

# Stinging reality about yellowjackets

By Linda Fine Conaboy

INCLINE VILLAGE – Who knew yellow jackets could be so fascinating? But spending time with Lynn Kimsey one blustery evening last week at Sierra Nevada College and listening as she revealed some of the secrets of these pesky critters was almost as entertaining as sitting around a campfire swapping stories.

At best, Kimsey knows her bugs and doesn't hesitate to share her scientist's look into the mysterious world of yellow jacket wasps, commonly referred to by some as the scourge of the Sierra.



Lynn Kimsey

Although they can be easily angered and have the potential to inflict painful stings if their nests are threatened, they also help to keep other insect populations in control, as well as serving as a food source for area bears.

There are about 10 species of yellow jacket, but only two are considered pests—the Western Yellow Jacket being one; the Bald-faced Hornet the other. Their ravenous appetites lead them to collect everything they can find including human food, garbage and road kill, along with myriad insects that keep the colony well fed.

"These two pest species are doing very well," Kimsey said, "because we humans 'feed the beast' so to speak by providing lots of avenues and places to find food."

Although there are thousands of wasps, the yellow jackets are social wasps, like bees, but unlike bees, they do not pollinate. "They collect nectar for their own needs. The nectar can be considered their jet fuel; it allows them to fly."

Unlike the Bald-faced Hornet that make aerial nests and are not particularly aggressive, the Western Yellow Jacket can be nasty and choose to construct their homes in cavities, such as hollow trees or rodent burrows.

"Yellow jackets sting for two reasons—defense and killing. Their venom is a cocktail of chemicals and they will sting as long as they've got venom left—they are good for up to three stings."

Stings cause pain, irritation or swelling and can be dangerous if allergic, which can lead to organ failure. "If you get stung and your throat becomes scratchy or swollen or if you have trouble breathing, call 911 at once," she said. "At the very least you need an EpiPen and Benadryl."

Normally, a sting can be soothed by applying ice and an antihistamine, with pain lasting a few days depending on pre-exposure. "My advice is don't put your hands and feet anywhere you can't see into."

The summer of 2017 saw a decrease in the number of yellow jackets in the Sierra, although Kimsey said she had her first invasion at her home in Davis this summer.

"My understanding is that the numbers are down in the Sierra, but in the Sacramento Valley they're up. The populations depend on the weather in the previous months."

She said colonies last about nine months, but the health of the colony depends on the queen surviving the winter alone after mating. She remains fairly dormant during the cold months, finally reviving herself in the spring. Instinctively, she knows it's her responsibility to find a suitable place to establish a new colony where she is responsible for the initial population of the new group. After this initial flurry of birth, the workers take over. One queen can produce up to 5,000 wasps.

Historically, wasps live a cyclical life; however, a constantly warming climate seems to be causing some colonies to become perennial, resulting in huge numbers of inhabitants within a nest—up to three million workers. Hawaii, with its moderate year-round climate has perennial wasp colonies, a phenomenon that seems to be filtering now to the Mainland and other places.

Kimsey treats the subject of bugs humorously, delivering her vast knowledge in easy-to-understand terms. Her expertise has led her to a professorship at UC Davis in the Department of Entomology and Nematology, where she also serves as director of the Bohart Museum of Entomology located on the UC Davis campus.