




Milwaukee County  
Emerald Ash Borer  
Preparedness Plan

WDR Photo by Renee Pinski



Compound Leaf with 7 toothed leaflets.  
WDR Photo by Renee Pinski

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Dnr.wi.gov

1

## Mission Statement

It is the mission of the Milwaukee County Parks, Recreation and Culture to maintain and enhance the urban forest and natural communities within Milwaukee County Parks to ensure maximum long-term benefits to the community.

## Goal

The goal is to minimize the impact of the Emerald Ash Borer and potential loss of ash trees in Milwaukee County Parks golf courses using the most recent scientific knowledge and most efficient techniques at the lowest cost to the community.

3

## Objectives

- Inform and Educate
- Monitor for EAB
- Assess Ash Tree Population
- Manage Existing Ash Trees
- Plant and Replace
- Funding Sources

4

## Inform and Educate

- How to educate golf membership and public
  - what we can do to decrease the chance of spreading,
  - how to identify an ash tree,
  - evidence of infections.
  - areas most affected
  - bands on trees (ribbons) to identify populations in rough areas
- Updated web site to include a link to [www.emeraldashborer.wi.gov](http://www.emeraldashborer.wi.gov)
- Where firewood is used and/or distributed inland, "DON'T MOVE FIREWOOD" fliers are given or posted.
- Post EAB informational in clubhouse and open space
- Issue quarterly updates informing and educating them on the constant influx of EAB material.

5

## English Bulletins



6

**Spanish  
Bulletins**




7

**Monitor for EAB**

- Golf Staff should incorporated into daily activities.
  - L for “D” shape exist holes
  - vertical splits in the bark
  - bark flicking (evidence of considerable woodpecker feeding)
  - epicormic shoots
- Cooperation with
  - Local municipalities
  - Department of Entomology at the University of Minnesota-Extension
  - State regulatory agencies Minnesota Department Ag

8



**Access Ash Tree Population**

Parks Wide Tree Inventory

- 220 random Sample Plots
- 14,962 acres
- 355,987 ash trees
- 24.17%

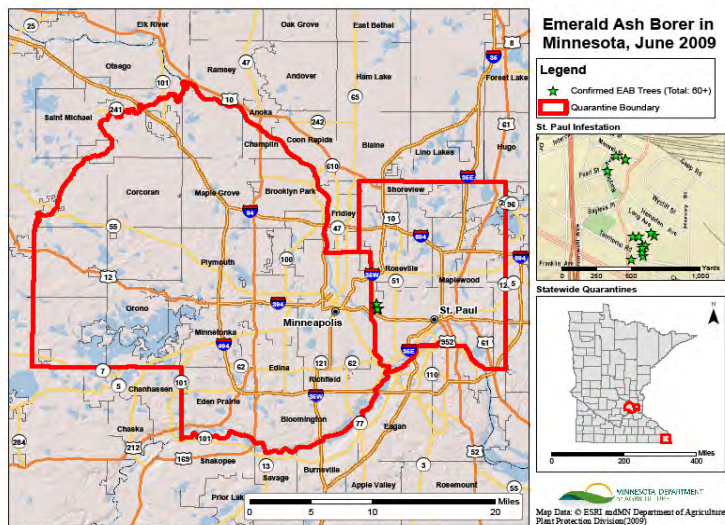
9

### Quarantine Site



10

## Quarantine Boundary



11

## Manage Existing Ash Trees

- Canopy Raising
- Maintenance Pruning
- Removal
- Wood Utilization
- Treatment
- Sunlight Exposure

12

## Plant and Replace



### Tree Nurseries

- Existing Nursery
  - composed of non-native and native tree varieties
  - Ash – temporary tree locations
    - Parking lots
    - Props for the Mitchell Park Domes

13

## New Nursery

- Native Tree Species
  - Easley Adaptive
  - Reduce stress in transplanting
- Mix of species
  - Fast/slow growing species
  - Poor/well-drained soils

14

## Potential Tree Specie Substitutes for Native Ashes

### Well-Drained Soils

1. Northern Red Oak	Quercus rubra
2. White Oak	Quercus alba
3. Shagbark Hickory	Carya ovata
4. Sugar Maple	Acer saccharum
5. American Basswood	Tilia americana
6. Ironwood/Hop Hornbeam	Carpinus caroliniana
7. Bur Oak	Quercus macrocarpa
8. Black Walnut	Juglans nigra
9. American Beech	Fagus grandifolia
10. Paper Birch	Betula papyrifera
11. Black Cherry	Prunus serotina
12. Hackberry	Celtis occidentalis
13. Black Oak	Quercus velutina
14. Northern Pin Oak	Quercus ellipsoidalis

### Poorly Drained Soils

1. Swamp White Oak	Quercus bicolor
2. Bur Oak	Quercus macrocarpa
3. Pin Oak	Quercus palustris
4. Kentucky Coffee Tree	Guttierrezia dioica
5. Sycamore	Platanus occidentalis
6. Honey Locust	Gleditsia triacanthos
7. Bitternut/Yellow-bud Hickory	Carya cordiformis
8. Red Maple	Acer rubrum
9. Silver Maple	Acer saccharinum
10. Black Maple	Acer nigrum
11. Hackberry	Celtis occidentalis
12. Cottonwood	Populus deltoides
13. Black Willow	Salix nigra
14. American Basswood	Tilia americana

15

## Funding Sources

- Potential future funding sources to address EAB<sup>[1]</sup>:
- **USDA Animal and Plant Health Inspection Service Plant Protection and Quarantine (APHIS PPO)** – Funding for initial assessment of EAB when it is discovered.
- **DATCAP** – Funding for initial assessment
- **Federal EAB Revolving Loan Fund** – provisions established in the 2008 Farm Bill
- **Wisconsin DNR Urban Forestry Grants** – For improvement of urban forest management, EAB readiness, and tree replacement. Funds are limited.
- **Community Development Block Grants**
- **Transportation funds** – Federal Transportation Enhancement
- **Utility Companies** – Assists with ash tree removals that interfere with transmission lines and replacement trees. Possible source for utilizing tree debris.
- **Revenue from wood debris** – Market possible wood products such as:
  - o Milled boards
  - o Wood mulch
  - o Fibar – material for playground surfaces
  - o Firewood
  - o Alternative energy – Power plant fuel or material for cellulosic ethanol
- **Increased Tax Levy**
- **Non Profits and philanthropy** – Park People and friends groups and charitable foundations
- **Reallocating funds**
- **Seek additional support** – Enlist aid from elected state and federal officials to increase EAB funding.
- <sup>[1]</sup> “Wisconsin Emerald Ash Borer Program, *How to Pay for EAB Management*”

16

## Conclusion

- It is the shared opinion shared by a majority of experts and professionals in the field that Emerald Ash Borer is inevitable.
- The Milwaukee County Parks has accepted that opinion and is proactively working towards minimizing its future effects financially and physically.
- The large extent of the cost will be realized during the removal process of all affected ash trees.
- If not managed properly these removal cost could inflate by 2-3 times if the ash tree is completely dead.
- Milwaukee County Parks is attempting to reduce the deferred amounts of ash removals without neglecting our overall mission by incorporating it into our current work practices.
- To ensure that our efforts of removing ash trees are acceptable, Milwaukee County Parks is working out benchmarks to allow us to annually quantify our pace.
- Physically, staggered ash tree removals will be less of a detriment to the landscape than if things happened on an acute scale.
- This will further be minimized through diligent replanting of native trees.
- This preparedness plan is created as a work in progress to be updated periodically as new scientific knowledge and techniques for confronting Emerald Ash Borer arise.