

# FORAGE FIRST

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## The Wilder Side of Forage



*by Sandra Burton*

Darrell Smith, Harlam Bradford and Mike Malmberg have much to share with northern producers about their challenges and successes with wildlife fencing in the Cranbrook area. Let Talon Johnson lead you through the "wilder side of forage" on December 1st. See the back page for more details.

This summer season has been rich with travel and sharing information with other regions and provinces. There seems to be considerable interest in our 3D fence demos, wildlife mitigation and revegetation projects. To share what we have been learning in this issue, I am thrilled to bring you articles by enthusiastic and youthful authors from within our midst. Enjoy and encourage this new energy.

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## Who is Carmen?

by Talon Johnson

You will see several articles in this edition of the Forage First by Carmen Schneider. Carmen is the PRFA's new summer student hired to work on a number of projects. Her main focus has been on the Re-vegetation of Disturbed Lands by Oil and Gas Activity project. However, she

has been very flexible and has contributed to the wildlife mitigation project, forage events, forage seed harvest and more.

Carmen just completed her second year at the U of A Augustana Campus in Camrose, AB. She is working towards a Bachelor in Science, majoring in Biology. Carmen enjoys working outdoors and, since she comes from a farming background, she is interested in agricultural issues and research pertaining to agriculture and producers.

We would like to thank Carmen for contributing articles and sharing what has been keeping her busy this summer. (See the articles in this issue: 2012 Forage and Livestock Tour, Wildlife Mitigation Smithers Trip and Re-Vegetation of Disturbed Lands written by Carmen.)

## THE WESTERN PRODUCER

Stories / News / Wildlife / Wildlife / Pilot project tests fencing options

### Pilot project tests fencing options

Swath grazing | Producer uses new fencing technique to keep wildlife out

Posted Jul 13th, 2012 by Mary MacArthur  
No Comments



The addition of a second fence creates the illusion of three dimensions, keeping wildlife out of the feed. Bill Wilson, of Bonanza, Alberta, has been able to return to swath grazing his cattle during the winter. | Mary MacArthur photo

BONANZA, Alberta — With a herd of 75 wild elk and a smattering of deer and moose wandering through the bush north of his farm, Bill Wilson thought his days of swath grazing and bale grazing were over. However, a new fencing technique has allowed Wilson to once again inexpensively graze his cattle without wildlife eating most of the winter feed. “Now it’s an option for me to do,” said Wilson, who farms east of Bonanza in Alberta’s Peace River region.

There isn’t just one three dimensional fence design, said Talon Johnson with the Peace River Forage Association of British Columbia. “Every producer has tried something different,” she said.

A pilot project has helped producers try a variety of fencing techniques to create three-dimensional fences to keep wildlife away from bale yards, grain bags, winter feeding, and for Wilson, entire quarter sections. Three-dimensional fencing is a second fence, often electric, beside an existing fence. The second fence makes the wildlife stop and think before leaping over, under or through it. It creates height, depth and width and produces a three dimensional effect. The

eyes on the sides of elk, deer and moose heads give them poor depth perception and make them more reluctant to leap over objects. Wilson has two three dimensional fence designs. He added a three-wire electric fence about one metre inside an existing barbed wire perimeter fence. The top wire is 54 inches above the ground. When building a new perimeter fence, Wilson built a two-wire electric fence and then added a three wire electric fence about a metre inside the perimeter to create the three-dimensional effect.

Wilson doesn’t know if the fence would be a deterrent for elk running from hunters, but the combination of electric and three dimensional fencing has stopped grazing wildlife from going inside the pasture. “It does seem to work.” Last winter, Wilson was able to graze swathed perennial forage without continually chasing away wildlife. (Article by Mary MacArthur in the July 13, 2012 edition of The Western Producer)



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Find us by typing in: Peace River Forage Association of BC. “Like” our page and we will keep you up-to-date on upcoming events, project statuses, news from other forage associations/groups and any other relevant news impacting forage and livestock producers.



# Wildlife Projects Road Show

by Talon Johnson & Carmen Schneider



This trip began many weeks before the actual departure date. It started when the PRFA of BC participated in the **BC Cattlemen Association's Tradeshaw** in Fort St John from May 31<sup>st</sup> – June 2<sup>nd</sup>. To prepare for such an event we built a 3D fence demo (thank you Ted Kabzems) and loaded every Forage Fact and Forage First we thought we could hand out! We set up our demo and display Thursday evening at the tradeshow and set out to promote our association and its research. We received a lot of questions and positive comments about the 3D fence demo and eventually a wonderful gentleman named **Harold Kerr** came to visit us. Harold thought our 3D fence would be a wonderful mitigation tool for their developing elk issues in the Smithers area. He took every Forage Fact about the 3D project and our contact information, promising we would hear from him soon.

Not even two weeks later we received a call from **Matt Taylor of the Bulkley River Cattlemen Association** in Smithers. He asked us to come give a presentation on the 3D fence and other mitigation strategies. He had been in contact with Harold Kerr who suggested we come share our knowledge and experience. Now if you're going to drive clear to Smithers to share information, wouldn't it be great if you could tie it in with producers along the way and learn how they are dealing with their wildlife damage? We thought so too! Therefore we set up interviews with five producers in the Prince George, Fort Fraser and Vanderhoof areas. We hit the road for Prince George late in the afternoon on Thursday July 5<sup>th</sup>.

Friday we got up bright and early to make it out to the **Bar K Ranch** for their daily morning meeting. We got to sit in with the manager, **Mark Grafton**, and his farm hands, who all participated in our interview. One of the things that we found very interesting is how little ungulate damage they have experienced. Moose are not numerous enough to do significant damage and they had recently seen the first elk in the area. Their main damage comes from mainly coyotes and wolves, but occasionally also bears. Trapping and snaring seem to be the most effective mitigation strategies for them. One of the ranch hands is completing a trapping course so they can do it on their own. They were also able to take a verification course through the B.C. Cattlemen's Association so they can verify their own kills.

Another problem that was new to us was their significant loss of oats fields to both grizzly and black bears. He has seen up to 20 bears at one time in one of his fields, so most producers in the area have moved away from seeding oats. Mark is very positive about the recent relationships that have been developed with local Conservation Officers concerning predator issues and their efforts to help reduce future losses.

We were able to have a brief phone conversation with sheep producer **Tom Griffith** rather than meet with



him. He also faces a lot of predator problems and has started using fencing techniques to keep predators out after his guard dogs got too old. He has found that electric fence works well and has had some success with keeping coyotes and wolves out.

After a short break spent in the beautiful weather in Prince George, we went on to visit **Jim and Roma Tingle** who have sheep as well as cattle and some horses. Their biggest wildlife problems arise from coyotes. One of their most successful mitigation strategies was improving fences. They have built much stronger fences with thicker wire and have also added 1-2 wires on the top. They also put a pen right in front of the house where they bring the sheep in at night. They also added lights and play CBC on the radio to deter predators.

One thing that was quite unexpected to us is that they face a lot of damage to alfalfa and clover fields from geese. This wrapped up our visits for the day and allowed for a little more time to enjoy the sunny day.

# Wildlife Road Show cont'd

The **Bulkey River Cattlemen Field Day** started at 10am Saturday morning. We arrived fully prepared with the 3D fence demo we had at the tradeshow in June and forage fact packages. We were exceptionally happy with the turn out as almost 50 people attended the field day. We stirred up lots of interest in the fence and facilitated many great discussions. We also discussed other mitigation strategies producers in the Peace are using to minimize moose, elk and deer problems. These include building wildlife fenced stackyards, using scare tactics or changing their feeding management. Unfortunately there are not enough elk in the Smithers area to constitute a hunting season so this is not an option yet.



We stayed for lunch with the group and learned more about their wildlife dynamics. After a filling BBQ lunch we checked out the haying equipment dealers that were there. We then packed up to leave as the group was heading on to watch and participate in demos of the equipment in a neighboring field.

Sunday was our day off and we enjoyed it by sleeping in, at least as much as we could with the sun shining into our tent. We started our day by packing our tent up and taking a short drive out west of **Smithers** to see Twin Falls. We took the quick hike up to a platform that provided us with a great view of the two falls. This apparently wasn't challenging enough for us, so we also tackled the hike up to the Glacier that feeds these falls. This hike was considerably more demanding than either of us expected but it was well worth the effort. We got to see some great sights and the glacier was very impressive. Four hours later and slightly more exhausted we made it back to the bottom. After a little break in Smithers we departed this beautiful town and headed back the way we came. We decided to spend the night near Burns Lake where we found a lovely campground on the shores of Kager Lake.

We headed out to **Wayne Ray's** operation near Fort

Fraser early Monday morning to learn about his wildlife damage and mitigation strategies. Besides dealing with chronic predator issues, Wayne has had increasing elk pressure over the last 10 years. We toured through many of his alfalfa forage fields to see areas where the alfalfa had been heavily grazed. The longevity and stand of his alfalfa has been severely affected. However, he is unable to afford the costs of reseeding more frequently to maintain his alfalfa stands. Hunting has been very unsuccessful on his operation as he has had poor luck finding respectful hunters. This caused as much or more damage and work to his operation than the actual wildlife.

After finishing looking at several of Wayne's fields we headed to **Daniel Weaver's** place near Vanderhoof. Ten years ago Daniel built a 10 strand barbed-wire fence near his cattle handling system. This fence has worked extremely well for keeping wolves and coyotes out while he is calving. He has wooden stays in between his posts to keep the strands tight together. Dan has not experienced any elk damages even though he is only about 50km from Wayne Ray's operation. He has some moose and deer damage but nothing extensive.

Our last stop of the day was in **Larry Garrett's** field where he was swathing silage. He kindly stopped to talk with us for a couple hours about the moose damage he encounters. Due to the forestry practices in his area there is very little aspen left which is a main food source for the moose in their natural habitats. This has pushed them onto Larry's land as he has many acres of forested property with aspen. He has been compelled to spray large aspen stands with roundup by plane to destroy them and force the moose to find food somewhere else.

Overall this trip involved lots of interprovincial information sharing between regions and allowed for great discussions about mitigation strategies!



The Wildlife Mitigation Project has matching funding from Agriculture Environment & Wildlife Fund through Investment Agriculture Foundation of BC & ARDCORP.



# Forage & Livestock Tour

*by Carmen Schneider*

## Day 1, Friday, June 8:

Once again, the Peace River Forage Association (PRFA) combined with the North Peace Applied Research Association (NPARA) to explore fascinating forage practices for anything from cattle and horses to sheep and goats. At what seemed like the crack of dawn, the PRFA group met up in Dawson Creek to make our way towards Rycroft, AB. After a fun bus ride, we arrived at **Christoph and Erika Weder's ranch** at around 10:30 am.

We started with a general discussion of their family business in the yard. Here we learned that they run 400 Angus cows on their ranch, as well as another 150 head of Highlands/Longhorns on land they have in Gordondale, AB. They have developed their genetics from a New Zealand Angus line, in order to make their herd more efficient on a completely forage based diet. This allows for cheaper winter feeding, which consists of bale grazing and stock piling. Since they have not yet faced the elk problems many of us have had to deal with, they can put out their whole winter's feed by driving through the field with the bale trailer pushing them off as they go. This covers a larger area and thus later allows the cow's natural fertilizing to spread across more pasture.

The Weders' finished beef program is largely focused on the European market, since many in the Canadian market are not willing to pay for high quality meat. So far, they are the only exporter of Canadian beef to Europe and therefore get their slaughtering done in Lacombe, whose facilities are European approved. Fresh, not frozen meat is then shipped by boat (or air for the highest quality line) to their distributors.

After much interest was shown in their beef program, we headed out to pasture to look at the forage their animals are fed on. The whole group was in vast amazement (as well as jealousy) of how nice their pastures look and how much farther the grass was compared to the very slow spring we were having. In some cases they improve pasture by broadcasting and harrowing legumes into an existing stand of grass. Their cattle are grazed on intensive rotational grazing cycles. This allows the cows to take the tops off the plants, leaving them in a continuous vegetative state. The shift from hay to grass is done by stockpiling, which allows the rumen to slowly transition.

We were then provided with a delicious lunch in their beautiful backyard. With many unique practices to think about, we once again boarded the bus.

This time the bus took us to Fairview, where we had the chance to take a look at the **Peace Country Beef & Forage Association's forage plots**. They had trials



with 15 varieties of grasses as well as 15 varieties of legumes. They are exploring winter survival, growth yield, and forage quality of the plants. They are testing three different timings of cutting: in June only, in August only, and in both June and August.

After viewing the plots, the bus took us to Grimshaw, AB. Here we met up with **Michael Scott** to look at his grazing management of the different kinds of livestock he runs. His main goal is to improve his land and to make it more sustainable, rather than getting everything possible out of it. We started by looking at his cow pasture. This pasture had seen some overgrazing in recent years, due to extreme drought. This caused him to rest it the previous growing year. However, there was still a significant loss of legumes in the grass mixture and Michael has now tried several methods of reseeding alfalfa. One method was by broadcasting with a quad and the other was by direct seeding with a zero-till drill.

He has also been trying different methods of grazing. One of these included two paddocks of 20 acres each. Paddock #1 was split up into 3, one third given each day. Paddock # 2 was given all 20 ac at once for three days. He found considerably less residue of old grass in paddock # 2. He also made an attempt to mob graze (requiring very small pieces, and moving the cows every few hours). He has not tried this enough to see the results but has found it to be much too labour intensive.

After a break for supper in Grimshaw, we headed back out to the Scott's farm to take a look at his sheep and goats. One of the biggest problems he has encountered with this livestock is the fencing that is required for it. He would like to use the goats to clear some overgrown brush from logging, but is afraid that they will find a way out despite rigorous fencing. He now has them in a small pasture connected to the yard corrals, where they are free to go in and out. This fence has four wires, three of which are hot. It will be interesting to see the results of the Scotts' good ideas and practices. This great visit wrapped up the day for us, only leaving the trip to our hotel in Manning.

# Forage Tour cont'd



## Day 2, Saturday, June 9:

Once everyone made it onto the bus, we proceeded to the NPRA research farm, to pick up the lovely group that was going to join us for the rest of our adventure. After a very dusty drive, we arrived at our first stop, the **Twin Rivers Hutterite Colony**. Jack, our great host and guide, explained a new watering system that is being put in. They have built a large dugout that collects drainage water. They will then have a pipeline system that leads out into the centre of a quarter so he can split it up for rotational grazing and always have access to the trough. For branding calves, they use ropers and then wrestle them and it takes the crew 2.5 hours to do 400 calves. This requires 3 ropers, 5 pairs of wrestlers, and many more ground workers.

On our way to the main farm yard we stopped to view their version of a Texas gate. It is an incredibly innovative self-created design made of an old piece of canvas that is laid across the road. There is a 2x4 attached to either end, on which insulators were screwed. Four wires were strung from one end to the other, through the insulators, and all connected to a gate handle which was connected to the electric fence on either end. There were also tennis balls strung onto the wire. The purpose of them was to draw attention, causing the cows to sniff them and get zapped. Also, if they want to move livestock through it, the handles can simply unhook and the whole thing can get rolled up. It was currently being used for horses, but Jack assured that it can be used for any livestock.

Jack then showed us some of his pasture which he seeds in a mostly brome mix first to let it establish. He then seeds in alfalfa. This way he can control any weeds before he adds alfalfa in. As we were driving in towards the farm yard, our bus broke down for a short period. This allowed for some coffee and BS time.

Once we made it into the yard, we looked at the metal and wood shops, which both had state of the art equipment. We also toured the feedlot.

The whole feedlot was at a slight angle to catch any drainage coming off it. They also have a fully hydraulic

squeeze that is closed in for bad weather conditions. Any calf being brought in has a tag that gets scanned, which provides its full history on the computer. The history starts the day they are born and includes all vaccinations and treatments they have received. They have an ultra-sound machine for preg-checking and they blood test the cows they are not certain about.

After a hearty lunch here, we proceeded on to look at some of **Nora and Bob's property**. Unfortunately we could not get to the year around solar watering system with the bus, but Nora provided us with some pictures and told us a little bit about it. It was installed in the fall and worked very well throughout the winter. They had no problems with it being too cold or with the sun not providing enough energy. We also stopped at a smooth brome field, which they sell as seed.

Next we went on to the **Murdoch Lake Agroforestry Project**, where forestry is combined with forage. This project covers 60 acres of land controlled by Ducks Unlimited; and is surrounded by an eight foot ungulate fence. In 2004 the forage crop was seeded and the trees, set apart 2.5m, were planted. They had three basic treatments, forage crop only, trees only, and forage + trees. Some of the trees had plastic mulch applied. Tree performance was measured biannually by DBH (diameter at breast height) and tree height.

Where applied, the forage crop productivity was measured each year. They found that the survival rate of trees with mulch was three times greater than the ones without mulch. NPRA waited 5 years to start rotationally grazing (i.e. 2009) to give the trees a chance to grow first. We noticed only minimal damage and most of the trees looked very healthy. One thing that accounts partially for these results is the fence that is in place. It protects the trees from wildlife damage, which is a common problem with tree growing. They found that the combination of trees and forage is very beneficial for cattle due to it providing shade.

We then made our way to the **NPRA research farm**. Here we looked at different kinds of tree and shrub options for a shelter belt. After everyone had the chance to grab some refreshments, we all jumped onto a flat deck trailer, which took us around to view the research plots at the farm. They had everything from trials with the Agropow, to different legumes, to many varieties of annual crops, and even trials with peas.

The amazing two day tour closed with a delicious dinner. A big thank you goes out to Douglas Lake Equipment, who came all the way from Dawson Creek to cook steaks for us. The Forage Association would also like to thank our partners and sponsors for making this tour possible including NPRA, PRAD and the County of Northern Lights.



# Don't Be Afraid To Back Up

by Pat Sutherland and Patt Kendrew



**Dylan Biggs** offers knowledge and experience on low stress cattle handling to livestock producers. He changed his attitude toward, and handling of, livestock after Bud Williams visited his ranch for 3 days in 1990.

Bud Williams was his inspiration and he has built on that foundation of calm controlled movement of cattle.

We were fortunate to learn from his expertise on the weekend of June 23rd and 24th at **Fred and Liz Schneider's** place outside Pouce Coupe. We were also very lucky to have Dylan's wife, Colleen, join us and share the real stories about working cattle in the Biggs family before Dylan took on this new approach. About 30 people showed up at 9:00am Saturday morning.

The day started with some instruction from Dylan on what we were going to learn and practice. He talked about getting the cow/calf herd paired up before you moved them, then getting them started by moving back and forth behind them perpendicular to the line of travel. Once you started driving them from the side, you needed to be aware of their comfort zone.

To move the cattle faster, aim for the rib area perpendicular to the animal and when it moves turn and walk against the flow. If you walk with the flow the herd will stop, then you have to start over.

When you want to stop an animal, loop around to the front and backup until it stops. "Don't be afraid to back up" was a message Dylan stressed. To turn an animal, stop it, then walk perpendicular toward its eye to get it turning away from you. Dylan showed video clips of these skills including loading bulls into a stock trailer in the middle of the pasture.

Once we had a general idea of what we were to do we moved to the pasture and were introduced to

Schneider's lovely quiet herd of black Angus cattle.

Dylan had us set up panels to mimic a gateway or bridge. He then demonstrated moving the cattle through the panels. He had a sound system so he could explain what he was doing. The lucky twelve who had paid for a hands-on experience got a turn moving the cattle too. It's not as easy as the notes indicate as different animals have different responses to pressure and you have to keep an eye on all the animals so you can be ready to adjust when their ears tell you to. By the end of the afternoon the handlers were moving the cattle around the tractor parked in the pasture, past the observers and through the panels. Pretty impressive!

We had sandwiches, veggies and desserts for lunch provided by the Forage Association. For supper Liz put on a spread of salads & buns with roast beef supplied by the local meat cutter: Richard "the Butcher". Except for the deluge of rain midway through the afternoon it was a great day.

We returned on Sunday at 9am in rubber boots and followed the same format as Saturday but we learned about moving a selected pair out of the herd. This time we built a pen in the middle of the pasture and Dylan demonstrated cutting out a cow/calf pair and herding them into the pen. The calf kept cutting back but Dylan persevered and the pair walked into the pen calmly.

For the practice session the cattle were moved into the corrals due to the time factor. After lunch we did a sorting session from one corral to another. You put pressure on until the animal faces you then step toward the hip until one animal steps forward, then back until it stops then forward to let it go. This would be handy for separating calves from cows, steers from heifers, replacement heifers from the herd or to just slow them down enough to get ear tag numbers.

It was a very educational weekend. Thank-you to the Forage Association, Dylan Biggs, the Schneiders, Champion Feeds & North Peace Vet Clinic.





# Soils Students Storm the Peace

by Sandra Burton & Richard Kabzems

It all started with an email from **Shannon Berch** (some of you will remember this enthused microbiologist from our compost project days) "Would you two like to help us with the Soils Course this summer? We would like to host it in the Peace." Shannon's enthusiasm is infectious, of course we committed.

This course is organized each year in a different region of the province by the Pacific Region Soil Science Society. It is an upper level accredited university course, and attracted students from Simon Fraser, UBC, UNBC and Thompson Rivers universities.

The course ran from July 10th to 12th. Students travelled on their own to our region and most of them camped at the Kiskatinaw River campground. Their travel and camping adventures provided great entertainment during lunch breaks.



The objective of the course was to provide a very hands on experience to learn about soils, describing and characterizing them. We also wanted to help the students understand the processes that had produced each soil. Each soil has its own story to tell. We wanted to get the students comfortable integrating soil characteristics with the climate, landscape, vegetation and land use management that it developed under. To achieve this in 3 days, the mentor to student ratio was high with 7 mentors to 24 students.

We kicked off the first morning with an introductory slideshow in **Albert's Barn Loft at Emilie and Larry Mattson's farm**. Once everyone was thoroughly muddy from learning how to soil texture, it was time for picnic lunches amongst the trees and flower gardens near Emilie's studio.

We looked at a wide variety of soil types and landscapes including a native prairie site near Rolla, a forage hay field in North Rolla, a site under aspen forest near the Kiskatinaw River and finally some poorly drained and organic forested soils on Bear Mountain. We divided into 4 groups to intensify the experience and inspire confidence.

These students were a very energetic and keen group and we had

trouble getting them out of their soil pits at the end of each day.

We hosted a BarBQ at our place and this was an opportunity for Bill Wilson to discuss the Re-vegetation Project with resource people like **Chuck Bulmer**.

Talon also charmed the group into including her for the last day of deciphering soil stories amidst high energy, keen integrative discussions and lots of laughter.





# Re-vegetating Disturbed Sites Project

by Carmen Schneider & Bill Wilson

## Objective:

To determine what forages establish, grow, and persist in the conditions the oil and gas industry is faced with in the Peace Region. This will be explored for berms with both subsoil and topsoil, pipelines, and roadways. The goal is to share these results amongst producers, oil and gas industry, and government agencies through field days, our website and facts sheets.

The ultimate aim is to communicate our results and work with seed companies, forage seed growers, the government, and the oil and gas industry adopting and utilizing appropriate species for site conditions. The initial goal is to keep the oil and gas industry talking about the re-vegetation practices.

## What we have done:

- ◇ On January 23, 2012, the project was approved.
- ◇ In late March, 2012, a steering committee was put together by the Peace River Forage Association (PRFA) to assist with the project. The committee included members of the PRFA, Ducks Unlimited, Peace Region Forage Seed Association, BC Oil and Gas Commission, EnCana, Shell Oil, BC Ministry of Agriculture and BC Ministry of Forest Lands and Natural Resources. The first task of the committee was to determine what species of grasses and legumes we wanted to work with. A combination of the suggestions by the committee as well as the Project Coordinators was used. This included 9 species for plots, and 7 species for demos. We also used 3 commonly used mixes from Ducks Unlimited, EnCana, and Forestry on some demos.
- ◇ At the end of April, 2012 EnCana provided us with two leases (13-18-79-17 and 12-15-77-15) as well as one roadway (into 12-15-77-15). This was closely followed by us staking out the leases and roadways.
- ◇ On May 28, 2012. we seeded the 13-18-79-17 site, followed by 12-15-77-15 on May 29 & May 31.
- ◇ On June 7, 2012 we partnered with the Forestry and Ducks Unlimited to do a plant ID clinic.
- ◇ On June 11, 2012 the first emerging plants were detected.
- ◇ On June 27, 2012 we presented our project at a tour hosted by EnCana.
- ◇ On July 25, 2012 we hosted a tour to provide opportunity to view two of our sites
- ◇ Throughout July and August we have been doing counts on emerging plants.



*Steep slopes and debris filled soil are just two of the challenges in seeding disturbed sites.*

## Issues we have encountered:

Seeding turned out to be more challenging than initially anticipated and certain things had to be adjusted as we went. The goal was to put on 80 seeds per square foot. With this in mind we calibrated the hand seeders accordingly. However, we soon determined that it was going to be impossible to put on exactly that amount of seed due to several factors:

- ◇ Each kind of seed was different and flow through the seeder was variable. Some seeds bridged much more than others.
- ◇ The amount of seed in the seeder affected the flow of seed. Usually as it got low, the seed flow got much better.
- ◇ The movement and bumping of the seeder changed flow as well. The more movement there was, the faster the flow got.
- ◇ The terrain of the berms made a steady rate of walking very hard. Going the same pace up the berm and down the berm, as well as climbing over debris was very difficult.
- ◇ The cranking of the handle was also very hard to keep at a steady rate as one is climbing up and down berms.
- ◇ The seeder itself didn't have a wide enough range of opening sizes. We had everything from as small as possible to as large as possible and it still wasn't enough.

# Re-vegetating Disturbed Sites Project cont'd



## Issues cont'd:

- ◇ The spreader wheel also didn't distribute the seed at a steady rate.
- ◇ Wind also had a great effect on the distribution of seed and it was very hard to adjust to.

We faced these challenges by weighing the seed before and after application. This way we knew how much we applied, even if it was done with some variability.

Another major problem was the seed bed quality. There was a lot of debris of roots and wood all over the berms. Any seed landing on it has no potential of growing. Some berms were very hard and firm, making it difficult for plants to establish a root system. We also seeded into compacted, clay subsoils.

We also had difficulties with specific species. The seeding of both Fowl Bluegrass and Meadow Brome grass were very challenging. Due to Fowl Bluegrass being a very light seed it was very prone to bridging and would not flow out of the seeder at a steady rate. Flow was highly dependent on how much seed was in the seeder at a given time. Meadow Brome grass is a very large seed and has awns attached to it. This also caused bridging and resulted in us having to do several passes over the berm in order to get enough seed on the plots. Fringe Brome grass proved very difficult to establish due to it being coated. We made some greenhouse seeding trials ahead of time for comparison and out of 48 seeds planted, only one germinated and grew.

While doing emerging plant counts we encountered more challenges. We discovered that it is difficult to distinguish different species of grasses when they are just emerging and are very small. One thing that helped overcome this issue was the help of plants we seeded previously in a greenhouse setting. These plants provided us with a good example of what it is that we are looking for in the field. We seeded some at a later time so that they were similar in size and maturity as the ones in the field.

## Future Goals:

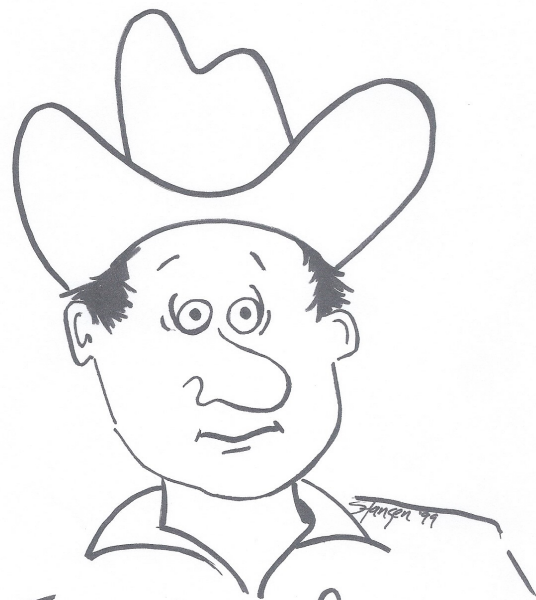
We have been provided with two more leases in the

Tomslake area that will be used for fall seeding. This fall we will also be able to seed the road and pipeline going into 13-18-79-17. Some things we would like to try are different forms of seed applications, such as using a packer or harrows for a better seed bed. Some interest also lies in the use of spraying herbicides/pesticides as well as the use of fertilizer. We would also like to do some trials with hydro-seeding or otherwise easier methods in place of hand seeding. The main goal of next year will be to use the information we acquire this year and put together mixes of seed that we think will work best.

## Thank You Partners & Funders:

Partners committed to the success of this project include Peace River Forage Association of BC, Peace Region Forage Seed Association and EnCana.

Matching funding has been provided by Agriculture and Agri-Food Canada through the Canadian Agricultural Adaptation Program (CAAP), which in British Columbia, is delivered by the Investment Agriculture Foundation of BC. Others committed to and supporting this project include Ducks Unlimited, Ministry of Forests and Natural Resources, Ministry of Agriculture and the Oil and Gas commission.



*It must be fall —*

*This is my 5<sup>th</sup> meeting  
this week!*





## Grass Roots of Grazing Nov. 27 - 29, 2012

Sheraton Hotels & Resorts,  
Red Deer, AB

### Optional Field Tour on Nov. 27

Lacombe Research Station & Swath Grazing Trials

### Keynote Speakers:

Neil Dennis - **Managing Chaos to Improve Soil Health**

Charley Orchard - **What Really Counts for Grazing Managers**

Glen Rabenberg - **Improving Crop Quality for All**

Christine Jones - **Fundamentals of Soil**

**Banquet Speaker:** David Irvine

**Working With the Ones You Love: The Human Side of Agriculture**

for more info contact:

West Central Forage Association at 780 727 4447

or westcentralforage@gmail.com



## Thank You to Our Event Sponsors

by Chris Thomson

**The Peace River Forage Association of BC would like to thank its sponsors of the 2012 Livestock and Forage Tour.**

Peace River Agriculture Development Fund (PRAD)



The **Dylan Biggs Livestock Handling Clinic** was a **successful, well attended event!** Peace River Forage Association of BC would like to thank the following sponsors for their support



# AGM & The Wilder Side of Forage!

When: December 1st, 2012

1:30 pm - Registration ( & get paid up for 2013 membership year!)  
2:00 pm - Wildlife speaker #1  
3:00 pm - Info stations, resource people and refreshments  
4:00 pm - Wildlife speaker #2  
5:00 pm - Info stations, resource people and refreshments  
6:00 pm - Supper  
7:00 pm - AGM starts

Where: Taylor Community Church

Mark your calendars! December 1st, 2012 has been hijacked by the Wildlife Mitigation Project and will display a showcase mitigation strategies and resources available to producers!

\* Discover valuable resources for mitigating wildlife damage.

\* Visit stations that showcase wildlife fencing, ungulate mitigation, and predator mitigation.

\* Listen to our speakers as they share their experiences and knowledge about wildlife.

\* See a demo of the forage website full of resources about mitigating your wildlife damage.

\* Discuss the governments role in wildlife issues with Julie Robinson, Darrell Smith and local conservation officers.

\* Talk with Harlam Bradford from the East Kootenay's about how he uses electric fences to keep elk and deer off his property.

Contact Chris at (250) 789-6885 or Talon at (250) 219-3944 for more information.

Free for members and \$20 for non-members.

