

Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



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Idiom #1: “Like Clockwork” Green June Beetles

The idiom, “Like clockwork” refers to something predictable/expected and which occurs on a regular basis. Such it is with green June beetles. I have been checking two sites where these beetles appear on a yearly basis. As of Sunday, July 4, all was quiet “on the western front”. After receiving 1.5 inches of rain on Sunday, I checked again on Monday. Still quiet. But on Tuesday, July 6, huge numbers green June beetles were skimming over the grass surfaces at both sites.

Clockwork? Check out the dates of past Kansas Insect Newsletters addressing green June beetle activities: 2005 – July 15; 2006 – July 14; 2007 – July 15; 2008 – July 25; and 2009 – July 17. And those flights followed rains that served as a signal/stimulus for the beetles to emerge from the underground quarters in which they developed.

Hordes of these beetles may appear menacing as they skim the surface of the ground as they fly in their erratic patterns. But up close, they can be seen for their true beauty (Figure 1).



Clustered Green June Beetles – Note color variations

Figure 1

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Their beauty can especially be appreciated by those people who take the time to closely examine them. This means that those individuals know that the “menacing” buzzing fliers are not bumble bees, and therefore can be safely handled.

Other than the nuisance factor associated with their aerial antics (they may clumsily bump into you), green June beetles do not constitute a threat to garden crops. They are, however, attracted to tree fruits (notably peaches), especially those with over-ripe and possibly fermenting fruit. Brambles and vine crops such as grapes are also targeted.

It is a matter of personal choice whether to treat or not to treat.

While insecticides can be used to kill green June beetles (1,254 products registered for use against green June beetles), attempts to do so border on impractical. Results are likely to disappoint, not on the basis of failure-to-kill, but rather on the multitudes of beetles and their extreme mobility.

Idiom #2: “There must be something in the water” Horned Oak Gall

The idiom, “There must be something in the water”, serves to explain a common source leading to a strange series of events. In this situation, it refers to excessive numbers of horned oak gall infestations.

In various meetings, I have dismissed leaf galls as nothing to be concerned about. By the time leaf galls are noticed, they are well-developed. They are nothing more than an aesthetic distraction. In the event that heavy galling causes premature leaf-drop in late May and early June, a new flush of foliage ensues, and those leaves **will not** have galls as the insects which caused the initial galls have completed their reproductive cycle.

When it comes to twig galls, the story may be a little different. Consider the horned oak gall (Figure 2).



Figure 2

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While I have encountered this particular gall but a single time, Jake Weber frequently see these galls. “Must be something in the water” down in southeast Kansas. Or, Jake is just very observant. Yet, it would be hard not to notice serious infestations of these galls (Figure 3).



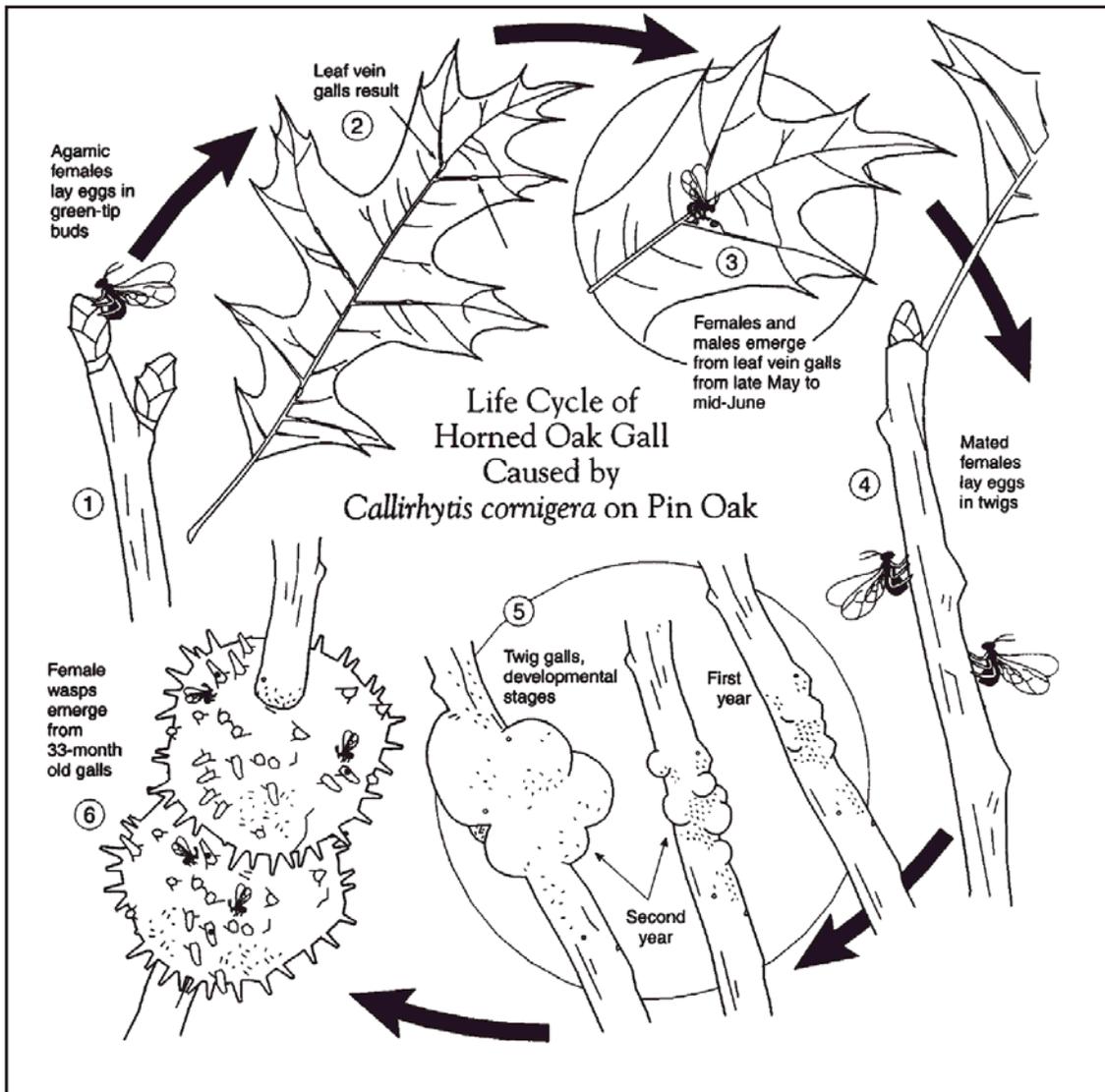
Photo Credits: Jake Weber, CEA Hort.
Cherokee Co., KS

Figure 3

Jake considered horn oak galls to be a serious problem on “overloaded” trees. Some twig dieback does occur, and trees may appear “thin”. But he has observed that an especially heavily “galled tree” is “.....(seemingly) recovering from the heavy infestation.

The occurrence of horned oak gall is sporadic. According to one source, some areas have experienced epidemics resulting in many trees being killed. Twig galls may disrupt vascular tissues through the galled area. Transport of photosynthates, water, and minerals becomes severely limited resulting in severe branch dieback, crown thinning and tree death.

Horned oak galls have a complicated life cycle spanning 3 years (Chart 1). This was elucidated by Eliason and Potter at the University of Kentucky.



Life history of the horned oak gall wasp, *C. cornigera*, on pin oak as determined from research conducted in Lexington, Kentucky, 1996–1999. Illustration by Dennis Duross (Agricultural Communications Services, University of Kentucky).

Chart 1

Given the unpredictable occurrence, a proactive approach against horned oak gall is difficult. Spray treatments would have to be precisely timed to coincide with the occurrence of wasps (1, 3 and 4 illustrated in Chart 1). But determining their actual presence is questionable given (again) their unpredictability, small size and inaccessibility in upper canopies of large trees. And by the time that there are signs of their presence (5), the die is cast (another idiom = past the point of no return).

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I have tended to be dismissive on twig galls based on observations. In 1996, a burr oak on campus looked “stark”, and there was consideration of its removal. I requested that its removal be delayed. And despite its grim appearance, the current season’s flush of foliage ensued. By July, it was evident that the tree was very much alive (Figure 4).

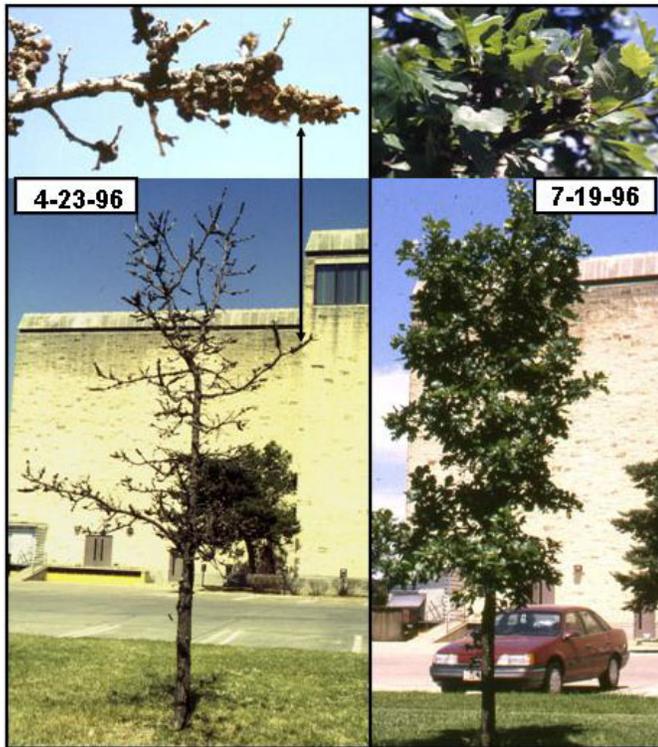


Figure 4

The tree has continued to prosper to its current status (Figure 5)



Figure 5

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The third installment Walnut and Yellownecked Caterpillars

The walnut caterpillars continue feeding, and the tree is taking on a more sparse appearance (Figure 6).

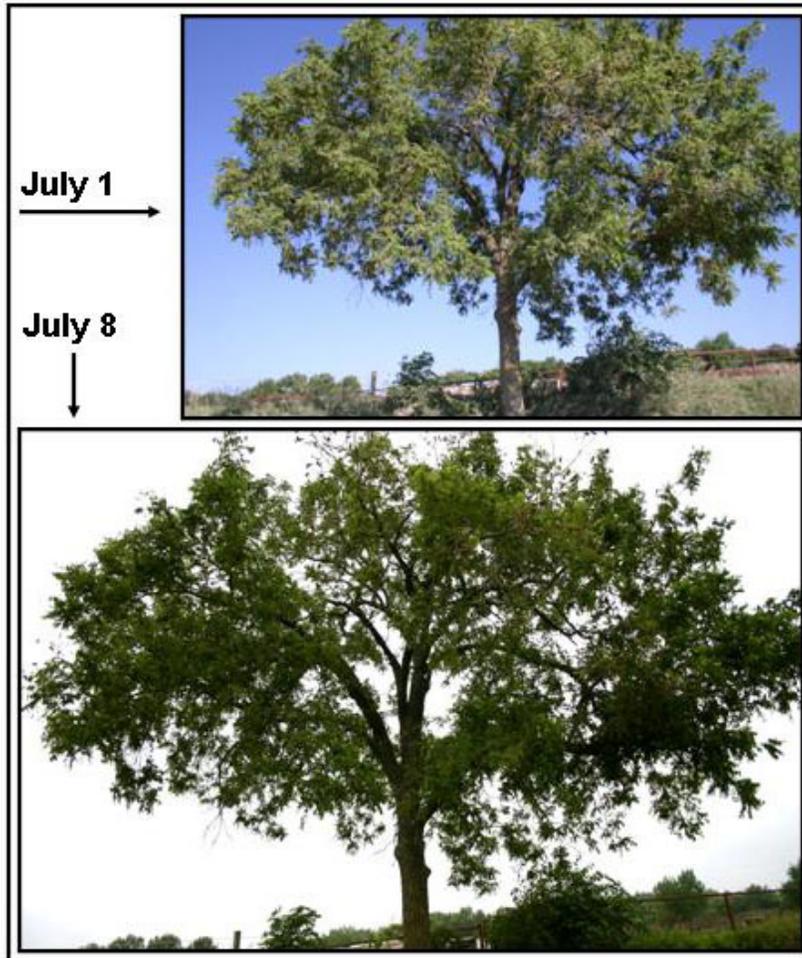


Figure 6

Walnut caterpillars seem to be lagging in development when compared to yellownecked caterpillars, most of which have matured ($2 \frac{1}{4}$ inches long) (Figure 7 – July 8).

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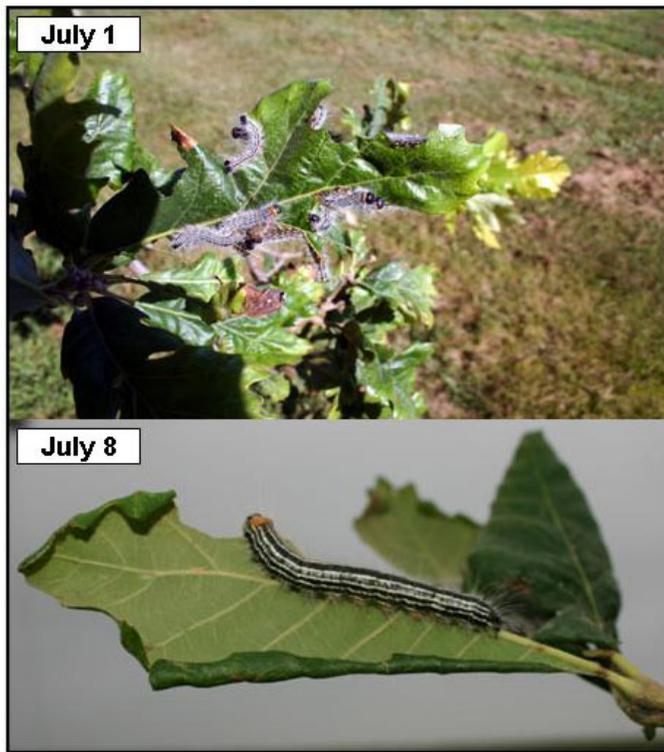


Figure 7

Mature larvae will next begin the pupation process (Figure 8). They become inactive and shrink (2 left specimens) before the transformation into the pupal stage.



Figure 8

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A newly formed pupa is light in color (center) and the body stripes of the larvae can still be discerned through the new/soft/light pupal covering. The pupal coat continues to harden and become progressively darkened with age.

I have been feeding out a cluster of yellownecked caterpillars collected June 24. They have already pupated (Figure 9). Perhaps they matured quicker on the apple foliage that I was providing as opposed to the oak foliage upon which the in-the-field caterpillars are confined.

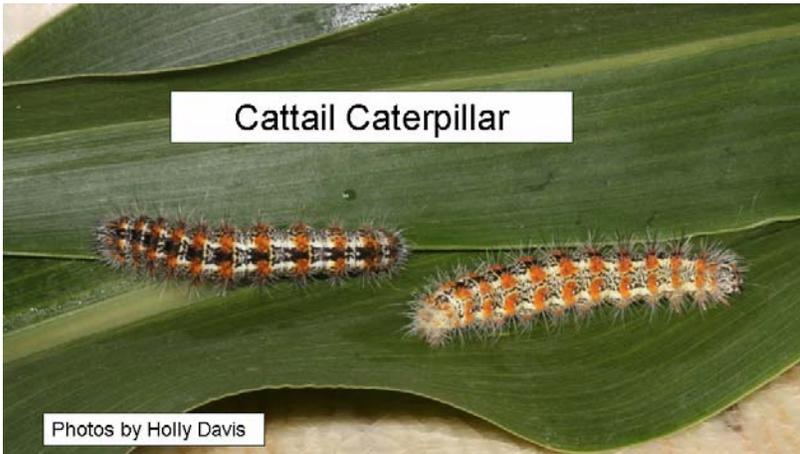
The bottom line is that for both the walnut and yellownecked caterpillars, their first generation feeding cycles are near-completed or completed. There is nothing to be gained by applying insecticide treatments to kill them.



Bob Bauernfeind

Cattail Caterpillars in Sorghum

Cattail Caterpillars were collected from whorl-stage sorghum in Riley Co. on 6 July. This field is bordered by a small creek that has cattails growing along its banks. These relatively large, highly visible worms can cause considerable concern because of the large holes their feeding causes in the leaves, but this will probably have little impact upon the development or yield of the sorghum. See photos and visit the KSRE website <http://www.youtube.com/ksrevideos#p/c/AD45744D5128C8EB> for a short video relative to these insects.



Japanese Beetles in Corn

Adult Japanese beetles were discovered feeding on corn silks in eastern Kansas (see photos). These beetles are voracious feeders and will utilize just about any plant, especially corn and soybeans as far as crop plants, and thus growers and consultants need to be vigilant regarding these pests. In KS, we don't have much experience controlling these insects as they have not become a significant agricultural pest, but they are in some of the states to the east.

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Jeff Whitworth

Holly Davis

Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostic Laboratory from July 2nd to July 8th.

- July 2 2010 – Haskell County – Possible Elm leaf beetle damage
- July 2 2010 – Pratt County – Possible Elm leaf beetle damage
- July 2 2010 – Riley County – Brown recluse spider in home
- July 2 2010 – Riley County – Fungus gnats in home
- July 2 2010 – Miami County – Garden fleahopper on various plants
- July 2 2010 – Cheyenne County – Male American dog tick on person
- July 2 2010 – Riley County – Male dobsonfly on building
- July 2 2010 – Anderson County – Wheel bug nymph around home
- July 2 2010 – Johnson County – Tree cricket nymphs and fly maggot in window seal
- July 2 2010 – Johnson County – Armyworm caterpillar in leaf litter
- July 2 2010 – Sumner County – Garden webworms and thistle caterpillar on soybean
- July 6 2010 – Harvey County – Wolf spider and hunting ground spider in home
- July 6 2010 – Clay County – Euonymus scale insects
- July 8 2010 – Sedgwick County – Green stink bug nymph and eggs on honeylocust
- July 8 2010 – Miami County – Possible rodent nesting material

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July 8 2010 – Harvey County – Drugstore beetles in home

July 8 2010 – Pratt County – Thistle caterpillars (*Vanessa* sp.) on flowers

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

Sincerely,

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