

# ASH TREE IDENTIFICATION GUIDE

## The Common Characteristics of Ash Trees

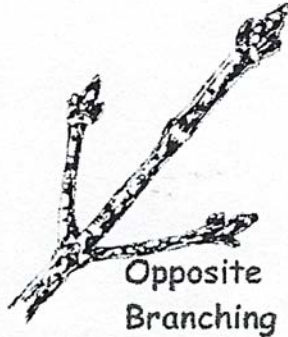
Ash trees are deciduous with an upright, oval to rounded silhouette and a dense canopy. Foliage is dark green above and paler below.

### Ash Bud and Branch

#### Arrangement:

Branches and buds of ash trees are located directly across from each other. They are **OPPOSITE**.

**YES!**



Opposite  
Branching

Ash trees **DO NOT** display staggered or **ALTERNATE** branching pattern.

**NO!**



Alternate  
Branching

#### Note:

Buds and limbs of ash trees often die and fall off, so not every single branch or bud will have an opposite mate. Look at several examples to determine the branch arrangement.

### Ash Leaves:

Ash have **COMPOUND** leaves which help make them easy to identify. Each leaf is made up of 5-11 leaflets. The leaflets are positioned opposite of each other, except for the solitary leaflet at the tip.

Green  
Ash



Green Ash

Leaflet margins may be smooth, serrated or toothed.

White  
Ash



White Ash

Black Ash



Black Ash

The leaflets vary in size depending on the species.

### Ash Bark:

Ash bark is usually light to dark gray with a medium to coarse ridged or furrowed appearance; as the ash tree ages, the bark looks diamond shaped. On younger trees, the bark is smooth.

### Ash Seeds:

The single winged seeds of ash trees are called **samaras**. Samaras hang in clusters. For identification photographs and more information on ash trees and the threat that Emerald Ash Borer represents to their health please visit:

[www.entm.purdue.edu/EAB](http://www.entm.purdue.edu/EAB)

# D' shaped holes

Colorado Department of Agriculture (CDA)  
Division of Plant Industry  
Emerald Ash Borer Talking Points  
September 26, 2013

80% water Healthy  
20% water 4-5 yrs of infected

- CDA is focused on detecting, controlling, and preventing the human spread of the emerald ash borer (EAB) beetle. The pest was just confirmed in Colorado but may have been here for a year or two. CDA will work with the affected community, the city, county, other state agencies, the USDA and US Forest Service to develop detect, control and minimize the impact of the beetle.
- Today 22 States are known to have EAB infestations; Colorado, Connecticut, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, Wisconsin and West Virginia. Federal and State quarantines, totaling 365,573.286 square miles, are in place to mitigate the spread of the pest.
  - Western most EAB state – Colorado (recently announced)
  - Eastern most EAB state – Massachusetts
  - Southern most EAB state – Georgia
- Signs of an EAB infestation include: (1) branches without any leaves, especially at the tops of ash trees (2) vertical splits in the bark exposing S-shaped tunnels (3) wild leafy branches (new growth) sprouting from the trunk and (4) D-shaped exit holes.
- If ash trees display multiple symptoms, it is likely an indication of a multi-year emerald ash borer infestation.
- Pesticides can serve as a control for EAB but they are not a cure. Homeowners with individual, high-value ash trees can buy state-registered insecticides at retail outlets or have their trees treated by a State-certified pesticide applicator.

We are working on recommendations at this time and will have them soon. What time of year is the best to treat? Can we treat the trees right now? Should we treat the trees right now?

(Homeowners should consult their State department of agriculture or local extension office for current guidelines.)

- A state or county quarantine may be put in place. They would closely follow the EAB Federal quarantine regulations, regulated articles include the emerald ash borer beetle, ash nursery stock, logs, branches and chips, green lumber, all hardwood firewood or any other article, product or means of conveyance that may present a risk of spreading EAB.
- CDA's overall goal is to safeguard our communities ash trees by managing current EAB infestation, detecting new (unknown) EAB populations and

preventing the future human-assisted spread and minimizing the impact of the natural spread of the EAB.

- CDA has participated in surveys in the past 5 years along with the USDA, CSFS and city forestry and parks departments in 30 different Colorado communities. This has mostly been trapping using the purple prism trap with lure.
- The EAB trap is a three-dimensional triangle or prism. It is made out of thin, corrugated purple plastic that has been coated with non-toxic glue on all three sides. The purple prisms are about 24 inches long and hang vertically in ash trees. To increase the attractiveness of the traps to EAB, they are baited with lures.
- CDA has also been involved in EAB education and outreach:
- USDA continues to research and monitor the use of parasitoid wasps from Asia to combat EAB in the United States. An EAB biological control laboratory, located in Brighton, Michigan, is responsible for the mass rearing and release of the three stingless wasps
- In 2012 the Brighton facility supplied 275,000 parasitoids for release in 14 States. State program partners monitored releases in Illinois, Indiana, Kentucky, Maryland, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and Wisconsin.
- Thus far this year, parasitoids were released in 17 States: Connecticut, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and Wisconsin. Additional parasitoid releases are expected in EAB-infested States when appropriate climate/release conditions are met.
- EAB is a pest of regulatory significance for domestic and foreign trade. The regulations of host material impacts multiple industries including pallet and wood industries, Green industry, the travel, tourist & recreation industry and the public at large.
- Ash trees are very desirable for urban and suburban landscape tree planting because they grow well under difficult conditions. The potential national impact of EAB on the urban environment alone is 0.5 to 2 percent loss of total leaf area, or 30-90 million trees with a loss of \$20-60 billion dollars.
- Emerald ash borer (EAB) beetle *Agrilus planipennis* Fairmaire (Coleoptera:Buprestidae) is an invasive species wood boring beetle, native to China and eastern Asia, which targets ash trees. EAB probably arrived in North America hidden in wood packing materials commonly used to ship consumer and other goods. It was first detected in July 2002 in southeastern Michigan.

not mtn Ash

- On this continent, the EAB attacks only ash trees (*Fraxinus* spp.), and all the ash species—including green, white, black, and blue—are at risk. EAB kills stressed *and healthy* trees and is so aggressive that ash trees may die within two or three years after they become infested. EAB larvae tunnel under the bark to feed in the phloem and outer sapwood producing galleries that eventually girdle and kill the tree.
- Passive dispersal (human assisted) of EAB is responsible for the wide-spread distribution of the pest; researchers continue to study and define active dispersal. Regulatory work continues to identify commercial and noncommercial pathways for regulated articles and facilitates quarantine decision-making.
- Everyday human activity facilitates the long distance spread of EAB, expanding the extent and range of the infestation in North America. The movement of infested ash tree products has been found to advance the spread of EAB. Currently, EAB is responsible for the death and decline of tens of millions of ash trees in the United States.

**Begin with an inventory of your ash trees**

- \* How many?
- \* Where are they?



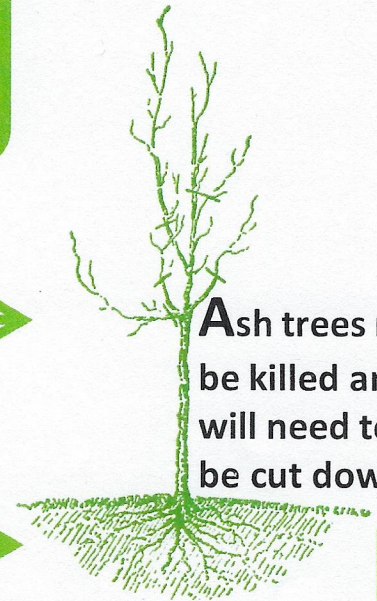
**Are some worth saving?**

- \* Valuable to landscape or owner?
- \* Healthy and few signs of EAB?
- \* Located in the right site?

Yes.

No.

**Do you want to save your ash trees from EAB?**



**Ash trees may be killed and will need to be cut down.**

No.

Yes.

**I don't know.**  
A professional can help.

**Hire a Tree Care Professional**

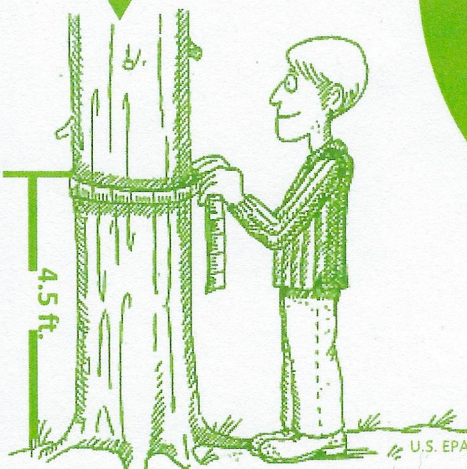
- \* Get at least two estimates
- \* Hire a certified licensed professional
- \* Ask for references and insurance

To find one in your area visit:

**[www.treesaregood.com](http://www.treesaregood.com)**

**Team up with your neighbors and seek discounts for managing all your trees at once!**

**Save money.** Have unwanted ash removed before they die.



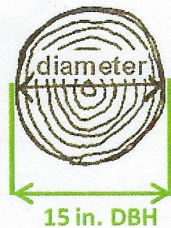
4.5 ft.

U.S. EPA

**Determine how big your trees are. Get DBH.**

Measure the distance around the trunk (at 4.5 ft. above the ground) and divide it by three to get Diameter at Breast Height.

**Are they greater than**

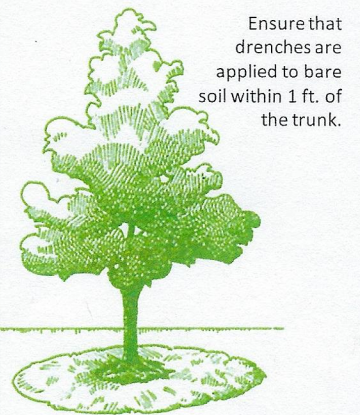


**?**

Yes.

You will need professional insecticide treatment.

No.



Ensure that drenches are applied to bare soil within 1 ft. of the trunk.

**Homeowners can treat trees themselves.**

Consider using a soil drench containing imidacloprid. Treat trees between May 1<sup>st</sup> and June 15<sup>th</sup>. Always follow all insecticide label directions.

**Protect your urban forest. Act Now. Save Trees. Save \$!**