Emerald Ash Borer

A serious threat to North American ash trees

U.S. Department of Agriculture
Forest Service
Northeastern Area State and Private Forestry

Description: The emerald ash borer (EAB), *Agrilus planipennis*, is an Asian insect that attacks and kills ash trees. It was found near Detroit in July 2002 and shortly thereafter in Windsor, Ontario. Accidental movement of infested wood products spreads the insect further, and EAB is now confirmed in 15 States: Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, Virginia, West Virginia, Wisconsin, and Tennessee. This insect has also been found in Ontario and Quebec, Canada. National detection surveys, conducted annually, are likely to find emerald ash borer in new locations.

Key Issues:

- EAB has already killed millions of trees and could ultimately be as deadly as chestnut blight. None of the 16 native ash species are known to be completely resistant.
- The value of ash trees in forests and urban areas has been estimated to exceed $300 billion.
- According to a recent study, removing infested and dead trees and planting replacement trees could cost local governments and homeowners $10.7 billion over 20 years.
- Movement of infested firewood is a major cause of new infestations.
- It is important to continue to develop and improve new tools and tactics to manage EAB.
- Introducing and establishing natural enemies may provide the long-term help we need to manage EAB populations and control their spread.
- Sustained, long-term assistance to State and local governments is needed, particularly for developing plans to deal with affected areas in the aftermath of EAB outbreaks.

Accomplishments:

The Forest Service is a major partner in EAB response. We support the lead Federal and State plant pest regulatory agencies and work with many partners to develop tools and technology to manage EAB and its impact. In cooperation with State partners, the Forest Service helps communities and landowners deal with the loss of their ash trees. Recent accomplishments include:

- Delivered an *EAB University* Webinar series; currently partnering with three universities to continue this effort in 2012.
- Refined the insecticide treatment recommendations for managing EAB.
- Began ash inventories in high-value recreation sites on three national forests as a precursor to possible preventative treatments.
- Began a seven-state effort to detect, suppress, and prepare for EAB in the Northeastern United States.
- Started an EAB community preparedness project with the State of Vermont.
- Continued technical and financial support for EAB management in the Western Lake Erie Basin in Ohio. The project helps communities and forest landowners remove infested trees, restore EAB-affected areas, utilize ash wood, manage forest stands, and restore areas along waterways.
- Continued technical and financial assistance to State and local partners for replanting EAB-affected urban landscapes in Illinois, Michigan, New York, Ohio, and Wisconsin.
- Prepared and delivered EAB information, including the production and distribution of "EAB kits."
- Continued support for the EAB portal Web site with Michigan State University: www.emeraldashborer.info.
- Continued to work with several universities to complete evaluations of EAB rate of spread and dispersal, chemical and biological controls, EAB survival in wood chips and firewood, and EAB survey methods.
- Completed another field season of the **SL**ow **A**sh **M**ortality (**SLAM**) project in Michigan's Upper Peninsula. Funded an additional 2 years to wrap up data collection and analysis as well as prepare management recommendations. This multiagency pilot could be the basis for an integrated management strategy to reduce EAB populations and slow ash mortality.

- Continued work in progress to evaluate the solitary wasp, *Cerceris fumipennis*, as an early detection tool for EAB.

Budget History: FY 2009 – FY 2011 funding increased, primarily to replant trees in communities affected by the EAB.

Emerald Ash Borer *($ in thousands)*				
Source	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2012**
Forest Health Management[1]	$2,739	$2,695	2,719	
Urban and Community Forestry[2]	1,000	0	0	
American Recovery and Reinvestment Act[3]	4,487	0	0	
Great Lakes Restoration Initiative[4]	0	3,000	1,758	
Totals	**$8,226**	**$5,695**	**$4,477**	

1 Congressionally directed funding: $1 million in FY 2009 for EAB work in the Midwest.

2 Congressionally directed funding: $1 million in FY 2009 to address impacts of EAB in the Midwest.

3 FY 2009: $2.243 million for *Implementation of Mitigation Strategies Based on the Slowing Ash Mortality Effort in the Upper Peninsula* managed by the Northeastern Area State and Private Forestry, and $2.244 million for *EAB Containment and Ecosystem Restoration* managed by the Northern Research Station.

4 FY 2010 and 2011 funding from EPA for EAB preparedness and restoration projects in the Great Lakes watershed.

Future Direction:
- Help Federal, Tribal, State, and local governments; homeowners; and landowners prepare for EAB.
- Develop effective management tools and strategies to deal with the aftermath of EAB outbreaks.
- Promote the release and establishment of EAB biocontrol agents and natural enemies of EAB.
- Reduce EAB-induced impacts in high-value areas and unique ecosystems.
- Promote and restore healthy, sustainable urban and rural forests.
- Minimize artificial movement of EAB to noninfested areas.

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