

Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



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Sorghum – Chinch Bugs and Sorghum Headworm

Chinch bugs are still very common throughout the central parts of the state, and still producing nymphs. The double cropped sorghum is really struggling because of the heat and drought and the feeding of these little plant-sucking bugs is compounding this stress. Seems like maybe the really intense heat wave has broken somewhat, but the dry conditions continue and thus this chinch bug feeding will continue to weaken these plants.



Also, the plants that are heading (and there are some really strange heading patterns in some of these fields relative to where the moisture is) are starting to be infested by corn earworm (sorghum headworm) larvae. The larvae we saw this week are very small which means they have not yet caused any yield loss so, this is the time to check all headed sorghum and treat if you decide that is justified. The larvae are relatively susceptible to insecticides as they are right up there on the head where they are usually fairly exposed to the insecticide. Sorghum is susceptible to headworm attack until about the soft dough stage. For more info please refer to the KSU Sorghum Insect Management Guide, 2012: <http://www.ksre.ksu.edu/library/ENTML2/Mf742.pdf>

Jeff Whitworth

Holly Davis

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COMMENTS REGARDING EMERALD ASH BORER

The recent confirmation of the presence of emerald ash borer in Platte Co., MO, and subsequent release of information regarding that instance prompts this inclusion in this issue of the Kansas Insect Newsletter. Although not a member of any official group or panel, I am offering several comments.

Troubling are doom-and-gloom and/or misleading words and statements which evoke fear: “Tree-killing...”; “... slow-moving death sentence...”; “If there is just one borer, that tree will die”; “It’s fatal 100 percent of the time”. These types of statements overshadow accompanying informative and positive statements: “Officials have been watching for its arrival...”; “.....it’s likely that the borer has been in the area for some time.”; “.... “...too soon to speculate on how fast an infestation could spread”; “..... urge those who own ash trees not to be alarmed.; recommendation to concentrate efforts on maintaining tree health as a means of reducing the attractiveness of trees to EAB and also helping trees to fend off the effects of borer larvae.

Although EAB were first detected (in Missouri) at the Wappapello Lake campgrounds in 2008, it is improbable that the current EAB confirmation in Platte County (Figure 1, red arrow) resulted from the movement/spread from that distant initial point of detection. Rather, the current detection likely provides additional credence to the long distance spread of EAB through the transportation of firewood --- the presence of parks/campsites near Weatherby Lake as the origination point for EAB in Platte County.

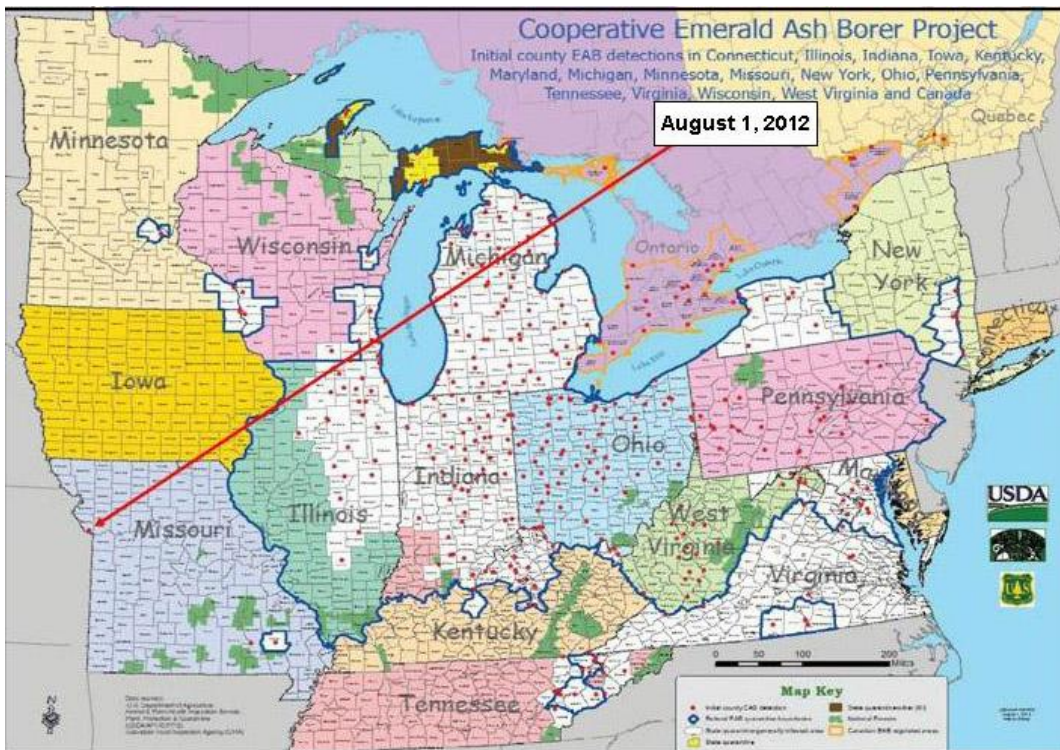


Figure 1

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At this time, take heed in a statement by an informed individual who has an ash tree on his property, “**I’m not going to panic**”. Rather, people need to be aware of the aforementioned confirmed/established EAB population close to the Kansas border. If at all concerned about the EAB, become a knowledgeable. To access the premiere website, “Google” Emerald Ash Borer. Select the first site listed: Emerald Ash Borer

www.emeraldashborer.info/ This website provides answers to most specific questions asked, and concerns regarding EAB.

A couple of frequently asked questions are: “Should I treat my ash trees against EAB?”; and “When should I initiate treatments?. Both of these questions are intertwined.

It is a personal choice to treat or not to treat a tree(s). Individual homeowners must determine the value/worth of a tree on their property, and what costs they are willing to incur in terms of preventative treatments. It would seem logical that they also expect and accept a continuum of costs beyond an initial treatment if trees are to be protected against EAB in future years. Also, people should know and accept that despite best efforts, insecticide treatments do not guarantee positive outcomes. EAB populations may continue to grow in treated trees, and thus ultimately, treated trees may decline, die and require removal.

A decision to initiate treatments might also be based upon the proximity of a tree(s) in relation to known infestation of EAB. In a publication from the North Central IPM Center entitled **Insecticide Options for Protecting Ash Trees from Emerald Ash Borer**, it is stated that trees within 10-15 miles of a known infestation “.... may be at risk”. It further states that it probably might be too early to initiate treatments if trees are beyond the 15 mile range. The caveat in the previous sentence is the word “probably”. Trees with low numbers of EAB may not show external symptoms. Furthermore, the initiation of a preventative treatment is best undertaken while a tree appears healthy and it’s vascular/transport system likely is intact thus facilitating the upward translocation of systemic insecticides through the trunk and to upper branches and the canopy.

Although the current initial find a bit south of Lake Weatherby is in Missouri (Figure 2, red dot), a portion of a Kansas metropolitan area falls within the aforementioned 15-mile range (Figure 2, roughly drawn partial circle). This is not to imply that Kansans within “the zoned area” need to adopt a rush-to-treatment stance. Again, as previously stated,

trees within 10-15 miles of a known infestation “... may be at risk”. Again, individual homeowners need to assess their situations and determine for themselves what route to take in terms of preventative steps (if any) against EAB.

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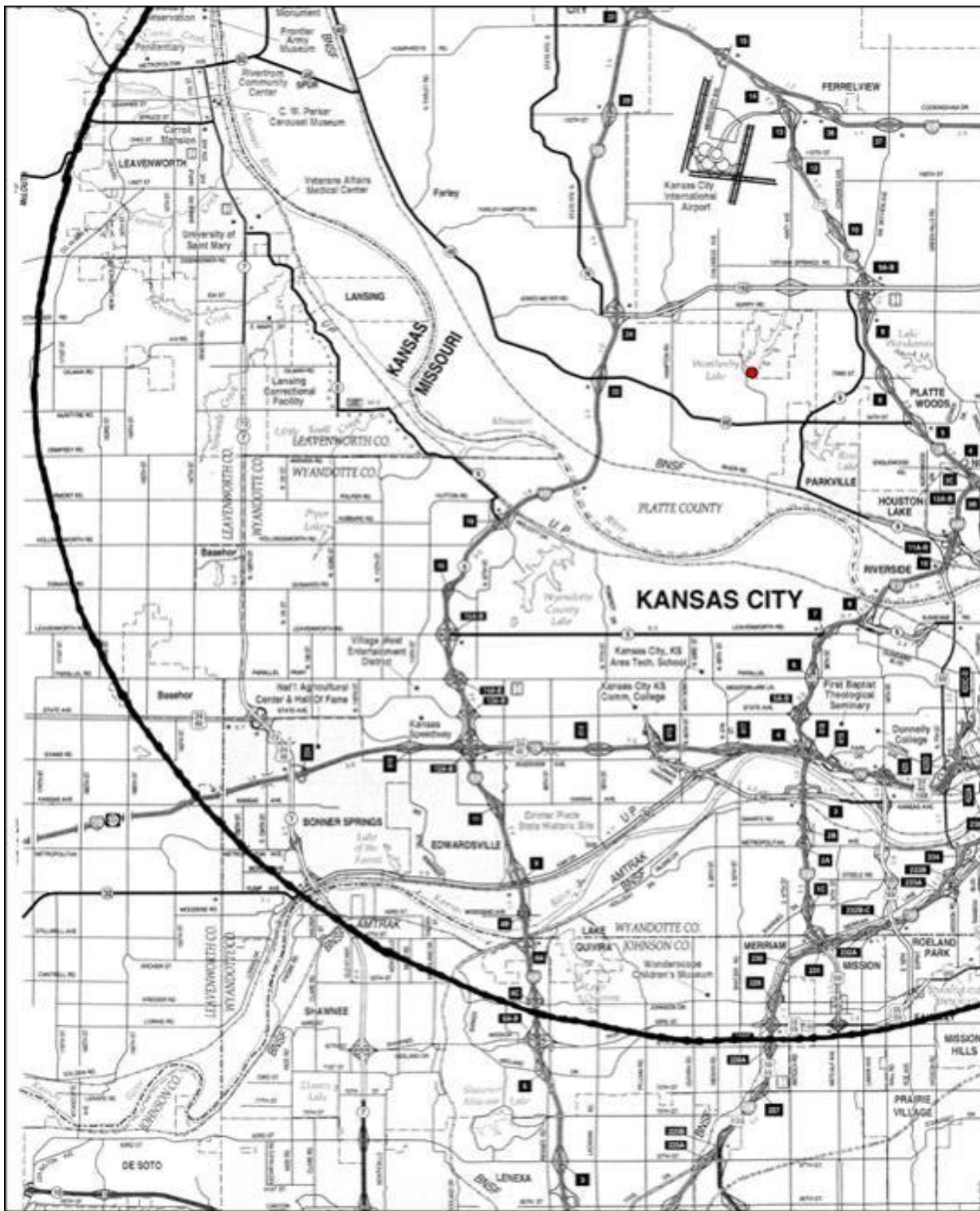


Figure 2

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It is not possible (here) to succinctly present information regarding preventative methods to be used against EAB. It is not a simple procedure. There are factors to be considered when selecting a preventative route. Consult the aforementioned **Insecticide Options for Protecting Ash Trees from Emerald Ash Borer**, which was authored by 6 Land Grant University entomologists “in the thick” of the EAB predicament. They elaborate on the different types of insecticides, application methods and timing thereof. In most instances, maximizing chances to successfully combat EAB may entail hiring professional tree care specialists who have access to insecticides not available to homeowners, and the equipment and training to properly deliver/apply treatments.

FLAT = FUNNY LOOKING ASH TREES

In light of the previous article, it should be noted that (currently in Kansas) ash trees may have an unthrifty “sick” appearance unrelated to emerald ash borers.

One of the symptoms associated with EAB is a thinning of a tree’s crown (Figure 3A). So are the trees in Figure 3B experiencing EAB?



Figure 3

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By closely examining the trees in Figure 3B, very noticeable are the pencil-sized round holes at the base of the tree (Figure 4A), and also higher up the trunk. Also possibly observed may be the caramel-colored paper-like “skins (Figure 4B) which actually are spent pupal cases from which have emerged ash/lilac borer moths (Figure 4C). The larvae of these moths are not the typical “free-roaming” defoliating caterpillars which most people associate with moths and butterflies. Rather, larvae bore into their tree host where they feed on the subcortical tissues and sapwood. The resultant of these feeding/mining activities is the creation of galleries which ultimately can disrupt the flow of plant nutrients, structurally weaken trees, contributing to a tree’s unthrifty appearance.

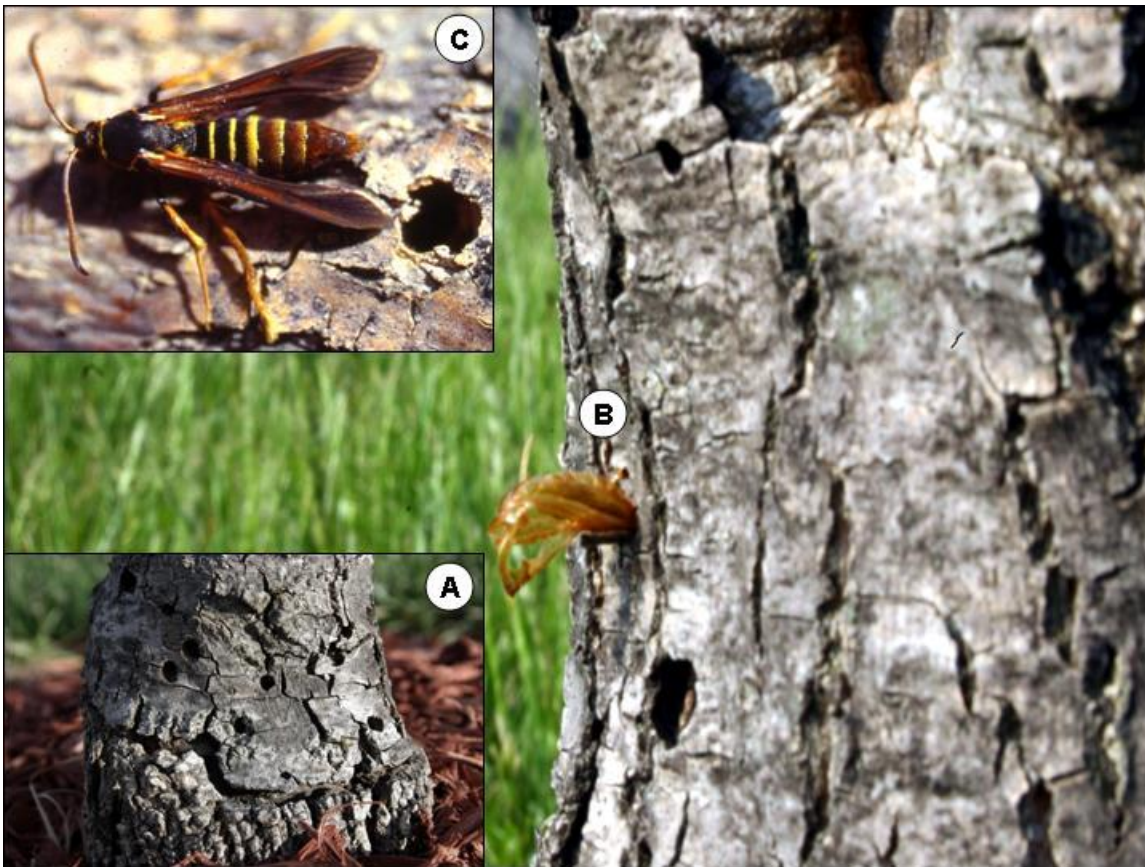


Figure 4

The situations presented in the following Figures 5 and 6 might cause people to think that they have EAB infested trees. The previously shown EAB-infested tree is again presented in Figure 5A. It might appear that the tree in Figure 5B has an EAB problem.

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Figure 5

Another symptom cited for EAB-infested trees is the presence of epicormic shoots (aka “water sprouts”). The 3 trees in Figure 6 have thinned and dying crowns. And one tree displays “water sprouts” (note red arrow). Thus it might appear at first glance that the 3 trees in Figure 6 have EAB problems.

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Figure 6

However as shown in Figure 7, one can rule out EAB by examining the dead branches of the trees in Figures 5 and 6..

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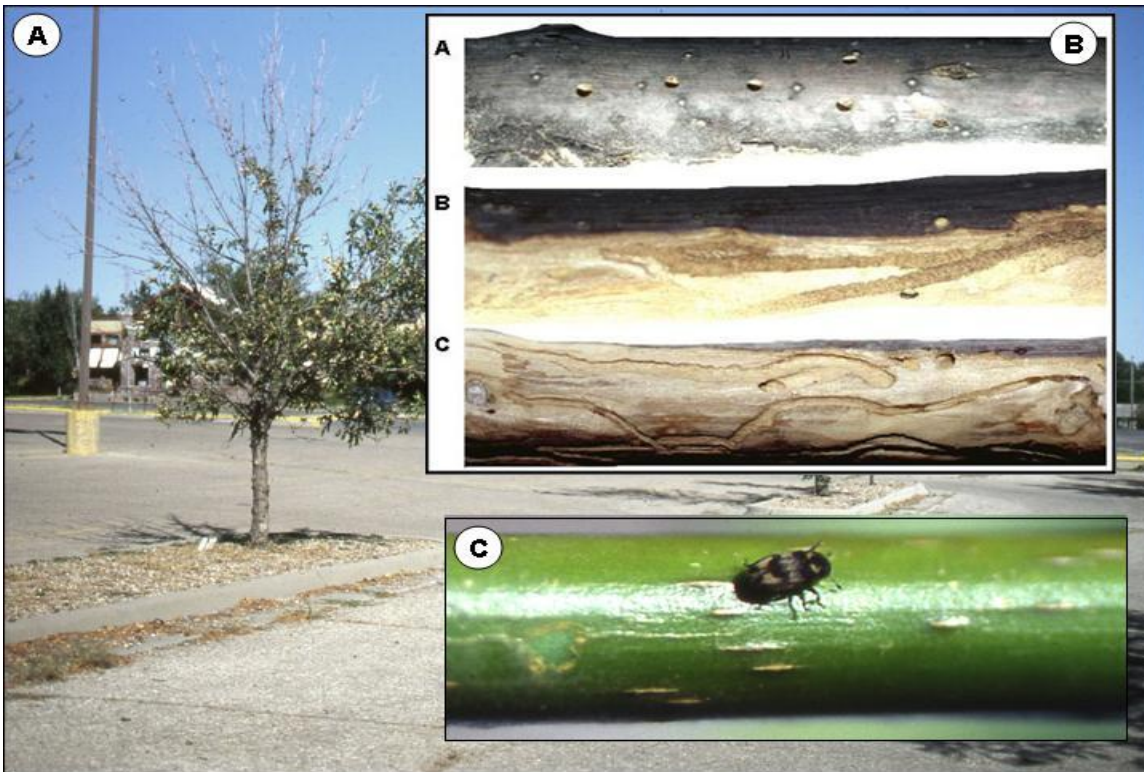


Figure 7

A of Inset B shows a portion of a small branch riddled with tiny (less <1-mm) round “shotholes”). Stripping away the bark, one can see (in B) sinuous narrow galleries packed with frass. With the frass removed (C), it is plain to see that the cause of the branch dieback. In this instance, the eastern ash bark beetle (Inset C) was the destructive insect.

This is not to dismiss the possibility of EAB being the cause of “sick” ash trees in Kansas. Rather, especially with the emergence of the EAB in North America and now closer to Kansas, trees need to be closely and carefully examined for the presence of D-shaped holes in branches and trunks ---- exit holes associated with the Emerald Ash Borer. If so noted, report these instances (locations) to Extension personnel who can then contact KDA and APHIS ARS authorities.

Bob Bauernfeind

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Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostic Laboratory from July 27th to August 9th, 2012.

July 27 – Morris County – Lubber grasshoppers around home and garden

July 27 – Cheyenne County – Fourlined silverfish in home

July 31 – Finney County – Kermesid scales on Pin oak

July 31 – Pottawatomie County – Spotted Datana, *Datana perspicua*, on fragrant sumac

August 1 – Osage County – Cat flea

August 3 – McPherson County –Skimmer dragonfly nymph, Libellulidae around water

August 3 – Thomas County – Lady beetle larvae and pupae in alfalfa

August 6 – Osage County – Book lice, *Liposcelis* sp., in home

August 6 – Wyandotte County – Snout-nosed weevils in crawl space

August 6 – Riley County – Wolf spider, *Rabidosa rabida*, in home

August 7 – Thomas County – Lady beetle pupae in alfalfa

August 7 – Pratt County - Aphids and lady beetle pupae on melons and okra

August 8 – Sedgwick County – Straight-faced solfugid, Eremobatidae, in home

August 8 – Sedgwick County – Chinch bugs around home

If there are any questions regarding these samples or about the identification of any arthropod please contact the Insect Diagnostician at (785) 532-4739 or GotBugs@ksu.edu.

Holly Davis

Kansas State University is switching over to a new web system starting immediately. They are combining several systems into one. Our Kansas Insect Newsletter is part of this transition. However, each individual will need to be trained on this new system and this takes time. We are notifying you that for now this could possibly be the last newsletter of 2012. However, if this training happens soon we will be able to send you additional issues of the Kansas Insect

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Newsletter in 2012. You will be alerted when our next Kansas Insect Newsletter is ready to send out.

Sincerely,

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