



Emerald Ash Borer Management Plan

Background

Emerald ash borer (EAB), *Agrilus planipennis* Fairmaire, is an exotic beetle that was discovered in southeastern Michigan near Detroit in the summer of 2002. The adult beetles nibble on ash foliage but cause little damage. The larvae (the immature stage) feed on the inner bark of ash trees, disrupting the tree's ability to transport water and nutrients. Emerald ash borer probably arrived in the United States on solid wood packing material carried in cargo ships or airplanes originating in its native Asia. Without any natural predators or controls in North America the insect has spread to, at least, 35 states and 5 Canadian provinces.

EAB adults can fly at least a half mile from the tree when they emerge. However, new infestations are most often created when people transport infested nursery ash trees, logs or firewood into uninfested areas. Transportation of firewood has been regulated to reduce the spread of EAB. Ramsey County is a quarantine area, which prohibits the transportation of ash wood outside the County. The Minnesota Department of Agriculture is responsible for quarantine enforcement and penalties.

Signs and Symptoms

Signs and symptoms of EAB include:

- Bark splitting
 - Vertical fissures on bark
 - Galleries exposed under bark split
- Serpentine galleries and “D” shaped exit holes
- The presence of EAB or larvae.
 - Adult – Bright, metallic green/ ½ inch long, flattened back
 - Larva – Creamy white, legless
- Canopy dieback
 - Begins in top one-third of canopy
 - Progresses until tree is bare
- Increased woodpecker activity.
- Sprouting of epicormic shoots from the base of the tree

Current EAB situation

St. Paul and Falcon Heights confirmed EAB discovery in May of 2009. The City of Shoreview confirmed EAB discovery in the vicinity of County Road I and Schutta Road in July of 2011. How these trees became infested is not known, though it is worth noting that the trees are only a half mile from interstate highway 35W and in other states the principal spread of EAB has been along travel corridors.

Analysis of the infestation showed that the EAB had been present for 3-4 years, which is consistent with the insect's path of destruction. Symptoms are slow to appear and once EAB is actually found, it is estimated that it has already been present for 3-5 years. It is believed that the emerald ash borer was first detected in Arden Hills in 2014 and, since then, its population has continued to multiply and spread. It is estimated that as much as 12.3% of Arden Hills' urban forest is composed of ash trees based on a Minnesota Department of Natural Resources survey (Minnesota Department of Natural Resources 2010 Community Tree Survey. Survey of front yard and street trees in residential and commercial sampling areas)

To date, North American communities have not been successful in eradicating EAB once found. EAB typically builds in population and eventually infests and kills all variety of ash trees.

Resident Education

Resident education and communication are key components of managing the impact of the EAB, especially as more information becomes available. Public information is available to residents through the City's website, newsletters, and available at City Hall. Residents can also find information about EAB management on the website for the Minnesota Department of Agriculture: <https://www.mda.state.mn.us/emerald-ash-borer-management-guidelines>

Homeowners may treat their private trees, provided they use a licensed treatment contractor who adheres to the City's standards to protect surface and ground water.

Mitigation

Although it is not possible to stop the spread of invasive species, like the Emerald Ash Borer, the City of Arden Hills' EAB Management Plan is designed to help manage the impacts. The City's mitigation of EAB will be similar to the policy and intent of Dutch Elm and Oak Wilt Disease, which attempts to control and prevent the spread of these diseases.

The City of Arden Hills has done the following to prepare for the EAB problem:

- Completed an electronic inventory with GIS software of all trees in the ROW along City streets, parks and trails. This will help the City monitor the condition of ash trees throughout the City.
- Clarified owner responsibilities for all Right of Way trees abutting a City road. These changes were done with the amendment of Chapter 3 of the City Code in October of 2011.
- Updated the City's Tree and Vegetation Ordinance, Chapter 7 to add ash trees to the diseased trees that must be removed to prevent the spread of the disease. This ordinance permits the City to enter private property for inspection, order the removal of diseased trees and abate the nuisance upon non-compliance of property owners.

- The City website includes general information for residents as well as the appropriate steps to take if EAB is suspected in one or more of their trees. The City has handouts from the Minnesota Department of Resources available at City Hall.

The City of Arden Hills will take the following actions:

- The City will monitor ash trees throughout the City for EAB and in the event EAB is discovered, staff will utilize Chapter 7, section 710 – Protection of shade trees from the City Code to prevent the spread of the disease. As in the case of Oak Wilt and Dutch Elm, this ordinance allows the City to enter private property for inspection of ash trees, order the removal of diseased trees, and abate the nuisance upon non-compliance of property owners.
- The City has inventoried all significant ash trees located on public property and continuously monitors their health. Trees that are 8-inches in diameter or greater and considered fair or better health will be treated by injection. Treatment frequency for these trees is on a two-year cycle and will be continued as long as the tree still indicates fair or better health “Buddy Trees” will be planted next to ash trees that begin showing signs of declining health and determined to be infested with EAB. Once EAB takes hold of a tree, it is inevitable that the tree will die. The “Buddy Tree” will provide an overlap period of time where it will grow before the existing tree must be removed.
- Once an ash tree is determined to be in poor health the City will begin removal of the tree on public property. These ash trees could be located within City parks or in boulevard areas. No significant pruning or methods to save a declining ash tree will be attempted. The City will remove the tree at that time. All ash trees that are removed will be replaced.
- Staff will schedule removal of declining ash trees in the fall. The most critical period for movement of confirmed EAB ash trees is May-July. This is the period when adult beetles emerge from trees, begin feeding on foliage, and move to more trees to lay their eggs. During this time, it is best to leave these trees standing and not chance the spread of EAB by transporting beetle-infested wood to other areas. The City will follow the Minnesota Department of Agriculture’s regulations for handling ash wood removal
- There are currently two methods of tree treatments being offered in the marketplace; drenching the soil with chemicals and injecting the chemical into the tree. The City strongly discourages the use of soil drench insecticides due to potential to pollute water and negatively impact wildlife. The City strongly encourages residents to utilize a certified arborist to treat trees.
 - The City will permit residents to use chemical treatments on private ash trees, given the following:

- a. Private contractors are to use **only** the approved trunk injection method.
 - b. The City strongly encourages residents to utilize tree contractors that are bonded, insured, and state licensed to apply commercial tree chemicals.
- The City will publicize the Minnesota Department of Agriculture’s regulations for handling ash wood removal. <https://www.mda.state.mn.us/eab>
 - In an effort to encourage reforestation of private properties, the City will promote Ramsey County’s Friends of the Parks annual tree sale and will pursue other EAB programs that are available.
 - The City will track the spread of EAB in surrounding communities in conjunction with the Department of Agriculture.

The following is a list of resources for residents to review to learn about Emerald Ash Borer symptoms, firewood requirements, and insecticide options. These will be listed on the City’s website and updated as needed.

- [Pest Alert-Emerald Ash Borer \(PDF\)](#)
- [Ash Tree Identification \(PDF: 7.95 MB / 2 pages\)](#)
- [Signs and Symptoms of EAB \(PDF\)](#)
- [Map of EAB in USA \(PDF\)](#)
- [Minnesota Department of Agriculture EAB Quarantine](#)
- [Firewood Restrictions & Safe Handling Guidelines](#)
- [Homeowner Guide to Insecticide Selection, Use and Environmental Protection](#)
- [Ash Tree Waste Disposal Sites within Hennepin-Ramsey-Houston County](#)