

WORM FARM HOPES TO HIT PAYDIRT



'Panua' is Sri Lankan for 'worms,' and Panua Farms means thousands of earthworms for Mike Keller in his Casserly Road worm farm. Shmuel Thaler/Sentinel photos

New company puts earthworms to work in solving animal-waste problem

By NICOLE STRICKER

SENTINEL CORRESPONDENT

WATSONVILLE — Pajaro Valley worm farmers see gold in gobs of worms.

Because earthworms convert harmful animal waste into rich fertilizer, the slimy wrigglers delight ranchers and environmentalists. The fledgling farm, launched two weeks ago by a local couple, will harvest 3 tons of worms per month by summer. The farmers also teach others how to grow worms in a nationwide effort to solve the country's mounting animal waste problem.

The Watsonville-based Panua Farms, owned by Annaliese and Mike Keller, is the only large-scale worm distributor in the state. The couple became interested in the idea after Mike's job as a financial writer went south with the stock market. While deciding what to do next, he learned of a demand for scads of earthworms.

"I started doing my research," Keller said. "When I really started looking into it, I found

out just how big the market is."

California cattle produce 125,000 tons of manure every day, according to the state Farm Bureau and the Environmental Protection Agency. Nationwide, animal waste outnumbers human waste 130 to one. Large farms, which house scores of animals in a small area, are under growing pressure to remove waste before it seeps into the earth and contaminates ground water.

"It's estimated that 80 percent of our water supply passes through agricultural areas," Keller said.

To curb water pollution, the EPA has started cracking down on animal waste at the large farms. Earthworms could be the solution to their problems.

Manure-munching worms, called red wigglers, eat their body weight every day. Half their meal is converted into castings — earthworm waste that is a rich soil fertilizer. The rest gives them energy to grow and multiply.

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In earthworms, Panua Farms' Mike Keller feels that he is holding a profitable future.

Worms

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The futuristic ideal of garbage removal, the worms convert 100 percent of harmful waste into fuel and self renewal.

Though the wonders of these worms are widely known, so far they are no match for the mountains of manure.

"People have done this a number of times in our country, but they've only been able to treat two or three sites before they run out of worms," said Keller.

To tackle the problem full force, one man has set out to breed an army of wrigglers. Salinas native Greg Bradley, owner of B & B Worm Farms Inc. in Oklahoma, set up a nationwide network of worm growers in hopes of making enough worms to keep up with the animal waste.

So far his network of worm farmers, including Watsonville's Panua Farms, generates 100,000 pounds, or 50 tons, of earthworms every month.

But, according to Bradley, 50 million pounds, or 25,000 tons, of worms are needed to handle just 10 percent of the large animal market.

The worms in Bradley's army are munching through manure from one dairy, one chicken farm, one pig farm and four race tracks. He has 25 more large animal farms lined up, but there are not yet enough critters to go around. That's where worm farms like the one in Watsonville come in.

Panau Farms

WHAT: Only large-scale earthworm farm in the state, raises earthworms to convert animal waste into fertilizer.

OWNERS: Annaliese and Mike Keller.

FOUNDED: October 2002.

WHERE: 970 Casserly Road, Watsonville.

GOALS: Grow earthworms and teach worm-farming. With 100 pounds of worms, which will double every 70 days, farmers can sell a fraction of their brood at \$7 per pound, and keep the rest to propagate, they Kellers say. Farmers also can sell castings, the rich byproduct worms make at half their weight per day, for \$150 per 1,000 pounds.

INFORMATION: Mike Keller, 426-WORM (9676).

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MIKE KELLER

Aspiring worm farmers can start out with just 100 pounds of worms, which will double every 70 days. Farmers can sell a fraction of their brood, at \$7 per pound, and keep the rest to propagate. They also can sell castings, the rich byproduct worms make at half their weight per day, for \$150 per 1,000 pounds, proponents say.

Because worm farming takes little effort — worm bins are watered once a day and stirred twice a week — people with the space to grow them are eager to learn how. Watsonville's Panua Farms held its grand

opening one week ago and already has lined up 10 more prospective growers.

"We are poised. We've got the worms and the scientific backing," said Keller. "We have everything going for us, and we're going to turn that animal waste into castings and replenish the topsoil around the world. And it's starting right here in Watsonville."

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