Researchers test horse-composting methods

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It is a big question — about a 1,200-pound one.

What will horse owners do with the increased number of dead horses if the American Horse Slaughter Prevention Act passes, ending the processing of 90,000 head per year for foreign consumption?

Local researchers are refining a method of turning the 1,200-pound bodies into compost.

"If you look at it environmentally and politically, it works. It's the whole circle of life thing. You grow the grass to feed the animals and then turn around and use them to do the same thing for the next generation," said Lance Baker, associate professor of animal science at West Texas A&M University.

The ban on slaughter for human consumption passed the U.S. House of Representatives on Sept. 7 and moved to the Senate for debate.

The options for dealing with a carcass are burial, rendering, landfill disposal, burning, composting or bio-digesting, Baker said.

The Amarillo landfill does not accept cattle or horse bodies. Canyon's does.

"We get calls from vets and farmers all the time," said Michael Rice, Amarillo director of public works.

Hereford Bi-Products, a rendering business, quit picking up horse carcasses in December.

The remaining options were not attractive.

"Burial is not an option for the average horse owner," Baker said. "And there's the coyote method — but who wants to think about that?"

The research by Baker, Extension Agricultural Engineer Brent Auermann and WT graduate student Laurie Brown has resulted in nine compost piles. Work began in February. The first of the piles will be finished within weeks.

"The intent of the research is to utilize an already existing system," Baker said. "Composting is a system that's been around for thousands of years."

The process is relatively simple: Chopped hay goes on the bottom of the pile, then the horse's carcass. It's topped with different mixtures of straw or hay and manure and water.

"Then you let the bacteria do their job," Baker said. "If the piles are managed right, you have nothing but wonderful fertilizer."

Temperature is a good indication of whether the composting process is working correctly, Auermann said.

"The temperature should start rising within 12 to 24 hours and reach a level between 131 degrees and 155 degrees and stay there for several weeks to a month."

Even composting takes more resources and space than most horse owners have at their disposal, so if the practice is to take off, it would have to be done on a commercial scale, according to the researchers.

Large-carcass composting is a growing practice among feedyards and dairies, said Auermann, who has researched the process for about five years.

A large carcass will take from seven to nine months to compost completely, at which point it can be used as a fertilizer for farms or in other uses.

"We're just investigating a natural system," Baker said.