



New York State Emerald Ash Borer Community Preparedness Plan Development Workbook

September 2010

Overview

The Emerald Ash Borer (EAB) is an invasive insect recently discovered in several regions of NY. This insect is known to kill ash trees of all species, size and vigor and spreads through flight and by transportation in firewood, logs, and nursery stock. The impact of EAB on communities is profound and comparable to the loss of American elm or American chestnut. Community-level planning is essential to manage the potential for impacts on health, safety, and economics that have occurred in all other communities affected by EAB.

This document will assist your community in developing a plan to prepare for the arrival of the Emerald Ash Borer or to begin dealing with the many issues that are facing communities where it has already become established. EAB Preparedness Plans can help answer the challenging questions that need to be asked to facilitate better decision making for your community as well as identify key players that can help manage the severe financial and aesthetic impacts of this devastating insect.

Why is an EAB Plan important?

- NYS has over 900 million ash trees, comprising 7% of all our trees in the state. Many are located on your streets, in your parks and yards, and in your forests. All of them are vulnerable to the Emerald Ash Borer.
- Once ash trees die, they quickly rot and break apart. Trees will have to be removed as they become public safety issues. This can be a significant expense depending on the number and size of hazardous ash trees in your community.
- Streets, parks, yards and wooded areas will be devoid of the shade trees they once had. Loss of shade trees on streets, yards and parks will negatively impact winter and summer energy consumption, water use, property values, aesthetics, and community morale.



- Ash trees comprise a substantial percentage of New York’s urban and rural forests, and their elimination can have a profound effect on local economies including:
 - The cost to treat or remove ash trees in public areas.
 - The cost to replant.
 - The devaluing of homes with ash shade trees.
 - The loss of ash trees in the wood product supply.

- EAB infestations will affect all New Yorkers in some manner, and require collective efforts to “Slow the Spread.” Slowing the spread of EAB will allow more time for communities to plan for the eventual arrival of EAB, thereby helping to minimize economic impacts. Time is also needed to research, refine, and implement potential sustainable management options as they become available.

Samples of community plans from other states can be found at:
<http://emeraldashborer.info/communityplan.cfm>.

A Glossary of Terms is included at the end of this document.



Getting Started

When developing a plan, convene a group of key players within your community. This group could include your mayor/supervisor, your forester (or equivalent), Public Works superintendent, Cornell Cooperative Extension Educator, NYS Dept of Environmental Conservation Forester, private urban forester or consulting forester, forester or liaison from your local power utility, your legal counsel, appropriate governing committee members, or other appropriate personnel, agencies, and community volunteers. This group should consist of people who have the authority to make decisions about your publically owned trees, those who will carry out the decisions outlined in your plan, and citizens who can help educate, execute, and assist with your plan.

Other communities in your region or elsewhere in the state that have similar community characteristics may have solutions for questions that arise during your planning process. Work through the NYS Conference of Mayors, Association of Towns of the State of NY, New York Planning Federation, NYS Association of County Planning Directors, Tribal Council, Society of Municipal Arborists, etc. to share your strategies and questions. Working collaboratively with others that share your issues is an effective and practical approach.

Documents needed for Plan preparation:

- Current inventory or similar information of community owned trees (street, park, woodland, etc)
- Ordinances regarding community owned trees
- Maps of town/village streets and community owned areas
- Satellite images of town/village parks and representative streets showing tree cover. Images are available from “Google Earth,” the county Soil and Water Conservation District/NRCS office, or your county/municipal Planning Department

If you do not have a current community tree inventory, consider conducting one. There are different levels at which an inventory can be executed:

- 100%: Every tree is identified, measured and evaluated for condition. Great for every community, if you have the time and the funds.
- Ash Only: only ash trees are counted (should include size, condition, and proximity to buildings and human-use areas). Should be considered a must if you don’t have the time/funds for the 100% inventory.
- Representative Samples: a percentage of your streets/public areas are surveyed and that number is used as an estimate. This inventory will only be an estimate. Consider only as a first step or if you already have EAB and no inventory. Consider conducting a more thorough one as time and funds permit.

Also, think about what trees you are going to include in the inventory

- Public only
- Public and privately owned trees that can effect public areas
- Public and all privately owned trees



Categorize trees to help streamline management actions and priorities.

- Define trees by their general locations
 - Street
 - Park
 - Right of way
- Risk level of each tree
 - Risk is an evaluation of the condition and health of a tree combined with the tree's proximity to a target (building, parking lot, playground, etc.). See Glossary for definitions of risk levels.

Where to find help with inventories:

- Cornell Urban Horticulture Institute Community Forest resources:
<http://www.hort.cornell.edu/uhi/commfor/>
 - Information on developing a Community Forestry Inventory
 - Details on SWAT (Student Weekend Arborist Team) Inventories for smaller communities and neighborhoods
 - Listing of resources to help with in-house inventories:
<http://www.hort.cornell.edu/commfor/resources/inventories/index.html>
- Your local Department of Environmental Conservation Forester:
<http://www.dec.ny.gov/lands/4957.html> (call the Albany office and ask to speak to the urban forestry department and they can help you as well, 518-402-9425)
 - Funding may be available for street tree inventories through the NYS DEC Urban and Community Forestry Grants
 - In the past the DEC has been able to fund grants for municipalities to conduct inventories, but funding has not been available since 2008. Hopefully funding will be available for 2011. Check <http://www.dec.ny.gov/lands/5285.html> for more information.
- USDA Forest Service iTree Tools: <http://itreetools.org/>
- Arbor Day Foundation/Street Tree USA:
<http://www.arborday.org/programs/treeCityUSA/>
 - "How to Conduct a Street Tree Inventory," Bulletin #23
 - "How to Manage Community Natural Areas," Bulletin #27
- International Society of Arboriculture, Certified Arborists (consultants):
<http://www.treesaregood.org/>
 - New York State Arborists: <http://www.nysarborists.com>



Writing Your Plan

Sample plan elements are outlined below including suggested headings and questions for consideration in your plan. Sample wording for particular answers is provided in quotations.

Some items may not be appropriate, given the size of your community or the urgency of your plan. The following sections should guide, not dictate, the content of your plan.

Plan Sections:

SECTION	PURPOSE OF SECTION
Background Elements	Describes the circumstances in your community and the impact that EAB will have on public and private resources.
Management Plan	Outlines your management action decisions for specified ash trees or locations of ash trees.
Education Plan	Identifies key stakeholders and how they relate to EAB, what they know and need to know, and activities that will help them contribute to the solution.
Budget	Details how much your plan will cost to implement.
Contacts	Identifies who is responsible for oversight and implementation of this plan.
Sources of Information	Places where you or your community members can go for more information about emerald ash borer and its management.

Background Elements

Definition of Problem:

Briefly review and discuss:

- EAB History
- Biology
- Scope of NY problem
 - Information about the EAB can be found at:
 - <http://www.nyis.info/insects/EmeraldAshBorer.aspx>
 - <http://www.dec.ny.gov/animals/7253.html>
- Scope of local problem: % of urban and community trees that are ash, number of streets with >50% of trees as ash, park impact, etc.



- Economic considerations particular to your community (e.g., % of ash in your community relative to NYS, high number of ash product users such as ash basket makers in town, local sawmill operation or other wood product facilities, etc.)
- Percentage of ash in forested areas around your community can be found at the USDA Forest Service Forest Inventory and Analysis web site: <http://fia.fs.fed.us/tools-data/>

Purpose of Plan:

What outcomes does the community desire through their response to Emerald Ash Borer? Some goals and outcomes to consider:

- Minimize the economic and social impact, disruption, and costs EAB will have.
- Manage for an urban (community) forest and street trees with improved health, resiliency, maintenance efficiency, and beauty.
- Identify ash related liabilities prior to EAB arrival.
- Reduce public health hazard. Reinforce the urgency for infested/dead ash tree removal: Ash trees die relatively quickly and soon begin falling apart. In public and human-use areas, dead ash trees are high risk and high liability.
- Determine property ownership and who is responsible for which trees. (This can be a problem especially in private ownerships where boundary lines may be in dispute.) See “Tree Ownership and Liability” section under *Notes* below.
- Explore opportunities for inter-municipal cooperation (marshalling yards, chipping equipment, tree care crews, utilization of ash materials – e.g., chip marketing).
- Outline an educational strategy.

Scope of the Plan:

What trees will this plan address and for how long? What basic management techniques will be used? Create a mission statement for your plan.

Example “The Village of Treeton EAB Preparedness Plan addresses all ash trees located on public properties within the Village limits and all ash trees considered high risk adjacent to public land for a period of 10 years. The Treeton Parks Department has oversight of plan implementation and will use staff and contractors to conduct the work.”

Community Specific Information:

Describe your community in the terms of EAB and its impact

- How many public trees/ acres are in your community?
- How many of these are ash trees?
- What percentage of large ash trees is considered high risk? (see Inventory section)
- Areas where public ash trees can be found: generally or specifically if only a few-streets, parks, wooded or natural areas, etc.
 - See “Tree Ownership and Liability” section in *Notes* below
- Other potential impacts of EAB on your community



Plan Oversight, Implementation, and Communication:

Describe the key people or positions involved in this plan, and how information about the plan and its progress will be communicated. Keep in mind that many people have strong emotional attachments to trees. Be prepared to work with people who do not want to part with infested, or soon to be infested, trees.

- Who is responsible for creating this plan?
- How will the plan be reviewed and authorized?
- Who is responsible for implementing this plan?
- What is the communication method your community will use to relay decisions and updates with your citizens? (newspaper, radio, web, public meeting, etc.) Consider drafting a press release or article about the completion of your Preparedness Plan or management actions.
- Will there be a regular schedule of updates/informational releases and how will these releases be distributed?

Management Plan

This section refers to the resources to be managed, resources needed for management, and the steps needed to enact that management.

Management of Ash on Community/Public Property:

1) Inventory

Define in detail the resource to be managed.

- What is the ash resource in your community and where are those trees located?
- Identify criteria for determining priorities, then identify priority areas/high risk trees or locations
- Do you want to categorize trees for removal?
 - *High Risk* (see Glossary)
 - *Low Risk*
 - *No Risk*
 - *Size/DBH*
 - General location (street, park, etc.)
- Identify significant ash trees, those that may be protected or need a public meeting to discuss their fate. Ash trees might be considered significant if they have historic notoriety or they are located at a high-profile public building or facility.
- May want to include a statement similar to: "Community recognizes that some ash trees may have been missed in the inventory and some non-ash trees may have been inadvertently included."

2) Ash Tree Management

Management Decisions

How will you manage your existing ash trees to mitigate the effects of EAB? Outline your decisions and the criteria for your decisions in this section.



- Are you considering any pre-emptive removals: “Community will remove/replace X% of ash trees each year.”
- Will you use insecticides to prevent EAB infestation in specific trees?
- Will you use herbicides to prevent cut ash trees from sprouting?
- Will you notify adjacent property owners of ash management efforts?
 - If so, how will that notification take place?
- Will you manage all ash, or only those considered *high risk*?
- Will the community manage ash trees in wooded/natural areas? Or, will these be left alone?
- Do any current ordinances refer to the management of trees on publically held land or right-of-ways? Reference or include them in your plan.
- Read management options at: <http://www.emeraldashborer.info/>
- Read insecticide options at: [http://nyis.info/insects/EAB EducationalResources.aspx](http://nyis.info/insects/EAB_EducationalResources.aspx)

Management Implementation.

Who will do the work outlined above? What are their qualifications?

- Who will conduct the removals? Staff or contractors?
- If contractors will be used for removals, how will you screen for arborist certifications? The International Society of Arboriculture (ISA) has a Certified Arborist program. You can verify certification at: <http://www.treesaregood.org>.
- If staff will be used, do they have adequate training and equipment to safely complete the tasks? ISA also offers training programs and resources for people conducting tree work.
- If staff will be used to conduct management, consider a statement that permits the deferment of regular duties to work on EAB removals.
 - Please read the “Trees and Utilities” section in *Notes* below which outlines rules for tree maintenance around electrical conductors.
- If you are planning to use pesticides, who will conduct the application? Staff, contractors etc.? How will you confirm the applicators have appropriate NYS Pesticide Certifications?
- More information about pesticide certification can be found at the NYS DEC page: <http://www.dec.ny.gov/permits/209.html>.

3) Wood disposal/utilization

- How will the wood/canopy of removed ash trees be disposed of? Where? By whom?
- What are the current legal constraints on the movement and processing of ash? Information on laws and quarantines can be found at: <http://www.dec.ny.gov/animals/47761.html>
- Do you have a location where ash wood can be stored/disposed? Are there adjacent communities that have appropriate wood disposal locations. These include designated fields, landfills, cogeneration facilities, etc.



- Are there utilization opportunities in your area? Is there an opportunity to create some? Consider meeting with surrounding communities and working together to utilize the high volume of biomass/wood that will be available. (This could be addressed in a separate plan.
 - See the “Wood Utilization” section in *Notes* for more information.
- In some parts of the state there are companies that take municipal wood waste at no charge and turn it into mulch for sale. Check with landscaping firms in your area.

4) Tree Replacement

- How will you replace your urban forest?
- Replanting schedule (number of trees per year, general locations)
- Recommendations for replanting
 - No new ash plantings.
 - 10-20-30 rule: Your community’s planted forest should consist of no more than 10% of one species, 20% of one genus, 30% of one family (less is even better).
 - For information on Tree Selection for your area check out “Recommended Urban Trees: Site Assessment and Tree Selection for Stress Tolerance,” from the Urban Horticulture Institute, <http://www.hort.cornell.edu/uhi/outreach/>.
- Does your community have funds for replanting?
 - Potential Sources for tree planting funds.
 - NYS DEC Urban and Community Forestry Grants.
 - In the past the DEC has been able to fund grants for municipal street tree planting, but funding has not been available since 2008. Hopefully funding will be available for 2011. Check <http://www.dec.ny.gov/lands/5285.html> for more information.
 - Local Foundations.
 - Municipal Budgets.

Management of Ash Trees on Private Property:

Privately owned ash trees can affect public areas, so your community may wish to address the management of those trees in this plan. The management of private ash trees can be included in the section above, or in a separate section. Also, consider mentioning the impact of EAB on all privately owned ash trees. Some points to discuss or consider are below.

- Is there an inventory of private ash trees in your community? If so, include the details of that inventory here.
- List any local ordinances that relate to dead/high risk trees on private land.
- Will you be requiring the removal or treatment of private ash trees that affect public areas?
 - If so, who has to pay for it? Do you have the authority to enforce such a determination?



- Sample texts:
 - “The Community encourages home and land owners to monitor their own ash trees and seek information to educate themselves on EAB’s biology and management.”
 - “Management of infested private ash is at the discretion of the owner. The Community encourages the removal or treatment of *high risk* trees before they become infested. Ash trees die within 3-4 years of infestation, and quickly become brittle and are capable of causing damage as they rot and break apart. It is also more costly to remove dead trees than live trees.”
 - “When EAB is located within XX miles of town, The Community encourages the landowner to remove infested trees.”
 - “The cost of chemically controlling EAB or sprouts of removed trees is at the discretion of the tree owner/landowner. Success of insecticide is not guaranteed- be wary of claims to that effect.”
 - “Removals of yard and specimen trees should be carried out by ISA Certified Arborists who are insured and bonded.”

Considerations:

- If your community decides to not treat ash with insecticides, will homeowners be able to pay for the treatment of community owned street trees on their property with insecticides?
 - If so, are there limitations? (permits, fees, etc.)
 - Does a new ordinance need to be drafted?
 - If the attempt to treat is unsuccessful, who will pay for the removal?
 - Insecticides must be applied correctly, by a certified pesticide applicator or by the tree owner (all pesticides must be applied in accordance with the product label). Tree owners should know the details of necessary application frequency and effectiveness of the different insecticides.
 - More information about insecticides can be found at: http://nyis.info/insects/EAB_EducationalResources.aspx
 - More information about certified pesticide applicators can be found at: <http://www.dec.ny.gov/permits/209.html>.
- If your community cannot keep up with ash tree removal, during an active infestation, or, the tree has been listed as low/no priority, can homeowners pay for the tree’s removal if it is on community property?
 - If so, what are the limitations?
 - Do ordinances restricting damage to street trees need to be revised?
- Does your community have a list of arborists licensed to work in the municipality?
 - If so, reference to that list should be made.
 - Provisions to protect homeowners, such as creation of such a list, or requirements for arborists to work within your community could also be included.
- The New York State Arborists has information on steps involved in hiring arborists and other tree care providers at their web site: <http://www.nysarborists.com/>. Please help your homeowners hire professional, trained, and insured contractors.



Educational Plan

How will you educate your citizens about the EAB and the scope of the EAB problem? Education is essential to help slow the spread, to help citizens make informed decisions about Emerald Ash Borer, and to help citizens constructively contribute to the community.

Educational topics could include:

- Ash tree identification
- EAB biology and symptoms of ash infestation
- Potential safety, economic, and aesthetic impacts of EAB in the community
- Control methods
- Importance of ash trees and wood products
- Don't Move Firewood campaigns
- Importance of planning and preparation
- Recovery plan options

Work with your local office of Cornell Cooperative Extension, or other local agencies, on these potential outreach activities: print a series of articles, hold public meetings, develop a website that references pre-existing materials, host a community “walk and talk” in the town park, demonstrate safe tree removal and processing, demonstrate correct tree planting. See the *Suggested Resources* section for appropriate information web sites and agencies.

Budget

How much will it cost to implement your plan?

How will treatments, removals, disposal, and replanting be paid for?

To determine these costs:

- Obtain a cost estimate to remove a tree of average diameter and multiply by the number of publically managed ash trees. Removal costs will vary greatly by region and by the size, condition and location of the tree being removed.
- Include the cost of labor, tree disposal (chipping, loading, transportation, and tipping fees), pesticides, and other potential costs
- Incorporate forester, staff, arborist, and other personnel costs.
- Use the Purdue University EAB Cost Calculator to get rough cost estimates of different management scenarios. This tool should be used only as a guide, not to develop an actual budget.
<http://extension.entm.purdue.edu/treecomputer/index.php>
- Develop an overall budget and budgets for managing trees by priority category (location, risk category, etc.).
- Determine a timeline for conducting management activities and how much will be spent each year. EAB management may be costly to your community, but if your plan is enacted promptly, you can spread those costs out over a number of years.



- Consider working with neighboring municipalities to improve the overall cost of tree removal and material management (for example: log marshalling yards and chipping facilities).

Contacts

To help your community better understand the scope of the EAB problem and this plan, consider including a contact list. At a minimum, contacts for your community should be included.

Your contact list could include:

- Contacts responsible for the writing or implementation of this plan:
 - Education
 - Monitoring
 - Management/Implementation
 - Planning and Finance
 - Communications
- Local Partners/Agencies (where plan authors, government officials and employees, and the community can get more information or help)

Sources of Information

Places you can go for help while preparing and implementing your plan. Include some in your final document for readers to follow up with.

Emerald Ash Borer

- Cornell Cooperative Extension Emerald Ash Borer Website- New York State Invasive Species Clearinghouse: <http://www.nyis.info>
- NYS Department of Environmental Conservation EAB website: <http://www.dec.ny.gov/animals/7253.html>
 - EAB and Firewood hotline at 1-866-640-0652
- Management and Pesticide Options:
 - http://nyis.info/insects/EAB_EducationalResources.aspx
 - <http://www.emeraldashborer.info/>
- Don't Move Firewood Campaign: <http://www.dontmovefirewood.org/>
- Presentations and notes from the USDA Forest Service, Forest Health and Protection 2009 "Coping with the Costs, The Economic, Social and Environmental Impacts of Invasive Insects on Communities" conference can be found at <http://na.fs.fed.us/fhp/hottopics/copingwcosts.shtm>.



Urban Forestry - Planning, Inventory, and Management

- Urban Horticulture Institute: <http://www.hort.cornell.edu/uhi/>
- Urban and Community Forestry- NYS DEC: <http://www.dec.ny.gov/lands/4957.html>

Cooperative Extension and Universities

- Cornell Cooperative Extension: <http://www.cce.cornell.edu>
 - Click “Local Offices” at the top for your county
- Cornell University: <http://www.cornell.edu>
 - CU Department of Natural Resources: <http://www.dnr.cornell.edu/>
 - CU Rural Woodland and Forest Management: <http://www.ForestConnect.info>

State and Federal Agencies

- NYS Department of Environmental Conservation: <http://www.dec.ny.gov>
- NYS Agriculture and Markets: <http://www.agmkt.state.ny.us/>
- APHIS (Animal and Plant Health Inspection Service): <http://www.aphis.usda.gov/>
- Regional PRISMs (Partnership for Regional Invasive Species Management) groups of regional agencies and collaborators working on invasive species: go to <http://www.nyis.info> and select your local PRISM from the drop down list at the top of the page.
- USDA Forest Service, Northern Area Forest Health and Protection: <http://na.fs.fed.us/fhp/>



Notes:

New EAB Infestations- Identification and Confirmation

If you suspect a new (undocumented) EAB infestation, please bring your suspect insect, photos of infested trees, etc. to your local Cornell Cooperative Extension office. They have a standardized protocol to help in the confirmation process. There are a few look-alike insects, so it is important to have a proper identification.

Tips on field identification of the insect or affected trees can be found at: http://www.nyis.info/Insects/EAB_EducationalResources.aspx. Choose “EAB identification, monitoring and detection” in the box on the right.

Suspected insects will be officially identified by Rick Hoebeke, Entomologist at Cornell University. The proximity of EAB to your community may activate some components of your plan.

Tree Ownership and Liability

Who owns the trees you need to manage? The ownership of many trees is often in question. Communities may need to establish who owns certain trees through a licensed survey. Include any ordinances referencing tree ownerships in right-of-ways, tree lawns, public grounds, etc. in your plan.

Trees whose ownership is sometimes in question:

- Street trees
- Boundary line (both publically and privately owned trees)
- Right-of-way vegetation

There are several strategies to help property owners follow recommended practices. Education often has a favorable cost:efficiency ratio and builds capacity in the community for communication among different groups. Incentives at the beginning of an initiative, such as a new street tree ordinance, can help initiate momentum for a practice and demonstrate the appropriateness of the practice. Ordinances establish an enforceable law and require community education on the details of the ordinance and enforcement through municipal staff. Information on street tree ordinances is available at <http://www.dec.ny.gov/lands/5276.html>.

Ownership is sometimes different than liability. Responsibility of liability may need to be defined for some trees, as well as specific management actions (e.g., planting versus removal of trees). New ordinances dictating who is liable for particular groups of trees (e.g., street trees, boundary line trees, etc.) may need to be developed. Make note of any tree ownership issues in your plan.

Your highway superintendent may have all the details about your right of ways and easements.



Monitoring for new Emerald Ash Borer Infestations

Should you monitor for EAB in your community? The USDA APHIS has placed survey tools in ash trees across the state in coordination with NYSDEC. These survey tools are not the only way to look for EAB, consider mobilizing volunteers or community members to be on the lookout. Information on detection and reporting can be found at:

<http://beetledetectives.com/>. Certain areas should be considered higher risk for new EAB establishment due to the high probability of transported infested firewood or logs, these areas could be targeted for monitoring. They include campgrounds, parks, truck stops, recreational centers, log yards, sawmills, and popular vacation routes. At a minimum, be sure to alert the staff and neighbors of such facilities.

Trees and Utilities

Anyone, staff or contractors, conducting tree maintenance or removals within 10 feet of an overhead conductor (e.g. electric, cable, or telephone wires) must be “electrically qualified” as per existing OSHA regulations. If they are not, the utility must be notified at least 5 days in advance of the tree work so they can make the situation safe for the work to proceed. The utility may charge for this service. This procedure is detailed in current NYS Department of Labor Regulations “High-Voltage Proximity Act,” Code Rule 57; effective 9/30/1992. <http://www.labor.ny.gov/>

It is highly recommended that you discuss your removal and treatment options with your local utilities before they are conducted. If possible, have a utility representative on your task force.

There are many tree care companies throughout New York with “electrically qualified” employees. Confirm this qualification when awarding the contract.

Wood Utilization

EAB presents an opportunity to establish or take advantage of wood utilization facilities near you. Resources for more information include:

- NYS Department of Environmental Conservation Forest Product Utilization and Marketing site: <http://www.dec.ny.gov/lands/4963.html> which includes directories of forest product users.
- Case Studies by Dovetail, Inc. of Minneapolis/St. Paul Urban Wood Utilization Program: <http://www.dovetailinc.org/files/UrbanWoodClustersFinalReport.pdf>
- The Minnesota Department of Natural Resources conducted listening sessions about the impending ash wood surplus. A report can be found here: <http://www.dnr.state.mn.us/forestry/um/index.html>

On-line versions of this document can be found on the Emerald Ash Borer Information and Resources page at the New York Invasive Species Information Website http://www.nyis.info/Insects/EAB_EducationalResources.aspx.



The EAB Community Preparedness Workbook through the Cornell Cooperative Extension Emerald Ash Borer Extension Program: Impact Reduction through Education, Community Preparation, Early Detection, and Rapid Response, funded through USDA APHIS.

Authored by:

Rebecca Hargrave, Cornell Cooperative Extension, Chenango County, Norwich, NY

Mark Whitmore and Peter Smallidge, Cornell Cooperative Extension, Dept of Natural Resources, Cornell Univ., Ithaca, NY

Thank you to all the reviewers.



NYS EAB Preparedness Plan Workbook

Glossary

Term	Definition	Example
Arborist	Individual with training and experience in tree care maintenance (e.g. pruning, removal or planting)	
CCE	Cornell Cooperative Extension is a key outreach system of Cornell University with a strong public mission and an extensive local presence that is responsive to needs in New York communities. Includes educators and specialists based at Cornell and in your county. http://www.cce.cornell.edu	
Certified Arborist	Official certification from the International Society of Arboriculture designating experience and knowledge of arboriculture. http://www.isa-arbor.com	
DBH	Diameter at Breast Height (4.5' from the ground) Industry Standard height at which tree diameters are taken	
Family	A taxonomic rank of a group of genera (plural genus) with similar characteristics.	Bold type refers to the family. Green Ash, Oleaceae <i>Fraxinus pennsylvanica</i>
Forester	Trained professional responsible for the management of forestland.	
Genus	A taxonomic rank of a group of species with shared characteristics.	Bold type refers to the genus. Green Ash , Oleaceae Fraxinus <i>pennsylvanica</i>
High Risk	Trees posing great risk to life or property due to condition or proximity to targets	Dying ash tree at a busy street intersection
ISA	International Society of Arboriculture: Professional Association for arborists and municipal foresters. http://www.isa-arbor.org	
Low Risk	Trees posing some risk to life or property due to condition or proximity to targets	Healthy ash tree in a park field
No Risk	Tree posing very little risk to life or property due to condition* or proximity to target	Ash tree in the middle of a seldom used woodlot
NRCS	Natural Resources Conservation Service- is the Federal agency that works in partnership with the American people to conserve and sustain natural resources on private lands. http://www.nrcs.usda.gov/	



NYS DEC	New York State Department of Environmental Conservation: Department of the state that manages state forest land and provides assistance on private woodlot and community forest management. http://www.dec.ny.gov/lands/309.html	
Pesticide	Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.	insecticide- insects; herbicide- plant
Pesticide Certification	Official NYS certification that permits the holder to purchase and apply restricted use pesticides or apply pesticides on property not owned or operated by him. http://psep.cce.cornell.edu/	
Species	Basic taxonomic division identifying a group of organisms with similar characteristics capable of interbreed and producing fertile offspring. Follows <i>genus</i> .	Bold type refers to the species. Green Ash , Oleaceae <i>Fraxinus pennsylvanica</i>
SWAT	Student Weekend Arborist Team: a Program of Cornell's Urban Horticulture Institute that may be available to help small communities with their inventory needs. http://www.hort.cornell.edu/uhi/commfor/index.htm	
Tree Condition	Professional evaluation of the health and structure of a tree. Professionals include Certified Arborists and others who have had specific training. USDA Forest Service Publication "How To Recognize Hazardous Defects in Trees" http://www.na.fs.fed.us/pubs/howto.shtm	
Urban Forester	Trained professional responsible for the management of urban and community forests (street, park and other community areas).	

