forage VIEWS







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Event Highlights

January saw WCFA staff and producers quite busy with extension events, with two exceptional learning events held this month.

WCFA, in partnership with Leduc County journeyed to GlenPark Hall on January 19 for a day of learning about Extensive Winter Feeding. We were pleased to have Forage-Beef Specialist, Karin Lindquist start our morning with her "Feeding Cattle in Winter: To Graze or Not to Graze" presentation. Her presentation went through a typical winter ration, the numerous winter grazing options available, the pros and cons of these options, cost comparisons, transitioning from a traditional feeding system to an extensive feeding system, as well as some of the feed quality issues from this year.

Following Karin's presentation we viewed a short preview of the Alberta Ranchers Winter Grazing Cattle Videos, which WCFA worked on in conjunction with several other organizations. These 47 videos feature producers discussing their personal perspectives on a number of different winter grazing techniques and management practices. All these videos are available on our website if you would like to view them.

The afternoon consisted of short presentations by a producer panel consisting of WCFA members. One member of the panel was Tom Thompson, 2017 Alberta Beef Producer's (ABP) Environmental Stewardship Award (ESA) recipient, who shared his knowledge and experience with bale grazing. Also on the panel

Continued...



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Agriculture Opportunity Fund

This publication is made possible by funding from our major sponsor, the Agriculture Opportunities Fund (AOF), Alberta Agriculture and Forestry

Event Highlights continued



was Larry Kidd (part of Kidd Bros. who were the 2011 ABP ESA recipients), who spoke on swath grazing various crops. Rounding out the panel was Darren Frank, who shared his perspective on grazing corn. This was a great learning opportunity for all attendees, and we greatly appreciated these individuals volunteering to share their knowledge with fellow producers.

The Sustainable Beef Field Day on January 25 gave us the opportunity to head out to Crossview Farms for a day filled with live demonstrations and presentations on technologies for improved herd management.

We began the morning with Mike Nicoletti of Remedy Animal Health Ltd. (who graciously stepped in last minute when TruTest ran into some travel difficulties and was unable to attend) showing off some of the TruTest technology, and demonstrating a TruTest RFID wand and scale head on live cattle brought through the chute Following Mike's demonstration we had Bernice Rennie, Mobile Field Representative with the Canadian Cattle Identification Agency educate everyone on Age Verification, Traceability in Alberta and Premise Identification

Following a short lunch break (with a drone flying teaser) we moved in to a demonstration of some herd management/record keeping software with Jasper Munro of BIO. Jasper had a demo account set up for the go360/ bioTrack app and participants were able to log in on their smart phones to follow along and test the software themselves.

The afternoon closed out with a demonstration of some UAVs (drones) from AgCon Aerial Corp. We ventured outside to see a few drones in action, and were able to see drone footage live. Following the live flying demonstration we moved back inside to watch some videos on some of the footage (including footage from the earlier demonstration) that can be taken with a drone. We hope to have the drone footage from the day posted on our social media outlets in the near future.

These were two great learning opportunities for all, and we appreciate everyone coming out and joining us. If you missed these events you can see some of the highlights on our Facebook page. Make sure to follow our website, social media accounts, or subscribe to our event email list to stay updated on future events.

WE WANT YOUR INPUT!



Have an idea for a project/demonstration you would like to see? Are you wanting to participate in a project/demonstration?

Are you willing to host a project/demonstration at your place?

If so we would love to hear from you!

Contact us: P: 780.727.4447 E: info@westcentralforage.com

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Carrot Creek Hall

Yellowhead County

Woodlands County

West-Central Forage Association



Forage producers have big role in reducing emissions

By: Cedric MacLeod

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HER hooves gently cut the fog that rests as a blanket across the rolling pastoral landscape. The calf grazing at her side has been nurtured and raised on the milk that grass made. And, now the pair adds value–both economically and environmentally– to Canada's vast grasslands.

Canada's cultivated forages for pasture, feed and seed production account for 33.8 million acres, or 39 per cent, of the country's land devoted to agricultural production. In comparison, the next-largest crop –wheat– accounts for 20.4 million acres or 23 per cent of cropland acres.

The above-ground value of Canada's vast forage land base is well-recognized. Forages have a direct economic value of \$5.1 billion–Canada's third-largest crop, just behind wheat with its value of \$5.2 billion and canola at \$7.3 billion. Forages are also the primary input for Canada's \$11-billion beef and dairy sectors.

However, it is the below-ground value that is most overlooked. The indirect ecological-goodsand-services-value contribution to Canadian society as a whole is estimated between \$895 million and \$1.9 billion annually.

On the heels of the United Nation's Paris Agreement now in effect, Canada's forage and grassland producers need to examine the positive impact their industry has on the environment.

The Paris Agreement brings the world's nations together to combat climate change and adapt to the effects of climate change–something farmers around the world are experiencing more regularly

We acknowledge agriculture, like so many industries, plays a role in climate change. However, forage and grassland producersthe backbone of the nation's agriculture industry–understand the work they do can help to dramatically reduce Canada's net greenhouse gas emissions output

Blake Vince, an Ontario farmer and Nuffield scholar who studied farmland conservation and the importance of biodiversity, points out that extreme weather events, those once-in-100-year droughts, snowstorms or floods, are happening with increasing frequency. If Canadian farmers are going to continue to grow food and survive potential catastrophic events, they need to start from the ground up.

And while farmers can't control the weather, they can control what they plant. Vince says planting cover crops and perennial forages protects the soil and prevents soil erosion. Annual and perennial forages in crop rotation also increase soil organic matter, which leads to increased internal drainage and soil moisture-holding capacity--both important in times of extreme weather, wet or dry.

Discussions around Canada's climate action plan have brought about mention of carbon pricing, an area in which perennial forage crops also play a role.

Yellowhead County

Woodlands County

West-Central Forage Association

Agricultural adviser Douglas Yungblut says perennial forage crops can sequester 2.7 times more carbon than annual crops in a year and store the carbon deeper in the soil profile. In addition, perennial forages keep carbon sequestered longer as forage stands can be managed for four to eight years at a time.

The payback for farmers comes with the offset. A 2012 study by Yungblut on the Alberta forage industry revealed forage producers could generate approximately \$14 million worth of carbon offsets annually, pending the approval of foragebased carbon-offset protocols.

Nationally, the Canadian agriculture industry is quickly

RSVP By February 17, 2017



SACA

Increased investment in environmental protection and climate change mitigation will provide the ideal opportunity to showcase the estimated \$894.5 million to \$1.9 billion worth of ecological goods and services generated by the Canadian forage sector each year.

Back in the field, as the fog gives way to the sun, the cow and her calf join the rest of the grazing herd. She is unaware of the profound positive impact she and her Canadian herd-mates have on Canada's greenhouse gas emissions profile.

Luckily, forage producers know and continue their important work of feeding the nation, nurturing the soil and building a positive environmental legacy for the next generation of grassland managers.

Cedric MacLeod is a beef farmer, agrologist and executive director of the Canadian Forage and Grassland Association.

Article from Winnipeg Free Press : http:// www.winnipegfreepress.com/opinion/ analysis/forage-producers-have-big-role-inreducing-emissions-401622025.html



Workshop #2

EFP Workshop Wed. Feb 22 | 5:00pm - 8pm Manly Hall, Parkland County, AB

Interested in completing an Environmental Farm Plan? Let us help you get started on your EFP. We will guide you through using the webbook, get you started on your personal EFP, and set-up with the tools and resources you need to be able to complete your plan! EFP technicians will be available to help answer any guestions you may have.

*Meals provided, inquire about workshop costs & further details

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Mold and Mycotoxin Problems in Livestock Feeding

Weather conditions during growing and harvesting seasons may appreciably increase the incidence and degree of moldy feed and mycotoxin problems from year to year. Visibly moldy feed may be free of mycotoxins, yet feed that looks fine can harbor mycotoxins that may cause production and health problems.

Cool, wet growing seasons may delay grain maturity, especially for corn, and result in mold and mycotoxin formation in the field. Fusarium toxins are more likely to occur under cool, wet conditions during growth, harvesting, and storage. Hot, humid conditions

favor the development of aflatoxins. Delaying harvest to increase maturity and reduce moisture levels, or to avoid muddy field conditions, may result in increased mold growth and mycotoxin formation. Storing grains, feedstuffs, and forages at moisture levels beyond recommended ranges or in poor storage units also may increase mold-related problems. Recent knowledge indicates that these problems sometimes may be the cause of previously unexplained production and health problems. Mycotoxins may be present in feeds that have little or no obvious mold present.

Moldy or musty feed won't always contain dangerous mold poisons or mycotoxins, but the presence of considerable mold in itself may adversely affect production and health. Digestibility of the ration may be decreased sufficiently to reduce energy content by 5% for ruminants. Such feed is also less palatable and may lower the intake of energy, dry matter, and critical nutrients. This may considerably reduce milk production, growth or weight gains, and depress resistance to metabolic and infectious diseases.



Mold and Mycotoxin Problems in Livestock Feeding

Vomitoxin (DON)

Fusarial toxins have been detected in corn, wheat, milo, flour, barley, malt, beer and other foods.

When it contaminates a feed ingredient, vomitoxin can produce:

- Feed refusal
- Immune suppression
- Diarrhea
- weight loss

Potentially harmful pmm (parts per million) 2.5 to 6.00

1. Agriculture and Agri-Food Canada guidelines

- 5 ppm in the diet for adult cattle, adult sheep and poultry.
- 2. United States FDA guidelines
 - 10 ppm in grains and by-products fed, beef and feedlot cattle older than 4 months.

Zearalenone (ZEN; ZON, F2 toxin)

Enlarged vulva and possible irregular heats and infertility at 4 to 7 ppm in TRDM. No effects on performance at 0.5 ppm in corn or about 0.15 ppm in TRDM. Decreased performance:

- Infertility
- Abortions
- Teat enlargement
- Udder secretions
- Milk production

Potentially harmful pmm (parts per million) 3.9 to 7.0

Aflatoxins (AFB1 B2B3)

Animals affected by aflatoxins include: cattle, sheep, chickens, pheasants, turkeys, ducklings, quail, swine, dogs, cats, fish, laboratory animals, monkeys and humans.

If an animal consumes a feed that is contaminated with aflatoxin, many health and performance problems may develop. Most commonly these animals display:

- Poor performance, such as reduced feed intake
- Decreased feed efficiency/ weight gain
- Decreased milk production
- Decreased resistance to infection
- Suppress an animal's immune system
- Decreased breeding efficiency
- Birth small and unhealthy calves

Advisory level ppb (parts per billion)

- 20 to 100 ppb Breeding Cattle
- 300 ppb Finishing beef cattle

T-2 toxin

T-2 is the least common, but the most toxic of the Fusarium molds causing multiple organ system damage, including immunosuppression.

Potentially harmful pmm (parts per million) 0.7 to 1.5

- 0.5 ppm recommended maximum concentration in total ration for Dairy Cows
- 0.2% of the dose appears in milk

HT-2 toxin

Potentially harmful pmm (parts per million) 1.5 to 3.0

Ergots (Ergot Alkaloids)

Cattle, sheep, swine, horses: Staggers, nervous, and motor disorders from some forms. More often lameness and tissue necrosis resulting in loss of ears, tail, feet; possible infertility and lactation failure in swine. Mainly from ergot present in quackgrass and other grasses. Dallisgrass and grains infected with a hard, black, banana-shaped growths on seed heads.

Performance and reproductive effects:

- Anorexia
- Reduced feed intake
- · Low milk production
- Reduced growth
- Abortions
- Decreased pregnancy rates
- Decreased calving rates
- Low sperm production
- Lameness
- Diarrhea

Levels may be converted for interpretation purposes as follows:

1. ppb to ppm: move decimal point three places to left

• Example: DON @ 1200 ppb is only 1.2 ppm

2. ppm to ppb: move decimal point three places to right

 Example: Aflatoxin @ 0.2 ppm is 200 ppb



9:30am Registration / 10am - 3:30pm

Free of charge for WCFA members Lunch provided WCFA Building 5009 45 Ave, Entwistle AB. R.S.V.P. limited space (780)727-4447







Benefits of corn for silage/grazing vs other crops Benefits of Corn for soil biology/building organic matter Strategies for maximizing profit/acre Advantages for time management with corn

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- •Bruce Avison Hard-De Agri Services
- •Dr. Bart Lardner WBDC
- •Nanne Bouius Bouius Custom Work
- •Andrew Tetz Alpine



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