

FORAGE FIRST

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Spring & Innovation All Around Us



Photo caption: Guess what is keeping Talon Johnson & Marty Gauthier busy these days?

The United Nations have declared 2015 the International Year of the Soil. How exciting is that? So after you admire these healthy calves in Talon and Marty's expanding herd, please also notice where each cow plop is, the bedding residues and think about the healthy life to come underneath these signs of spring. To celebrate such an important year, we will be visiting friendly forage folks throughout the year to recognize what you innovators are doing to improve your soil. This spring issue features the Readings & Browsings page again that was requested by members. Of course there are the usual updates on our busy winter months of projects, events and communication activities. We also are initiating a new resiliency project that we are excited to tell you about.

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Visit our website at www.peaceforage.bc.ca

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Inserts: (for paid up members)
Forage Fact # 86, 87, 88, 89
Kiskatinaw Memorial Trail Ride

Inserts: (for renewing members)
Membership Renewal Form 2015

Meet Our New Member

by Tess Davidson



Tess Davidson & her working dogs, from left to right, Dell, Ila & Little Dawn.

Tell us about your family & farm?

My husband, Howard, and I started a farm 40 years ago near Cecil Lake. We own 320 ac and lease 320 ac. We currently have a small herd of 25 exotic cross cattle, 3 female border collies. We expanded from 5 ewes to a flock of 100 sheep now, including ewes, rams and lambs. Our daughter Kyreen is a dental assistant in FSJ but comes to help out whenever she can.

Tell us about your dogs?

I have learned so much from my experiences with our working dogs. On my first clinic from Dennis Gellings in 2003, I had so much to learn. The first thing was that my dogs didn't respect me enough. Then we progressed through learning to bring the sheep to me or move them away. It all sounded so simple at the time.

Over the last 12 years, my dogs have opened a lot of doors and even brought me 2 jobs. My trialing story is a big part of this. I went through Novice with Dell (starting from 20 months old) all the way through Pro Novice. She was the 2010 BC Stockdog Assoc Top Pro Novice sheep dog. I bought her half sister, Dawn the same year starting in Pro Novice and continued with both dogs up to Open competitions, also taking in the Calgary Stampede and Farm Fair Northlands. We entered all the field trials in Alberta and BC, which are distance competitions working sheep through a set course. My third dog, Ila (eye-la), is a Pro Novice dog, who is also a wonderful chore dog.

I have to mention Carol Nelson of Pink Mountain, my trialing coach. She helped me through many training problems and we traveled together with her Mom, Pam a lot of miles across AB and BC. Also Pete and Rose Marie McAleney hosted many of the stockdog events and added to the fun of this great little group.

We took 2 summers off trialing to work cut blocks. In 2006 we herded 1600 goats to control native vegetation so that seedling trees could establish. This was in 3 areas: Moberley Lake, Bear Lake and the Mackenzie area. The vegetation was so tall, that with the snow press, the tree seedlings had flattened and bent into horizontal shapes. In the second year on the cut blocks in the summer of 2007, I herded 1300 sheep and learned they did a much better job of grazing all the 15 native species of shrubs and grasses than the goats did. They were a flock that had learned over 20 years to eat all the forage put in front of them (the goats were new at it). Recently we have been contacted to haze deer in the Waterton Lake Park.

All my dogs herd the cows as well, and I change pastures on foot now, just go open the gate. It used to take Howard, Kyreen and I (on our horses) together to do the same job in the past! So much to tell! Love my dogs... they lead me into so many adventures.

Why did you join the Forage Association?

I was reading many articles from other areas about removing fuel to prevent wildfires and using dogs and sheep or goats to control invasive weeds. After conversations with Kari Bondaroff and checking out the website of the Peace River Forage Association, I decided to check out this ambitious group and join.

Teach Your Livestock To Eat Nasty Weeds

by Kari Bondaroff

Innovative, creative & spectacular, is how livestock producers are going to be labelled following a "Teach your livestock to Eat Weeds Course" hosted by the Peace River Regional District. The only thing missing is the livestock producers and the weeds. Lucky for us Northerners, the weeds have not yet begun to grow; however, we all know that they are coming. In order to best prepare our livestock for this year's grazing season, it would be wonderful to be ready to release the livestock onto the weeds as soon as possible this year.

In order to achieve this, there will be two separate partial training days for livestock producers in May and June to educate, and support the new desired behaviours of the livestock, and yes, the producer. If you are interested in teaching your livestock to eat weeds such as Canada thistle, spotted knapweed, or toadflax, this is the course for you.

Dates will be set following acknowledgment of interest. The cost will be minimal and will include all feed necessary for training your livestock, as well as either a book or a CD from Kathy Voth, coaching by Kathy Voth, and assistance from the PRRD invasive plant staff and other support networks within the Peace River Region. Do not miss the opportunity to get involved. Minimal effort, spectacular results!



Please contact Kari Bondaroff at 250 784 3227 or 250 219 4807, to discuss this opportunity **by May 15, 2015.**

If you would like to get a peak at what the training will include, please check out website below for more details.

Website: www.livestockforlandscapes.com/cowmanagers.htm

Or email: kari.bondaroff@prrd.bc.ca

Excerpts From The Crooked Fence

by Arlette Seib

Sandra's Note: Arlette Seib headed to Montana this March to take care of the Burradoo Ranch for her friends located near the Beartooth Mountains. I got quite a chuckle reading her newsletter Crooked Fences issues of Ranching With Sheep.

Ruminations - Caught In The Act

When I arrived I was introduced to several people. Bill and Janice left, trusting me to fly solo at the ranch. I've been invited to suppers, gone to community plays and auction fundraisers and helped with cattle work (on horseback no less). People have come over to work dogs with me and neighbors stop by to be sure all is well. There is a level of care and community here that I don't sense at home. I will miss it dearly.

I had a pretty good laugh today. I put two and a half kelpies (BJ, Mic and Muster) outside of the house this afternoon and returned myself to the indoors. A few minutes later a neighbour stopped by to see how things were going and upon coming into the house made a comment about dogs penning sheep. Somewhat confused I popped outdoors. The three dogs had retrieved sheep, which I didn't know were grazing so nearby, and nearly

penned them in the attached garage, which I guess is as close to me as they could get them. I figure it was Coyote Mic, the half Kelpie, who instigated this little venture.

I put sheep back to the field, collected dogs and returned to the house feeling rather sheepish and trying to come up with a way to assure the neighbour that I had everything under control. But then I decided it does no good to tell lies.

That's kinda how things are going here. Regular chores, a few mishaps, and some good laughs. With shearing days, supper invites and going to fundraiser events Bill and Janice lined up previously, I'm beginning to feel more and more like a local.

The last two days have been remarkably windy and when Mother N calmed her winds this evening it was downright warm and blissful. I sat on the deck of this beautiful Montana log home I'm staying in, looking at mountains, watching the sun go down and thinking of how out of control life needs to be.

See Arlette's Website:

www.ranching-with-sheep.com/ranching-newsletter.html

Readings & Browsings

By Forage Members

As we collected feedback this winter from you, the members, about how we could improve, it was suggested that we start this column. Readers were missing the way Ernie Nimitz & Deryle Griffith would comment on what they had been reading. They wanted us to find out & share good reads that might be of interest to other forage members. The half page in the last issue has grown to a full page here. Please contact us at any time to pass on your favorite reads, or any other feedback you care to share with us.

Deryle Griffith: A couple of books I've read this winter that I found interesting, were both written by Jeff Lowenfels. They're called **Teaming with Microbes** and **Teaming with Nutrients**. They have a good balance of technical and real life. A few readings of these books may change your view from problem/treatment to linear/cycle, and the importance of life to support the cycles of nature.

Julie Robinson: How about **Principles in Field Crop Production 1st Ed 1949 2nd Ed 1967** by **John H Martin & Warren H Leonard**? On page 542 it talks about the value of brome grass in retarding soil erosion because of its heavy root mass... Here we are 60 years later, still trying to figure that out.

Also **Peace Makers of the North Peace** with stories of the Clarke brothers (Joe, Alf & Bob) breaking land in the Montney area in 1922, and forage first being grown for seed in this area in 1929 and the Clarke brothers bringing in the first cattle in 1919. That is almost 100 years ago!

Jodi Kendrew: The book I'm currently reading is titled **Man, Cattle and Veld** by **Johann Zietsman**. Zietsman was a pioneer of ultra high density grazing in his homeland of Zimbabwe, and is referenced in Alan Savory's book **Holistic Management**. Walt Davis (author of **How Not To Go Broke Ranching** and **The Green Revolution Delusion: A False Promise**) gave the book 5 stars and reviewed it on Amazon as follows: "Managing For What Is Important. Johann has put in print concepts that will be the difference between success and failure for ranching operations. I strongly recommend the book to anyone serious about building a ranch that is financially and ecologically sound. Especially valuable are his thoughts on logical animal breeding – substance rather than fluff."

Grant Lastiwka: **6 steps to low-input cow herd feeding** by **Burke Teichert**. While a few beef producers are successful with a "no input" approach to winter feeding, Burke says he prefers a "low input" approach, in which producers are willing to take the rough edges off the natural environment with six steps. The sentence that caught me was: "Then there are the deep, crusted snows and droughts that come occasionally but perhaps not every year. We must have a contingency plan for such events, and this will usually entail some feeding. However, don't mentally and emotionally exaggerate these tough times, and feed much longer and more than is necessary. Watch the cows' body condition and let it lead you to good decisions."

<http://beefmagazine.com/blog/6-steps-low-input-cow-herd-feeding>

Llewellyn Manske from Dickinson, North Dakota is another inspiring writer and is truly a brilliant person (in my opinion) range scientist. I arranged to spend a day with him last summer at his work. He is over 70 years old and truly passionate about range ecosystems. It was one of the best days of my career in grazing/plants/soil/management/economics. He has continuously for over 30 years ran replicated grazing experiments on range comparing continuous versus a twice over grazing philosophy on a western wheatgrass, green needle grass, plains reed grass, blue grama stand that gets about 12 to 14 inches of total precipitation. I asked him how the University of North Dakota let him carry on experiments that long. He said it is because they think he will retire each year so let him continue a bit longer.

<http://www.grazinghandbook.com/>

Sandra Burton: Finally, my own copy of **Judith D Schwartz'** book **Cows Save The Planet**, and other improbable ways of restoring soil to heal the earth, unmaking the deserts, rethinking climate change, bringing back biodiversity, and restoring nutrients to our food. It wasn't that long title that caught my attention; it was the dynamic presentation by the author at the Western Canadian Grazing Conference. I love the way she urges us to re-examine climate change adaptation issues and move our focus from the "blue water" (rainfall, ppt, lakes and rivers) to the "green water" or the movement of water through soils and plants. On page 88 we are urged to give the plants the collective power to manage climate for us.



Whole Farm Nutrient Balance Tool

By Ruth McDougall

Project Overview of WFNB

Spearheaded by the B.C. Ministry of Agriculture, a B.C. 'Whole Farm Nutrient Balance' Tool (WFNB) has

been developed over the past year and, as part of fine-tuning, it was tested on several Peace region cow-calf operations during March. The tool is designed to provide producers with a 'snap-shot' look at their operation's nutrient balance – essentially, whether they are accumulating nutrients on their property or 'mining' nutrients – exporting more than are brought on as feed and fertilizer. It has been designed to work for all major agricultural commodities in B.C. – dairy, extensive and intensive livestock, poultry and fruit and vegetables.

How does the WFNB tool work? The tool calculates the nutrients (nitrogen, phosphorus or *phosphate*, & potassium or *potash*) imported onto your farm or ranch in feed, fertilizer, bedding and purchased animals as well as nitrogen fixed by legume-containing stands, and nutrients exported from your farm in livestock and feed sold. It does not consider nutrient cycling on-farm, only nutrients brought onto or removed from the farm.

This is because all the nutrients taken up by your crops and ultimately consumed by your livestock, and then exported in those livestock when they are sold, came onto your property in feed and fertilizer (aside from nitrogen fixed by your legume crops, and the small amount of phosphorus and potassium released from mineral soil). Feed nutrients find their way to the soil through manure (approx. 90% of the nutrients in feed are excreted by livestock) and from residual feed in winter feeding areas.

If you import more nutrients over time than you export in livestock or feed (*nutrient surplus*), your soil nutrient levels will gradually increase, leading to potential losses to the environment. If you export more than you bring on (*nutrient deficit*), your soil nutrient levels will decline over time leading to reduced crop yields.

What did we learn from testing the tool in the Peace? We ran the WFNB simulation on 3 farms. Farms provided records of feed, mineral supplements, fertilizer and bedding purchased during a one-year period.

They also provided numbers and weights of livestock sold as well as any other nutrient outputs leaving the farm during the same period. When feed nutrient content was available, it was used in the simulation. All farm information was entered into the Excel spreadsheet, and nutrients imported and exported were calculated by the tool. A typical nutrient balance summary is on the next page.

On **Farm 1**, a fairly new 100 cow operation where all feed is imported and the farm currently has a small land base (80 acres), we learned that the farm is currently importing more nutrients in the purchased feed than are needed to fertilize the land base. Because the existing land base is small, the nutrients in the manure are spread over a relatively small area and thus, at this time, they exceed what is required to fertilize the existing land base. The upside of this is that the farm does not need to purchase fertilizer to maintain fertility. However, more land could be fertilized with the amount of nutrients currently imported in purchased feed, so the farm could lease or purchase additional land for grazing, and spread the nutrients from the manure over a larger land base.

From **Farm 2**, an established 200 cow operation with 800 acres of grazing and hay land, we learned that the farm is operating at near nutrient balance (*see summary on next page*). The farm puts up most of its own hay but also purchases some hay and a small amount of nitrogen fertilizer. All the farm's fields are a mix of clover and grass. The simulation suggests that the farm is exporting slightly more phosphorus in livestock than is imported in feed and mineral supplements, suggesting that eventually the farm's soil reserves will be depleted and fertilizer will be required to maintain yields. With the amount of nitrogen fixed by clover in pastures, and the purchased feed and fertilizer, the farm had a nitrogen surplus of around 40 pounds per acre. However, because the nitrogen is deposited on the land as manure, there is the potential for some nitrogen to be lost as ammonia from manure and urine which would reduce this surplus.

Farm 3 is also an established cow-calf operation with a herd size of approximately 175 cows and a land base of 900 acres.

Whole Farm Nutrient Balance Tool *continued*

This operation purchases all winter feed and intensively grazes the land base during the growing season rather than putting up feed. This ranch was also near nutrient balance. On a per acre basis, between the amount of nitrogen fixed by the clover on site, and nitrogen imported in the feed, the farm imported approximately 50 pounds per acre per year more nitrogen than was exported in livestock. The surplus for phosphorus and potassium was smaller. It was interesting that the purchased feed contained enough of all three nutrients to maintain the fertility of the pastures – as long as the manure can be spread equally on all grazed areas. Nutrients brought onto the farm in feed are deposited on the land during winter feeding, which makes it essential that winter feeding areas are rotated so that the manure is distributed as evenly as possible on all grazing areas.

Provided that feed nutrients can be fairly evenly distributed over the land base, this farm should not have to fertilize to maintain soil fertility.

The testing was very helpful in identifying changes required to make the tool work better under the livestock production systems in the Peace. For instance, intensive grazing is much more common on beef cow-calf operations in the Peace than in the rest of the province. Pastures are typically a mix of clover and grasses. The legume nitrogen fixation module was adapted to allow it to be used on grazing land, not just for hay land. Also, simple changes such as allowing feed purchased to be entered in bales, and bulk feed in tonnes, will make the tool more user-friendly. We also learned that we need a better data bank of region-specific forage nutrient data, including data for the Peace.

WHOLE FARM NUTRIENT BALANCE SUMMARY

(Note: this page prints in portrait format.)

Farm Name or type:

Farm 2 (220 cow herd)

Cropped or grazed land base (acres)

800

Nutrient Input and Output Summary	Imperial or standard			Metric		
	Nitrogen	Phosphorus	Potassium	Nitrogen	Phosphorus	Potassium
	lbs per year			kg per year		
Nutrient Inputs						
A. Livestock and poultry	0	0	0	0	0	0
B. Feed	5762	954	4561	2616	433	2071
C. Fertilizer	5560	0	0	2524	0	0
D. Manure	0	0	0	0	0	0
E. Bedding	0	0	0	0	0	0
F. Estimated legume nitrogen inputs	28063	na	na	12740	na	na
Nutrient inputs	39386	954	4561	17881	433	2071
Inventory adjustment (livestock and feed)	0	0	0	0	0	0
Nutrient inputs with inventory adjustment	39386	954	4561	17881	433	2071
Nutrient Outputs						
A. Livestock and poultry	5040	1364	396	2288	619	180
B. Products	0	0	0	0	0	0
C. Feed	0	0	0	0	0	0
D. Manure	0	0	0	0	0	0
Nutrient outputs	5040	1364	396	2288	619	180
Nutrient Balance Summary						
Nutrient Balance (inputs - outputs) (farm surplus or deficit)	34346	-409	4166	15593	-186	1891
Nutrient Balance (surplus or deficit as lb/acre and kg/hectare) (must enter cropped or grazed acres above)	43	-1	5	49	-1	6
Nutrient Use Efficiency (outputs/inputs)	13%	143%	9%	13%	143%	9%

It is anticipated the WFNB tool will be available on the B.C. Ministry of Agriculture website in 2016.

Thanks to Sandra Burton for coordinating the tour, and to the cooperators who generously provided their farms' information so we could run the simulations.

The project was funded by *Growing Forward 2*, a federal - provincial - territorial initiative.

Thanks Also To:

Talon Johnson
Andrew & Brian Clarke
Ron & Karen Buchanan
Jodi Kendrew

For info contact:

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R & D Project Updates

by Sandra Burton, Talon Johnson & Bill Wilson



Michael Nimitz modifying 3D fence.

3-D Fencing Phase 2

Year: 2 of 2

Status: Project completed.

Project Lead: Talon Johnson

Details: Following the completion of the original 3-D fencing project some aspects of the fence needed to be improved. Experiences from other regions were documented.

Forage Facts: 3 (of 16 3D fence topics in total) as newsletter inserts

Funder(s): IAF on behalf of AAFC & BCMA programs

Cooperators:

- ⇒ John & Patt Kendrew
- ⇒ Freddy & Liz Schneider
- ⇒ Michael Nimitz
- ⇒ Bill Wilson
- ⇒ Phillip Proudfoot
- ⇒ Sandra Burton/Rick Kabzems
- ⇒ Glenn & Ann Hogberg

Re-vegetation of Disturbed Land by Oil & Gas Activities

Year: 3 of 3

Status: Proposal for new funding in progress

Project Lead: Bill Wilson

Details: Working with oil & gas to re-vegetate berms, pipelines and roadsides. Approximately 20 research and demo sites have been set up & monitored.

Funder(s): AAFC's CAAP Program delivered through IAF, PRFSA

Cooperators:

- ⇒ Encana
- ⇒ Shell



Bill Wilson (right) leading tour of sites.

Healthy & Vigorous Forage Stands

Year: 2 of 3

Updates: Forage Fact & article in this issue.

Project Lead: Talon Johnson

Details: Focussed on weed control and soil fertility with cooperators. Other deliverables include feed testing & ration balancing, dog handlers clinic & Peace Forage Seeding Tool (see article page 7).

Funder(s): PRAD, PRFSA, Murphy Oil Corp, PRRD, Enerplus, GF2

Cooperators:

- ⇒ Esbern & Heather Hansen
- ⇒ John & Patt Kendrew
- ⇒ Karen Kealy
- ⇒ Bill Wilson
- ⇒ Ron & Karen Buchanan
- ⇒ Glenn & Ann Hogberg
- ⇒ Ducks Unlimited
- ⇒ Chuck & Pat Sutherland



Talon & Julie measuring manure rate.

Soils, Forages & Water Dynamics

Year: 2 of 2 in progress

Updates: article in this issue.

Project Lead: Sandra Burton (PRFA of BC) & Bill McGill (UNBC)

Details: PRFA of BC and UNBC have combined forces to develop a series of interactive soil, forage & water courses for UNBC students, forage and livestock producers, as well as forestry, range and reclamation/ environmental professionals.

Funder(s): Shell, UNBC, PRAD, Blackbird, Nor-Kam

Field Day Hosts:

- ⇒ Glenn & Ann Hogberg
- ⇒ John & Patt Kendrew
- ⇒ Ron & Karen Buchanan
- ⇒ Jim Chramosta, Shell Canada
- ⇒ Jennifer Critcher, Encana



Keith Carroll sharing his experience with long term erosion plots.

Nitrogen Losses Study

By Lori Vickers

How much urea nitrogen is volatilized or lost into the air as ammonia?

Urea is the most common synthetic nitrogen fertilizer used in the agriculture industry. Urea is broken down into ammonia. This ammonia can quickly be lost to the atmosphere (volatilization) unless it reacts with water to form ammonium, which is the nitrogen source that is available to the plant. The more nitrogen that is volatilized means that there is less available to the plant, resulting in either reduced yields or increased fertilizer costs!

What influences how much nitrogen is volatilized? Many environmental factors contribute to ammonia volatilization including soil pH, temperature, soil moisture, crop residue, soil organic matter and time between urea application and precipitation.

Management and method of fertilizer application also play a role. Research has traditionally shown that broadcast application of urea to the soil surface leads to the highest rate of nitrogen volatilization. However, using coated urea or incorporation of urea into the soil reduces the rate of ammonia lost to the atmospheres. Taking this a step further, banding urea has recently been recommended to improve nitrogen use by the crop while minimizing the amount that is lost through volatilization.

However, new research is suggesting that nitrogen volatilization from banding urea is actually higher than expected under certain conditions. In fact, in one study, ammonia volatilization from banding of urea was actually higher than ammonia volatilization from broadcasting and incorporating urea! This indicates that there is much more to learn about soil and nitrogen fertilizer dynamics.

During the summer of 2014, PRFA conducted a pilot project with Robert Vander Linden to assess feasibility of measuring nitrogen volatilization under various fertilizer management applications. To do this, ammonia dosimeters were used. A dosimeter is a small tube designed measure gas concentrations. Dosimeters were placed near the seed row after fertilizer application and covered with a plastic box designed to capture any released gas (ammonia!) so that it can be effectively read by the dosimeter. As ammonia is volatilized, the gas it read by the dosimeter which is indicated by a colour change. Dosimeters should be read every 3 to 4 days.

Stay tuned for more work on this coming this summer & see article on the new project below....

Reference: Rochette, P., J.D MacDonald, D.A. Angers, M.H. Chantigny, M.O.Gasser, N. Bertrand. 2009. Banding of Urea Increased Ammonia Volatilization in a Dry Acidic Soil. *Journal of Environmental Quality*. 38:1383-1390.

Innovative Management Practices for Resiliency

By Sandra Burton

Year: 1 of 2 newly started

Project Lead: Sandra Burton

Funding Partners: UNBC, BCGPA, PRFSA, BC Business Knowledge Fund, BC Farm Innovators Adaptation Fund, Blackbird, South Peace Grain

Details: This project uses a farming systems approach to identify nutrient management practices that are more resilient in response to climate change.

Three areas of production will be evaluated including on farm nutrient management, legume production options, and timing and placement of fertilizer. A key component to producer adoption of practice is an economic evaluation. The project team will work with George Geldart to complete a cost benefit analysis of each innovation in the context of the farming operation. They will also work with Bill McGill of UNBC to evaluate a Soil Quality Field Kit. Holistic approach will team cooperators with economist & researchers throughout the process. **Cooperators are:**

⇒ Ron & Karen Buchanan
⇒ Andrew & Brian Clarke

⇒ Arnold & Nelda Bennett
⇒ Rod & Kim Strasky

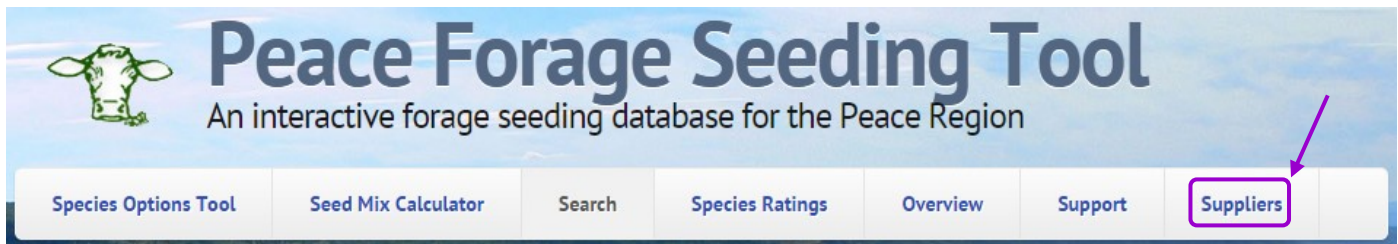
Seeding Web Tool Update – Supplier Component

by Talon Johnson & Sandra Burton

Project Overview

In April 2013, the Peace River Forage Association of BC (PRFA of BC) initiated a pilot project to develop the Peace Forage Seeding Tool (www.peaceforagetool.ca). The tool was based on the data compiled during the writing of the BC Rangeland Seeding Manual in 2011-12.

When this initiative was almost complete in early 2014, they approached the Peace Region Forage Seed Association to partner with them on developing a seed supplier component to the interactive web tool. This would enable users of the tool to connect with forage seed suppliers in the AB & BC Peace Region while developing seed mixes for either agricultural or reclamation purposes.



Seed Supplier Functionalities

1. Seed Supplier Pages

Suppliers can connect with users in one of two ways. The first is through their **own unique page** that contains company specific information such as:

- * Contact(s)
- * Address, phone & website
- * Supplier specialties
- * Description of services
- * Species & varieties available
- * Our mixes

Based on the 9 seed companies that are currently on the PRFSA website, the same 9 suppliers were added to the Forage Seeding Tool:

- * Ag-Vision
- * BrettYoung
- * DLF Pickseed Canada
- * Dynamic Seeds
- * Fosters Seed & Feed
- * FSJ Seed Coop
- * Golden Acre Seeds,
- * Moore Seed Processors
- * South Peace Grain

A fictitious seed supplier (*shown to the right*) was used to test the functionality.

Sams Seed Supply - TEST



Contact(s)

Bill Wilson
(250) 782-2866
treasurer@peaceforage.bc.ca
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Company fax:
604 555 9991
Company Phone:
604 555 9999
Website:
<http://www.seedsams.com>

Supplier specialties

Suppliers can identify specialty services below (like custom mixes, certified seed preferences, seed analysis, native species and Peace grown seed).

- We make custom mixes
- We provide current seed analysis on request
- We source Peace grown species



Description of services

This page is for testing the tool for function behind the scenes as we add new features. It is purely fictional.

Sammy Williams always liked being different. Even though he started work as an apprentice shoemaker, a good education enabled him to change careers and become a bookkeeper at a local seed cleaner and mixer. He stayed on and, 25 years later, now owns the company.

This company is the one to watch over the next months and years to come.

New sales & Additional information

Seedy Sams is offering a special green seed mix for St. Patrick's Day. Contact the Sammy for more information.

All of these 9 seed suppliers have been contacted and guided through the process of keeping their pages, species/ varieties and mixes up-to-date. Many have embraced this opportunity to connect with agriculture and oil & gas users.

Seeding Web Tool Update *continued*

by Sandra Burton & Talon Johnson

2. Who Carries The Selected Species?

The second way seed suppliers connect with users is through the **Species Options Tool** after users have selected the species they desire in their seed mix. Users have the option to see "Who Carries the Selected Species". Here they will only see species and/ or varieties that are supplied "in stock" or "ask" by seed companies.

Users are also able to **sort** based on supply choices or by the suppliers ability to provide certificates of analysis (see example below).

Information available to users about each species/ variety for decision making purposes are:

- * species
- * variety name
- * is it certified?
- * grade, & grade details
- * is it Peace grown?
- * a non-bloat legume?
- * supply
- * price range
- * any final details.

Operations

Send selected species to seed mix calculator

Who carries the selected species?

Species Options Tool

Seed Mix Calculator

Search

Species Ratings

Overview

Support

Suppliers

Suppliers

1. To see/filter for supply, click appropriate boxes.
2. Remember to request a recent certificate of analysis (no older than 6 months) BEFORE purchasing seed.
3. To see which suppliers can supply certificates of analysis, use the filter below. Select "We provide current seed analysis on request" and click Apply.
4. Click [here](#) to learn how to interpret your certificate of analysis.

Supply Can supply certificate of analysis

☒ In stock ☐ We provide current seed analysis on request

☒ Ask

☐ Sold out

Apply

Agronomic Grass

Species	Variety	Certified?	Grade	Grade details	Peace grown?	Non-bloat?	Supply	Price range	Details	Supplier link
Creeping Red Fescue	Boreal	Certified	#1				In stock	< \$2.50 /lb		Fort St John Seed Cleaning Co-op
Creeping Red Fescue	Boreal	Certified					In stock	< \$2.50 /lb	\$71.64 per 25 kg bag (Feb 2015)	Foster's Seed & Feed
Creeping Red Fescue	Boreal	Certified	#1		Peace grown		In stock	< \$2.50 /lb		Dynamic Seeds Ltd

Thank You

To Our Funding Partners of the Healthy & Vigorous Forages / Webtool Projects:
PRAD, PRFSA, Murphy Oil Corp, PRRD, Enerplus, GF2 & to Seed Supplier for collaborating with us.

Tools For Establishing Forages & Reclamation

by Darrell Kroeker



Jim Chramosta (*far right*) & Martin Geertsema (*center*) showed us what we could learn from enhanced air photos & lidar imagery. Please note: Darryl's group did not "get to" come to this station, so this is not discussed in their group's case study.

Our first station was led by **Bill McGill** and **Keith Carroll**, who gave us a quick tutorial on the effect of water movement over different soil textures and under different slope conditions. They demonstrated the effect of these factors with mini erosion plots. The Buchanan ranch field in question has slopes of about 5% with fairly fine soils. We concluded that any re-establishment of forage stands has to be undertaken with care to keep the maximum amount of runoff on the field and not start an erosion problem. Minimum- or zero-tillage seems like an appropriate tool to achieve those objectives.

The third workshop of the Soils, Forages & Water Dynamics Course took place on Saturday, February 7th at the Taylor Community Church. Participants were divided into 5 groups with each group using a scenario based on conditions at one of 5 previous workshop locations.

Our collective memories were immediately challenged as we tried to recall shady details! Our group's scenario was based on the Buchanan ranch, location of the October 4, 2014 workshop. Our challenge was to consider how to maintain forage stands under a year of drought. Fortunately for us, Ron Buchanan was part of our group, the "go to guy" for all the hard questions and memory refreshers!



Keith Carroll & Bill McGill led a discussion of erosion factors.



Julie Robinson hosted a stop with nutrient flows & candies.

Our second stop was hosted by **Julie Robinson** who showed us the value and nutrient content of manure as a soil additive, but its management comes with challenges. I think many of us were surprised to learn that the target for winter feeding grounds was 1 acre per cow to achieve appropriate manure distribution. That's a lot of ground to cover to look after a typical 200 to 400 head cow herd! One idea our group came up with to achieve good manure distribution was to use portable shelters to encourage animals to move away from the feeding grounds. On some ranches, the resulting snow compaction could contribute to poor over-winter survival of alfalfa. Ron's experience on their ranch was that they receive sufficient snow fall during the winter that it hasn't been an issue in the past.

Photo Credits: Vicki Moser

Tools For Establishing Forages & Reclamation *continued*

Kari Bondaroff's lesson on weed management was very clear; don't introduce weeds onto your ranch! I think many landowners have been a little casual about sourcing seed for forage establishment and sourcing supplemental livestock feed during years when we come up short on supply. With the help of workshops like this, the situation is improving. Kari's second lesson was, if you have weeds, it's important to document the locations. Without a map, you really don't have a reliable way to measure your success at weed control and eradication. Whether the information is kept in a journal or on the tractor log book, don't rely on memory alone.



Kari Bondaroff's lessons on weed management (*left photo*) & Matthias Loeseken demonstrating role of drone technology (*right photo*).



Jim Little (*left*) & Richard Kabzems (*right*) & the role of maps.

Our last work station was led by Jim Little and Richard Kabzems. Old style paper maps were the tool at hand. The Peace region soil erodibility maps indicate that most of the Buchanan ranch was mapped as potential risk 1, the lowest level of soil erosion risk for our region. Land slope and soil type combine to generate the potential risk. However, our experiences at the fall workshop, and certainly Ron's experience on the ranch, lead our group to conclude that we can't ignore proper soil and vegetation management simply because the erosion risk is low. Low risk of erosion does not equal no risk of erosion.

At the end of the day, our heads were full with new information or new perspectives on old information, our stomachs were full of the fine food served up by the caterers, and I think we each went home with a few more management tools in our land management tool box.

At our group's fourth stop, Shaun Grant and Sandra Burton walked us through some examples using the web-based forage species selection tool. A quick lesson on the difference between seed blends based on weight or seed count put everyone in the group on the same page. The take home message; know your seed counts to develop effective blends. Sandra shared some information she had gleaned from a recent conference in which one presenter indicated that most mixed forage stands end up being approximately 40% legume and 60% grass. The lesson; we may as well start out with the same ratio if that's where we end up anyway. Soil information for the Buchanan ranch indicated pH on the low side (somewhat acidic). Imagine our surprise when we selected for acid-tolerant species and came up with only 3 choices: birdsfoot trefoil, reed canary grass and timothy! If the soils are truly acidic, some soil amendments may be needed to expand the selection of viable forages. The forage selection tool not only helps you make appropriate species choices, it educates you along the way as you manipulate parameters.

Thank you to our funding partners:

UNBC, Shell Canada, Encana,
Peace River Agriculture Development Fund,

Thank you to our enthused station masters:

Bill McGill, Keith Carroll, Martin Geertsema,
Jim Chramosta, Kari Bondaroff, Julie Robinson,
Richard Kabzems, Jim Little, Shaun Grant, Sandra Burton

Thank you to our knowledgeable mentors:

Darryl Kroeker, Kristin Kendrew, Lori Vickers,
Matthias Loeseken, Talon Johnson

Marketing Your Beef

by Lori Vickers & Talon Johnson

On February 27, PRFA hosted world renowned marketing expert **Brenda Schoepp** for a day focusing on marketing your beef. The event was held in Taylor, BC and attended by 40 people. The day consisted of Brenda sharing her local and global marketing experience with the group. There were also breakout sessions where participants got to learn from local experts about their experiences with various beef marketing strategies.

Brenda started our day by discussing her view of the Canadian beef industry. Brenda's 3 basic principles for marketing were:

- ⇒ Market cattle in large, uniform groups of the same size and sex
- ⇒ Use a pricing mechanism you understand – even for forward contracts (price, weight, delivery window, shrink and slide, grid...)
- ⇒ Reduce stress and shrink... *continued to the right...*



Between Brenda's talks, we heard from local experts who have tried various marketing strategies. They discussed their challenges, learning and future opportunities. **Michael Nimitz**, Nimitz Beef, discussed his grass and flax fed beef marketing program where he markets to farmers markets and directly to consumers. **Freddy Schneider**, Riverside Ranch, talked about how their ranch markets antibiotic free beef into a feedlot in Alberta, emphasizing the better profit margins he receives as opposed to selling through the auction. **Shawn Gist**, auctioneer, provided everyone with advice on the best ways to market through the local auction mart in Dawson Creek. **Lori Vickers**, BC Min of Ag Regional Agrologist, introduced the group to some provincial funding that is available for Farm Business Advisory Services for anyone looking for assistance to take their farm business to the next level.

All and all, it was a great afternoon and evening filled with learning and networking opportunities!



Some issues in the Canadian cattle industry are:

- ⇒ In general, it is slow to adapt to market demands and has not gone to their clients to see what they want. This has led to a disconnect between customers wants/ needs and what ranchers are producing.
- ⇒ It continues to market high end cuts of beef while 60% of Canadians' beef consumption is in the form of ground beef.
- ⇒ Consumers continue to ask where their beef comes from and what is in it. Consumers may not fully understand the uses of hormones or steroids in cattle rearing, but they continue to request meat without it.

She left the group challenged with thinking about what you can do to value-add to your product and meet customer demands. One avenue is direct marketing and one means to do this is farmers' markets. Farmers markets continue to grow and are over a billion dollar industry in Canada. Another is branding your own beef. Various avenues exist including hormone free, antibiotic free, flax fed, grass fed, as well as other options.



Breakout session with Shawn Gist, auctioneer from DC.

Thank you to our funders: BC Farm Business Speaker Program through Growing Forward 2.



2015

International
Year of Soils

Watch website for
more details: [http://
peacecountrybeef.ca](http://peacecountrybeef.ca)

International Year of Soils & Events in AB

by Nora Paulovich

ARECA plans 2015 International Year of Soils Events

Nora Paulovich, manager of the North Peace Applied Research Association (NPARA) announced several upcoming field workshops and speaker events, culminating in a western Canada conference on soil health.

"Planning is in full swing for the **2015 Western Canada Conference on Soil Health** to be held in **Edmonton on December 8, 9 and 10th**" said Paulovich. At least two international speakers already plan to present at the conference. Gabe Brown, grain and livestock producer from Bismarck, North Dakota, and Peter Donovan of the Soil Carbon Coalition will share their experience in improving soils health. Two speakers will be touring the Alberta Peace this summer. Donovan will also be touring the province as ARECA's guest this summer, conducting workshops on measuring soil carbon and ways to improve physical, biological and chemical attributes. Dr. Christine Jones will also return to Alberta in July for a continuation of her very successful visit to Alberta last fall.



2015 SUMMER EVENTS

SUMMER EVENTS	DATE	TIME	LOCATION	CONTACT	COST
Soils Workshop with Peter Donovan	June 17	10 - 4 PM	NPARA Farm	NPARA	TBA
Soils School with Christine Jones	July 29	10 - 4 PM	NPARA Farm	NPARA	TBA
Soil Health Tour to USA	August 17		Brown's Ranch / Dakota Lakes Research Farm	NPARA	TBA
www.npara.ca Box 750, Manning, AB 780-836-3354					

Soil Conservation Council of Canada & Events in Canada

By Paul Thoroughgood, SCCC President

"... There is important work to be done! Harnessing our passions, knowledge and efforts for soil conservation to form a collective approach is the only sure way to sustain our soil resources now and for future generations. The Soil Conservation Council of Canada (the SCCC) provides a means by which we can jointly advance the soil care and soil protection message to supporters, land managers and policy makers.

The SCCC is moving forward to address soil care issues that will affect us and future generations. We increased the membership fees this year in order to accomplish this important goal. Some examples include:

- ♦ hosting a **Soils Summit in December 2015** in cooperation with GrowCanada;
- ♦ increasing communication to heighten awareness about soil care, soil degradation from tillage, water and wind erosion,

and the need to protect Canada's soil, air and water resources through the use of appropriate agricultural land management practices.

- ♦ investigating ways to help land owners and managers assess the extent of erosion on their land – and the cost in dollars from lost yield and reduced land value; and
- ♦ upgrading the SCCC website with the objective that it will become the "go-to" source for information on soils.

More ideas are coming our way and we need your input and help to add strength to the SCCC voice. As members of the SCCC team we can achieve greater value for time and dollars invested. Your membership in the SCCC is an investment in the protection of soil and the environment it affects..."

For many more articles and international events of interest check out their website: <http://www.soilcc.ca/> is an excerpt from the SCCC spring newsletter.

Upcoming Events in BC Peace

Saturday June 13 & Sunday June 14, 2015

Stock Dog Clinic at Carol Nelson's place in Pink Mountain

Any experience level welcome.

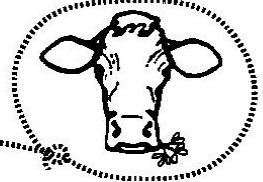
\$150 for 2 days (May be options to take in only 1 day)

Call Carol for info or to pre-register at (250) 772 5315 in the evenings.

UNBC

In partnership with

Peace River Forage Association
of British Columbia



Soils, Forages & Water Dynamics Course

Involving Real People with Real Issues

Credits
available for
UNBC, CCA
or P.Ag PD

Next
Up

June 6,
2015

How can we control
erosion on lease sites?

Limited
spaces !
Please
pre-register.

All activities
hands on &
interactive !

July 4, 2015

What role do manure and
nutrients play in happy
forages lasting forever?

To Register:

In the Peace:
Sandra Burton
at 250 789 6885
coordinator

@peaceforage.bc.ca

For university credits:

Bill McGill
at 250 960 5308 or
bill.mcgill@unbc.ca

**Thank you to our
funding partners
Shell Canada
& PRAD**

Registration Costs:
Including coffee & lunch
\$90 / day non members
**\$50 for existing & long term
Forage Association members**

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Judy Madden
EFP Planning Advisor

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You too can be a **Friend of Forage** by advertising in our newsletter. The rates are:

\$75	business card
\$125	1/4 page
\$200	1/2 page
\$300	full page

You can also be a **Friend of Forage** by buying coffee or a meal at one of our events. Or call us with your idea at 250.789.6885 or by emailing coordinator@peaceforage.bc.ca



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**The Environmental Farm
Plan Program**

Kari Bondaroff
EFP Planning Advisor

Tel. 250-467-3918
kari.bondaroff@gmail.com



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