

Laura Phillips  
District Extension Agent, Horticulture

### **USGS Wants Your Dead Butterflies**

While the dead butterfly on your patio might normally prompt you to reach for a broom, the U.S. Geological Survey is asking that you reach for an envelope instead. The agency is calling on Kansas residents to mail in dead butterflies, moths, or skippers to help them find out why our insect populations are declining.

When you step outside on a hot afternoon, you might not think we are running low on bugs. The research, however, shows a different story. Loss of habitat, invasive plant species, and changing weather patterns are putting valuable insect species at risk. We have already lost nearly 10% of our insect species, and new research suggests that an additional 40% of insect species could be extinct within the next couple of decades.

These numbers are not just bad news for the bugs. We often hear about insects as pests that decimate crops or spread disease. Yet insects play key roles in our food system and ecosystems. Insects are responsible for pollinating over a third of our food and in the U.S. alone their service is worth around \$20 billion a year. Other insects keep our food chain stable, serving as prey for many other creatures. Many beetles make themselves useful by breaking down manure and waste, which keeps our soil fertile and healthy.

To make matters worse, the decline is not affecting all species equally. While beneficial insects are taking a hit, many nuisance species are thriving. The pine beetle and the emerald ash borer are expanding their range, and crop pests are seeing increases in their populations. Without beneficial insects that can pollinate or prey on pests, our crops and gardens everywhere will struggle to produce.

All is not lost, and acting now can help us find solutions that will protect our gardens, trees, and fields in the future. In addition to sending in insects to the USGS, you can create gardens that attract pollinators, plant native species, and limit your water usage.

Those who have dead butterflies, moths, or skippers should place all specimens in a resealable plastic bag, and mail them USGS LRC, 1217 Biltmore Drive, Lawrence, KS 66049. You do not need to put your return address or any other personal information. All specimens should be dead when collected, and not killed, but they can be partially intact or damaged. If you are not able to mail the insect within three days of finding it, place it in the freezer until you get the chance to mail it. The initial deadline is November 1<sup>st</sup>, but based on the current response, the agency may extend their collection efforts into 2024.

If you are interested in learning more about the USGS's work, threats to our insect populations, or how you can help the insect world, reach out to the Meadowlark Extension District for more information.