EMERALD ASH BORER (EAB) IS HERE

WHAT

The Emerald Ash Borer is a metallic green beetle. The adult beetle is about 1/4" to 1/2" long and about 1/8" wide.

HISTORY

It was discovered in Michigan in 2002. It has spread to more than 20 states in 14 years in the NE and Canada killing millions of white and green ash trees. The beetle seeks new sources of food – ash trees – once it kills all available ashes. It is also spread via infested fire wood, nursery stock and landscape debris, as well as via the normal movements of people and vehicular traffic.

CYCLE

Eggs are laid mid-June into August, about 2 weeks after leaving the tree. Female beetles feed on ash leaves for 14 days before they begin laying their eggs. Eggs hatch in about 2 weeks. The larvae tunnel through bark to the cambial region (just below the bark) and feed on phloem (the thin layer of tissue which provides nutrients to the tree), etching galleries which are serpentine. The tree dies as the larvae starve it of nutrients it needs to survive. Consequently, the tree dies from the top (canopy) down. (Badly infected trees may have branch sprouts along its trunk as well as numerous sprouts growing from the base, where the channels of larvae have not reached.)

The larvae winter under the bark, creating "D" shaped holes in the bark upon exiting. You may observe the beetle during mating and egg-laying between 3-7 PM on sunny, warm days in mid-July. On average, females lay about 55 eggs, but can produce as much as 150. Females live about 2 months, males about 1 month. THEY REPRODUCE GEOMETRICALLY OVER THE YEARS.

SIGNS

The mortality to ash trees occurs 5 years after it has been observed. The infestation is then in the beginning of its exponential growth phase and continues for the next 5 years.

One of the best early signs of the presence of EAB is if you notice woodpeckers feeding on the main upper limbs and large branches. You may also observe orange-pink patches along the usual grey weathered bark of the ash tree trunk, the woodpecker creates while scavenging.

Notches on the side of ash leaves, causing the crown to appear ragged as well as heavy seed production. (Few of the seeds are viable.)

WHAT TO DO

Decide if you wish to try to save the tree. The recommendations are:

Only treat trees with a 12"- 30" diameter at chest height. Trees that are less than 12" may not warrant treatment due to the cost of treatment.* Trees larger than 30" may have their best years behind them (so to speak).

Only consider treating trees with less than 30% canopy decline.

Determine as well that your ash tree is not suffering from 2 other diseases; ash yellows and ash decline.

Take into account the cost of treatment vs. the cost of removal, as eventually the dead ash will need to be cut down.

There are many treatments: ground or root injection; bark sprays and bark injection, ground drenching. Some the homeowner can do, others require a certified arborist. Treatments have to be done yearly or every other year. Timing of treatment is critical as 2 life stages are targeted; adult beetles and young larvae.

*There are over-the-counter soil drenching products that contain 1.47% imidacloprid the homeowner can try. It must be done yearly. Arborists have found emamectin benzoate to be effective; it is injected into the trunk of the tree every 2 years.

LINKS

http://www.nj.gov/agriculture/divisions/pi/prog/emeraldashborer.html

Or you may find it easier to simply type in "Emerald Ash Borer".

To find a certified arborist: njtreexperts@gmail.com

Homeowners Associations should be aware of EAB: inventory the ash trees and develop a plan.

Montgomery Township has fewer than 200 streets trees that are ash trees. The Shade Tree Committee inventoried the trees: measuring them and taking note of their condition. A presentation was given to the Township Committee in which we recommended not to treat the trees as most of them are less than 12" in diameter and the others are not "specimen" ashes. The following streets have ash trees: Cedar Lane, DeHart Dr., Grandview Rd., Meadow Run, Norfolk Way and Belle Mead-Blawenburg Rd. (Rt. 601) at Elm Dr.

(Shade Tree Committee stopped planting ash trees years ago due to awareness of EAB and other diseases affecting ash trees.

All this information is available under the Shade Tree Committee's section of the Montgomery Township website.)