



Grey
Wooded
Forage
Association

The Blade

"Creating an Awareness of Forages"

FEBRUARY 2013

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In this issue:

- New Sainfoin Cultivar Promises Bloat-Free Alfalfa Grazing - Pg 4
- Deadline to Insure Hay & Pasture - Pg 5
- Prairie Shelterbelt Program 2013 - Pg 6
- Fusarium - The Enemy Within - Pg 9
- New Incentives for Environmental Improvements in the Livestock Sector - Pg 10

Upcoming events:

- Precision Ag Update - Pg 6
- Cows, Creeks & Communities Seminar - Pg 7
- 2013 Livestock Care Conference - Pg 8

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Manager's Notes:

By Albert Kuipers

At a recent Projects Committee meeting we were discussing various legumes for pasture. It was an interesting discussion indeed, so I thought I'd share some of it with you.

We talked a lot about the new sainfoin cultivar, Mountainview, that was developed by Dr. Surya Acharya from the Agriculture & Agri-Food Canada's Lethbridge Research Centre. This is significant because sainfoin, when grown in a mixture with alfalfa at about 30% of the stand will virtually eliminate bloat issues on that pasture.

Dr. Acharya developed this cultivar because available sainfoin varieties did not survive well in an alfalfa stand, or re-grow as well as alfalfa after grazing. Mountainview has shown to be capable of surviving well in an alfalfa stand and re-grows at the same rate as alfalfa.

This is good news for graziers who like to use alfalfa for pasture purposes. However, there is much more to be learned



about using sainfoin in alfalfa stands.

A big issue we need to address is that of adaptation. There are reasons why sainfoin is grown in the south, but not in much of Central Alberta. We need to learn the limits of sainfoin's adaptation, and in particular the limits of adaptation of this new cultivar.

Plans are well under way to have test plots of this sainfoin cultivar, and others, grown with alfalfa in various regions in Alberta. ARECA's Forage & Livestock Team is working with Dr. Acharya and Alberta Agriculture & Rural Development staff to develop and fund this work. We hope to get a good handle on the limits of adaptation of sainfoin and the best management practices necessary for success with using sainfoin in mixtures with alfalfa.



A beautiful stand of Sainfoin

Director's Corner:

My name is Kirk Seaborn, I am a part of a family farm known as Seaborn Seeds Inc. and Crooked Post Shorthorns.

I have served as a director on the GWFA for several years now and it has been both educational and enjoyable. Two years ago, when asked by Albert if I'd like to return for a second term on the board I was pleased to take that opportunity, but warned Albert that I wouldn't be as involved as the first term due to time shortages and other commitments. Well, I held my promise to Albert and regretfully I've not been as involved as much as I should have.

Apart from the knowledge picked up along the way, I have met some great people who share some of the same goals and for this I am grateful. I have enjoyed being both a director and a member of GWFA and would encourage anyone with a desire to learn and have an interest to further explore aspects of forage and livestock production, to become more involved.

As a token of appreciation towards the GWFA and it's cardholding members, Seaborn Seeds Inc. and Crooked Post Shorthorns would like to offer for the 2013 spring season, a 10% purchase price discount on its forage seed products and Shorthorn breeding bulls and females. Info regarding our forage seed and Shorthorn cattle can be found on our website www.crookedpost.ca or please give a call at 403.729.2267 or stop by.

Until the cows are up to their bellies in grass, have a good winter.

Regards,

Kirk Seaborn



We need your help!

All you guys who swath graze, could you please let me know what cereal forage species you prefer, and what varieties do you prefer, or have used, and why.

We need this information to contribute to forage and beef research at the Lacombe Research Centre.

Thanks, Albert.

VISION STATEMENT

GWFA – The centre of choice for gathering and dispersing of forage and livestock information, providing a strong link with producers and the research community

MISSION STATEMENT

To enhance awareness of the organization as an information exchange centre, illustrating forage and livestock production practices that are environmentally and economically sustainable for the agricultural community.

Approved May 2012

Kura Clover was also a hot topic for the evening. Having dabbled with growing Kura Clover as far back as 2001 at our project site at Ron Marcinek's, we had learned two main things about Kura Clover. First, it takes a loooong time to establish. It took several years before we realized it wasn't a total failure. Secondly, once it's established, it competes very well with pretty much any forage and will survive for years. We also noticed that it contributed a considerable amount of nitrogen to the growth of the Meadow Brome in the stand.

While that site has since been returned to annual crop production, last fall we had the opportunity to visit Ken Ziegler's Kura Clover stands. These stands were lease sites that were seeded down to Kura Clover in 2004. Ken, who had joined us for the meeting, said he and his son mowed the sites during the first summer and hayed one of the sites for the next couple of years. The results were quite spectacular.



This photo shows Kura Clover mixed with Reed Canarygrass in early October.

As you might remember, we had also seeded some Kura Clover at one of Harald Magnus's fields near Bingley Hall. We also seeded Cicer Milkvetch, Birdsfoot Trefoil and Red Clover at this site. The main objective here was to see if late fall seeding improved establishment of Kura Clover and Cicer milkvetch.

While all of the legumes seeded in late October of 2009 germinated well, all but the Red Clover suffered under competition from volunteer grasses and forbs. Yes, some of those forbs were weeds. By the summer of 2012 we still weren't all that impressed with the results. The Red Clover looked fabulous, but all the rest of the legumes were tough to find.

Naturally, Cicer Milkvetch was also significant in our discussion. We all recognised that it's tough to establish, but once it's established it'll continue to increase in a pasture. We shared several stories of how Cicer Milkvetch started slow, but ended up establishing very well in a number of pastures we had visited over the years.

Some concern around the possible invasiveness of Kura Clover and Cicer Milkvetch also entered our discussion. Cicer Milkvetch has been seen in some areas on public lands and I've seen a lot of it along trails in the city of Red Deer. Nobody

seemed to have a problem with too much Cicer milkvetch in their pastures, though.



Past GWFA Director, Chris Sande invited me to check out his renovated hay field. It was pretty much devoid of any legumes, so Chris direct seeded some clover into it with excellent results.

Now, the discussion went to the practical use of some of these exotic legumes. With slow establishment issues and pricey seed, these legumes just might get passed over in favour of cheap and readily available Alsike Clover or Red Clover. These well adapted clovers are easily frost seeded into pasture and establish quick. Their only downfall is that they are short-lived., I guess you can't have everything.

Our discussion also took a turn towards an old alfalfa variety that had excellent longevity and acid tolerance, even in the west country. Kirk Seaborn suggested that it might be an old, unavailable variety called Grimm. He said the alfalfa variety, Algonquin, and Seaborn Seed's variety, MV, are derivatives of this old variety. There may be some very old plants still around the countryside.

Anyhow, with all these different legumes available a guy gets wondering just what might be the best choice. I would have to say, "whatever the choice, just make sure it's one that's well adapted to your area," keeping in mind that climatic conditions vary greatly across our region.



Here's a healthy patch of Cicer Milkvetch with just a little Red Clover mixed in it.

New 'Mountainview' Sainfoin Cultivar Promises Bloat-Free Alfalfa Pasture Grazing

Lethbridge, Alta., Feb. 11 2013: It's a marriage made in cattle heaven. Scientists have developed a new variety of sainfoin that when paired with alfalfa in a mixed stand offers the holy grail of bloat-free alfalfa pasture grazing for cattle.

Development of the new cultivar, tested as LRC 3902, was led by Dr. Surya Acharya of Agriculture and Agri-Food Canada (AAFC) in Lethbridge. With a proposed name of Mountainview, it offers cattle producers a brand new 'king' to pair with 'queen of forages' alfalfa, to provide innovative new options and many superior benefits.

Announcement of the new variety was made by Acharya at the Alberta Forage Industry Network AGM, Feb. 5, in Ponoka, Alta.

"This new sainfoin cultivar is truly one-of-a-kind and represents an exciting new opportunity for cattle producers," says Acharya, a long-time forage breeder and recipient of the 2012 Canadian Plant Breeding and Genetics Award. "It is the first sainfoin cultivar that will survive in alfalfa pasture and grow back at the same rate after cutting or grazing. It will prevent bloat in mixed stands to provide producers with their first real, economically viable option to allow for highly productive, bloat-free alfalfa pasture grazing."

A new way to win the battle with bloat is a big step forward to benefit beef and dairy industries in Western Canada. The forage industry is very significant across the Prairie provinces. According to the most recent census of agriculture by Statistics Canada there are 28.8 million acres of forage land in Alberta alone.

Sainfoin is a high quality forage legume crop that features a condensed tannin concentration. This is very effective at preventing deadly pasture bloat in ruminants. However, until now, sainfoin cultivars have not survived well in alfalfa pasture or grown back after the first cut.

The new cultivar was bred to overcome those two hurdles and field trials show it represents a great success. It was derived from parental clones selected for improved forage yield in mixed stands with alfalfa and re-growth after cutting. When grown under irrigated and rain-fed conditions of Western Canada, LRC 3902 out yielded Nova, the check variety, by 22 to 42 percent in pure stands and 30 to 39 percent in mixed stands with alfalfa. It also showed strong re-growth.

"The Mountainview cultivar achieves what we set out to accomplish with our sainfoin improvement program," says Acharya. "It grows very well and fits all the criteria cattle producers have required to have a solid, reliable option to support bloat-free alfalfa grazing. This cultivar is well suited for preventing bloat in mixed alfalfa stands without loss in animal productivity."

Mountainview promises to live up to its name by delivering results at the peak of forage performance. Through four years of testing at different locations in Western Canada it proved a consistent leader in yield, maturity, seed weight, disease resistance and winter hardiness. Mountainview reaches flowering 10 days earlier than Nova and has a seed weight with



pod of 20-24 g per 1,000 compared to 18-22 g for Nova.

"Mountainview's rapid re-growth after cutting is very different from Nova and is one of its greatest benefits," says Acharya. "I think cattle producers will find a lot to like in this new cultivar."

That sentiment is echoed by Doug Wray, Wray Ranch, Irricana, Alta., Chair of the Canadian Forage and Grassland Association. "Legumes are vital to the productivity and sustainability of our tame pastures," says Wray. "Mountainview sainfoin offers exciting potential to increase the carrying capacity of our ranch."

Breeder seed for LRC 3902 will be produced at AAFC in Indian Head, Sask., and the multiplication and distribution rights will be awarded through a competitive process. Seed is expected to become available to growers for 2015 seeding.

The forage breeding program at AAFC in Lethbridge has a major focus on the development of innovative, superior new varieties that benefit Canadian cattle producers and their industry.

Acharya and his forage research colleagues at AAFC Lethbridge are part of Alberta Forage Industry Network (AFIN), which was formed in 2010 to represent the forage industry in the province. Key parts of the AFIN mandate are to provide a forum for the exchange of ideas among producers and other stakeholders in the forage industry, and to champion research, education and extension for the management and use of forages. More information is available at www.albertaforages.ca.

For more information contact:

Dr. Surya Acharya, Forage Breeder
Agriculture and Agri-Food Canada, Lethbridge
Phone: 403-317-2277
Email: surya.acharya@agr.gc.ca

Alberta Farmers Reminded of Deadline to Insure Hay and Pasture

Getting Adequate Moisture is Always Producers' Biggest Concern

Alberta farmers are reminded they have until February 28 to decide whether to insure their pasture and hay land for the upcoming growing season.

"Never knowing from one year to the next whether they'll get enough moisture to grow productive forage crops continues to be the main reason farmers insure nearly 7.5 million acres of pasture and hay across Alberta," says David Maddox, Manager of Insurance Operations with Agriculture Financial Services Corporation (AFSC).

AFSC is the Crown corporation that provides crop insurance to Alberta farmers on behalf of the provincial and federal governments.

More Than \$3.7 Million Paid in 2012

More than \$3.7 million was paid out through AFSC Perennial Crop Insurance on hay and pasture claims across the province in 2012 – mostly due to lack of moisture. Other perils that triggered claims last year include summer hailstorms that blanketed the province, January pasture fires sparked by dry winter conditions in southern Alberta, as well as frost, flooding, heat stress, wind, and winterkill.

"Hay and pasture claims have been much lower than average these last few years compared to drought years like 2009 and 2002 when about \$56 million and \$89 million were paid out respectively," says Maddox.

Farmers Rely More on Grazing to Keep Costs Down

Managing risk on hay and pasture with tools like insurance is becoming increasingly important as Alberta cattle producers rely more and more on grazing pasture and forage land to keep costs down for greater profitability, says Grant Lastiwka, a forage and beef specialist with Alberta Agriculture and Rural Development (ARD).

"We're seeing producers graze cattle earlier in the spring and longer into the winter, feeding less stored feed, because grazing is their lowest cost feed source," says Lastiwka, noting strong commodity prices have kept the cost of feed grain and other alternative feed sources high.

This increased reliance on grazing has producers recognizing the need to manage their pastures and hay stands to be as highly productive as possible, says Lastiwka. "It's important they consider management changes such as fertilizing and re-seeding old depleted stands with more profitable legume grass mixes – to get more sustainable production out of every acre – especially those producers who are building bigger herds and plan on being in the business long term," he explains. "Because simply leaving animals out to graze longer – especially if you don't have the forage growth to support it – depletes pastures of healthy plants and lowers productivity."

"With so much invested in a resource they count so heavily on, hay and pasture insurance becomes more important," he says, noting dry weather last fall left many producers with low soil moisture, increasing the risk on their hay and pasture this spring.

Of course, anything can happen between now and the spring when the rains start falling, says Ralph Wright, a soil moisture specialist with ARD. He points out moisture conditions



As the February 28 deadline to apply for hay and pasture insurance in Alberta approaches, David Maddox says AFSC has added 21 new weather stations like this one to its provincial network, for a total of 227 across the province. AFSC uses precipitation data collected at these stations for Alberta's Perennial Crop Insurance programs.

in February are often not an accurate reflection of what the growing season will be like. "We often see dry times end abruptly with wet periods and vice versa. We won't know the real story for a few more months."

21 New Weather Stations

New to Perennial Insurance this year is the addition of 21 new weather stations to AFSC's provincial network – for a total of 227 stations across Alberta. "We've more than doubled the number of weather stations in our network since 2005," says Maddox. "It's an ongoing effort to ensure we have stations as close as possible to each producer's farm, making our programs more representative of conditions on their land."

AFSC uses precipitation and other weather data collected at the weather stations for Perennial Crop Insurance programs. "For example, with Moisture Deficiency Insurance (MDI) for pasture, producers select up to three weather stations that best reflect conditions on their farm. A claim is triggered when precipitation at those stations – and Spring Soil Moisture (SSM), if producers choose that option – fall below normal over the growing season. Normal moisture is based on 25 years of historical data," says Maddox.

He explains SSM is scientifically modelled based on precipitation and temperature at each weather station. Producers can track hourly, daily, and historical precipitation at their insured weather stations online at www.agriculture.alberta.ca/acis.

Farmers who take Perennial Insurance every year benefit from the Continuous Participation Discount – a substantial premium discount that gradually builds to 20 per cent after five years, says Maddox. "If you opt out one year, the discount returns to zero and takes five years to rebuild." Like other AFSC crop insurance programs, Perennial Insurance premiums are subsidized by the provincial and federal governments.

For more information about Perennial Insurance, farmers can contact their local AFSC District Office or the AFSC Call Centre at 1-877-899-AFSC (2372) before the February 28 deadline.

PRECISION AG

UPDATE

February 27-28, 2013

Deerfoot Inn & Casino
Calgary, AB

\$235/person

ARECA is hosting a Precision AG Update workshop February 27-28, 2013 in Calgary, AB. This workshop will feature in depth sessions on precision agriculture technology including GIS software, PRS probes, GreenSeeker technology, soil sampling and more. Registration includes 2 days of sessions and breakfast and lunch both days.

Register Online at www.areca.ab.ca/events/pagupdate



To book your hotel room please call
1-888-875-4667 or email reservations@dfic.ca
Group Rate Code: GTJABRES

Speakers include:

Dr. Raj Khosla, Colorado State University
Dr. David Lobb, University of Manitoba
Dr. Guy Lafond, AAFC
Dr. Eric Bremer, Western Ag Innovations
Karon Cowan, AgTech GIS
Dr. Ty Faechner, ARECA



For more information please contact the ARECA office at 780-416-6046

www.areca.ab.ca



Prairie Shelterbelt Program 2013

The first allotment of seedlings has been completed. A total of 4,599,760 trees and shrubs were allotted to 8,575 Prairie Shelterbelt Program clients. There is a limited amount of stock left which includes: mixed hybrid poplar cuttings; mixed tree willow cuttings; hedge rose; and snowberry.

As in previous years, tree orders were not allocated on a first-come, first-served basis but were allocated based on a rating system. In addition to the priority ranking system, limits were applied to the quantity of trees provided to each client. Limit levels were based on total supply and demand of trees.

Statements will be mailed to PSP clients in February to advise them of what they will (and will not) be receiving this spring. We request that our clients carefully review their Statements, and if they are not satisfied with a substitution or if they would like to reduce their tree numbers they must **call the Agroforestry Development Centre at 1-866-766-2284 by March 22nd** to make changes to their order.

We will continue to accept applications until the March 15th deadline. For the orders that we will not be able to fill, clients will receive an out-of-stock letter. We encourage

our clients to continue their valued tree planting efforts, and recommend that they look into alternate sources for trees and shrubs, such as those listed below:

CNLA - Canadian Nursery Landscape Association
www.canadanursery.com

SaskPower - Shand Greenhouse (Saskatchewan residents)
www.saskpower.com/shandgreenhouse

Trees for Tomorrow (Manitoba residents)
www.thinktrees.org/Trees_for_Tomorrow.aspx

Don George
AAFC-STB - Red Deer
403-340-4291

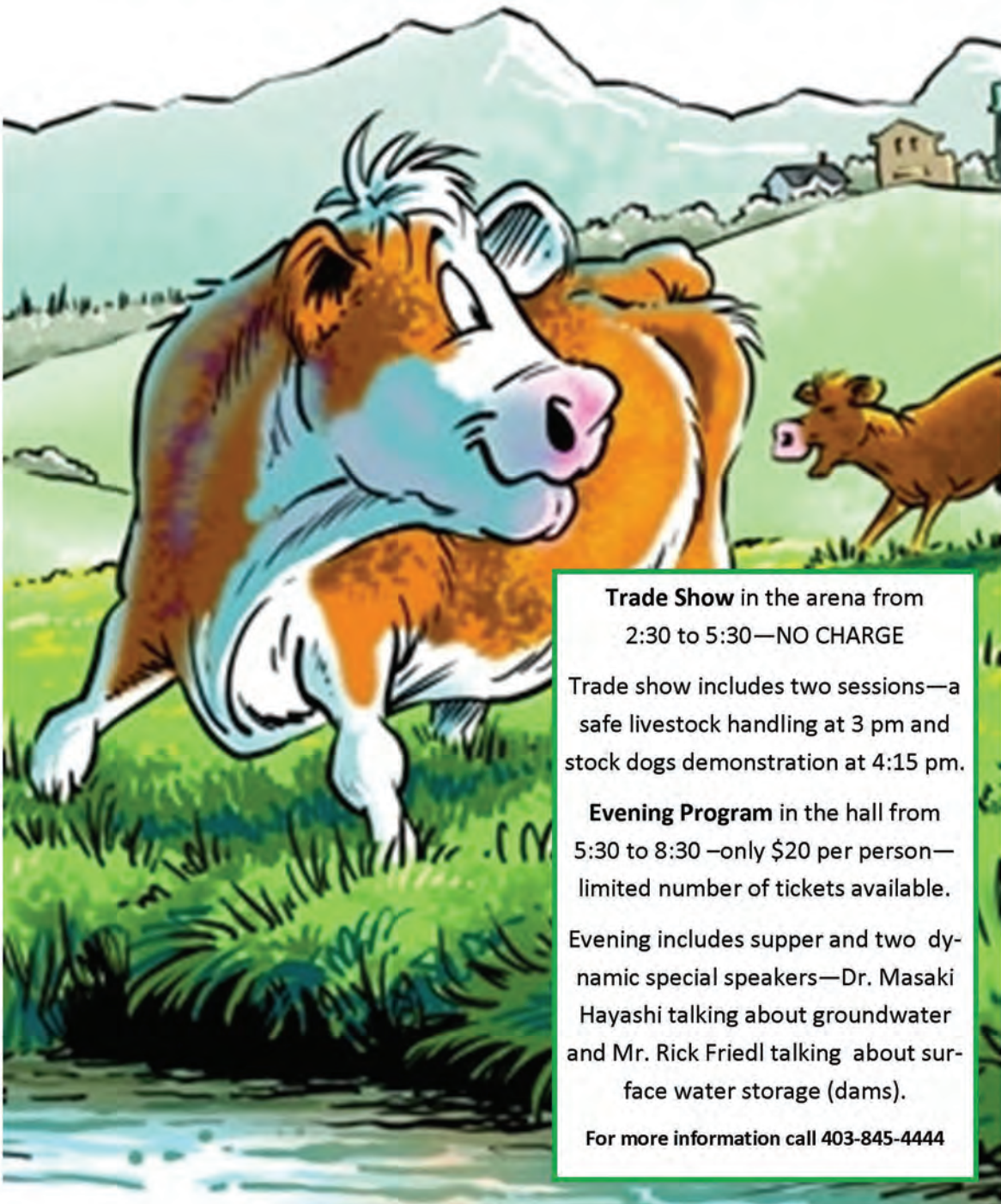


Coming Soon

“COWS, CREEKS AND COMMUNITIES”

Thursday, April 25, 2013

At the Kurt Browning Complex in Caroline Alberta



Trade Show in the arena from
2:30 to 5:30—NO CHARGE

Trade show includes two sessions—a
safe livestock handling at 3 pm and
stock dogs demonstration at 4:15 pm.

Evening Program in the hall from
5:30 to 8:30 —only \$20 per person—
limited number of tickets available.

Evening includes supper and two dy-
namic special speakers—Dr. Masaki
Hayashi talking about groundwater
and Mr. Rick Friedl talking about sur-
face water storage (dams).

For more information call 403-845-4444

“THE BEST FOR EACH”

2013 Livestock Care Conference

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ALBERTA FARM
ANIMAL CARE

**Thursday
March 21
& Friday
March 22**

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Calgary AB.**

Visit
www.afac.ab.ca/lcc
or call
403.662.8050

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WHAT'S ON THE AGENDA?

Thursday:

- Student Meet the Expert Session
- AFAC Annual General Meeting
 - Open Poster Session
 - Social Networking Event

Friday:

- Sessions on Animal Welfare Assessments
- Perspectives from Education, Processors, Industry, and Retailers
 - AFAC Awards of Distinction
- Bear pit Session - 'What does the Alberta Livestock Industry need to do now?'

The 2013 NEW Calgary venue will offer convenience for most travelers with easy access to the Deerfoot Trail and close proximity to the Calgary International Airport.

View the program and register online.

Early bird Registration deadline:

February 28, 2013

LivestockTransport.ca



Livestock Help Line & Resource Team
To report livestock care concerns CALL

1.800.506.2273

click here for details on ALERT



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Watersheds™



This publication is made possible by funding from Alberta Agriculture & Rural Development & Alberta Environment and Water via the Agriculture Opportunities Fund (AOF).



Agriculture Opportunity Fund

Alberta

What's on Foragebeef.ca?

See Front Page News
New information on forage beef issues from across Canada

New and Improved Swath Grazing Manual Available Soon!
Summarizing research done by Western Forage/Beef Group and Others

Coming Soon!
Greenhouse Gas Research Summary as it affects the forage beef industry



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Government of Alberta
Agriculture and Rural Development

AgriProfit\$

www.foragebeef.ca

Fusarium – The Enemy Within.

There has been a lot of press lately on the cereal disease *Fusarium graminearum*. You might wonder what the big deal is about. *Fusarium* fungal species are always around us. They naturally occur in the soil and the group is a large one with many species. *Fusarium graminearum* is the fungal infection that causes fusarium head blight in wheat, oats, barley and corn and is the most aggressive *Fusarium* species causing head blight.

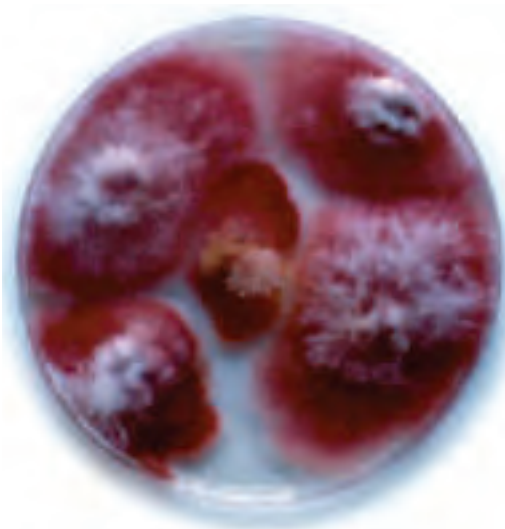
Why is it a problem? The causative agent itself damages kernel development, affecting grade and yield. Secondly, it has a significant negative effect on the quality of grain used for the feed, malting, milling, biofuel (ethanol) and brewing. More importantly, fusarium affected grain may contain fungal toxins (mycotoxins), such as deoxynivalenol (DON or vomitoxin), that are highly poisonous to livestock and humans above certain threshold levels.

How does it spread? The disease has been spreading, widely due to extensive planting of highly susceptible varieties, especially in durum wheat. Zero tillage has also contributed to the spread of the disease as infected crop residue from previous crops (especially with short rotations), are the prime source of head blight infection. Corn in rotation is known to be highly susceptible and can be instrumental in its spread to cereal crops. However, probably the greatest reason for the increased spread in Alberta has been the weather conditions at heading. Warm, moist conditions at heading in combination with the air-borne spores, has led to increased incidence and severity of the disease in Alberta. Once it is established, fusarium easily overwinters on infected crop residues and on infected seed, providing infectious spores for the next year.



In 1999 Alberta declared *Fusarium graminearum* to be a pest under the Pest Control Act. This put in place a series of regulations intended to slow or reduce the spread of the disease into central Alberta. *Fusarium graminearum* is a seed borne pathogen and, along with infected crop residues, present the most likely method of spreading the disease to non-infected areas.

The best management practices recommended to control the spread of the disease include testing next year's seed to determine if it is infected. If so, don't use it. Use seed treatment with activity on *Fusarium* species on all cereal seed. Clean off equipment of any crop residue between fields if fusarium has been found in a field. Use a crop rotation of at least 2



Please call **GWFA Manager, Albert Kuipers** at **(403) 844-2645** or your local County Agricultural Services staff if you would like to complete an Environmental Farm Plan. **Your EFP is required** to apply for funding to the Environmental Stewardships Plan Program of Growing Forward. **Grazing & Winter Feeding, Integrated Crop Management and Manure Management** are the 3 Stewardship programs that will be available in Growing Forward 2.

Alberta EFP
Environmental Farm Plan

Growing Forward

years between potentially susceptible cereal crops. Increase seeding rates to limit stooling and reduce the time the cereals flower and thus reduce their susceptibility to infection. If conditions are favourable to development of the disease (warm, humid evenings and days) and fusarium is known to be in the area, use an appropriate fungicide to limit the infection.

Other steps to take include avoiding irrigation during flowering, burying affected cereal crop residue, and controlling volunteer cereals and grasses in the headlands and around fields. This disease is becoming more economically damaging and prevalent in Alberta. It is imperative we take the necessary steps to stop the disease from becoming as severe as it in the other Prairie provinces.

For more information on this disease, go to this website ([http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex5210](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex5210)) or phone the Ag-Info Center at 310-3276.

By Harry Brook, Crop specialist

New Incentives for Environmental Improvements in the Livestock Sector

From the Jan 28, 2013 Issue of Agri-News

The recent approval of the Residual Feed Intake (RFI) carbon offset protocol by the Government of Alberta has opened up a new opportunity for farmers to get paid for making environmental improvements. The innovative practice highlighted in this new protocol reduces greenhouse gas emissions from beef cattle through advancements in genetic selection. This makes it possible to increase the efficiency of feed used by cattle.

“Low RFI or efficient cattle have lower maintenance requirements and consume less feed for the same level of production - such as growth, milk production or fat deposition,” says John Basarab, beef research scientist at Alberta Agriculture and Rural Development’s Lacombe Research Station. “This improved efficiency of feed use translates into a carbon offset when compared with normal feeding practices.”

The first generation of cattle produced from animals with these genetic characteristics will be eligible to receive carbon offset credits of about 28 tonnes (T) of carbon dioxide equivalent (CO₂e) per 100 head of cattle. This is like taking five or six cars off the road every year. The value would be close to \$340 per 100 head, assuming agricultural carbon offset prices of about \$12/T CO₂e. Extra benefits of reduced feed costs will also be gained. Tests are currently being conducted at Olds College and Strathmore to identify the most feed efficient animals.

Buyers of offsets are companies regulated under Alberta’s Specified Gas Emitters Regulation (2007). These companies can purchase carbon offsets in the Alberta Carbon Market as a way to meet their legal requirement to reduce annual greenhouse gas emission intensities by 12 per cent. Agricultural carbon offsets are created from farm practice improvements that have a proven scientific basis for reduced greenhouse gas emissions, are above and beyond business as usual, and can be verified by independent third parties.

“Although carbon offset payments are not large at this time, they provide a way to gain extra income from management improvements that increase efficiencies of production,” says Sheilah Nolan, climate change specialist with Alberta Agriculture and Rural Development. “This also helps producers and livestock operators get familiar with types of verifiable farm records that are needed to prove the practice change happened. These records are also likely to be needed to participate in other emerging environmental markets.”

Initiated by Alberta Agriculture and Rural Development, funding for this Canada-Alberta cost-shared project was provided by Agriculture and Agri-Food Canada through the Agricultural Flexibility Fund, as part of Canada’s Economic Action Plan.

More details about other agricultural offset opportunities are available on the [Agriculture Carbon Offsets](#) website.

Contact: Ag-Info Centre - 310-FARM (3276)[Sheilah Nolan](#)

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Dr. Basarab was a colleague of mine when I worked in Alberta Agriculture before my retirement 17 years ago.

This is another link to a series of press releases which outline the Carbon Offset policies available to agricultural producers in Alberta.

Agriculture in the Alberta Carbon Market

[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/cl11618](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/cl11618)

Ross Gould, P.Ag. Retired, Calgary, Alberta



!!!Don't miss any issues of The Blade!!!
Join Grey Wooded Forage Association
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2013 –2014 Memberships are available now for \$20.00
and run from April 1,2013 to March 31,2014
For more information phone 403-844-2645

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- Receiving *The GWFA Newsletter* in Spring & Fall and *The Blade* monthly.
- Receive up-to-date information on G.W.F.A. activities via The Blade.

Please mail the portion below with a cheque for \$20.00 to:

Grey Wooded Forage Association
Box 1448
Rocky Mountain House, Alberta
T4T-1B1

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Town. Prov..... Email.....
Postal Code..... Confirm Email.....

Please give us an idea of what area of forage production you are interested in:

Controlled Grazing & Pasture Management:_____

Growing Annual Forages for Extended Grazing or Swath Grazing:_____

Growing Annual Forages for Silage or Greenfeed:_____

Growing Hay:_____ Ration Balancing:_____

Soil Biology:_____ Pasture Rejuvenation or Renovation:_____

Low Cost Cow/calf Production:_____

Environmental Sustainability:_____ Economical Sustainability:_____

COMMENTS:_____

AGRI-FACTS

Practical information for Alberta's Agriculture Industry

October 2004

Agdex 420/52-4

Beef Ration Rules of Thumb

This factsheet can both guide producers through a feed test and help them understand the results.

With a feed test in front of you, look at the following rules and compare them to the feed test. Remember, these are rules of thumb, which means they hold true most of the time, but variations in management and cow type will affect the end result.

These rules of thumb should not be considered a replacement for balancing rations with proven software, but rather an aid to understand the feed and where it fits in the management.

Energy

Energy gives the ability to use the building blocks for growth and other productive purposes. Learn one of the six measures for energy and stick with it. Using Total Digestible Nutrients (TDN) per cent, the Rule of Thumb is 55-60-65. This rule says that for a mature beef cow to maintain her body condition score (BCS) through the winter, the ration must have a TDN energy reading of 55 per cent in mid pregnancy, 60 per cent in late pregnancy and 65 per cent after calving.

Rules of Thumb

Dry matter

Always refer to the "dry matter" numbers. These numbers have the moisture factored out and allow the comparison of all feeds, from stage 1 grains.

Crude protein

Protein is a building block. The Beef Cow Rule of Thumb with protein is 7-9-11, which means an average mature requires a ration with crude protein of 7 per cent in late pregnancy, 9 per cent in late pregnancy

AGRI-FACTS

Practical information for Alberta's Agriculture Industry

August 2009

Agdex 130/536-1

Nutrient Management on Intensively Managed Pastures

Distances are measured in kilometres and miles. Distances are measured in kilometres and miles.

several pools of nutrients including organic matter, growing plants, shoots, plant litter, living animals, including large herbivores, above and below ground invertebrates (beetles and worms) and soil microbes, and the atmosphere.

nutrient cycles develop as nutrients flow along pathways from one pool to another. The processes and pathways of nutrient cycles are different for various nutrients, but nutrient balances control the cycles. Balances are made up of inputs, outputs and losses of nutrients in the pasture system.

inputs = outputs + losses

they are removed or lost. Some are exported out of the system to other parts of the landscape.

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Pasture Planner



A Guide for Developing Your Grazing System

AGRI-FACTS

Practical information for Alberta's Agriculture Industry

September 2008

Agdex 420/56-3

Agronomic Management of Swath Grazed Pastures

Feed, feeding, cow management and pasture disposal can account for up to two-thirds of the total cost of production in a cow-calf operation. Systems that can extend the grazing season and reduce these costs are of great interest to cow-calf producers. One of these is swath grazing.

Many factors come into play to determine forage quality, quantity and unit cost of production in a swath grazing system. Some of these factors, such as weather, are

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These publications are available to our members by phoning or emailing the GWFA office!



Management of Canadian Prairie Rangeland

Grazing Notebook



Name: _____
Year(s): _____

Agronomic Management of Stockpiled Pastures

Stockpiling pasture is a form of deferred grazing. The producer stockpiles the forage grown during the spring and summer for use when the pasture is in short supply or when cows need fall or winter feed. This practice can mean savings for the producer:

- harvesting, hauling and feeding costs associated with wintered
- to be removed from feeding

range in
prairies. Depth
limits winter
in the
regions.
season may be
by using
fall and early

ing a successful
system:

period between grazing or cutting
time

Stems

If for a full growing season, for a
e regrowth may be stockpiled
lage harvest or grazing.
is suited to the drier prairie
er rainfall prevent good
e native species in these areas
quality better than

Winter grazing on the prairie works best with little or no
snow cover. Supplemental feed is needed if snow cover is
too deep and forage yields are low.

In the Parkland and Northern areas, a multi-pass system
where the second or third cut or regrowth from pastures is
grazed in late fall or winter makes more efficient use of the
land and is generally economical. Forage quality of the
regrowth is higher than that of the summer first growth,
especially if it is saved until fall or winter. Winter grazed
cows are often required to forage through more than
30 cm (12 in.) of snow, so stockpiled
forage plants must be tall.

Stockpiled forage
for pasture can
mean savings for
the producer

Species selection

Species selection depends on the system
being used. Ideally in cut-and-graze or
multi-pass rotational grazing systems, a
species used for stockpiling should be
able to do the following:

- regrow rapidly following early harvests to provide at
least 2,000 kilograms (kg) of forage per hectare
(1,785 lb./ac) for good fall grazing
- maintain high quality following fall frosts

If grazing is to occur after snowfall, forage mass needs to
be higher as grazing efficiency is reduced and grazing
losses increase. Using an erect species makes it easier for
cows to get at the feed under the snow.

In a single-pass system, a species that maintains its quality
as it matures is a good choice.

