

## **Illinois Emerald Ash Borer Readiness Plan**

Prepared by: Emerald Ash Borer Readiness Team (see attached)

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The Emerald ash borer (EAB) is a significant threat to the urban and rural forests of Illinois. It was first identified in the spring of 2002 in Ontario and the Detroit area. It is estimated that it has already killed about 16 million ash trees in Michigan. In the two years since it was identified, infestations have broken out in several locations in Ohio, in Maryland, and most recently in Indiana. Thirteen counties in Michigan are quarantined and significant containment and clean-up operations are underway. The outbreaks in Indiana, Maryland and Ohio have required swift, aggressive and organized responses by regulatory and other government agencies and the cooperation of stakeholder groups.

The emerald ash borer, *Agrilus planipennis*, is a slender, elongated (3/4-inch), bright green beetle in the same genus as the bronze birch borer. It likely arrived in Michigan from China at least five years ago, probably traveling with ship cargo. Although chemical and biological controls are being researched and show promise, more aggressive containment and eradication efforts are necessary for new outbreaks outside the core zones and quarantined areas of Michigan.

The borer kills trees relatively quickly and affects white, green, black, pumpkin, and several horticultural varieties of ash whether healthy or stressed. The beetle deposits eggs on the surface or cracks of ash tree bark, which hatch to release larvae that feed on the tree's phloem and outer sapwood. Within several weeks, larval feeding creates S-shaped galleries in the tree's inner bark that wind back and forth, becoming progressively wider and girdling the trunk and branches as larvae grow. Adult beetles emerge headfirst, creating very small (3-4 mm) D-shaped exit holes that leave minimal evidence of infestation until the canopy begins to die back. Then the tree quickly declines in the second growing season and is usually dead by the third. The symptoms of emerald ash borer infestation resemble ash decline or damage from the native ash-lilac borer and the two-lined chestnut borer, making detection difficult.

The Morton Arboretum took the lead in organizing to minimize the risk of an EAB introduction into Illinois, to find it, and contain it quickly if it arrives. First, we conducted a survey of area municipalities to determine the scope of the ash population at risk. From a sample of municipal street tree inventories, we determined that about 19.2 % of public trees in the Chicago area are ash, usually white (*Fraxinus americana*) or green (*F. pennsylvanica*.) The US Forest Service did a sampling of public and private land in Cook and DuPage County in 1993 and determined that 19.4% of the overall urban and community forest is ash, essentially confirming the validity of the street tree sampling. Statewide, forests are 6% ash according to US Forest Service surveys.

The planning began in July of 2003 by assembling nearly 40 representatives from municipal, county, state, and federal governments, green industry professional associations, universities, and Chicago Wilderness (a coalition of public and private land management and educating organizations) to develop an Emerald ash borer 'readiness plan'. The group worked together to identify resources available from participating organizations and likewise, identify gaps. Existing EAB efforts and programs were compiled, including current regional efforts and work from other states that serve as useful models.

All members of the planning team brought useful and important knowledge and experience to the planning effort. The team itself creates a critical network for information sharing and dissemination. Educational outreach to the members and constituents represented on the planning team has already been effective in raising awareness and fostering cooperation and collaboration. The team's work has resulted in strengthening the ability of the state regulatory agency, putting more staff expertise in the field inspecting nursery stock and responding to possible sightings of EAB. The collaboration has also spawned and funded a survey of EAB in the Chicago area being done in the summer of 2004, and another statewide survey is in the works.

There is much work to be done to protect Illinois' ash trees from this aggressive pest. The following Plan lays out a comprehensive strategy to assess resources, minimize risk, identify an infestation promptly, and collaborate to contain an infestation. The network of the Readiness Planning Team already facilitates the administrative and technical readiness called for in the Plan. Public and professional education and awareness are critical to the overall success of the plan.

The Readiness Planning Team continues to collaborate and cooperate to implement the plan. Current priorities are public awareness to identify likely infestations and minimize the possible spread of EAB through firewood movement, and the regulation and inspection of the firewood industry in Illinois.

For information and inquiries, please contact Edith Makra, The Morton Arboretum, at 630-719-2425 or [emakra@mortonarb.org](mailto:emakra@mortonarb.org).

## Illinois Emerald Ash Borer Readiness Plan

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**1. GENERAL READINESS-** to reduce risk, minimize impact, and respond more effectively to a possible infestation of the Emerald ash borer (EAB), *Agrilus planipennis*, and to work collaboratively towards overall health and sustainability of the forests, both urban and rural, throughout Illinois and northeast Indiana

(√ indicates task completed, → indicates ongoing effort already begun)

**A. √ Establish a network of agencies and organizations** that may be affected by the EAB into the **Emerald Ash Borer Readiness Team** (see attached list.) The team's goal is to collaborate in drafting a readiness plan; and to advise, advocate and lead in the implementation of the plan.

Subdivide into:

**1. √ Statutory Administrative Team** – agencies that have, by law, been assigned the responsibility of managing an exotic infestation and have been granted the legal authority to act by the federal, state, or local government

- Illinois Department of Agriculture (IDA)
- USDA Animal and Plant Health Inspection Service (APHIS) Plant Protection and Quarantine (PPQ)
- Affected local government(s) at site of infestation

**2. √ Technical and Administrative Team** – agencies and organizations that are vital to the design and rapid implementation of the readiness plan; and serve important roles in research related to Emerald ash borer; administration and coordination of policies, programs, and staff; and the education of stakeholders

- Illinois Department of Agriculture (IDA), Environmental Programs
- Illinois Department of Natural Resources (IDNR)
- USDA Animal and Plant Health Inspection Service (APHIS) Plant Protection and Quarantine (PPQ)
- USDA Forest Service Urban and Community Forestry Program
- USDA Forest Service Forest Health Program
- USDA Forest Service, North Central Research Station
- University of Illinois
- Illinois Arborist Association
- Illinois Nurseryman's Association

3. ✓ **Education and Communication Team** – agencies that will collaborate to communicate accurate information, quickly and broadly in a manner that supports the prevention, identification and control of a possible infestation.

- APHIS PPQ
- USDA Forest Service, Public Affairs
- IDA, Environmental Programs
- Illinois Landscape Contractor’s Association
- The Morton Arboretum
- Regional councils of governments (i.e., DuPage Mayor’s and Manager’s Association, Northwest Municipal Conference)
- Chicago Wilderness
- Illinois Department of Natural Resources (DNR)
- University of Illinois
- Municipalities
- Forest Preserve Districts
- Other Trade Groups and stakeholders

**B. Administrative Readiness** – to assure that current, relevant, and achievable policies are in place that allow the actions described in this plan to occur quickly and unencumbered:

1. ✓ Draft EAB Readiness Plan
  - a) ✓ Distribute plan to readiness team
  - b) Readiness Team members to distribute condensed plan to constituencies
  - c) → Foster cooperation among agencies for implementation
2. Identify resources and needs
  - a) ✓ Evaluate staffing needs in regulatory agencies
  - b) Monitor nursery field operations
  - c) Determine firewood movement
  - d) Identify sources of funding for readiness activities
  - e) ✓ Assess human and technical resources
3. Take proactive steps to speed administrative processes
  - a) ✓ analyze IDA procedures to identify streamlining opportunities
  - b) ✓ analyze APHIS procedures to identify streamlining opportunities
  - c) ✓ communicate EAB status to Illinois Emergency Management Agency (IEMA) liaison
  - d) encourage communities to examine local administrative processes for streamlining opportunities

4. Educate the media and assure accuracy of information
  - a) ✓ Issue a press release on the final plan
  - b) Coordinate Public Information Officers from statutory team
  - c) ✓ Identify key sources of current information
  - d) ✓ create a Core Communications Team for expedited communications clearance including representatives from:
    - IDA
    - Morton Arboretum
    - Forest Service
5. Explore wood waste utilization opportunities to reclaim ash material to its highest possible use should a volume material suddenly become available

**C. Technical Readiness** – to assure that policy decisions, actions, and education initiatives are guided by the best and most current science

1. ✓ Review and distribute federal scientific guidelines to advise actions. (i.e., EAB biology and controls)
2. Reference national plan, when one is available
3. Operate under New Pest Response Guidelines or other relevant USDA technical guidelines
4. Advocate for continued research for greater understanding of EAB and management options
5. Participate in annual Forest Pest meeting in Annapolis, MD
6. Transfer technology as it becomes available

**II. REDUCE RISK OF INFESTATION** – to assure that all means of EAB introduction are known and blocked, whenever possible

**A. Assess Risk** - to determine the size and scope of the ash resource and the severity of new and existing EAB infestations

1. → Analyze possible sources of EAB importation (i.e., ash logs, firewood and nursery stock from Michigan) and other affected areas
2. ✓ Assess the scope of the resource at risk (number of ash trees)
3. Analyze density of ash populations to determine high risk areas
4. → Track spread of EAB and distribute to Readiness Team

**B. Reduce Risk**

1. → Raise public awareness about risk from firewood importation
  - b) install educational posters at State, and county campgrounds
  - c) promote "EAB-free" firewood from reputable firewood dealers

2. →Convene a Firewood Committee to analyze the firewood market and find ways to reduce the risk of importation with representatives from:
  - IDNR
  - APHIS
  - IDA
  - Lake County Forest Preserve District
3. Survey or inspect firewood dealers
4. Recruit campground and firewood dealers associations to participate
5. →Contact municipal officials to request trace-back of records for firewood transport
6. Educate industries about risk of ash importation
  - a) reach out to wood products manufacturers through IDNR’s licensed timber buyers and the Illinois Wood Products Association
  - b) →educate contractors and municipalities about the importance of knowing the source of ash trees and assure they are IDA inspected
  - c) educate garden centers, firewood dealers about risk
  - d) reach out to trucking associations to help track movement of ash
7. ✓Assure full and thorough analysis of ash nursery stock movement and effective inspection of current ash stock
  - a) → advocate for strong state support of nursery inspection program
  - b) ✓ track nursery stock importation in recent past
    - a. ✓review trace-back program for nursery shipping records from Michigan with the assistance of ANLA (American Nursery and Landscape Association)
8. Assure planting selections contribute to a diverse and sustainable urban forest
  - a) → educate municipalities and large property managers about diversity in planting
  - b) →encourage tree inventories to analyze diversity and guide planting decisions
9. Seek legislative support to reduce risk
  - a. assure Michigan’s control efforts are well supported
  - b. advocate for readiness funding
  - c. advise federal legislators of the hardship of state required match of federal funds

**III. IDENTIFY INFESTATION PROMPTLY** – to minimize the spread and improve odds of containing an infestation

- A. Survey urban ash populations** - to quickly find or rule out the presence of EAB using USDA Forest Service Forest Health survey protocols
1. Continue the University of Illinois, The Morton Arboretum, and APHIS collaborative detection surveys
  2. Enable municipal and commercial green industry professionals to participate in monitoring and reporting in a systematic way
  3. Communicate survey results to stakeholders and the media

4. ✓ Convene Monitoring and Surveying Committee to survey and monitor ash populations to determine the presence of the Emerald ash borer including representatives from:

APHIS  
The Morton Arboretum  
US Forest Service  
University of Illinois

**B. → Educate the public and professionals** to provide stakeholders with current and accurate information in a targeted manner to aid in rapid identification of symptoms of an infestation

1. → Offer training and outreach based on current information to landscapers, arborists, nurserymen and other green industry workers to assess ash health and accurately identify EAB
2. Educate general public about ash health and EAB
  - a) ✓ Convene a Public Education Committee

IDNR  
The Morton Arboretum  
DuPage County Forest Preserve District  
University of Illinois
  - b) ✓ develop simple educational materials for the general public
  - c) → pursue opportunities for speaking, educating, and exhibiting educational displays including EAB identification material broadly
  - d) distribute and promote newly developed *Project Learning Tree* activities on EAB and Asian Longhorned Beetle (ALB)
  - e) Broadly distribute U of I public education materials
3. Recruit and enable volunteer scouting
  - a) Promote awareness through the media with regular press releases and public appeals for help in scouting
  - b) Prepare kits to support volunteer scouting by both individuals and groups

**C. Coordinate state and national information** to address professional and public inquiries from Illinois and foster cooperation and communication

1. Have Readiness Team members link to USFS, APHIS and Michigan State websites
2. Coordinate with <http://www.emeraldashborer.info/> to add Illinois information
3. Support full staffing of regulatory agencies so that vital information about Illinois forest health is readily available

**D. → Guide public inquiries and possible sightings** through the following process for the most effective use of resources and quickest response:

1. Contact University of Illinois Extension, The Morton Arboretum Plant Clinic, municipal forestry programs and other professional resources, or the expertise of a certified arborist to pre-screen inquiries, i.e., assure suspect tree is an ash, rule out similar but common insects, etc.

2. If other pests are ruled out and EAB is still suspected, contact IDA's statewide **Pesticide Hotline 800-641-3934** or in the Chicago area use **312-74BEETL (312-742-3385)**
3. An IDA or APHIS official shall dismiss or confirm the identification of the Emerald ash borer

**E. Guide *professional* (arborist, entomologist, pathologist, plant health care specialist) inquiries and possible sightings** through the following process:

1. If a suspected Emerald Ash Borer is found, contact:
  - Illinois Department of Agriculture (847) 294-4343**
  - or
  - USDA-APHIS-PPQ (847) 299-6939**
 Officers from these agencies will collaborate to inspect the suspected ash tree(s) and identify the specimen.
2. Collected specimen will be sent or delivered to:
  - APHIS Identifier
  - USDA-APHIS
  - P.O. Box 61192
  - Terminal 5
  - O'Hare International Airport
  - Chicago, Illinois 66192
3. If collected specimen is initially confirmed to be Emerald Ash Borer by an APHIS Identifier, the specimen will then be sent to the National Systematic Entomology Laboratory to make final identification:
  - Systematic Entomology Laboratory
  - ATTN: Communication and Taxonomic Services Unit
  - Bldg. 005, Rm 137
  - BARK - West
  - 10300 Baltimore Avenue
  - Beltsville, MD 20705
4. All cooperators are notified that a suspect Emerald Ash Borer is in the system for identification. However, **at this point, all information is not for public dissemination.**
5. The result, either positive or negative for EAB, is received from the Systematic Entomology Laboratory and all cooperators are notified.

**IV. IN THE EVENT OF AN INFESTATION CONTAIN AND MANAGE THE EAB POPULATION** – the Statutory Administrative Team will be established with the affected local government(s) and will implement coordinated efforts to contain the infestation according to New Pest Response Guidelines established by USDA under the leadership of IDA and APHIS



**A. APHIS and the Illinois Department of Agriculture will take the lead in planning and implementing actions.**

1. Begin collaborative response with affected county and city government(s)
  - a) schedule an emergency meeting with cooperators
  - b) discuss and determine a preliminary plan of action
  - c) release verified, accurate information to the press
2. Initiate and conduct a thorough delimiting survey to determine the outer boundary of the infestation.
3. **Illinois Department of Agriculture places into effect an Emerald Ash Borer State Interior Quarantine** regulating all potential host material (ash wood and ash wood products) within the quarantined area as determined by the delimiting survey. This would include the “declaration of all plants and part thereof infested with the Emerald Ash Borer as a nuisance in the State of Illinois” as well as the establishment of a formal quarantine of the infested area (s).
4. Reference APHIS State Plant Health Director’s Emergency Plant Health Management Plan based on incident command.
5. Regulatory and control activities will be initiated as necessary.
  - a) Administer provisional quarantine established by IDA consistent with the Insect Pest and Plant Disease Act (505 ILCS 90) and associated regulation 8 IAC 240
  - b) Remove trees up to ½ mile from infestation or necessary distance as determined by current protocol based on research
  - c) Municipalities may act under their own local authorities when local ordinances are applicable and consistent with IDA quarantine requirements

**B. Communicate and coordinate actions, information and response**

1. Provide accurate information and updates to the media through EAB Core Communications Team.
2. Provide accurate information to affected residents
  - a) have an informational door-hanger ready for customizing and distributing to affected area immediately after infestation is found
  - b) host local resident meetings or visit affected residents to share information as soon as possible after finding an infestation
3. Communicate with public and industry professionals to foster cooperation to maximize effective response
4. Communicate eradication success stories

**C. Dispose of Wood debris**

1. Establish processing facilities in the quarantine zones to efficiently handle ash debris and reclaim useable products as best as possible
  - a) market reclaimed wood products

**D. Develop and implement a reforestation program authorized under applicable federal, state and local authorities using available resources.**

**Illinois Emerald Ash Borer Readiness Team**

City of Chicago  
Chicago Wilderness  
Chicago Park District  
Cook County Forest Preserve  
DuPage Mayors & Mgrs. Assoc.  
DuPage County Forest Preserve Dist.  
Hinsdale Nursery  
IL Arborist Association  
IL Department. of Agriculture  
IL Department of Natural Resources  
IL Forestry Development Council  
IL Landscape Contractors Assoc.  
IL Natural History Survey  
IL Nurseryman's Assoc.  
IL Parks and Recreation Association  
IL Wood Products Association  
Indiana Dept of Natural Resources  
Lake County Forest Preserve Dist  
Michigan State University  
The Morton Arboretum  
Northwest Municipal Conference  
Purdue University  
University of Illinois  
USDA Forest Service, Northeastern Area  
USDA Forest Service, North Central Research Station  
USDA Animal and Plant Health Inspection Service, APHIS, Plant Protection and  
Quarantine, PPQ  
Wilson Nurseries  
Village of Bolingbrook, for Northeast Municipal Foresters  
Village of Oak Lawn, for Northeast Municipal Foresters

