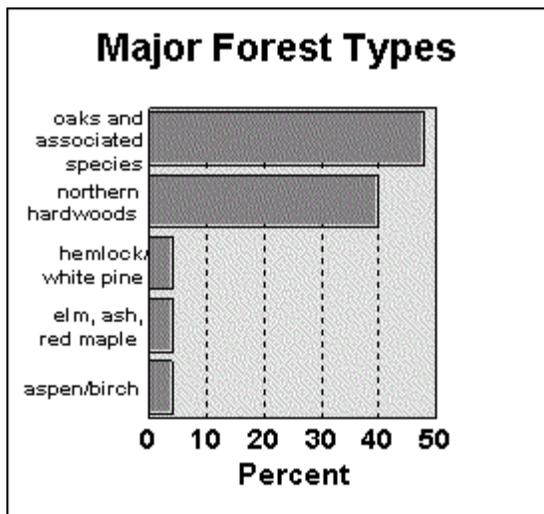


Pennsylvania

The Resource

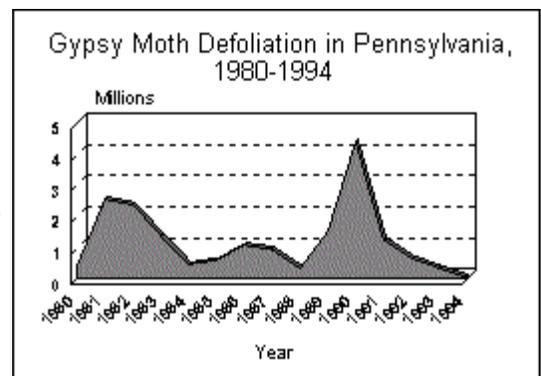
There are 17,000,000 acres of forestland in Pennsylvania, which is nearly 60 percent of the total land area. The Hardwood Lumber Manufacturers' Association has calculated that \$5 billion worth of timber products are produced annually in Pennsylvania. This includes lumber and pulpwood, as well as, finished products such as furniture, export logs, crating, pallets, and veneer. The forests also provide watershed protection, wildlife habitat, and recreational benefits.

Pennsylvania forests are dominated by hardwoods, particularly maples and oaks.



Special Issues

The **gypsy moth** population continued to decline as it has for the past 5 years. There were 22,500 acres of defoliation by gypsy moth in 1994 distributed fairly evenly among 11 counties, primarily in central Pennsylvania from York to Lycoming to Pike Counties. The fungus *Entomophaga maimaiga* was especially prevalent in gypsy moth populations and undoubtedly contributed to the abbreviated area infested. There are indications, though, such as the presence of large, healthy egg masses in some eastern counties (Monroe, Luzerne, Carbon, Schuylkill, Berks, Lancaster, Lebanon, Dauphin, and Northumberland), that gypsy moth populations could build again in the absence of damp weather that is conducive to the buildup of the fungus.



The **elm spanworm** has caused a considerable amount of defoliation during the past 4 years in Pennsylvania, primarily in the northern tier of counties. The epidemic began in 1991 in Elk and McKean Counties, with approximately 65,000 acres. The epidemic expanded to 321,000 acres in 1992, then to 1,211,232 acres in 1993, then 1,347,721 acres in 1994. The area defoliated by the elm spanworm in 1994 was most severe in the northcentral counties (Potter to Sullivan). However, there was some defoliation as far south as Somerset County, and significant spots in Susquehanna, Jefferson, and Venango Counties, as well as several counties adjacent to those mentioned.

The **forest tent caterpillar** caused moderate and heavy defoliation in three parts of Pennsylvania in 1994. In northeastern Pennsylvania, the heaviest defoliation occurred in Wayne County. In northwestern Pennsylvania, defoliation occurred mainly in northeastern Warren County and northern McKean County. In southern Pennsylvania, visible defoliation was confined mostly to areas of western Bedford and eastern Somerset Counties. A total of about 160,000 acres were visibly defoliated by forest tent caterpillar. Defoliation was mainly to northern hardwoods, especially sugar maple.

Beech bark disease results from attack by the beech scale insect *Cryptococcus fagisuga*, and subsequent infection by the fungus *Nectria coccinea* var. *faginata*. This one-two punch is devastating to beech trees. Those trees that are attacked by both the scale and the fungus undergo a gradual degeneration that results in gross disfigurement or death. The hopeful aspect to this disease is that certain trees seem to possess resistance to the scale insect.

The beech bark disease has spread throughout northern Pennsylvania during the last 20 years. In 1994, it was reported from northern Somerset County, which represents a significant spread to southwestern Pennsylvania.

The **hemlock woolly adelgid** has received a considerable amount of negative press in recent years.

This adelgid damages eastern hemlock by piercing twigs with its mouthparts and sucking out plant fluids. The adelgid has been blamed by entomologists in New Jersey and Connecticut as the cause of hemlock dieback, decline, and mortality. The adelgid has been in Pennsylvania since at least 1969. While the damage to hemlock has not been as destructive in Pennsylvania, the forest health staff has been closely monitoring both the pest and its host.

Other Issues

Management

Three-fourths of the timberland (forestland producing or capable of producing crops of industrial wood, and not withdrawn from timber utilization) in Pennsylvania is in private (nonindustrial) ownership. Here are almost 12,000,000 acres of an extraordinary resource which, for the most part, goes without intensive forest management. Incomes of private forest landowners in many instances could be substantially enhanced if they knew the value of the forestland and used the management advice available to them.

Deer browse

Deer continue to be one of the principle causes of regeneration failure in many forest stands. In the absence of an ecological management unit approach to deer management by the Pennsylvania Game Commission in Pennsylvania, the only way to achieve suitable stocking of desirable tree species in most areas is to erect deerproof fencing.

Regional Surveys

NORTH AMERICAN MAPLE PROJECT (NAMP)

This survey was begun in 1987 and involves 4 Canadian Provinces and 10 States. There are 6 NAMP plots in Pennsylvania. The objective is to look at change in sugar maple tree conditions over time. To date, sugar maple crowns have been evaluated for signs of dieback, reduced foliage, and discoloration. Overall, sugar maple crowns appear to be normal.

FOREST HEALTH MONITORING (FHM)

This nationwide effort to assess forest conditions began in Pennsylvania in 1995. The objective of this program is to assess trend in forest conditions by assessing crown conditions, signs of damage, ozone

symptoms, lichen populations, and changes in soil chemistry. To date, all of the New England States, Maryland, New Jersey, Delaware, West Virginia, and the Lake States are participating in Forest Health Monitoring.

For More Information

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September 1995