Emerald Ash Borer in Wyandotte County

In August of 2012, the U.S. Department of Agriculture confirmed the presence of the emerald ash borer in Kansas City, Kansas. The infected ash tree was located at Wyandotte County Lake. This emerald ash borer will feed on and kill ash trees. It will not harm people, pets, or animals.

The emerald ash borer has now been detected in 24 states in the United States as well as two Canadian provinces. Emerald ash borer is now considered the most destructive forest pest ever seen in North America. For more information as well as what a white and green ash tree look like, click on the following link: <u>http://www.arborday.org/trees/treeguide/browseTrees.cfm</u>

The Emerald Ash Borer is an invasive, non-native insect that feeds on and ultimately causes the death of ash trees. The beetle is metallic green in color and approximately one-half inch in length. Recent research shows that the beetle can have a one or two-year life cycle. Adults begin emerging in mid to late May with peak emergence in late June. Females usually begin laying eggs about 2 weeks after emergence. Eggs hatch in 1-2 weeks, and the tiny larvae bore through the bark and into the cambium, the area between the bark and wood where nutrient levels are high. The larvae feed under the bark for several weeks, usually from late July or early August through October. Most emerald ash borer larvae overwinter in a small chamber in the outer bark or in the outer inch of wood. Pupation occurs in spring and the new generation of adults will emerge in May or early June, to begin the cycle again.

The emerald ash borer infestation expands in two major ways. In the natural, it is estimated that the pest will fly 2+ miles to other ash trees in the area. In addition, humans can spread the emerald ash borer by transporting firewood that may be infested with the insect to other areas.

All species of North American ash appear to be susceptible. Trees in woodlots as well as landscaped areas are affected. Larval galleries have been found in trees or branches measuring as little as 1-inch in diameter. Although beetles may prefer to lay eggs or feed on stressed trees, healthy ash trees are also susceptible. When emerald ash borer populations are high, small trees may die within 1-2 years of becoming infested and large trees can be killed in 3-4 years.

The canopy of infested ash trees begins to thin above infested portions of the trunk and major branches because the borer destroys the water and nutrient conducting tissues under the bark. Heavily infested trees exhibit canopy die-back usually starting at the top of the tree. One-third to one-half of the branches may die in one year. Most of the canopy will be dead within 2 years of when symptoms are first observed. Sometimes ash trees push out sprouts from the trunk after the upper portions of the tree dies. Vertical splitting of the bark will occur to infected ash trees. Increased woodpecker activity is also a sign of infected ash trees. Although difficult to see, the adult beetles leave a "D"-shaped exit hole in the bark, roughly 1/8 inch in diameter, when they emerge in June.

For More Information:

http://www.Emeraldashborer.info/ http://www.wycokck.org/InternetDept.aspx?id=36921 http://www.kansasforests.org Heartland Tree Alliance

What Happens if I Own an Ash Tree on my Property?

The emerald ash borer will impact all untreated ash trees in Wyandotte County in the near future. There are several options available for property owners in managing ash trees such as:

<u>Do Nothing</u>: The first option is to do nothing about ash trees dying. Over time ash tree populations may be significantly reduced and ash trees may disappear from the urban, suburban and forest landscape. For the owner, this option poses liability, safety, and utility line risks as well as financial and environmental impacts.

<u>Leave Wooded Areas Alone</u>: Second, no action can be taken on those ash trees that are in wooded areas. As a result of this action, most ash trees in these natural, wooded areas will be killed by the end of the emerald ash borer infestation. These natural areas will need to be analyzed by property owners to evaluate if any of the dead ash trees pose a danger and/or liability risk.

<u>Chemically Treat Ash Trees</u>: A third option is to chemically treat ash trees. There is several insecticide options available which research has shown can be effective. However, controlling insects that feed under the bark with insecticides has always been difficult. The economics of treating ash trees with insecticides for emerald ash borer protection are complicated. Factors that should be considered include the cost of the insecticide and expense of application, the size of the trees, the likelihood of success, and potential costs of removing and replacing the trees. Until recently, insecticide products had to be applied every year. A new product that is effective for two years or even longer (emamectin benzoate) has altered the economics of treating ash trees. As research progresses, costs and methods of treating trees will continue to change and it will be important to stay up to date on treatment options.

<u>Cut Ash Trees and Replant</u>: A fourth option is to cut down the ash tree and to replant a different tree. A pro-active approach can be used of cutting down ash trees before they have been destroyed by the emerald ash borer. Whether it is a public or private property owner, cutting the ash tree will involve cutting, transporting, and disposal of the ash tree. In replacing the dead ash trees, it is recommended that a variety of tree species be planted. Although a replacement tree is planted, it will take decades to replace the urban forest from the loss of mature ash trees. <u>http://www.arborday.org/trees/treeguide/browseTrees.cfm</u>

<u>Cut Ash Trees and Do Not Replant</u>: A fifth option is to cut down ash trees with no replacement trees planted. Whether it is a public or private property owner, cutting the ash tree will involve cutting, transporting, and disposal of the ash tree. A reduction of the urban forest by not replacing ash trees would mean increased stormwater runoff; increased water consumption; increased heating & cooling costs created from an increased heat island effect; property value reduction; and a loss of neighborhood character. <u>many benefits trees provide</u>