## Are Kissing Bugs Really a Threat in Kansas?

## **AGRI-VIEWS**

by Chuck Otte, Geary County Extension Agent

A few days before Thanksgiving, the Center for Disease Control (CDC) issued a press release about a "deadly insect" known as the "Kissing Bug" being found in Kansas. The wording from the press release was, "The Centers for Disease Control and Prevention says a deadly insect known as the "kissing bug" has made its way to into Kansas and nearly every southern state." This same press release was sent to over half of the state in the country, many of whom were surprised to find out that they were a "southern" state. While I appreciate the great work that the CDC does, I felt that this press release was a bit alarmist and a bit overboard.

Unfortunately, the name kissing bug can apply to over ten species of insects, most in the Triatomine family of insects. Only a couple of these are known to occur in Kansas, most are more likely to be found in Texas or Arizona. They are in the same large insect order as box elder bugs (Hemiptera) and in the same insect family that includes the assassin or conenosed bugs. The best known of these is the wheel bug, a very common insect in late summer. All of the assassin bugs are capable of inflicting a quite painful bite. These insects have a long tube for a mouthpart and they use this to pierce their food source and suck out blood or insect juices.

These insects, while capable of inflicting a painful bite, are not deadly. You may think you're going to die, but you won't. The potential health threat comes from a parasite that the kissing bugs can carry. The parasite causes the disease known as Chagas disease. This is a tropical disease that infects millions of people every year. It is quite treatable if caught early, but can cause death if left untreated.

Becoming infected with the parasite is quite difficult. The parasite does not enter your body when the insect bites you. The parasite is in the bug feces. The insects often feed when the victim is sleeping and frequently defecates while it is feeding. Infection occurs when fecal matter is inadvertently rubbed into the bite wound or a mucous membrane. The following statement is also directly from the CDC. "It is important to note that not all triatomine bugs are infected with the parasite that causes Chagas disease. The likelihood of getting Chagas disease from a triatomine bug in the United States is low, even if the bug is infected."

Like any disease cycle, you have to have a source of the disease (parasite). You have to have a vector to transmit the disease to the victim. Then you have to have the right conditions for the transmission to occur. While one of these bugs could blow in during the summertime from an area where the disease occurs regularly, the incidence of the causative parasite in the state of Kansas is going to be very minimal.

The presence of these insects in Kansas is nothing new. They have been here for centuries. We have very few cases of Chagas contracted in the United States and even fewer in Kansas, perhaps none. So the risk is very low. If we are experiencing global warming, then over the next several decades the risk could increase.

Do we have kissing bugs in Kansas? Yes. Are we at much risk from kissing bugs and Chagas disease in Kansas? Probably not. So it behooves us, as we move through winter and into next spring, that we continue to be concerned about insect borne diseases and utilize prevention techniques. But let's focus that on real risks that we have here from our tick and mosquito borne pathogens! There's enough of those to go around!