

# Conenose Bugs

## Status

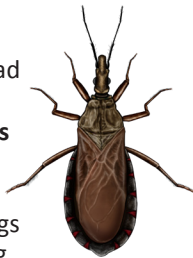
- Painful bite
- Blood feeder
- Possible health threat
- Can transmit a pathogen through bite

## General Information

There are about 35,000 known species of true bugs (a group of insects that have piercing-sucking mouthparts.) North America has over 11,000 species. One group of true bugs, the **assassin bugs**, are predators of other insects. A few assassin species (called **conenose bugs**) suck blood from vertebrate animals, including humans. They frequently attack at night while the **host** is sleeping. The bite from most species is painless and results in skin swelling. Some people are sensitive to the bites of conenose bugs and may experience intense itching, nausea, flushed face, irregular heartbeat, rapid breathing and pulse, and hives. Such severe reactions may require medical attention.

## What Do They Look Like?

Adult conenose bugs have a long, narrow head and a slender, piercing **beak** that is folded beneath the head when not in use. The **wings** are folded back over the body and overlap at their tips, leaving a triangular area at the back of the **thorax (scutellum)**. Immature bugs resemble the adults, but do not have working wings and are much smaller.



The two conenose bugs that most often bite humans in Orange County are the **western corsair** and the **western bloodsucking conenose**. Both are about 3/4 inch long. The western corsair is orange; its dark front wings have an orange spot in the middle. It feeds only on other insects but will bite humans if mishandled. The western bloodsucking conenose is dark brown to black. It feeds on the blood of other insects and vertebrate animals such as humans and wood rats.

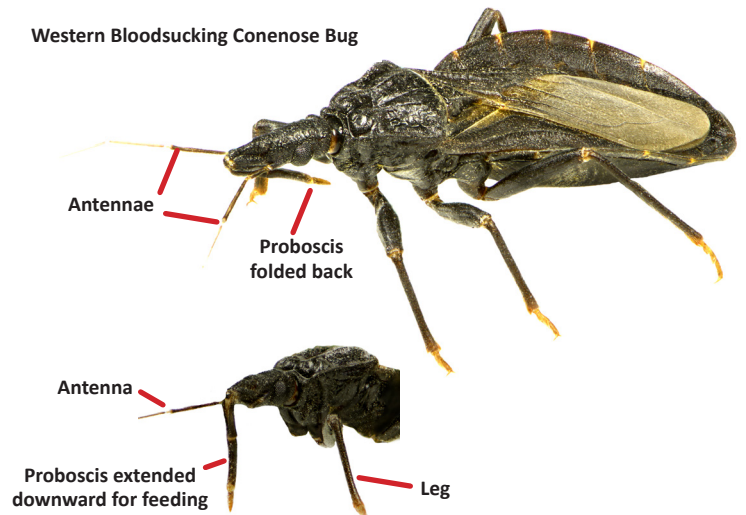
## Where Do They Live?

Bloodsucking conenose bugs live in the nests of native **wood rats** (they do not live with non-native roof rats). Western corsairs live alone in wild areas, not with other animals. Both conenose bugs fly to lights at night and may enter houses. In Orange County, they are most often found in rural foothill and canyon areas.

## Life Cycle

Conenose bugs have three stages in their life cycle: **egg**, **nymph**, and **adult**. The adult females lay eggs in summer months. About 2-5 weeks later, the nymphs hatch and feed on the blood of their hosts. As they mature, they outgrow their skin, grow a new skin layer, and shed the old one, a process called **molt**. Following each molt, the nymph has longer wings. After the fifth growth-molt cycle, usually months to a year later, the bug reaches full size and has functioning wings. The process of changing body forms while maturing is called **metamorphosis**.

Western Bloodsucking Conenose Bug



## Health Risks

There is no specific treatment for the bite of these bugs. Consult your doctor if the symptoms are severe or if a secondary infection occurs. Some bloodsucking conenose bugs have been found naturally infested with the microscopic parasite that causes **Chagas disease** in man. Though most cases are from South America, several human cases of the disease have been reported in California. Symptoms include swelling at the infection site and problems with internal organs such as the stomach and heart. The disease can cause death by interfering with the heart's ability to beat and pump blood. Medication to treat Chagas disease is so strong that it is available only from the Centers for Disease Control and only at the request of a physician. No self-administered medication exists.

## Impacts of Chagas Disease

- Current cases: 16-18 million people, mostly in Latin America
- New cases per year: 300,000
- Chronic complications: 2-3 million cases
- Deaths: 21,000 annually
- People at risk: 120 million

## Protect Yourself

**Prevention** is the best way to avoid the insects and Chagas' disease. Keep insects out of your home and discourage wood rats from nesting nearby. Make sure that window and door screens are in good working order, have no tears, and are installed properly. Inspect the entire house for cracks, holes, and degraded door seals; repair as needed. Wood rats often build nests from piles of sticks in wilderness areas and near homes. Remove wood rat nests from around and under the home and other buildings.

