

June 14 Interactive Soils & Forages Day

by Sandra Burton & Julie Robinson



The Kendrew family hosted a very thought provoking field day. John, his wife Patt and their 2 daughters, Jodi and Kristin, each provided a unique perspective on their management goals for the land, their forage crops, their grazing, their herd and their family.

Key messages from each station master

Breaking into smaller groups sparked lots of learning and discussions. Here are some key messages.

“Plant roots tell us volumes about what it is like to grow in their world. *(photo to the right)*. But it is also important after we learn from individual plants, to look up and think about the scales of the hard pan or nutrient deficiency we are seeing. Some nutrient deficiencies can also be temporary. For example, phosphorus may be hampered by cool spring temperatures; then as the soil warms up, it can become more available to the plants.”

Iewan Evans and Julie Robinson



Plant roots and soil layers both have their stories to tell us.

“We can get important clues from soil maps, and the soil layers about pH, salinity, gypsum salt crystals and calcium carbonate splotches. *(photo on far right)* These properties can have a huge impact on alfalfa growth, if they occur anywhere within 2 m of the plant roots.” *Sandra Burton*

“There is much better soil moisture and faster water infiltration under the cow patties. Also when we compare soil compaction in these areas with the high traffic areas near gates and waterers, we can measure quite a difference.” *Bill & Alice McGill*

“At my station, we discussed different options for rejuvenating a forage stand. We chatted about cultivation, spraying, directed seeding into the stand, and looked at the effects of bale grazing on the stand. The bale grazing effects really perked a lot of interest especially from the producers in the group. There was good discussion about the information the Kendrew field demonstrated for us.”

Bill Wilson



Iewan Evans & Julie Robinson led a station helping us learn what the plants tell us *(left)* .



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From *Jodi Kendrew* we learned about aspects of animal health and herd management that are important at this site. We gained insights into when it was important to match the quality of forage to the cycles of breeding and reproducing.



At another station, *John Kendrew* talked about the evolution of his thinking and how their management of this field had changed over the last 15 years. He pointed out their addition infra-structure of electric fencing, stock waterers and handling pens to make their more intensive grazing work effectively. He laughed and told us about all the critters he was now concerned about keeping happy, including the critters or microbes in the soil.

Cowboy Math

The year 2000 was a critical turning point for this field. Kendrews decided to start transitioning from a hay based operation into a grazing based operation. The alfalfa was diseased and dying out and at that time, the field yielded only about 1/2 ton/ac. Now using rough "cowboy math" to evaluate their new system of very frequent cattle moves (i.e. sometimes once a day), and looking at the number of animals and grazing days, he figures he is getting the equivalent of 1 1/2 to 2 tons/ac. There is a little more alfalfa than the Kendrews would prefer, but they are willing to adapt to what works well for this field, and are getting good gains with not too many wrecks.

Quotes from participants

"We learned so much from the field day last week. We are already trying to apply what we learned at our place."

Tara and Ben Harrington (& little Roy!)

Thank you to our station masters:

Bill McGill, Bill Wilson, John Kendrew, Jodi Kendrew, Iewan Evans, Julie Robinson, Sandra Burton

Thank you to our group mentors:

Darryl Kroeker, Keith Carroll, Carmen Schneider, Richard Kabzems

Photo Credits: Julie Robinson



Forage members of all ages, from Roy the youngest (top of page) to the wiser gathering here we enjoyed learning from each other.

July 5 Interactive Soils & Forages Day

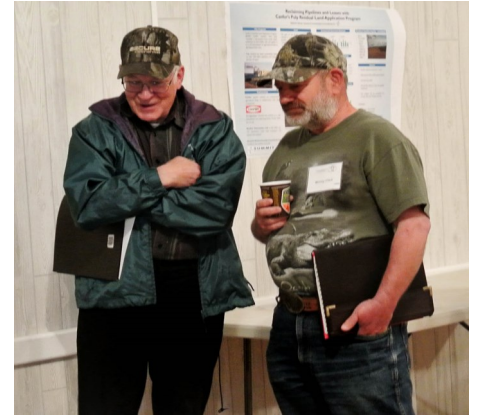
By Brenna Schilds & Sandra Burton



Asenath and Don Herbison enjoying the day's first activity.



Tim Repas, Scott Schilds and Bess Legault enjoy a morning cup of coffee before the course.



Stan Smithard and Murray Clark discussing the upcoming day.

July 5th marked the last day of a 5 day series of Interactive Soils and Forages courses. It was a wonderful success and included over 50 people from diverse backgrounds. These are some of the highlights of the day, which focused on the revegetation of pipelines and leases.

The morning began with everyone being divided into 6 groups. First we all got to know each other by engaging in a fun group activity organised by Sandra Burton, Talon Johnson, and Alana Duncan, which combined some of the knowledge gained in past courses and turned them into fun stations. This was an excellent way to get to know the people in your group, including some of their strengths as industry professionals in soil science, plant science, pipeline management, and many other disciplines.

After a fun start, we all car pooled to the Encana site where we rotated through 3 stations for the rest of the morning. Each station was about 30 minutes

long and presented different topics related to revegetation along pipelines. People really seemed to have fun at Bill McGill's station about soil infiltration, compaction and health indicators. He made it extra interactive by allowing several different people to use his high quality soil testing instruments.

"I found it very interesting to learn about soil infiltration and compaction with Bill McGill. His enthusiasm and love for soil science made for a very interesting and interactive station." Bess Legault

Julie Robinson and Carmen Schneider both encouraged some lively discussions during their station about fall versus spring seeding, grass and legume species and nodulation. Two representatives from Encana, Brian Arnold and Colin Mair, as well as Richard Kabzems gave a talk about what goes into the management of a pipeline including construction and administration.



Carmen Schneider demonstrates nodulation of red clover plants.

Just after lunch we were treated to 3 different stations, just 15 minutes in length. With Richard Kabzems and Sandra Burton we learned about the natural history we can learn from looking at soil landscapes. Talon Johnson talked about an online forage seeding tool. With Arlan Benn we learned about the importance of insect pest monitoring. All 3 stations caused lively and interesting discussions.



Sandra Burton, Xin Yuan, Christina Irvine and Allan Gifford listen at Bill McGill's station.

July 5 Interactive Soils & Forages Day cont'd



Left: Talon Johnson, Hailey Wilson & Robert VanderLinden put the soil samples in order of highest infiltration.
Right: Gino Morrone, Don Herbison, Matthius Loeseken & Art Siedl chatting.



Once we had carpooled back to the field site, we had the pleasure of going through 3 more afternoon stations. Murray Clark opened a lot of eyes with his demonstration of soil erosion and slope. Bill Wilson, Julie Robinson & Carmen Schneider all took us out onto the berm to talk about managing fertility on lease berms. Katarina Glavas and Sandra Burton blew minds while talking about innovative uses for pulp residual as a possible fertilizer. "I had no idea about the pulp residual. It was really interesting to hear about emerging technologies in other industries and novel ways in which we can apply them." Scott Schilds



Lisa Belleville & Deny Chramosta answer questions about Schedule A's and B's.

We all gathered together for a panel discussion about industry practices and issues like Schedule A's, Schedule B's, Certificates of Reclamation, and Alternative Practices. This was led by three panelists, Lisa Belleville, Deny Chramosta and Brian Arnold. It raised a wide variety of questions, ranging from environmental consulting practices to the responsibility of revegetation.

The day ended on a high note with Bill McGill and Bill Wilson. After they summarised what we'd learned at each station, they opened up a discussion for feedback on the entire series. The most consistently positive feedback was that with the diverse group of people, there were many different perspectives. This lent itself to thought provoking discussions, appreciation for other viewpoints, thinking 'outside the box' and new 'take home' ideas.



Murray Clark demonstrates the effect of slope on erosion potential.



Bill Wilson & Bill McGill facilitate a feedback discussion.

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Thank you to our enthused station masters:
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Rick Kantz, Korey Green, Darryl Kroeker, Alana Duncan, Talon Johnson

Thank you to our panel discussion participants:
Brian Arnold, Colin Mair, Deny Chramosta, Lisa Belleville

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