# Emerald Ash Borer – An Integrated Response in Ohio

USDA Forest Service
Northeastern Area
State and Private Forestry



**Description:** Emerald Ash Borer (*Agrilus planipennis*) is a tree-killing insect from Asia that was unintentionally introduced to southeastern Michigan several years ago. Emerald ash borer (EAB) larvae feed on the living portion of the tree, directly beneath the bark. This eating habit restricts the ability to move essential water and nutrients throughout the tree. In three to five years, even the healthiest tree is unable to survive an attack. Since its arrival in the United States, EAB has killed or necessitated the removal of more than 20 million ash trees in Illinois, Indiana, Michigan, and Ohio. In February 2003, it was first found feeding on ash trees in northwest Ohio.

Based on research findings and the best science available, a science advisory panel recommended various EAB management strategies. The panel determined that the Forest Service and Ohio Division of Forestry (DoF) could play an important role in these strategies as cooperators in a process to contain EAB to northwest Ohio. The DoF developed a Forestry Action Plan, using the Forest Health, Forest Stewardship, Urban and Community Forestry, and Economic Action programs to focus efforts in support of eradication and containment goals. Forest Service and DoF program staff worked together to address emerging issues caused by EAB, provided public outreach, assisted communities with restoration and management planning, proactively harvested ash from a state forest, reduced the ash component in targeted ash zones, and assisted private landowners in making sound forest management decisions.

### **Key Issues:**

- About 1 in 10 trees in Ohio is ash.
- Ash accounts for 7.5 percent of sawmill sales.
- EAB will cause more than \$3 billion in damage to Ohio's economy over the next 10 years.
- Ecosystems with an ash component are at risk of being degraded.
- Ohio woodland owners and municipalities will bear the burden of managing dead and declining trees.

#### **Accomplishments:**

These key outcomes are for projects supported by the Forest Service from 2004-07:

- Four foresters were hired and trained two field foresters to work with landowners, one urban forester, and one forester for communications and outreach.
- DoF staff has coordinated efforts with the Ohio Department of Agriculture and USDA Animal and Plant Health Inspection Service (APHIS) on a weekly basis.
- DoF removed all merchantable ash from the Maumee State Forest and used the forest as a demonstration area for landowners.
- More than 1,700 stewardship plans were reviewed to assess the ash component and offer assistance to landowners.
- More than 466 landowners were contacted and provided information.
- More than 135 Stewardship plans were revised or written for 3,541 acres.
- DoF marked more than 320,722 board feet of ash for removal.
- More than 49 public information and education activities were conducted by EAB project foresters including field days, displays, radio spots, meetings with landowners, and workshops covering more than 30 counties.
- Twenty-six communities removed 2,396 ash trees and replanted 2,626 new trees (non-ash species).
- The EAB urban forester worked with community officials, assisted 23 communities with ash inventories, and assisted with administration.
- More than 59 communities developed EAB management plans.
- Updated the DoF web site to keep visitors aware of EAB.

- Created information packets for handouts and mailings.
- Worked with state extension agencies to develop a tri-state EAB workshop for landowners in Ohio, Indiana, and Michigan.
- Trained Ohio Department of Agriculture staff to identify ash wood, which helped in their firewood regulatory activities.
- Created an EAB display of ODNR Forestry for use at open houses, conventions, and workshops.
- DoF worked with Ohio Extension to develop a commercial firewood directory.
- Utilization staff worked with federal and state regulatory agencies to assist with contracts and compliance agreements to allow for the highest values to be realized from removed trees.
- Utilization staff facilitated low value wood markets such as wood chip boilers and mulch.
- Evaluated log debarking equipment that proved successful for efficient removal of regulated portions of ash logs.
- Increased awareness of the wood industry and forestry consultants resulted in identifying potential candidates for Ohio Department of Agriculture compliance agreements.
- The DoF utilization program awarded a grant to the Ohio Agricultural Research and Development Center to research the phytosanitation of EAB infested firewood.

## **Budget History:**

| Ohio EAB Project<br>(\$ Thousands) |         |         |         |         |
|------------------------------------|---------|---------|---------|---------|
| Program                            | FY 2004 | FY 2005 | FY 2006 | FY 2007 |
| Forest Health                      | \$0     | \$258.4 | \$258.3 | \$258.3 |
| Forest                             | \$125   | \$100.0 | \$0     | \$0     |
| Stewardship                        |         |         |         |         |
| Economic                           | \$0     | \$60    | \$60    | \$60    |
| Action                             |         |         |         |         |
| Totals                             | \$125   | \$418.4 | \$318.3 | 318.3   |

#### **Future Direction:**

- Continue building on the State and private approach of using its full force of programs to provide technical and financial assistance for a critical State issue.
- EAB is, and will continue to have, a significant impact on the health, productivity, and functional value of NA's rural and urban forests. Ohio has battled this pest since 2003, and hopes to share its experiences and advice with other states that are currently suffering or are threatened by a future EAB infestation.

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