

FORAGE FIRST

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\$10



Learning about Soils & Forages with Laughter

Photo caption: Bill Wilson & Bill McGill facilitating discussion of what we learned at the end of a full day of activities on Feb 15! (see article inside)

This spring issue of Forage First

brings you highlights of winter events and notices of upcoming summer events. We also share updates about our R & D projects, excerpts from other forage newsletters and new member profiles. If you have ideas about what you would like in your newsletter, please share them with one of the people below.



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Visit our website at www.peaceforage.bc.ca

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Inserts: (for paid up members)

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Dog Handlers' Clinic

Mark Nimitz Memorial Trail Ride

New Member Tara Holmes

by Sandra Burton



Tara Holmes, Ben Harrington and their 2 children, Iris and Roy.

Tara Holmes and her husband, Ben Harrington have a sheep operation north of Cecil Lake, BC. I recently caught up with her to find out more about their family operation and why she had joined the Forage Association.

Tell us about your family and farm?

Tara: Ben and I have 2 children, Roy, aged 2 years and Iris, 2 weeks old. We have 2 sections of land where we raise sheep, primarily for meat. We currently have 130 ewes of 5 or 6 different breeds, including Katahdin, Icelandic, Jacob, Scottish Black-face as well as some commercial ewes. The main determinates for our selections are easy lambing and good mothering. We have 130 ewes now, but we keep our female lambs and are increasing our flock. Eventually we hope that Ben will not have to work off farm.

Where do you market your lamb meat?

Tara: We take our lambs to Lawrence's and market the male lambs ourselves through family and friends in Vancouver, and tie in meat deliveries with visiting.

Do you have any predator issues?

Tara: We live right next to the Doig River and have other creeks and wildlife corridors. We have lost sheep to coyotes and wolves. We also had a golden eagle carry off a lamb.

What are your biggest challenges?

Tara: We bought our place not knowing about the soils or weeds in the Peace. We have land with clay soils, no topsoil and lots of weeds, such as scentless chamomile and foxtail barley. We are winter feeding on these areas to improve the pasture.

When did you join the Peace River Forage Association? Why?

Tara: Two years ago, we were looking for information about alfalfa varieties and found one of your Forage Facts on the website. Then we looked at the website and thought this would be a great group to join. I went on the tour to Manning, then recently to the soils workshop in Feb. You have great events!

Is there anything you would like to see the Peace River Forage Association doing or sharing?

Tara: I would like to learn more about soil building, weed control and grazing management.

PRRD Ag Advisory

by Chris Thomson

Heather Hansen is our representative on the Peace River Regional District Agriculture Advisory Committee. This committee deals with issues affecting the rural farmers and producers in our Peace Region area. The committee meets every 3rd Tuesday of every 2nd month with the next meeting being held in June. The Peace River Forage Association board appreciates that Heather is very dedicated to this position. Her alternate is **Rob Larsen**.

Timothy Hay in Creston

by Ed Hadland & Julie Robinson

The BC Branch of the Canadian Seed Growers Association hosted their AGM and information session in Creston BC on Jan 23, 2014. The meeting was attended by many local Creston and area growers, as well as 2 Peace River Forage Seed Growers (Robert Vander Linden and Ed Hadland), Alberta Forage Seed Specialist Calvin Yoder (as guest speaker), and BC's Grains and Oilseed Specialist (Julie Robinson). It was interesting to note that Monsanto had big presence in the region with over 4 staff attending from Cranbrook (over an hour away).

The Creston Valley is productive in agriculture. On just over 18,000 acres, 3 to 4 tonne of timothy hay /ac per year are produced. This is sold into the timothy compressed hay market, ending up in Japan for \$200 to \$260/tonne. Seed yields up 1000 lbs/ac in peak years. They are growing varieties that have been registered due to research completed in the Peace Region at the forage seed timothy variety trials and utilizing Snow Brand varieties like Horizon, Moore Seed Processors varieties like Alma and Allied Seed varieties like Derby. This forage seed is shipped south to Bonners Ferry for sale and most of the production acres are contracted out.

Producers can seed in October and have been producing seed crops the following year. Some growers are using cover crops in establishment years, delaying the first seed crop by one year. Harvest season can sometimes drag out due to high humidity that leaves only a 3 to 4 hour/day window of harvest in September and October. Most producers are using aeration to assist in drying the crop. There is a compression timothy plant shipping 18 trucks load per week equalling 22000 tonnes/ yr from the valley, all going to Japan.

Producers are growing hard red spring, soft white wheat, winter wheat, canola, and small amounts of barley. The size of farms range from 1000 ac to 4000 ac. On farm storage is not an issue as crops are shipped immediately after harvest. Freight rates to ship grain to Alberta are reasonable because the Columbia Brewery in Creston gets its malt in every week, so backhauls are a frequent and affordable option.

Local markets include approximately 600 beef cattle, 3 to 4 dairies in the area, the largest being 300 milking cows, with the other 2 significantly smaller. There are lots of smaller livestock operations like sheep, goats, pigs, chicken etc. There is also a strong horse hay market.

In discussions with land buyers, the purchasing price for land now is approximately \$4,500/ac. In the not too distant past, they were purchasing land for \$1200/ac ... quite a change in 5 years.

Climate in the region is hot with lots of sub-irrigation from the Moyie River, opening and closing the drainage ditches from the river. Most of the agriculture land is dyked, allowing for optimal use of nutrients and plant potential, and producing canola yields of 60 to 90 bu/ac and wheat yields over 60 to 100 bu/ac. Producers are selecting varieties utilizing Lethbridge irrigated area experiences and expecting slightly reduced yields.

Producers are managing their rotations similar to the Peace using perennials in the crop rotation, with canola as the crop they are seeding into. Producers are buying fertilizer from Cranbrook. As for as wildlife impacts to crops grown, mice were mentioned as the seed growers biggest issues as these rodents are able to kill 80% of the plant population in one winter!

Producers in the valley are very diversified and looking for opportunities, but like all regions struggle with ALR boundaries, and large acres of owned by First Nations in the centre of agricultural land, creating some management challenges. The farms are transitioning into larger acre operations and are always striving for more diversification.

Calvin Yoder's herbicide presentation was very relevant to the growers in the area and much of the same things have been observed there. The producers are not yet concerned about herbicide resistant weeds but are concerned it may become an issue due to current grass seed herbicide options. One other point of interest that Creston growers raised is that their region is not included in minor use permits for herbicides on the label, the label indicated only in the BC Peace, this may be an item for future follow-up.

Cow Bites, Buffalo Bites & Elephant Bites in Nepal

by Julie Robinson & Sandra Burton



Typical Nepali farmstead in middle Himalayan region with both dryland terraces or 'bari', and irrigated lowlands or 'khet'. Water buffalo & oxen are used for draft power to puddle the soils for paddy rice planting. Tree in foreground has been lopped for forage.



Over 12 M cattle/ buffalo, 10 M sheep/ goats & 5 M people live in a country with 100,000 ha of agriculture/ grazing land. By the dry season end, all crop residues have been fed, so grazing areas & fodder trees take a beating.



Karkga Gurung, a long time friend, shows Sandra their newly planted spring maize & mature wheat crop while Julie takes a closer look at the impressive heads. A third of the maize crop & all other crop residues are fed to cattle, buffalo, sheep & goats.



In Chitawan, we learn from Saubin, the mahoot to make super energy rice residue balls for the elephants. There is not enough time between tourist safaris for them to get enough calories.



Holy cows always have the right of way.



Kamal Bhandari, a District Live-stock Officer, describing livestock improvement programs in Nepal.

Photo Credits:

Julie Robinson & Hanna Kabzems

Soils, Plants, Re-vegetation & Fences

Compiled by Talon Johnson



Learning about the fascinating world of soils.

Interactive Soils & Forages Courses

Year: 1 of 2

Project Lead: Sandra Burton

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

Progress: Currently three of five courses in the first cycle have been completed. Each day has been a tremendous success with an excellent turnout and mix of people.

Next: The next courses will occur on June 14th and July 5th. Cycle 2 of these courses will commence in September 2014.

3-D Fencing Phase 2

Year: 2 of 2

Project Lead: Talon Johnson

Details: Following the completion of the original 3-D fencing project some aspects of the fence needed to be improved to ensure wildlife were receiving an appropriate shock when coming into contact with the fence.

Progress: Fences were built/ improved with six cooperators. Wildlife cameras were put up by two fences to monitor wildlife interactions with the fence. Fence line lures were used to entice wildlife to investigate the outer electric fence with their noses.

Next: Continue to monitor fence effectiveness with existing cooperators and tackle issues if and when they arise.



Proudfoot 3-D fence in the Kootenay's.



Broadcast seeding across a berm.

Re-vegetation of Disturbed Land by Oil & Gas Activities

Year: 3 of 3

Project Lead: Bill Wilson

Details: Working with Shell and Encana to re-vegetate berms, pipelines and roadsides. Approximately 20 research and demo sites have been setup so far in the project.

Progress: This spring will include more seeding and fertilizing. Also doing plenty of evaluation for re-vegetation success indicators such as: germination, establishment, and ground cover percentages.

Healthy & Vigorous Forage Stands

Year: 2 of 3

Project Lead: Talon Johnson

Details: Sites were setup with four cooperators focussing mainly on weeds but also on improving hayfield productivity. Feed testing and ration balancing occurred in Nov/ Dec to give producers an idea of how their hayfields and pastures are producing. Since fall there has been a push to develop the Peace Seeding Tool based on the BC Rangeland Seeding Manual.

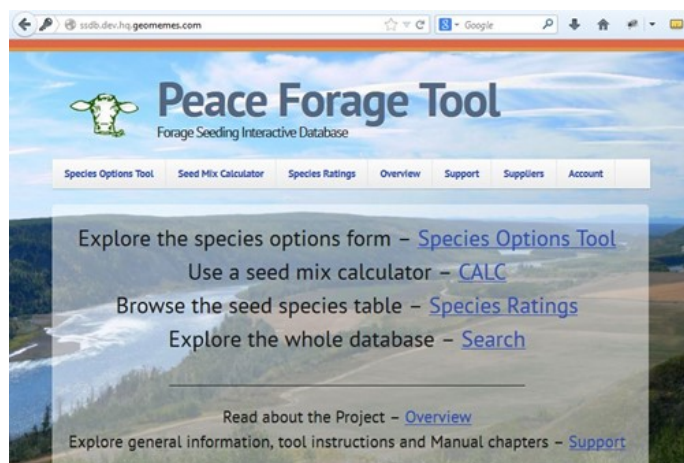
Progress: Finalize the Peace Seeding Tool to ensure user friendliness. Setup sites with cooperators in the North and South Peace and continue to monitor/ work on sites already setup.



Broadcasting fertilizer on established fescue to outcompete Canada thistle.

Peace Forage Seeding Tool

By Allen Dobb & Charles Burnett



Page 1. Location - Where are you seeding?

Choose a default location

Peace River Somewhere in BC

If you are returning to this page and previously selected 'All BC' you must select that option again if you wish to retain it.

Enter a custom location

Geodata Source

Draw on a map

Please select the format of data you would like to use to enter your location

- Upload a Spatial File - to upload a shapefile or kml
- Enter WKVT - Enter WKVT into the text area
- Enter KML - Enter KML into the text area
- Enter Latitude and Longitude - Enter Longitude and Latitude into the text field separated by a space: loncoords latcoords
- Enter a Geomark URL - Enter a Geomark url into the textfield
- Enter a street address. The following format is recommended, but almost anything valid will work: 123 Some Street, Cityname, BC V1X #X#
- Draw on a Map - Draw features on the leaflet map.

Note: The map may not load properly if it was not visible when loading the page. If the map does not load properly please try selecting 'Draw on a map' as the Geodata source then refresh the page (click 'resend' if asked). If problems still persist delete all cookies and try again.



The Peace River Forage Association of BC is about to launch a new web-based decision support tool to help forage producers and re-vegetation specialists select appropriate forage species for their seeding projects. The *Forage Seeding Interactive Database* (or ForSid) will soon be up and running at this link <http://www.peaceforagetool.ca/>.

ForSid contains information on 47 different agronomic and native grass and legume species.

Five tools in one

The tool was designed to be flexible, so that it would be useful for ranchers, farmers, seed suppliers and environmental technicians. It includes 5 main parts:

1. A **Searchable Database** of species information;
2. Two **Species Ratings** tables allow users to actively sort species based on suitability to meet seeding objectives such as forage enhancement (hay, pasture), erosion control and invasive plant suppression. Species can also be ranked based on their drought tolerance, winter hardiness and other adaptive characteristics. Special key notes have been added to the species summaries for the Peace River area.
3. The **Species Options Tool** allows users to define a seeding location, seeding objectives and any site factors that might be of concern. Based on the selections, the tool returns a list of species that meet the user-defined requirements, and could be considered in a seed mixture.

Location, location, location

Objectives and site are key considerations for seeding, but what ties it all together is location. One of the most exciting elements of the tool is the spatial queries within the species options discovery tool. If a custom seeding location is specified on the

map interface, the report gives back basic soil and topographical information for the site, and indicates whether it is in the Agricultural Land Reserve (ALR). And it will give you a printable short-list of species you should consider for your project.

4. Once selected from species options, species can be forwarded to a **Seed Mix Calculator** where amounts by weight and composition are reported. The calculator report also provides seed density in seeds/sq. foot based on the seeding rate that is input by the user. This feature allows fine tuning of seed mixtures, an important feature in site rehabilitation contexts. Seed price information can also be added for each species, which allows the calculator to return a total project cost based on the seeding rate and species mixture.

5. Finally, through **Seed Suppliers** the tool provides a link to seed company contacts and supply information so that recommendations can be based on knowledge of what seed is locally available.

The species summary and seeding information contained in ForSid was extracted from the Rangeland Seeding Manual for British Columbia, by Allen Dobb and Sandra Burton (which was published in 2013 by the Ministry of Agriculture). There are many funding contributors including the Peace River Agricultural Development Fund, Murphy Oil Corporation, Growing Forward 2, the Peace River Regional District, the Peace Region Forage Seed Association, and Enerplus. The programming and website design was provided by Charles Burnett and his team of Geomemes based in Victoria. This was a big project that began back in October 2013, and we are excited to see this first version of ForSid rolling out. Questions and comments on ForSid can be directed to Talon or Sandra at (250) 789 6885.

NPARA is based in Manning, AB and caters to agricultural sectors interested in cereals & oilseeds, forages and livestock. Below is an excerpt from the Fall 2012 issue of NPARA's newsletter. This article has relevance to the Healthy Forage Stands project that is working with a cooperator to reduce a heavy Canada Thistle infestation in a fescue pasture.

Also known as *Hadroplontus litura*, the **stem mining weevil** was introduced from Canada to Europe 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 tunneling 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.

Thistle Stem Mining Weevil

Compiled by Talon Johnson
from NPARA newsletter

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 favorable 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 favorable 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 favorable 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 above ground 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%).

In high density situations this method of control may be very successful but it may not be apparent for a long time until the weevil population builds up. There are other biological controls that have been developed for Canada thistle including:

- * Stem gall fly,
- * Defoliating beetle,

These controls have been selected to be specific to Canada thistle and to be able to withstand the harsh climate.

Photo: Stem weevil larvae



Carbon Offsets Update – Livestock

Compiled by Talon Johnson from SARDA newsletter

SARDA

Back Forty

Mission: To facilitate the transfer of unbiased ideas and information between research institutions, industry, and agricultural producers.

SARDA (Smokey Applied Research and Demonstration Association) is based out of Fahler, AB. This association caters to many agricultural commodities including cereals, oilseeds & pulses, forage, livestock and forage seed. Below is an excerpt from their February 2014 newsletter with information on improving livestock carbon production efficiency.

Information provided by Paul Jungnitsch, Carbon Offset Agrologist with Alberta Agriculture and Rural Development, 1 780 427 3801

Beef: Reduced Age at Harvest

Overview: Aimed at beef cattle, this protocol rewards shortening the birth to slaughter time which reduces methane and nitrous oxide production. Similar to the NERP protocol, the carbon yield is variable, depending on the improvement over a 3 year baseline. Feed savings should result from the earlier harvest dates, in addition to the income from the carbon payment. Also around for a few years, the amount of records and practical methods of getting and proving them has been the main difficulty.

Update: This protocol is a work in progress. A test project was started in 2013 to see what the issues are, looking at streamlining the process and making it operational. It has been getting a carbon harvest of around 2.3 tonnes/animal. While mostly being looked at by feedlots, incentives may come out of this for the cow-calf producer.

Beef: Reduced Days on Feed

Overview: This is also looking at a shorter feeding time for cattle, but only the time in the feedlot. Similar issues to Reduced Age at Harvest, but a much smaller window of opportunity.

Update: Another protocol being tested, with a project started in 2012 getting a carbon harvest of around .06 tonnes/head. It has been proposed the protocol be changed to animal head/days, greenhouse gases per kg of carcass weight.

Beef: Residual Feed Intake (RFI)

Overview: Cattle bred for more efficient feed use, reducing methane and nitrous oxide. Carbon yield is variable. Feed savings appear to be the main benefit so far.

Update: New this year, RFI has not been trialed yet. Work is needed on how to make it operational in the carbon system, especially measurements and proofs.

Greenhouse gas production is a hot agricultural topic and there are many programs and research projects that cater to the reduction of these noxious gases. More and more opportunities for producers to gain money from carbon offsets are surfacing. The BC Agriculture Climate Action Initiative has developed a Climate Change Action Plan which can be viewed at www.bcagclimateaction.ca/wp/wp-content/media/BC-Agriculture-Climate-Change-Action-Plan.pdf



Year Old Hay?

By Barry Yaremicio, AB Agriculture Beef and Forage Specialist

If you are buying year old hay, how do you come up with a fair price?

1. Weigh the bales. Do not use average weights from last fall.
2. Take a representative sample and test the feed. Does the quality meet your needs?
3. Price should reflect the 10% reduction in digestibility for hay that was stored outdoors. If the cows cannot digest the hay efficiently, more nutrients end up in the manure.
4. Compare the price of year old hay to green feed or straw. Pay according to quality not forage type.

Tools For Success in Re-vegetating & Re-seeding Forages

by Bill McGill & Sandra Burton



Sandra Burton led a discussion of how we can use 3 tools for success, air photos, soils maps & CLI maps and what we can learn from each.

Each station leader introduced their topic or approach to the problem or question of the day. It was quite entertaining when they then told us about what soil, plant or seed they had always dreamed of being.

We focussed on **3 soils stations** in the morning, with a half an hour at each place, to find out about each approach for more successful revegetating and reseeded. Discussions at Sandra Burton's station must have stimulated some take home messages, as the box of soils maps she brought was empty at the end of the day.



Maja Krzic introduced us to the UBC soils website & on line courses.

Maja Krzic's online soils courses were recognized by several people as a resource for further study and future professional development.

Amidst the laughter at Bill McGill's station, the take home messages were "wow! I never realized how complex things are below ground." and "There is certainly more to worry about than just the top 6 inches."

Richard Kabzems kept our tradition of telling us landscape stories at lunch. However, Chris Thomson vetoed this from happening outdoors on a windy cold ridge top at this time of year.



Everyone had fun learning from Bill McGill about microbes & their habitats.

Tools For Success (continued)

by Bill McGill & Sandra Burton

In the afternoon we focussed on **3 plant stations**.

After the discussions and demos with Charles Burnett and Allen Dobb, the participants were very excited about the database and the upcoming opportunity to access and interact with the forage seeding interactive database or ForSID.

Morgan Webb shared his passion for seed quality and using the analysis as a tool for more successful seeding projects. We heard comments that reflected an increased knowledge about the importance of certified verses common seed for many situations.



Morgan Webb showed us the importance of seed quality & analysis as a tool for success.

Feedback We Have Received:

- ♦ More effort and coordination with resource people is needed in an interactive, hands-on format rather than a lecture format.
- ♦ Participants were very complimentary about what is learned during this style of field day.
- ♦ Participants commented on how much more effective the integrated take home messages are.
- ♦ Our most rewarding feedback is people keep asking when the next session of this course is.
- ♦ Where pre-registration is not common, we have people committing ahead of time for all 5 days.



Charles Burnett & Allen Dobb demonstrated the use of the new forage seeding web tool.

Elston Solberg and Julie Robinson stirred up interest in digging up roots, and learning more about pH and nutrient relationships. Several farmers wanted to explore the use of Mo or molybdenum as a “poor man’s lime”.

Bill Wilson and Bill McGill led us in a fun and lively discussion to integrate all the tidbits learned throughout the day (and this course to date) into take home messages. Amongst the joking, there was a lot of positive feedback and great suggestions for future sessions. The best part was people were appreciating the amazing brain power that the group would have in the room for solving the challenges out in the field.



Elston Solberg & Julie Robinson shared stories from what the plants are telling us.

“The thing that impressed me was so many different groups of people all working together: farmers, academics, consultants, gas and oil people; everybody was trying to work positively together on common problems.” *One Participant*

Photo Credits:

Allen Dobb & Bill McGill

Thank you to our partners:

UNBC, Shell Canada, Encana
Peace River Agriculture Development Fund
Investment Agriculture Foundation/AAFC

Thank you to our enthused station masters:

Maja Krzic, Morgan Webb, Allen Dobb, Charles Burnett, Elston Solberg, Julie Robinson, Bill McGill, Sandra Burton

Thank you to our knowledgeable mentors:

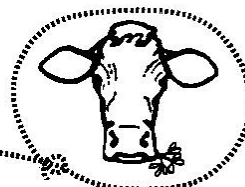
Bill Wilson, Richard Kabzems, Darryl Kroeker, Talon Johnson, Rick Kantz, Jim Chramosta

Upcoming Soils & Forage Fun Days

UNBC

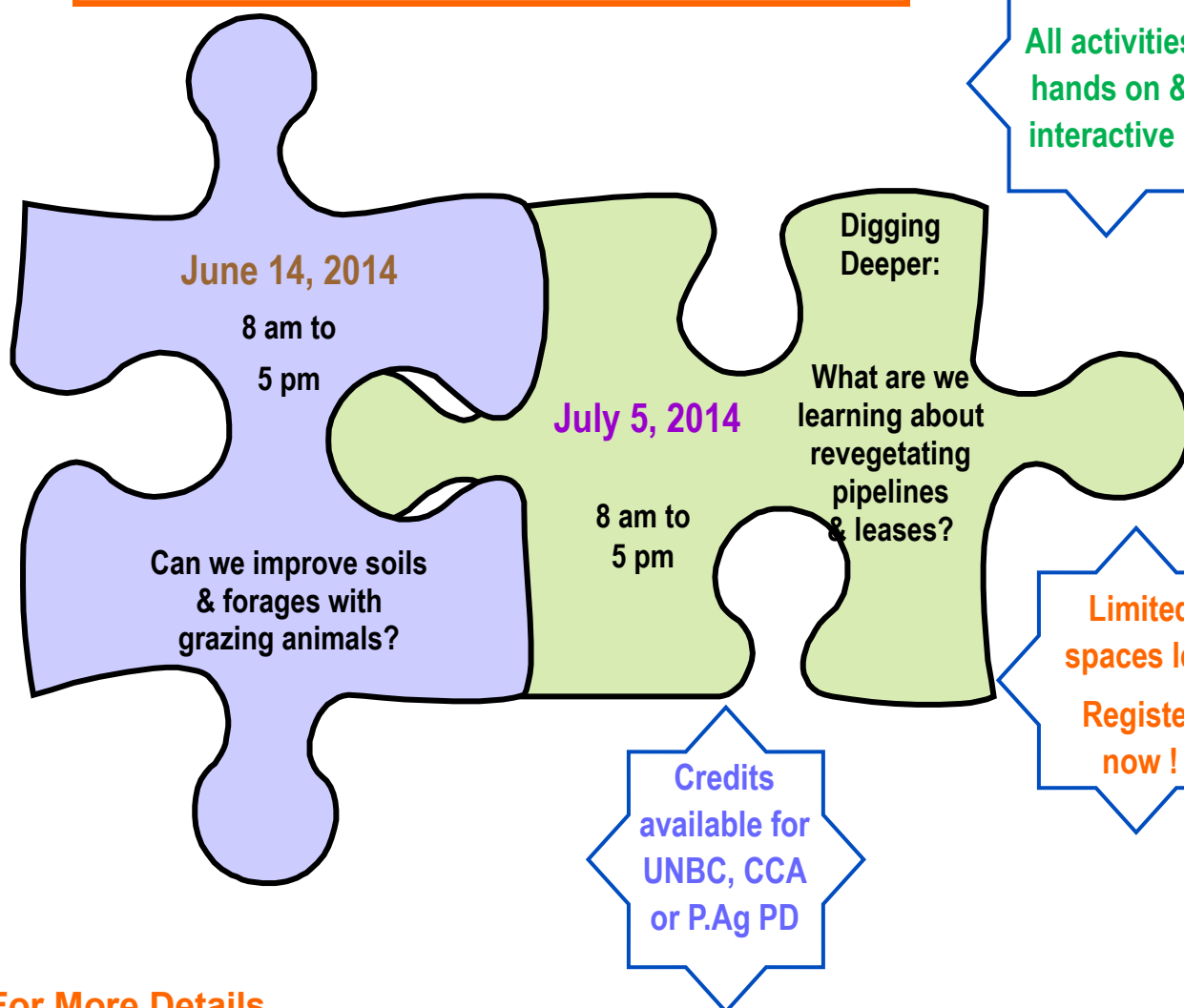
In partnership with

Peace River Forage Association
of British Columbia



Interactive Soils & Forages Course

Involving Real People with Real Issues



**For More Details
or To Register
in the Peace:**

Sandra Burton at
250 789 6885
sburton@xplornet.com

***Thank you to
Shell Canada ,
Encana
& PRAD
for their contributions***

Registration Costs:
\$50 / day non members
\$40 / day for members

More Upcoming Forage Events

Peace River Forage Association invites you to join them on their

Solstice Western Canada Tour June 20 to 27, 2014

WORLD CONGRESS6 on CONSERVATION AGRICULTURE

Winnipeg, MB / June 22-25, 2014



GROW MORE, MORE EFFICIENTLY



WEATHERPROOF YOUR CROP



SHARE WHAT YOU KNOW

“Going To Winnipeg ...” With Friendly Forage Folks

Hop in a van with us as we make our way to attend the 6th World Congress on Conservation Agriculture!

Including 3 days of fun filled travel & stops in AB at
♦ Native grasses, Vegreville
♦ Research Ranch, Kinsella

& stops in SK at
♦ Manure digester at PAMI /
Western Beef Research
Center, Lannigan

& stops in MB at
♦ Carl Beasley cattle ranch
near Boggy Creek
♦ Grass seed growing area
in Arborg

♦ & much more ...
based on requests
by who is joining us

World Congress on Conservation Agriculture

WHO

700 Farmers
Researchers,
Government,
NGOs
& Industry

More than **60**
countries
attended the previous
world congresses

6 continents

WHAT

GLOBAL
conference on
conservation and
sustainability that
emphasizes the
practical application
of information and
research presented

FIRST time in
North America

For complete 3 day
congress agenda go to:
www.ctic.org/wcca

We will stay at the Humphrey
Inn & Suites or Fairmount
Hotel, downtown & close to
the congress center

Back to the Peace With Friendly Forage Folks

2 more days of fun filled
travel back including stops:
♦ Ducks Unlimited office
overlooking Oak Hammock
Marsh, Stonewall
♦ Prairie Originals, Selkirk

♦ & much more

Cost: Up to \$1750
For full 8 day trip
Includes vehicle rental, fuel,
accommodation, most meals
& congress registration
Based on double occupancy
in hotels & motels

Contact Sandra / Talon
@ 250 789 6885