Grey Wooded Forage Association

The Blade

"Creating an Awareness of Forages"

DECEMBER 2012

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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

Manager's Notes:

By Albert Kuipers

Variety choice - Does it matter?

I think everyone in this business knows that choosing a suitable variety of a crop species to grow is important. A big factor is the climatic adaptation of the varieties in question. In dryer climates choosing a drought tolerant variety reduces the risk of crop failure due to drought. In most of our area this is important, as is winter hardiness on perennial forages.

Now, those factors are pretty much "no-brainers" for most of us. There are a number of other `no-brainers``, but I don`t think we need to get into them. There are some variety characteristics we deal with that are often overlooked. Variety factors that affect forage yield, disease resistance, or palatability have been the subjects of crop research for many years.

Now, if we take a look at some of the common choices of cereals for swath grazing, we often see choices of varieties made on the basis of total forage yield. Take oats for example, varieties such as Magnum, Cascade, Baler, Mustang or Pendic 99 are varieties that have been commonly used in the last twenty years.

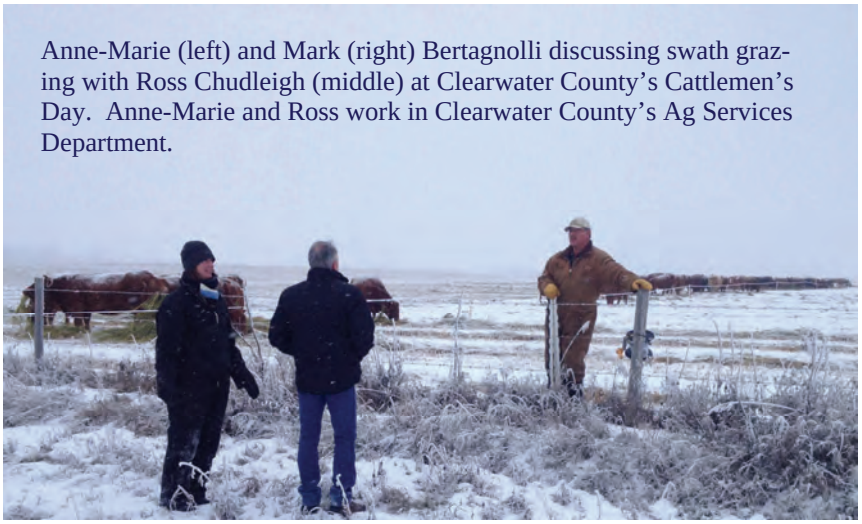
Some, like Magnum oats, we don`t hear much about any more. Magnum and Baler oats were developed for high forage yield. Baler is still used quite a bit, but why did Magnum fall out of favour? I would love to hear the reasons why from those who`ve tried Magnum and quit using it. I suspect it may have something to do with palatability, or wastage by the cattle.

Yield is a big factor, but the yield expressed in cow days per acre, or animal unit days per acre I would say is more important to the swath grazer than simply total forage yield.

I think we can say the same for other cereal species commonly chosen for swath grazing. Barley is very commonly used for swath grazing and we`ve seen that cattle clean it up quite well. One problem we see is that forage yield is impacted quite significantly by late planting dates often chosen to delay swathing to September. Photoperiod, or day length affects when barley matures, so less days between planting date and when flowering is triggered by shortening days will significantly reduce forage yield.

Choosing varieties less affected by photoperiod, or varieties bred for longer growing seasons would make sense. It`s worthwhile to research this thoroughly before making your seed purchase decisions.

Triticale is increasing in favour as a choice of a cereal for swath grazing. Older varieties have been rejected by swath grazing producers due to the palatability issues caused by the awns on the heads. This lead to the development of varieties like Bunker and Tyndal, both high yielding, reduced awn varieties. Bunker is well suited to most of the black soil and grey wooded soil areas of the province, while Tyndal is designed for the dryer brown soil areas.



Anne-Marie (left) and Mark (right) Bertagnolli discussing swath grazing with Ross Chudleigh (middle) at Clearwater County's Cattlemen's Day. Anne-Marie and Ross work in Clearwater County's Ag Services Department.

These two varieties are good examples of the work our researchers have done to meet the needs of the cattle producer who uses swath grazing to reduce costs of production.

Now, we know many of you have been choosing cereal species and varieties that you feel are best suited to your operation, in your climate. Some of you have been using the same varieties for years and others have been making new choices based on information from GWFA, ARD, or Agriculture Canada researchers.

Could you please take the time to let me know what species and varieties you have been choosing, and why? This information will be very helpful to Dr. Vern Baron and other forage and beef researchers at the Lacombe Research Centre. Please call me at 403-844-2645 or email me at gwfa2@telus.net with this information.

Thanks,

Albert.

Director's Corner:

I would like to thank you for the opportunity to be a director for GWFA. GWFA is very active in bringing information to the primary producer about forages and grazing methods. It also participates in research on new forages, new grazing techniques and their application to the producer.

On my own farm, I raise purebred Gelbvieh cattle. We raise these cattle on a rotational grazing system and aim to extend our grazing by banking some pasture for early winter grazing. We then use annual crops for winter grazing the cow herd. Our bulls are raised on forages without additional grain. This allows us to select cattle that are more suited to forage based production models. Information from GWFA has helped me with my management decisions for my operation.

Thanks,

Murray Abel

Residual Feed Intake (Net Feed Efficiency) in Beef Cattle

Improving the feed efficiency of a beef cattle herd can mean big savings for producers. One way to achieve this goal is to select breeding bulls that are naturally feed-efficient, since 80 to 90 per cent of the genetic improvement in a herd comes through the sires.

Benefits

On average, it costs $50 less over 112 days to feed an efficient bull compared to an inefficient one. An efficient bull will pass on superior genetics for feed efficiency to his progeny, which will be realized as feed savings for calves in the feedlot and for replacement heifers entering the cowherd.

Feed is a major expense for cattle producers, second only to fixed costs. With 75 per cent of the total feed cost used for maintenance in breeding cows, improving feed efficiency can have a big economic effect.

A 5 per cent improvement in feed efficiency could have an economic effect four times greater than a 5 per cent improvement in average daily gain. Improving feed efficiency will have an effect on the unit costs of production and the value of breeding stock, embryos, semen and feeder animals.

Residual Feed Intake

Residual Feed Intake (RFI) or net feed efficiency is defined as the difference between an animal's actual feed intake and its expected feed requirements for maintenance and growth. RFI is the variation in feed intake that remains after the requirements for maintenance and growth have been met. Efficient animals eat less than expected and have a negative or low RFI, while inefficient animals eat more than expected and have a positive or high RFI (see Figures 1 and 2).

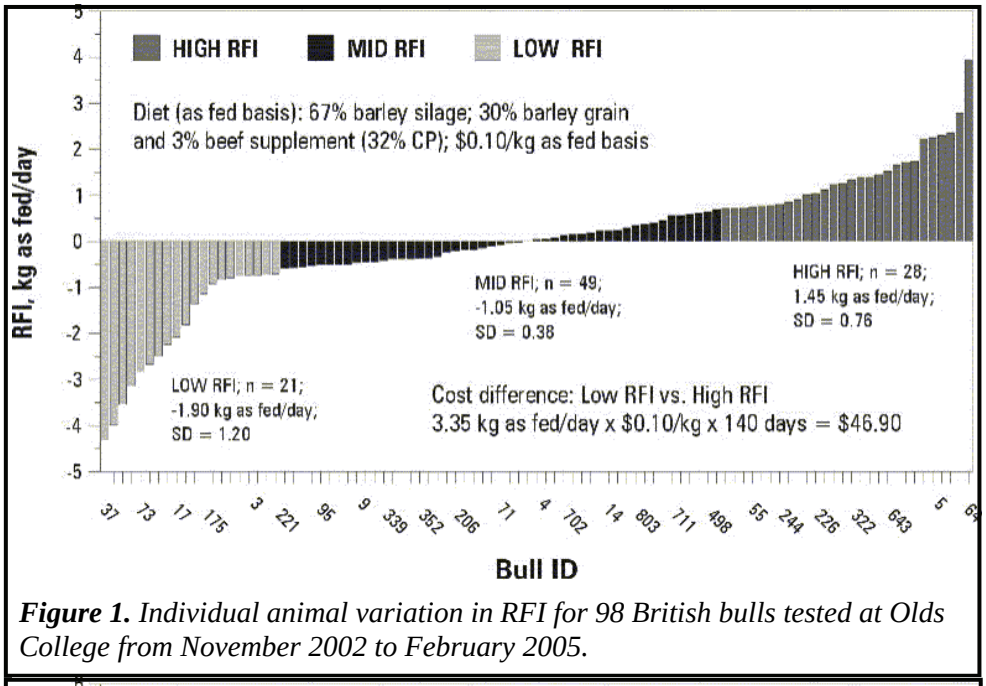


Figure 1. *Individual animal variation in RFI for 98 British bulls tested at Olds College from November 2002 to February 2005.*

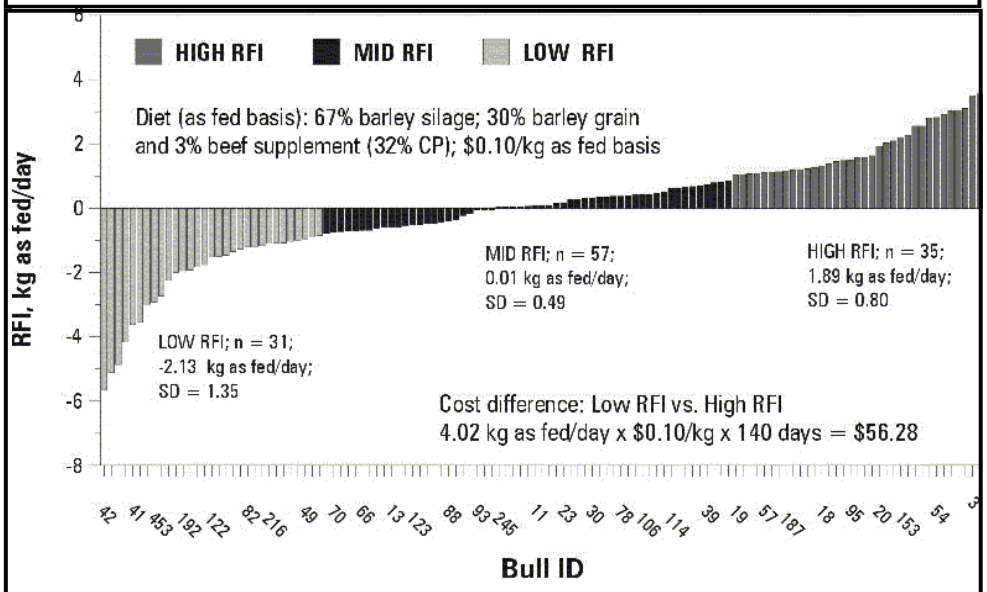


Figure 2. *Individual animal varation in RFI for 123 Continental bulls tested at Olds College from November 2002 to February 2005.*

Considerable variation in RFI exists among individual animals within breeds or genetic strains. This variation suggests that substantial progress can be made in RFI since the heritability of the trait is about 40 per cent.

Research

In the early 2000s, Dr. John Basarab and colleagues were the first in North America to integrate the concept of RFI with new advances in radio frequency (RF) identification, wireless communication, RF detection, data acquisition and computer software integration (GrowSafe Systems Ltd., Airdrie, Alberta, Canada).

Their results were also the earliest in North America to show the relationships between RFI and carcass characteristics, body composition, heat production, methane and manure production. They were the first to uncover the economic potential associated with selecting beef cattle for RFI.

Based on this proof of concept work, a three-year feeding trial was organized and conducted at Olds College to identify feed efficient breeding bulls and to demonstrate the RFI technology to the beef industry. The trial made use of the GrowSafe System to measure individual animal feed intake (see Figure 3).

Approximately 80 bull calves, averaging 7 to 8 months of age, were tested for RFI over a 140-day bull test each year. The genetic make-up of the group was 12 to 16 bull calves from each of 5 major seed-stock breeds in Alberta. In the second and third year a sixth breed was added. Each group of 12 to 16 consisted of 3 to 4 half sibling groups of 4 bull calves (4 sons of the same sire/half sibling group).

The trial started with a 28-day adjustment period, followed by a 112-day test period. Each animal was weighed every 14 days and measured for hip height and body condition score. Back-fat thickness, rib-eye area and marbling score were measured using real-time ultrasound every 28 days. The adjustment and test period diets were similar to those used in →

standard bull test stations.

Results

Background information on the trial, results by year and biological type (British, Continental) and by breed type ranked by economic index, as well as presentations made at the June 9, 2005 results meeting can be viewed on Alberta Agriculture's website.

Research in Alberta and Australia shows that selection for low RFI can have significant results:

- lower maintenance requirements of the cow herd by 9 to10 per cent
- reduce feed intake by 10 to 12 per cent
- have no effect on average daily gain or mature size
- improve feed conversion ratio by 9 to 15 per cent
- slow gain in empty body fat by 4 per cent, but still grade A, AA or AAA.
- lower weights of liver, stomach and intestines
- have no effect on distribution of 9 wholesale cuts
- improve calf-weight-per-cow feed intake by 15 per cent
- lower methane emissions by 25 to 30 per cent
- reduce manure nitrogen, phosphorus and potassium production by 15 to 17 per cent
- efficient growing animals are efficient as adult cattle
- progeny of efficient beef cattle are also more efficient than those of less efficient cattle

Value of Residual Feed Intake

The economic potential, accrued after 15 to 25 years of selection for RFI, is estimated at $109 million annually for Alberta's feeder cattle industry and at least as much for cow-calf producers.

Improving RFI is expected to reduce methane and manure emissions from cattle by 15 to 20 per cent, which, in turn, may result in new agriculture investment due to greenhouse gas credits.

Selecting for Residual Feed Intake

Dr. Denny Crews, a beef quantitative geneticist with Agriculture and Agri-Food Canada, generated the first North American expected progeny differences (EPDs) for RFI on 221 bulls from the Olds College test. Accuracy values for the RFI EPD averaged 59 per cent and will increase with more RFI bull and progeny testing.

Dr. Crews also developed a multi-trait economic index that includes average daily gain, 365-day weight and RFI. This index will aid in genetic selection by ranking bulls according to how well and how economically their progeny perform in the feedlot. Higher index values (mean = 100, range = 78.6 -165.1) are associated with bulls with higher growth rate, lower daily intake and improved efficiency. In addition to being more desirable as yearlings on test, these high-index bulls are expected to sire calves that generate more net revenue in the feedlot segment of the industry.

Cattleland Feedyards, the largest bull test in Canada, has invested $1 million into a new research and RFI testing facility for breeding stock and have the capacity for RFI testing 320 head per test with the possibility of running 2 tests per year.

The Cattleland RFI Bull Test has allowed more producers

Figure 3. *GrowSafe System used for measuring RFI of bulls at Olds College.*

to participate in RFI testing to identify efficient sires and learn about the potential of this new technology in breeding programs to improve production efficiency and competitiveness. Breeders interested in testing their bull calves or replacement heifers for RFI should contact Scott McKinnon, Research and Bull Evaluation Manager at Cattleland Feedyards.

In addition, research at the Lethbridge Research Centre and at the University of Alberta is focusing on understanding the relationship between feeding behavior and RFI.

The Bovine Genome Project, lead by Dr. Stephen Moore, bovine genomics chair, University of Alberta, Edmonton, is presently identifying genetic markers for RFI that will have commercial application and will aid in future selection programs.

Contacts:

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Source: Agdex 420/11-1.

My Take on the Value of Residual Feed Intake Research

While initial Residual Feed Intake (RFI) research was done in feedlot settings, this research is now being done with heifers on pasture as well. It will be interesting to see if the same animals that were found to be efficient on feed would also be the efficient animals on pasture. It will also be interesting to see if there is any significant difference in efficiency between the efficiency levels of animals on pasture vs. on feed.

Researchers on RFI are also looking at DNA from animals in the trial to identify genetic markers for efficiency. In the future selection of breeding animals could include having blood samples analysed for these markers.

Now, I've heard suggestions that most any one of us can identify efficient animals, or "easy keepers" in our cow herds. It is true that we can easily identify animals that tend to be fatter than the rest of the herd, but we really don't know if these animals stay fat because they eat more, or if they stay in good condition while eating the same, or less than their herd mates.

I think it's very important for us to loudly support such research. With feed costs being a major factor in the costs of production in a livestock operation, a 5% increase in feed efficiency can have a significant impact on your operation's bottom line. Besides lower cost feeding systems like swath grazing of high yielding cereals, RFI could be the leading influencer in making our beef industry more competitive globally.

Albert.

Some of you may remember Land EKG workshops that ARECA's Forage and Livestock team members held in various parts of Alberta. GWFA worked with Mountain View County to hold a field workshop west of Bowden at Ken and Laura Bluck's pasture. Charley Orchard from Bozeman, Montana developed the Land EKG system and conducted these workshops for us, yes, he's the guy behind all of this.

Charley has developed a way to use Google Earth aerial photos/maps with his Land EKG system that would be worthwhile to take the time to learn. If you want to learn how to use Google Earth to develop your pasture maps then these workshops are for you.

We are working with Ted and Charley to make a couple of two-day Land EKG Field Monitoring Courses available to you in mid-July of 2013. If participating in such a course is of interest to you, you don't want to miss the Google Earth webinars in the above ad.

Albert.

News release

ALBERTA, December 11, 2012 – Just over 300 participants came from across western Canada to attend the Western Canadian Grazing Conference and Tradeshow in Red Deer, Alberta on November 27, 28 & 29.

We were extremely pleased with the results of all the hard work our dedicated planning team accomplished to make this conference what it was. Planning started in early 2012 with the choice to hold the conference in Red Deer. Attendees suggested that the Sheraton Inn & Suites, previously the Capri, was an excellent choice.

Unique to this conference, we started out on Tuesday, November 27th with a field tour of Dr. Vern Baron's swath grazing project site, followed by an excellent presentation by Dr. Baron and a question period that lasted 45 minutes. About 90 people attended the tour and many expressed their appreciation for the value they received by participating in it. This truly was a valuable part of making this conference a success.

The tradeshow opened up on the evening of November 27th with over forty exhibitors showing what they contribute to the forage, livestock and grazing industry. Throughout the conference we found the tradeshow to be very well attended by conference participants. Many commented on the excellent variety of exhibitors we showcased this year.

On Wednesday, the 28th we started the day with Neil Dennis, a top notch grazier and soil health manager from southeast Saskatchewan. He did an excellent job of showing how he uses grazing management to rebuild the soils and productivity of the land, and in so doing, the economical sustainability of his family operation.

Throughout the day, participants had the opportunity to choose from four Select-a-Sessions. Greg Selzer and Duane Thompson shared their experience with extending the grazing season. Bill Gibson shared his experience with grazing sheep while Louis Leibenberg showed how she manages predator control in her livestock operation. Ian Murray and Nicole Lamb shared how they go about marketing beef, not your usual 'haul them to the auction' deal. Logie Cassels showed us how he goes about keeping soil healthy using compost teas.

After Wednesday's Select-a-Sessions were completed, we had the honor of listening to Dr. Christine Jones, an internationally renowned groundcover and soils ecologist, give us the fundamentals of soils and soil management. By using today's wonderful audio/visual technology we were able to bring her in live from Australia.

After a delicious banquet we had the pleasure of being entertained and educated by world class speaker, David Irvine, an international authority on the human dynamics of business leadership. This local, yes local talent spoke from the heart about "Working With the Ones You Love", bringing both laughter and tears to all who listened.

On Thursday, the 29th we heard from Glen Rabenberg on the subject of "Improving Crop Quality for All", which was really about balancing the minerals in the soil so energy can flow and life can abound. Loved by some and controversial to others, this talk certainly provoked thought and discussion.

For Thursday's Select-a-Sessions, Neil Dennis spoke on, I think his favorite subject, "If You Are Going to be Lazy: Get Good at It``. Certainly this is a thinking man`s game in which grazing management is the tool to get healthy soils. Lee Eddy, Kristen Ritson-Bennett and Grant Lastiwka did a fine job of explaining how the right minerals are important for successful extended grazing management that works for the livestock and your own operation. Dr. John Basarab, Senior Beef Research Scientist at the Lacombe Research Centre talked about the work he`s doing to help us become better able to select for a feed efficient cow herd. This stuff`s really important for our beef industry to be sustainable and globally competitive. David Irvine took ``Working With the Ones You Love`` to another level with his talk on being inspired and putting that inspiration to work.

After lunch we heard Charley Orchard tell us about his Land EKG monitoring system and how it can be used to complete the information feedback loop for the grazing manager. What Really Counts for Grazing Managers is knowing whether pasture production is improving or declining under the chosen grazing management strategies.

Grant Lastiwka, who most of you already know as a long time forage and grazing specialist with Alberta Agriculture and Rural Development, wrapped up the conference by summarizing how each speaker contributed to the wealth of knowledge participants were going home with.

Many times over members of the planning team heard compliments from participants on the quality of the presentations and speakers, on the excellent tradeshow and on our choice of venues for the event. Many times we heard how this was among the best of conferences participants had attended.

The members of the planning team would like to express a huge thank-you to the agri-businesses and other industry groups who sponsored the event. Their continued commitment to the Western Canadian Grazing Conference and Tradeshow, along with the support of the provincial, federal governments, our local Counties, producers, and students, made for an outstanding event, one that raised the bar for all future conferences.

As co-chairs of the Western Canadian Grazing Conference Planning Team, Vicki Heidt and Albert Kuipers would especially like to thank everyone who helped plan this event. Your generous contributions of time and energy are what made this event special, and a huge success.

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Battle River Research Group
Co-Chair, WCGC Organizing Committee
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Winter Tetany - Frequently Asked Questions

What is Winter Tetany?

Winter tetany is a metabolic condition caused by lower than average blood magnesium (Mg) levels. This condition occurs when cattle consume poor quality hay or straw, that contain low levels of magnesium, or good quality cereal greenfeed or silage with high levels of potassium (K). High levels of potassium in the diet reduces the absorption of magnesium and calcium (Ca). Cattle depend upon a continual daily supply of magnesium and calcium from the digestive tract to maintain normal blood concentrations. Often in Alberta winter tetany is associated with feeding grain and straw or greenfeed based rations that contain low or borderline calcium and magnesium, and high potassium levels compared to the cow's requirements.

What are the signs of Winter Tetany?

Winter tetany is most commonly found in cows in late pregnancy and after calving. “Downer cows”, as often referred to by producers, is a sign that the cow may be suffering from winter tetany. Affected cows will behave similar to those with milk fever, they are unable to get up. Those cows that have not gone down, often appear uncoordinated, trembling or stagger. Another sign is a dead cow with struggling marks (paddling) on the ground around her head and legs from trying to get up.

How do you treat Winter Tetany?

Active treatment for winter tetany includes intravenous or subcutaneous administration of solutions containing magnesium and/or calcium salts. If your cattle show any sign of the above symptoms producers should contact their veterinarian immediately.

What can you do to help prevent Winter Tetany?

The K/(Ca + Mg) ratio should be less than 2.2 in the feed ration to prevent winter tetany. Have your feed tested and then based upon the results of the available levels of nutrients and minerals, appropriate supplementation can be prepared. Work with a nutritionist to achieve an appropriate feeding program. Supplementation of magnesium oxide and limestone are important in ensuring that the cows are receiving adequate levels of calcium and magnesium.

Magnesium oxide is very unpalatable and will need to be mixed with grains or other feeds to hide the taste. Mixing magnesium oxide with either silage, in the salt mineral mix, or in the grain, are some options.

Approximately 40 grams of magnesium oxide and 80 grams of limestone may be required per cow per day depending on feed test results. If potassium levels are high greater amounts will be required.

For more information about the content of this document, contact the Ag-Info Centre at 310-FARM (3276).

Oats & Tillage Radishes at the VanderVies farm

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

Contact us to read ‘The Blade’ online on our new website:

www.greywoodedforageassociation.com

*Email us for a username/password and enjoy reading ‘The Blade’ anywhere!

* Restricted to members only!

gwfa1@telus.net

‘Like’ Grey Wooded Forage Association on Facebook and enjoy viewing our latest photos and hear about upcoming events!

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Grey Wooded Forage Association
"Creating an Awareness of Forages"

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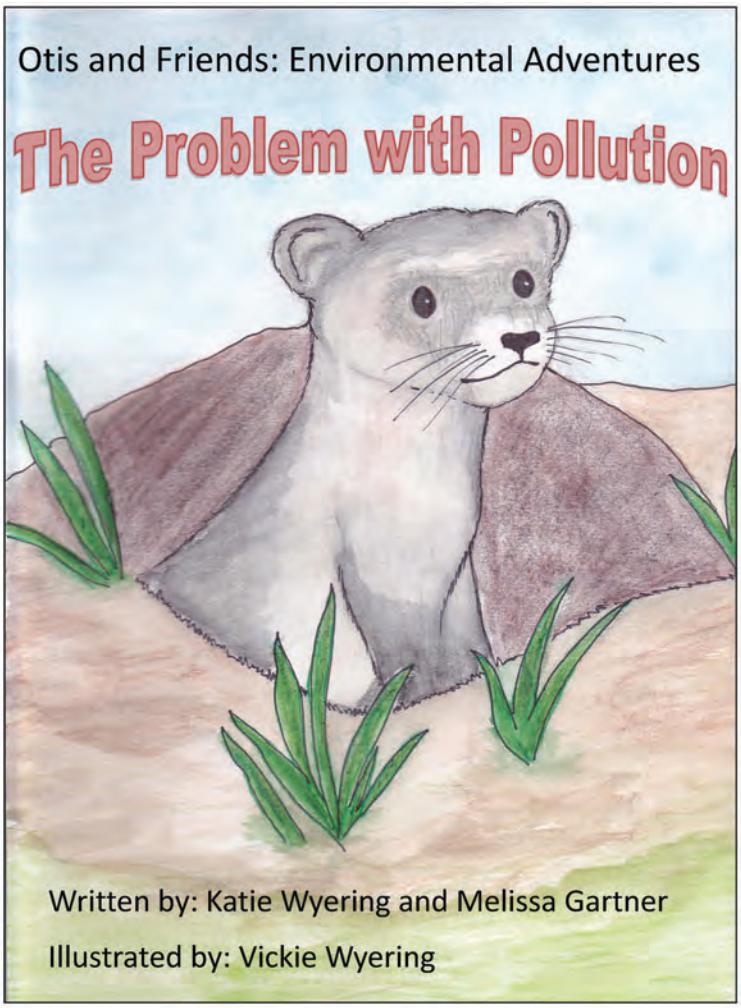

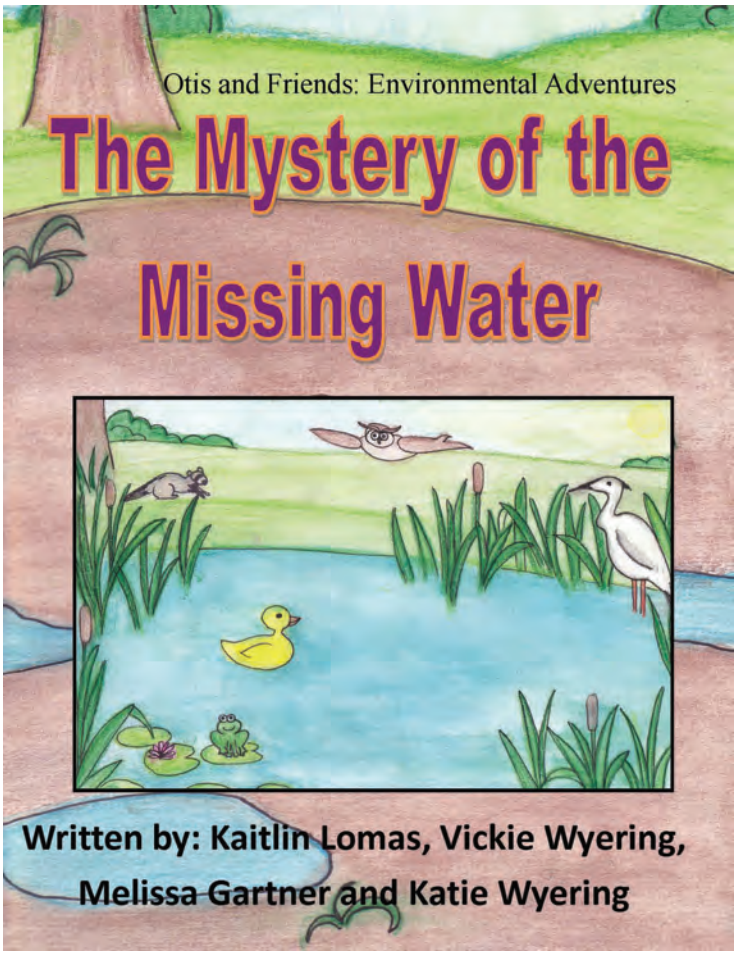

Over the past couple of years we have had the privilege of publishing not one, but two excellent children's books. Two of the authors are the daughters of GWFA Director and ARECA Representative, Herman Wyering.

The first book, "The Mystery of the Missing Water" takes a good look at our habits of wasting water and how simple changes to our habits can conserve quite a lot of water. The second book, "The Problem With Pollution" shows how the terrible habit of littering affects our environment and the critters that live in it.

Thanks to all of the sponsors of these books, we were able to print over 500 of these books and distribute them. Some of these books went to each of the public libraries in the David Thompson region.

When we think we have it bad…

The cow flatulence tax

Cows, there is no sensitive way of putting it, are gassy beasts. The livestock's flatulence produces plenty of methane that drifts into the atmosphere. But the goofy problem is actually very real from an environmental standpoint. The issue is so severe, in fact, that European regulators tax farmers for their cattle's relief. According to some estimates, cow flatulence is responsible for about 18 per cent of all greenhouse gases in the European Union. In response, farmers in nations like Ireland and Denmark are forced to pay penalties as high as $110 per cow to offset the global warming-causing flatulence.

Healthy People, Healthy Land, and Healthy Profits!

The 2013 Western Canadian Holistic Management Conference is rapidly approaching. Now is the time to register to ensure your spot at the premier Holistic Management (HM) event in Canada. It is being held February 12 and 13, 2013, at the Russell Community Centre in Russell, Manitoba.

If you haven't had the chance to learn about Holistic Management and are interested, you should take the time to attend. You will discover how HM can benefit your family, land and bottom line. If you are familiar with HM, then this conference is a great opportunity to network with other producers from across the three Prairie Provinces.

Don't let the phrase "Holistic Management" scare you off. It is all about managing the resources you have in a sustainable way in order to be profitable. You are likely employing some of the Holistic Management principles on your operation without even knowing it! Knowing when and where to spend money; using livestock to improve soil health; monitoring plant and animal health; and designing your infrastructure and land development to reduce costs and increase profits are all HM practices many producers do on a daily basis in one way or another.

"We have tried to put together a program that addresses the three components of our theme, Healthy People, Healthy Land and Healthy Profits," says Stephanie Kosinski, a member of the organizing committee and Forage specialist with Alberta Agriculture and Rural Development. "The speakers we have at the conference this year are well-respected experts covering everything from land management and integrated biological systems to human resources and how to maintain a work-life balance while meeting the needs of your operation."

Featured speakers include Dr. Martin Entz, a professor in the Department of Plant Science at the University of Manitoba, who focuses on cropping and natural systems agriculture. He devotes much of his research time to organic cropping systems and the rotational benefits of legumes and cover crops. He will be speaking on the importance of integrated biological systems for food production.

Pierrette Desrosiers, the first psychologist and specialized coach to respond to the agricultural industry in Canada, will look at growing your emotional competencies in order to reap the benefits in a successful farm business. And finally, Peter Holter, the CEO of Holistic Management International, will also be presenting. He will talk about the new mission statement for HM International, programs, data tracking and the results-emphasis of HMI's latest system.

One of the highlights of this conference will be hearing first-hand from producers about their experiences with Holistic Management. Attendees will get a chance to hear about how they have applied the theories they learned on soil management, financial management and human resource management in order to fit their operations. Many have applied HM principles in innovative ways to reach their production goals.

Other topics being address during the two-day conference include: how to handle bumps you might experience along the way, harnessing your emotional competencies to benefit your business and how Holistic Management is being adopted by youth in agriculture.

Interested in attending the conference? Check out the conference information online in the Coming Events section of the Alberta Agriculture and Rural Development website at www.agriculture.alberta.ca, or by contacting Manitoba Agriculture, Food and Rural Initiatives at 204-622-2006. Early bird registration ($165 per person) ends January 25, 2013. You can register by phone (204-622-2006) or online at www.mbforagecouncil.mb.ca. Don't delay and register today!

Stephanie Kosinski
Alberta Agriculture and Rural Development
310-FARM (3276)

Importance of Body Condition Scores

Kim McLean, PhD, PAg, Tisdale SK (Sask Ag Stay Connected)

With the cows making their way back to the feed yard from the pasture, now is a great time to evaluate where they are at. Do they look great? Have they come in a little under conditioned this year compared to normal? This is a time to be CRITICAL. In order to ensure that calving goes smoothly and they are able to quickly rebreed they need to be at the proper body condition score.

This will be important to assess what condition they are in, to ensure that the feed on hand is sufficient through the winter. Normally if cows come off the pasture at a body condition score of 3.0, on a Canadian scoring system of 1 – 5, they are sitting pretty good. By having the cows come in at this BCS they are able to maintain themselves through the cold winters here in SK. At calving we would like to see the cows around a 2.5 and first and second calf heifers at a 3.

If you find that your females are under conditioned and need to increase their body condition score, a great rule of thumb is that one BCS equates to roughly 100 pounds. For example, if you calve in March right now you have four months to increase one full BCS so we need to gain 100 pounds in 120 days.

Roughly we should be feeding for an average daily gain of 1 pound per day. If your cows are right where they need to be then maintenance is likely all we need for these cows.

This is where a producer can save significantly in winter feeding by ensuring those cows come in at a BCS of 3. It is harder for the cows to gain weight when it is cold out and by having some room to simply maintain you save on your winter feed stocks. To gain a pound a day you will need to provide more energy to the cows than grass hay can provide.

If you are unsure of what typical body condition scores look like, there are several sites online that are useful with pictures to help you evaluate what cows should look like when they are at different body condition scores. There are even some apps that can be useful to track body condition scores. Having someone come in to your herd that does not see your cattle every day is also a great idea. Invite your neighbour over for coffee and take a good hard look at the cows!

For more information on this or other related topics, please call 310-FARM (3276).

!!!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 $$$.

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Soil Biology:_____ Pasture Rejuvenation or Renovation:_____
Low Cost Cow/calf Production:_____
Environmental Sustainability:_____ Economical Sustainability:_____
COMMENTS:_____
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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 silage t grains.

Crude protein

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

August 2009 Agdex 130/538-1

Nutrient Management on Intensively Managed Pastures

Pastures are unique to agricultural production systems in that only a very small portion of the nutrients

• effect of legumes

and environmental risks

and pathways

al pools of nutrients including ic matter, growing plants plant litter, living animals g large he/b/vores, above and und invertebrates (beetles an and soil microbes, and the ere.

cycles develop as nutrients flo always from one pool to The processes and pathways o cycles are different for various s, but nutrient balances control cles. Balances are made up of outputs and losses of nutrients pasture system.

uts = outputs + losses

when they are removed or hay or silage. These exported s, some type of fertilizer t ounts are s

September 2008 Agdex 420/56-3

Agronomic Management of Swath Grazed Pastures

Feed, feeding, cow management and manure 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

Swath

bedding

Agdex 420/56-4

Agronomic Management of Stockpiled Pastures

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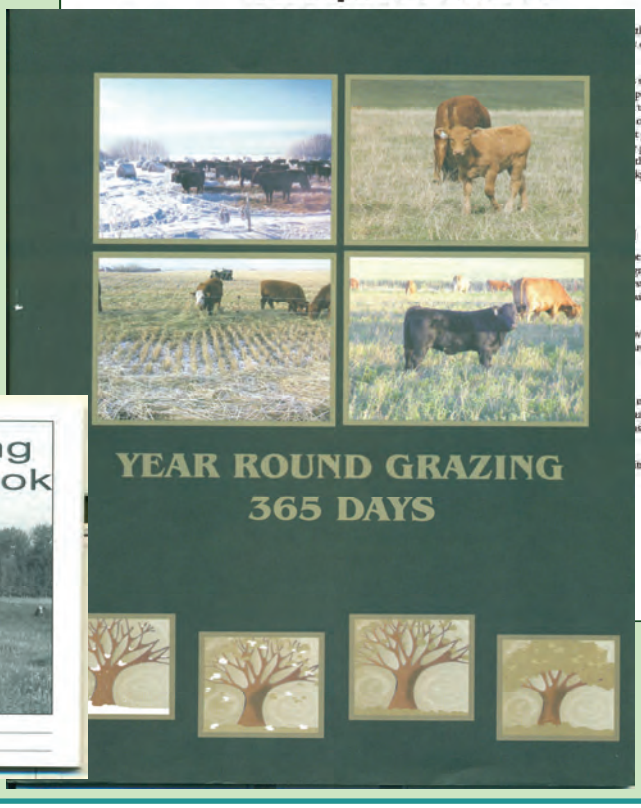

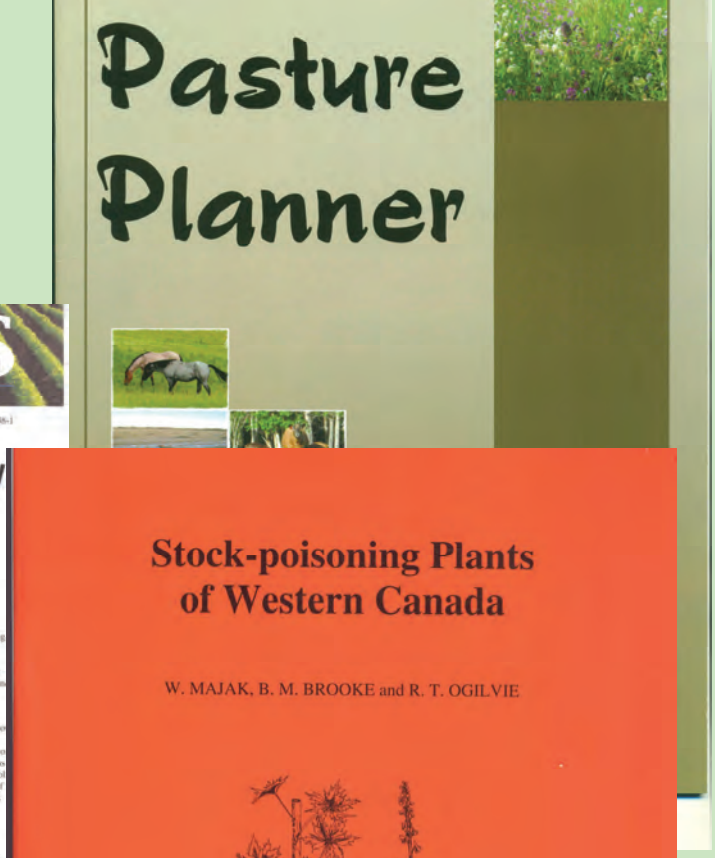

These publications are available to our members by phoning or emailing the GWFA office!