

# July 4th Field Day

by *Bill McGill & Sandra Burton*



Sandra & Bill leading a dialog linking soil properties & erosion processes.

The latest field based soils, forages and water dynamics module again provoked lively discussions. On July 4th we focused on revegetation, erosion control & making pipelines blend into the landscape. We gathered at the Saturn Plant site and learned about the site, its history, management goals & construction practices from Jim Chramosta & Dan Arcand from Shell Canada.



David Miller listening to Jim Chramosta.

Splitting into groups we discussed issues from various perspectives. First we were regaled by Matt Edgar and Jim Chramosta on pre-project considerations & best management practices for revegetation, surface water management & reducing erosion. New tools are adding precision to this phase of a project.

“Is there potential for revegetating with native plant transplants &/or native and agronomic seed mixes?” This question was explored by Lenore Mallis & Julie Robinson. This topic proved to be a rousing one under Lenore and Julie's leadership with diverse considerations noted and conclusions drawn.

We learned the lessons gleaned from PRFA's re-vegetation project with Bill Wilson. A key message here was: “Beware the basis of seed mixes: is it weight or number of seeds – they are totally different methods of thinking about and ordering seed.”

Meanwhile Sandra Burton and Bill McGill poured water in holes while participants destroyed soil aggregates. They wanted to know “Can we use the soil quality field kit to understand soil erosion processes? Are there ways we can prevent or mitigate the effects of erosion?” The answer: “Yes”.

It was a bracing day with rain threatening early but in the end the sun shone warmly, spirits rose and discussion blossomed – a fitting ending to end the day and the course.



Julie & Lenore instigating discussions.



Cali Seater taking note of Wilson wisdom.



Matt Edgar, Pat Sutherland, Lori Vickers & Mahesh Khadka laughing together as they learn.

### Thank you to our July field day hosts:

Jim Chramosta & Shell Canada

### Thank you to our funding partners:

UNBC, Shell Canada, Peace River Agriculture Development Fund, South Peace Grain, Blackbird Environmental & Synergy Aspen

### Thank you to our enthused station masters:

Bill McGill, Sandra Burton, Matt Edgar, Jim Chramosta, Bill Wilson, Julie Robinson, Lenore Mallis

### Thank you to our knowledgeable mentors:

Cali Seater, Lori Vickers, Mahesh Khadka, Matthias Loeseken

**Photo Credits:** Vicki Moser

# People First and Last (and in between)

by *Bill McGill & Sandra Burton*

A highly successful soils, forages & revegetation course was completed this year. It consisted of 10 modules of one day each delivered over 2 years; the first module in Sept 2013, the last in July 2015. Core funding from Shell Canada and PRAD made the course possible.

Development of the course started in 2013 through collaboration between the Peace River Forage Association represented by Sandra Burton and UNBC represented by Bill McGill. This interactive and integrative course placed people first and last using a case study approach. It met many needs by providing an on the ground learning opportunity for UNBC students, agricultural producers, forage association members and for consultants in the environmental aspects of the oil and gas industry.

Each module of the course started and finished with people using real life case studies involving real issues and management challenges. Each case study began with meeting the land owner, or person managing that site.

The management problems were wide ranging, and varied from "Where has all my alfalfa gone?" to "How can we re-vegetate this lease site berm?"; from "Can we improve our soils & forages with grazing & seeding management?" to "What are we learning about revegetating pipelines & leases?"; through "Can we make pipelines disappear or blend into the landscape?" and "Can we make forages last forever without starting over?"; to "Is there a role for grazing management in making pastures last forever?" and "How can we re-vegetate, control erosion & make pipelines blend into the landscape?"

Some of the tools that we explored included, learning about soils from the microscopic scale to soil profiles and regional distribution; use of maps, air photos, LIDAR and drones; identification of native and agronomic plants; use of web sites to understand soils and select forage species; sampling and analyses of soils, plants, feed, and seeds; use of the soil quality assessment kit; predicting likelihood of erosion; assessing weed dispersal mechanisms and control options; and following the flow of nutrients from soil to plant to animal to manure and back to the landscape.

**The Peace River Forage Association thanks UNBC for this effective partnership & appreciates generous funding from Shell Canada & PRAD**

Experts from the region and from away shared their understanding of the varied challenges and wide ranging tools. By virtue of the integrated, hands on and interactive nature of the course, subject experts also learned much from the participants.

Participation rates were high with an average of 35 to 60 people at each event. The total registration was 160 individuals, 79 of whom were from the Forage Association.

On reflection, much has been learned from this project. First, it takes more time, effort and coordination with resource people, station masters and group mentors to convert key messages from lecture format to a more interactive, hands-on format. But all participants were very complimentary about what they learned during this style of field day, and how much more effective the integrated take home messages are. Our most rewarding feedback was people asking when the next session of this course was and in a region where preregistration is not common, we had people committing well ahead of time.

Finally feedback from the course suggests that it generated ideas for participants who are taking them home for implementation. You may expect to hear more about outcomes from such ideas. Also the course stimulated new questions and brought possibilities to light. These too may germinate into fresh new ideas for trial.

We would also like to thank the mentors and presenters who enriched the course; the funders who financed the course and the many participants who made it all so very worthwhile.



Our very creative & resourceful course modules organizing team included Bill McGill, Richard Kabzems, Sandra Burton, Julie Robinson and Bill Wilson.