

TABLE 2.—NET VOLUME OF SAWTIMBER ON TIMBER LAND IN THE EASTERN UNITED STATES, BY REGIONS AND SPECIES—
Continued
[In million board feet]

Species	Total East	Total North	Northeast	North central	Total South	Southeast	South central
Ash as % of all species	5.5	5.3	3.7	6.9	5.6	5.8	5.5

Using the estimates provided in table 2, the value of ash timber grown in the eastern United States is \$25.1 billion (see table 3 below). Based on the establishment of the EAB in Michigan

and its range in Asia, it should be able to survive in most of the eastern United States. In Michigan, an estimated 7.7 billion board feet of ash timber is harvested annually. Using the stumpage

figures listed previously, Michigan alone could see a loss of \$1.7 billion in timber trees.

TABLE 3.—VALUE OF POTENTIAL LOSSES IN ASH TIMBER TREES IN THE EASTERN UNITED STATES BECAUSE OF INFESTATION BY THE EMERALD ASH BORER FOR DIFFERENT REGIONS, BASED ON STUMPAGE PRICES

Region	Volume of timber trees (million board feet)	Value of losses (million dollars) ¹
Michigan	7,700	\$1.697
Northeastern region	11,740	2,558
Northern region	35,575	7,842
Total Eastern region	113,916	25,111

¹ Assumes average stumpage price of \$22.43 per 1,000 board feet (Agricultural Statistics, 2002).

Other Effects

We must also consider the value of ash trees as important environmental and recreational resources. The recreational use of national forest lands amounted to 341.2 million visitor days² in 1996, the most recent year for which data were available. In Michigan, 4.87 million visitor days were spent in the national forests in 1997. While not specifically attributable to the presence of ash trees, these statistics illustrate the importance of forest-based recreation in the United States. Ash trees are important components of U.S. forests; in addition to their aesthetic value, they provide food and shelter for wildlife.

Citizens may also be affected by the presence of EAB in their own yards and neighborhoods. Removing dead or infested trees is costly and inconvenient, and replacement trees may have to grow for years before they offer the same amount of shade and ornamental value. Further, the quarantine restricts people from freely moving firewood and ash products through Michigan.

Effects on Nursery Stock

An estimated \$2 million in annual nursery stock sales have already been lost in the six Michigan counties first quarantined by the State. The Michigan

Nursery and Landscape Association reports that nursery, plant production, and landscaping industries employ 347,000 Michigan citizens and contribute \$3.7 billion to the State's economy. Michigan's nursery producers generate about \$711 million in annual sales and distribute their products to 35 U.S. States, Mexico, and Canada; these producers are the second largest agricultural group in Michigan and the fifth largest nursery industry in the United States. Losses, of course, could be larger if the EAB were allowed to spread to other areas of the country. Several European agrilids are known nursery pests, and we now know that EAB is capable of infesting small-diameter nursery stock.

Economic Effects on Small Entities

The Regulatory Flexibility Act requires that agencies specifically consider the economic effects of their rules on small entities. The Small Business Administration (SBA) has established size criteria based on the North American Industry Classification (NAICS) for determining which economic entities meet the definition of a small firm. The small entity size standard for nursery and tree production (NAICS code 111421) is \$750,000 or less in annual receipts, and \$5 million or less in annual receipts for forest nurseries and gathering of forest products (NAICS code 113210). The SBA classifies logging operations (NAICS code 113310), sawmills (NAICS

code 321113), and wood product manufacturers generally (NAICS subsector 321) as small entities if fewer than 500 people are employed.

More than 4,000 businesses considered small entities by the SBA are affected within the 6 counties first quarantined for EAB. These entities must meet certain requirements before moving regulated articles from the quarantined areas. Regulated entities may incur additional costs to dispose of articles such as wood debris from tree pruning and removal. Nurseries are currently prohibited from moving ash trees under the State quarantine. However, of the nurseries within those 6 counties, only 10 to 20 operations having a substantial amount of ash nursery stock in the ground are expected to be significantly affected. These entities represent only 0.2 to 0.5 percent of the number of nurseries in the six counties first quarantined.

Conclusions

Damage caused to EAB-affected ash trees in the landscape and woodlots in southeast Michigan over the past 5 years is estimated at \$11.6 million. In addition, \$2 million of nursery stock was restricted from sale due to the infestation. The monetary values at risk are \$11.7 billion in replacement costs in 6 counties first quarantined for EAB alone. The undiscounted value of the national urban tree population that are ash trees amounts to \$20 to \$60 billion. The undiscounted compensatory value

² A visitor day aggregates 12 visitor hours, which may entail 1 person visiting for 12 hours, 12 persons visiting for 1 hour, or any equivalent combination of individual or group use, either continuous or intermittent.