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A few Manitoba ranchers are breeding cattle back to their natural, grass-fed state. Here's why

Against *the* grain

A DECADE ago, when BSE devastated cattle economics in Canada, the Bouw family had a collective epiphany.

The Bouws are cattle farmers. They raised cattle and ran a feedlot on which they fed the decades-old conventional diet of barley and corn to other people's cattle to raise them to slaughter weight.

BILL **REDEKOP**

A grain diet speeds weight gain so cattle get to market faster. It also produces larger animals. But cows are ruminants with four stomachs designed to digest grass, not grain. A rich grain diet causes cattle to contract diarrhea, and for some it becomes a chronic condition. The cattle also suffer acidosis, a very bad form of acid reflux.

To prevent cattle catching disease in this compromised state, and because feedlots keep cattle in close quarters where a disease can spread quickly and result in financial ruin, cows are fed antibiotics mixed into their feed as soon as they arrive as a preemptive strike.

But studies have begun showing those antibiotics can transfer to humans eating cooked meat. The fear is human overexposure to antibiotics could lead to resistant strains of bacteria. The United States Department of Agriculture recently recommended feedlots cut down their use of antibiotics.

The BSE crisis — the discovery of a single cow with mad cow disease in 2003 that made Canadian beef a pariah internationally for a time — caused a huge reassessment within the Bouw family. Family members saw themselves as addicts — addicted to throwing money at big agriculture for an endless supply of feed supplements, antibiotics and growth hormones. The way to kick the habit was standing right in front of them, and under them, and all around them: grass. Just grass.

Today, Bouw brothers Jonathan and Stefan, along with parents Herman and Marilyn, don't just raise grass-fed beef on their farm near Anola, about 25 kilometres east of Winnipeg. They are re-breeding the cattle to get them back to their natural, grass-fed genetics so other ranchers can raise them. They are at the epicentre of the grass-fed beef movement.

"I read *The Silent Spring* in the '60s (the groundbreaking book by Rachel Carson about environmental impacts from pesticides)," said Marilyn, directing her comments toward her two sons. "You didn't know, it but those things were being bred into you."

How did farmers come to start feeding grain to their cattle? The practice took over in the 1950s thanks largely to developments in synthetic fertilizers, Jonathan said. The fertilizers increased grain yields exponentially, so feedlots were invented to take the extra grain and feed it to cattle. About 50 per cent of a cow's diet today is grain once it reaches the feedlot, he said.

The advantage to feeding grain, along with using growth hormones, is a huge one: efficiency. The cattle virtually explode in weight. You can get a calf to market in as little as 12 months on grain, versus 24 months for a grass-fed animal, said Jonathan. That's an extraordinary difference and it explains why the industry opted for grain diets so completely. Grain also allows animals to get up to 40 per cent bigger — to about 1,500 pounds before slaughter, versus about 1,100 pounds for grass-fed cattle. "Grain was a game changer," Jonathan said.

But reversing those genetics, as the Bouws do, is complicated. You can't just take a calf and raise it on grass and expect positive results.

"The meat tastes like shoe leather," Jonathan said.

What you have to do is reverse half a century of cattle breeding because grain has changed the whole skeletal frame of today's beef cows.

To fatten animals faster with grain, breeders selected bigger-framed cattle with each passing generation, because those animals could put on more pounds per day. (They put on about five pounds a day on a grain diet in feedlots.) The genetics of animals with larger skeletons were the most prized and their genetics were carried on.

But an exclusively grass diet cannot support the larger frames of today's cattle. With grass, you're going back to breeding smaller cows that can support their bodies naturally.

It takes about four generations of feeding cattle on straight grass to obtain smaller, good-tasting beef cattle. That's where the Bouw family's grass-fed bulls come in. With their bulls, a farmer can produce that grass-fed beef in two generations. The Bouws sell about 30 grass-fed bulls per year for breeding from their line of cattle called Edie Creek Angus. They have been breeding their bulls since 2005.

WHAT grass-fed beef lacks in efficiency, it may make up in health. "The health benefits are really quite striking," said Martin Entz, a professor of natural systems agriculture at the University of Manitoba.

It's the old saw about bad fat, Omega 6, versus good fat, Omega 3. The object in a healthy human diet is to get those fats in balance. "You've probably heard that wild game is really healthy for you... In venison, the ratio is 1:1 (Omega 6 vs Omega 3). We evolved as a species eating 1:1 ratios," said Entz.

But a typical human diet today has an 8:1 ratio. "That's why we're getting so much heart disease.

We like to eat fat," said Entz. Grain-fed beef has about a 6:1 ratio, whereas grass-fed beef has just a 2:1 ratio.

Grass-fed beef also has elevated levels of conjugated linoleic acid (CLA), another agent in the fight against heart attacks. Grass-fed beef is also high in cancer-fighting anti-oxidant selenium and Vitamins A and E.

As for the taste, proponents claim grass-fed beef is more tender and flavourful. The meat of an older cow just naturally takes on more flavour, as if marinated longer, Jonathan said.

Finally, grass-fed cattle are happier because they don't live in confinement on a feedlot. "They're out on nice green pastures and loving life," said Stefan, the other Bouw son.

CAM Dahl, general manager of the Manitoba Beef Producers Association, has heard it all before. He has no problem with cattle producers trying to find a niche market with grass-fed livestock. What he tires of is "this (theme) that how we did things 50 or 60 years ago was so much better than today... That just isn't true."

Dahl said science doesn't back up claims cow health is compromised by a grain diet. As well, the source of antibiotic resistance has been found to be hospitals themselves, he said, citing a recent study by the Centers For Disease Control in Atlanta, Ga. Neither are the antibiotics used for animals the same as those used for humans.

"If you look at the science, food-borne illness is continually declining, and production practises across agriculture are leaving a smaller environmental footprint," Dahl said.

The Bouws don't blame other ranchers for finishing their calves on diets of grain. Those farmers are responding to market signals. What the Bouws are trying to do is demonstrate grain-fed beef is economically viable, too.

Jonathan argues the economics of grass-fed cattle aren't bad once all the bills are tallied. For example, hay to feed grass-fed cattle through the winter is half the price of feed grain right now.

Yes, grain gets a calf to market much faster, but it also requires that the producer start buying such things as feed supplements, growth hormones and antibiotics.

Contrast that to the miracle of converting a mostly useless product like grass, which humans can't consume and has virtually no food value, into a high-protein food: steak, roast, ribs, hamburger, sausage, stew.

Growth in the grass-fed food sector has some legs, said Entz. "Grass-fed is huge in Europe. That extends into dairy products. For example, milk from pastured dairy animals is promoted as healthier for children.

There are about a dozen grass-fed beef ranchers in Manitoba today.

But they are all fairly small producers. They might market 10 to 20 heifers a year. Combined, that may total about 200 head annually, nearly all marketed directly to consumers. Compare that with the rest of Manitoba ranchers who sell about half a million cattle per year.

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Want to try some **GRASS-FED BEEF?**

All grass-fed producers have to be their own retailers. Jim Lintott of Oakbank, president of the Manitoba Grass Fed Beef Association, goes a bit further, selling individual cuts at the St. Norbert Farmers' Market every weekend. His markup can range from 25 per cent to 100 per cent, depending on the type of cut, versus what you pay in a supermarket for conventional beef.

You can find grass-fed beef at such places as Crampton's Market and Vita Health, but the selection of cuts is somewhat limited. Fusion Grill and the Velvet Glove restaurant serve grass-fed beef.

Most producers are like the Bouw family and just sell a quarter or half a cow at a time directly to consumers. That's where you get your best price. The Bouws sell a quarter of a cow, or about 125 pounds of meat, for about $500. Jonathan Bouw maintained those cuts of regular beef would cost about $550 to $600 in the supermarket. The challenge is people may have to learn to cook cuts of meat they aren't familiar with.

The $500 includes the cost to process the cow by provincially inspected abattoir BJ Packers in Beausejour. Often, several families will go together on the purchase of a quarter or half a cow. A quarter of a cow can fill about a quarter to a third of an average freezer, Jonathan said.

The Bouws sell 20 grass-fed heifers annually by direct sale, as well as grass-fed lamb. The lamb is also sold by the quarter or half. They also sell organic grains to commercial mills.

More information is available at manitobagrassfedbeef.ca. The Bouws' website is ediecreekangus.com.

Stefan Bouw (left) with Mikaya, 2, and Jaxon, 4, and Jonathan Bouw with Lucille, 19 months, inspect pasture where they also raise grass-fed sheep.