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### Director's Note - Stan Wiebe

Howdy Folks;

As November is upon us again we need to look back over the past year and review what we did, what worked, and what we could improve on for the following years. For us this year we started out with calving in mid-February putting up with a lot of cold weather. This was worth it though as our calves were up and running before the April wet snow came. A lot of ranches did have some severe losses because of the weather.

Crops were seeded into decent moisture, but the following weeks turned quite dry. Pastures here started very slow and due to lack of moisture did not grow to their full potential. Some of our cows are pastured out at the Rocky Mountain House community pasture but with the lack of rain there they came home in mid-August rather than mid- October. This created some unexpected challenges in that we had to look for different feeding options at home. With help from Courtney from Blue Rock Animal Nutrition we came up with a few options focused on different rations. Cows were started on a silage, ground barley, pea straw, and barley straw ration. Our silage yields came off surprisingly good as well as our cereal and pea crops.

In a year like this with feed shortages it is much more important to test your feed. I found out this year that our silage was a bit higher in moisture than usual which

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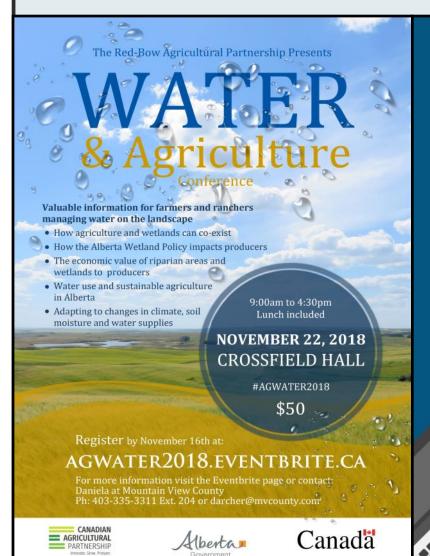
does make a difference in how much to feed. A lot can be wasted if feed is higher in value or, on the flip side; cows can go down in body condition if feed values are low. If you want more information or to learn more about feed testing and winter-feeding options you should plan to attend some of the seminars available throughout the area like the Feed What You Need Workshop in Swalwell on November 29<sup>th</sup>.

Just like your favorite sports team, ranching/ farming hopefully will be different next year.

Stan Wiebe

Cattle grazing on Stan Wiebe's farm







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# **Building Soil Resilience With Cover Crops**

Research is building on the many benefits of cover crops, from their ability to help boost yields in subsequent crops to improved soil structure and reduced erosion. A new area of focus for researchers and producers alike is the use of cover crops in so-called "shoulder seasons" – fall after harvest, and spring before planting – in order to help build resilient, productive soils.

"Where we are with climate change, it's about extremes," says University of Manitoba cropping systems researcher Yvonne Lawley. "Sometimes both extremes – too wet or too dry – occur in the same growing season, like in Manitoba over the last couple of years where we've had both not enough moisture and too much in the same season.

"That's where the theme of soil health comes in. We need soils that are resilient enough to handle both extremes," she says.

The "new paradigm of cover crops," according to Lawley, is to use cover crops in the shoulder seasons, not just by eliminating fallow but by using the entire growing season, before crops

are planted in the spring and after they come off in the fall, to build biomass and provide energy to soil microorganisms and root systems and improve infiltration and aeration in the soil.

In 2017, Lawley started a threeyear project funded by Manitoba Pulse and Soybean Growers that will look at the use of cover crops following edible beans, which is a low-residue crop.

a researcher working with cover crops, it's about demonstration of principles the can be adapted and applied to different situations. There is a diversity of needs and questions about how to use cover

"We're planting seven species and one mix at three timings – mid-August, September first and middle of September," Lawley explains. "Edible beans are not harvested in mid-August, but we'll look at the potential for interseeding or other early establishment strategies at that date."

Lawley's main research goals are to identify which cover crop species can produce the most biomass in late fall as well as optimal planting dates for cover crops following edible beans.

Management questions: According to Lawley, it's important to take a "humble" approach to this type of research because of its real-world challenges and applications.

"It's important for me to do experiments that compare replicated treatments side-by-side but the work I do is informing those people who are innovating on their farms," she says. "For me as a researcher working with cover crops, it's about demonstration of principles that can be adapted and applied to different situations. There is a diversity of needs and questions about how to use cover crops across Western Canada. Where do you start? It's a conversation between farmers and researchers – that's how our knowledge of how to use cover crops in Western Canada will move forward," she says.

There are many variables when it comes to working with cover crops. Farmers have to juggle planting and termination dates, budget for extra seed (and sometimes extra equipment), and most importantly, choose the cover crop species that will work best on their operations.

Lawley says the latter choice is more difficult in Canada than the U.S., where help for producers to select cover crop species and source seed has become



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# Cow Feeding Economics This Winter

Rising feed costs during the second half of 2018 have many producers wondering about the economics of overwintering cows this fall. The question; is it even feasible to keep cows. Some are liquidating their entire herds, others are culling heavily and many are trying to find economical ways of maintaining their herds. The two main factors to consider in developing feeding economies are, of course, price and availability of feed. An additional factor to consider this winter will be the length of the feeding period. Our forage specialists are suggesting this feeding period could be extended by 30 days. The hot dry summer this year resulted in pastures being stressed to the point that it may take an additional 30 days next spring for the grass to recover enough to take normal grazing pressure.

I ran some rations through Cowbytes to arrive at daily feed costs to add perspective to feed price variations and the effect on a producer's bottom line. The rations assumed 1400 pound cows at mid pregnancy. The barley/straw ration

priced barley at \$5 per bushel and barley straw at \$50 per ton. This resulted in a ration that came to \$2.20 per head per day. With a straight grass hay ration for hay priced at 8 cents per pound the daily cost increased to \$2.75 per head. Hay priced at 10 cents per pound jumped the daily cost to \$3.40 per head and with hay at 12 cents per pound the daily cost bounced up to \$4.10 per head.

I ran those numbers through Rancher's Return to give us some insight into the effect varying feed prices have on a producer's bottom line. I used a 100 head herd with a weaning percentage of 85%. It was assumed that 650 pound steer calves averaged \$210 per cwt and 600 pound heifer calves averaged \$190 per cwt. The feed costs for the barley/ straw ration amounted to 53% of the total production costs for the herd and resulted in a gross margin of \$13,250. A hay ration priced at 8 cents per pound increased feed costs to 58.5% of total production costs and reduced the gross margin to minus \$250 basically break even. Hay at 10 cents per pound jumped feed costs to

63.5% of the total resulting in a negative \$15,131 gross margin. Feed costs increased to 68% of total production costs for hay priced at 12 cents per pound resulting in a loss of \$30,350.

Feed costs this winter are basically charges against next year's calf crop. Break evens in the fall of 2019 for this example herd on a barley/straw ration comes in at \$176 per cwt for next year's calves. The herd on 8 cent per pound hay ration would need \$202 per cwt to break even. At 10 cents per pound, break evens are \$229 per cwt. Break evens for 12 cent per pound hay are \$258 per cwt. This analysis underscores the necessity of managing feed costs for a cow/calf operator. Feed costs are by and far the largest component of the production costs in a cow/calf operation.

Author: Ted Nibourg

# ALBERTA BEEF PRODUCERS AND YOUR PROVINCIAL CHECK-OFF DOLLARS

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A producer plebiscite will be your opportunity to make a decision on future funding for your organization and industry. The Agricultural Products Marketing Council is preparing the regulation that will outline the rules and procedures for the plebiscite, which we hope will be conducted around the ABP fall meetings in late October and early November.

When the time comes to have your say in the future of your industry - get out and vote!

Alberta Beef Producers albertabeef.org

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(Continued from page 3) much easier.

But farmers' questions about how best to use cover crops don't stop there. There are others to consider, such as when and how to seed cover crops during the busy harvest season, how much moisture is needed for seeding cover crops and seed placement.

Lawley is collaborating on an experiment with Adam Gurr, a farmer in Brandon, Man., whose company Agritruth Research develops independent agronomic data on cropping systems.

Last fall, Gurr started a longterm cover cropping experiment within an annual cropping system to determine the value of including cover crops in the shoulder seasons.

"In order for us to adopt the system we need data, and I don't know that there's a lot of data yet," says Gurr. "There's a lot of anecdotal evidence out there, though, and that's what prompted us to do this study."

In the Brandon area, Gurr says producers who use cover crops tend to have integrated crop-livestock operations and cover crops are useful for extending the grazing season, but cover crops are not widely used in annual cropping systems.

Lawley's team has funding to do baseline sampling on Gurr's project for five years, but Lawley plans to continue monitoring the experiment with Gurr over the long term.

"We're going to compare any changes based on initial sampling we did. It comes down to economics, the cost of seeding, the cost of the seed, and crop yield and quality over time. We'll keep a running tally on the differences we see," he says. "If you're able to establish that there's an economic benefit to using cover crops, then you make it work. That's what were trying to do here – determine what that benefit is."

Real-world benefits: Dean Toews, who farms near MacGregor, Man. with his father and brothers, has been using a fall rye cover crop since 2005 in order to protect his soil from erosion.

"We have sandy loam soil so the surface can blow for days," he says, adding some farmers in his region who do not use cover crops end up with sand dunes in their ditches after windstorms.

On the Toews' operation, they grow fall rye following edible beans, and then plant corn in eight-inch strip-tillage

strips, terminating the rye after the corn is out of the ground. They put fertilizer right where they will plant their corn in order to prevent the rye from robbing those nutrients from the corn.

Before they moved to a striptillage system, the Toews would broadcast nutrients and plant corn directly into the rye; the corn would have to compete with established rye and would struggle until the rye was sprayed out. If sprayed too early, the corn would struggle from exposure and wind erosion issues until it was established enough.

"We'd see a 10 to 15 bushel yield drop when we left the rye too long," Toews explains. "Now we have an eight-inch barrier, with no competition for the corn to start, with the rye growing beside the row. That buys us time before the rye can go after the nutrients, and then we spray it down and it leaves a brown mat on the ground."

This means the Toews have erosion protection in two ways: they leave the rye to grow longer, a living cover after the corn is seeded; and the rye biomass from the extra growth provides res-

idue cover after termination, explains Lawley.

Toews' advice to farmers considering using a cover crop is to get it in the ground as soon as possible in the fall. In the spring, he cautions farmers against leaving the cover crop growing too long, particularly if they're not using strip tillage.

On land that is subject to wind erosion, he says the use of cover crops is a good management tool.

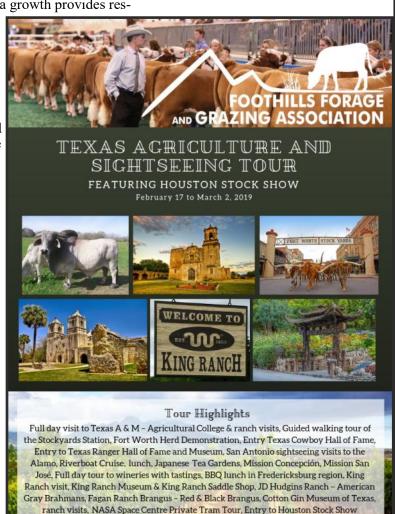
As far as the value of cover crops is concerned, Toews says it's hard to calculate, but on his operation shoulder season cover crops work almost like insurance against erosion. "What does it cost other farmers to have the soil blowing into the ditch? What if he starts corn the next year and the sand blows and cuts off the corn stalks or exposes the seed?" he asks.

"On October 19 last fall, there was this massive windstorm, and the wind broke a lot of corn stalks down. That day, a lot of dirt moved, and there were clouds two miles away from the fields. That all costs money – it plugs your ditch and wrecks your drainage. What does that cost to repair?"

The actual value of cover crops is a practical question that Lawley hopes to answer in another long-term experiment looking at cover crop intensive systems.

But for farmers like Toews, it's already evident that cover crops are an investment in resilient soil.

Julienne Isaacs—Top Crop Manager. https://cdn.coverstand.com/1031/520325/ ac288b42a2f7eb9745f9214016bd793c38 cc3425.6.pdf



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This grant will help eligible agriculture employers comply with new occupational health and safety (OHS) requirements and offset some of the costs employers may incur in complying with OHS regulations for farms and ranches, which take effect Dec. 1, 2018

- Applications open Oct. 15, 2018 and the program runs until March 2021.
- Farms and ranches with waged, non-family workers and a WCB account may apply for the grant.
- The grant covers up to 50 per cent of eligible safety expenses to a
  maximum of \$5,000 per year or \$10,000 over the life of the program
  per eligible applicant. Expenses going back to Jan. 1, 2018 are eligible
  under the program.
- · Eligible expenses include things like:
  - First aid kits, fire extinguishers and warning signage.
  - Respirators, eye and hearing protection.
  - Health and safety programs, courses, education, training and consultant fees.
  - Seatbelt installation, warning lights and auger guards to improve equipment safety.

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# Canada: A Role Model for Sustainable Beef Production

Summary: Graeme Finn reports on Canada's participation at the Global Conference on Sustainable Beef. The news is good.

"Canada is ahead of the game when it comes to beef sustainability," affirms Graeme Finn, a member of the Canadian delegation at the Global Conference on Sustainable Beef held in Ireland on October 9-12, 2018.

"What we're doing here is right on track to keep the public informed. It's good to see progress from the McDonalds' pilot program to getting a cheque from BIX/ Cargill for sustainable beef—and most of all, that other countries are looking to us for guidance. I'm pretty proud of where we are right now in the world."

The Global Roundtable for Sustainable Beef (the conference host) is a global initiative that aims to improve the sustainability of the global beef value chain through leadership, science and stakeholder engagement/collaboration. It is the umbrella organization and governing body for initiatives in member countries, which includes Canada (hence our interest in this).

Canadian representatives at the conference



Of the 245 attendees, Canada had the biggest delegation: 15 people representing organizations as diverse as the Canadian Cattlemen's Association, McDonald's, A&W, BIX, Ducks Unlimited, World Wildlife Fund Canada, and three producers (including Graeme, who also represented the Canadian Roundtable).

On Day 1, Graeme took the Dawn Meats tour. Dawn Meats is one of the largest suppliers of beef into the McDonald's system in Europe at the company's fossilfuel free (!!!) plant in Waterford. In 2017, the site became the first Irish food manufacturing company to be awarded BITC Ireland's prestigious BWR (Business Working Responsibly) mark.

"Dawn buys all its meat from Verified Sustainable operations," says Graeme. "No common market cattle. McDonalds does the same thing in Canada, so we're aligned with Ireland on that. Cargill and McDonalds are the prime buyers of sustainable beef here. All our own beef goes into that chain, and we get the quarterly cheque."

The tour also involved a visit to John and Catherine Powers' farm in Waterford where calves are reared and finished as beef cattle, as part of McDonald's Flagship Farm Program.

"It's all bull meat," says Graeme. "They don't castrate any animals so, obviously, no synthetic hormones. It must be quite boisterous on that farm when the animals are young!"

Days 2 and 3 were in a more traditional conference format. Justin Sherrard. Global Strategist Animal Protein, Rabobank RaboResearch, Food & Agribusiness delivered the keynote address, focusing on leadership and the concept that the customer is always right.

"I didn't totally agree with that," says Graeme. "How can the customer be right if they don't have the correct or the full information—or if they've watched Cow-

spiracy on Netflix? It does make sense that veggie burgers are trendy in a first-world urban setting but in developing countries. the cheaper option will always be meat. As their standard of living improves, they are moving towards more animal protein.'

Graeme spoke about the impact of technology on producers and their operations. He believes that the BSE crisis of 2003 drove producers to know their costs and to improve their winter management, grazing management and traceability – which turned out to be the best thing for the industry as it relates to sustainability.

"We already have traceability," he says. "South Africa doesn't even have RFID tags. The UK and Ireland have passports that follow every animal through the system throughout its life. It's intense! They need to get with the Canadian model."

Other presentations focused on the environmental side of sustainability, reducing emissions through innovative feeding strategies, sustainable beef production on the Canadian prairies and genetic improvement for animals on pasture.

Michael Lee, Chair of Sustainable Livestock Systems at Rothamsted Research, delivered the capstone address focusing on how livestock fit into the environment, not just as meat but also as wool fibre, cosmetics, leather, milk, fertilizer and beasts of burden. All biodegradable. Styrofoam... not so much.

"Attending a conference like this makes us more aware of where the trends are going," says Graeme. "It's important to know what's going on in the world and to know Canada is ahead of the game "

Graeme Finn

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<u>Vision:</u> We envision a global community that respects and values profitable forage production and healthy soils as our legacy for future generations.

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