

Emerald Ash Borer

USDA Forest Service
Northeastern Area
State and Private Forestry

Extirpation of Ash from America's Forests



Description: The emerald ash borer (EAB), *Agrilus planipennis* is a non-native insect from Asia that threatens our urban and rural forests. EAB was found in the Detroit area in July 2002 and shortly thereafter in Windsor, Ontario (Canada). Spot infestations resulting from the movement of infested nursery stock or firewood from Michigan have been found scattered throughout Lower Michigan, and in Indiana, Maryland, Ohio and Virginia. Presently the EAB quarantine area covers about 16,500 mi² and includes 20 Michigan counties and one county in Ohio; however, small spot infestations resulting from human aided movement of EAB have been found in an additional 31 counties in Michigan, 10 counties in Ohio and 6 counties in Indiana.

No species of ash trees in North America exhibit any significant resistance to EAB attack. All size classes of ash are also attacked and killed. Estimates of 15 million ash trees killed to date have been put forward, but the actual number is probably much higher. Ash is common in forests throughout the eastern US and Canada, and also commonly occurs along riparian areas in the western US. It has been extensively planted throughout the country in the urban landscape. USDA Animal Plant Health and Inspection Service, Forest Service, state foresters and plant pest regulatory officials are implementing a strategy to contain the further spread of EAB and eventual eradication of the pest. The strategy consists of aggressive surveys using trap trees and visual surveys; identification of potential pathways for artificial movement and development of compliance agreements with businesses to facilitate commerce; and treatment of spot infestations. Survey and treatment are labor intensive, time consuming and expensive because only rudimentary tools are currently available. Treatments, for example, involve cutting of all infested ash trees and all host trees within one-half mile, and grinding or chipping and burning the residue. The smallest treatment area is 502 acres. Surveys involve felling ash trees and peeling the bark to look for the tiny EAB larvae.

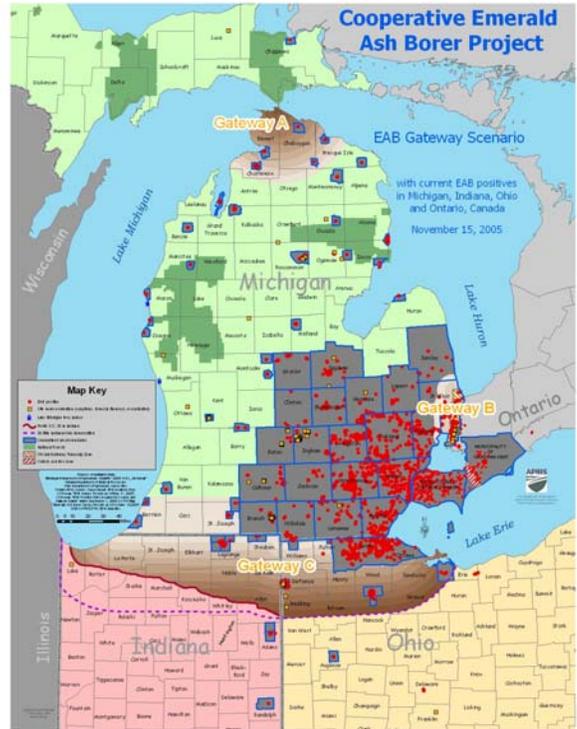
Key Issues:

- EAB occurs in MI, OH, IN, and Ontario, Canada.
- EAB is regarded as the worst tree killing pest introduced into North America since chestnut blight.
- No native ash species appear to be resistant
- More than 15 million trees across southeastern Michigan and northwestern Ohio have been killed.
- Human intervention via movement of infested firewood is the major cause of new infestations.
- Intensive surveys and treatment of spot infestations are key to preventing the spread of EAB and minimizing impacts.
- A sustained effort is necessary to reestablish a healthy tree canopy in the affected areas.
- More cost effective management tools and treatments are needed.
- Ash trees are naturally abundant in woodlands and extensively planted elsewhere; the value of ash in forests and urban areas is estimated at more than \$300 billion.
- Over the next 25 years the potential costs to local governments and homeowners to remove hazardous dead trees and replant new ones could be about \$7 billion.
- In January 2006 the State of Indiana decided to cease cutting infested trees. This was in response to EAB funding levels in 2006 that are not sufficient to treat all of the spot infestations in Indiana. EAB funding for Ohio and Michigan is also not sufficient to cut all the spot infestations that need to be treated in 2006.

Accomplishments:

- Conducted early detection surveys on public and private lands in 24 eastern states in 2005.
- Trap tree surveys on more than 110 campgrounds on federal and state lands in Michigan and northern Wisconsin.
- Continued critical evaluations: EAB rate of spread and dispersal; chemical and biological control methods; EAB survival in wood chips and firewood, EAB survey techniques; ash modeling; ash utilization and marketing.
- Information and outreach activities including various information products supporting EAB program goals
- Partnering with Ohio state forester to enhance the utilization of ash, assist landowners to reduce woodlot susceptibility to EAB, and to encourage communities to proactively remove ash trees.
- Helped states prepare EAB response plans.

- Continued support for the EAB web site with Michigan State University at www.emeraldashborer.info.



Current Gateway Strategy

Budget History:

Emerald Ash Borer Containment and Eradication				
<i>(\$ Thousands)</i>				
	FY 2003	FY 2004	FY 2005	FY 2006
Totals	\$3,690	\$4,284	\$4,221	\$ 1,800

Future Direction:

- Continue current efforts and initiatives.
- Support accelerated USDA research and development effort for effective survey and control tools.
- Continue evaluating new ways to reduce program costs by better utilizing ash.
- Continue ash reduction initiative in Ohio and development of additional tools to ‘treat’ EAB spots.
- Reassess and refine current EAB strategy in cooperation with USDA APHIS and the states.
- Complete revision of Forest Service EAB economic analysis.
- Implement ash damage assessment evaluation in MI and OH.

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