

USDA APHIS PPQ EAB Trapping Protocols 2013 Emerald Ash Borer Survey

A. Trap Assembly (should be completed in the field)

1. Items needed:

- a. Traps (pre-glued)
- b. Cable ties - 7 inches long (3 per trap; 2 to hold the trap together, 1 to attach the lures)
- c. Parchment or wax paper
- d. Utility knife
- e. Spreader
- f. Lure

2. Two traps will be delivered together with the glued faces touching. You should peel these apart. If you are only going to use one of the traps at a site, cover the exposed, sticky face of the other trap with the parchment (or wax) paper to protect it and yourself.

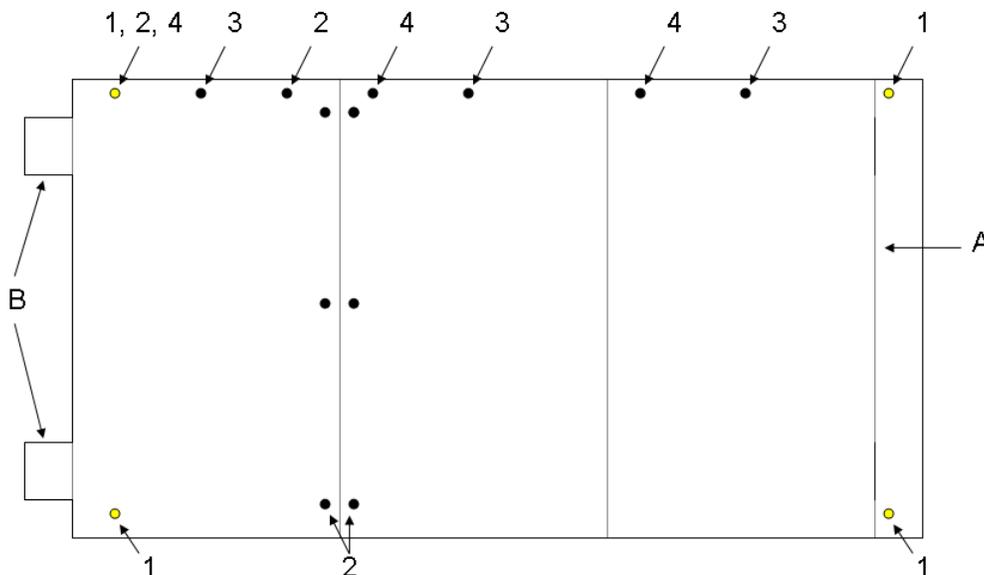
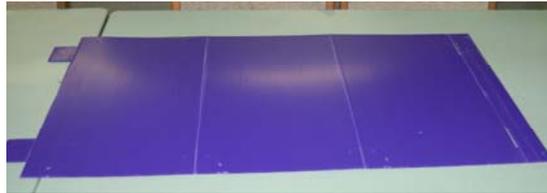
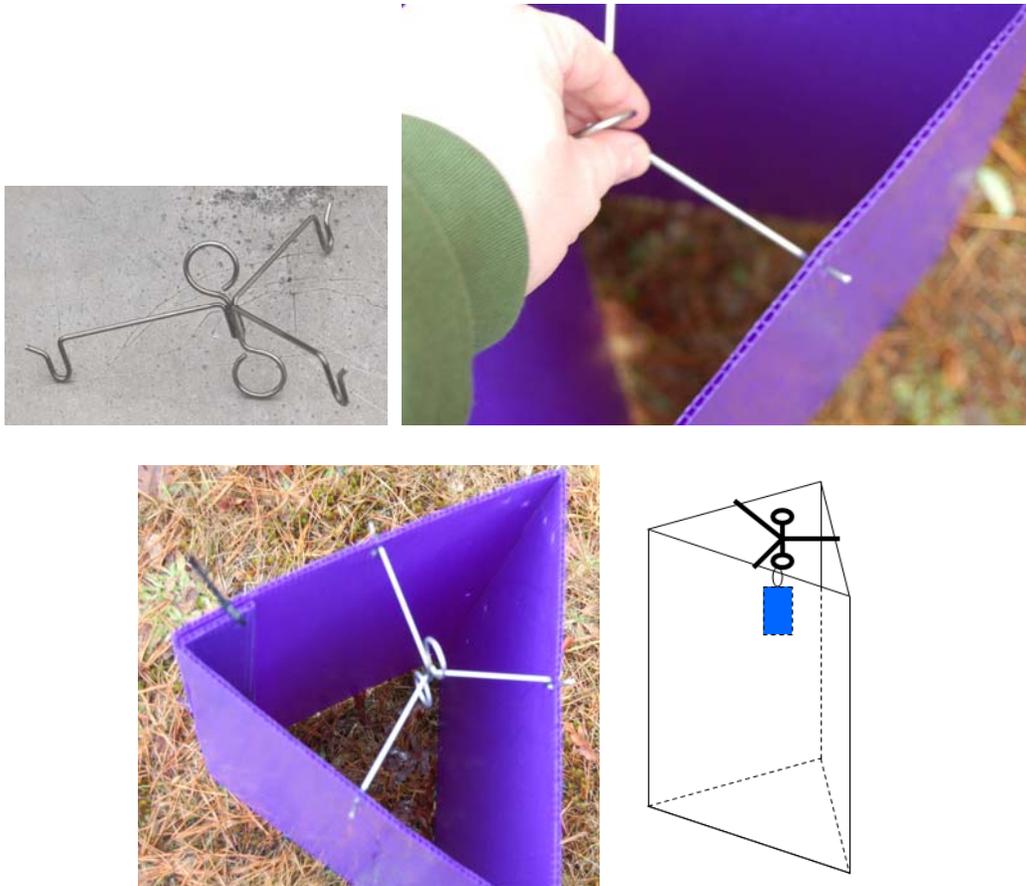


Figure 1. Diagram of prism trap

3. The line (A) on the side containing the two slots should be scored with a utility knife (or similar item), taking care not to cut completely through the line. This can be accomplished by exposing a small portion of the blade, and gently cutting down the length on one side of the trap. The two tabs (B) should be placed inside the slots (see picture below). Cable ties can be inserted into the holes marked (1) on Figure 1, and as shown below to secure the two sides together.



4. The spreader can be attached to the holes in the trap labeled (3) as shown below. The lures can be attached to the spreader on a loop located on the underside of the spreader.



B. High Trap Placement (lower canopy) – Pole Method

1. Items needed:
 - a. Assembled trap with attached spreader (as shown in Section A)
 - b. Hanger
 - c. Telescoping Pole (to 24 feet) with hanger attachment
2. Attach the hanger to the spreader at the loop in the top of the spreader



3. Using the pole and attachment, the trap can be hoisted into the lower canopy, and the trap hanger placed over a (preferably large, stable) branch as close to the edge of the limb and in as sunny a location as possible. A tree with a diameter at breast height of at least eight inches is preferable when available.



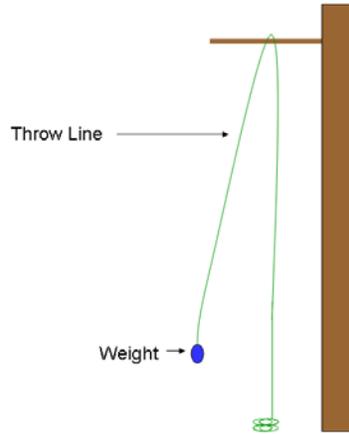
4. The trap can be taken down and serviced by slipping the attachment on the pole through the loop at the top of the hanger, and lifting it off of the tree, and then down to the ground.



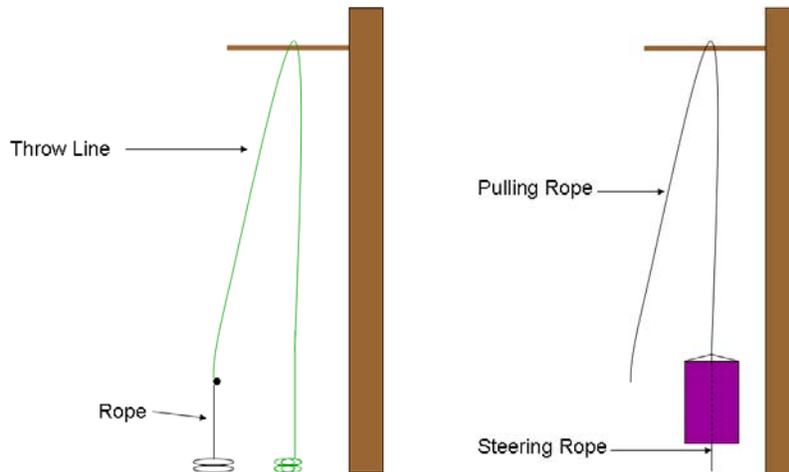
5. In high wind areas, we suggest tying a rope to the bottom loop in the spreader (through the inside of the trap). This rope can be tied to the tree, to help secure the trap.

C. High Trap Placement (lower canopy) – Rope Method

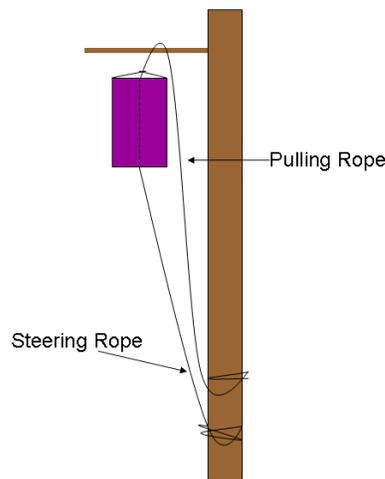
1. Items needed:
 - a. Assembled trap with spreader (as shown in Section A)
 - b. Throw weight (14 or 16 oz)
 - c. Throw line
 - d. Rope – 3/16” braided nylon (~ 100 ft per trap)
2. Toss the weight attached to the throw line over a branch in the lower canopy. Allow or coax the weight to fall to the ground.



3. Untie the throw line from the weight, and tie one end of the rope to that end of the throw line. Pull the throw line and rope back over the branch. When the rope is over the branch and reachable, untie it from the throw line and tie it to the top loop on the trap. Tie a second section of rope to the bottom loop on the spreader (where the lure is attached). This second section will now be the “steering rope” while the original section will be the pulling rope.



4. Pull the trap up to the branch using the “pulling rope”, while keeping it from coming in contact with anything on its ascent with the “steering rope”. The steering rope can later be used to help pull and guide the trap down when servicing it. Wrap the excess rope from both sections around the tree (preferably apart from each other to avoid entangling).



D. Low Trap Placement (On Tree)

1. Items Needed:

- a. Assembled trap with attached spreader (as shown in Section A)
- b. Cable ties – 4 feet long (2 per trap)
- c. Specialized tree trunk hanger (provided; pictured below)

2. Attach the tree trunk hanger to the tree by running two 4-foot long cable ties around the tree trunk hanger and the tree. Again, if possible select an ash tree of eight inches or greater in diameter at breast height.



3. Attach the trap to the hanger by running placing the top loop of the spreader over the loop at the hanger.

E. Removing EAB from Traps in the Field; Preparing Insects for Identification in the Lab

1. Items needed:

a. Forceps

i. Bioquip #4750 – rounded end featherweight (Forestry Suppliers sells these same forceps, but at a higher price) – pictured below

b. Small plastic sealable bag

i. “snack size” bag -- available from any grocery store (6 ½ in x 3 ¼ in)

ii. GSA plastic bag # 8105-00-837-7753 (4 in x 4 in – pictured below)

c. Data label -- provided at the end of this document; should be printed on an Avery #5163 (2 in. x 4 in.) shipping label

d. Data sheet

e. Permanent magic marker or pencil

e. Hand Cleaner – Mechanic’s hand cream cleaner, such as Gojo, baby oil, mineral oil (paper towels will also be necessary)

f. Examination gloves (vinyl, nitrile, or latex)

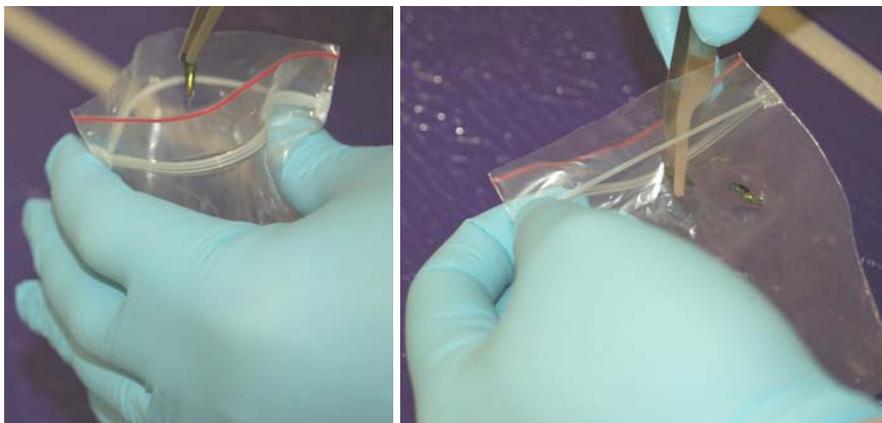
g. Small plastic tarp (trap placed on tarp during inspection to avoid soiling of trap)



2. Using the forceps, gently remove any suspect insects from the trap while taking care not to damage the specimens.



3. Place the specimens in the plastic bag, using a separate bag for each trap each time they are checked.



4. Complete the data label and stick it directly to the plastic bag. Insects from the same sample can be placed in the same bag, but insects from different samples should be stored in separate bags.

Trap Disposition: While the polypropylene material of the traps is recyclable, the glue that is adhered to the panels renders the traps undesirable to most recyclers. Alternatively, one may seek a user of waste fuel material for trap disposition. Hangers and spreaders are reusable and should be retained for future use. Hangers and spreaders that cannot be reused should be recycled.

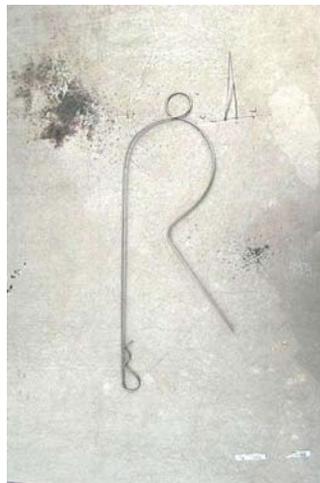
MATERIALS



Prism Trap (unassembled)



Spreader



Trap Hanger



Tree Trunk Hanger



Telescoping Pole



Pole Attachment



Throw Line and Weight



Forceps



Plastic Sample Bag

NATIONAL EAB SURVEY Date _____
State _____ Trap No. _____ Collector Initials _____
GPS Coordinates _____ N _____ W
Trap Cleaned Y / N Lure Replaced Y / N
No. Insects Collected From Trap _____

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