“The Green Menace”

An iridescent, metallic green jewel beetle is in the process of destroying one of the most valuable and abundant woodland and landscape trees in North America - and it has arrived in North Andover on my street, and probably yours. Smaller than a dime, the Emerald Ash Beetle (EAB) has destroyed seven ash trees in my small neighborhood and **56** trees in the French Farm area. The EAB was first detected in Detroit, Michigan, arriving in wood packing crates and pallets from China in 2002, and is now in 30 states in eastern and mid-western US and parts of Canada, according to the USDA. It arrived in Essex County, MA in 2012 and the entire state is now under federal quarantine for EAB. (Ring a bell??)

The mature Emerald Ash Beetle emerges in mid–May and is attracted to stressed or injured ash trees first… and then all the healthy ones. Within 20 days, the female lays eggs in crevices in the bark of any of 16 species of ash trees. Their white, flat headed larvae tunnel and feed for the next one to two years on the inner layer of soft wood, thereby disrupting the tree’s ability to transport the water, nutrients, and carbohydrates that give it life. The canopy thins, branches die, and the tree succumbs. A small ash tree can die within 1-2 years, a larger one in 3-4 years, and, within 8-9 years of infestation, 90% of the ash trees in the forest, swamp, urban or suburban neighborhood are dead. Here on Cobblestone Circle, all of our ash trees were destroyed within 2 years.

To detect “The Green Menace”, check your ash trees for:

-mature, shiny green beetles 1/2” long by 1/8” wide emerging in mid-May/early June,
-splitting bark,
-D-shaped holes 1/8” wide in the bark surface (*very* tough to see),
-dying upper branches,
- leafy shoots from the lower trunk or roots, often with larger than normal leaves,
- and woodpeckers!

Most adult EABs stay within a half mile of where they emerge, but females can fly up to three miles. People actually transport the majority of beetles in the cut logs, firewood, and nursery stock of ash trees. Do not move firewood from your property or carry it across state lines. Buy local/burn local, or buy kiln dried firewood. Have trees removed by the Town or by a professional who understands the repercussions of moving infected ash wood and cuttings.

Homeowners can apply an appropriate systemic insecticide in a concentrate or granular form to the soil at the base of an ash tree in the spring or fall, with no spraying necessary, but this will only control, not cure, the infestation for 2-3 years. After much research, three types of non-stinging parasitic wasps were released as bio-control species in Massachusetts in 2014 (including in Essex County), according to Mass.gov, in hopes of “promising” results to reduce the EAB population. Fingers are crossed, but too early to tell.

In the winter, 2013 issue of *American Forests*, the Emerald Ash Borer was described as "the most destructive forest insect ever to invade the US", more devastating to our native trees than the Chestnut blight or the Dutch Elm disease of the early 20th century. A national inventory says that over 8 billion ash trees exist in the US with hundreds of millions of mature urban trees growing on municipal and private land. 50% of municipal trees growing along streets and in parks are ash trees. Now, more than 40 million ashes have been destroyed by the EAB in Michigan alone. Once ash trees die, they not only become hazardous to people, homes, and cars and alter the look of our neighborhoods, they change the ecology of the landscape. Nutrients are no longer available to the soil, lack of shade changes hydrology, and the composition of plants and habitat available for birds, insects and animals is altered forever. The Emerald Ash Borer is a huge threat to our eastern forests and neighborhoods as we know them – and one more thing to keep us awake at night in 2020!!

-Leslie Frazier, September 30, 2020

Ash tree in front of 24 Cobblestone Circle

Tunneling by EAB larvae under ash bark