

# Maryland - 2008



## Forest Health Highlights

### The Resource

Maryland occupies a land area of 6,255,800 acres. Forest land comprises 2,565,800 acres of which nearly 76 percent is privately owned. Healthy, productive forests are critical in urban and rural areas for soil conservation, clean air and water, wildlife habitat, outdoor recreation, and aesthetics. The forest products industry is the largest employer in Allegany and Garrett Counties and the second largest employer on the Eastern Shore.

### Forest Health Monitoring

The Forest Health Monitoring (FHM) Program has two components: plot network and off-plot survey. The U.S. Forest Service Northern Research Station Forest Inventory and Analysis staff administer the plot network in Maryland. The plot network is designed to annually monitor, assess, and report on changes in the long-term condition of trees, soils, lichens, and air quality in forests.

The Maryland Department of Agriculture conducts the off-plot survey component of FHM. The objectives of this component are to delimit, map, and report forest pest problems as a supplement to the FHM plot network. Aerial and ground surveys, data collection, and reporting are conducted in accordance with FHM standards for air operations and GIS.

### Forest Pest Issues

**Gypsy Moth** — Egg mass surveys conducted in fall 2007 indicated damaging infestation levels in many counties. In spring 2008, 99,222 acres were treated in the northeast, central, southern,

and western areas of the State. Maryland experienced 19,279 acres of defoliation. Surveys indicate that treatments will decrease to about 40,000 acres in 2009.

**Hardwood Defoliators** — None were detected in 2008.

**Bark Beetles** — Maryland participated in the exotic bark beetle program in 2008. Pheromone-baited Lindgren funnel traps were placed near importers of marble, tile, and granite. The traps were monitored from May to October. No target species were trapped in 2008. The **pine shoot beetle**, a European bark beetle, was the target of another USDA, APHIS-funded survey conducted in 14 Maryland counties. The pine shoot beetle was first found in western Maryland in 1995. Pine shoot beetles are now found in all five western Maryland counties (Allegany, Frederick, Montgomery, Garrett, and Washington). Significantly more beetles were found in traps in 2008 than in previous years. A Federal quarantine restricts pine material moving from these counties. Southern pine beetle populations continue to remain low in the State, but populations usually build up to damaging levels on a 7- to 8-year cycle. The last outbreak ended in 1994.

**Hemlock Woolly Adelgid (HWA)** — HWA remains the major threat to eastern hemlock health. Infested hemlocks occur in the metropolitan area between Baltimore and Washington and in natural stands from Harford to Garrett Counties. A joint Maryland Department of Agriculture (MDA)-Department of Natural Resources HWA Task Force addresses the multidisciplinary needs of the HWA infestation. As part of a mid-Atlantic multistate survey, 13 plots have been set up in 6 counties to assess the HWA impact on hemlock stands. The potential for HWA biological control by the predatory beetle, *Laricobius nigrinus*, was evaluated in the Frederick City Watershed and in Rocky Gap State Park in Allegany County during 2004. *Laricobius* was recovered from Rocky Gap in fall 2005. Recoveries since then indicate that the beetle is now established at that site. Additional releases have been made at Rocky Gap in an effort to establish a field insectary so that beetles can be harvested for movement to other areas. In 2007, 15 beetles were recovered at the Frederick City Watershed. *Laricobius* was released at the Hagerstown Watershed in Washington County, Pretty Boy Reservoir in Baltimore County, and the Broad Creek Boy Scout Camp in Harford County in 2007. In 2008, *Laricobius* was again released at Broad Creek, Frederick City Watershed, and Rocky Gap. New release sites include Savage River State Forest

(Big Run area) and Potomac State Forest (Lost Land Run area). To date, 2,928 trees on priority sites have received soil injections and 461 have received trunk injections of the insecticide imidacloprid for control of HWA.

## Special Issues

***Phytophthora ramorum*** — Maryland was one of many States receiving *Phytophthora ramorum*-infested nursery stock in 2004. MDA Plant Protection was responsible for surveying nurseries that received infected stock and conducting trace forward inspections for all potentially infected plant material. Forest Pest Management and the Plant Protection Section conducted a stream sampling survey during 2008 at five sites. No *P. ramorum* was found.

**Emerald Ash Borer** — Infested ash trees were found at a Maryland nursery in August, 2003. Infested ash trees from Michigan were sent to the Maryland nursery in April, 2003, and some of these trees were sold as part of the nursery's landscaping business. The remaining trees and

other ash that became infested at the nursery were destroyed by MDA staff. MDA Plant Protection staff had traced forward ash trees sold by the Maryland nursery and removed most of these ash trees. Additionally, all ash trees within ½ mile of the infested nursery were cut and burned in early spring 2004. MDA Forest Pest Management and Plant Protection staff conducted visual surveys and monitored trap trees in areas that had infested ash trees. Trap trees were placed in areas of Garrett County near property owned by Michigan residents. In 2005, no additional infested ash trees were found and no emerald ash borers were found in trap trees. In August 2006, EAB larvae were found in trap trees near the original infestation. A large-scale detection and eradication project was initiated. Additional detections of EAB life forms in the area have forced the eradication zone to be expanded, and the project is ongoing. The result is that Prince Georges and Charles Counties are now quarantined for this insect. MDA established trap trees to detect EAB at 12 sites in State parks that had Michigan residents; no detections were made. MDA placed 954 Barney traps outside the eradication zone in Garrett, Allegany, and Prince Georges Counties as well as the counties adjacent to Prince Georges; no EAB were caught.

**Sirex Woodwasp** — Eighty traps were deployed in 2008 in the eight counties adjacent to Pennsylvania. No woodwasps were collected.

## For More Information



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