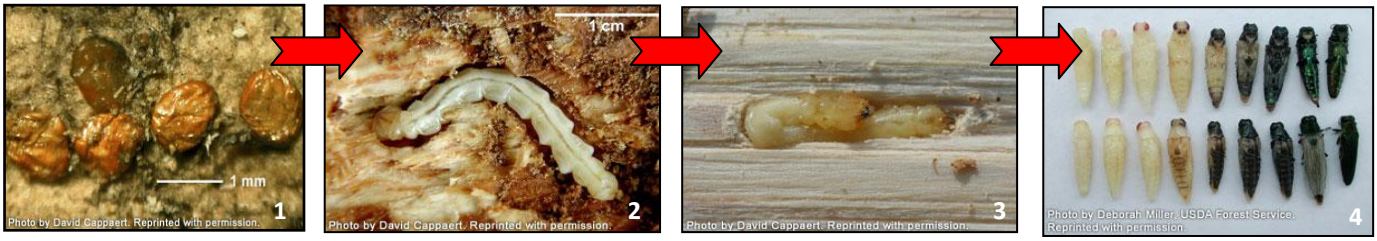
University of Connecticut
COOPERATIVE EXTENSION SYSTEM
College of Agriculture and Natural Resources

QUICK REFERENCE GUIDE TO EMERALD ASH BORER

Emerald Ash Borer (EAB) is a wood-boring beetle. It feeds exclusively on all species of ash trees (*Fraxinus spp*). In Connecticut's forests, there are green, white and black ash trees.

LIFECYCLE OF EAB





The EAB lifecycle can take one or two years depending on environmental factors. 1. **EAB eggs** are laid in the crevices of ash tree bark during the summer, particularly in the crown of the tree where bark is thinnest. 2. **Larvae** burrow into the cambial layer under the bark, creating 's'-shaped serpentine galleries as they feed until late fall. 3. **Pre-pupal larvae** 'jacknife' into a self-created pupal chamber where they spend the winter. 4. In the spring, over a period of two to three weeks, **pupae** mature into adults. 5. **Adults** emerge from the tree May through June, creating a small **D-shaped exit hole** on the tree. Adults consume leaf tissue before flying, mating and eventually laying eggs. *www.emeraldashborer.info*

IDENTIFYING ASH TREES



There are four identifying features of ash trees: 1. Compound **leaves** comprised of 7 to 11 leaflets, depending on specific variety; 2. **Twigs** are smooth, rigid, grayish in color and resemble 'bones;' 3. Deeply furrowed **bark** on mature trees; 4. **Opposite branching**, particularly obvious on newer growth.

IDENTIFYING EAB IN THE FIELD

Adult EAB may not be the most easily observed indicator of an infestation given their small size and the limited amount of time they are active outside of the tree. **EAB is more likely to be found either through a formal monitoring process or due to the damage it causes ash trees.**









1. Splits in tree bark reveal the **serpentine galleries** created by larvae (inset: full gallery exposed). Galleries can be found between the outer bark and heartwood in a layer called the 'cambium.' Note the whitish enlarged portion of the gallery packed with chewed bark (bottom arrow). 2. The presence of **epicormic branches** at the base of the tree, and/or visible decline in the health of the crown (also called **crown dieback)** [inset]. 3. Woodpeckers flake off the outermost layer of the bark seeking larvae, exposing lighter inner-bark. Experts believe this is one of the most visible indicators of an EAB infestation. 4. Localized death of the tissue above where larvae have been feeding can cause **fissures, cracks, or sloughing off of the bark** as the tree continues to grow.

If you suspect you have an infested tree, contact CT Agricultural Experiment Station: **CAES.StateEntomologist@ct.gov**; **203-974-8474** For more up-to-date information: **www.emeraldashborer.info**

DONT MOVE FIREWOOD