The Emerald Threat

Emerald ash borer
Agrilus planipennis

Introduced species; native to Asia

Confirmed presence in Illinois on June 12, 2006 in Lily Lake (Kane County). Additional infestations have since been confirmed in Wilmette and Evanston, located on the shore of Lake Michigan in Cook County.

Adult:
appearance: 1/2-inch long and metallic-green
habits: Adults are not prolific flyers and their long-distance movement is through human transport, usually associated with ash firewood or nursery stock. Females will deposit 65-90 eggs on the bark surface, or in cracks.

Larvae:
appearance: 3/4-inch long and cream-colored
habits: Larvae feed on the inner bark that transports water and nutrients from the roots to the rest of the tree, creating S-shaped galleries. Eventually, feeding larvae will girdle the trunk and/or branches. Larvae overwinter under the bark, leaving D-shaped holes that are 1/8 inch across when they emerge as adults from May through July.

Infestation signs include root sprouting, D-shaped holes and S-shaped feeding galleries.

Plan of attack

Learn more about EAB: www.dnr.state.il.us/conservation/forestry/urban/index.htm; www.agr.state.il.us; www.emeraldashborer.info; http://na.fs.fed.fhp/eab/index.shtm; www.mortonarb.org/plantinfo/plantclinic/EAB.htm.
Be prepared: Developed through a partnership between DNR, Illinois Department of Agriculture (IDOA), USDA, University of Illinois and other organizations, the detailed Community Action Plan and Readiness Plan Workbook are available at www.dnr.state.il.us/conservation/forestry/urban/index.htm.
Report findings: Contact your county Extension office if you suspect an EAB infestation. Once confirmed, landowners may call the IDOA toll-free EAB hotline at 800-641-3934 for technical support.

Signs of infestation: Beyond seeing adult beetles, look for D-shaped holes, fissures on the bark and root sprouting at the base of the trunk. Heavy woodpecker feeding activity may indicate the presence of EAB larvae.
Reason for concern: Since appearing in the Midwest in 2002, more than 20 million ash trees are dead or dying, primarily in Michigan, Ohio, Maryland and Indiana. Trees are usually dead within three to five growing seasons after infestation. Ash trees represent approximately 20 percent of the urban Illinois tree community, and 6 percent of the statewide forest.
Monitoring efforts: Wood boring beetles are usually more attracted to stress trees. For the past two years, foresters have girdled some ash trees in Illinois state parks. EABs are more likely to select these girdled trap trees for egg laying, and thus foresters can locate light infestations of the beetle when they later sacrifice the trees and search for beetle larvae. To date, no Illinois trap tree has been infested.
Managing infestations: Researchers are studying various control techniques. Communities where infestations occur will identify authorized tree removal crews and create debris handling centers.

Monitoring efforts have included girdling a few ash trees in select Illinois state parks.

Often mistaken for the emerald ash borer are the: Tiger beetle, cuckoo wasp and Japanese beetle. (Clockwise from upper left.)

Quarantine

DNR has established an emergency rule that bans the importation of firewood from quarantined areas by utilizing a list of ZIP codes associated with these locations. Campground hosts and those who issue camping permits can cross-check ZIP codes on camping permits with the ZIP code list. Firewood found to have come from a quarantined area will be immediately burned.

What you can do: Early detection is critical to controlling EAB. On sunny days, look for adults on ash foliage, branches and tree trunks Report potential sightings immediately. Purchase locally produced firewood and do not bring into Illinois firewood from Michigan or Indiana, or from quarantined areas, as the wood may contain borer larvae. Burn all firewood by the end of April each year. Diversify your landscape plantings.

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