Composter: Healthy plants need nutrient-rich soil

By Kathryn Reed

MINDEN – "America's Garden Book" was first published in 1939. It talks about humus (not hummus) as the key to good soil composition.

In 1978, Craig Witt graduated from UNR with a degree in agriculture. Nothing in his textbooks said anything about humus; the organic matter that is created after plant and/or animal matter decompose. He left Reno for his family farm in the Carson Valley with a certificate to spray pesticides.



Craig Witt talks composting at Full Circle Compost. Photos/Kathryn Reed

And spray he did.

"We kept adding more fertilizer and got less results," Witt said. "My grandfather told me he was not sure about the stuff I was learning in college."

The 350-head of cattle were producing less milk and the 600

acres they farmed didn’t turn out the quantity of produce they had before pesticides were introduced.

Witt, who had his first garden as a second-grader, knew things had to change. His mother’s diagnosis of liver cancer nearly 25 years ago also led him down the path of researching nutrition.

For 15 years he has been operating Full Circle Compost in Minden. In his backyard in Gardnerville last year he grew sunflowers 15-feet tall and tomatoes 12-feet high.

“Commercial garden soil looks like wood,” Witt said. “Humus is the end result if composting was done right.”

He is quick to point out that compost is a verb and not a noun.

The soil amendments he sells are so refined it’s delicate to the touch. It’s almost a silky texture instead of coarse. And there’s no smell.

What people grow their plants and produce in matters because if it’s not full of nutrients, the plants will suffer. Soil is like a food source for plants. What goes into the compost mix will dictate the richness of the end product.

“People are becoming more aware soil is living,” Witt said.

At Full Circle Compost recipes are used to create their different blends. It’s a combination of 10 percent horse manure, 10 percent cow manure, 30 percent green waste, 10 percent finished compost carbon, and 40 percent pine needles/wood waste, with the latter mostly coming from the Lake Tahoe Basin.

Witt will take green waste (for a fee) from people, as well as sell the different blends of composting material.

He said soil in this part of the Sierra Nevada is often

deficient in calcium. So he adds some of the mineral to his mixture. Feather mill is added to another blend to boost the nitrogen content.

It’s possible with all the compostable matter being delivered to Full Circle Compost that a Tahoe Blend could be created. Witt says he’d need someone on the South Shore, like Tahoe Sand and Gravel or Aspen Hollow, to sell it.

For six years Witt has been composting at the Northern Nevada Correctional Center in Carson City – known casually as the Prison Farm.

All the food waste people want to give him goes here. Lira’s Market in Gardnerville was the first company to bring him food scraps. Whole Foods in Reno does now. A group in Truckee this year had a zero-waste crab feed and all the shells, compostable paper products, flatware and bag it was collected in ended up at the prison. South Tahoe Refuse’s collections from its pilot compost program end up at the prison, too.

Besides food waste, the crab shells, bones from meat products, meat, compostable food service products, and paper are part of the mix.

Grinders are used to blend everything together. Wood chips are mixed in. A machine turns the whole concoction. Water is regularly sprayed on the mix to keep it moist.

“When you turn it, it gives the bacteria fresh air, oxygen. You want aerobic bacteria in a compost pile,” Witt said. “When steam comes off, it means moisture is leaving.”

Temperatures of the mix hit 150 degrees, which is hot enough to kill any pathogens.

It takes 10 weeks for food waste to be turned into soil amendment.

Embassy Suites in South Lake Tahoe uses the compost from Full

Circle for its plants. Zephyr Cove Resort, which is part of the pilot program on the South Shore, is considering using the end product in its grassy areas.

At the office in Minden, Witt has several worm bin containers that are more suited for the backyard gardener. He said they work at Tahoe because they don’t attract critters.

This is called vermicompost. It’s sold in stores. If it’s good quality, it won’t stick to your hands.

Worms till the soil and eat the pathogens.

“You don’t see worms in dead soil,” Witt said.

Not only is the end product a rich compound that is good to garden with, but a liquid that Witt calls “worm wine” is produced. This can be sprayed onto plants as a natural fertilizer.

His end result looked like root beer, whereas the commercial product looked like Mountain Dew, so it was severely diluted before it was sold.

For more information about Full Circle Compost, click here or call (775) 267.5305.

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