## Emerald Ash Borer in Texas – NOT a "Nightmare on Ash Street"

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Some readers may remember information that was sent out early last year (2012) through texasinvasives.org concerning a project to survey for this exotic invasive beetle known as the emerald ash borer (EAB), *Agrilus planipennis* (see Figure 1). The trapping effort is now completed and, fortunately, not a single emerald ash borer was collected anywhere in Texas.

The emerald ash borer has been found killing native ash trees (*Fraxinus* spp.) in at least 18 states, including Connecticut, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, Tennessee, Virginia, Wisconsin, and West Virginia, as well as Canada. Because this beetle is readily spread by man's activities, like moving infested firewood to uninfested areas, an extensive survey was initiated in 2012 to check for the presence of EAB in Texas.

With funding from the Animal and Plant Health Inspection Service (APHIS), the Texas A&M Forest Service (TFS) and collaborators conducted a detection survey for emerald ash borer (EAB). The TFS contribution to the 2012 EAB survey involved placing and monitoring 552 standard EAB detection traps in 56 counties in Texas, utilizing TFS field staff and Master Naturalist groups located in East, Central and South Texas. The EAB detection survey in other Texas counties targeted by APHIS was conducted by staff of the Texas A&M AgriLife Extension Service (218 traps) and Sam Houston State University (549 traps). A total of 1,319 purple panel traps (see Figure 2) baited with EAB lures were deployed in selected counties. See Figure 3 for a map showing counties surveyed by TFS and cooperators. The process of locating ash trees, installing traps, checking the traps twice, collecting possible emerald ash borers, removing the traps from the field, and reporting the data was a huge job. Without the help of Master Naturalist groups, Texas A&M AgriLife Extension Service, Sam Houston State University, and Stephen F. Austin State University, this project would not have been possible.

In January 2012, news releases were prepared and distributed for publication in forestry newsletters, web pages maintained by TFS, the International Society of Arboriculture Texas Chapter, and the Lady Bird Johnson Wildflower Center with the purpose of notifying the public about the upcoming detection survey. During February, TFS entomologists conducted training on EAB trapping procedures for TFS foresters, resource specialists, and Master Naturalist groups at various locations in East, Central, and South Texas.

During March and April, field crews successfully set out all assigned traps and recorded pertinent information such as county, date trap was placed in the field, latitude and longitude of the trap, height of trap above ground, size of the ash tree where the trap was placed, and other information on field data sheets. Copies of these data sheets were sent to TFS, Texas A&M AgriLife Extension Service and Sam Houston State University for eventual entry into a national EAB database called the "Integrated Plant Health Information System" (IPHIS) maintained by APHIS.

In June, field crews and volunteers inspected all traps and collected every insect that resembled EAB in size and/or color (EAB look-alikes), which were preserved in alcohol and sent to experts for initial screening. Field data sheets were updated with this information and were submitted for entry into the IPHIS EAB database. In addition, fresh lures were placed on all traps. No emerald ash borers were found in this initial screening.

During August and September, field crews began the final inspection of traps in the field and collected insects that could be EAB. This activity was completed by mid-September. Traps were removed from the field following this final check. Collected insect specimens were screened for the possibility of EAB and data from this final check was entered into the IPHIS database. Again, no EAB were found in any of the traps, suggesting that this invasive pest has yet to make it to Texas.

An emerald ash borer survey is planned for 2013, but at a much reduced scale, primarily due to insufficient federal funds. This year there are funds currently available to cover only 147 traps. Additional funds may become available later in the year (March or April) if Congress appropriates more monies for EAB trapping. To begin the 2013 emerald ash borer trapping, Texas A&M AgriLife Extension Service will deploy 93 traps in high risk counties around Dallas (Collin, Dallas, Denton, Grayson, Hopkins, and Tarrant counties). TFS and Master Naturalist volunteers will deploy the remaining 54 traps in selected counties in Central and East Texas with an emphasis on placing traps along major thoroughfares or within state/federal campgrounds, as follows:

<u>Central Texas Counties</u>: Bastrop (2 traps), Bexar (12), Caldwell (2), Kaufman (6), Travis (3); total = 25 traps.

<u>East Texas Counties</u>: Bowie (6 traps), Cass (5), Harrison (5), Marion (3), Smith (3), Van Zandt (3), and Walker (4); total = 29 traps.

EAB traps in Kaufman, Bastrop, Caldwell, Harrison, and Marion counties will be handled by volunteers (Texas Master Naturalists).

Hopefully, the traps will confirm that Texas remains free of the destructive emerald ash borer.



Figure 1. Adult emerald ash borers; these metallic green beetles are about 1/2 –inch long.



Figure 2. One of the 1,319 purple panel traps being installed in an ash tree to survey for emerald ash borer.

## **Texas Total Number of EAB Traps by County**

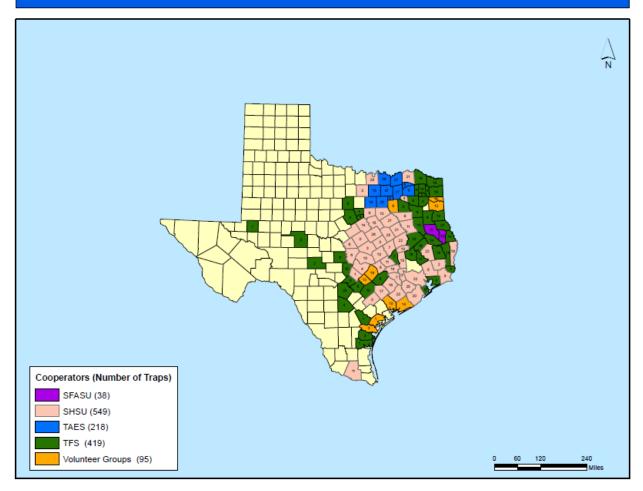


Figure 3. Distribution of emerald ash borer survey traps in Texas, 2012. Note: The Texas A&M Forest Service was responsible for SFASU (38), TFS (419) and Volunteer Groups (95) traps for a total of 552 traps.