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Making a profit from animal waste

Composted manure used for bedding, sold to landscaping companies

Story and photos by Kristin Millis

Waste is the wrong word to describe the cow manure at Lochmead Farm near Junction City, Ore. For the last year Buzz Gibson and his son Chris have been using a Brown Bear PTO PA35-10.5 compost attachment on a New Holland bi-directional TV145 to make compost for the cows' bedding and sell to local landscaping companies.

What was once waste now generates a profit.

The 600-cow dairy flushes animal waste in the freestall lanes to a separator. The liquid waste goes to a lagoon while the manure cake drops to a pile below. There it sits for a couple of

days before Chris Gibson makes long windrows of the cake for composting. During the composting process the manure cake will heat to around 130 degrees F, killing the bacteria. When the temperature drops, Chris Gibson turns the pile again. After a week the bacteria-free compost is then put into the freestalls for bedding, or shipped to a local landscaping company.

"It's a simple process. It only takes about two hours a week," Buzz Gibson said. "It doesn't take much time on a 600-cow dairy."

Their average cycle is to turn the rows of manure on Mondays and Fridays as long as the weather cooperates.

"We don't turn it when it's raining," Gibson said.

Although working in the rain can be a problem, Oregon's notorious wet weather is a boon rather than a bane for composting, as the process requires

water. During heavy downpours, the compost can be covered.

The new bacteria-free bedding is laid for the cows on Monday or Tuesday.

"What we don't use for bedding, we sell," Gibson said. "We're able to do all the bedding for the cows, as well as sell one to two loads a week at \$180 a load."

A load is approximately 16 yards of compost. Cow manure fits the profile for perfect compost, which should have a 30:1 carbon/nitrogen ratio.

"It comes out of the cow that way," Gibson said.

Gibson and his son have been composting for the last year and a half after buying the tractor and compost attachment at Corvallis New Holland. He estimated a \$30,000 to \$35,000 net profit in the last year from the additional income and not having to pur-

Buzz Gibson turns a row of manure at Lochmead Farm near Junction City, Oregon.



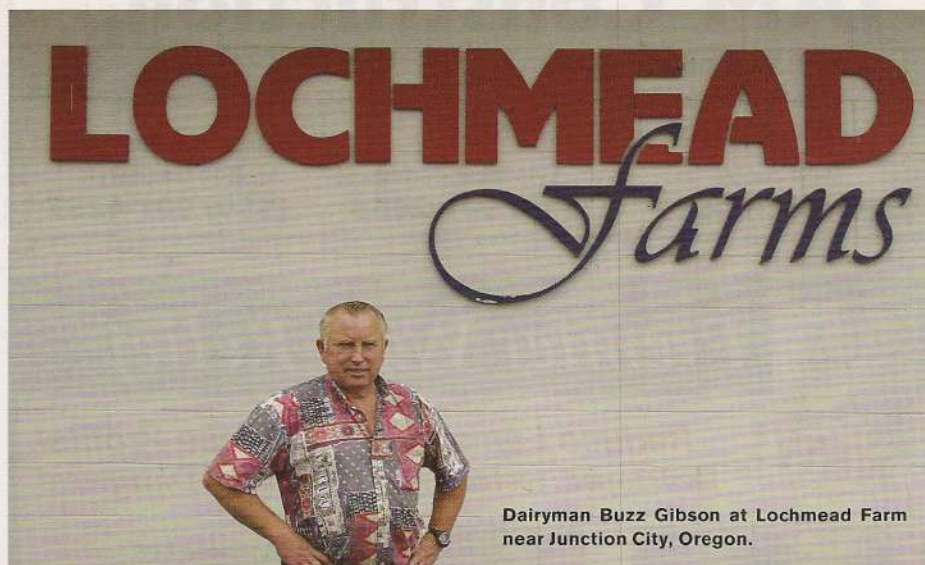
chase sawdust for bedding.

But, Gibson said the hidden savings are found in the cows' health.

"Reducing bacteria adds hidden savings from the cows that would be lost if you use sawdust. Mastitis doesn't kill a cow, but you lose the cow for milking," Gibson said.

He estimated an additional savings of \$32,000 to \$40,000 a year from healthier cows that aren't removed from the production line because of bacterial infections.

"When compost is properly done, you kill all the major environmental bac-



Dairyman Buzz Gibson at Lochmead Farm near Junction City, Oregon.

teria," Gibson said. "Compost bedding is different from dry manure bedding."

Klebsiella mastitis, often called sawdust mastitis, is one of the worst forms of mastitis to affect dairy cows. Since Lochmead Farm switched to the compost bedding from sawdust, bacteria counts are between 1,100 and 4,000 and *E. coli* is under a 100. The SCC is between 190 and 250.

"We seldom lose a cow now," Gibson said.

For more information on composting and equipment contact Brown Bear, Ph. (402) 987-3412, email: sales@broyhill.com or log onto: brownbearmfg.com Oregon dairymen can call Corvallis New Holland at (800) 325-2895. Or visit booth EH 4202 Feed & Manure Equipment at the World Dairy Expo. ■