

# IT'S ALIVE

## *Vermicompost transforms drab soil into something teeming with life*

**BY CAMILLIA LANHAM**

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It's the broccoli that did it: One of those homegrown varieties—the kind that changes lives—with a tender stalk, sweet leaves, and a succulent crown that never made it to the salad bowl.



### **BREAK IT DOWN**

*Black Diamond Vermicompost owner Cristy Christie explains the process she uses to create the worm castings her company sells as compost. It all starts outside with hot composting, to kill pathogens and help bacteria procreate. Red worms and other little critters will further break down the material at a later stage.*

**PHOTO BY CAMILLIA LANHAM**

About six years ago, Jac Reid was getting out of the shower after a long day at work when he heard his wife Cristy Christie yelling from the other room: “Jac, you’ve got to try this!”

She was holding the fateful and freshly plucked broccoli in her hand.

“We ate the leaves. We ate the stalks,” Reid says. They ate all of it. They had never tasted anything like it before. Every part of it was absolutely delicious.

He tells me this story as the Baywood Farmers’ Market is wrapping up on a recent Monday afternoon. He’s standing in the shade of his white tent, a sign with prices for the couple’s Black Diamond Vermicompost and other products at his back. “This was our first broccoli,” he says emphatically, while pointing at a photo of it.

The compost the couple sells through their farmers’ market storefront is a rich, dark color, the kind you want your vegetable garden to sink its roots into and thrive from.

“Vermi” is Latin for worm, Christie informed me earlier that day. She actually told me the very same broccoli story as we stood in front of her East Paso Robles home looking out at the result of that first delicious veggie the pair grew using worm castings.

Uncovered plastic containers full of dairy cow manure lead to a long corrugated metal roof with black netting hanging down from it. Beneath the metal, two long bins full of even more manure rest, relaxing in the cool breeze of the shade.



### **CREEPY CRAWLIES**

*These red worms are the beasts that help gardens grow, according to Cristy Christie. They do their best work under shade and protected from red robins, which love wormy snacks.*

**PHOTO BY CAMILLIA LANHAM**

What's outside is being hot composted: breaking down and killing pathogens at temperatures of up to 130 degrees or more simply by basking in the Paso sun. What's inside is half-composted, brought into the shade after about two weeks in the elements. It doesn't look like much until Christie plunges her hand into it, turning over the material to reveal a world I couldn't see before. Red worms writhe and wriggle alongside tiny white springtails—"We call them shredders," she informs me.

"And through their process, they transform what they eat into something very different and poop out food for soil," she says about the worms.

These are the nearly invisible little worker bees that make this hilltop worm farm possible. The little guys break down dairy cow manure into the worm poop that Christie and Reid bag up and take to farmers' markets, or gurgles into something called compost tea ("liquid biology," as Reid calls it), which can be injected into the ground. They stick 1,200 pounds of compostable material into each worm bin and 800 pounds of castings come out.

Worm poop is so much more than a castaway. It's full of life—nitrogen-rich microbes, protozoa, nematodes, and little fungi that the couple says help make soil healthy. Plus, dozens of other as yet un-named invisible friends.

"It's a huge field that's got lots and lots of work to do because there's tons of bacteria we haven't even identified yet," Christie said. "I think we know more about the other side of the moon than we do about the soil under our feet."

This little world, which science is starting to earnestly dig beneath the surface for, is what fed the broccoli that transformed their life.



### **STOREFRONT**

*Jac Reid, co-owner of Black Diamond Vermicompost, talks with customer*

**PHOTO BY CAMILLIA LANHAM**

But before that broccoli, there was a desire to make a change.

"Jac and I wanted to do something together," Christie says. She was a real estate broker; he was a contractor.

Both had their fill of those respective careers. And along came something else:

“My favorite book, *Teaming with Microbes*,” she says. In it Jeff Lowenfels talks about the science behind healthy soil and the power of worms, among other things.

She says he tells a story about how he didn’t know anything about soil at first, which is similar to her story.

“I thought you dug a hole, put the plant in, and then it grew,” she says. “Boy was I wrong.”

The couple totes around their dog-eared copy to the various SLO County farmers’ markets. You see, they don’t just sell compost. They also post up placards with definitions of microbes, carry around soil biology informational packets, and chitchat with customers about what could improve their gardens. It’s all about education. Because what they learned changed their life, and they believe that knowledge should be shared.

“I’ve been farming for the better part of 40 years, and it wasn’t until I read this book that I understood,” Reid says. “We’re just trying to give our customers anything we can to have a nice healthy garden.”

### **Grow your own**

*Black Diamond Vermicompost products are available at the farmers’ markets in Baywood Park on Mondays from 2 to 4:30 p.m., Templeton Park on Saturdays from 9 a.m. to 12:30 p.m., and in SLO in front of the World Market on Saturdays from 8 to 10:45 a.m. You can also buy compost, compost tea, and even worms via the website or by visiting the farm in Paso (by appointment only). For more information or to learn about how to start your own miniature worm farm, click over to [slocountyworms.com](http://slocountyworms.com) or email [cristy@slocountyworms.com](mailto:cristy@slocountyworms.com).*

The goal is ultimately to keep things as natural and organic as possible—no spraying for pests. Let the soil take care of things. The proof the couple has about their compost products is from the people they sell to. One loyal customer, who’s also a photographer and an avid flower gardener, gave them images of her garden. They’re full of pristine purple and yellow irises and peach-colored roses.

“Look at the leaves; there are no blemishes, and the blooms are just ... ,” Reid says with a laugh. “It blew me away.”

Christie points to the oaks growing in their yard. In 2012, the couple injected compost tea into the ground around the roots and then applied straw mulch to the top of the soil. They repeated the process in 2013.

“These trees are fairly stressed because of the drought,” she says. But those three oaks look like they’re doing way better than the grove just down the hill, which hasn’t received any treatment. The bark isn’t cracked, the canopies are full and green, and the Spanish moss hanging from the branches is pretty much nonexistent. It’s like viewing two different worlds.

“There is such a need for understanding what healthy soil is all about. I think every community should have a small worm farm,” Christie says. “Healthy soil is directly linked to healthy people.”