

Emerald Ash Borer (EAB) Major threat, now in Warren Co. along Schroon River

Impact- Ash comprises up to 8 % of NY communities. Ash seeds are a food source for birds and mammals. The tree is valuable for flooring, furniture, lumber and pallet manufacture. First found in NY in 2009, it is found



in almost all counties. Recently it has been found along the Schroon River in Chestertown. It has killed more than 50 million trees across the country. Despite quarantines it has managed to spread and now in 35 states.

ash trees before (left) and after (right) (9)

What is EAB / How to Identify- A small beetle that attacks only ash species. Its larvae enter the tree thru crevices in the bark and then feed on the inner tissues of the tree disrupting the tree’s ability to transport nutrients and water. Four life stages; adult, egg, larva and pupa. The adult beetle has shiny emerald bright green wing covers & a coppery red or purple abdomen. Adults- 3/8 to 5/8-inch-long & 1/8 inch wide, emerge from May thru Sept. most commonly in June & July. Females lay eggs 2 weeks after emergence, hatching in 1-2 weeks. Larvae 1 to 1 ¼ “long, bore into the bark leaving long serpentine tracks underneath. Feeding disrupts the ability to transport water & nutrients resulting in dieback and bark splintering.

Signs of infestation: dieback, thinning, usually starting at canopy top, epicormic shoots from the tree base, woodpecker activity, bark splitting. Heavily infested trees die within 2-3 years of when symptoms are observed. On the trunk and branches, look for small (1/8 in. diameter) D-shaped holes that are left by emerging beetles. When the bark splits or falls off, S-shaped larval galleries may be visible. Adults feed on the ash leaves in the canopy but cause little defoliation. Adult EAB’s typically fly less than ½ mile from their emergent tree thus it spreads by firewood movement.



(10)



(11)



(13)

D" shaped exit hole



(12)

serpentine galleries under bark



EAB Larvae

Emerald Ash Borer Look a likes- The six spotted tiger beetle (below) is often mistaken for EAB. Also, the bronze birch borer that also has D shaped holes.



(14)



Above - six spotted tiger beetle,

Above- Bronze birch borer (native)

How to identify ash trees- Ash trees can grow 60 to 100 ft. The leaves are pinnately compounded with 5 to 11 leaflets. Clusters of small white flowers develop on the twigs during the spring. The fruits (winged) are light green in color changing to brownish. Branches, leaves and buds are directly opposite from one another rather than staggered. Older tree bark has a diamond-shaped ridges. Smaller ash tree bark is often smoother.



Above- Ash Leaf (15)



Ash leaf and bark (16)



Ash fruit

What to do / Help / Report- Do not move firewood. NYS law prohibits movement of firewood more than 50 miles, so buy your firewood locally. EAB is spreading rapidly thru human transport of infested wood and ash nursery stock.

There are a variety of treatment options that can serve as a control measure for the EAB, but no cure. While DEC is still collecting EAB location information, they are not actively managing infestations at this writing. It is cooperating in efforts to identify potentially resistant trees, estimated at 1 % of the population. Biological efforts (APHIS) are underway to contain and eradicate and research has identified natural enemies - several species of parasitoid wasps with promising results. Management and controls are constantly evolving. Systemic Insecticides are available but are only considered viable in urban areas; Emamectin Benzoate is the most



effective, also Imidacloprid (available to landowners -Bayer Advance Tree & Shrub, but only as a soil drench) and Dinotefuran. A certified arborist is required for most treatments.

In urban areas trees should be removed once an infestation is found to reduce further spread More info;

<https://www.emeraldashborer.info> & the DEC webpage <https://www.dec.ny.gov/animals/45409.html>

If you confirm a tree is infested with EAB it may not have to be taken down. With treatment, trees can be saved before 30% is affected. DEC can confirm if the signs of tree damage are from EAB and provide tree information removal. If you suspect you have found EAB, take photos of the insect or signs of damage and email them along with location information to foresthealth@dec.ny.gov &/or call 1 866-640 0652.