

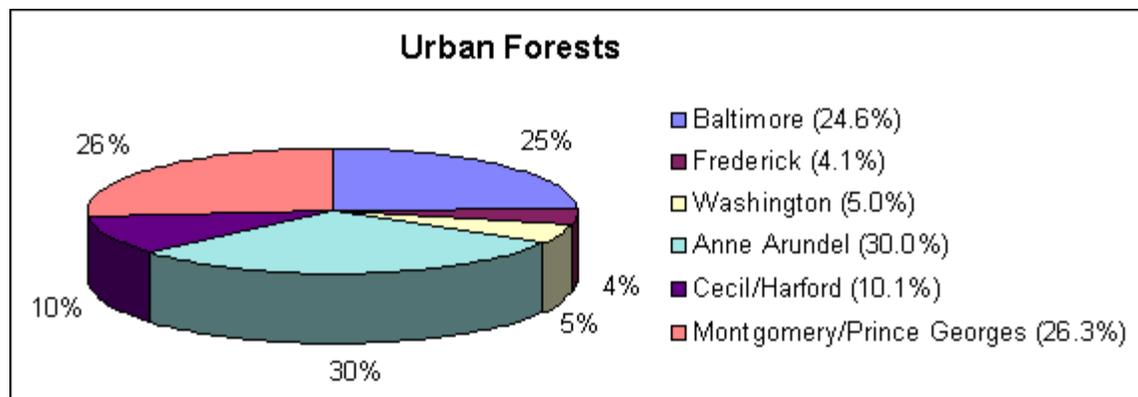
## 1994 Forest Health Highlights

# Maryland

### The Resource

Maryland's forests account for 44 percent (almost 3 million acres) of the total land area of the State. The forests are a mixture of conifers and hardwoods. The largest forest type is the oak/hickory, but the southern pines dominate the lower eastern shore.

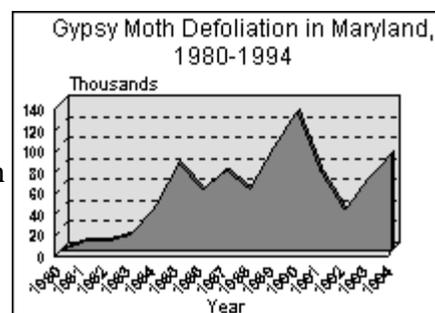
Urban forests and forested residential areas account for about 103,000 acres.



### Special Issues

On the Eastern Shore, 1,514 acres of defoliation was caused by a combination of gypsy moth and **forest tent caterpillars**. An additional 2,946 acres were defoliated by forest tent caterpillars alone. Most of the defoliation occurred on bottomland hardwoods in the Pocomoke River drainage of Worcester, Wicomico, and Somerset Counties. This is the first significant defoliation by forest tent caterpillars since 1981.

The **gypsy moth** is the most serious pest of Maryland forests. The Cooperative (with the USDA Forest Service) Gypsy Moth Suppression Program treated 96,008 acres during 1994. A total of 93,147 acres of oak-dominated forests were defoliated in 1994; 94 percent of which occurred on the Eastern Shore. All Eastern Shore counties, except Somerset, had an increase in defoliated acres from 1993. In the remainder of the State, with the exception of Charles County in Southern Maryland, gypsy moth populations remained low. In Charles County, as on the Eastern Shore, large areas of suitable host trees have contributed to extensive defoliation.



The **ice storms** of February 1994 affected forests in Talbot, Caroline, Calvert, and Charles Counties. Over 3,000 acres of pines and hardwoods were damaged. In some areas, damage resulting from the ice storms became evident during the summer when decay and bark beetles begin infesting damaged trees. The effects of this storm will be seen for years to come.

The extreme cold temperatures of last winter apparently ended the **southern pine beetle** outbreak on the Eastern Shore. In 1993, approximately 3,000 acres of loblolly pine in Worcester, Wicomico, Somerset, and Dorchester Counties were killed by southern pine beetle. In 1994, only two beetle spots were detected and by the fall, they appeared to be inactive.

Other insects and diseases had a minor affect on the forests of Maryland. **Fall cankerworms**, which had

caused approximately 4,000 acres of defoliation in 1993, were found in only scattered locations in the State. **Hemlock woolly adelgid** has been infesting native hemlock stands in Frederick County since 1991, but no hemlock decline has been noted. **Dogwood anthracnose** is having an impact on ornamental dogwoods in suburban areas, as well as the cool, humid mountain areas of Western Maryland.

## **Other Issues**

For 1994, there were 700 fires that burned 550 acres of forest and 1,450 acres of field and marsh. The number one cause of fires in Maryland is debris burning. Effects of fire on forest health are dependent on fire intensity and type of forest. Young pine stands are especially susceptible to damage.

Maryland's Forest Stewardship Program continues to work with private forest landowners to help them manage their land, including monitoring for insect and disease problems.

## **Regional Surveys**

The Maryland Department of Agriculture (MDA) has participated in several Regional surveys relating to Forest Health issues. Through the USDA-APHIS Cooperative Agricultural Pest Survey (CAPS), Northeastern Region States conducted surveys in 1994 and 1995 for several species of exotic bark beetles: pine shoot beetle, three species of *Ips*, a *Pityogenes* species and a *Hylurgus* species. In 1994, surveys were conducted in the eastern half of the State and were continued in 1995 in the southern and western counties. Collection data from this survey is added to the regional CAPS database.

Maryland is also participating in a south-wide survey to predict trends of southern pine beetle outbreaks. This survey, coordinated by the Texas Forest Service, utilizes pheromone-baited traps in 12 southern States to give pest management specialists an early warning of southern pine beetle populations.

Although the hemlock woolly adelgid has not had a significant impact on Maryland forests, MDA is participating in a multi-state survey to determine the distribution and impact of the adelgid. Permanent plots have been setup in the State to determine the long-term impacts on the native hemlock resource.

## **FOREST HEALTH MONITORING PROGRAM**

For several years, Maryland has participated in the National Forest Health Monitoring Program. Permanent monitoring sites have been established throughout the State from which long term changes in forest condition and forest stressors can be detected.

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