



Emerald Ash Borer Update

Emerald Ash Borer (EAB) is an insect that is responsible for the death of nearly 50 million ash trees since its discovery in Michigan around 2002. Since then, it has spread into 22 states and was discovered in late September, 2013 in Boulder, Colorado. Ash trees are popular in Colorado with approximately 98,000 in the City of Boulder alone and an estimated 1.45 million more in the Denver Metro area. It is estimated that 15-20% of all trees in the Metro Area are an ash species, so EAB poses a serious threat to our urban forests.

This insect does not move rapidly and with the ash tree-free Great Plains, it was thought that it may never reach Colorado. The careless movement of ash fire wood and nursery stock across the country, though, has now introduced the insect to Colorado. As a non-native insect, EAB lacks natural predators to keep it in check.

Infestations are very difficult to detect since larvae reside under the bark. The adults are generally present from May through September and ash trees may be infected for several years before there are visible signs of decline. The adult beetles consume ash foliage but cause little damage to the leaves of affected trees, allowing them to go unnoticed. EAB adults are approximately ½ inch long, with a metallic, emerald green head and back and a coppery reddish-purple abdomen.

Female adults lay their eggs in bark crevices where they develop into a worm-like larva. The larva bore through the bark and feed on the inner vascular system of the trees disrupting the transportation of water and nutrients. This is comparable to the effect of Mountain Pine Beetles to pine and spruce trees. Once the larvae matures into an adult, it exits the bark through a D-shaped exit hole in the spring. The adults feed and mate, re-infecting the same or new trees within a radius of approximately one mile.

Fortunately, there have not yet been any ash trees with EAB diagnosed outside of Boulder. The Colorado Department of Agriculture (CDA) and City Foresters across the Front Range are surveying trees state-wide in search of the insect to try and determine if the infestation is only localized to Boulder County. The CDA has also established an emergency quarantine in Boulder County that prohibits the movement of all untreated plants and ash wood products out of Boulder County.

Currently, with the exception of Boulder County and neighboring areas, the urgency of treatment is debatable. Regardless of location, though, this is a critical time for planning, and there are a few options for dealing with the insect. Chemical controls can help with prevention or mild infestations. There are also chemical controls that will help keep the insect from damaging ash trees. Based on information from the Mid-West, soil injections of systemic insecticides can provide a reasonable control in early stages of infestation. As EAB activity increases, trunk injections are the best course of action

Alternatively, ash trees, especially those already in poor health or decline, may be removed and replaced with a different species that is not susceptible to the insect. The expense to treat an ash tree for 10 years is roughly equal to that of removing and replacing an average tree. Naturally, the larger cost may be in the environmental and emotional impact of losing a large, mature tree.

As your landscape maintenance provider, Keesen Landscape Management, Inc. is available for consultation regarding your specific ash tree concerns. For additional information please visit www.eabcolorado.com.

