



Insect Threatens Forest

A new insect pest, the emerald ash borer, is a major threat to ash trees in American forests. Its impact is expected to be as devastating as the chestnut blight and Dutch elm disease, two fungal diseases from Asia that caused massive tree die-offs in the early twentieth century. These accidentally introduced diseases permanently changed what trees grow in forests and cities.

While Missouri's ash trees make up about 3 percent of the state's forest, that number is substantially higher in urban areas, where 14 percent of street trees and 21 percent of trees in parks are ash. The economic and ecological impact of emerald ash borer has already been substantial, and it will be staggering as this exotic pest continues to spread. The emerald ash borer has the potential to virtually eliminate ash from forests in North America, with dramatic effects on ecosystem processes as well as plant and animal communities.



Damage. ©DAVID ROBERTS/MICHIGAN STATE U.
Insect. ©DAVID CAPPAERT/MICHIGAN STATE U.

Emerald Ash Borer



The emerald ash borer (*Agrilus planipennis*) is an Asian wood-boring beetle that kills ash trees three to five years after infestation. Adults are dark metallic green, and fly from May through September to ash trees to mate and lay eggs. Larvae emerge and tunnel beneath the bark, chewing on vascular tissue and interrupting the tree's circulatory system. An infestation only becomes apparent once the canopy thinning begins and branches die back.



Damage. COURTESY/MICHIGAN DEPT. OF AGRICULTURE
Larvae. ©DAVID CAPPAERT/MICHIGAN STATE U.

By then, the insect has long since moved on.

The emerald ash borer was first identified near Detroit, Michigan in July 2002. Unfortunately, the insect has continued to disperse, already killing millions of ash trees from Missouri to Maryland and up into Ontario. In 2008, Missouri became the tenth state to confirm the presence of the emerald ash borer in a county neighboring Ozark National Scenic Riverways.

Leave Your Firewood At Home



Humans unknowingly contribute to the spread of the emerald ash borer and other forest pests when they transport firewood. Ozark National Scenic Riverways has implemented a Firewood Movement Restriction Program entitled, "Leave Your Firewood at Home."

If you plan to visit the park, local sources of firewood (within a 50 mile radius of your destination) can be obtained or 'dead and down' wood can be collected in the park. All firewood must be burned before you leave. For more information on the emerald ash borer,

quarantine areas, and firewood movement restrictions, please visit: http://www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/index.shtml

Together, we can help prevent the spread of the emerald ash borer and protect Missouri's forests.



**Ozark National
Scenic Riverways**