1996 Forest Health Highlights

New York

The Resource

New York's forests provide a recreational base for millions of New Yorkers and others visiting the state's scenic regions. Forests are also productive in timber, providing employment to 2 percent of the workforce. The manufacture of wood products provides \$2.4 billion to the state's economy annually.



• 62% of the state is forested (18,641,300 acres)

Out of the forested area:

- 82.6 % timberland
 - 17.4 % non commercial or reserved forestland (data unpublished)

Special Issues

A significant discovery was made in the summer of 1996 when an exotic insect, the <u>Asian long-horned beetle</u> was detected in Greenpoint, a community in Brooklyn. Investigations by the USDA Animal and Plant Health Inspection Service found that the beetle was also located in Amityville, on the border of Suffolk and Nassau Counties on Long Island. The insect has been found infesting Norway maple, red maple, sugar maple, silver maple, horsechestnut, and poplar. Other tree species may also be at risk. As an exotic pest, the beetle can be potentially devastating. Recent surveys indicate that 20 to 30 percent of the street trees in Brooklyn are Norway maples. The inch long beetles damage trees by burrowing deep into the wood and weakening branches. The insects emerge from holes



about one-half the size of a dime. To halt the spread of this introduced pest, a quarantine has been established which prohibits moving tree host material from infested to noninfested areas. There are also plans to cut, chip, and burn infested trees, including stumps and roots, prior to April 1997.

Wilting and mortality of the **tree of heaven**, *Ailanthus*, is occurring in the Hudson River Valley. Mortality has been observed in the New York City area and as far north as Albany County. A recent laboratory report from the Agricultural Station at Riverhead revealed Verticillium wilt in a sample from New York City. Investigators from the US Forest Service, NY DEC, and New York City have also dissected affected trees

to ascertain the symptoms of the disease and to collect additional plant material for culturing. The NY DEC recently received a federal grant to study the health of *Ailanthus* and extent of mortality in New York City. The work will begin in 1997, along with a study to determine if mortality is occurring outside of the Hudson River Valley.

Best known for its shrill song in June, the **periodical cicada** emerged in 1996 after 17 years of underground feeding on roots of plants. On Staten Island 10 emergence holes per square foot were counted. Populations of cicadas occurred in the southeastern part of the state along the Hudson River Valley from New York City to Albany. After mating over the course of three weeks, eggs were laid in twigs of trees. As a result, many of those twigs were girdled and died. Oaks were primarily damaged.

Other Issues

Surveys in the spring revealed a decline in the numbers of **hemlock woolly adelgids** in the northern part of its range near Clairmont State Park in Columbia County and Woodstock in Ulster County. Years of adelgid feeding has resulted in 50 percent mortality of hemlock in Garrison and Bear Mountain State Park. No effective natural control is known. Studies are being conducted to determine the adelgids ability to survive colder winters. Infested areas include Long Island, New York City, Westchester, Putnam, Dutches, Ulster, Rockland, and Orange Counties. Infestations previously found in Columbia and Sullivan Counties were not found in 1996.

A second year of **pine needle miner** damage has been observed in Suffolk, Nassau, Ulster, and Albany Counties. The miners caused needles to turn brown and unsightly, but apparently does not harm the trees. Parasites are thought to help control the needle miners.

An introduced insect to New York state, the **common pine shoot beetle**, is primarily destructive to Scotch pine. The beetle bores into terminal branches and causes their death. Mugo pine is also damaged in New York state, but to a lesser degree than Scotch pine. To prevent the artificial spread of the beetle, the movement of pine from infested counties to non-infested areas is regulated by the New York Department of Agriculture and Markets. Infestations are detected through annual surveys. Presently, 16 counties in western New York are infested and regulated under quarantine. The most recent areas placed under quarantine are Cayuga, Wayne, Steuben, and Seneca Counties.

In 1995, a **drought** gripped many areas of New York state during the growing season. Trees growing on dry sites showed the effects. Most susceptible was the eastern white pine. Pines growing along Interstate 88 in Schenectady County and near Route 50 in Saratoga County showed symptoms of drought related damage. Scattered pines have died following wilting and bark beetle attacks. Surviving pines have thin crowns and/or top dieback. A heavy cone crop also contributed to the thin crowns of the pines.

Stewardship

Among the several NY DEC programs that contribute to forest health improvement, the **stewardship program** has the potential to reach a large number of forest landowners. All forest management plans prepared under the stewardship program include a forest protection component. The planning process helps alert forest landowners to potential and existing forest health conditions and procedures to protect forest resources.

Regional Surveys

NORTH AMERICAN MAPLE PROJECT

This cooperative project with Canada was initiated in 1988 to look at change in sugar maple tree condition. There are several states in the Northeast involved including New York, New Hampshire, Vermont, Maine, and Massachusetts. Overall, sugar maple located within the sample sites are in good condition. Periodically,

insect defoliation has affected crown condition in some areas. There was little difference found between sugarbush and non sugarbush stands.

For More Information

NY Dept. of Environmental Conservation Division of Lands and Forests 50 Wolf Road Albany, NY 12233

(518) 457-7370

Forest Health Protection USDA Forest Service P.O. Box 640 Durham, NH 03824



(603) 868-7709

January 1997