

## COMMONLY ASKED QUESTIONS ABOUT THE EMERALD ASH BORER

- 1. Where did the emerald ash borer come from?** The natural range of *Agrilus planipennis*, or the emerald ash borer, is eastern Russia, northern China, Japan, and Korea. Before June of 2002, it had never been found in North America.
- 2. How did it get here?** We don't know for sure, but it most likely came in ash wood used for stabilizing cargo in ships or for packing or crating heavy consumer products.
- 3. What types of trees does the emerald ash borer attack?** In North America, it has only been found in ash trees. Trees in woodlots as well as landscaped areas are affected. Larval galleries have been found in trees or branches measuring as little as 1-inch in diameter. All species of North American ash appear to be susceptible.
- 4. Where has it been found?** The "core infestation" was initially designated as 6 counties in southeast Michigan: Livingston, Macomb, Monroe, Oakland, Washtenaw and Wayne. As of December 2004, the quarantined area now contains an additional 14 counties surrounding those just mentioned: Branch, Calhoun, Clinton, Eaton, Genesee, Gratiot, Hillsdale, Ingham, Jackson, Lapeer, Lenawee, Saginaw, Shiawassee, and St. Clair. Emerald ash borer has also been found in a few isolated locations in Michigan's lower peninsula as well as northeastern Indiana and northwestern Ohio. These outlier infestations are not new (i.e., EAB has not spread this far in the past 2 years). We are simply getting better at finding infestations as survey methods improve. However, it is important to watch for signs and symptoms of EAB in non-quarantine areas where the beetle may have been accidentally transported in ash firewood.
- 5. What happens to infested ash trees?** The canopy of infested trees begins to thin above infested portions of the trunk and major branches because the borer destroys the water and nutrient conducting tissues under the bark. Heavily infested trees exhibit canopy die-back usually starting at the top of the tree. One-third to one-half of the branches may die in one year. Most of the canopy will be dead within 2 years of when symptoms are first observed. Sometimes ash trees push out sprouts from the trunk after the upper portions of the tree dies. Although difficult to see, the adult beetles leave a "D"-shaped exit hole in the bark, roughly 1/8 inch in diameter, when they emerge in June.
- 6. What do emerald ash borers look like?** The adult beetle is dark metallic green in color, 1/2 inch-long and 1/8 inch wide.
- 7. What is the life cycle of this borer?** Recent research shows that the beetle can have a one-, two-, or even three-year life cycle. Adults begin emerging in mid to late May with peak emergence in late June. Females usually begin laying eggs about 2 weeks after emergence. Eggs hatch in 1-2 weeks, and the tiny larvae bore through the bark and into the cambium – the area between the bark and wood where nutrient levels are high. The larvae feed under the bark for several weeks, usually from late July or early August through October. The larvae typically pass through four stages, eventually reaching a size of roughly 1 to 1.25 inches long. Most EAB overwinter in a small chamber in the outer bark or in the outer inch of wood. Pupation occurs in spring and the new generation of adults will emerge in May or early June, to begin the cycle again.
- 8. How is this pest spread?** We know EAB adults can fly at least 1/2 mile from the tree where they emerge. Many infestations, however, were started when people moved infested ash nursery trees, logs, or firewood into uninfested areas. Shipments of ash nursery trees and ash logs with bark are now regulated,