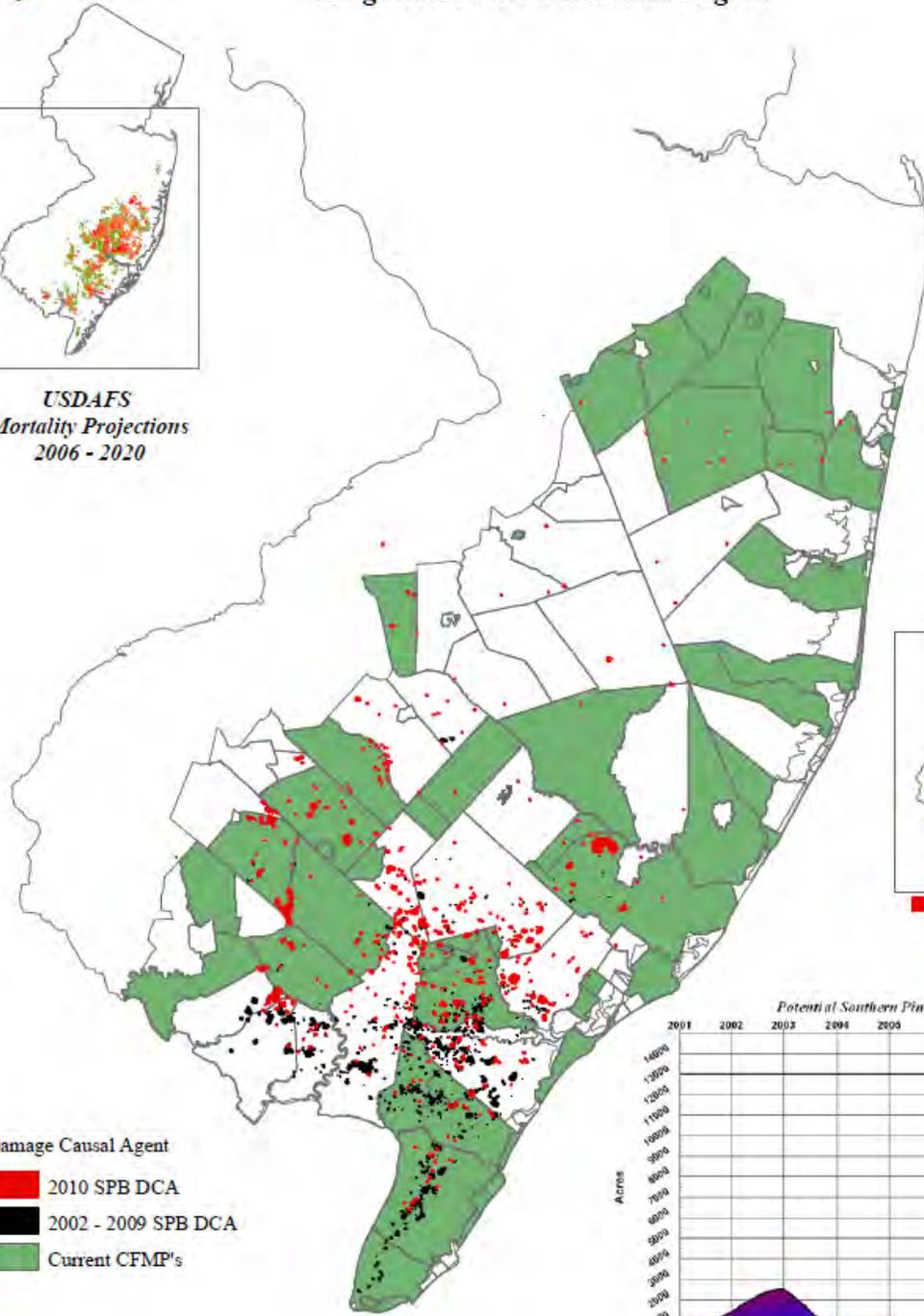
WEST VIRGINIA: SPB surveys were conducted. No SPB has been detected as of yet in West Virginia.



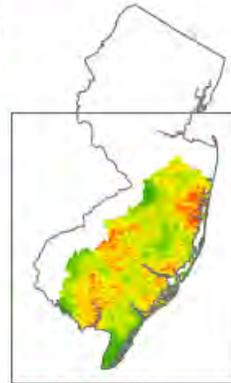
An Integrated Approach to Southern Pine Beetle Control and Mitigation in the Pinelands Region



**USDAFS
Mortality Projections
2006 - 2020**

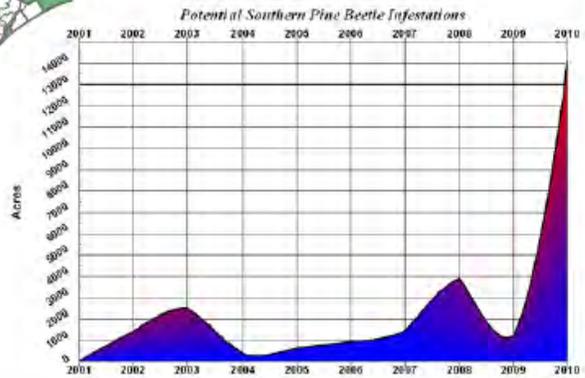


**NJFFS
Fire Risk 2010**



Damage Causal Agent

- 2010 SPB DCA
- 2002 - 2009 SPB DCA
- Current CFMP's



New Jersey DEP
Division of Parks and Forestry
New Jersey Forest Service
501 East State Street, 4th Floor, Trenton, NJ 08625
Chris Christie, Governor
Bob Martin, Commissioner
www.nj.gov/dep/parksandforestry



NJFS
Geographical Information Systems
1/2011
Data source: NJFS DCA Air Survey 2010

BACTERIAL LEAF SCORCH (BLS)

Bacterial leaf scorch (BLS) is a bacterial plant disease. Urban trees such as sycamore, red maple, dogwood, American elm, and several species of oak can become infected and eventually die, as can agricultural crops such as peach, pear, coffee, and grapes.



Bacterial leaf scorch symptoms

This disease is caused by a vascular clogging

bacterium (*Xylella fastidiosa*) that multiplies rapidly within active plant xylem. Distinct scorch-like leaf symptoms are followed by twig and branch death, leading to plant decline and death. Many other plants, including numerous shrub species and grasses, become infected with BLS but do not show symptoms and do not die. Knowledge of BLS is presently limited, especially when attempting to understand how an infection is contracted and spread within the urban environment. What is known is that the BLS bacterium is spread from diseased to healthy plant material during feeding by common urban xylem-feeding insects such as leafhoppers and treehoppers.

For information about BLS, visit the following Web site:

<http://na.fs.fed.us/fhp/bls/>

DISTRICT OF COLUMBIA: The D.C. Urban Forestry Administration (UFA), the University of Maryland, and the U.S. Forest Service are jointly conducting an evaluation. Leaf samples are being collected and sent to a diagnostic laboratory for BLS confirmation.

DELAWARE: Surveys conducted in 2006 and 2007 revealed that BLS is common in red, pin, scarlet, and black oaks throughout Delaware, and has emerged as a serious threat to forest health in both urban and rural forests. In 2008, permanent plots were established to assess the effects of BLS in traditional forests. Preliminary findings indicate that trees with 50 percent or greater scorch either die within one year or have a greater percentage of BLS infection the next year. All dead trees exhibit *Hypoxylon* stroma, regardless of whether BLS was observed in 2008 or 2009. Maybe BLS stresses the trees sufficiently to predispose them to *Hypoxylon* canker disease. It is still too early to draw many conclusions. In the coming years, the data should begin to shed light on the disease progression and economic costs associated with BLS.

NEW JERSEY: The New Jersey Forest Service is conducting a project to evaluate the effects of a sanitation cut, a method that removes BLS-infected trees, on the health and condition of residual trees over time. The residual trees will be monitored to see if this silvicultural method has a long-term effect on extending tree life and stand rotation. If results are favorable, this silvicultural prescription may be incorporated into the development of forest management plans as an option for controlling BLS across the landscape.

OHIO: The Ohio Division of Forestry conducted a survey in 2010. Sixty-one samples were taken, 8 of which were positive for BLS and located in central and northern Ohio. More surveys are planned for fall 2011 in areas surrounding the positive finds.

WEST VIRGINIA: In 2010, BLS was found in two new counties: Barbour and Wayne. BLS was also found in witch hazel, a new host. BLS is currently found in 11 counties in the State.

SUDDEN OAK DEATH (SOD)

Sudden oak death is a recently recognized disease that is killing oaks and other plant species in the Western United States. Since it was first noticed in 1995, the disease has been confirmed in the coastal areas north and south of San Francisco and in a relatively remote location in southwestern Oregon. The pathogen responsible for the disease, a fungus-like organism called *Phytophthora ramorum*, is also found in Germany and Denmark where it is causing a recently identified disease on Rhododendron and Viburnum.

Although the disease has been found only in California and Oregon in the United States, it is of great concern to land managers in the Eastern United States as well because at least two eastern oak species—northern pin oak and northern red oak—are highly susceptible to the disease when inoculated with the pathogen.



Sudden oak death symptoms

Forest land

managers nationwide should be aware of the symptoms of sudden oak death, and should contact a pest management specialist if they suspect that the disease is present in a new location.

A stream survey is a way to monitor and detect SOD. It involves placing rhododendron leaves in nylon bags and floating the bags in a stream for period of time, then removing and testing the leaves for the pathogen.

For information about SOD, visit the following Web sites:

<http://www.na.fs.fed.us/sod/>

http://www.aphis.usda.gov/plant_health/plant_pest_info/pram/

Thousand Cankers Disease (TCD)

Thousand cankers disease (TCD) poses a serious problem to the health of the black walnut tree. Walnut trees are important because of their nut crop and the desired wood for various products. The disease-causing fungus, *Geosmithia morbida*, is transmitted by the walnut twig beetle, *Pityophthorus juglandis*. Repeated beetle attacks and the resulting cankers disrupt the movement of water and nutrients throughout the tree, which leads to dieback of branches and eventually kills the tree. Early symptoms of TCD are yellowing of the leaves and thinning of the upper crown foliage.

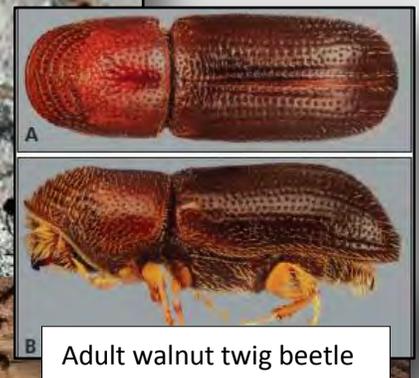
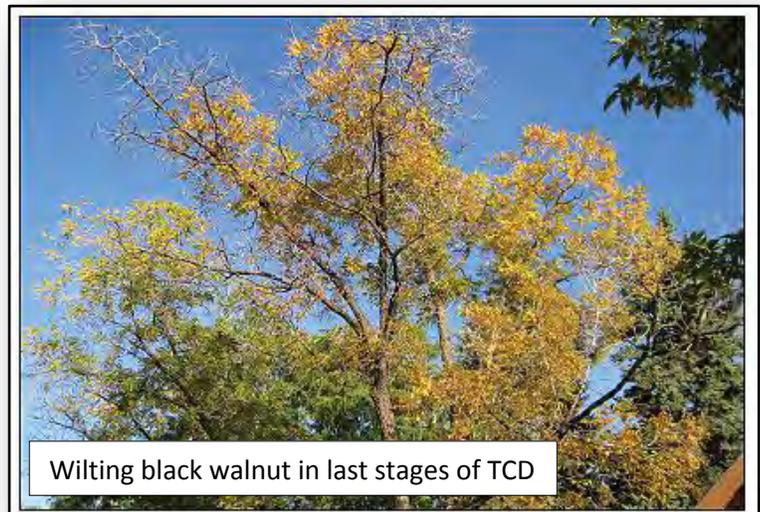
Thousand cankers disease was described in the Western United States in the 1990s, but was not well understood until after 2000. In July 2010, TCD was reported in Knoxville, TN, causing dieback on black walnut. The infestation is believed to be at least 10 years old and was previously attributed to drought stress. This was the first time TCD was found in the Eastern United States. On June 24, 2011, TCD was found in two black walnut trees in Chesterfield County, Virginia. A quarantine order restricts the movement of walnut material and hardwood firewood from States known to have thousand cankers disease, including Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Tennessee, Utah, Virginia, and Washington.

On August 9, 2011, the Pennsylvania Department of Agriculture, in cooperation with the U.S. Department of Agriculture and Penn State Cooperative Extension, confirmed the presence of thousand cankers disease in black walnut trees in Bucks County, Pennsylvania.

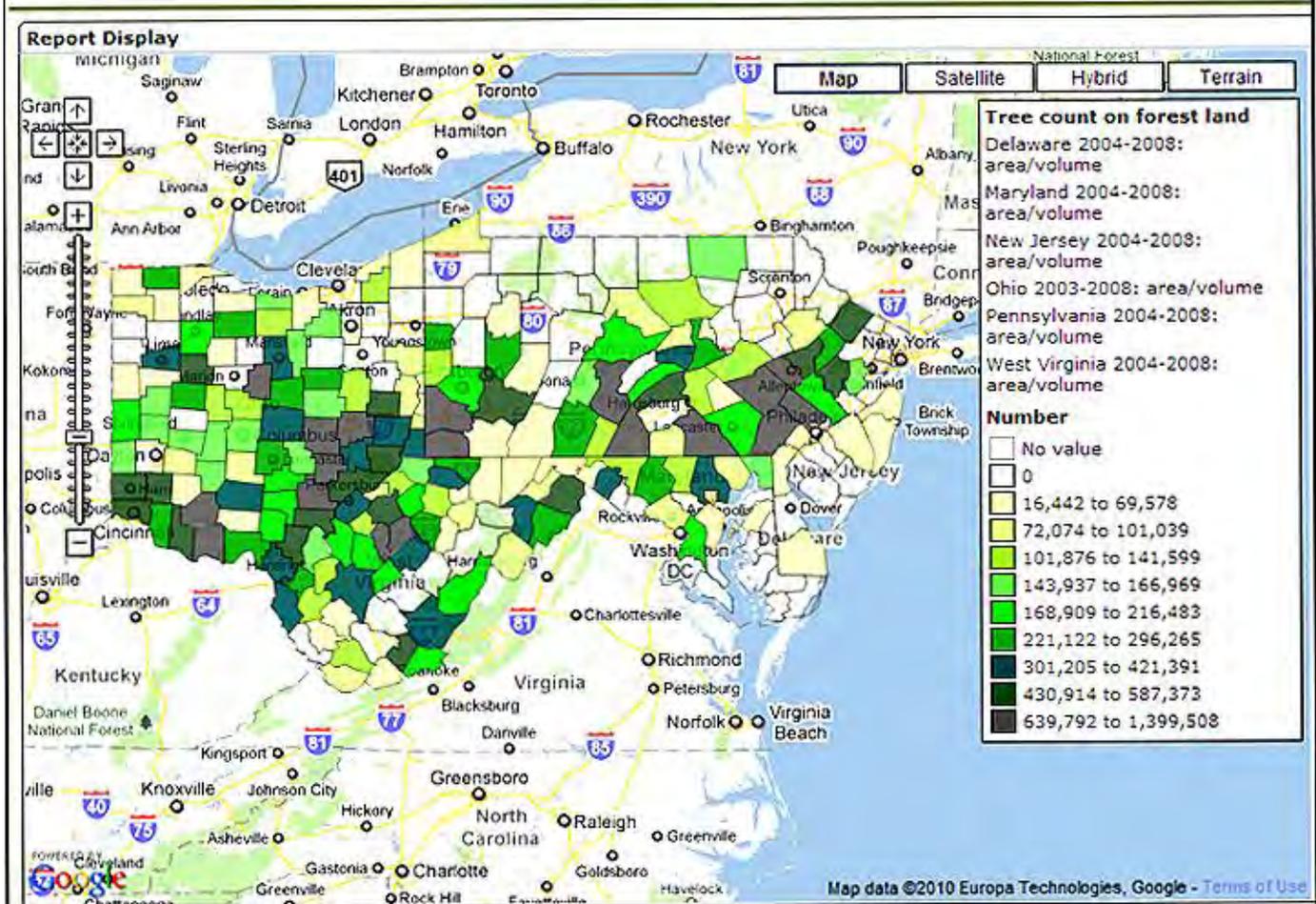
For information about TCD, visit the following Web sites:

<http://www.fs.fed.us/foresthealth/fhm/sp/tcd/tcd.shtml>

http://www.aphis.usda.gov/plant_health/plant_pest_info/tcd/index.shtml



USDA Forest Service Forest Inventory Analysis based summary of black walnut for Mid-Atlantic states

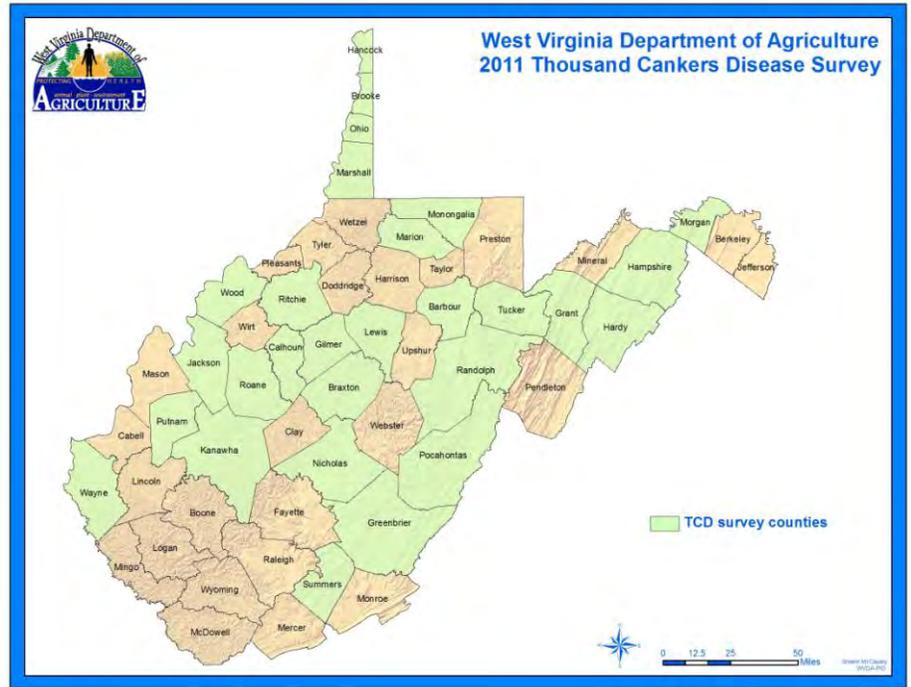


DELAWARE: Surveys were conducted around homesteads and urban areas. Two trees were cut down to inspect the branches; no TCD has been detected.

OHIO: Surveys are being conducted and no TCD has been detected.

PENNSYLVANIA: Multistate surveys are being scheduled for 2011. Examinations of black walnut trees in southeast and central Pennsylvania will focus in riparian zones, urban forest zones, and some forest edges adjacent to flood plains, among others. Sample collections will be made where evidence of crown dieback, bark beetle emergence activity, and canker symptoms are detected. Surveys and training programs will focus on arborist operations, logging operations, sawmills, and private woodland ownerships in 2011 and 2012.

WEST VIRGINIA: Surveys for TCD began in August 2011. Counties were prioritized based on tree counts from the U.S. Forest Service Forest Inventory and Analysis of black walnut in the Mid-Atlantic States. Survey area emphasis was based on urban areas, campgrounds, day-use areas, industrial parks, and riparian areas. TCD has yet to be detected.



Invasive Plants

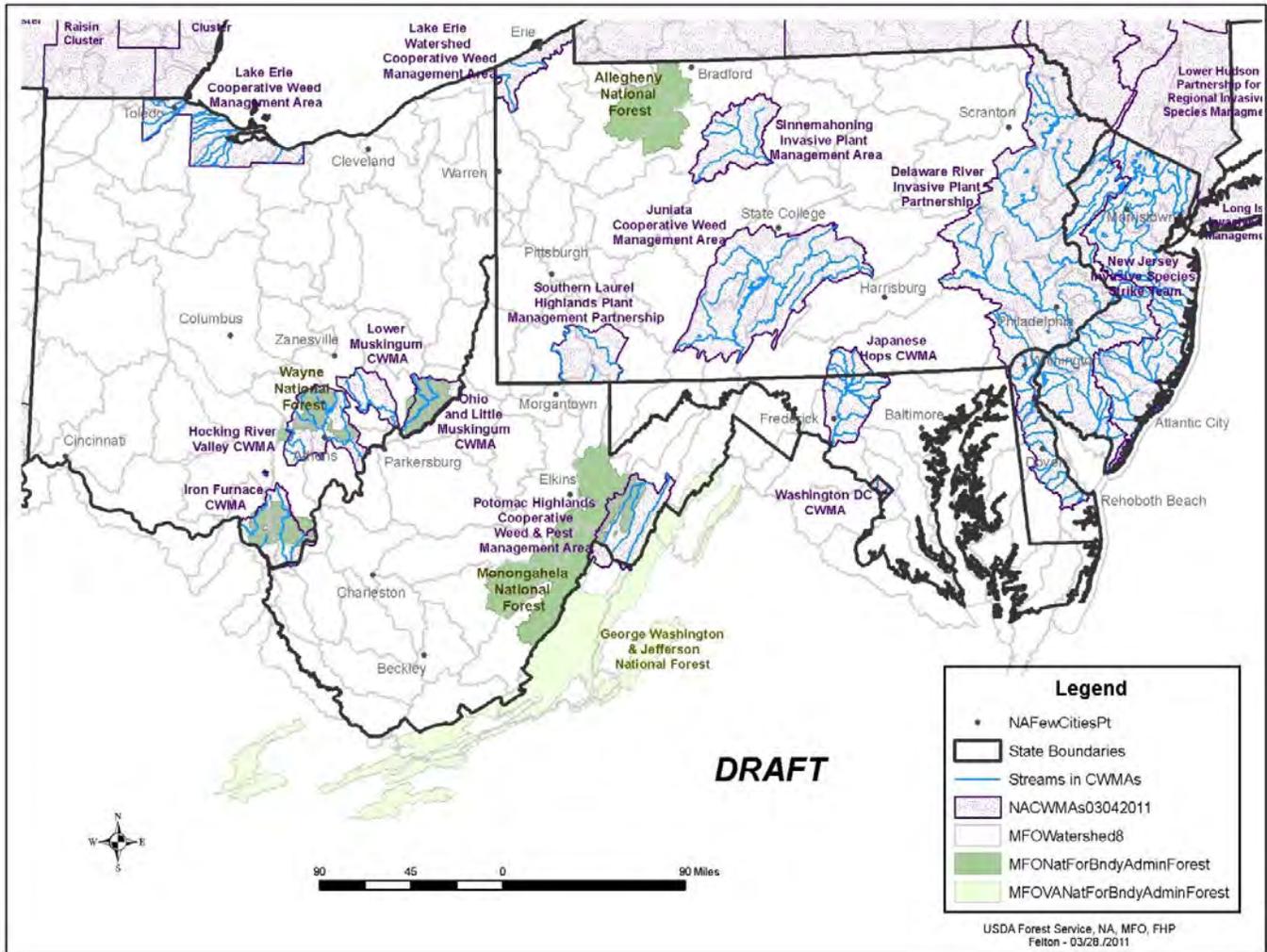
Invasive plants are species that aggressively compete with and displace native plant communities.

Communities of landowners are joining with local, State, and Federal partners to prevent and manage invasive plants and support healthy ecosystems by organizing Cooperative Weed Management Areas (CWMAs) across the United States. CWMAs work within a defined geographical area that is distinguished by a common geography (watershed), weed problem, community, climate, political boundary, or land use.

Cooperative Weed Management Areas are local organizations that bring together landowners and land managers to coordinate action and share expertise and resources to manage common weed species. CWMAs often function under the authority of a mutually developed Memorandum of Understanding or Cooperative Agreement and are governed by a steering committee. Together, CWMA partners develop a comprehensive weed management plan for their area. At the least, CWMA plans include weed surveying and mapping components as well as plans for integrated weed management. More comprehensive plans may include education and training, early detection of new invaders, monitoring, revegetation, and annual evaluation and adaptation of the weed management plan.

CWMAs may have different names in different parts of the country. Examples include the Southern Laurel Highlands Plant Management Partnership in Pennsylvania and the Potomac Highlands Cooperative Weed and Pest Management Area in West Virginia.

Over the last several years, the majority of Northeastern Area State and Private Forestry grants that deal with invasive weed control have been within a CWMA.



Known Cooperative Weed Management Areas within the Morgantown Field Office area of responsibility as of Summer 2011.

For information about invasive plants, visit the following Web sites:

http://na.fs.fed.us/fhp/invasive_plants/index.shtm

<http://www.invasive.org/eastern/>

<http://www.ma-eppc.org/>



Feeding damage on mile-a-minute weed caused by weevils, *Rhinoncomimus latipes*, on Pennsylvania State Game Commission Lands.

Mechanical and chemical control methods are most commonly used to combat invasive plants; however, two examples of potential biological control methods include the use of weevils such as *Rhinoncomimus latipes* for mile-a-minute weed control and the use of a fungus, *Verticillium albo-atrum*, for tree of heaven control.



A 2008 tree of heaven (TOH) stand inoculated with *Verticillium albo-atrum* in the Buchanan State Forest, Pennsylvania. In 2008, 10 TOH stems were inoculated. In 2011, up to 13,000 dead and dying TOH stems were tallied.

OHIO: Aerial surveys for tree of heaven (TOH), *Ailanthus altissima*, were conducted over districts of the Wayne National Forest. Flying took place during the winter months to look for TOH seed clusters. Results will aid in control management and research. Aerial data will be overlaid with past land uses to look for patterns in dispersal. During the control treatments and ground truthing of the aerial surveys, any *Ailanthus* wilt will be reported and verified.

Other activities include coordinating with the Natural Resources Conservation Service on EQIP contracts to control invasive species on private lands, surveying the general public for kudzu locations throughout the State, conducting workshops to educate attendees about invasive species identification and control options, and creating invasive plant factsheets with Ohio State University Extension.

FOR MORE INFORMATION:

USDA Forest Service,
Northeastern Area,
State & Private Forestry
Forest Health
Morgantown, WV 26505

Group Leader for the Forest Health Staff in Morgantown, WV:
Dan Twardus: 304-285-1545

District of Columbia – Morgantown Forest Service Contact:
Rick Turcotte: 304-285-1544 / Al Iskra: 304-285-1553

Delaware – Morgantown Forest Service Contact:
Brad Onken: 304-285-1546

Maryland – Morgantown Forest Service Contact:
Brad Onken: 304-285-1546

New Jersey – Morgantown Forest Service Contact:
Bill Oldland: 304-285-1585

Ohio – Morgantown Forest Service Contact:
Bill Oldland: 304-285-1585

Pennsylvania – Morgantown Forest Service Contact:
Rick Turcotte: 304-285-1544

West Virginia – Morgantown Forest Service Contact:
Amy Hill: 304-285-1565

This newsletter is also available on the WWW at:
<http://na.fs.fed.us/fhp/fhw/>