

KISSING BUGS

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Triatoma rubida

Kissing bugs, a blood-sucking insect common to Arizona, are also known by the common names conenose bug or Hualapai tiger. The common species is *Triatoma rubida*, but three other species are known to Arizona, *T. protracta*, *T. recurva* and *T. indictiva*. The kissing bug is normally a resident of packrat dens, but may live with other rodents. The kissing bug normally stays in the nest. If homeowners try to eliminate packrat nests, but don't remove the bugs, the bugs will find the next readily available blood meal, generally that homeowner.

Kissing bugs lay pearly white cone-shaped eggs singly in a habitat near its food source. These eggs hatch in 10 to 30 days into small, soft-bodied nymphs (small and wingless) that soon will be ready for a blood meal. There are five nymphal stages, each requiring at least one to several full blood meals to stimulate molting to the next growth stage. Completion of growth from egg to adult takes 1-2 years.

In Arizona, the flight period of adult kissing bugs is usually in May and June, coinciding with high nighttime temperatures in the 70's and low humidity. A second activity period may occur in September when conditions again are similar to early summer. This activity means new adults leaving their juvenile home,

seeking a mate and a new host. Adults are attracted to porch lights or merely a lighted window, and they will land nearby. If a female kissing bug does enter a home, feeds, mates and lays eggs, the people may encounter these bugs any month of the year. Incidental contact with adult kissing bugs can occur during the other summer months, but their activity is lower.

One good way to manage populations is to inspect outside your house around the windows before going to bed, for the bugs may be sitting on the house then. During the day, the bugs seek dark shelters, so inspect beneath flowerpots or other potential hiding places near the home. The bugs are flat and can enter a home through narrow openings, so good home maintenance such as caulking and replacing damaged wood around doors and windows is necessary to prevent entry.

If a kissing bug does get into the house, it will become active once it gets dark, seeking a host. Once it has fed, the bug will not venture too far away, often found between the bed frame and springs or mattress. This also will be the area a female will deposit her eggs, so check the sheets, etc. and vacuum

thoroughly in the bedroom during this season. Just because you have been bitten once, or you have found an adult in your home, it does not indicate you have an infestation. A concentrated search is the most effective means of dealing with these insects. Pesticides are generally ineffective and not recommended because of their secretive habits and proximity to humans. Kissing bugs do not generally work beneath sheets or pajamas to feed on a host, preferring naked, exposed skin like the face, hence the name. Use of mosquito netting during peak activity periods may prove an effective deterrent.

Kissing bugs are sometimes vectors of Chagas' disease, known to occur in Mexico to South America. All species of kissing bugs may harbor the pathogen, *Trypanosoma cruzi* is the causative agent of this disease. Transmission of the pathogen is through the kissing bug feces that are deposited near the feeding site and later rubbed into the itchy wound site by the victim. The four species of *Triatoma* found in Arizona, due to their behavior of defecating away from their feeding site, have never been implicated in transmitting this pathogen.

The bite of the kissing bug usually is painless, because the mouthparts are very sharp and big enough for only a single blood cell to flow through. Most people never know they have been bitten, and the results may simply be a welt like a mosquito bite. Some people react more adversely, developing hives or experiencing an allergic reaction resulting in an anaphylactic response. People being bitten a lot may develop this more adverse response to the bites over time and should consult a physician for proper care.