



ENTOMOLOGICAL NEWS

Plant Protection and
Weed Control
2022 Year-End Report

Spongy Moth (*Lymantria dispar dispar*)

Two positive detections of spongy moth were confirmed in Johnson County in early September 2022 (Fig. 1). The male moths were captured in green delta traps at two separate sites. The department will be partnering with USDA-APHIS to conduct delimiting surveys in 2023. These surveys will identify the extent of the moth’s presence in the area, if at all.

2022 Spongy Moth Detections

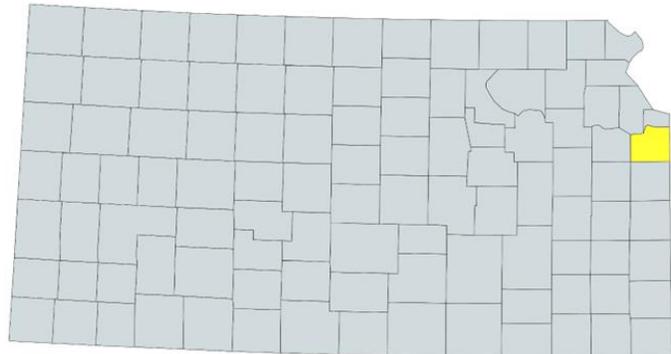


Fig 1. Two male spongy moths were captured at two trap locations in Johnson County this year.

EAB

2022 Detections Past Detections Trap Trees



Emerald Ash Borer (*Agrilus planipennis*)

2022 saw new detections of emerald ash borer (EAB) in Brown and Osage County (Fig. 2, top). EAB is gradually moving westward into the state. The department continues to slow the spread through surveying/monitoring and outreach events.

Each year, EAB dispersal is monitored by girdling a select number of ash trees in predetermined regions around the state. Girdling the ash induces a stress response that lures EAB to the tree. The bark of these “trap trees” is peeled in the fall to assess for immature EAB larvae, indicating that EAB are present in the area and are reproducing. This year, trap trees were set in the southeast corner of the state and included Lnette, Cherokee, and Crawford County. No EAB larvae were found in the trap trees, and the sticky trap placed above the girdled portion of the tree yielded no adult EAB. Species of native wood-boring insects, however, were found in the process (Fig. 2, bottom).



Fig 2. Current EAB detections and survey (top). No EAB were found in SE Kansas this year, but other borers were discovered while peeling ash, such as this wood-boring moth larva (bottom).

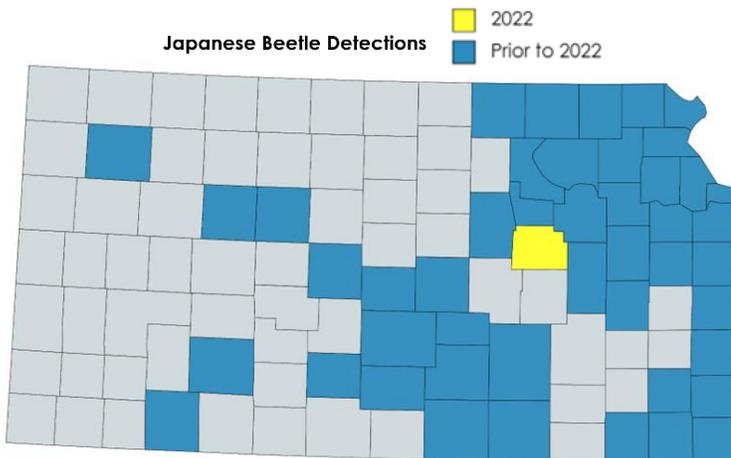


Fig 3. Current survey records of Japanese beetle-positive counties. Morris is the newest county to detect Japanese beetle.

Japanese Beetle (*Popillia japonica*)

This year, Japanese beetles were detected for the first time in Morris County (Fig. 3). With over 300 host species, the Japanese beetle is an economically and environmentally significant pest. Adults feed on a variety of hosts, including corn, soybean, grape, roses, and many other agricultural and ornamental plants, shrubs, and trees. Japanese beetle grubs feed on the roots of turf, preventing grass from taking up enough water to withstand drought and heat stress, causing dead turf patches.

Brown Marmorated Stink Bug (*Halyomorpha halys*)

Initially found in Douglas County in 2011, brown marmorated stink bug (BMSB) has now been confirmed in six Kansas counties (Fig. 4). The bug was most recently detected in Riley County in 2020. BMSB is a serious pest of specialty crops and a nuisance pest in homes when they aggregate in large numbers. Surveying for BMSB will continue in 2023.

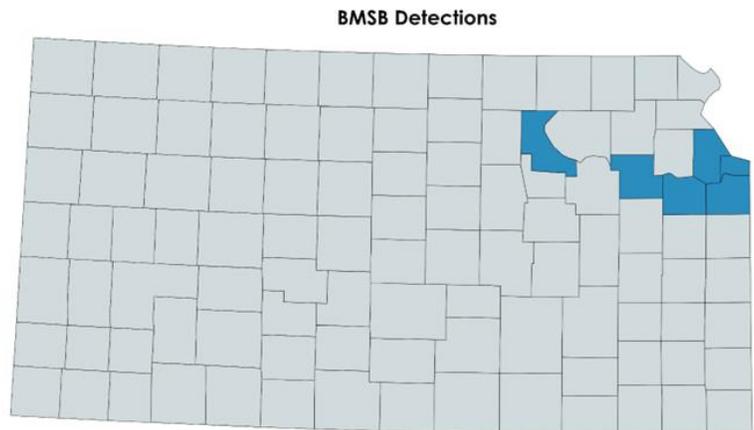


Fig 4. Current brown marmorated stink bug detections by county.



Fig 5. Other species of Scolytinae were caught in walnut twig beetle traps, for instance, the Asian ambrosia beetle, *Xylosandrus crassiusculus*.

Walnut Twig Beetle (*Pityophthorus juglandis*)

Another survey for walnut twig beetle (WTB) was completed this year. Eighteen counties in the northeastern part of the state were surveyed. From May 16th to August 8th, 32 trap sites were routinely checked for WTB. The beetle is a vector for *Geosmithia morbida*, a fungus that is detrimental to walnut trees. When a walnut twig beetle bores into the tree, it brings *G. morbida* with it, and the tree becomes fatally infested with the fungus. Currently, no WTB have been found in the state, and the 2022 survey yielded no positive detections. Notably, other species of bark and ambrosia beetles were collected in the traps and serve as good documentation for Scolytinae diversity in Kansas (Fig. 5,6).

Species	County Found	# Collected	Native Region	Distribution
<i>Xyleborinus saxesenii</i>	Atchison	1	Europe, Asia	Worldwide
	Doniphan	1		
	Jefferson	1		
	Marshall	1		
	Nemaha	2		
	Pottawatomie	1		
	Wabaunsee	1		
	Wyandotte	8		
<i>Xyleborus bispinatus</i>	Atchison	1	Neotropics	NA to SA
	Pottawatomie	1		
<i>Ambrosiodmus obliquus</i>	Geary	1	N. Asia	Worldwide
<i>Xylosandrus crassiusculus</i>	Jackson	1	E. Asia	Worldwide
<i>Hylurgopinus rufipes</i>	Jefferson	1	USA	USA, Canada
<i>Monarthrum mali</i>	Pottawatomie	1	NA, W. Indies	NA, W. Indies
<i>Hylocurus rudis</i>	Wyandotte	1	USA, Canada	USA, Canada

Fig 6. Scolytinae bycatch from the 2022 walnut twig beetle survey. Several species were captured across multiple counties and include both native and non-native beetles¹⁻³.

Spotted Lanternfly (*Lycorma delicatula*)

In 2021, a spotted lanternfly (SLF) specimen was discovered in a 4-H collection at the Kansas State Fair. The bug was reportedly collected in Colby, Kansas. In response, The Kansas Department of Agriculture and the Kansas Forest Service surveyed the site of collection and the surrounding area. No adults, nymphs, or honeydew (the sugary waste created by the insects) were found. In September 2022, the Kansas Department of Agriculture returned to Colby to survey the collection site and all known locations of tree of heaven (the insect’s preferred host). No adults, nymphs, or honeydew were found. Surveying for SLF in Colby will be conducted again in 2023.

In January 2022, eight, dead SLF were discovered within the plastic packaging of boxes at a facility in Olathe, Kansas. The boxes were shipped from China (the insect’s native region) and sat in a warehouse in Pennsylvania before coming to Kansas. Thus, it is unknown when and at which location the insects became trapped in the packaging. The collection site and surrounding area were surveyed in June and September. No adults, nymphs, or honeydew were found.

In Kansas? Found a
Spotted Lanternfly?

Catch it!
Take a photo!

Then, record:

- 1. Date**
- 2. Location**

... of your insect sighting.



Photo: Pennsylvania Dept. of Agriculture

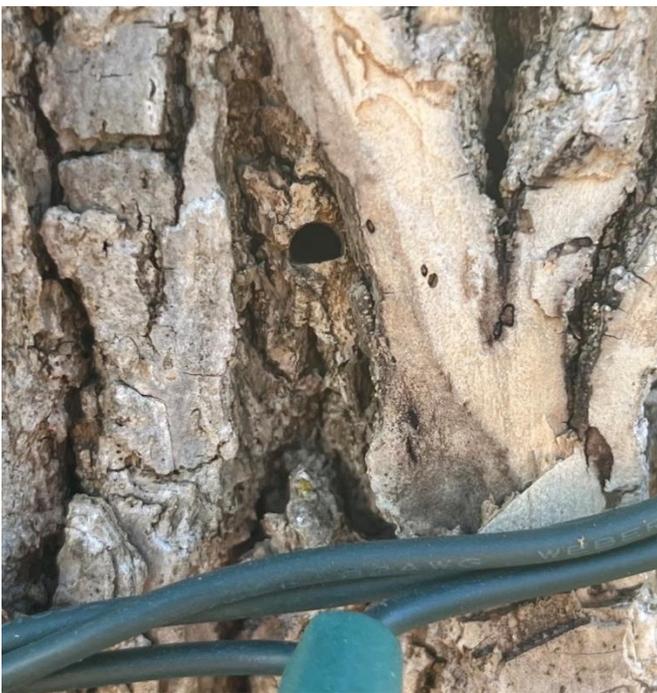
Send your information to **KDA.PPWC@ks.gov**

Currently, SLF is not present in Kansas. Residents are encouraged to be on the lookout for the hitchhiker and check their vehicles if returning from a state where SLF is established.

References

1. Mercado, J.E. 2010. Bark Beetle Genera of the United States. Colorado State University, USDA-APHIS-PPQ Center for Plant Health Science and Technology, and USDA-FS Rocky Mountain Research Station. <http://idtools.org/id/wbb/bbgus>. Accessed 2022-12-14.
2. Atkinson, T.H. 2022. Bark and ambrosia beetles of the Americas. <http://www.barkbeetles.info>. Accessed 2022-12-14.
3. GBIF Secretariat. 2022. *Xyleborus bispinatus* Eichhoff, 1868. GBIF Backbone Taxonomy. Checklist dataset <https://doi.org/10.15468/39omei>. Accessed 2022-12-14.

Thank you to Robert Androw from the Biodiversity Services Facility at the Carnegie Museum of Natural History for identifying the Scolytid samples in our walnut twig beetle survey!



Check Your Trees! A perfect, D-shaped exit hole created by a newly emerged emerald ash borer adult was spotted in a neighborhood in Johnson County this fall. Although the beetle has been present here since 2013, homeowners should continue to check their ash trees and monitor for signs of infestation.

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For more information
about pests, surveys,
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