

Emerald Ash Borer: Recommendations for Homeowner and Woodland Owner Action

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http://nvis.info/insects/EmeraldAshBorer.aspx

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Since the first detection of emerald ash borer (EAB, Agrilus planipennis Fairmaire) in Randolph, NY, on June 15, 2009, New York State and federal partners have identified a 10-acre infestation area that included 39 trees, all of which have since been cut and chipped. Trapping efforts are currently underway to determine if the infestation has expanded beyond this initial detection site. The natural spread of EAB is slow, often less than 5 miles per year, but may increase 6 fold when human-assisted. The long distance movement of firewood and infested nursery stock is primarily responsible for the spread of EAB to new locales.

To limit the potential introduction of EAB to other areas of the state and protect New York's more than 900 million ash trees, the New York State Department of Environmental Conservation (DEC) and the Department of Agriculture and Markets (DAM) have implemented a quarantine for Chautauqua and Cattaraugus Counties. New York's quarantine order prohibits the movement of ash seedlings, trees, logs, boards, wood chips, other plant parts, and the insect both within and beyond Cattaraugus and Chautauqua counties without certification or compliance agreements issued by DAM. Additionally, the movement of these regulated wood products into and through the quarantine zone is restricted. More information about the quarantine is available at http://www.dec.ny.gov/animals/47761.html

Additionally, a DEC firewood regulation (www.dec.ny.gov/animals/28722.html) limits the transportation of all species of untreated firewood to no more than 50 miles from its source and prohibits the importation of firewood into NY unless it has been heat treated to kill EAB or other potentially invasive species.

Compliance by the public with the EAB quarantine and firewood regulations is critical to slowing EAB spread in New York. People with questions about EAB and related regulations should contact the NYS DEC Firewood Hotline: (866) 640 – 0652. If you suspect illegal transport of potentially infested firewood or nursery stock please contact the DEC TIP hotline at (800) 847 7332 (800-TIPP-DEC).

Homeowners are encouraged to avoid hastily implementing control or chemical prevention strategies unless an EAB infestation is known on your property or is located within 10 to 15 miles. Aggressive and compulsive actions are often not prudent, may not significantly change the impact of EAB, carry financial and environmental costs, and may limit your future control options. The detection of EAB in Cattaraugus County does not mean that EAB will spread

statewide this year or occur in your county in the immediate future. *Chemical pre-treatment for EAB in unaffected areas is not an effective control, is costly, and may kill other beneficial insects.* However, diligent, thoughtful planning for EAB arrival by woodland owners and municipal governments is warranted.

Woodland owners should think carefully about their objectives and talk with a forester to assess if some management activity is warranted. Most woodland owners will not need to undertake any harvesting. Any harvesting should be completed based on an inventory, management plan, and deliberate silvicultural prescription. Woodland owners can learn more about selecting foresters and loggers to assist with management activities through publications available at www.ForestConnect.info and at www.ForestConnect.info and at www.dec.ny.gov/animals/45402.html.

All land owners are asked to be vigilant and prepared to detect a new EAB infestation or report an existing one. People in both urban and rural wooded settings should recognize symptoms of EAB, including: D-shaped exit holes resulting from adult emergence, s-shaped larval galleries under the bark, epicormic branches (i.e., side sprouts from the main stem or base) growing from the trunk or dead branches, and extensive woodpecker activity. Branches and crowns of trees cut for firewood or tree maintenance should be inspected for EAB exit holes and galleries. Carry an empty plastic container to collect specimens of insects that are suspicious. Use a digital camera to take pictures and document symptoms. Suspicious specimens or photographs should be submitted to your county Cornell Cooperative Extension (CCE) Association for a no-cost screening and identification.

CCE strongly recommends that individuals concerned about or affected by EAB first consult educational resources and local CCE extension professionals to develop an action plan before hurriedly acting. Woodland owners should contact their local DEC office and request a stewardship plan be prepared and include management recommendations for EAB. There is no cost to have a DEC forester prepare a stewardship plan. The Cornell-based NY Invasive Species Clearinghouse http://nyis.info/Insects/EmeraldAshBorer.aspx and the DEC EAB Web site http://www.dec.ny.gov/animals/7253.html are excellent sources of information. To locate your local office of Cornell Cooperative Extension, visit: http://www.cce.cornell.edu/editor/show/In_Your_Community

About EAB

The first occurrence of emerald ash borer (EAB, *Agrilus planipennis* Fairmaire) in New York State was confirmed by USDA APHIS on June 17, 2009 in Randolph, NY (Cattaraugus County). An invasive beetle introduced from eastern Asia, EAB kills all species of ash trees native to North America, and has the potential to cause severe economic and ecological damage. First detected near Detroit in 2002 it has now spread to 13 states and two Canadian provinces. Ash mortality is 100% near Detroit and is widespread in all the affected areas.

Table 1. Recommendations for homeowners and woodland owners inside and outside the EAB quarantine zone.	
Quarantine Zone	Other Areas
Home Owners	Home Owners
• If you are planting trees, do not plant	If you are planting trees, do no plant ash (Fravirus app.) trees

- ash (*Fraxinus* spp.) trees. Plant other species suited to the soil to avoid providing habitat for EAB and to avoid the potential for transporting EAB via infected nursery stock.
- There are some insecticides that are registered in NY that are labeled for control of Emerald Ash Borer. Active ingredients include compounds such as imidacloprid, bifenthrin, betacyfluthrin, and others. These and other compounds may be in some formulations that are not registered for use in NY and are typically only legally applied by a NYS Certified Pesticide applicator. Some homeowner formulations may be available. Trees should be within 10 to 15 miles of the infestation to warrant the costs of insecticidal treatment.
- Chemical treatments must continue for many years (with applications every 2 -3 years, depending on the product). If their ash trees have already lost more than 50% of their crown, they probably can not be saved.
- Cooperate with state and federal officials to assist their efforts at control.

- plant ash (*Fraxinus* spp.) trees. Plant other species suited to the soil to avoid providing habitat for EAB and to avoid the potential for transporting EAB via infected nursery stock.
- Actions to limit EAB, for example preventative insecticide applications, are not warranted unless your trees are in an infestation area. Pre-treatment is not an effective control, is costly, and may kill other beneficial insects.
- Monitor trees for signs of health. Contact your local office of Cornell Cooperative Extension if you detect symptoms of EAB, including dead branches in the upper crown of your ash tree.

Woodland Owners

- See fact sheet at www.ForestConnect.info by Nyland (2009), "Silviculture and Invasive Insects".
- See additional info on DEC Forestry website at: http://www.dec.nv.gov/animals/454 02.html
- Cooperate with state and federal officials to assist their efforts at control.

Woodland Owners

- See also the recommendations provided for woodland owners inside the quarantine zone. However, the urgency to act is less acute, though real.
- Do not fall to the temptation to preemptively liquidate the ash from your property. Approach any harvest deliberately, with professional guidance, and with clearly defined objectives.

- Understand the extent of ash in your woods and your dependence on ash as a source of revenue. If you have significant amounts of ash and depend on sawlogs for revenue, work with a competent forester to target ash for removal. During or after the harvest, take steps to control interfering vegetation that might inhibit the successful regeneration of other desired species. Harvesting to pre-salvage ash should avoid exploitive removal of other species necessary to retain canopy coverage and provide seed for regeneration.
- The current EAB quarantine limits your ability to transport sawlogs to market. Contact your forester or the DEC to learn about current restrictions and your options, if any, to sell logs or other ash-related products.
- Some owners may want to hire portable bandsaw operators to saw infected logs and salvage the wood into boards rather than chipping. Slab wood should be thoroughly chipped or promptly burned. Movement of all ash tree parts is controlled under quarantine rules.
- Manage woodland through thinning and control of interfering vegetation to ensure healthy and diverse woodlands. Heavy cutting of ash will stimulate regrowth in the understory, but the mixture of species responding may not be desired by the owner.
- There are no known chemical controls for woodland situations.
 Thus, large-scale control of the insect is not currently possible.