



Grey Wooded Forage Association

"Creating an Awareness of Forages"

Box 1448, 5039, 45 Street, Rocky Mountain House, Alberta T4T 1B1 Phone: 403 844-2645
Fax: 403 844-2642 Email: Muriel - GWFA1@telus.net or Albert - GWFA2@telus.net
Website: www.greywoodedforageassociation.com

Annual Report 2013/2014

30 Years of Learning and Growing Together!

VISION STATEMENT

GWFA – The center 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.

You can now read 'The Blade' and the Spring & Fall Newsletters on our website and enjoy reading our publications anywhere!

www.greywoodedforageassociation.com

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

facebook

Table of Contents:

Page

2. Manager's Notes
3. GWFA Directors
4. GWFA Publications
5. GWFA Consulting Services and Printing Services
6. Publications available
8. GWFA & Partnering organization's Events
16. Collaborations with FarmOn, Lacombe Research Centre and the University of Alberta
18. Alberta Forage Beef Centre
19. Innovative Swath Grazing/Increasing forage Research capacity
21. Managing Nutrients in Extensive Cattle Wintering Sites
22. Late Fall Seeded Legumes
23. Grazing Tall Buttercup Pastures
24. 3D Fencing Project
25. Stockpile Grazing Project
26. Hardy Alfalfa Varieties



all our finances and administration duties, a huge and challenging job, I might add. She keeps all of our records in impeccable order. When we were visited by the AOF Audit Committee last year, they highly praised Muriel's detailed and correct records.



For the past two summers we also had the pleasure of having Bonita Knopp as our summer staff. She's a daughter of one of our past Chairs, Gerald Knopp, who is still an active GWFA member.



Bonita helped lighten the load for Muriel and me for a few short months each summer. She helped with coordination of our summer events, getting sponsors and all of the preparations behind the scenes. She helped with the project work, gathering and chopping samples. She put The Blade together each month and handled the mail-outs. In 2012 she set up our website and Facebook accounts and kept them updated throughout this past summer. She was always a hard worker and a pleasure to work with.

Now, to all of you who helped get me away from the office and onto your farms, many, many thanks. I really enjoy getting out and helping you tweak your grazing management, look for solutions for your forage establishment problems, or dig into soil issues. Not only do I enjoy helping you guys, I learn a lot from you as well.

Thank you to all the ag services staff from the counties we enjoy collaborating with, especially Clearwater County, Red Deer County, Mountain View County, Ponoka County and Lacombe County. Thank you to our many friends with various organizations who've helped us deliver quality information to our people. Throughout this annual report you can see how each has contributed.

A huge thank you to the Agricultural Research & Extension Council of Alberta (ARECA) for the connections we have with our sister organizations across the province and the opportunity to belong to and benefit from being part of the provincial big picture.

Thank you to our friends at the Lacombe Research Centre who have been very helpful in providing us with information and collaborating with us in the development of extension products. Dr. Vern Baron and Dr. John Basarab's project collaborations with Dr. Tom Flesch from the University of Alberta has given us some new and exciting opportunities. Collaborating with the FarmOn foundation has lead to the development of some exciting, new videos to help get our messages out to the industry and the public.

Thank you to all who have been a part of our journey and we look forward to many more years of providing valuable information together.

Manager's Notes

By Albert Kuipers

30 years, wow! GWFA has been around for 30 years! Now that's quite an accomplishment. GWFA has not only thrived, but grown into a well known source of forage and livestock information. Our 16 page spring and fall newsletters now go to 16,000 rural mailboxes. The Blade has grown from a single page to 12 pages. Readers tell us they look forward to The Blade each month.

I enjoyed being on the Board of Directors back in the mid nineties and have had the pleasure of being GWFA's manager for the past 13 years. I am truly thankful for being able to serve you for all these years, and look forward to continuing to do so. To follow in the footsteps of GWFA's first manager, Jim Bauer and our second manager, Kyle Greenwood, has been a real privilege. I am honored to have gotten to know many of you through your terms of office as GWFA Directors. I have learned from all of you.

Thank you to all the Board members for giving direction to our organization and for keeping us focused on what's most important to our members and the forage and livestock production community. Thank you for all the input and time you've contributed to our organization and its projects and events. I really appreciate your dedication to GWFA.

There's one person who keeps our organization running smoothly. Muriel Finkbeiner, our office manager takes care of





Grey Wooded Forage Association

"Creating an Awareness of Forages"

2013-2014 Board of Directors & Staff

Chair:	Victor Penner	Rocky Mountain House	403-729-2973
Vice Chair:	Kristen Ritson-Bennett	Innisfail	403-358-1674
Treasurer:	Cameron Jenkins	Spruceview	403-728-3300
Secretary:	Deb Skeels	Rocky Mountain House	403-845-2515
Directors:	Bob Aasman	Rocky Mountain House	403-845-4438
	Murray Abel	Lacombe	403-782-1009
	Iain Aitken	Rimbey	403-843-0094
	Chris Sande	Rocky Mountain House	403-729-3896
	Kirk Seaborn	Rocky Mountain House	403-729-2267
ARECA Rep:	Herman Wyering	Ponoka	403-783-2681
Ex-officio:	Ken Ziegler	Rocky Mountain House	403-845-8204
Manager:	Albert Kuipers	GWFA Office:	403-844-2645
Office Manager:	Muriel Finkbeiner	GWFA Office:	403-844-2645
		GWFA Office Fax:	403-844-2642



Grey Wooded Forage Association Publications

The Newsletter

Most of you have received the Grey Wooded Forage Association Newsletter in the past. This publication is a sixteen page paper presenting articles on GWFA projects and happenings and many other forage and livestock related items that may be of interest to forage producers. This is also an advertising opportunity for agricultural service businesses to show what they have to offer. 16,000 copies of this paper are now printed twice annually, spring and fall, and are mailed to members and the rural public in West Central Alberta in April and November. The Western Star publishes the Spring and Fall Newsletters for us.



MARCH 2014

Box 1448, 5039 - 45 Street, Rocky Mountain House, Alberta T4T 1B1, Phone: 403 844 2645, Fax: 403 844 2642, Email: GWFA1@telus.net or GWFA2@telus.net, Website: www.greywoodedforageassociation.com

!!!SAVE THE DATE!!!
Join us for our 30th Anniversary Celebration,
Tradeshow & Annual General Meeting!!!
!!!Wednesday, May 7, 2014!!!

!!!Special Guest Speaker!!!

In this issue:

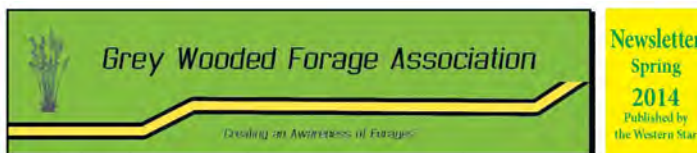
- www.foragebeef.ca adds wintering sites info! - Pg 3
- Economic Impact of Wildlife to Beef Producers - Pg 5
- 4R Nutrient Stewardship an Important Aspect of Successful Farming - Pg 6
- Dupont Pioneer Brings Increased Nutritional Values With New Silage Inoculants - Pg 8
- New Executive Director for Red Deer River Watershed Alliance (RDRWA) - Pg 10

Upcoming events:

- Cows, Creeks & Communities Tradeshow & Seminar - Pg 5
- 4R Nutrient Management Workshops - Pg 7
- The Forest on Your Desktop - National Electronic Lecture Series - Pg 9
- Tree Care & Woodlots Workshop in Mountain View County - Pg 10

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.



Box 1448, 5039 - 45 Street, Rocky Mountain House, Alberta T4T 1B1, Phone: 403 844 2645, Fax: 403 844 2642, Email: GWFA1@telus.net or GWFA2@telus.net, www.greywoodedforageassociation.com

You can now read 'The Blade' and the Spring & Fall Newsletters on our website and enjoy reading our publications anywhere!
www.greywoodedforageassociation.com

Coming Events

- Cows, Creeks & Communities Tradeshow & Seminar - Pg 2
- GWFA's 30th Anniversary, AGM & Tradeshow - Pg 5
- 9th Annual Community Safety Day - Pg 12
- Rocky Mtn House Ag Society Banquet & Dance - Pg 14
- Western Canadian Grazing Conference 2014 - Pg 16
- Family Firesmart & Tree Pruning Workshop - Pg 16

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

facebook

In This Issue:

- Enlarging the Lives of Others - Pg 47
- 2014 Summer Farm Employment Program - Pg 6
- Land Rent Realities in 2014 - Pg 7
- Seeding a New Forage Stand - Pg 8
- Beef Cattle Research Council - Pg 9
- Funding for Tag Readers - Pg 10
- It's a Thought by Harry Nevelpolder - Pg 11
- Choosing a Commodity Futures Broker - Pg 12
- Free Farm Safety Training - Pg 13

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

The Blade

This monthly publication is an important vehicle for regularly getting event announcements and information to the members. *The Blade* has grown over the past few years from four pages to eight pages, and then on to twelve pages.

We have been working at developing *The Blade* into a publication that is of high enough value that people want to be GWFA members just to get it. We're getting feedback that we're on the right track.

Grey Wooded Forage Association publishes this paper in house, prints 500 copies and mails 450 of them to members. Copies are also used to keep in touch with our partners, potential event sponsors and service providers, as well as placing a few in strategic locations where people can pick them up as examples of what the forage association has available.

The Blade is also available on our website:

www.greywoodedforageassociation.com

Thank-you to our funding providers!



Agriculture Opportunity Fund



Canada



Red Deer County

Growing Forward 2

A federal-provincial-territorial initiative

Forage & Grazing Mgmt Consulting Services for GWFA Members

Forage production and grazing management consulting services have been available, and continue to be available to members. So far, this valuable service is available free to current members. In the past year we did 58 individual consults for members throughout our area.



Printer and Printing Services for GWFA Members & ARECA Member Associations

As you may remember from previous years, GWFA purchased a large printer, capable of printing The Blade effectively 'in house'. We had been awarded funding from the Alberta government and administrated by ARECA for purchasing and replacing capital assets, so some of this funding was used for this purchase. In early 2009 we replaced this printer with a new one of the same make and model. We also used capital purchases funding for this replacement.

ARECA and some of our sister organizations come to us for their printing jobs. Low cost printing is available to GWFA members as well. Please call the office for details.

Revenue from sources other than government funding is very important as we must show that we get 'matching dollars' to get any of our government funding. It also contributes to our fund for replacement of office equipment in the future.



Beef Ration Rules of Thumb

This fact sheet can help guide producers through a feed test and help them understand the results.

With a feed test to hand, look at the following rules of thumb to help you understand the results. Remember, these are rules of thumb, which means they build time, stress of the time, low variation in management and low type will affect the results.

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.

Rules of Thumb

Dry matter

Animals refer to the "dry matter" content. These numbers have the moisture (water) content and allow the comparison of all feeds, from sugar to grain.

Crude protein

Protein is a building block. The Beef Cattle Rule of Thumb with protein is 7-9%, which means an average mature beef cow requires about 100 lbs of protein per year. If you are in a feed test, 9 per cent is low protein and 11 per cent is high. The method to measure protein is based on the nitrogen in the feed. The nitrogen is converted to protein by multiplying by 6.25.

Crude protein with feeder calves

The Feeder Cattle Rule of Thumb is 14-16% DM, 8-10% CP. This means a feeder calf needs 12 per cent protein, from 800 to 1,000 lbs needs 12 per cent protein and from 1,000 to 1,200 lbs needs 10 per cent protein. An optimal program will create variation in this rule, so check with the supplier carefully.

Energy

Energy gives the ability to use the building blocks for growth and other productive purposes. Look at one of the measures for energy: acid-detergent fibre (ADF). Digestible Nutrients (TDN) per cent, the Rule of Thumb is 58-60%. The rule is that the ADF must have a TDN energy value of 50 per cent in feed programs, 60 per cent in feed programs, and 60 per cent in feed programs.

Energy can be measured in the feed by watching RUM, low energy means there is a lot of ADF. Other energy units of measure include Digestible Energy (DE), Net Energy (NE), and Gross Energy (GE).

Rules of thumb

are not a replacement for balancing rations with proven software

Minerals

Minerals are essential for growth and health. The most common mineral deficiency is phosphorus. The Beef Cattle Rule of Thumb for phosphorus is 0.3-0.4% DM. This means a feeder calf needs 0.3-0.4% DM phosphorus, from 800 to 1,000 lbs needs 0.3-0.4% DM phosphorus and from 1,000 to 1,200 lbs needs 0.3-0.4% DM phosphorus. An optimal program will create variation in this rule, so check with the supplier carefully.



Alberta



Nutrient Management on Intensively Managed Pastures

Protein is an integral to agricultural production systems.

In this case, a very small portion of the nutrients required for crop production are contained in the system. Up to 90 per cent of the nutrients required by grazing animals are contained in the feed. The rest is contained in animal maintenance and growth or milk production.

Nutrient cycling is faster in grazed than degraded pastures because of the nutrients in manure and urine. Grazing management affects the rate and timing of nutrient cycling. Intensive

- effect of legumes
- grazing management
- soil sampling, fertilizing and environmental risks

Nutrient pools and pathways

Pasture systems have several pools of nutrients including the mineral soil, and organic matter, growing plants, including large herbivores, sheep and cattle, and small herbivores, insects and soil microbes, and the atmosphere.

Stomach contents develop as nutrients flow

Nutrient cycling is faster on

Agronomic Management of Swath Grazed Pastures

Feed, forage, crop 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 systems is swath grazing.

Swath grazing

Swath grazing occurs when annual or perennial forage crops are mowed and left in the field for cattle to graze in late fall and winter. The practice has several associated costs:

- fuel and oil
- seed and fertilizer
- equipment operation for winter feeding

Labour costs are also high due to the time required to mow and feed. However, winter disposal costs will be reduced as less manure will accumulate in a feeding pen or area where grazing is not allowed.

Swath grazing has advantages over grazing established standing crops. Problems with grazing established standing crops:

- Grazing time and dry matter intake are reduced when cows graze standing forage during cold or snowy periods in the winter.
- Some cover can be a problem with grazing standing forage. Cows will graze standing forage through up to

Many factors come into play to determine forage quality, quantity and time of production in a swath grazing system. Some of these factors, such as weather, are uncontrollable, but best management practices can reduce the risk and increase the benefits of swath grazing.

Understanding the risks associated with swath grazing and the strategies developed from more than a decade of research will help producers get the greatest benefit from a swath grazing system.

Species and variety selection

When selecting the crop to grow, choose a species with good dry matter (DM) yield potential that provides a palatable forage with quality characteristics suitable to the livestock who will be grazing it. There are both annual and perennial species that fit these criteria.



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 full or winter feed. This practice can mean savings for the producer:

- harvesting, hauling and feeding costs associated with increased feed use eliminated
- manure does not need to be removed from feeding area

Winter grazing on native range is common on the southern prairies. Depth of snow cover frequently limits winter grazing of standing forage in the Parkland and Forest-Front regions. However, the grazing season may be extended by several weeks by using stockpiled forage in late fall and early spring.

There are several important considerations in developing a successful stockpiled forage grazing system:

- species selection
- accumulation or rest period between grazing or cutting
- soil nutrient management

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 harvest to provide at least 3,000 kilograms (kg) of forage per hectare (1,780 lb./ac) for good fall grazing
- maintain high quality following fall frost

If grazing is to occur after snowfall, forage must need to be higher as grazing efficiency is reduced and grazing more difficult. Using an erect species makes it easier for cows to get at the feed under the snow.

Stock-poisoning Plants of Western Canada

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



YEAR ROUND GRAZING
365 DAYS

Publications available to members

Canada

Over the last few years we've been collaborating with Dr. Vern Baron and the now retired, Duane McCartney and Arvid Aasen, from the Lacombe Research Station, to make information available to you from research they've worked on. Thanks to Agriculture & Agri-Food Canada's Green Cover Program for funding, we are able to make the following publications available to you.

Management of Canadian Prairie Rangelands is an excellent manual for managers of rangelands. Some of Canada's leading rangeland researchers have contributed to this publication.

We still have a few copies of the book entitled: "**Stock – poisoning Plants of Western Canada**". Forage Researcher, Duane McCartney was involved in publishing this book. This is a very comprehensive collection of information on a large variety of plants that have toxic attributes which could affect livestock. Some of Canada's leading authorities on toxic plants have contributed to this book.

The **Wealthy Rancher Calculator**, by Arnold Mattson of Agriculture & Agri-Food Canada, is also available at our office. Anyone who has participated in a GWFA grazing course designed by Albert Kuipers will have seen Arnold Mattson's Wealthy Rancher presentation demonstrating the use of the calculator.

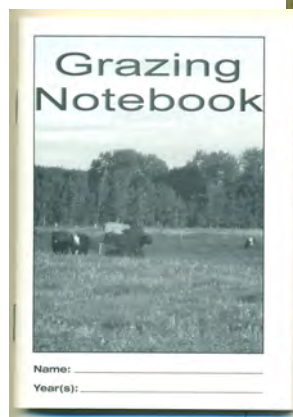
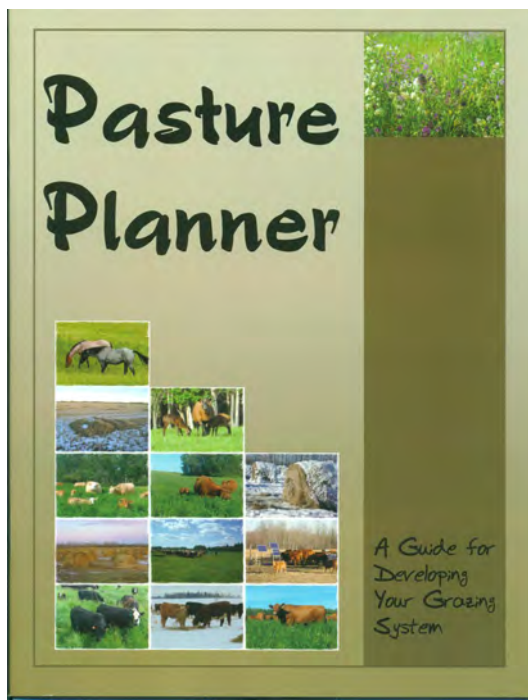
This calculator is available on a cd and is useful for comparing different enterprises or profit centres in your operation, using an Excel Spreadsheet format. You can also use it to try a bunch of "what-if" scenarios for pasturing beef cow/calf or feeder cattle.

We also have the factsheets "**Agdex 420/56-3 - Agronomic Management of Swath Grazed Pastures**", "**Agdex 420/56-4 - Agronomic Management of Stockpiled Pastures**" and **Agdex 130/538-1 - "Nutrient Management on Intensively Managed Pastures"** available. We'll email or mail you one or more of these if you email or call us and ask for them.

If you get looking around in **Ropin-the-Web** or **foragebeef.ca** and find any other factsheets you want and would like a printed copy, just let us know and we'll get them for you.

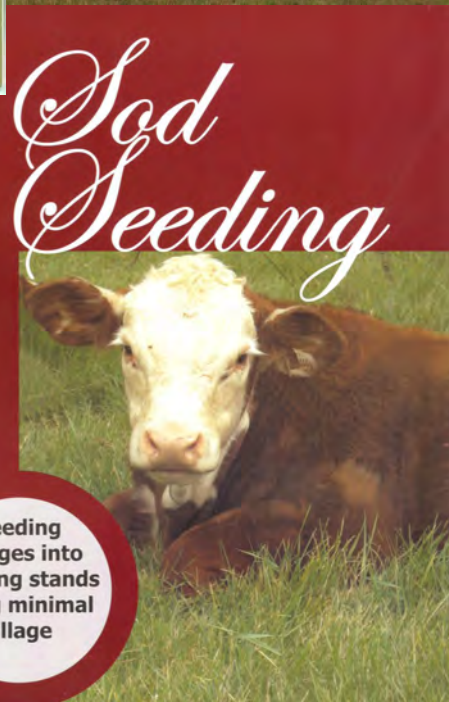
We also have copies of **Year-Round Grazing-365 Days** available. These were published by AR-ECA's Forage/Livestock Team a few years ago. These booklets show that various forms of year-round grazing can be done pretty much anywhere in the province. Producers using stockpile grazing, swath grazing or bale grazing are featured in this publication.

Grazing Notebooks are a handy pocket size pasture record keeping tool that have been popular for quite a few years. We have some of these available at



the GWFA office.

Here's a handy, dandy **Pasture Planner** manual that was originally developed in Manitoba and was re-designed and published in Alberta by West Central Forage Association, our neighbour to the north of us.



The new **Alberta Forage Manual, 2nd Edition**, offers producers comprehensive information on a range of forage topics: adaptation, legumes and grasses, annuals, mixtures, establishment, fertility, pasture management, harvesting and rejuvenation. In addition, sections on forage pest insects and diseases present detailed discussion of these problems in forage crops, helping producers diagnose damage. The extensive descriptions of forage species and their growth habits will help in planning forage management programs. Fully illustrated with colour images, line drawings, tables, charts and graphs, this forage reference work provides a wealth of information.

350 pages. **Agdex 120/20-1 \$30.00**

This manual may be purchased by:

- * Calling 1-800-292-5697 (toll-free in Canada) or (780) 427-0391
- * Calling the GWFA office 403-844-2645 (we can order a copy for you)



Grey Wooded Forage Association events, events in which GWFA partnered with industry, other organizations and/or government and events at which the GWFA was present.

Grey Wooded Forage Association

AGM & Tradeshow

May 2, 2013 at the Leslieville Hall!

2:30 PM: The Tradeshow opens

3:30 PM: Afternoon Program

"What's Happening in Forage & Beef Research"

By Dr. Vern Baron & Dr. John Basarab

5:00 PM: **Annual Business Meeting**

followed by a delicious roast beef dinner!

7:00 PM: **"Looking Back and Foraging Ahead"**

By Duane McCartney, Retired Ag Canada Scientist

\$20/member - \$25 after April 23.
\$25/non-member - \$30 after April 23
 Registration Deadline is April 29, 2013
 (Memberships are only \$20.00 per year and will be available at the door)
 Please phone (403) 844-2645 or email GWFA1@telus.net
 for more information and to register.



Photo credit: Albert Kuipers & Bonita Knopp

May 9, 2013 Rocky Ag Society's Ag Theme Park



Every year we participate in this event with a Beef & Forage station. About 400 grade 4 and 5 students from schools in Rocky Mountain House and Clearwater County attend this event. We show the students a year in the life of a beef operation, how healthy pastures stop erosion, a solar watering system, RFID tags and tag reader. Then we get the whole class onto Clearwater County's livestock scale for a group weight. Harald Magnus and Bonita Knopp helped Albert make this a great experience for the students.



Photo credits: Bonita Knopp

Controlled Grazing Course

What is controlled grazing?

It's a grazing management program based on maintaining control of animal numbers, and the amount of time each area is to be grazed or rested.

This course will provide enough information for you to be able to apply it to your own farming operations!

**June 11, 13, 18 & 20th
2013**

***Starts at 5:30 pm each night
at the Eckville Hall.**

***New topics covered every
night!**

**Cost: \$15 each night (supper
included)**

Includes classroom learning and pasture walks!



To register, contact one of the following counties:

- Clearwater County (Gary Lewis/
Brooke Sauve) (403) 845-4444
- Grey Wooded Forage Association
(Albert Kuipers) (403) 844-2645
- Lacombe County (Blayne West)
(403) 782-6601
- Red Deer County (Ken Lewis)
(403) 342-8653



Photo credits: Bonita Knopp

Brought to you by:



Principles of Growing Productive Pastures!



Grey Wooded Forage Association

Leading an Awareness of Forages

By Albert Kuipers



LAND EKG-CANADA

EKG Blink Monitoring Basics - July 8 & 9, 2013



Participants will leave this two-day course with well-practiced abilities in choosing monitoring sites, transect layout mechanics, and EKG photo procedures. This class is designed for any rancher or conservation manager seeking a rapid, repeatable monitoring program, right away.

Participants will practice thorough land monitoring basics, soil survey using Alberta Soil Information Viewer, grazing indexing, forage production measurement methods, surface cover percents, and EZ-EKG assessments, but will spend the majority of time learning monitoring mechanics for EKG transect lines.

Additional time will be spent on "situational monitoring" and site recording techniques including an introduction to EKG DataStore. Monitoring kits will be available for those wishing to purchase this item.

Prerequisite: None, bring a camera if you have one.



JOIN CHARLEY ORCHARD & TED SUTTON FOR THIS INFORMATIVE 'HANDS-ON' COURSE

For course content information contact Ted Sutton
Tel: 403.764.7402, Cell: 403.909.1772, Ted@ekgcan.com

For registration information and to register
please contact the GWFA office at 403-844-2645

Location: East of Red Deer

At the Rolyn Hills B&B, approx. 10 mi (16 km) east of
Hwy 2 (Corner of Hwys 595 & 808 + .5 km)
NW 36-37-26-W4 - home quarter
GPS 50.51.532, -113.35.984 - for field work



Photo credit: Albert Kuipers & Bonita Knopp



26th Annual West Country Ag Tour



Thursday, August 22, 2013
Dovercourt Hall
7:30 am till 4:30 pm

Sign up for an exciting day filled with good company and delicious food! Enjoy the sights as we tour Clearwater County and visit a variety of agricultural operations to learn about research and innovations taking place in our area!

**Pancake Breakfast
starts at 7:30 am!**

**Tour buses
depart right after
breakfast!**

**Coffee and snacks
will be provided!**

Registration Fee: \$25 per person before August 16th
\$30 per person after August 16th

Includes breakfast, lunch, snacks, bus charge and an information package!

To register, please contact: Clearwater County Agricultural Services
and Landcare

About 100 people attended this annual event.

The tour will also feature a tradeshow during
breakfast & lunch and a silent auction!

Hosted by:



Photo credits: Bonita Knopp



Local Food Workshop

Featuring **Joel Salatin**
October 24 & 25, 2013

Pomeroy Hotel & Conference Centre
 Olds, AB



Joel Salatin: *Ballet in the Pasture at Polyface Farm, Local Food to the Rescue, Relationship Marketing and evening presentation Watch Where You Step*



Doug Weatherbee, the Soil Doctor:
 Soil Health & Production and Healthy Soils
 breakout session



Breakout Sessions: *Grass Finished Beef, Pasture-Raised Poultry, Healthy Soils, Challenges of Going Organic, Livestock Processing Regulations, Reaching Your Regional Market, Marketing Options and Strategies.*



Photo credit: Lorelee Grattidge



Photo credit: Albert Kuipers

Cost: \$150.00/Person
 \$100.00/Student

Workshop includes Keynote address,
 tradeshow, banquet and evening

Contact Laura Gibney for more info, to register or

Registration Deadline: October
 (403) 652-4900, laura@foothi



Silvopasture Workshop

October 22, 2013

Will be held at the Raven Community Hall

Registration Deadline: October 18th, 2013

Topics of discussion will include:

- Management of cattle grazing in woodlots
- Value and management of forage in forested stands
- Benefits of grazing cattle in a partially forested pasture
- How to process wood harvested in woodlot
- Protection of forested riparian areas

Schedule

- 5:00pm - Registration
- 5:05pm - Brief talk on silvopasture and the tour area
- 5:15pm - Depart to Glenn Mainland's property
- 5:30pm - Arrive at property, tour grazed mixed-wood stands and riparian area, comparing stands with different grazing pressures
- 6:15pm - Sawmill demonstration
- 6:30pm - Head back to Community Hall
- 6:45pm - Dinner
- 7:00pm - Discussion of timber and forage value and management in silvopasture
- 8:00pm - Wrap-up and Door prizes

For more information and to register please call:

- Gary Lewis at Clearwater County: 403-845-4444
- Ken Lewis at Red Deer County: 403-342-8653
- The GWFA Office: 403-844-2645

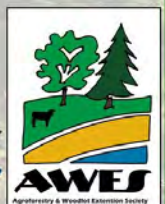


Photo credit: Albert Kuipers



Photo credit: Jane Fulton

2013 Canadian Forage & Grassland Association Conference & AGM

Dec 9th (Optional Tour)

December 10th & 11th

Pomeroy Inn & Suites at Olds College, Olds, Alberta

When:

Monday December 9, 2013 at 8:00 AM MST to Wednesday December 11, 2013 at 5:30 PM MST.

Monday, Dec 9th - Tour, Tuesday, Dec 10th and Wednesday, Dec 11th - Conference & AGM

Where:

Pomeroy Inn & Suites at Olds College
4601- 46th Ave, Olds, Alberta
Phone: 1-855-800-8815
Email: gm@PomeroyOlds.com

Room Rate is \$129-\$149 + taxes
Reserve before Nov 10th, 2013
Limit of 50 rooms

Alternate rooms available across the street at the Best Western
1-866-460-7440.
www.bestwestern.com
4520 - 46th Street
Olds, Alberta
T4H 1P7
Room Rate is \$101 until Nov 25th.



Dear Forage Enthusiast,

We are pleased to be hosting our 2013 CFGA conference & AGM, this time in the well known agriculture community of Olds, Alberta (home also of Olds Agriculture College who is celebrating their 100th anniversary this year).

Our theme is "Taking Forages Mainstream - Challenges, Pitfalls and Opportunities" so we've engaged speakers to give their perspective, as well as researchers, industry and producers to help us identify what must be done to move forages forward as a main crop. We want YOU to share your opinion at our conference, see a little of Alberta via our tour and liaise with those representing the various sectors of the forage and grassland industry!

For more information

FREE SHUTTLE

Olds is located approximately 100 km from Edmonton and is providing a free shuttle to the conference.

Please provide your itinerary at mhobin@gprc.ab.ca

SPONSORSHIP INFORMATION

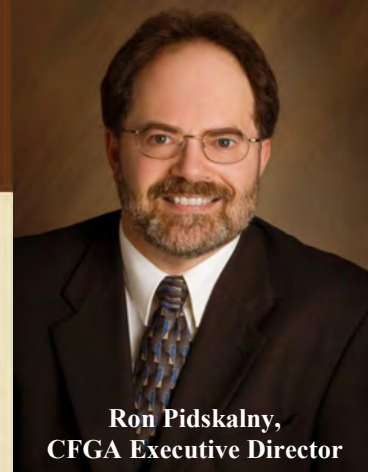
We've got some great opportunities for you to sponsor the whole year on our web and sponsor logos will be on the Sponsorship Invitation on line.

Thank you very much for your interest at the conference.

Sincerely,

Corie Arbuckle
Canadian Forage & Grassland Association
c_arbuckle@canadianfga.ca

204-254-4192



Ron Pidskalny,
CFGA Executive Director

Cow-Calfenomics 2013

Tools and Strategies for Better Decisions

Risk Management and Profitability in the Alberta Cow-calf Sector

Date	Location	Venue	Time
November 25 th 2013	Vermilion	Vermilion Regional Center 5021 - 49 Avenue	9:30 am-3:30pm
November 26 th 2013	Veteran	Veteran Community Hall 403 Coronation Ave	
November 27 th 2013	Olds	Olds College, Student Alumni Center	
November 28 th 2013	Lethbridge	Country Kitchen Catering 1714 Mayor Magrath Drive	

Risk and Opportunity in Today's Markets - Anne Wasko or Debbie McMillin - Market Analysts

Measuring and Managing Calf Price Risk - Alberta Agriculture and Rural Development

Production to Futures, Options and Cattle Price Insurance - AFSC

Handing over the Reins - Transition on the Ranch - Barrie Broughton QC TEP, North and Company LLP

Accessing Capital - Yours and the Banks - Alberta Agriculture and Rural Development

The Future of Alberta's Beef Sectors: A Young Producer's Experience in Getting Established

How to Register

All participants are requested to register prior to Wednesday, November 20, 2013. Registration fee is \$25.00. Lunch is provided with registration. Registration for students is free and compliments of Alberta Beef Producers. To register please call the Ag-Info Center at 1-800-387-6030



Your farm information is the **key** to making better business choices and your farm more **profitable** ...

Sign up for an **AgriProfit\$** Business Analysis today!

Call: 310-0000, then 780-422-3771
E-mail: dale.kaliel@gov.ab.ca
jesse.cole@gov.ab.ca
pauline.vanbiert@gov.ab.ca

Government of Alberta
Agriculture and Rural Development

AgriProfit\$



Growing Forward 2
A federal-provincial-territorial initiative

Alberta Government

Canada



AFIN

ALBERTA FORAGE INDUSTRY NETWORK



YOU'RE INVITED...

AFIN'S 2014 ANNUAL GENERAL MEETING

ON FEBRUARY 13, 2014

9:30 TO 4:30

ABERDEEN COMMUNITY CENTRE

**5 miles directly East of Innisfail on
Highway 590 just before the Highway
791 intersection.**



Everyone Welcome,

Lunch \$25 at the door,

Please pre-register by Feb 7, 2013

To register email: Info@albertaforages.ca

or call: 403-556-4248

Check us out at: www.albertaforages.ca

AFIN - An Organization of Stakeholders in Alberta's Forage Industry

*Find out what's happening in
our forage industry, locally,
provincially and nationally!*

RANCHING OPPORTUNITIES

**Ideas and Opportunities
for Growing your Business**

Discover new ways to manage your livestock,
explore options for marketing your product and
learn about the challenges and achievements of
successful ranchers.

Conference Schedule

8:30 to 3:30, Olds College Alumni Centre

Registration 8:30 to 8:50, Parking is Free

The Value of the Back End; Manure Management
Trevor Wallace - Alberta Agriculture, Nutrient Management
Specialist

"HANDS ON" BREAKOUT SESSIONS

Beef Information Exchange System (BIXS)

Holly LaBrie - Difficulty Ranch

* bring your own laptop or tablet if you can

Analysing Your Forage Quality

Barry Yaremko - Alberta Agriculture - Beef Forage Specialist
Grant Lastiwka - Alberta Agriculture - Livestock Forage
Business Specialist

Livestock Handling Demonstration

Jennifer Woods, J. Woods Livestock Services

PRODUCER PANEL

Pros & Cons of Different Calving Times & Strategies
(3 producers, 1 panel "expert")

KEYNOTE SPEAKER

What Do Your Consumers Want?

Theresa Dietrich, People Talking Market Research Services

Note: Schedule is subject to change

February 6th, 2014

Olds College

Registration

\$40 includes lunch, coffee and snacks

Student price \$20

Register today or for more information contact
Mountain View County Agricultural Services at
Phone: 403-335-3311 Ext 143
e-mail: lgaudette@mvcounty.com
or contact your local conservation staff.

Registration closes January 31st

Tradeshow

The Ranching Opportunities Tradeshow is an
opportunity for producers to meet local organizations,
businesses, industry groups and other key contacts.

Hosting Partners

Olds College, M.D. of Bighorn, Red Deer County,
Kneehill County, Rocky View County, Wheatland
County, Mountain View County, Alberta Agriculture,
Foothills Forage & Grazing Association

Sponsored by

The Alberta Livestock & Meat Agency (ALMA)



LIVING WITH WILDLIFE

**Friday, February 21, 2014
Cremona Community Hall**

Join Mountain View County & MD of Bighorn Agricultural Services, along
with many of the top experts in Alberta, for a day of interesting topics and
presentations regarding wildlife co-existing with agricultural operations. All
interested producers and residents are invited and encouraged to attend!

Agenda

- 8 am** Breakfast - Booth Displays
- 9 am** *Predators in your Backyard (Bears, Cougars & Wolves Conflict),* **Todd Ponich**, Regional Problem Wildlife Specialist
Alberta Environment & Sustainable Resource Development
- 10:30 am** *Ungulate Damage to Feed (Prevention, Control and Options),* **Willy Rasmussen**, Problem Wildlife Technician
Alberta Environment & Sustainable Resource Development
- 12 pm** Lunch - Booth Displays
- 1 pm** *Coyote Livestock Predation (Prevention and Control),* **Phil Merrill**, Provincial Rat and Pest Specialist
Alberta Agriculture and Rural Development
- 2 pm** *Trapping Overview (How They do it, Who to call, Rules & Regulations),* **Larry Nielsen**, Sunde Trappers Association
- 3 pm** *On Farm Carcass Composting,* **Dr. Kim Stanford**, Beef Research Scientist
Alberta Agriculture and Rural Development
& **Gordy Cunningham**, Sun Roc Ranching Ltd, Agricultural Service Board, Mountain View County

Details: **Free of Charge!** Please register in advance with MVC
Ag Services, 403-335-3311 ext 143 or ag@mvcounty.com

4R Soil Nutrient Management Workshops

Thursday, March 27, 2014

at the POFIANGA Hall, NW of Ponoka

10 AM to 3 PM with Lunch provided!

Please call the GWFA office

at 403-844-2645

or email GWFA2@telus.net

to register by March 20, 2014

**4R Nutrient Stewardship System
Right Source @ Right Rate, Right Time, Right Place®**

**To learn more about Farming 4R Future go to
www.farming4Rfuture.ca**



Grey Wooded Forage Association

Division of Agriculture & Forestry

FarmOn.com - we're bringin' farming back



Search Workshops, or Users.



PROFILE

The 4 Principles of Grazing Management

WORKSHOPS

Topics: *Cattle Grazing Land Management Fast Farmer Forages*
90 views | 0 comments | 1 followers

Like 3

by: **Grey Wooded**

E-MAG

MEMBERS

STREAM

SUPPORT



Over the last year we've been developing a very nice WIN/WIN relationship with the FarmOn Foundation. FarmOn has become well known for their excellent web-based educational resources for young farmers of any age. Their videographer, Ben Wilson, does an awesome job of putting short videos together. "The FarmOn Manifesto" and "FarmVoices-It's Our Turn" are excellent examples of his work and can be found on FarmOn.com, or on YouTube.

Ben and the FarmOn Foundation Chair, Sarah Wray, approached me about working with them to develop some simple electric fencing videos and some videos on "The 4 Principles of Grazing Management". These videos can be found on the FarmOn website in the "Fast Farmer" workshops.

We also collaborated with Dr. Tom Flesch, U of A, Dr. Vern Baron, AAFC, Dr. John Basarab, ARD and Ben Wilson to develop several videos showcasing Dr. Flesch's work with measuring greenhouse gases on pasture; Dr. Baron's work on improving swath grazing efficiency; and Dr. Basarab's work on feed efficiency in beef cattle.

GWFA and FarmOn will continue to collaborate on these kinds of projects, so watch our website and the FarmOn website for anything new we come up with.

ABOUT THIS GUIDE

Grey
Wooded



Browse all Workshops by Grey
Wooded Forage Association

GWFA's Website

The Grey Wooded Forage Association is located in Central Alberta, and offers support to members involved in forage production and grazing management, through information, consultation, projects and events....View profile

Other Workshops by Grey Wooded:

The 4 Principles of Grazing Management

How To Splice High Tensile Fencing Wire

How To Set Up Portable Electric Fence

Installing Permanent Electric Fence



How To Brace a Corner Fence Post, Underground



How To Set Up Portable Electric Fence



How To Splice High Tensile Fencing Wire





Measuring Methane Emissions from Cattle
E-MAG

- MEMBERS
- STREAM
- SUPPORT



For more information about the ground breaking research by Rural Development at the Lacombe Research Centre, check



Where are we at with swath grazing?



Dr. John Basarab - Where we're at with low RFI "Feed Efficiency"

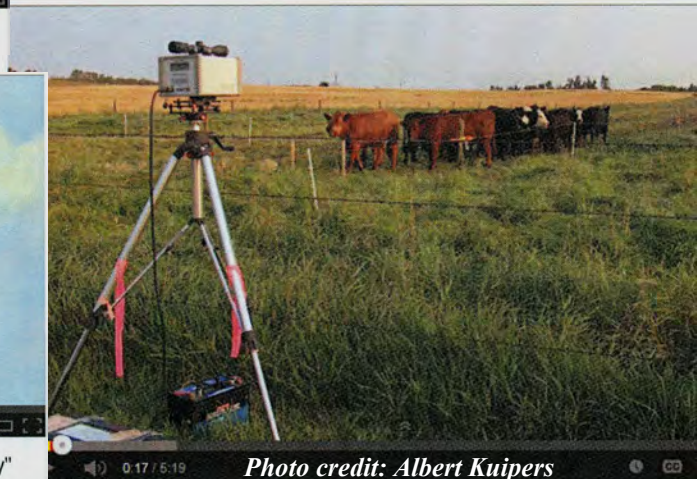


Photo credit: Albert Kuipers

ABOUT THIS GUIDE

Grey
Wooded



Browse all Workshops by Grey
Wooded Forage Association

GWFA's Website

The Grey Wooded Forage Association is located in Central Alberta, and offers support to members involved in forage production and grazing management, through information, consultation, projects and events....View profile



Photo credit: Albert Kuipers

Alberta Forage Beef Centre

The beef cow-calf sector has suffered economically since 2002-2003 due to many factors, but the sector, which relies on feedstuffs consisting of 90% forage and pasture, remains a significant contributor to the Canadian and Albertan economy and environment. Recent economic, climatic and market events have left the industry less competitive, globally, than a decade ago.

An *Alberta Forage/Beef Centre Strategic Plan* was developed in the summer of 2012 by a steering committee representing producers' associations of Alberta Beef Producers (ABP); Agriculture Research and Extension Council of Alberta (ARECA); Grey Wooded Forage Association (GWFA); Alberta Forage Industry Network (AFIN); Beef Cattle Research Commission (BCRC) and the Canadian Forage and Grasslands Association (CFGa) in partnership with Agriculture and Agri-Food Canada (AAFC) and Alberta Agriculture and Rural Development (ARD).

The Strategic Plan was developed as a result of preliminary discussions between AAFC and ARD for a forage beef program and the outcome of 2011 industry focus group sessions that were held in Strathmore, Lacombe, Vegreville and Grande Prairie; *to explore the need for Forage Beef Research and Extension in Alberta*. The Focus Group Steering Committee consisted of the producer groups and organizations cited along with the Alberta Livestock and Meat Agency and University of Alberta.

Priorities for the Strategic Plan are based on the focus group participants' response to questions about the current situation, the issues, and the threats, opportunities and solutions to move the forage and beef industry forward. The participants were asked for advice on research priorities and what the steering committee needs to do. There are seven main outcomes outlined in the strategic plan under the overarching goal:

Improve productivity, competitiveness, sustainability, land and resource use efficiency of the forage/beef system by:

- * Reducing winter feeding costs by 50%
- * Environmental sustainability
- * Improving cow efficiency by 15%
- * Reducing back-grounding costs by 50%
- * Improving late summer/fall pasture productivity by 30%
- * Improving the role of forage in meat quality
- * Building and maintaining research and extension capacity

To fulfill these objectives, it was deemed necessary to

have a strong base and leadership for this initiative. Given the resources available at Lacombe (expertise, land base, research facilities, cowherd, etc.), a consolidation of resources at this site will provide the best utility for the currently limited resources. Subsequently, in early May of 2013, AAFC announced that the Lacombe Research Station would be called **The Cow-Calf-Forage Centre** and through consolidation will move an animal nutrition position to Lacombe. The close linkages with the federally inspected abattoir, as well as existing ARD personnel and the **Field Crop Development Centre** are invaluable resources located at Lacombe. Given the recent closure of AAFC Brandon, Lacombe is uniquely positioned to become a centre of excellence in the research areas of forage/beef systems, management and utilization of forages, and cow/calf production. From this concept of the **Alberta Forage Beef Centre (AFBC)** was born.

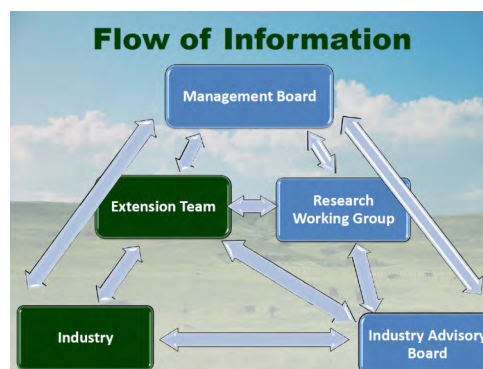
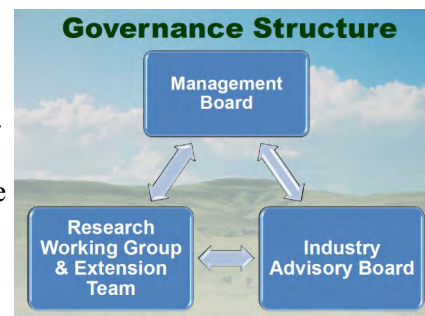
The steering committee then focused on developing a governance structure with industry, represented by ABP and ARECA, being a major component of every

level. The committee developed a structure for the flow of information within the AFBC and terms of references were drawn up for each component.

Throughout the process the committee checked in with ARD's Deputy Ministers office and their AAFC counterparts. The process is now to the point where an official agreement between ARD, AAFC and the forage and beef industry is in the beginning stages of being drawn up. If all goes well an agreement should be in place by late 2014.

GWFA's manager has been involved with this initiative throughout the process and, besides GWFA, has been representing ARECA and AFIN at this table. GWFA's

members stand to gain considerably from the forage and beef production and economics information products generated from the Alberta Forage Beef centre.



Applied Research Project Partnerships

Innovative Swath Grazing / Increasing Forage Research Capacity

Timeframe: April, 2013 through March, 2018.

Project Leader: Dr. Vern Baron (AAFC), **Co-Investigators:** Dr. Raquel Doce (AAFC), Dr. John Basarab (ARD), Dr. Patricia Juskiw (ARD), and Albert Kuipers (GWFA).

Plots of cereals for swath grazing.



Photo credit: Dr. Vern Baron

Purpose:

Reduce the cost of calf production by reducing the cost of overwintering beef cows as a result of improving carrying capacity of swath grazed pastures.

Objectives:

1. Compare "in-swath" weathering losses among popular and new cereal lines used for swath grazing. Deliverable: Improved recommendations to reduce weathering loss.
2. Determine the feasibility of utilizing strip-mixtures of spring and winter triticale to improve swath nutritive value. Deliverable: Develop high quality swath grazing system.
3. Test and compare new barley and triticale lines, selected for high fiber digestibility, under swath grazing conditions. Deliverable: New varieties selected for swath grazing.
4. Train and mentor a new forage scientist. Deliverable: Increase science capacity.

Summary:

Progress has been made in increasing yield of the swathed-grazed crop, thus increasing the carrying capacity, reducing the daily cost of overwintering the beef cow and reducing the amount of land required to produce enough feed to overwinter the cow herd. This is important during times when high grain and canola prices cause competition for land.

However, producers are concerned about low nutritive value of the swathed-grazed crop and loss in nutritive value due to weathering during fall, winter and spring. Increasing nutritive value or maintaining nutritive value could increase carrying capacity, more, by lowering the dry matter (DM) intake required for maintenance. This would reduce the daily feed cost per cow, further, and could make the swath grazing system more flexible. For example, a swath-grazed system that could maintain In vitro True Digestibility (IVTD) or TDN

above 60% for 150 days of grazing might be used for back-grounding or at least allow cows to maintain good body condition during extremely cold conditions without supplementation. It would allow swath-grazing to be used over a broader geographical area.

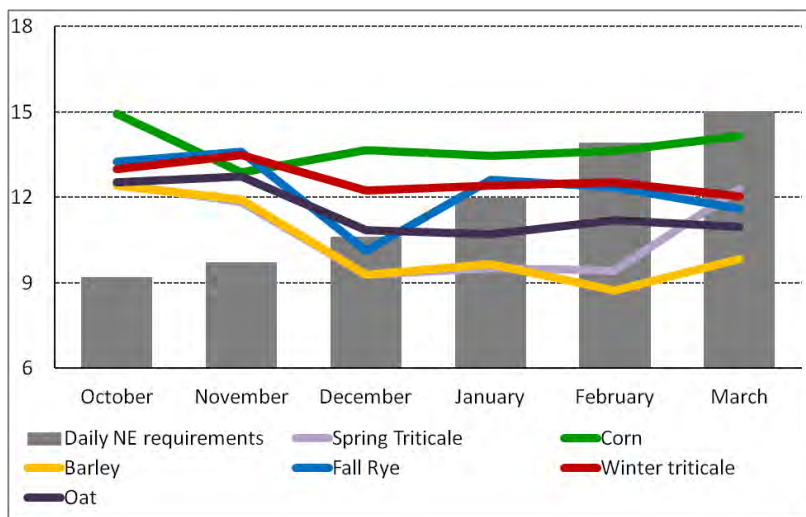
Improvement to the swath-system requires innovative management and enhanced genetic material specifically designed to improve digestibility and be used under winter grazing conditions. AARD breeders are selecting and have available advanced lines of barley and triticale with improved fiber digestibility. However, the lines must be tested for resistance to weathering loss and compared to popular forage types under winter grazing conditions. The project includes a comprehensive weathering trial and two winter grazing trials to evaluate the suitability of this new material for overwintering beef cows.

The **weathering trial** began with the selection and planting of several cereal lines of commonly used species for swath grazing. The table below shows which species and va-

Cultivars and lines used in the weathering trial			
	Cultivar or line	Species	Swathed or Standing
1	Pioneer 39F44	corn	swathed
2	Pioneer 39F44	corn	standing
3	94L	Spring triticale	swathed
4	Bunker	Spring triticale	swathed
5	Hay Maker	oat	swathed
6	Mustang	oat	swathed
7	Gadsby	barley	swathed
8	AC Ranger	barley	swathed
9	Luoma	Winter triticale	standing
10	AC Remington	Fall rye	standing

rieties were chosen. Some of these lines were chosen as a result of a survey GWFA did more than a year ago to learn what species and varieties are commonly used in our area. Some lines (e.g. 94L) were chosen from the AARD breeding program on the basis of fiber digestibility, lignin, starch content and agronomic characteristics.

As it turned out, swath grazing and weathering conditions were severe this past winter. The information shown represents one season and data is variable. Corn and winter cereals maintained nutritive value well during the winter.



Weathering loss for forage species over winter in 2013-14 compared to increasing daily energy requirements for pregnant cows with cows calving at the end of March.

Produced by Raquel Doce

Both barley and spring triticale suffered the greatest losses in quality; oat was intermediate in this regard. The graph above shows that corn could provide adequate energy to meet the cows increasing nutritional requirements throughout the winter. Cows would likely lose weight grazing the small grain cereals. This difference among corn, triticale and barley was shown in Baron et. al (2014).

Even though corn costs twice as much to grow as the small grain cereals (Baron et al. 2014) it maintained carrying capacity for cows well into the winter, resulting in a relatively low daily feeding cost. Hay Maker oat and AC Ranger barley maintained carrying capacity closer to October values than others resulting in relatively low daily feeding costs. Keep in mind that results could be quite different from year to year.

The **first grazing trial** is about improving the quality of swath-grazed spring triticale using winter triticale strips. Bunker spring triticale and Pika winter triticale were used.

Growing conditions in summer were conducive to high yields of spring and winter triticale. Swath grazing was carried out according to Dr. Baron's usual protocol, however, heavy snow and ice conditions caused difficulty in winter grazing. This made it difficult for cows to access forage and obviously required more energy to graze than in past research. Swath grazing was discontinued about a month earlier than usual so the cows wouldn't lose too much body condition and wastage.

Cost of feed delivery per cow-day between pen fed and swath-grazed cows was approximately equivalent ranging from \$0.35 to \$0.39 cow-d⁻¹ for swath-grazed spring triticale and the control. Normally swath-grazed triticale costs less than \$0.10 cow-d⁻¹, but extra costs of moving snow to allow cows to access swaths increased the cost of machine time, labour and fuel.

The **second grazing trial** will compare barley and triticale lines selected for swath grazing compared to popular forage-types. Treatments: 1. "Popular" triticale; 2. "Best triticale line" 3. "Popular" barley; 4. "Best" barley line; 5. Control. Treatments 1 to 4 replicated twice. "Best" lines were chosen and seed was increased at ARD's Field Crop Development Centre so that sufficient seed is available for a field-scale test.

Triticale will be planted during the first week in June, 2015 and barley after June 15, 2015. All triticale treatments will be planted at 120 kg/ha and barley at 77 kg per ha. In both grazing trials fertilizer will be applied according to soil test to bring soil nutrients up to a common level across treatments.

As this project is intended to run from April, 2013 to March, 2018, obviously this summary shows only preliminary results of the first production year and winter. The unusually long and harsh winter had considerable impact on the results so far. By the spring of 2015 we hope to have enough information to hold a workshop showing what this and other related research can do for your beef operations. Once the project is completed in 2018 we'll be compiling the results and developing various extension products to get the information out to you and many other beef producers in Western Canada.



Winter conditions for grazing cows and for sampling

Photo credits: Nadine Lamb & Adele Ohama

Results from the completed project "Reducing the cost of swath grazing cows by increasing the swathed-crop yield" will be published in the "Canadian Journal of Plant Science" this fall. Resulting information will also be included in the workshop we're planning for 2015. We'll be developing other extension products such as factsheets and videos as well.

Managing Nutrients in Extensive Cattle Wintering Sites

Project #: 2011C

Cooperator: Doug & Deb Skeels

By: Agriculture and Agri-food Canada

Extension Partner: Grey Wooded Forage Association

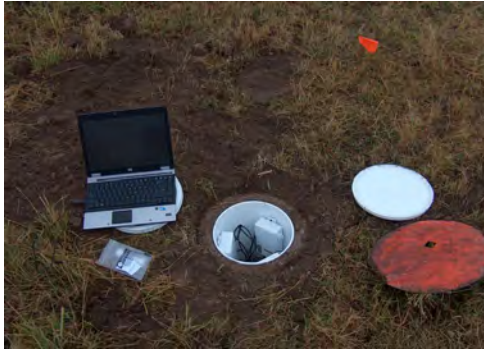


Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada



Photo credits: Albert Kuipers



Early in 2011 we were approached by Dennis Lastuka from Ag Canada to see if we had a suitable site and an interested cooperator for a nutrient intensity and distribution study in bale grazing situation. GWFA Director Doug Skeels was quick to volunteer as he was planning to try bale anyway.

Some high tech moisture and temperature sensors were buried at various depths at specific distances from the centre of the two test bale's locations. A set of sensors were also set up just outside of the bale grazed area.

These sensors were then connected to special transponders that were buried in 5 gallon buckets as well. Apparently, these transponders can hold up to seven years of temperature and moisture data, which can be readily downloaded onto a computer. Many soil samples were taken at the beginning of the project and each year following.

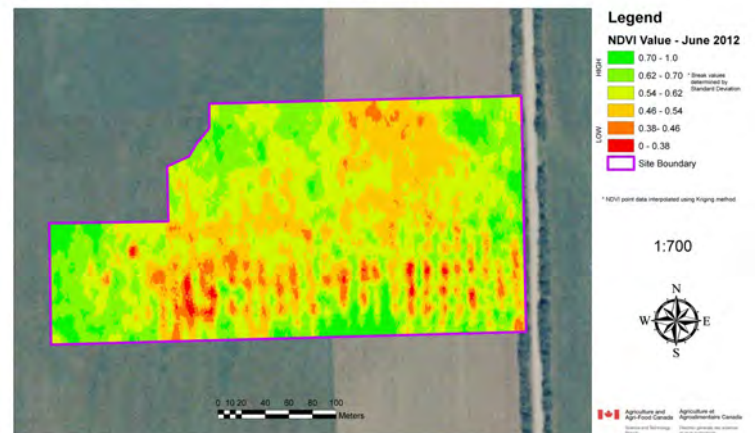
Bales were then set at 40 foot centres and a different area of the pasture was used each year. Doug and Gerald Skeels (Doug's Dad) managed the bale grazing each winter. They were quite impressed with the ease of bale grazing as compared to the conventional feeding system they normally used.

Data was collected from the transponders in 2012 and 2013. Many more soil samples were taken in strategic distances from the bale centres. Forage samples were also taken to see the correlation between high soil nutrient content and high quality forage.

At intervals during the summer of 2012, forage yield was mapped using "Green Seeker" technology. The "Green Seeker" unit was mounted on the front of a quad which was driven back and forth over the pasture till the whole thing was recorded. The colourful maps that were produced showed where the forage production was the highest, and in so doing, showed where the nutrient deposits were the highest.

The plan is to run this project for several years to be able to collect meaningful information over time. This information is intended to help develop bale grazing BMPs for future publication.

Normalized Difference Vegetation Index Map - June 2012



GWFA Demonstration Projects

Late Fall Seeded Legumes

Project #: 2009A

Cooperator: Harald Magnus

By: Grey Wooded Forage Association

Funding: Agriculture Opportunities Fund (AOF)

Sponsors: Seaborn Seeds, Hannas Seeds, Vitera (now Crop Production Services)



The intent of this project is to see if late fall seeding of difficult to establish legumes will improve establishment in the following year. Winter's affect is thought to soften the seed coat and trigger germination once spring arrives.

In late October of 2009, seeding of Kura Clover, Cicer Milkvetch, Birdsfoot Trefoil and Red Clover was completed at Harald Magnus's field just south of the Bingley Hall. Gerald Knopp helped Harald and Albert with the seeding.

During the 2010 growing season, we watched to see how well these four legumes established. When we first looked at the site in early June, we could see that all of the legume species had germinated well. Of particular interest were the Cicer Milkvetch and Kura Clover. We could see seedlings, neatly in the rows.

When we went back to the site in early August of 2010, we saw that Corn Spurry dominated the site. The Kura Clover, Cicer Milkvetch and Birdsfoot Trefoil looked pale and stressed. Harald mowed the site to knock back the Corn Spurry.



Photo credit: Albert Kuipers



Photo credit: Albert Kuipers



Photo credit: Albert Kuipers

For 2011, Corn Spurry was pretty much gone. The Red Clover looked great. The Cicer Milkvetch was gaining. The Kura Clover and Birdsfoot Trefoil were pretty much lost in the mix of grasses and weeds. While we had good germination in 2010, it seems that the competition is too much for these species.

In 2012 and 2013 we saw that the Cicer Milkvetch was starting to gain some strength. We could see small, healthy plants in rows.

The Kura Clover was there, but was still pale and did not look healthy. A lot of volunteer Alsike and White Clover were there as well. If the Kura Clover survives and thrives, the plants should soon be much larger than the other clovers. We dug up a few plants to see what the roots were like. The roots were actually quite large for the top growth that was there, and looked much like alfalfa roots.

It looked like Birdsfoot Trefoil was pretty much choked out by the competition. Very few plants could be seen.

The Red Clover, however, was doing very well. Red Clover is well known to establish easily and produce well in the West Country. In 2013 the Red Clover was starting to decline. It is a short-lived species, so that could be expected.

Over-all, we clearly demonstrated that we could get good germination in spring when these legumes are seeded in late fall. We also saw that competition with weeds was detrimental to further establishment and productivity of three of the legumes used in the project. Red Clover, however, did very well throughout all of the growing seasons.



Photo credit: Albert Kuipers



Grazing Tall Buttercup Pastures

Project #: 2011B

Cooperator: Alan & Wanda Sunde

By: Grey Wooded Forage Association

Funding: Agriculture Opportunities Fund (AOF)

Sponsor: Seaborn Seeds



Photo credit: Tia Stadnicki



Photo credit: Tia Stadnicki



Photo credit: Tia Stadnicki



Photo credit: Bonita Knopp

This project began in 2010 with Clearwater County Ag Services applying herbicide to kill Tall Buttercup in strips on this predominantly wetland pasture. The goal was to see how dense the buttercup infestation had to be to deter cattle from grazing.

In 2011 we were asked to collaborate with the county on this the project. We worked with the county to build electric fencing so the grazing could be controlled in the project area. Grazing cages were set up and we collected samples to determine how much forage was available and how much remained after grazing. This was done separately in areas where Tall Buttercup was sprayed out, and where no herbicide had been applied.

After, what turned out to be a fairly severe grazing, we found that the cattle ate everything, buttercups and all.

When we tallied up the numbers after the growing season, we found that the un-sprayed areas had produced more total forage than the sprayed strips. We noted that there was quite a lot of clover, as well as dandelions and other forbes that contributed to the total forage mass. This broadleaf component was absent from the sprayed strips.

After 2012, our friends from Clearwater Ag Services decided to leave the project. We decided to continue the project by monitoring photo points to track species composition and forage density on this pasture.

In 2013 we set up a Land EKG style transect to help us consistently monitor the site for several years. We plan to continue monitoring the site with this transect and the previously established photo points, to see what changes occur to species composition and productivity under the Sunde's management of grazing on that pasture.



Photo credit: Bonita Knopp



Photo credit: Bonita Knopp



Photo credit: Bonita Knopp



Photo credit: Bonita Knopp



3D Fencing

Project #: 2011C

Cooperator: Warren Bloomquist

By: Ponoka County Agricultural Services & Grey Wooded Forage Association

Funding: Agriculture Opportunities Fund (AOF)

Sponsor: Ponoka County Agricultural Services, PowerFlex Fence Canada & Gallagher Canada

In November of 2011 we built a “3D” electric fence around a 10 acre field of swaths for swath grazing. This fence consisted of a four wire inner fence and a one wire outer fence constructed three feet away from the inner fence and about three feet high. A 3D fence was also built around a grain storage bag at another nearby site.

Rob Davidson, from PowerFlex Fence Canada, supplied enough high tensile wire and PowerFlex posts for both sites, as well as a 30 Joule fence energizer. Shayne Steffen and Justin Babcock from Ponoka County provided manpower, corner posts, rented a post pounder and had a sign made to promote the project. Ponoka County also sponsored the project with \$500.00 for GWFA travel expenses. GWFA provided a variety of electric fence insulators and manpower for the project.

During the winter of 2011/2012 there had been no evidence of deer going through the fences all winter, so there was no damage to the swaths or the grain storage bag done by deer. There were deer on a nearby field also belonging to Warren Bloomquist. The area didn't get a whole lot of snow that winter, which may have contributed to the success of the fence.

During the winter of 2012/2013 the area received more than the usual amount of snow, and it was a long winter to boot. Warren discovered that deer were breaching the fence in late December and early January. By the time we got out there, the deer had damaged a couple of acres of swaths already.

There was some hair on the bottom wires, good evidence that they're crawling under.

So it was back to the drawing board. Some of the questions that we discussed were: Were the outside wire and the bottom wire too high? Were the deer not grounding well

enough to get shocked? Was the energizer sufficiently grounded? Could we have used scent caps to entice the deer to touch the fence with their noses? Would that have helped in this case? Were the deer hungry enough to get more resourceful?

We took a look at what we might be able to change to hopefully get better results.

In November, 2013 we made a few changes. We added 6 more ground rods 10 feet apart. We added a Gallagher Polytape on the south side on the outside single wire fence, and we put it 6" lower than the high tensile wire. We added scent caps with deer attractant scent and also rubbed some on the Polytape. We found one place where the bottom wire of the 4 wire fence was making a dead ground. Fixing this and the improved ground field would improve the fence's shocking power considerably.

Warren told us in January that he had finished grazing the swaths in that field and had no deer issues in there. He commented that he should have put a 3D fence around his barley bag, because he had lots of damage to it. The snow cover was quite heavy and we heard reports of hungry deer all over our area, so we considered it to be a pretty good test this winter.

We're planning on continuing with the project with Warren Bloomquist as long as he's willing to continue with it. We're also looking at opportunities to experiment with 3D Fencing in the West Country, somewhere where elk are a major problem.

The Peace River Forage Association of BC has been experimenting with some alternative 3D Fencing designs. We have been sharing information with them, so hopefully we can learn from them as well.

3D Fencing is quite possibly a way producers who have problems with wildlife damage to feed supplies, can reduce or eliminate that damage. 3D fencing can be used around swath grazing, stockpiled grass, grain storage, bale yards and even gardens.



Photo credit: Shayne Steffen



Photo credit: Justin Babcock



Stockpile Grazing Project

Project #: 2012C

Cooperator: Bob Aasman & Iain Aitken

By: Grey Wooded Forage Association, feed analysis by Parkland Lab

Funding: Agriculture Opportunities Fund (AOF)

Sponsor: Environment & Sustainable Resource Development (ESRD)

Back in 2008 ARECA's Forage Livestock Team began a stockpile grazing project with the help of some funding from AAFC. Organizations from across all of Alberta participated in this project that was designed to start recording yield and feed quality information from a variety of locations and species compositions. This project fell on hard times as funding was not available to continue the project after the first year.

Despite the discontinuing of the project provincially, the projects committee decided that there was enough value for our members that we should continue gathering data with the hopes that the provincial project would be revived with some funding success. This didn't happen, so we decided to continue on our own and compile our own data.

As the project was very different in the winter of 2008/2009 with several different cooperators, we did not include information from that year. We have data from the winter of 2009/2010 through the winter of 2012/2013. The idea was to get some idea of the yield and quality someone considering grazing stockpiled forages could reasonably expect.

We learned, however, that yield and quality can be highly variable for a large number of reasons. To start with, growing conditions were highly variable each year, affecting both yield and quality.

At the Aitken's farm pastures chosen had different species compositions. Some were old pastures that were recovering from over grazing by horses prior to the Aitken's ownership of the farm. Others were meadow brome pastures that Iain had planted since 2000.

At the Aasman farm we collected samples from the same pasture every year. This pasture generally got used hard during calving season and till Bob moved the cows to their summer pastures in late May to early June. Bob generally used the stockpiled forages in late fall or early winter and fed his cattle on this pasture while the cows were on it in spring. After this the pasture was rested until the following late fall/winter.

On both farms grazing cages were used to protect the sampling locations from grazing. This allowed Iain and Bob to use the pastures we were sampling at any time during the winter.

We then collected forage samples at each location in late fall and then again in April and in May. It was determined that this frequency and timing of sampling was suffi-

cient for managing stockpile grazing, so it made sense to use the same sampling protocol.

At the Aitken farm yield varied from 850 lb/acre to almost 7900 lb/acre for some areas heavily covered with Cicer milkvetch. Most of the yields were between 3500 lb/acre and 5600 lbs/acre. Total Digestible Nutrients (TDN) ranged from 54.1% to 59.3% and crude protein levels ranged from a low of 5.8% to 9.8% on Iain's stockpiled pastures.

At the Aasman farm yields varied from 1100 lbs/acre to almost 4500 lbs/acre over the life of the project. The over grazing while the pasture was used during calving time had a large affect on yield. So did the weather. TDN on Bob's pasture 52.5% to 59% and crude protein varied from 5.1% to 13%.

While protein was quite low in the samples some years, at both sites the cattle were likely getting better nutrition than that, due to some level of selective grazing. It often seems like the cattle do a lot better on the stockpiled forages than the nutrient levels on a feed test suggests. I have seen feed test results showing protein levels on stockpiled forages as high as 14%.

Species composition, timing of the last grazing before beginning stockpiling, weathering and soil nutrients available, all factor into nutritional feed value of stockpiled forages. It's amazing how much green grass we see in stockpiled forages when the snow recedes.

We usually see a lot more green in stockpiled grass when the stand is dense and the yield is high. Snow cover also affects weathering and we see a lot better forage quality when snow has covered these pasture the longest. Once snow recedes the old material weathers badly, reducing forage quality and dry matter.

The weathering of old material is offset by increasing new growth mixed with the old material, so we actually see higher protein levels in spring than we saw in fall and winter. Protein levels in May are usually considerably higher than in April.

This provides the grazing animal with a very nice slow transition from dry feed to lush green grass. We don't see the dietary shock issues in livestock when their diets are transitioned slowly vs. a sudden change from dry feed, or silage, to the plenteous lush forages of spring and early summer.

Photo credit: Iain Aitken



Photo credit: Iain Aitken



Hardy Alfalfa Varieties

Project #: 2013A

Cooperator: Doug & Deb Skeels

By: Grey Wooded Forage Association

Funding: Agriculture Opportunities Fund (AOF)

Sponsors: Seaborn Seeds, Secan, Glen Lundgard, Allen Batt & Dave Bartlett



↑
N

R
a
n
g
e

R
o
a
d



Photo credit: Albert Kuipers



Photo credit: Bonita Knopp

New for 2013 is our hardy alfalfa varieties demo at Deb & Doug Skeels' pasture quarter, the same quarter where the AAFC bale grazing nutrient study is situated. We had been in lots of conversations regarding the lack of longevity of alfalfa stands in the west country. In some cases alfalfa wouldn't even establish well enough to keep in production.

In one of our projects committee meetings we got discussing the availability of some of the old alfalfa varieties that had good longevity. "Grimm" was one old cultivar that was mentioned.

We started searching for some seed for Grimm and learned that, while there was someone growing it for seed up in the Peace, he didn't have any seed for sale in 2013. We widened our search to find other hardy varieties of alfalfa. We got Yellowhead from Se-

can, Anik from Dave Bartlett, Rhizoma from Allen Batt, Lundgard's Falcata (a Siberian creeping rooted type) and Lundgard's taprooted cultivar. Kirk Seaborn supplied us with Seaborn Seeds' MV Blend as it is commonly planted in the west country.

All of these, with the exception of Yellowhead and Seaborn's MV Blend, are from very old seed stands, some over 30 years old. We expect that there has been some natural selection via survival of the fittest and lots of cross-breeding with outside cultivars, so they're not likely to be the same as what was originally planted.

We seeded these varieties on July 1, 2013 and included them in the West Country Ag Tour. We're hoping that this might stir up more interest in development of hardy cultivars of alfalfa.

We especially would like to thank our major funders, Alberta Agriculture & Rural Development's Agriculture Opportunities Fund (AOF) and Alberta Agriculture & Rural Development for their support of our association. Without them we would not be what we are today.

We would also like to thank ARECA (the Agricultural Research and Extension Council of Alberta). ARECA unifies all the member applied research associations and forage associations in Alberta. ARECA helps us get funding, channels funding and gives our associations a level of strength that we would not have alone.



AGRICULTURAL RESEARCH AND
EXTENSION COUNCIL OF ALBERTA

**Government
of Alberta** ■



Agriculture Opportunity Fund



FOOTHILLS LIVESTOCK CO-OP
"Farmers Helping Farmers"



Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

Canada

Photo credits: Bonita Knopp & Albert Kuipers

