Emerald Ash Borer Trapping Procedures 2013

Texas A&M Forest Service

Goal: To survey ash habitats in selected counties in Texas to detect the presence of the emerald ash borer, EAB (*Agrilus planipennis*), following procedures proposed by the Animal and Plant Health Inspection Service (APHIS).

Trap: The standard 3-panel purple EAB survey trap will be used exclusively.

Lure: The commercial EAB lure, containing fragrant oils attractive to EAB, will be attached to the interior of the trap. Each lure will be replaced once in late May or June.

Location of trap: If feasible, install one trap at each location preselected by APHIS as indicated by a red dot and GPS coordinates on the EAB county map. Each red dot is the center of a circular 250-acre (1/2 square mile) sampling area. The trap is to be hung from the lower branch of an ash tree (*Fraxinus* spp.) or within 50 feet of an ash tree. See photo guide on how to identify ash from other tree species that may resemble ash.

Exceptions to preselected trap location: If there is no ash available following a reasonable search within the preselected trapping cell, list the trap location as "VOID." If there is no easy access to the preselected trapping cell, the landowner refuses permission to install the trap, or the trapping cell is more than 100 yards from a road, list the trap location as "OMIT." Record the trap number and provide a reason for each trap designated as "OMIT."

Relocating traps: Each trap that is classified as a VOID or OMIT should be relocated to another location within the same county. Preference should be given to locations considered high risk for EAB infestation (state or federal campgrounds, parks, hardwood-processing yards, rest stops, etc. with ash trees.)

Assembling EAB trap: Carefully separate one trap. Fold the second trap with sticky side in and cover exposed sticky surface with wax paper to facilitate transport to next trap location. Assemble trap by folding into a triangle, with sticky side out. Place 4-inch flap on inside of trap. Insert tabs into holes such that end of tabs are on inside of trap. Punch two holes about one–foot apart on side of trap where it is joined, using an ice pick or small screwdriver. Secure sides of trap with 4- or8-inch black cable ties inserted through the punched holes and trim off excess from each cable tie. Add wire separator to top of trap and secure each junction (where separator meets trap) with a cable tie. Attach lure to

center of wire hanger such that lure hangs inside the trap. Place a "Do not disturb" label and a TFS contact card on one panel at the base of the trap and cover with shipping tape.

If wire hanger is used: Attach wire hanger to wire separator and secure end loop with duct tape.

Installing trap with wire hanger: Each trap should be placed 6-12 feet above the ground, out of reach of children, on or near an ash tree (*Fraxinus* spp.). If a wire hanger is used , install the trap with an extension pole or step ladder. Loop the end of hanger around itself to avoid having the trap blow down. A piece of string should be used to extend from the base of the trap to the tree, to avoid the trap blowing excessively in the wind.

Installing trap with string: If string is used instead of a wire hanger, attach string to center loop of wire separator. Use heavy string or catfish line. Throw the string over a lower branch of ash tree using a weight or stick tied to the end of the string. Attach two lengths of string to cable ties inserted at corners of one panel at the base of the trap. Raise the trap into the tree and tie the lose end of the hanging string to the trunk or lower branch of the tree, leaving sufficient string to lower the trap for collection of insects. Tie off the two basal strings to the tree to secure the trap from twisting or moving excessively in the wind.

Recording trap location: Record the GPS coordinates (latitude: longitude in degree decimals (**N31.79048 W-096.05906**)) while standing directly beneath the trap, or . Also record 1) county, 2) trap number, 3) tree species as either ash or not ash, 4) diameter of tree containing the trap, 5) digital photo image numbers (see next step), and 6) make and model of GPS unit used to determine coordinates. Describe physical location of trap with reference to access (i.e., 400 feet west of campground entrance on north side of road.)

Digital photos: Take a low resolution (1000 x 700 pxl or lower) digital photo of the landscape where trap was placed, showing the trap in the photo. Also take a close-up photo of the ash tree at the site, including foliage if possible. Record the photo numbers from your camera on the data sheet. Relabel image numbers with county and trap number when back in office.

Trap and tree labels: Each trap should have one label stating "Do Not Disturb" on one panel and another label with Texas Forest Service and a local contact phone number (in case the trap falls down). TFS staff members can use a copy of their business card. Place the

labels on the lower 1/3 of one panel and cover with shipping tape. In public areas, another "Do Not Disturb" label can be stapled to the trunk of the tree containing the trap.

Trapping Schedule: Traps should be installed in the field following leaf out of ash in March, monitored once in late May or June, then removed from the field in August. Lures should be replaced during the first revisit (late May or June).

Collection of insects: The trap should be revisited in late May or June and again in August. Lower the trap to the ground and carefully inspect all 3 panels of the trap. Remove any beetle resembling EAB (about ½-inch long, elongated body) and place in glass vial with 70% isopropyl (rubbing) alcohol. If the insect is too wide to fit in the 4- or 6-dram vial, it is not an EAB and doesn't need to be collected. Include all beetles or other insects that look like they could be EAB, based on size and shape. (Emerald color may be masked by sticky paste). Label the vial with date, county, trap number, and collector name, using a permanent ink pen. Stick label on outside of vial and cover with scotch tape, enough to encircle the vial. Place all insect vials in a packing box and mail to Mike Murphrey, Texas A&M Forest Service, P.O. Box 310, Lufkin, TX 75901 or drop off at his TFS office at 2127 S. First Street, Lufkin, TX.

Replacing lures: Remove the lure and replace with a fresh lure at the June visit. If feasible, keep lures in a refrigerator or freezer until placed in the field.

Trapping supplies: The following trapping supplies are recommended:

Purple EAB traps
Trap spreaders
Trap hangers (optional)
Heavy nylon string or catfish line
Ice pick or narrow screw driver for punching holes in trap
Cable ties (8-inch, black preferred)
Pocket knife or pliers to cut cable ties (optional)
Extension pole with modified paint roller hook, if wire hanger is used (optional)
6-10 foot step ladder (optional)
Do Not Destroy labels
Texas Forest Service labels or business card
GPS unit
Digital camera, batteries, memory card
Paper towels
Baby oil or other hand cleaner (for cleaning hands of sticky goo)
Roll of wax paper (to cover sticky trap surface of single trap during transport)

Latex gloves (optional)
2-inch clear shipping tape and dispenser
EAB lures
Duct tape (optional)
Clip board with data sheet
Stapler and staples for tree signs (optional)

Insect collecting/trap maintenance supplies:
4- or 6-dram screw-cap glass vials
Isopropyl alcohol
Grout trowel (optional)
New EAB lures
Forceps (optional)
Scotch tape and dispenser
Indelible ink pen and labels for vials

After late May/June collection of insects: If needed, scrape debris off trap with grout trowel. Recoat trap panels with adhesive, if needed. Replace old lure with fresh one. Re-install trap in tree.

Replacement of traps: Replace severely-damaged or missing traps with new ones. Record date and reason for replacement. If no spare trap is available, record date trap was noted as lost.

After last insect collection in August: Remove trap, string, and labels from field. Dispose of trap in dumpster or by other means after recovering trap spreader and wire hanger. Celebrate end of the EAB trapping season as warranted.

For questions or more information: Contact Ron Billings, Texas A&M Forest Service in College Station (rbillings@tfs.tamu.edu) or by phone at 979-458-6650.

In East Texas, contact Mike Murphrey, Texas A&M Forest Service (mmurphrey@tfs.tamu.edu) or by phone at 936-639-8170.

In Central or West Texas, contact James Houser, Texas A&M Forest Service in Austin (jhouser@tfs.tamu.edu) or by phone at 512-339-4589.