

# EMERALD ASH BORER BACKGROUND INFORMATION

## Host Trees

All 16 native ash species are probably susceptible to EAB attack. In northeastern Illinois, common susceptible ash species include green (*Fraxinus pennsylvanica*), white (*F. americana*), blue (*F. quadrangulata*), and black (*F. nigra*). Horticultural cultivars of these species are also susceptible. Healthy ash trees of any size are vulnerable to attack. The EAB does not attack mountain-ash, prickly-ash, or wafer-ash since they are not true ash or *Fraxinus* species. (Refer to "Ash Tree Identification" for information on how to identify ash trees.)



## Controlling EAB

Maintaining tree health is important. Research suggests that insecticide treatments may be more effective if overall tree health is maintained. Fertilize trees in the fall or spring and provide supplemental irrigation during periods of drought. Trees should receive approximately one inch of water per week during the growing season.

**Do not move firewood! Use local sources of firewood. Movement of infested firewood and wood products has repeatedly been found to be the major cause of introduction of EAB and other exotic pests into new geographic areas.**

The best long-term defense against EAB, and other future invasive insects and diseases, is to plant a diverse range of trees. Replacement trees in lieu of ash include the disease-resistant Accolade® elm, Kentucky coffee tree, ginkgo, Marmo Freeman's maple, swamp white oak, chinkapin oak, bur oak, and Redmond linden. The EAB reforestation committee, including partners such as the U.S. Forest Service and The Morton Arboretum, created these extensive lists of suitable replacement trees. Northern Illinois list, Central Illinois list, and Southern Illinois list. [PDF]

## History

The emerald ash borer was first detected in North America in the Detroit, Michigan area in June 2002 and later that year in Ontario, Canada. Since then EAB has been found in Ohio, Indiana, Maryland, and Virginia. The Maryland and Virginia infestations resulted

from Michigan nursery shipments to those states in direct violation of the Michigan quarantine. Continuing survey activities in both states have shown no further detections of this pest. The natural spread of the EAB is about half of a mile or less annually; however, humans can greatly accelerate its spread. Firewood and log movement have been the primary means by which EAB is spread.

EAB is native to Asia and is suspected to have arrived in this county in cargo utilizing wood packing material. In its native range, EAB attacks and kills trees that are weakened by stresses such as drought, disease, and mechanical injury. Unfortunately, in North America, EAB also attacks and kills healthy trees. This invasive pest is so aggressive that virtually all native ash trees are at risk, and trees may die within two to four years after they become infested. Already an estimated 20 million North American ash trees have succumbed to this borer. If EAB is not contained, the devastation to our ash trees may be similar to that of our American elms, which were decimated by Dutch Elm Disease. The potential impact from EAB in Illinois is significant. Ash trees account for six percent of forests state-wide, and 20 percent of urban forests in communities in the northeastern part of the state, or approximately 130 million ash trees.