



## Emerald Ash Borer Municipal Preparedness Checklist

Emerald Ash Borer [*Agrilus planipennis* (Fairmaire)] is a rapidly spreading invasive pest that is decimating ash (*Fraxinus*) trees in the Midwest and moving into the Southeast. As EAB continues to spread, communities in its path will need to prepare for the inevitable decline and protection or removal of their ash tree populations. The process of removing large numbers of ash trees from a municipality in order to reduce liability can be quite overwhelming if it is not planned for. The internet has a vast amount of information regarding this pest and how to deal with it. This checklist provides a subset of that information and is designed to give municipalities basic, logical steps to prepare themselves for an infestation. Realizing that every municipality is unique, not every step may apply or the order of the steps may need to be changed. Some steps may need to be modified, augmented, and/or worked concurrently to address the needs of some municipalities. Resource links are provided for more detailed information.

### Before EAB is detected:

#### 1. Understand life cycle, feeding habits, characteristics, control methods, etc. for EAB

[http://www.na.fs.fed.us/spfo/pubs/pest\\_al/eab/eab04.htm](http://www.na.fs.fed.us/spfo/pubs/pest_al/eab/eab04.htm) (USDA Forest Service Pest Alert)

<http://www.emeraldashborer.info/identifyeab.cfm> (How to Identify Emerald Ash Borer)

<http://www.emeraldashborer.info/files/E-2938.pdf> (Signs and Symptoms of Emerald Ash Borer)

[http://www.emeraldashborer.info/eab\\_university.cfm](http://www.emeraldashborer.info/eab_university.cfm) (Emerald Ash Borer University webcasts)

<http://emeraldashborer.info/treatment.cfm> (Treatment options)

#### 2. Inventory municipal forest to determine ash population

Inventory all public rights-of-way, parks, city-owned property to determine ash population

Identify ash location, size, condition, etc.

Consider a sample inventory methodology for the entire municipality

- To locate areas of ash tree concentration
- To determine areas in which to concentrate public education efforts

<http://na.fs.fed.us/fhp/pubs/hottopics/10/PDF/090929%2012%20Sivyer.pdf>

(Milwaukee, WI preparedness inventory methodology slide presentation)

<http://cnre.vt.edu/urbanforestry/eabstreettrees/>

(Assessing Potential Impacts of EAB on Municipal Street Trees in Virginia)

#### Contacts:

Don Duerr  
Entomology Program Manager  
Region 8 Forest Health Protection  
404-347-3541  
[dduerr@fs.fed.us](mailto:dduerr@fs.fed.us)  
<http://www.fs.fed.us/r8/foresthealth/>

Eric A. Kuehler  
Technology Transfer Specialist  
Urban Forestry South  
706-559-4268  
[ekuehler@fs.fed.us](mailto:ekuehler@fs.fed.us)  
<http://www.urbanforestrysouth.org/>



### 3. Calculate the value of the trees

Collectively – use a benefits calculation software such as i-Tree Streets and/or Eco (for park trees)

<http://www.itreetools.org/>

Individually - use the on-line National Tree Benefit Calculator for street trees

<http://www.treebenefits.com/calculator/>

Calculate costs of removal, treatment, and replacement

<http://extension.entm.purdue.edu/treecomputer>

### 4. Develop an emergency EAB action plan

<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp> (Wisconsin EAB Toolkit)

[http://www.dnr.state.oh.us/Portals/18/eab/pdf/EABmanagement\\_plan022808.pdf](http://www.dnr.state.oh.us/Portals/18/eab/pdf/EABmanagement_plan022808.pdf)

(Ohio municipal EAB management plan template)

### 5. Develop an EAB public-awareness campaign

<http://www.emeraldashborer.info/homeownerinfo.cfm>

Plant diverse tree species

[http://www.na.fs.fed.us/spfo/pubs/silvics\\_manual/table\\_of\\_contents.htm](http://www.na.fs.fed.us/spfo/pubs/silvics_manual/table_of_contents.htm)

‘Don’t Move Firewood’

<http://www.dontmovefirewood.org/>

[http://www.dof.virginia.gov/health/resources/pub-flyer\\_Dont-Move-Firewood.pdf](http://www.dof.virginia.gov/health/resources/pub-flyer_Dont-Move-Firewood.pdf)

### 6. Develop partnerships before an EAB infestation and determine primary contacts for EAB-related inquiries

APHIS

State forestry agency / extension agency

Municipal departments

Utility providers

Local Tree Care Industry

News media outlets

Universities

Contacts:

Don Duerr  
Entomology Program Manager  
Region 8 Forest Health Protection  
404-347-3541  
[dduerr@fs.fed.us](mailto:dduerr@fs.fed.us)  
<http://www.fs.fed.us/r8/foresthealth/>

Eric A. Kuehler  
Technology Transfer Specialist  
Urban Forestry South  
706-559-4268  
[ekuehler@fs.fed.us](mailto:ekuehler@fs.fed.us)  
<http://www.urbanforestrysouth.org/>



Artisans / local wood-working industry

Lumber mills / portable mill operators

Other municipalities that have had experiences with EAB infestation

Garden Centers / local nurseries (to help reduce the number of ash trees being sold)

State Urban Forestry Council

## 7. Be proactive – remove potential target trees and prepare for tree replacement

Prioritize public trees for removal

- hazardous trees removed first
- dead, dying, diseased and non-asset trees removed next
- coordinate with utility provider to remove undesirable ash in utility easements

Prioritize high-profile and high-value trees for chemical treatments to extend life and delay removal

For an overview of issues related to ash tree removal, visit:

<http://emeraldashborer.info/removal.cfm>

For an overview of issues related to tree replacement, visit:

<http://emeraldashborer.info/replacement.cfm>

## 8. Become familiar with APHIS quarantine protocols and regulations

[http://www.aphis.usda.gov/plant\\_health/plant\\_pest\\_info/emerald\\_ash\\_b/quarantine.shtml](http://www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/quarantine.shtml)

<https://onlineservices.datcp.wi.gov/eab/article.jsp?topicid=20> (Wisconsin state regulations example)

## 9. Develop and establish an EAB and Ash Tree Monitoring and Surveillance Program

[http://www.iowadnr.gov/forestry/eab/eab\\_10survey.html](http://www.iowadnr.gov/forestry/eab/eab_10survey.html) (Iowa surveillance protocol)

<http://www.cerceris.info/monitor.html> (Bio-surveillance protocol)

### Contacts:

Don Duerr  
Entomology Program Manager  
Region 8 Forest Health Protection  
404-347-3541  
[dduerr@fs.fed.us](mailto:dduerr@fs.fed.us)  
<http://www.fs.fed.us/r8/foresthealth/>

Eric A. Kuehler  
Technology Transfer Specialist  
Urban Forestry South  
706-559-4268  
[ekuehler@fs.fed.us](mailto:ekuehler@fs.fed.us)  
<http://www.urbanforestrysouth.org/>



**After EAB has been detected:**

**1. Confirm the presence of EAB via local or state extension office**

<http://www.emeraldashborer.info/call.cfm>

**2. Notify USDA APHIS and state forestry agency of confirmed EAB infestation**

<http://www.emeraldashborer.info/call.cfm>

**3. Determine severity of infestation via trapping or other appropriate method**

<http://www.emeraldashborer.info/files/handoutforpdf.pdf>

**4. Implement emergency EAB action plan, which may include as appropriate:**

- Local eradication
- Suppression
- Spread-rate reduction
- Individual tree protection
- Quarantine actions

Modifications to the plan may be needed to address the current situation

**5. Continue public-awareness campaign or revise existing campaign as needed**

Contacts:

Don Duerr  
Entomology Program Manager  
Region 8 Forest Health Protection  
404-347-3541  
[dduerr@fs.fed.us](mailto:dduerr@fs.fed.us)  
<http://www.fs.fed.us/r8/foresthealth/>

Eric A. Kuehler  
Technology Transfer Specialist  
Urban Forestry South  
706-559-4268  
[ekuehler@fs.fed.us](mailto:ekuehler@fs.fed.us)  
<http://www.urbanforestrysouth.org/>