



2012 Annual Report



Foothills Forage & Grazing Association

2012 Annual Report



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Foothills Forage & Grazing Association encourages a profitable and sustainable forage industry by providing an information network for southern Alberta producers.

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Mission Statement

FFGA provides relevant unbiased sustainable forage and livestock information to producers in partnership with industry, government and the agricultural community.
FFGA is a producer driven volunteer association leading the industry to long term sustainability through research and development.

2012 Board of Directors

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Top (left to Right): Sean LaBrie, Travis Lundberg, Phil Rowland, Blaine Treloar, Rod Vergouwen, Alex Robertson, Wayne Robinson, Morrie Goetjen, Rick Kohut (past director)
Front: Ian Murray, Brian Rodger, Laura Gibney (manager) Joel Salatin (guest speaker) Graeme Finn

Chairman's Report

When I sat down to write this I took some time to reflect on the events and projects that Foothills Forage and Grazing Association has presented in the past year. I think all can agree that this past year has been an all around success!

A few highlights surfaced as I looked back. The first one was when we had the opportunity to bring you Dr. Temple Grandin, along with Brenda Schoepp on a stupidly cold day in January at Olds College. To see the gym floor filled with over 400 people and students stacked up on bleachers on the side was terrific, and I think it is fair to say that it was one of the biggest one day events FFGA has ever put on! Another highlight was last year's AGM when we presented Joel Salatin from Polyface Farm in Virginia. Once again we filled the room at the Highwood, and we were very pleased to find a large portion of the crowd was new to FFGA events. It was great to shift our focus somewhat and draw in others in agriculture with a different viewpoint. In November we were proud to once again organize an agricultural tour, this time to New Zealand with 34 people, and again a huge success!

By pointing out these highlights I by no means want to belittle the demonstrations and tours that we put on through the year, and I want to thank the members of our board who opened up their places for us to see. Sean LaBrie, Graeme Finn, Wayne Robinson, and most recently Travis Lundberg at the a7 Ranch were all happy to share their knowledge and ideas with us. The wealth of knowledge on this board, and within our membership, is tremendous and the openness to share this knowledge with others makes this association one that I am very proud to be a part of!

It is this sharing of knowledge that forms the foundation for the Foothills Forage and Grazing Association, and the key aspect that we plan to continue to grow and evolve. We pushed our comfort zone a lot when we planned the Temple Grandin and Joel Salatin events. The caliber of the speakers and the budget for the events were beyond what we as a board had tried to accomplish before. When the dust settled though, it was clear to see that the days were successful, and the information that we were able to get out to producers was well worth the investment. These presentations have given us the confidence to pursue this level of event, and we are looking for ways to bring you more high profile speakers in the future. One example we are happy to announce is we are bringing back Joel Salatin for a two day local food workshop this fall. Again, this will be slightly out of our normal area of programming, but we feel very excited to diversify our focus.

Our tours have become a strong part of our program, and we are now in the initial stages of planning for our next agricultural tour to Argentina in early 2014. These tours have proven highly popular and provide a great way to see areas of agriculture from different parts of the world and how they might be applied here at home.

A few thank-you's are always in order at this time of year. A big thank you goes out to our sponsors; our industry corporate sponsors and our county sponsors, along with ARECA and the Agriculture Opportunity Fund. Without their financial support and commitment we would not have an association. I want to thank our board of directors for their time and commitment to

this association. It has been pointed out before but it bears repeating, this board is made up entirely of individuals who not only volunteer their time but their knowledge, experience, and at times their own ranches to guide and develop FFGA and to get pertinent information out to our membership. I am very proud to sit among them and honored to be asked by them to chair the association. Two of our directors have come to the end of 2 consecutive 3 year terms and must now step down, at least for a year. I wish to thank Morrie Goetjen and Sean LaBrie for their time and the effort that they have given over the past 6 years to help shape the FFGA into what it is today. I know we have not seen the last of them. I could not finish without deeply thanking our manager, Laura Gibney, for all of her hard work and dedication to FFGA. She is the one that keeps the association moving forward day to day, and without her we would not be where we are today. She is a true asset that we are very fortunate to have with us.

Lastly, thank you to you, our membership, for without you we have no purpose. We value your input and if you have ideas for speakers, tours or projects that you think would be of value please let us know. We will continue to do all that we can to help make your businesses prosper and to promote sustainable forage systems.

Respectfully,

Ian Murray

Chairman, Foothills Forage and Grazing Association.



Manager's Report

The spring of 2012 offered plenty of moisture but as the summer progressed things started to dry out and we went into the fall fairly dry. The fall run had hardly begun when the XL E. coli case had a significant impact on the industry and hurt cattle prices as we headed into the fall. Due to the XL Brooks plant shutdown more producers had tough decisions to make about selling at lower prices or hanging onto their calves into the fall and winter. Winter hit early with heavy snowfall in November which caused many producers to have to be flexible with their winter feeding programs as many had to start feeding hay earlier in the season than they had originally planned. As we move into spring I wish you a good calving season and a growing season with plenty of moisture and grass!

FFGA had another productive year which showed further growth and development of the association. 2012 marked the first year of another three year grant agreement with the Agriculture Opportunity Fund, this along with the continued support of our corporate sponsors and several of the counties and MDs in our region enabled FFGA to continue to grow and expand our programs. We also had an additional fund come in from the Alberta government in the form of a supplemental fund which was greatly appreciated.

In 2012 FFGA's program included nine events with an attendance of over 1,100 producers, our monthly *GrassRoots News & Views* newsletter and three demonstration trials. We brought in some great speakers including cattle behaviour specialist Dr. Temple Grandin, marketing and grazing expert Brenda Schoepp, multi-species grazing and local marketing specialist Joel Salatin and soil expert Peter Eggers as well as hosting a bale grazing tour, a forage variety tour and our international agriculture Tour to New Zealand. Our winter bale grazing project continued in 2012 and we initiated tillage radish and biological control of Canada thistle demo sites as well.

Communication is a large part of FFGA's program with our monthly newsletter *GrassRoots News & Views* reaching over 300 people. The monthly newsletter has been a great way to keep in touch with our members and partners, letting them know what we have going on as well as providing extension material. We have also ventured into the world of social media. FFGA currently has a Facebook page, you can follow us on Twitter and in 2012 we launched a new website, check it out at www.foothillsforage.com! Social media is becoming more and more important in staying connected with the next generation of forage and beef producers and we plan to continue to maintain and develop our communications plan to engage them.

Thank you to an active, innovative and enthusiastic board of directors! FFGA's board is a major factor in our successes and growth as we move forward.

Stay connected for another great year!

Laura Gibney
FFGA Manager



A year in review...

Message from the Executive Director



2012 provided significant challenges for timely moisture and weather events such as hail but a long, dry harvest was welcome news. There were many **personnel changes** with our Associations hiring new Managers at GRO, LARA, MARA and SARDA and staff changes at BRRG, CARA, FS, NPARA, PCBFA and WCFA. This has been a challenge for our Association Boards and ARECA to mentor and support Associations who have been focused on recruiting well qualified personnel and orienting them to the administration and management of an Association. Through this change, we have welcomed very competent Managers and Staff who have stepped in to learn how an Association is managed. Interestingly, we have 70% of Associations managed by women and our thirty-two professional staff includes four PhD, three MSc and twenty five BSc who have a combined agricultural experience of 250 years. Of course, each Association has land and complementary equipment to deliver world class applied research on behalf of Alberta's farmers. Well done!!

For **ARECA**, we reviewed our strategic plan in July with the ARECA Board, Association Managers and ARECA representatives. From this review, a plan of action was developed in November. Three areas were highlighted including securing alternative funding, creating awareness (external communications) and capacity building (training and internal communications). The **ARECA Board** of Directors convened for five Board meetings plus seven conference calls. Discussion has been about policy and governance, advocacy, strategic planning, training, participation in FarmTech and membership fees. Of particular interest is the work being done by our Advocacy Committee under the chair of Dianne Westerlund with CARA. We also respectfully acknowledge the contributions of JP Pettyjohn with SARDA who chaired the Policy Committee and our Team Chairs, Kabal Gill with SARDA, Laura Gibney with FFGA and Torsten Flyng with WCFA (Crops, Forage/Livestock, Environmental). The ARECA Board experienced change with the resignations of Manfred Gross, Richard Fritzler and Vance Yaremko while Herman Wyering was appointed to the Board.



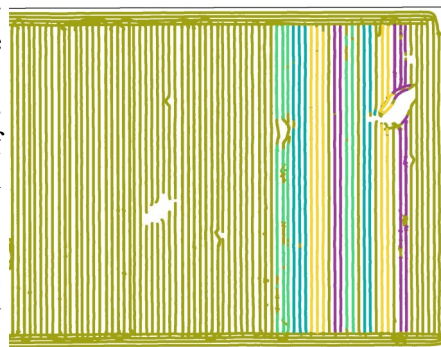
The **ARECA website** continues to about 5000 page views per month while the e-newsletter has about 55% readership. The Twitter (@ARECAResearch) account became functional in August and currently, we have about 140 followers. Please make sure to follow us on **@ARECAResearch** and get the word out.

Data for crop varieties in Alberta is generated through the **Regional Variety Testing** trials by a partnership of ARECA Associations, government and industry. RVT's compare different crop varieties side by side in actual field and weather conditions. They allow farmers to decide which variety will perform best in their soil zone, climate and management style. Regional Variety Trials are under the coordination of Alex Fedko with Alberta Agriculture and Rural Development (ARD) and have continued to be financially supported by industry.

This was the final year of the **Regional Silage Variety** Trial with six Associations reporting on the nutritional value of annual crops for feed (silage, greenfeed and swath grazing). The project has been

funded by the Alberta Beef Producers (ABP) and a request for continued funding from ABP was denied.

The **Precision Tools for On Farm Research** project involved six Associations and fourteen farmers working to learn about field scale research. In 2009, there were thirteen fields, seventeen fields in 2010 and ten fields in 2011 committed to the study. What have we learned? The response of canola to increasing rates of nitrogen fertilizer over several years, while significant, was small. Given current fertilizer costs, this limited response would not justify the additional fertilizer expense. For field peas, the TagTeam treatment out-yielded both the inoculant plus phosphorus and inoculant treatments by eight bus/ac. Variation of crop yield occurred between locations in the field as well as from year to year. It is easier to manage spatial compared to temporal variation provided the scale of the variation is sufficiently large to be accommodated by today's equipment since it can be predictable from year to year. Funding for this project was provided by the Alberta Government, Alberta Pulse Growers Commission, Alberta Canola Producers Commission and Novzymes.



ARECA hosted the first “**PRECISION AG 2.0: The Next Generation**” Conference at the Deerfoot Inn & Casino in Calgary, February 2012. This two-day conference attracted 320 attendees, with approximately 30% producers and 52% industry/consultants. Over 55% of the attendees were from Central/Southern Alberta and 23% from Saskatchewan. The majority of attendees have farm operations in dry land (82%) and cereals/pulses (67%) and over 50% farm/consult/influence on areas of 10,000 acres or more. The educational program consisted of consecutive keynote speakers or industry panels each morning, and ten breakout sessions in the afternoon. The tradeshow was sold out, bringing 37 exhibitors and 23 sponsors. Sponsors were provided with coverage on our website, advertisements, and onsite at the event. ARECA and a committee of Association members organized the event.



Just over 300 participants came from across western Canada to attend the **Western Canadian Grazing Conference** and Tradeshow in Red Deer, Alberta in November. Unique to this conference, we started 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 expressed their appreciation for the value they received. 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. 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. Co-chairs of the Conference, Vicki Heidt and Albert Kuipers did a great job.

ARECA and Associations are valued leaders in applied agriculture research and extension. Our mission is to collaborate with member associations and partners to support applied agricultural research and extension in Alberta. As we go forward in 2013, I wish to thank everyone for their contributions and efforts in 2012.

Ty Faechner
Executive Director,
ARECA

Foothills Forage & Grazing Association Events

Cattle Behavior, Stress & Handling

With Dr. Temple Grandin and Brenda Schoepp

On a bitterly cold January day FFGA hosted renowned livestock-welfare specialist Dr. Temple Grandin and Brenda Schoepp at Olds College in conjunction with Mountain View County. Despite the terribly cold weather over 400 people came out to take in the exciting day where Dr. Grandin shared her knowledge and expertise on how to keep cattle calm and reducing stress during handling as well as handling facility designs that promote calm and easy movements of groups of cattle. Dr. Temple Grandin obtained her B.A. at Franklin Pierce College in 1970. In 1974 she was employed as Livestock Editor for the Arizona Farmer Ranchman and also worked for Corral Industries on equipment design. In 1975 she earned her M.S. in Animal Science at Arizona State University for her work on the behaviour of cattle in different squeeze chutes. Dr. Grandin was awarded her Ph.D in Animal Science from the University of Illinois in 1989 and is currently a Professor at Colorado State University. She has done extensive work on the design of handling facilities. Half the cattle in the U.S. and Canada are handled in equipment she has designed at processing plants. Other professional activities include developing animal welfare guidelines for the meat industry and consulting with McDonalds, Wendy's International, Burger King, and other companies on animal welfare. Temple attributes some her unique understanding of animal behaviour to her autism and has been recognized as one of the most influential women in livestock agriculture in the world.

Brenda Schoepp who has lived and loved agriculture for over 30 years shared an energetic and motivating market update with us as well as discussing market trends, the market outlook and what it means to beef producers.

The atmosphere was one of awe and enlightenment when Temple took the stage as the students, livestock producers, corporate representatives and all else who attended listened to the famous professor share her years of research and knowledge in such away that could be used by each and everyone of us at home on the farm. Thanks you to the ten companies that comprised the tradeshow and the four lunch sponsors who helped to make the day such a success!



Ranching Opportunities 2012

Ranching Opportunities 2012 with the theme of Farm to Finish was a hit with 180 students and livestock producers attending. The day had a great line up of presentations, topics and speakers including a Market Outlook for Farmers and Ranchers by Jerry Klassen, a Marketing Panel with Sobeys, Sunterra Markets, Jerry Klassen and a Farmers Market Representative, Yearling Management; Contracts & Shrink by Leon Specht and Grass and Business management by Steve Kenyon. Attendees were able to attend two of the three breakout sessions; a Low Stress Roping and Doctoring demo in the arena with Keith Stewart, a Stock Dogs for Cattle Handling demonstration with Judy Finseth and a discussion on Flerds; running cattle and sheep together, with Bill Lee. This annual beef and forage conference is held every February at Olds College put on in partnership with Olds College, Red Deer County, Mountain View County, Kneehill County, Wheatland County, Rocky View County, Alberta Agriculture & Rural Development and FFGA.



Annual General Meeting Featuring Joel Salatin

FFGA's Annual General Meeting was held on March 20, 2012 featuring guest speaker Joel Salatin. At the AGM the FFGA board said goodbye to Rick Kohut who served a 3 year term on the board and was instrumental in getting FFGA to think about our website, multi-media and connecting with the next generation of producers. Candice Manshreck also stepped off the board after one year on the board sharing pasture and weed management strategies with us from her background with Dow Agro Sciences. Both Wayne Robinson and Ian Murray were re-elected to the board of directors after serving their first 3 year term. Graeme Finn was elected to the board of directors. Graeme had been away from the FFGA board for a year in accordance with the FFGA bylaws after serving 2, 3 year terms during which he was FFGA chair from 2008 - 2010. Following the AGM the board had a quick meeting to elect the executive. Ian Murray was voted in as FFGA Chairman, Alex Robertson was voted in as Vice-Chairman and Sean LaBrie was re-elected as treasurer.

Joel Salatin, owner and operator of Polyface Farms in Swoope Virginia is an expert in multi-species grazing and local marketing. His riveting presentation *Ballet In The Pasture* provided a virtual tour through pic-

tures of the grass-based multi-species livestock farm. Joel explained how Polyface Farm rotates cattle, hogs, turkeys and chickens over their pasture lands and how this choreographed plant-animal symbiosis heals the landscape through grazing, rest and nutrient management.

Joel's *Relationship Marketing* presentation focused on how for nearly half a century, Polyface Farm's patron base has morphed and expanded with the culture and new food awareness. As a 10-year-old with a backyard flock of laying hens, Salatin pedaled eggs around his rural neighborhood in the basket of his bicycle. Mixing humorous stories with passionate "aha's", this presentation had the audience thinking outside the box and wondering how they might apply some of these tidbits to their own businesses. Currently, Polyface supplies some 400 families from an on-farm store, 1,600 families in Metropolitan Buying Clubs, 30 restaurants, and 10 retail venues. Each has assets and liabilities, and Salatin freely discusses all the nuances. Heavy on hilarious stories, this talk empowers otherwise reluctant marketers to go for it.

Joel's passionate *Can We Feed the World?* presentation articulates a credible "feed the world" argument for localized, solar-driven, carbon-fertilized systems really gave people something to think about.

It was a dynamic and exciting day to celebrate FFGA's 40th year as an association as well as for the 110 attendants to gather motivating and strategic ideas from Joel Salatin.



Summer Pasture Walk: Bale grazing and watering system tour

In July FFGA toured Sean & Holly LaBrie's winter bale grazing site. Sean gave us a tour of how they had been managing and rotating the bale grazing throughout the winter months. Alberta Agriculture's Grant Lastiwka lead us through a pasture walk of the site. Explaining how the recycling of nutrients over time affects the plant species and cover above the ground. We also took a look at the LaBrie's Sundog Solar all season watering system and how they control grazing along the Dog Pound Rive that runs through their land. Jim Bauer, a grazier from Acme and PowerFlex representative, show cased some of PowerFelx's products and how they can be utilized in various grazing systems.

For more details on the project see page 16.



FFGA Summer Forge Variety Tour

On a cool wet day in August FFGA coordinated a forage variety tour with corporate sponsor AgrowPlow in the Airdrie area. We visited several plots throughout the day, one of which was canola seeded into sod which had been sprayed out with glyphosate in 2011, giving a later yield report of 45Bu/acre despite an early season hail. The field was infected with aster yellows, which impacted the yield somewhat, but overall it was not bad for seeding into sod. Next we toured some Viterra forage variety plots; its always informative to see what is coming along. Along the way we looked at a very familiar bale grazing field on the east side of Hwy #2, belonging to Scott Copley, where he has been grazing this way for years. The results were very similar to what we saw at the LaBrie's earlier in the summer. We were then off to a field where Cicer Milk Vetch was direct-seeded into grass, in strips, to add nitrogen fixing species into a straight grass pasture. It had taken off and was spreading by seed to the rest of the field.



Tillage Radish Demo Site & Soil Health Workshop

In early October we headed out to Wayne and Peggy Robinson's to look at a cocktail crop they were using as both a feed source and a tool to improve soil quality on a field that had previously been in canola. We began the day in the Mossleigh Hall where soil expert Peter Eggers gave us an overview of soil health, how to understand soil tests and various soil amendments and how to balance the soil for health and productivity with what's available in your area.

After lunch we headed out to the site for a tour. Wayne and Peggy seeded 80 acres to a salad bar of turnip, millet, sunflowers, soybeans, radish, cow-peas, and oats on June 20th 2012. Part of the salad bar was grazed in early August while the majority was swathed for grazing in the winter. Soil samples were collected in the spring, fall and will be again next spring. A sample of the swath was collected in September for a feed analysis. The 30 people that attended they day enjoyed the combination of learning in a classroom setting as well as being able to get out and seeing what was going on in the field at a hands-on level.

For more details on the project see page 18.



Agriculture Tour to New Zealand

FFGA's recent agriculture tour to New Zealand was an awesome experience and holiday!

On our trip we toured the north and south islands. The three biggest industries in New Zealand are agriculture, tourism and timber. There are 4 million people, 12 million cows and 35 million sheep. The average sheep farm runs 3,700 sheep and clips 14 tonnes of wool per year. It is a country that relies on export markets and supplies 30 percent of the world's traded dairy produce. Land is being cleared for more dairy production, an extra 30,000 head. We visited a couple dairy farms; one was state of the art with a 50 cow circular rotating milking parlor. It took 4 minutes for one cow to complete the circle so they made milking 600 cows look easy. They milk twice a day and their cows do a lot of walking back to pasture. This dairy farm takes 2 months off in June and July, which is common practice, to dry up their cows before calving.

There is very little feed put up for the winter months as they use stockpiled grass. We did see round hay bales wrapped in plastic and some small piles of haylage.

Wind is a concern so they grow trees for natural wind breaks. The tops and sides are pruned to make a dense stand.

There was very little infrastructure on the farms we visited. Most of the farmers use custom operators for seeding, haying, and livestock hauling. Fuel prices were about \$2.50 per liter for gas and \$1.54 for diesel.

We visited a purebred Angus operation that is involved in one of the countries branded beef programs, Angus Pure. We also saw a no-till Cross Slot drill seeding swedes into their pasture for fall grazing.

At the Massey University we toured the research plots involving plantain, chicory, clover and grasses. The chicory has deep tap roots that bring up moisture for the other plants. They were studying grazing rotations and measuring plant regrowth.

We visited a grasser operation that finishes lambs and yearlings. In 10 years he has gone from finishing 8000 stock units to finishing 24000 stock units on the same land base. This producer thinks outside the box. We all walked through his new handling system that was designed using Temple Grandin's expertise.



We saw lots and lots of sheep. It was not uncommon to see areas in town with sheep keeping the grass down.

Most farms run cattle and sheep together, to maintain a more uniform grazing. The lambs are born on grass and have a rapid growth rate. The lambing average was about 135%. There are no predators so they don't have any losses to coyotes. Lamb meat is always on the menu, it is even sold at McDonalds and Subway.

We toured a knitting mill where possum fur is blended with merino wool to make warm and soft knit wear products. The ladies boosted the local economy after their tour!

An agriculture trip would not be complete without a visit to the auction mart. The Feilding livestock auction is located in the downtown area; it occupies the same site where the first sale was conducted in 1880. There are two sales weekly; one day is a “store” livestock sale where the animals go back to a farm to be grown or finished on grass. The other sale day is for “prime” animals which are ready for slaughter. Cattle lots are sold through an auction ring and every farm has a TB status that is listed as their cattle are being sold.

The sheep are sold outside and the auctioneers jump from pen to pen. There are no weights listed only the sellers name and the number of head. It only took a couple of hours to sell 3,000 head of “store” sheep. All animals are hauled in and out the same day, there are no overnight stands. Producers are expected to haul their animals in empty. Pens are washed down after the sale.

New Zealand has the climate to produce grass fed livestock making them competitive in the international market place. This is a very condensed version of our 14 day tour. The people and places we visited were very friendly and hospitable. We traveled with a terrific group of people, learned lots and had a great time. We would like to wish everyone a Merry Christmas and look forward to seeing members at future FFGA events.

Brian & Teresa Rodger



2012 Western Canadian Grazing Conference & Tradeshow

Grassroots of Grazing

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., 2012

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 grazer 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.

Albert Kuipers
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FFGA Strategic Plan Review

In 2010 the FFGA Board of Directors spent a fair bit of time developing a 3-5 year strategic plan which has provided guidance and purpose as we have moved forward over the past couple of years. In November 2012 the board got together with a strategic plan leader to review and re-evaluate this plan. It was rewarding to see how many things had been accomplished while providing an opportunity to re-evaluate what was most important to the association and prioritise those things. Thank you to the board for taking the time to do this as it helps gives the association direction as we move into 2013 and beyond.



Cow CalfEconomics 2012

The third series of Cow-CalfEconomics workshops focused on Transitions, Tools and Technologies in November and December 2012. There were five of these workshops held across the province with Alberta Agriculture taking the lead on them and the ARECA associations, Alberta Beef Producers, AFSC and FCC collaborating to offer these sessions to producers. The workshops focused on Transitioning the Business: A Next Generation Perspective, Strategic Risk Management for Cattle Producers, the Cattle Price Insurance Program: Managing your Risk, Economic Value of Genomics: Current and Future, BIXS/Traceback: Tools to Improve Herd Profitability, and Profitable Strategies for Full Time Ranching (Producer Panel). The Nanton workshop drew 50 producers out to network and glean information on these topics.

Christmas Party



FFGA's Christmas party was at the Highwood Auction Mart and provided a chance to network, and relax. Manager Laura Gibney gave a presentation on our Ag Tour to New Zealand which was an opportunity for those on the trip to share what they learned and some of their travel experiences while those who weren't able to attend had the chance to see what it was all about and learn about the tour and agriculture in New Zealand. Around 60 people came out enjoy the fellowship and networking of the evening which was topped off with a live band!

Foothills Forage & Grazing Association Demonstration Projects

Bale Grazing Project 2011 - 2015

Producer Co-operators: Sean & Holly LaBrie

Background:

In 2011 FFGA and producer co-operators Sean and Holly LaBrie initiated a bale grazing demonstration near Didsbury Alberta. Sean and Holly purchased this land about 10 years ago and the pasture had been grazed heavily and it was not as productive as they felt it could be. In an effort to increase the pasture health and productivity in a low-cost practical way they decided to bring in hay, green feed and straw bales and feed them on the pasture during the winter months.

Objective:

To look at the effects of winter bale grazing on plant community, productivity and soil quality of the pasture over several years.

Methods:

Sean feeds bales of hay, green feed and straw in the pasture throughout the winter months while marking their location in the pasture by GPS. There are three treatments in this trial, the control which has had no bales fed on it, the high quality feed areas where hay is fed and the low quality feed areas where the straw is fed.

In the summer FFGA takes forage clipping of the three treatments to measure the yield as well as doing feed tests on the three groups for analysis on forage nutrients. At this time the plant community in each area is assessed to watch for changes in the plant species over time by bringing in the bales. Soil samples are collected annually to look at the soil nutrient content as well as the microbes and biological components of the soil.

Results:

Table 1. Pasture Forage 2012 (Dry Matter Basis)

	Control	Hay 2011	Hay 2012	Straw 2011	Straw 2012
Average Yield (lbs/ac)	1,246	2,672	2,280	2,565	1,353
CP (%)	12.5	15.6	16.5	13.3	19.6
Ca (%)	0.8	0.82	0.85	0.69	1.03
P (%)	0.29	0.33	0.36	0.31	0.39
K (%)	2.43	3.1	3.18	3.02	2.87
Mg (%)	0.29	0.28	0.27	0.26	0.31
ADF (%)	31.5	32	30.9	33.5	31.7
NDF (%)	51	51.3	50.5	55.4	49.4
TDN (%)	64	63.6	64.5	62.2	63.2
Relative Feed Value	117.4	115.9	119.4	105.5	120.9

*The year refers to the winter the bale was fed, the 2011 bales had 2 growing seasons (2011 - 2012) since the bale was fed there, whereas the 2012 bales were just placed there over the past winter (2011 - 2012)

Observations:

In 2012 96 cows bale grazed through the late winter and spring in this pasture and were removed after calving in mid-June, the cow-calf pairs then grazed it for 3 days in mid-July. The clippings were collected in late August and represent regrowth after the two previous grazings on that pasture. This accounts for the lower than expected yields. Table 1 shows that all of the areas that have been bale grazing over the last 2 years have an increased yield as compared to the control which has not had any winter bale grazing done on it. It is also noted that the sites that were bale grazed 2 years ago had higher yields than those grazed over the past winter. This is attributed to the time it takes for the nutrients to break down and become available to the plants in the soil.

When the samples were collected it was found that the straw sites had more litter and matting the first year after the bale was fed, in some areas it was heavy and thick enough that plants were not breaking through in the first growing season after the bales were grazed. However worms and beetles were found in that area which leads us to believe that there is an increase in nutrients in the area but that they are being released more slowly into the soil. The cattle cleaned the hay up better than the straw so there was less litter left from the bales. Less litter and higher quality litter (hay vs straw) causes the waste to break down more quickly allowing the nutrients to become available to the plants sooner. It will be interesting to see how these sites look in another year, if many of the nutrients provided from the straw sites are still being slowly released into the soil. Timing of when the bales are fed also affects how quickly the waste will break down, bales that are placed on top of ice or snow pack insulate the ground which takes longer to thaw and for biological processes to begin. In growing seasons with more moisture the litter breakdown happens more quickly than in drier years.



Soil sampling

During the summer most cows have a calf at their side so are lactating as well as re-breeding for the following year. During this time a mature lactating cow requires about 11% crude protein, 62-65% TDN, 0.45% Ca and 0.3% P in their daily dry matter intake. Each of these treatments are providing the level of nutrients than are required by the cattle at this stage in production. Forage clippings In Table 1 were taken without a consideration of animal selectivity. If adequate residual forage is left, the quality of forage animals select would be upgraded from the sample quality stated. .

Bringing in outside feed increases the potential of introducing undesirable plants species to the pasture. It was noted that the straw sites contained the most litter the first year after feeding. All of the sites had meadow brome grass as the main species present however dandelions and quack grass did show an increase in the initial years after the bales had been fed. It is expected that as the grasses and alfalfa have more time to re-establish themselves we will see the balance return to a more desirable mix at the bale locations. There was a visible area of darker green, lush growth in a perimeter around where the bales had been fed. Manure, urine and smaller amounts of litter would be been distributed further out around the bales causing an accumulation of available nutrients for plant uptake.



Sean and Holly are working towards pasture improvement in a low-



Control Area

cost management system. They are finding that by bringing in feed (hay, green feed and straw) and feeding it on their pasture land they are capturing the nutrients from this feed stuff through waste that is trampled to the ground as well as recycling the majority of the nutrients back to the soil through manure and urine deposits. Bale grazing can be a viable option for maintaining and improving the quality of pasture land. However it does need to be monitored through soil testing because nutrient build up can become a problem if bale grazing is done heavily in a concentrated area or on a slope where nutrients can be moved with spring runoff.

Tillage Radish Project 2012 - 2013

Producer Co-operators: Wayne & Peggy Robinson

Background

The tillage radish is a brassica with a singular tap root that has been known to penetrate compacted soils, accessing nutrients below the compaction line as well as reducing compaction in soils. The radish leaf has high feed values and can be as high as 18% in crude protein. This high level of nutrients makes the radish tops a good feed source for cattle when fed in a grass or oat mix. As the radish root decays it releases nutrients into the soil as well as leaving voids that increases water and air circulation which promotes microbial activity.

Objective

To look at the tillage radish as a cost effective source of feed for cattle and look at its effect on soil nutrients and compaction.

Methods

Wayne and Peggy Robinson seeded 80 acres to a salad bar of turnip, millet, sunflowers, soybeans, radish, cow-peas, and oats on June 20th 2012. The 80 acres had been a canola crop the previous year. Part of the salad bar was grazed in early August while the majority was swathed for winter grazing. Soil samples were collected in the spring, and fall of 2012 and another sample will be taken in the spring of 2013. A sample of the swath was collected in mid-September 2012 for feed analysis.

Results

Table 1. Salad Bar Swath Feed Analysis

Dry Matter Basis	Salad Bar Swath
CP (%)	3.5
Calcium (%)	0.45
Phos (%)	0.22
Potassium (%)	2.23
Mg (%)	0.15
ADF (%)	36.8
NDF (%)	57
TDN (%)	59.1
Relative Feed Value	98.2



The soil samples haven't been included as they don't tell us much at this point but will be more informative after the spring 2013 samples are collected.

Observations

Wayne and Peggy put 80 bred cows out on the swaths on December 1st and aim to be done in that field around March 15th for a total of 105 grazing days. To supplement the swath grazing Wayne and Peggy started putting out 1 mixed grass-legume round bale per day in mid-December. This reduced mineral and salt intake to almost nothing and has helped to



extend the swath grazing. The cows selected the turnip leaves and any exposed bulbs that they could get at. However they wouldn't graze the sunflowers but they have knocked them down which provides valuable litter for ground cover.

Many of the radish roots were 8 - 12 inches in length. Some seemed to hit the hard pan then turn and grow horizontally along it, while others were able to penetrate. In mid-September we took soil samples and took a look at the growth, it was surprising when we were back on October 3rd for a field tour how much larger the radish roots were. The turnips were not particularly large but there was a significant difference in the turnip root size in the areas that had been winter bale grazed a few years previous. This is likely a result of higher soil nutrients in these areas. It will be interesting to see what 2013 spring soil samples show.



Wayne reflected that in the future he would include more turnip and radishes in the mix. He and Peggy are considering an oats and spring triticale mix top dressed with tillage radish and turnip for the coming year.



Biological Control of Canada Thistle 2012 - 2015

Producer Co-operators:
Rod & Beth Vergoweun
Phil & Pam Rowland

Also known as *Hadroplontus litura*, the stem mining weevil was introduced from Europe to Canada in 1965 and to the USA in 1970 to feed on Canada thistle. It is a biological control agent that attacks Canada thistle stems and rosettes. The weevil restricts its feeding to this weed and a few close relatives. It attacks rosettes of Canada Thistle in early spring, before the thistle bolts.

The weevil has a single generation each year. The adults spend the winter in the soil (generally in the upper 5cm). They emerge in early spring as the first thistle rosettes begin to appear. The adults are present for several weeks, mating and feeding on young foliage of the Canada thistle; unfortunately, adult feeding appears to have little adverse effect on weed vitality. Even at high densities, the adults are difficult to find in the field, as they fall off the host plant when disturbed and remain motionless on the ground where they are well camouflaged. They also



spend much of their time on or near the ground. When ready to lay her eggs, a female weevil chews a hole (1/10" in diameter) in a thistle leaf on a young rosette, generally in the main vein. She turns around and lays one to five eggs in the hole. When the larvae hatch a week or so later, they tunnel through the leaf in the lower stem and root collar; when several larvae are present, the main vein turns black from the tunnelling and, several days later the leaf dies. In the stem and root collar, the larvae mine the pith; they avoid the vascular bundles, however, and hence generally do not cause the stem to die during the growing season. In early summer when they have fed fully, the larvae emerge from the thistle shoot through small exit holes that they chew near or just below ground level. They work their way into the soil, and enter the pupal stage in which they transform into adults. After two to three weeks, adults emerge from the soil in late June and July and feed on the thistle foliage until heavy frost occurs in fall. They may feed intensely at high densities, with attacked leaves bearing many small feeding punctures.



The weevils tend to aggregate in dense patches of Canada thistle and upon release at new locations they spread slowly and at the same time, level of infestation at the sites of release slowly increase. Larval mining does not prevent vigorous growth of attacked thistle stems under favourable conditions for the weed. Female weevils tend to lay their eggs in early developing stems; and these stems generally grow taller than those developing later in the season. Consequently, under otherwise favourable conditions for thistle growth,

stems mined by weevils are generally taller on average at the end of the growing season. When attacked by only one or two weevil larvae, vigorous thistle stems are often able to kill these larvae by surrounding them with gall tissue. But when the weevil attacks a Canada thistle growing under less favourable conditions, the weevil can adversely affect weed vigor during the growing season. Initial field studies in Canada suggested that weevil feeding may also aid in the spread of the thistle rust, but this was not confirmed in subsequent research. However, weevil feeding may allow a variety of other micro-organisms to enter the thistle stem, with adverse consequences for the thistle: field studies in Montana indicated that underground parts of stems are much more subject to winter kill if the aboveground stem is attacked by weevils during the growing season. It is presently unclear how effective the weevil will be in causing decline in thistle densities. Fluctuation in thistle density could not be consistently associated with varying levels of weevil attack in field studies performed in Canada. But ranchers in Montana have reported sharp declines in Canada thistle in some instances, apparently associated with release and subsequent population build-up of weevils. Research to date suggests that population reduction of the thistle is unlikely until the weevil reaches high numbers and infest a very high percentage (90-95%).

FFGA is participating in a province wide project, coordinated by the Environmental Team of ARECA. Objectives of the project are:

- a) Determine if the weevils work, and if native populations can be established in Alberta.
- b) Determine if weevils are a cost effective method of Canada thistle control.
- c) Determine if additional weevils need to be added to a site in consecutive years following initial release.



The success of *Hadropontus litura* on suppression of Canada thistle will demonstrate:

- a) Use of biological control as an alternate means of pest control
- b) A possible reduction in chemical use
- c) Weed control in sensitive areas where other traditional methods are not able to be utilized.

Two sites were selected, one near Strathmore the other near High River. Both had a minimum of 5-10 plants/m² and vegetation around the sites was mowed. On September 7 2012, five dishes of weevils, each containing 105 weevils were released at each site. At both locations there is a second site that is the control, with no application of weevils. The sites will be monitored for the presence of weevils and plant counts of thistle populations will begin next summer. We are hope they are wintering well!

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