

1994 Forest Health Highlights

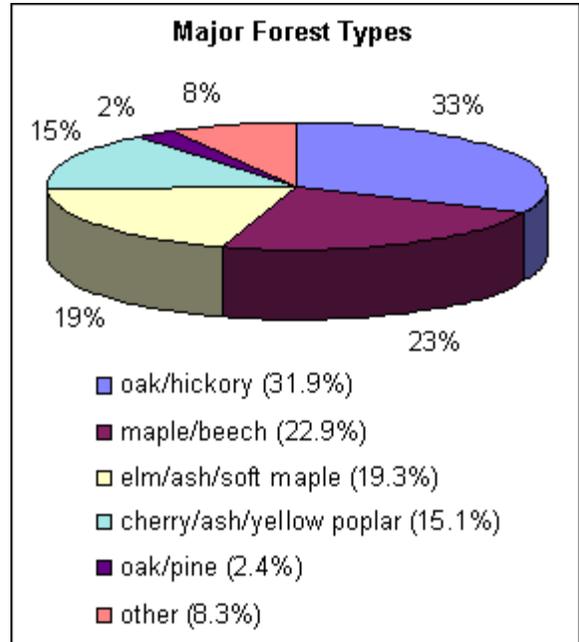
Indiana

The Resource

The estimated gross value of the wood products industry is \$3.5 billion, including employment for about 42,000 people with a total payroll of \$1.05 billion.

About 500 million board feet were harvested in the most recent year for which statistics are available. The value of sawlogs delivered to the mill is about \$175 million. About 90 million board feet of veneer are exported. Other major products include handlestock, cooperage and specialty products.

- Total acres: 23,171,000
- Forested acres: 4,439,000
- Percent forested: 18% of all land
- Percent timberland: 17% of all land, 99% of forested land
- Reserved acres: 58,000 or 0.3% of forest land



Special Issues

Dogwood anthracnose, *Discula destructiva*, recently was introduced into Indiana on infected nursery stock. Shipments of potentially infected dogwood were delivered to retail nursery lots in 62 of the 92 counties. Of these 62 counties, 27 received stock that were confirmed to be infected. Shipments came from several states, however, one nursery in Tennessee was the primary origin for infected dogwood. Retail nursery lots received the majority of the infected trees. The commercial landscape nurseries also received infected material.

The Indiana Department of Natural Resources, Division of Entomology & Plant Pathology issued stop sales orders and a quarantine to contain the introduction of the disease. A survey of the native dogwood in the forest understory was conducted to determine if the disease was present. Counties that received dogwood nursery stock and adjacent counties were surveyed. Approximately 50 counties were surveyed and only one county, LaPorte, had native dogwood infected with the disease.



Flowering dogwood did have symptoms that many people believed were dogwood anthracnose. The symptoms occurred in 1993 and again in 1994. First impressions were that the symptoms were drought caused. Close examination found that a powdery mildew was present on the twigs and foliage.

Infestations of the **gypsy moth** looms nearer as each year passes. Although not yet established in Indiana, introductions that require eradication measures are being detected each year. One eradication project was conducted in Fort Wayne. Survey results indicate that the eradication should be achieved in 1995 or 1996.

The project reduced egg mass numbers from 32 to 1 and male moth counts from 333 to 13 moths. The survey in 1994 identified two introductions in Steuben county and possible introductions in St. Joseph and Porter counties.

Other Issues

The **introduced pine sawfly**, *Diprion similis*, defoliated several white pine plantations in Perry and Spencer counties. Two plantations on the Hoosier National Forest are being monitored to determine the impact of defoliation. This information will be used to guide management of white pine in the campgrounds on the Hoosier National Forest.

Ash Yellows (**Ash Decline**) can be found across the state primarily on white ash. Symptoms of the disease, especially crown dieback and growth loss, are more prevalent in the northern part of the state. It is generally more common to observe the disease on wetter sites, but witches'-brooms (a diagnostic symptom) also can be found on trees growing on dryer sites. Fourteen years of monitoring infected trees indicates progression of the disease in an individual tree is slower than first believed. Approximately 3% of the healthy population begin declining annually. Of the trees in early decline, 4% annually advance to a higher state of decline. Trees in an advanced state of decline have the greatest change with 7% dying annually. Cumulative mortality over this period was greatest in trees with advanced decline, about 49%. Healthy trees and early declining trees had mortality of 2% and 5%, respectively.

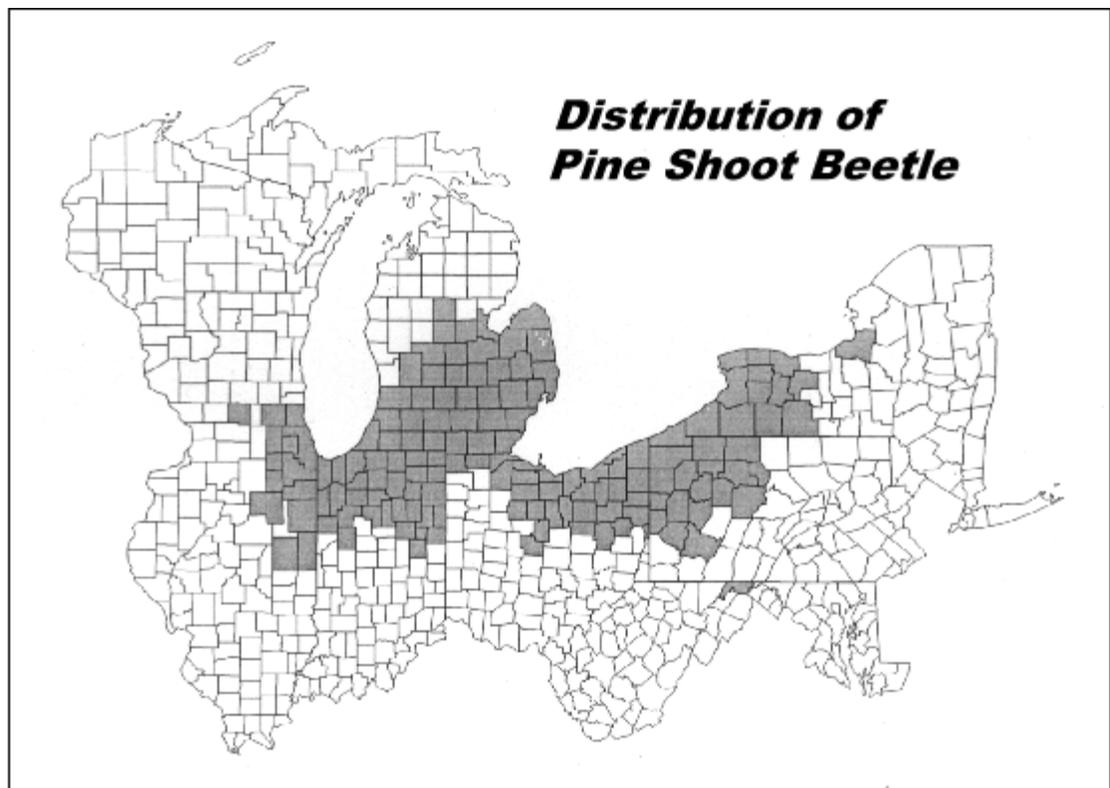
A **looper complex**, linden looper (*Erannis tiliaria*) and half-wing geometer (*Phigalia titea*), heavily defoliated the forests of south central Indiana between 1979-1981. Since that epidemic, monitoring surveys have been conducted to detect the next epidemic. The survey during the last 4 years indicated the epidemic may be starting, however, no defoliation or outbreak has occurred.

Regional Surveys

The **pine shoot beetle** (*Tomicus pineperda*) was identified in pine plantations in the northern third of the State. Christmas tree growers are particularly concerned about the potential of this introduced insect to cause destructive losses to their industry.

Butternut canker affects butternut throughout the state. Butternut is a relatively uncommon yet

prized relative of the black walnut. Efforts are continuing to locate individual trees that may exhibit resistance to the disease.



For More Information

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