Pennsylvania - 2006
Forest Health Highlights

The Resource

Pennsylvania covers a land area of 25,333 square miles and is 59 percent forested. Seventy-five percent of the forest land in the State is privately owned by 513,900 landowners. Yet with a population of 12 million people, forest landowners account for only 4 percent of the total population. Forests provide timber, watershed protection, wildlife habitat, and recreational benefits for all Pennsylvanians.

Weather Conditions

Temperatures in the winter of 2005-2006 were above normal and precipitation was normal. Temperatures were above normal throughout the spring months, while precipitation was below normal with drought in some areas. Temperatures were normal in the summer months and precipitation was well above normal, with major flooding in some areas near the end of June. Incomplete data suggest that temperatures in the autumn months started below normal and precipitation started out above normal.

Forest Pest Issues

Gypsy Moth — There was increased defoliation by gypsy moth throughout Pennsylvania, where aerial and ground surveys recorded 698,268 acres of damage. Egg mass counts are high in many areas of the State. An aerial suppression program was conducted in 2006 on 81,160 acres of land. Suppression activities are scheduled for qualifying lands in 2007.

Hemlock Woolly Adelgid (HWA) — As of November 2006, 47 counties in Pennsylvania have been infested with this insect. In 2006, the Department of Conservation and Natural Resources, Division of Forest Pest Management (DCNR-FPM) continued biological control efforts with releases of Scymnus sinuanodulus (Ss) and Laricobius nigrinus (Ln). A total of 3,467 Ss have been released at three sites since 2005. Three hundred Ln were released at one site in Centre County, bringing the total number released to 1,500 at four sites since 2004. The DCNR-FPM also continued a chemical suppression program for HWA in 2006. The program protected 8,688 high-value hemlock trees on DCNR lands using either soil- or stem-injected imidacloprid. A total of 14,985 hemlocks have been protected since the program began in 2005.

Elongate Hemlock Scale (EHS) — Throughout 2006, Cybocephalus nipponicus (Cn), a predator of EHS, has been introduced to aid in control of this pest. A total of 118,000 adults have been released at 42 sites since releases began. In 2006, a total of 566 Cn were recovered at sites where the predator was released in previous years.

Emerald Ash Borer (EAB) — The DCNR-FPM participates in a multiagency effort with the Pennsylvania Department of Agriculture and the USDA APHIS to detect this destructive pest. In 2006, 36 pairs of girdled trap trees were established in 12 western Pennsylvania counties. One tree from each pair was felled and peeled to detect EAB. No EAB were collected from these trees. In addition, visual inspections for EAB were also all negative.

Early Detection and Rapid Response (EDRR) — The DCNR-FPM participated in an early detection program targeting exotic bark beetles (Curculionidae: Scolytinae). Sixteen sites were established in 16 counties, and samples were collected every 2 weeks from late March to early June. No new exotic bark beetles were detected in 2006.

Sirex Wood Wasp — The DCNR-FPM participated in a multiagency effort to detect the presence of Sirex noctilio, an invasive woodwasp recently discovered in northern New York. Cooperating agencies placed 275 traps in a trapping grid within a 150-mile radius of the original New York detection. Two S. noctilio were detected—one in Tioga County and one in Bradford County. Additional surveillance is planned for 2007.
Disease Conditions

**Anthracnose** — Anthracnose was reported to cause 1,030 acres of damage in 2006. Moderate activity was reported in southeastern Pennsylvania on sycamore, while light activity was reported on sugar maple and oak in the north.

**Cytospora Tip Blight** — Shoot and twig damage caused by *Cytospora leucostigma* was reported on 1,297 acres of black cherry in northern counties.

**Sudden Oak Death (SOD)** — Thirty-two new surveillance plots for the detection of *Phytophthora ramorum*, the causal agent of SOD, were established in 2006. Fifty-eight samples from the plots were tested for *P. ramorum*. A single sample from a Delaware County nursery tested positive for SOD. Several streams were also baited with host material leaves for 2-week periods to test for SOD. No stream baiting samples tested positive in 2006.

**Miscellaneous Diseases** — Reportable forest damage was also noted for several other diseases, including but not limited to elm yellows, *Fabrella* needle blight, *Rhizosphaera* needlecast, and *Armillaria* root rot.