

The Blade

"Creating an Awareness of Forages"

JULY 2012

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Western Canadian Grazing Conference & Tradeshow

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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



West Country Ag Tour

Thursday, August 23rd, 2012 7:30 am till 4:30 pm

Come join us for an exciting day filled with good company and tasty food as we travel around Clearwater County and visit a variety of agricultural operations to learn about research and innovations that are taking place in our area!



Registration Fee: \$25 per person before August 16th \$30 per person after August 16th (Includes breakfast, lunch and snacks, bus charge and an information package)

To register, please contact: Clearwater County Agricultural Services (403) 845-4444

Registration Deadline: Tuesday, August 21st!

Pancake Breakfast starts
at 7:30am,
Leslieville Hall!

Coffee and snacks will be provided!

Tour buses will depart right after breakfast!

Hosted By:



Grey Wooded Forage Association



2012 Lacombe Field Day

Field crop research in a world of challenges and changes

Thursday, July 26, 2012

Hosted by Lacombe Research Centre and Field Crop Development Centre

Schedule

Registration at Alberta Agriculture 8:00 am Field Crop Development Centre farm site.

1 km south of Lacombe on Highway 2A, south on Range Road 270.

> Field presentations 9:00 am Noon Lunch (provided) Field Presentations 1:30 pm

Registration Fee is \$20 per person and includes lunch, tour, and refreshments. Please register by July 13, 2012.

Contact Kristy at 403.782.8100 ext. 0 or kristy.vogelzang@agr.gc.ca for more information.

Topics

Breeding - An overview of the triticale, wheat, and feed and malting barley breeding programs, including the development of molecular techniques, with a focus on new varieties.

> -M. Aljarrah, J. Helm, P. Juskiw, J. Nyachiro, J. Zantinge

Agronomy - Discussion of malting barley, winter cereals, and silage.

-J. O'Donovan, N. Harker, V. Baron

Pathology - Management strategies for stripe rust, scald and other diseases.

-K. Turkington, K. Xi, K. Kumar

Certified Crop Advisor CEU credits will be available.

Thank you to the 2011 Field Day Sponsors:

Alberta Canola Producers **Growing Forward** Canadian Seed Growers (Alberta Branch)

Alberta Pulse Growers Arysta Life Sciences

2012 Lacombe Field Day Registration Form

Registration Deadline is July 13, 2012

Name	Company	
Address	Town/City	Postal Code
Phone	Email	

Number of people in your group x \$20 each = enclosed.

Please provide the names, addresses, and phone numbers of all attendees in your group.

Please make cheques payable to: 2012 Lacombe Field Day

Mail to: 2012 Field Day, AAFC Lacombe Research Centre, 6000 C&E Trail, Lacombe, AB, T4L 1W1



- Managing waste water on your property
- Creating habitat in your yard



Contact:

Blavne Petrowicz Environmental Coordinator bpetrowicz@lacombecounty.com 403-782-6601

Location: Gull Lake Center

TIME: 9am-12pm with lunch to follow











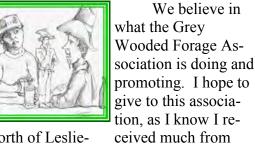


Director's Corner:

My name is Victor Penner. I am married to Elmona Penner and have 4 children, all with families of their own.

Five years ago we sold our grain portion of farming operation and moved north of Leslieville where we have a few cow/calve pairs. We used to feed our calves through to slaughter weights. The majority of our cows are leased out to other individuals.

This has worked very well, giving us time to build our house and just recently a workshop. I have always thought that the feed I do not have to plant/harvest is the cheapest way to go to feed our cows, or at least as minimal Victor as possible.



it. Thank-you.

"...as for me and my house we will serve the Lord."



Manager's Notes:

By Albert Kuipers

In recent years mob grazing has become a subject of increasing interest to pasture managers across North America. Basically this is about using high, or ultra high



stock densities of livestock as a tool to heal the land. Stock densities of about 40,000 to 200,000 lbs of beef per acre could be considered to be high stock density. Ultra high stock densities could be as high as 1,000,000 lbs of beef per acre.

Allan Savory, founder of holistic management taught that using a strategic combination of land management tools, one could make dramatic improvements in land, or pasture health.

These tools, animal impact, grazing, technology and rest have since become well known and well used by graziers across the globe. When these tools are used together correctly, forage production could be doubled, tripled, and some have said, quadrupled.

Animal impact refers to the hoof action of animals milling around and trampling much of the forage into the ground. Manure and urine would also be trampled into the soil surface. This is an effect that is not usually seen in low stock density grazing management.

Grazing can be severe, or very light, even with high stock density grazing. That is a function of the amount of time grazing is allowed to occur. For example, if a paddock is stocked at 300,000 lbs per acre and only moved once a day, they would have severely grazed and trampled everything. If they were to be moved several times a day, they would most likely graze lightly and trample everything into the ground.

Technology - Yes, we have lots of technology nowadays. Electric fencing, portable and permanent, has made it quite easy for us to manipulate stock densities. Portable and pipeline watering systems have allowed us flexibility in grazing strategies that were incredibly challenging in years gone by.

Rest is the key to making all of this work. The more severe the grazing and animal impact, the longer it will take till the pasture is fully recovered. In dryer areas the recover time will have to be much longer than in wetter areas. Very often we find that rest periods given, are not long enough for the plants to fully recover.

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is defined as re-grazing individual plants before they are fully recovered.

During the fast growth period we usually see in June, over-grazing can occur in less than a week. In highly productive pastures plants can re-grow fast enough to be over-grazed in two to three days. If grazed lightly during the fast growth period, plants will bounce back very quickly.

In late summer, as re-growth slows way down, it could take even three weeks for plants to re-grow enough to be grazed again. It also takes much longer for plants to fully recover once growth has slowed down.

Here's another important concept. One animal given a large pasture, let's say one animal on ten acres, for a long period of time, will over-graze its favorite plants over and over again. Many plants in that pasture will not be grazed at all, or be under-grazed.

I have seen grass in permanently fenced off areas dying from the insides out because it wasn't being grazed. A friend showed me a piece of land that hadn't been grazed in at least fifteen years. It was quite a mess of weeds and the forages were not very productive.

OK, so now we got the idea that mob grazing, or high, or ultra high stock density grazing could be used to rejuvenate pasture. Yes, pastures can be rejuvenated very well with these tools, but don't forget the animals.

I remember coming home from a GWFA Controlled Grazing Course back in the early nineties with one big concept firmly planted in my brain. Stock density was the way to improve pastures quickly.

My big mistake was not allowing the cattle enough forage to gain weight. These were yearling heifers, and while they pretty much all got bred, they didn't gain much more than a quarter pound a day for the grazing season. Our client was not happy.

The big lesson in this is:

When managing for healthier pastures, don't forget the needs of the animals, and when taking care of the animals needs, please, don't forget the grass.

This doesn't mean that you can't do mob grazing with animals you need to get weight onto. It means that you need to make sure they get enough forages into them to perform well.

One way a friend and I were talking about yesterday is to alternate periods of severe grazing and animal impact with peri-This brings us to the topic of over-grazing. Over-grazing ods of high quality grazing. A common term for grazing high quality pasture after periods of severe grazing, or grazing poor quality pasture is "popping".

> Popping is basically fast compensatory gain. I've heard of gains of five lbs per day during these periods.

What this all comes down to is that the livestock can be the tool to damage and reduce pasture production, as commonly seen, but they also can be the tool to rejuvenate pastures. It's all in timing.





Your Watershed News

WATERSHED ALLIANCE

Your Land, Your Water, Your Voice

What we heard from you about the place you live As summer arrives, all of us here at the Battle River Watershed Alliance (BRWA) are reflecting on the amazing opportunity we had this past year to travel across east-central Alberta and talk with the wonderful people who live here. Through a series of workshops, you told us what you appreciate about this place, what you see as the critical challenges facing us, and your hopes for the future. Learn more about what we heard at these workshops in our "What We Heard" report, which is now available on our website! Visit us at www.battleriverwatershed.ca.

Taking Care of our Land and Water

Watershed management in east-central Alberta
In 2011, the BRWA released Our Battle: State of the Battle
River and Sounding Creek Watersheds Report 2011. An
online version of the report is available on our website. This
report provides a snapshot of the current ecological, social
and economic health of our watersheds; it also acts as a catalyst to start talking about what we want our watersheds to
look like and what actions we need to take to get there.
This year marks the beginning of the BRWA's watershed
management planning process, which is all about developing
management recommendations that lead to tangible actions
that support the ecological, social and economic sustainability of our watersheds. Visit our website to read the Terms of
Reference that will guide this process.

Here's what we'll be working on over the coming year:

Working to Improve Water Quality

Coming up with collective solutions to water quality issues

Over the coming year, one of the key components of our watershed that we want to focus on is water quality. In particular, we want to get a handle on high nutrient levels in our rivers, streams, lakes and wetlands. This year we'll be focusing our attention on nutrients and other pollutants coming from "non-point" sources; this includes pollution entering our water bodies and waterways through storm water runoff from our communities and surface water runoff from the countryside.

We want to learn more about the good work that is already being done and work together to come up with solutions to improve water quality and nutrient management in our watersheds. We'll be hosting a number of workshops in 2012/13 to talk with you about what collective actions are possible. The first round of workshops will take place in

September. Stay tuned for more information about workshops near you!

Planning For Extremes

Developing strategies to thrive in times of water shortage and drought

In 2011, the BRWA began work on policy research related to issues of drought and water shortages in the Battle River and Sounding Creek watersheds. This coming year, work will continue with the development of policy recommendations and implementation guidelines for drought management in our watersheds.

Over the next year, we will be hosting a number of workshops to have conversations with you about drought policy recommendations and implementation guidelines that you would like to see put in place. The first round of workshops will take place in August. Stay tuned for dates and times for a workshop near you!

For more information, please contact Sarah Skinner, BRWA Watershed Planning Coordinator

(phone: 780-672-0276, email: sarah@battleriverwatershed.ca)

GROWING FORWARD UPDATE

Announcements:

The Grazing and Winter Feeding Management Program *WILL BE CLOSED AS OF AUGUST 31, 2012*.

The Manure Management Program WILL BE CLOSING on AUGUST 31, 2012 to allow time for application processing before year end and for project completion during the normal construction season. Any new applications received after August 31, 2012 will be returned to the Applicant.

PROGRAM APPLICATION FORMS FOR 2012-13 ARE NOW AVAILABLE. A new Manure Management Program Application form is available online. Also, minor changes have been made to the program Terms and Conditions.





Stakes are High for Alberta Farmers as Hail Season Begins

'Farmers Have So Much Invested in the Ground'

As crops start to grow and another hail season gets under way, high commodity prices and input costs are raising the stakes for farmers this year, says Chris Dyck, with Agriculture Financial Services Corporation (AFSC), Alberta's provincial crop insurer. "Hail is a threat every growing season in Alberta because we have one of the highest incidences of hail in the world. But when crop prices and inputs like fertilizer and seed climb as high as they are now – at well-above average levels – hail becomes an even greater concern for farmers because they have so much invested in the ground," says Dyck, senior manager of business risk management operations for AFSC. The Crown corporation provides the majority of hail insurance to farmers across Alberta on behalf of the provincial government.

AFSC Straight Hail Insurance

As soon as crops emerge from the soil, they're vulnerable, says Dyck. He points out hailstorms in late-May and early June triggered several claims under the AFSC Straight Hail program this spring in southern Alberta. Last year, the first Straight Hail claim happened on June 4 in the Peace region. "Crops have an amazing ability to rebound from early season hail damage," says Dyck. "However, those early storms do often result in reduced plant stands and yields. The later hail strikes in the growing season, the greater the damage," he adds, "because once plants have podded or headed out – usually by mid-July – it's too late for recovery."

\$25.5 Million Paid Out in 2011

AFSC paid out just over \$25.5 million on nearly 1,500 Straight Hail claims last year — an average hail season for Alberta, says Dyck. The most severe damage was caused by two major hailstorms — one in early July that tore through crops from Sundre to Red Deer — and a second one on July 18 that cut a wide swath through fields from Millet to Saskatchewan. Several smaller storms also peppered crops with hail in almost every region of the province. "Last year was a good example of the fact that hail strikes everywhere in Alberta, not just in the highest risk area known as Hail Alley that stretches from Calgary to Edmonton, along the Highway 2 corridor," says Dyck.

What kind of hail season lies ahead this summer is any-body's guess, he adds. "If it's wet and warm, we usually get more hail. If it's dry, there's generally less hail. But the weather can change so quickly, it's impossible to predict," he says, referring to the dry conditions experienced in 2009. "Parts of the province did end up getting moisture that summer, and we had hail losses of more than \$30 million."

More Farmers Choosing Auto Elect

An increasing number of farmers are electing to take out Straight Hail coverage in April with their crop insurance – before their fields are even planted – qualifying them for a 2 per cent premium discount, says Dyck. "It's an option we started offering two years ago for producers who want protection the



The stakes are high for Alberta farmers as crops start growing and another hail season gets under way, says Chris Dyck with AFSC. Just over \$25.5 million was paid out to farmers across the province last year through AFSC's Straight Hail Insurance program. Farmers can access Straight Hail coverage online at www.afsc.ca to receive a 2% premium discount, or by contacting their AFSC District Office, local hail agent, or the AFSC Call Centre.

instant their seeds are in the ground – rather than waiting for their crops to emerge and risk early hail damage," he says, explaining crops that suffer more than 25 per cent hail damage before being insured with Straight Hail coverage become ineligible for AFSC hail insurance until the next growing season. "It's a risk many farmers want to avoid," says Dyck.

AFSC Mandate

AFSC has been providing hail insurance to Alberta farmers on behalf of the provincial government for more than 70 years. It all started when the province passed special legislation in 1938 creating the Alberta Hail Insurance Board. The original hail program offered by the Hail Insurance Board still exists today and is administered by AFSC.

"Until the Hail Board was established, there were farmers in Alberta who didn't have access to hail insurance. That's because private insurers weren't able to provide hail insurance in all areas of the province due to the high level of risk involved," says Dyck. "Hail is risky business, and our mandate as a provincial insurer today is the same as it was back then – to provide hail insurance to farmers in every corner of the province, even in the highest risk townships."

Farmers can access Straight Hail Insurance online at www.afsc.ca, through their AFSC District Office, local hail agent, or by contacting the AFSC Call Centre at 1-877-899-AFSC (2372). Farmers receive a 2 per cent premium discount by purchasing online. Once a policy is purchased, it takes effect at noon the next day.



Livestock Consumption of High Nitrate Feeds

We know that nitrates are not toxic to most animals. However, in ruminant animals like cattle, sheep and goats, the bacteria in the rumen convert nitrates into nitrites creating a toxic substance for animals. Luckily, the nitrites are then transformed into ammonia, a less harmful substance. When the nitrate breakdown system in the body is balanced, the excess ammonia produced is absorbed by the blood and then passed in the urine. Occasionally, ruminant animals consume a high nitrate feed causing an overload for the microbes to convert the nitrates into nitrites and then finally ammonia. This causes an accumulation in the rumen of the animal, leading to a greater problem known as nitrate poisoning.

Nitrate poisoning occurs when the nitrate and nitrite amounts seep through the rumen wall into the bloodstream. As we learned above, nitrites cause toxicity. The nitrites combine with the hemoglobin creating something known as methemoglobin. While hemoglobin is able to carry oxygen to body tissues, methemoglobin is not, causing the animal to suffer from oxygen starvation. All animals have different levels of tolerance to the nitrites because of their own breakdown rates.

Chronic nitrate poisoning is a condition in which the clinical signs of the illness are not observed. Reduction in weight gain, depressed appetite and lower milk production are more commonly noticed. The nitrates can cause abortions within the first hundred days of pregnancy, due to its ability to interfere with the implantation of the egg in the uterine wall. Reproductive problems may also appear because of a nitrate or nitrite hormone imbalance. Babies affected within the last three months of gestation, are usually born prematurely and die within 18 to 24 hours of birth. Young calves affected by nitrate poisoning may suffer from convulsions or seizures.

In acute poisoning, the signs are observed and the animal is in critical condition. The conversion of nitrates into nitrites is done rapidly, resulting in large amounts of nitrites to be absorbed into the bloodstream. This is severe, causing animals to die within a few hours of ingestion. Signs include: excess saliva and tear production, increased heart rate, disorientation and an inability to get up, staggering gait, laboured or violent breathing, vomiting, and muscle tremors. Due to its fast evolving nature, animals are usually found dead before signs can be noticed.

So, just how do nitrates get into the forage and cause harm to our animals? Plant roots ingest nitrates, which are a

form of nitrogen, and transport it to the leaves. Damage to the plants caused by hail or frost, and drought or hot dry winds, can put forage under stress affecting photosynthesis, which results in excess nitrate levels to form. Plants continue to absorb nitrates even after they have been damaged or stressed. Since plant roots continue to consume nitrates even though their leaves may be damaged, the nitrates have nowhere to go and begin to accumulate in the

stem, increasing the risk of toxicity. When the stress has been removed, nitrate levels should also return to a normal level within several days. However, if harvesting occurs before the plants get a chance to recover from the stress, the potential for nitrate poison-



ing exists. Therefore, the best time to harvest damaged crops is immediately after the stress has occurred because the nitrates have not had time to accumulate in the plant stems. Other factors that may increase the level of nitrates in the forage include large applications of nitrogen fertilizer or herbicides, as both interfere with normal plant function.

How do you introduce your cattle to a damaged crop and prevent the affects of nitrate poisoning? First of all, make sure your cattle are well fed before turning them into the damaged pasture. Slowly introduce the cattle to the crop by limiting

their time to consume the contents. The idea is to get the cattle accustomed to the crop, reducing the overall impact of the nitrates on the cattle. Over time, the cattle can be left to consume the full pasture; however, five to seven days should be given to ensure the cattle have had adequate time to adjust to the new feed before allowing the cattle to have free



range. Other ways to reduce the risk of nitrate toxicity may include: diluting the nitrate content of the total ration by feeding a combination of low and high nitrate feeds or feeding the ration in two or three meals a day rather than just one meal per day.

Among the ruminants, sheep have the highest tolerance to nitrates as they are able to convert methemoglobin back into hemoglobin more easily. Cattle on the other hand, have the lowest capability to convert methemoglobin into hemoglobin and therefore are at the greatest risk of nitrate poisoning.

So, next time you notice damaged or stressed plants in

your pasture, don't worry that you will instantly be a victim to nitrate poisoning. Instead, learn how to manage feed that contains nitrates as that will help you reduce further problems associated with nitrate poisoning in your livestock.

By Bonita Knopp



Farmers' Advocate Office to Offer Advice to Local Farmers and Ranchers Affected by Oil Spill

The Farmers' Advocate Office (FAO), a division of the Alberta Ministry of Agriculture and Rural Development, will be providing advice to and advocacy for farmers and ranchers affected by the recent oil spill in the Jackson Creek and Red Deer River watershed areas. Members of the FAO will be personally contacting affected operators to offer advice on maintaining relevant records and general information about private claim and recovery procedures.

Peter Dobbie, Q.C., Farmers' Advocate stated to his team that "once spill control, containment, clean-up protocols are fully in place, we need to be there for these Alberta farmers and ranchers to provide support and to ensure that they are recognized as key affected stakeholders". While the FAO does not provide legal advice, the FAO plans to work closely with relevant regulatory bodies, municipalities and organizations and follow up with affected agricultural operators.

The FAO extends an invitation to any affected landowners to call our office to become informed about their options and appropriate processes to follow during this unfortunate event.

Specialists in the FAO in the area of land issues are Carol Goodfellow and Graham Gilchrist. However, all staff will be up to date and able to provide assistance.

> Please call toll free: 310-FARM (3276) and ask for someone in the Farmers' Advocate Office for more information.



By Janet Patriquin, Assistant Farmers' Advocate



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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



www.foragebeef.ca





Alberta EFP

Environmental Farm Plan

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 available.





Soil Chemistry Now Available @ Soil Foodweb Canada!

Soil Foodweb Canada is proud to announce that effective immediately we will be offering not only biological testing but chemistry testing as well! We are using a 'Melich I' extraction

assess the water soluble portion of the macro and micronutrients.

Go to http://soilfoodweb.ca/SFC-Newsletter4.4.pdf for more information!

> Soil Foodweb Canada Ltd. 285 Service Rd. Box 420 Vulcan, Alberta T0L 2B0 403-485-6981

If you're interested in starting or being involved in a Grazing Club, please call: Arnold at 780 495-4593 or Albert at 403 844-2645.



Agroalimentaire Canada Agri-Food Canada



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



!!!Don't miss any issues of The Blade!!! Join Grey Wooded Forage Association Or renew your membership!

2012 –2013 Memberships are available now for \$20.00 and run from April 1,2012 to March 31,2013 For more information phone 403-844-2645

Become a part of an enthusiastic group of people who are exploring ways to turn grass into \$\$\$.

Membership is open to anyone interested in forage production and grazing management in an economically and environmentally sustainable way.

Members benefit by:

- Receiving discounts on Controlled Grazing Courses, seminars, tours, farm calls and consulting on grazing management, pasture rejuvenation, feed production (annual forages) and more.
- 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 Renewal or New Member PLEASE PRINT CLEARLY: Canada Post or Email Name......Phone.... Address......Fax......Fax..... 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:



Beef Ration Rules of Thumb

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

Rules of Thumb

Dry matter

Always refer to the "dry matter" numbers. These numbers have the noisture factored out and allow the comparison of all feeds, from allage t

Nutrient Management on Intensively **Managed Pastures**

Stock-poisoning Plants of Western Canada

Pasture

Planner

W. MAJAK, B. M. BROOKE and R. T. OGILVIE



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



Agronomic Management of Stockpiled Pastures

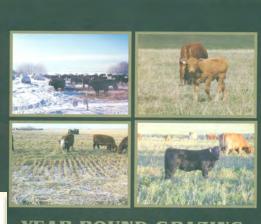


Agronomic Management of Swath Grazed Pastures

Management of Canadian Prairie Rangeland



Grazing Notebook Canad



YEAR ROUND GRAZING 365 DAYS







SAVE THE DATE!!



"GRASS ROOTS OF GRAZING"

November 27 - 29, 2012 Sheraton Hotels & Resorts, Red Deer AB

Keynote Speakers:

Neil Dennis

David Irvine

Charley Orchard

Glen Rabenberg

For More Information Contact: West Central Forage Association westcentralforage@gmail.com (780) 727-4447



New for 2012:

A Tour at the Lacombe Research Centre!!!

