



Innovation, education and regenerative agriculture

Unit 4A, 710 Centre St. SE, High River, AB T1V 0H3 Phone: (403) 995-9466 ~ www.foothillsforage.com

JANUARY 2020

Chairman's Note - Andy Hart

Happy New Year to all the membership and staff of Foothills Forage and Grazing Association!

As I sit at the table composing what I assume is my last Director's Note, the ground is almost completely bare and the temperature is a very moderate 0°C. However, the forecast has us bracing for a precipitous drop by mid week as the January blues set in. The days are slowly progressing to longer daylight hours, but it is most definitely winter. I sincerely hope everyone who reads this had a safe and enjoyable Christmas and New Year celebration.

The first week of November I travelled through the Alberta Health Care System and picked up a new knee as a souvenir. Not that that is big news, we had a year to prepare for it and my wife Ramona managed to keep clicking along. However, I got to wondering how prepared we would have been had we been caught by surprise. Have you got your operation set up in such a way that someone else can step in and keep it going if you are unexpectedly laid up? What is your plan B?

A few years back, Ramona and I took part in the Ranching for Profit school. One of the first questions Dave Pratt asked was "Who's Ranch is easier to run? Yours or your neighbours?" We have a tendency to be blind to our own mistakes. Often we do what we do because we have always done it that way. The mistakes that our neighbour is making plus the opportunities he is missing are sometimes obvious in our minds as we overlook opportunities in our own operation.

IN THIS ISSUE	
Managing resistance to internal parasites in cattle	2 & 6
Regeneration Canada reaches out to farmers	3
Feds delay transport rule enforcement	5
A boaring threat to our meat production	7

If you haven't had a vacation in ten years, is that a badge of pride? Or is it a sign that your operation needs to analyze itself critically? If you say you can't leave because the place will fall apart if you are gone, maybe that is a sign that you need to consider some changes.

Where am I going with this? Well, in my six years on the FFGA board I have had the privilege to rub shoulders with some pretty forward thinking people. They have challenged me to try to do better in my own operation; whether in the area of soil health, better grazing practices, improved fencing or winter feeding methods to reduce labour and input costs. The various speakers FFGA has brought in and a free exchange of ideas with fellow members has been to my great benefit. If you are not already a member or you are a member who has not fully exercised the opportunities that FFGA has to offer, I urge you to get involved. It only takes one good idea implemented successfully at home to whet the appetite for more.

At the upcoming Annual General Meeting on March 18, 2020 at the Foothills Memorial Centre, we will have four directors reaching the end of their second terms. Under FFGA bylaws, they must sit out for one year before they can let their names

stand for another term. If you have considered becoming more involved but have questions, feel free to approach any of the present Directors listed on page 8 of this newsletter.

Until next time.....

Andy Hart



Managing resistance to internal parasites in cattle



Producers need to tailor parasite control to align with their herds and management systems

Managing internal parasite resistance starts with asking the right questions and understanding the principles of antiparasitic resistance and the range of control products. From there, a producer needs to develop a deworming strategy and pin it to the spring and summer grazing calendar. A veterinarian can help.

Antiparasitic resistance is typically defined as the genetic ability of parasites to survive the effects of an antiparasitic drug to which they were previously susceptible. Antiparasitic resistance becomes a problem when an increasing percentage of the parasite load carries resistance genes, decreasing the efficacy of control products and increasing the production-limiting influence of internal parasites.

The performance of cattle on pas-

ture often depends on tive broad-spectrum anthelmintics to remove, or prevent infection with gastrointestinal nematodes. The degree to which internal parasites affect performance depends on the age of cattle entering pastures, the number of parasite eggs that overwintered on pasture, the increasing resistance: parasite load and de-

gree of egg shedding from animals moving onto pastures, time of year, weather, overall effectiveness of the deworming product being used and the application timing.

Controlling nematodes resistant or partially resistant to commonly used anthelmintics adds another dimension to deworming practices, that being the preservation of effective drugs. Preservation means being astute about the timing of administration of deworming products and using appropriate combinations of products each season. Again, veterinary input is important.

Resistance to antiparasitic drugs has developed more slowly in cattle than in small ruminants (sheep and goats). However, the number of reports in scientific literature over the past five years suggests a rapidly escalating problem in cattle, especially with some species of economically important parasites. Australia, New Zealand, South Africa and South America have strug-

gled with antiparasitic resistance in the availability of effec- livestock species for several decades. Recent scientific data indicate significant antiparasitic resistance is emerging in livestock species, including cattle, in North America.

> Genetic mutation, environmental influences, egg production and the parasite's ability to survive and reproduce contribute to resistance. Management practices can also increase or decrease selection pressure for resistance. The following practices can be factors in

- Treating too often.
- Treating the entire herd at the same
- Treating animals when there are few eggs on pasture such as after a harsh winter or hot, dry summer boosts the proportion of resistant
- Failure to isolate and deworm new additions and cull heavy shedders. Eighty per cent of eggs are shed by 20 per cent of the animals in a herd.
- Failure to monitor egg counts.

Drug factors — under-dosing, using the wrong drug or failing to use combinations of drugs when indicated — all contribute to the development of antiparasitic resistance.

One important aspect of the drug's behaviour is whether it's short- or long -acting. Long-acting drugs that persist in the animal's body a long time after initial treatment tend to select for resistance more quickly than short-acting

(Continued on page 6)

Thank you to our municipal supporters!



Regeneration Canada reaches out to farmers



A small non-profit organization based in Montreal hopes to make big gains on the Prairies as it works to connect people who want to improve soil health.

Regeneration Canada formed in the fall of 2017 after a successful Living Soils Symposium earlier that year. The symposium focused on bringing together farmers, scientists and other stakeholders who have a goal of regenerating the soil to feed people and mitigate climate change.

Last month, the organization had a booth at Canadian Western Agribition in its bid to better understand prairie agriculture and increase the membership base from its current 250.

"Our mission is really to promote regenerative land management practices to foster healthier food systems and also to mitigate climate change," said assistant director Sarah Barsalou.

"We're really trying to build a network across Canada of regenerative farmers and other stakeholder groups that are part of the movement. We have farmers all across Canada."

Most of the farmer members are in Ontario, Quebec and British Columbia, but there are several from the Prairies, including grain farmers, cattle producers and bison ranchers.

Barsalou said many are already practicing regenerative agriculture but just don't use that term.

Regenerative agriculture is broadly defined as principles and practices that enhance ecosystems. This includes minimal soil disturbance, keeping soil covered, integrating livestock and greening cities. The practices improve watersheds, enhance biodiversity and improve the soil, when then becomes more productive and sequesters more carbon. The organization's scientific director, Antonious Petro, said they sometimes face resistance from skeptics who think they are

promoting a certain agenda. However, he said they get beyond debates over such things as organic versus conventional farming.

"There is only two percent of our land that is organically operated," he said. "We need the 98 percent. Soil regeneration is one thing that everybody on this planet should agree that we need to work on."

Added Barsalou: "Everyone has a role to play, and that's what we're really trying to figure out."

Urban residents are urged to compost, grow food on rooftops and create said. more green spaces.

Petro said for every one percent of organic matter added to the soil, a hectare of land will retain 25,000 gallons of water. Water is a powerful driver in the carbon cycle.

"We think that sustainability is great but we need more than that," said Petro.

"Our generation found (the land) in an already bad place. We need to regenerate. We need to add more to soils than we take from it.

"It's nothing new. We're not reinventing the wheel, neither are the farmers."

What's lacking is the connection between farmers who are walking the talk and consumers with no farm background.

Barsalou said she found that prairie agriculture is much different than what they see in Quebec.

"We're trying to be as humble as possible," said Barsalou.

"We're not farmers. We're trying

to connect farmers and we're trying to connect city people to agriculture and bridge that gap. We're here to learn more and understand the reality."

After Agribition, they visited the cattle operation of one of their members in southeast Saskatchewan.

Ross Macdonald said Barsalou and Petro were able to put some of what they heard at the show into context, such as the size of the landscape, distance to markets and topographical and climatic differences.

He advocates for regenerative agriculture for several reasons, saying it provides a positive direction for most agriculture production. The gold standard, he said, is native prairie.

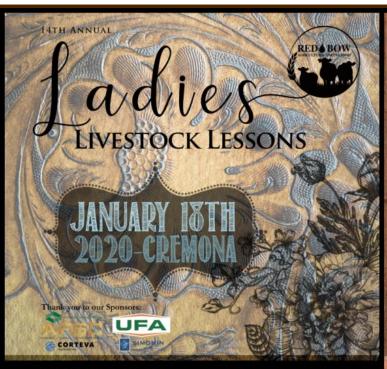
"Most of our ranch is native prairie and finding ways to enable the grassland function that has evolved with grazing for thousands of years is paramount for our risk management, including capturing as much rainfall as possible and extending our grazing window as long as we can throughout the year while selecting for low maintenance, profitable cattle," he said.

"The concepts around potential soil health improvements have actually made me consider expanding and buying some cultivated land to apply similar concepts to those we practice on our existing grasslands."

A third Living Soils Symposium is scheduled for Montreal in March. Regeneration Canada plans to start moving the gathering out of that city as it gets more resources.

For more information, visit www.regenerationcanada.org.

Author: Karen Briere. Original article can be found at https://www.producer.com/2019/12/regeneration-canada-reaches-out-to-farmers/



REGISTER TODAY

The Heritage Centre (Mountain View Events) 8:50 AM (8:30 Registration) \$50 (Includes lunch, coffee, & snacks) View the current agenda & pre-register at

www.redbowag.com Registration Deadline: January 14th, 2020





SAVE THE DATE FOR

Rural Roots AG DAYS

FORT MACLEOD

IN PARTNERSHIP WITH





PRACTICAL STRATEGIES TO GROW YOUR BOTTOM LINE

FEBRUARY 11, 2020 FORT MACLEOD, AB

FEATURING:

RENOWNED GRAZIER JIM GERRISH

OTHER TOPICS TO BE COVERED:

SUCCESSION PLANNING, LIVESTOCK CARE AND WELFARE, AND MORE

> REGISTRATION OPENS DECEMBER 2 RURALROOTSCANADA.COM





Feds delay transport rule enforcement



Federal Agriculture Minister Marie-Claude Bibeau told cattle producers Dec. 11 that they'll have a transition period before Canadian Food Inspection Agency institutes hard enforcement that would include fines and penalties for non-compliance.

Canada's cattle and dairy sectors will have two years to familiarize themselves with the federal livestock transportation regulations that come into effect Feb. 20.

Federal Agriculture Minister Marie-Claude Bibeau told cattle producers Dec. 11 that they'll have a transition period before the Canadian Food Inspection Agency institutes hard enforcement that would include fines and penalties for non-compliance.

The transition period specifically involves the feed, water and rest provisions in the regulations that require shorter transport times and a requirement to unload cattle and give them eight hours of rest if the length of the journey exceeds 36 hours.

Current rules allow cattle to be in transit for up to 48 hours with no requirement to provide feed, water or rest. However, statistics show most loads reach their destination well before that.

"During the first two years, the CFIA will focus its enforcement efforts on compliance promotion through education and awareness measures, which are part of the CFIA's continuum of enforcement actions," the CFIA said in response to queries.

"The amended regulations contain outcome-based requirements to ensure that animals are not likely to suffer (from exhaustion, dehydration, weather or other conditions), be injured or die. The CFIA has the discretion to appropriately enforce these outcome-based requirements to prevent and act on animal welfare situations."

The agency has established one work-

ing group for the beef sector and another for the dairy and veal sector to provide guidance, identify issues and find solutions.

News of the softer launch of new rules was welcomed by the Canadian Cattlemen's Association, which has asked for a delay in regulatory implementation until current research into transport and rest times is completed.

obviously the devil is in the details of how this transition period will operate, but certainly having some more time to collect more data through research and have more time for awareness and education for the entire industry ... is something that we've been asking for since the regulations were published in Canada Gazette Part II last February," said CCA policy and program manager Brady Stadnicki.

The cattle sectors have expressed concern about the availability and capacity of off-loading facilities. They contend that loading and unloading cattle in transit causes stress and increases risk of injury, while the benefits of an eight-hour rest period for cattle have not been established. Research is underway to explore the latter aspect, some of it funded by Agriculture Canada.

As well, cattle producers are concerned about health risks associated with commingling cattle in temporary facilities while the rules-imposed rest is provided.

Stadnicki said the CCA also seeks confirmation that there will be some flexibility in the regulations when they are fully enforced.

"I think one of the big things that we've really wanted to stress was ensuring that there is the flexibility for producers and livestock haulers when unforeseen and uncontrollable circumstances occur on the road," he said.

Bad weather, road and bridge closures, construction and mechanical failure can all prevent cattle loads from reaching their destinations within the required time.

"That's the reality of travel in Canada and especially in some of the east-west travel when you go from Manitoba to Ontario or Quebec or even the Maritimes into Ontario or Quebec," said Stadnicki.

"We've been working with CFIA on trying to make that more clear in the interpretive guidance." Oliver Anderson, director of communications in the federal agriculture minister's office, confirmed the transition period does not represent a delay or an exemption for the beef and dairy sectors. However, he said the department recognized the cattle industries face a range of challenges to comply with the new rules.

"Certainly there's a recognition that the cattle sector has some unique challenges and so there's a two-year transition period that we can focus on that education and awareness for what kinds of enforcement measures that they would take," Anderson said.

Author: Barb Glen with the Western Producer. Original article found at https://www.producer.com/2019/12/feds-delay-transport-rule-enforcement/



Program shares costs
relating to enhancements of
a producer's on-farm water
supply management, arising
from a Long-Term Water
Management Plan (LTWMP).

Must have a Long Term Water Management Plan for this funding program from an Agriculture & Forestry Water Specialist



CANADIAN

AGRICULTURAL

PARTNERSHIP
Integration Group Prosperi

Cost Share 1/3 up to \$5000 in 3 areas;

- Standard incentives for new/expanded water source development
- Standard incentives that support new/expanded water source development
- Standard incentive that protect new, expanded or existing water sources

Visit

https://cap.alberta.ca/CAP/ program/FARM_WATER for more details (Continued from page 2)

drugs. Long-acting drugs may "fuel the fire" of antiparasitic resistance by not only putting selection pressure on the parasites present in the animal at the time of treatment, but also on parasite larvae ingested after treatment. Also, as the level of a long-acting drug es. declines in an animal's body over time, parasites are exposed to gradually decreasing drug levels, which may accelerate the development of resistance.

Remember: "The solution to pollution is dilution" and "dilute the undesirables" by using antiparasitic drugs

along with non-chemical control meth- develop resistance. Refugia occur both ods such as good pasture management practices, adequate isolation and treatment of new arrivals, and routine culling of heavy egg shedders. These principles may not mesh with traditional management practices on some ranch-

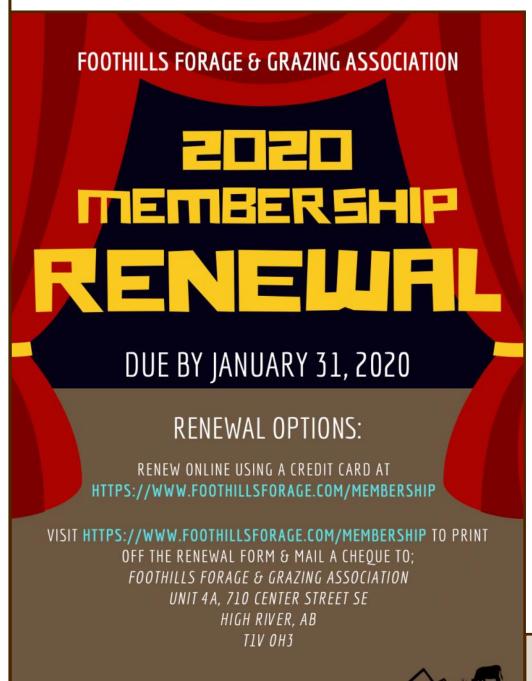
One can also consider preserving refugia. Refugia represent the proportion of the total parasite population that hasn't been selected for antiparasitic drug resistance — essentially, parasites in "refuge" from the anthelmintics in use. In effect, there's no selection pressure on these parasites to

inside the animal and in the environment. They include:

- Parasites in untreated animals, called host-based refugia.
- Eggs and larvae already on the pasture when animals are treated, called environmental refugia.
- Life stages of the parasite that are unaffected by drug treatment, such as some larval stages.
- The purpose of preserving refugia is to maintain a greater proportion of drug-sensitive parasites. Two strategies to preserve refugia include:
- Leaving some animals untreated by targeting only animals that need treatment, based on fecal egg counts, or miss several animals that are shedding eggs. Use highly effective anthelmintics on the rest.
- Delay deworming until there are more eggs and larvae on the pasture, when environmental refugia is higher. This may not coincide with other management practices on some ranches, such as branding, unless the timing changes.

It's important to keep in mind that animals don't have to be completely parasite-free to be healthy and productive. To reduce the risk of resistance. it's critical to use the most effective product at the right time. Talk to your veterinarian.

Author: Dr. Ron Clarke. Original article can be found at https:// www.canadiancattlemen.ca/features/ managing-resistance-to-internal-parasitesin-cattle/



Connect with the FFGA on social media!









A boaring threat to our meat production



The growing population of wild boar on the prairies threatens livestock production

People who say they have never seen wild boar should watch the ditches at dusk from Florida to Dawson Creek. I have seen them at both locations and many places in between, and more than once avoided a disastrous collision with a wild boar.

Wild boar, wild swine, Sas scrofa, Eurasian wild pig or just plain wild pig are becoming an established and destructive introduced species on the Canadian Prairies.

Wild boars were first introduced on some Alberta and Saskatchewan farms in the 1980s for exotic meat production. Why people chose to chew on stringy, gamey wild meats when domesticated pig varieties are descended from these wild boars is an enigma. There is no accounting for taste.

Unfortunately, wild boars either broke loose from meat farms or were released to the wild. Now these wild feral pigs, some crossed with domestic pigs, are widespread across Alberta and Saskatchewan and as far east as Manitoba and Ontario. Rumour has it that some individuals delib-

erately helped the boar escape, to have a wild population to hunt. Wild boar, sows included, can weigh from 200 to 400 pounds. Unlike deer, moose or domestic animals that have one or two offspring a year, wild pigs can have two litters generally breed from November to January with a gestation period of around four months. Sows can breed at one or two years of age and live for up to 15 years. In 10 years of

breeding, one sow can produce up to 200 piglets. They breed more like rabbits or rats than other domestic animals.

Wild boars are social animals and normally travel in family groups or "sounders." In cold winter months, wild boar groups build shelters lined with spruce branches and hay in dense brush and especially in snow-covered brush and ditches. They wander all year, feeding on cereal and oilseed crops, grass pastures, tree roots, berries, leaves, bark, rodents, frogs and carrion. Boars have been known to kill poultry, wildfowl and even fish. They can break into grain storage areas and grain bags, and will loot gardens for potatoes, carrots and anything edible.

Clearing the boar

In Saskatchewan, no season or licence is required to shoot boar. The same applies to Manitoba, but kills must be reported to Manitoba Food and Rural Development.

In Alberta only landowners are permitted to destroy feral wild boar with kills reported to Alberta Agriculture and Rural Development. From 2018 to 2015 Alberta had a \$50 bounty on wild boar. Some 1,000 kills were recorded, but the program was discontinued, as killing individual boars caused the group to break up and scatter. Research is underway to trap fam-

ily groups rather than shoot at and disperse them.

In Europe, wolves are the only effective biocontrol for destructive boars. In Italy, a wolf can kill 60 piglets and subadults annually.

The elephant in the house on wild boar of six to 10 piglets a year. Wild boar is not their crop destruction but the disease they could carry to other farm animals, including domestic pigs. Wild boars can carry many porcine diseases including foot and mouth and, worst of all, African swine fever. African Swine Fever is presently sweeping through China. Experts estimate that 300 to 350 million pigs will be lost to this disease in China — a quarter of the world's pork supply.

> African swine fever (ASF) is not the same as swine flu, which is infectious to humans. ASF is harmless to humans but can be spread via contaminated pork products or on the clothes of people working with infected pigs. The disease is not airborne but it's hard to eradicate. Outbreaks in Canada and the U.S. would be disastrous to the pork industry.

> Canadian hog producers better wake up and smell the coffee. We need to greatly reduce the wild boar population. There is a need to either restrict boar meat production or ensure that containment procedures are so stringent that boars will never escape. Alberta is rat free and forbids public ownership of rats of any kind. Wild pig control programs should be a high priority. Round them up or wipe them out before its too late.

Author: Leuan Evans. Original article can be found at https:// www.grainews.ca/2019/12/23/a-boaring-

threat-to-our-meat-production/

Thank You to Our Corporate Sponsors

Gold Sponsors

DATAMAI



Silver Sponsors

Bronze Sponsors









GRAZING WORKSHOP

featuring Jim Gerrish

Wheatland County & Foothills Forage and Grazing Association present renowned grazier Jim Gerrish for a full day Grazing workshop!

Details

February 14th, 2020 Wheatland County Office 9:00am to 3:30pm FFGA Member - \$75.00+ GST Non Member - \$85.00+ GST

Register at https://jimgerrishwheatland2020.eventbrite.ca before February 7, 2020











Board of Directors

Chairman:

Andy Hart (403) 625-0180

Vice Chairman:

Alex Robertson (403) 888-1517

Treasurer:

Ben Campbell (403) 803-9190

Directors:

Tamara Garstin (403) 333-0376 Justin Blades (403) 646-5952 Morrie Goetjen (403) 863-7484 Sean LaBrie (403) 999-3089 Mike Roberts (403) 625-0337 Rod Vergouwen (403) 934-1666 Steve Yule (403) 934-7855 Marcel Busz

<u>Staff</u>

(403) 394-7614

Manager:

Laura Gibney manager@foothillsforage.com Cell: (403) 998-4687

Environment & Communications Coordinator:

Sonja Bloom enviro@foothillsforage.com Cell: (403) 700-7406

FFGA MISSION & VISION STATEMENTS

<u>Mission:</u> Assisting producers in profitably improving their forages and regenerating their soils through innovation and education.

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

This Publication is made possible by our major funder—Alberta Agriculture and Forestry.



FFGA is a proud member of

