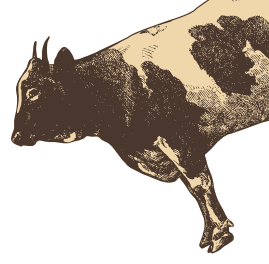


Cardston County: Composting Cows to Conserve Carnivores



BY NIGEL DOUGLAS



If you were making a list of positive conservation measures implemented in Alberta, composting cows wouldn't necessarily be one of the first things that sprang to mind. But, in fact, Cardston County in southwestern Alberta has been showing tremendous leadership in taking measures to reduce conflicts between carnivores and livestock. Composting cows is a significant part of Cardston's program.

In the August 2012 issue of *WLA* the story "Good News Bears" looked at some of the initiatives carried out by the Drywood Yarrow Conservation Partnership to help local residents live with locally healthy grizzly populations. Here we highlight Cardston County and its shining example of how one forward-thinking local municipality can itself play an enormous role in reconciling two goals that too-often are seen as incompatible: keeping the County's people and livestock safe while allowing carnivores such as grizzlies to go about their business.

Tim Romanow, Executive Director of Milk River Watershed Council, is a former Conservation Extension Specialist with Cardston County. He points out that, since the advent of BSE (Bovine Spongiform Encephalopathy) in Alberta in 2003, dead livestock have become a growing problem. "There used to be a market for deadstock," says Romanow. "But BSE destroyed that; it became cost prohibitive to collect carcasses." Before 2003 southern Alberta processors used to take 1,300 carcasses a year from Cardston County. That number "dropped to zero," says Romanow.

Of course 1,300 extra dead animals lying around on the landscape were not going to go unnoticed by local carnivores. Increasingly bears and wolves were drawn to investigate the easy food source and the potential for conflict increased dramatically. "Once they have

fed on (a dead cow) they will come back, sometimes year after year to the same location, hoping to find a free meal," says Rod Foggin, Agricultural Fieldman with Cardston County.

The impetus for both the Drywood Yarrow group and Cardston County to look at alternative ways to deal with the growing problem was provided by

says Romanow. Funding from Alberta Sustainable Resource Development (now Alberta Environment and Sustainable Resource Development - AESRD) and the Waterton Biosphere Reserve was crucial in setting up these early programs.

The next challenge was how to make the program sustainable in the long term. Collecting livestock carcasses was just

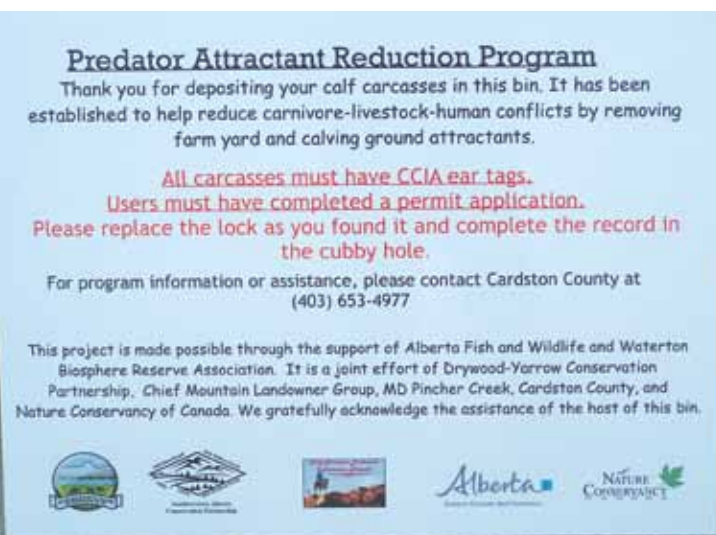


Active deadstock compost pile 6-8 months old. One of the issues with composting on this scale is keeping the piles moisture levels high enough to maintain the microbial digestion. This is the job of the sprinkler on top of this pile.

PHOTO: © T. ROMANOW

the Oldman Watershed Council with a 2008 visit to the innovative Blackfoot Challenge program in Montana. Cardston was quick to adopt the Blackfoot Challenge practice of providing large metal carcass disposal bins to offer residents a safe, economical way to dispose of their dead livestock. "We could provide a service that's beneficial to ratepayers to address health concerns and also show we are doing our part as producers to deal with the issue locally,"

part of the picture; they still had to be disposed of and the County still had to pay to transport them to the nearest rendering plant for disposal. While temporary funding may be available to set up such a collection program, it would not necessarily be a reliable source of maintenance funds for evermore. "Funders are results-based," points out Romanow. "It is easy to find start-up dollars but what happens when the grants run out?"



TOP: Bin composter (starter) with two 1,500 lb plus cows.

MIDDLE, BOTTOM: Carway area deadstock bin. This bin sign ironically was peeled off and chewed in the spring of 2012 by a resident sow and two cubs. Bins were confirmed bear proof as the bears couldn't get into the bin at the carcasses being stored for pickup.

PHOTOS: © T. ROMANOW

A second visit to the Blackfoot Challenge program led to the somewhat startling solution of carcass composting. Surprising as it may be, given the right conditions an entire cow carcass will compost in a matter of months. “You use woodchips and straw to get the process started,” explains Foggin. “With the right amount of moisture, heat generates so it will decompose.”

The Blackfoot Challenge program services three municipalities and works as an effective partnership. “The department of highways supplies the truck,” explains Romanow, “one of the municipalities supplies a trailer; a producer does the farmyard pickup. It provides a part-time job for a producer.”

Deadstock composting in Canada comes with its own complications. Ironically, regulations south of the border make it harder to pick up deer carcasses than livestock carcasses because of the associated risk of chronic wasting disease. In Canada the opposite is true: because of BSE, regulations are much stricter in relation to moving cattle carcasses. “The finished compost can't leave the site,” points out Foggin, “so it will be used in the landfill for landscaping.”

The set up costs for the composting facilities are around \$100,000, and these are due to be paid by a grant from AESRD. Once established, the economics of the composting program are impressive. Operating costs are expected to be in the order of \$10,000 per year. Currently it costs Cardston County eleven cents per pound for a processor to pick up carcasses. Composting is expected to price out at three cents per pound. The program also has the flexibility to pick up hogs and horses, even sheep, though Romanow points out that sheep wool can present a challenge. The new facility will give Cardston the capacity to handle 444,000 pounds per year, equivalent to 1,100 carcasses. This is nearly the number of carcasses that were picked up every year in the days before BSE. Construction of the new composting facility is currently underway. Piloting should have started this fall so the facility should be ready for operation for the start of the calving season in February 2013.

Though nothing like this composting facility had ever been built in Alberta, Cardston County, to its credit, was willing to take the initiative and to get ahead of the parade. “We presented it to the county as an opportunity to showcase and be the first in the province to do this and provide a service to the ratepayers,” says Romanow. “The county got on board right away. Council has been very supportive, particularly considering few councillors are directly impacted.”

Part of the strength of Cardston's attractant management program is that it was very much locally driven, the impetus provided by local producers trying to find their own solutions to problems. “My thought was to distance ourselves from a government of Alberta project and make it a landowner-driven stewardship initiative,” says Romanow. “The County and councillors agree; they have ownership of the project. This is a shift from the way it's happened in the past.”

Though he no longer works for Cardston County, Romanow is understandably “quite proud of” Cardston's carnivore program. “Producers are carrying it on and the county is keeping the ball rolling.” And the success of the Cardston program is already having a knock-on effect beyond the County's boundaries. “Pincher Creek, Willow Creek and Ranchlands are all working on carnivore projects,” says Romanow. “Grande Prairie and Clearwater have looked at our projects to adapt to their own issues.” This is good news for livestock producers and good news too for carnivores in Alberta – particularly threatened grizzly bears. 🐻

Thanks to Tim Romanow for providing the photographs for this article.