Emerald Ash Borer is now widespread in Norwich – and we must act!

Ash trees throughout Norwich are infested with the Emerald Ash Borer (EAB), and nearly all will die within the next several years, yet the pest was not officially detected until January 2024. The "Emerald Ash Borer Management Group" is a new subcommittee of Norwich Conservation Commission working to help both town officials and residents effectively manage ash trees along our roads, in our public spaces, and on our individual properties. This overview provides information and resources to begin informing and guiding management decisions.

Ash trees

Ash trees are common forest and planted trees in Norwich and throughout eastern North America. Our three native species play important ecological, cultural, and









aesthetic roles, and the wood is often used to make tool handles, baseball bats, canoe gunwales, and woven baskets (Black Ash). In general, identify ash trees by furrowed bark, often with a diamond pattern – and opposite, pinnately compound leaves (see photos). Ash leaf-out in spring is among the latest of common tree species. Our largest species is the White Ash, usually growing in moist upland soils and reaching 120+ feet tall and three feet or more in diameter.

The problem

EAB is a wood-boring beetle that arrived in North America about 20 years ago. It exclusively attacks all species of ash trees, and infested ash typically die within a few years. This destructive pest reached Vermont by 2018, and although only recently confirmed in Norwich, we now recognize that EAB has been here for years. During summer, adult beetles lightly feed on foliage in the upper branches, then mate and lay eggs in bark crevices. Larvae hatch, chew their way through the bark, and kill trees as they feed by cutting off the flow of nutrients. Signs and symptoms of EAB attack can be difficult to detect until a tree is heavily infested (see resources, below). In Norwich ash, EAB can be suspected when upper portions of the canopy begin dying (see photo).

Options for action

Once a regional EAB infestation is underway, only three management options exist:

- 1) Chemical or biological control of EAB. Healthy or lightly infested ash trees can be effectively and safely treated by stem injection with an insecticide (e.g., Emamectin benzoate), at a per-tree cost of roughly \$200-500 every two years, depending upon diameter (for details, see resources link below). Biocontrol with wasps which parasitize EAB is an emerging possibility, but still in the research stage and not likely to be widely effective in time for Norwich.
- 2) <u>Tree removal</u>. Ash trees killed by EAB become brittle and dangerous, dropping branches, and then breaking or falling. The unfortunate reality is that any ash tree in close proximity to structures, roads, utility lines, or areas where people concentrate must be removed ideally before they become infested and die unless the tree is treated as in option #1. Identification of such trees within public spaces will be the Management Group's highest priority, and their removal will be a considerable expense for the town; funds will need to be budgeted ASAP. Landowners are advised to undertake a similar identification and budgeting process, heeding regulations mandating only short-distance transport of the wood. Ash is an excellent firewood.
- 3) No action. Most ash trees in Norwich do not need cutting; they can be left to die, providing wildlife habitat until and after they fall down. A very small proportion perhaps only 0.1% have the potential to be a "lingering ash" harboring EAB resistance and providing hope for ash conservation. Note that "No action" is not an option for trees that will pose a potential hazard once infested.

Resources

Visit the Norwich Conservation Commission website for resources on all aspects outlined above, with the QR code above or at https://norwichconservation.org/projects/eab/resources

Please communicate with your neighbors – and us – to help manage this infestation. Thanks!