

A life without bumblebees

BY TYLER HEBERLE

Where would we be without

tomatoes? The majority of pizzas would crumble without their essential marinara foundation, and fast food fries without ketchup are a risky proposition. And imagine having no access to good squash, watermelon or pumpkin—that could put three different meals in jeopardy.

All those foods owe a major debt to bumblebees, according to bee rescuer Daniel Schoenthal. Those fuzzy bees have special talents not shared by their honeybee brethren. Bumblebees have the advantage in size, allowing them to shake out heavier pollens. And their longer tongues help them reach deeper honey pots in herbs and plants such as lavender.

"Some greenhouse crops now are 100% pollinated by introduced bumblebees," Schoenthal says. "You can order them over the internet. Tomatoes, peppers, these are crucial."

Schoenthal, who runs the Orangevale-based bee rescue service Blue Green Horizons, says bumblebees can nearly guarantee that every flower on a tomato plant gets pollinated, with roughly an 85% success rate. For honeybees, it's only a 15% chance. But there's a catch: Bumblebees need early access to nectar, ideally as soon as February and March, so queen bees can start hives. That pre-spring food can be found in dandelions and pansies.

Schoenthal says one bumblebee will need thousands of flowers over several months for the proper amount of food. "They need carbohydrates for fuel, just like you do ... but then they need pollen for protein for the babies," Schoenthal says.

Schoenthal believes the last two years have been good to Sacramentoarea bee populations in the short term, following the drought. But long-term problems such as pesticides and a lack of native forage are still present.

You can add an unbalanced diet to the list of concerns, according to a recent study from UC Riverside. The study found that "a loss of floral resource abundance and diversity" is one of the biggest threats to wild bumblebees across the globe.

According to UC Riverside's online news page, study leader Hollis

Woodard said there's at least one endangered species of bumblebee, and four species from California are "being considered for state listing."

Lynn Kimsey, an entomology professor for at UC Davis, says she hasn't seen any bumblebees on the campus in two years.

"One of the things that's become very popular now is covering exposed soil ... with chipped wood," Kimsey says. "It's probably one of the single worst things you could do for ground nesting wasps and bees ... because they can't get through the wood chips to get to the soil to dig their nest."

Kimsey suggests planting a variety of native flowering plants to provide pollen and nectar for bees.

"They need a diversity just like we do," Kimsey says. "If all you ate was hamburger every day, you'd have a problem."

Schoenthal says people can make a positive change for bees in public areas by planting clovers and cutting back on mowing to preserve weeds.

"Perhaps the best thing we can do is really recognize the whole complete picture," Schoenthal says.



