The Emerald Ash Borer

What is the Emerald Ash Borer (EAB)?

Where does it comes from? The beetle, originally from Asia, was detected in Michigan in 2002. It has since been found in 12 states (including Missouri) and Canada.

What does it do to trees? All Ash tree varieties are susceptible. Once infested, mature trees typically die in 3-4 years. The effectiveness of existing chemical treatments varies.

Why it is a major concern? The Ash is a popular tree planted in cities and suburban areas in the eastern and central U.S. It is a very common canopy tree that occurs naturally in the region's forests. As EAB spreads unchecked, experts recognize it could decimate both plantings and forests over a vast area.

What is being done? Monitoring with traps. When detected, the transport of infected wood is restricted to try to prevent spread. Foresters manage EAB in one of three ways: insecticides, removal, and replacement. Treating trees can be difficult and insecticides are not always effective. Ash trees in and near infested areas have been removed and destroyed to slow the spread of EAB. They are sometimes replaced with resistant tree species.

EAB is monitored using purple traps. Restrictions on transport of infected wood and other measures are taken in an effort to slow the spread of the insect.

EAB has been identified in 12 states and Canada.

The EAB is a 1/2-inch-long bark beetle, originally from Asia.

Ash are popular trees in suburban and urban settings.

EAB results in the mortality of all varieties of Ash trees.

How will the EAB threat affect the Memorial landscape?

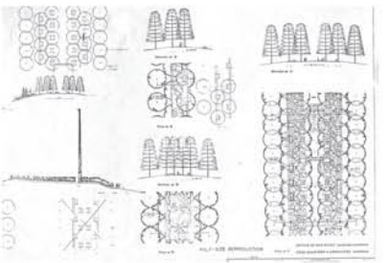
How many Ash trees are at the Memorial? Of the 2,070 trees at the memorial, 956— or 46%—are Rosehill Ash (*Fraxinus americana* 'Rosehill').

Are the ash trees important to the Memorial's design? The planting of a single species of tree along the walks is an essential character-defining feature of the Saarinen-Kiley design of the Memorial grounds. However, the original plan did not call for Ash.

Does retaining or replanting the Ash trees have any effect on EAB spreading in the region? The large concentration of Ash trees at the Memorial grounds could function as a vector for EAB: a point from which infestations could gain strength and present a greater threat to Ash trees throughout the region surrounding St. Louis.

What is the life cycle of the trees? The planting of Ash trees was installed by the National Park Service in 1971 and 1979-80. As these urban trees approach 40 years of age, the trees are beginning to decline and have begun to require replacement regardless of EAB.

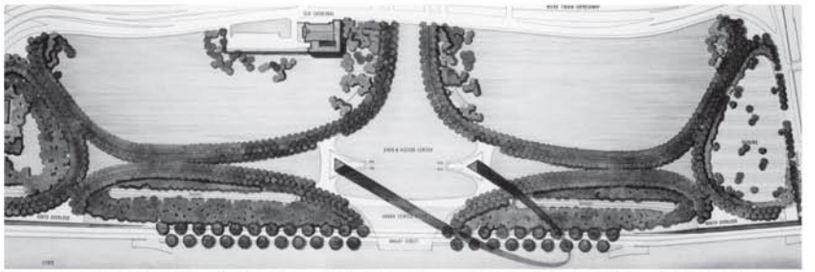
The walks lined by uniform trees are an important part of the visitor experience.



The form of the trees and the planting pattern were part of an intentional design.

Ash trees being removed in Ottawa, Canada due to EAB infestation.

Of the 2,070 trees in the Memorial, 956 are Ash trees, and 1,114 are a variety of other species.



The curving form of the walks, reflecting the geometry of the Gateway Arch, is emphasized by the single-species tree planting, shown here in an early design drawing by Dan Kiley.

Do the Ash trees need to be removed?

How does this action relate to accepted management strategies for EAB? Forestry management strategies include insecticides, removal, and replacement. Tree replacement is preferred. Insecticide treatment of the mature, stressed Ash planting is not feasible. Removing without replacing diminishes the important planting and the integrity of the National Historic Landmark. Replacement with a different tree in a way that is compatible with the Memorial's design has been determined to be the best option.