

Landowner Trap Tree Protocol

It is important to follow the protocol as outlined to validate your efforts.

Trap Tree Selection:

- Select ash trees for use as trap trees in this order:
 - Green Ash (Most preferred)
 - Black Ash
 - White Ash
- Whenever possible, try to select trees that are open grown and are fully exposed to the sun.
 - Open-grown trees (e.g. along a roadside or in a field) (most preferred)
 - Hedgerow trees (e.g. at least 2-3 sides mostly open)
 - Edge trees (e.g. trees along the edge of a woodlot, crown exposed on 1-2 sides)
 - Closed canopy trees (least preferred)
- Choose trees that are at least 4 inches in DBH (diameter at 4.5 feet above ground).
Avoid trees larger than 10-12 inches DBH. Avoid trees that are overtopped by larger trees. Avoid trees that could cause damage or injury if they break.

Trap Tree Girdling:

1. Use a pruning saw to make 2 parallel cuts, about 8 - 10 inches apart. Each cut should completely encircle the trunk. Cut through the phloem and down to the wood on each cut. Young, vigorous ash trees will sometimes begin to callus over the girdle during the summer. This reduces the level of stress and makes the tree less attractive to EAB. To reduce the chance of this, try to remove all phloem tissue.
2. Be careful not to cut into the sapwood. If you cut into the sapwood, you will disrupt xylem cells that transport water. This can cause the trap tree to die and be ineffective as a trap. We want the tree to stay alive during the summer.
3. Use a drawknife to remove the bark and phloem in the space between the two cuts. Try to get all the way to the sapwood.

4. Girdle in the spring, completed by June 1st. Trees should be cut and peeled in the fall (October-November).

Protocol for Tree Removal and Sampling

1. At the end of the growing season (fall) before cutting the tree(s) measure the DBH above the girdle.
2. Cut the tree into as many 3 foot sections (as possible) as there are inches DBH (e.g. 10 inch DBH = 10 sections to be debarked). Each 3 foot section will be a sample.
 - Samples should be collected from the upper half of the tree -- especially from the base of the canopy, near branch crotches, main limbs. Not smaller than 3 inches in diameter and all about 3 foot long (longer is better than shorter for peeling).
 - Start cutting the 3-foot sections from the upper half of the tree at 3" DBH and work down. Large sections from the lower trunk are not as likely to have EAB larvae.
 - Saw off any branch nubs, etc. to make the peeling easier.
 - Labeling is important. Keep track of which sections come from which trees.
3. Peel all sample sections carefully through the phloem down to the wood.

Sampling considerations:

- Galleries may be small – 2-yr development of larvae is common in healthy ash trees that have low densities of EAB.
- Be patient – peel the phloem in thin sections to avoid missing small larvae. Peel all the way to the sapwood.
- Need to recognize different life stages of EAB.
- Don't miss the prepupae – these occur in thick bark and the sapwood so peel carefully and recognize when to excavate deeper.
- Debark suspicious areas of the tree – dying branches, bark cracks, epicormic shoots could be associated with an EAB infestation; also pay extra attention to where the bark is rough, furrowed or rippled.

- Other insects get into ash phloem too – be able to distinguish between EAB and native borers. Refer to the Emerald Ash Borer Field Guide.

Safety Precautions to Consider:

- Be aware of your surroundings – body position, neighbors, etc.
- Chain saw chaps, bibs, gloves, safety glasses, first aid kit.
- Do not get sloppy, frustrated, rushed or out of control.
- Keep knives in good condition and sharp.
- Try the drawknife both with the bevel edge up and down.
- Do not reach in to help another person using a drawknife.

For more detailed information use the guidelines outlined in the Michigan State publication:
Using Girdled Trap Trees Effectively for Emerald Ash Borer Detection, Delimitation & Survey.

Emerald Ash Borer Trap Tree Form

State: _____

County: _____

Site Name: _____

Organization: _____ (who did the survey?)

Observer: _____ (Name of primary observer) Email: _____

Ownership: **P**-Private; **M**-Municipal; **F**-Federal; **S**-State; **O**-Other (where the survey was done)

Land Use: **F**-Forest; **FW**- Firewood Dealer; **RE**-Recreation; **S**-Street Tree; **L**-Landfill; **R**-Residence; **W**-Woodlot; **O**-Other; **S**-Swamp; **YT**-Yard Tree; **N**-Nursery

Latitude (decimal degrees dd.ddddd – NAD83)	Longitude (decimal degrees dd.ddddd – NAD83)	Trap #	DBH (inches-tenths)	Date of Girdling	Date of Cutting	Date of Peeling	EAB Presence/ Absence
							Y N
							Y N
							Y N
							Y N
							Y N
							Y N
							Y N
							Y N
							Y N
							Y N

Comments: