

# Maryland - 2007

## 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 administers the plot network in Maryland. The plot network is used 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 the FHM Program 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 2006 indicated damaging infestation levels in many counties. In spring 2007, 50,184 acres were treated in the northeastern, central, southern, and western areas of the State. Maryland had

68,460 acres of defoliation. Surveys indicated that treatments will need to more than double in 2008.

**Hardwood Defoliators** — Fall cankerworm defoliated an unknown number of acres of mixed hardwoods in Cecil County. The defoliation could not be mapped because all personnel were working on gypsy moth-related work.

**Bark Beetles** — Maryland participated in the Early Detection Rapid Response program in 2007. Pheromone-baited Lindgren funnel traps were placed near importers of marble, tile, and granite. The traps were monitored from May to October. Cornell University conducted prescreening. No target species were trapped in 2007. 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 2007 than in previous years. A Federal quarantine restricts the movement of pine material 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 the health of eastern hemlock. Infested hemlocks occur in the metropolitan area between Baltimore and Washington, and in natural stands from Harford to Garrett Counties. A joint MDA-DNR HWA Task Force addresses the multidisciplinary facets of managing 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 city of Frederick watershed and in Rocky Gap State Park in Allegany County during 2004. *Laricobius* was recovered from Rocky Gap in the fall of 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 city of Frederick watershed. *Laricobius* was released at the Hagerstown watershed in Washington County, Pretty Boy Reservoir in Baltimore County, and Broad Creek Boy Scout Camp in Harford County in 2007. To date, 2,618 trees on priority sites have received soil injections, and 314 have

had trunk injections with imidacloprid insecticide to control HWA.

**Beech Bark Disease** — This disease was detected for the first time in Maryland in 2007 in southern Garrett County. The scale now infests two-thirds of that county.

## 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 the 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 at 10 sites. No *P. ramorum* was found.

**Emerald Ash Borer** — Infested ash trees were found at a Prince Georges County 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. MDA staff destroyed the remaining trees and other ash that became infested at the nursery. MDA Plant Protection staff had traced forward ash trees sold by the Maryland nursery and removed all of these ash trees. Additionally, all ash trees within ½ mile of the infested nursery were cut and burned in the early spring of 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. As part of the eradication project, 34 prism traps were placed in the counties adjacent to Prince Georges. No EAB were caught. MDA established trap trees to detect EAB at 12 sites in State parks that had Michigan residents. No EAB has been found to date.

**Sirex Woodwasp** — Trapping was conducted at eight sites in 2007 in counties adjacent to Pennsylvania. No collection of the insect was made. The CAPS program used 13 traps in the central and southern part of the State to monitor for Sirex; no woodwasps were caught.

## For More Information



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