

# EMERALD ASH BORER

## RESIDENT GUIDE



*Discovered in Lake Forest in 2009, the Emerald Ash Borer (EAB) has killed tens of millions of ash trees in urban, rural and forested settings around the Midwest. With an ash tree population of nearly 16%, tens of thousands of trees within Lake Forest are at high risk. This Resident Guide provides essential information to help residents manage their ash trees and prepare for potential loss.*

### ***Why the urgency to remove infested or dead ash trees?***

*Unlike many other tree species, ash trees become very brittle when infested or dead, causing serious safety concerns.*

For complete detailed information regarding EAB, a list of licensed tree care providers, and trees recommended for Lake Forest landscapes, please visit [www.cityoflakeforest.com](http://www.cityoflakeforest.com).

## ARE YOU PREPARED?



EAB is spreading rapidly. There are treatments to help stop the spread of EAB, but there is no known direct and effortless solution for eliminating it.

The adult beetle will lay its eggs on the bark of the ash trees. Once the eggs hatch, the young larvae will feed underneath the bark of the tree. Through the feeding process, the larvae will create channels under the bark which will eventually kill the tree. From the outside, the tree might appear healthy, but underneath the bark, it is being suffocated.



Adult EAB



Larval galleries



D-shaped hole in bark



EAB larvae

# 1. Check your yard today

*Do you have an ash tree? Look for these characteristics:*

- **Opposite Branching:** Every branch is paired with another on the same limb, directly across from it.
- **Compound Leaves:** Each leaf has 5-11 small leaflets with one leaflet on the tip of the leaf, pointing outward.
- **Distinctive Bark Pattern:** Most visible on mature trees, there are diamond shaped channels or X patterns.
- **Ash Flower Gall:** Some ash trees form black or brown clusters of balls. These balls develop from mutated flowers in spring that last into winter.



Distinctive bark pattern



Compound leaf



Ash flower gall

# 2. Look for signs of EAB

- Water and nutrients won't be able to reach the top of the tree, causing the canopy to thin or die.
- New young branches called "suckers" may sprout from the base, trunk, or lower branches.
- Woodpeckers feed on EAB and may make holes in the bark or branches in attempt to consume the EAB larvae.

***These signs can take numerous years to appear. Ash trees that appear healthy but are located near infested ones are most likely infested as well.***



Canopy dieback



Suckers



Woodpecker damage

### Who is responsible for managing ash trees & EAB?

The City is responsible for managing the ash trees on City rights-of-way and public properties. Residents are responsible for the treatment and removal of ash trees on private property.

#### Because EAB is declared a Public Nuisance as defined in the Tree Preservation Ordinance:

- Residential trees declining more than 40% in front yards or trees that pose a public hazard will be tagged for removal
- Residents will receive a letter notifying them of the infested ash tree and be given 30 days to remove the tree

**Ash trees in back yards and trees whose locations do not pose a public hazard will generally not be inspected or be required to be removed; however:**

- Residents will receive a letter explaining the probability that their trees are infested
- Residents will be encouraged to remove infested trees on a voluntary basis

## 3. If you suspect an EAB infestation...

Knowing how to hire an arborist or tree care company is critical to ensuring you get the best care possible for your trees. As the Emerald Ash Borer devastates Lake Forest's ash trees, services provided by qualified arborists will be in high demand.

*A certified arborist can best advise you on treating an infested tree or removing it.*

If you know what to look for in a tree care company, you can be confident that the individuals working on your trees are knowledgeable, properly equipped and will put safety first. These questions will help you become an informed consumer who can expect quality work:

- **Does your company have current workers' compensation as well as personal and property damage insurance?**
- **Is your company a member of professional organizations such as the National Arborists Association (NAA), the International Society of Arboriculture (ISA), or the Illinois Arborist Association (IAA)?**
- **Is your company accredited?**
- **Does your company employ ISA Certified Arborists?**
- **Does your company have references for similar work performed?**
- **Will the company be responsible for the disposal of all limbs and debris? If a tree is being removed, will the stump be removed and cleaned up?**

No matter how companies answer questions, if you are not comfortable, feel free to shop around. In fact, getting more than one estimate is a good idea. The following is a list of local, accredited companies:

Autumn SavATree  
 Bartlett Tree Experts  
 Davey Tree Expert Company  
 Kinnucan Tree Expert & Landscape Co.  
 Nels J. Johnson Tree Experts, Inc.  
 The Care of Trees

(continued)





800 N. FIELD DRIVE  
LAKE FOREST, IL 60045

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LAKE FOREST, IL  
PERMIT NO. 64

## Re-Greening Lake Forest after an Emerald Ash Borer infestation

### Environmental Factors

Trees provide a host of benefits to The City of Lake Forest. Loss in landscape value due to EAB includes a variety of fiscal and environmental factors that are difficult to quantify; trees conserve energy, reduce carbon dioxide levels, improve air quality, and mitigate storm water runoff. In addition, trees provide numerous economical, psychological and social benefits.

**Be sure to plant a diversity of trees.** The greater the diversity of tree species within Lake Forest, the less vulnerable it will be to the devastating effects of future pests or pathogens and natural disasters. Follow the 10/15 rule to ensure broad diversity:

- ◇ No more than 10% of the trees of the same species
- ◇ No more than 15% of the trees of the same genus

*Buying native trees with native seed sources will ensure that they have the right characteristics and genetics to cope with local weather patterns.*

### Tree Removal

Removal and proper disposal is the only 100% effective tool for preventing larval development in infested trees. The population of EAB in Lake Forest will tend to decrease as more ash trees, the food source for the larvae, are removed. With ash reduction and insecticide treatment, mortality rates can be lessened and removals can be planned.

*But despite all the best efforts, ash removal will be an unavoidable reality year-to-year.*

An ash tree that is allowed to linger can become a hazard by dropping limbs or falling over. A tree exhibiting over 40% dieback should be considered for removal, as EAB has significantly damaged its ability to move water, nutrients or insecticides.

### Compost Center

For the convenience of disposing of ash tree logs & brush, you may utilize The City of Lake Forest's Compost Recycling Center located at 1381 W. Kennedy Road (Route 60).

#### March 15—November 30 (Summer Hours)

Monday-Friday, closed.

Saturdays, open 8 a.m.- 5 p.m. and Sundays, 9 a.m.- 5 p.m.

#### December 1—March 14 (Winter Hours)

Open Saturdays only: 8 a.m.- 3 p.m.

*Please see the website for Compost Center Rules and Regulations.*

LOCAL RESIDENT  
LAKE FOREST, IL 60045

## EAB Insecticide Treatment

The economics of treating ash trees with insecticides for EAB protection are complicated. Though there has been skepticism about chemical treatment, it has been proven to be effective. Specific chemicals have proved to prevent 99% of larval development in study trees (Smitley, Docco, & Cox, 2010). Important factors that can affect the success of chemical treatment are:

- General health of the tree
- Size of the tree
- Timing of application

The three most common insecticides are:

- Imidacloprid (Merit)
- Emamectin benzoate (TREE-age)
- Dinotefuran (Safari)

There are other chemicals that manage Emerald Ash Borer, but these are the most common and well-researched chemicals. Pesticide treatments are continuing treatments. *Please note that insecticide treatment must continue throughout the life of the tree.*

For further information, please contact  
Peter Gordon, City Forester, at 847-810-3563 or  
gordonp@cityoflakeforest.com.

[WWW.CITYOFLAKEFOREST.COM](http://WWW.CITYOFLAKEFOREST.COM)