

Grazing Management & Pasture Longevity June 6 2015

by Darryl Kroeker, Talon Johnson, Matthias Loeseken, Chandra Khadka & Sandra Burton

The field based, 4th session of the Soils, Forages & Water Dynamics Course was held on Saturday, June 6th at the Kiskatinaw River Ranch. The day kicked off with some laughter as the participants were divided into 4 groups for the fencing skills relay game. The winning **Green Team** won some Rangeland Seeding Manuals and all errors were blamed on the **Yellow Team**.

Michael Nimitz, one of our hosts, introduced the history of the Kiskatinaw River Ranch, and discussed the current goals of the people involved with the ranch. Michael described his herd and his direct marketing through Nimitz Beef at the Farmers Markets in Dawson Creek and Fort St. John. Then in smaller groups, we rotated through the stations. Points gleaned and overheard by group leaders are listed in each section below.



Michael Nimitz told us about the ranch, its history, its goals & direct marketing strategy.



Mahesh Khadka & Richard Kabzems describe the tool, Grazing Response Index.

One station was hosted by **Mahesh Khadka** and **Richard Kabzems** where they showed us the value of using standardized photo monitoring and the GRI or grazing response index as tools to learn from grazing management.

- ⇒ The GRI tool is helpful in grazing management and is simple to use.
- ⇒ It involves finding out frequency (no. of days livestock are grazing), intensity (removal of biomass) and opportunity (how much rest the grassland or forages got during the grazing season).
- ⇒ GRI as an easy way to identify trends & adjust your grazing system. Dividing your pastures as Michael has done increases your opportunity for regrowth so your score improves. So if you split a season long pasture in half, you provide a half season opportunity for regrowth for both sides!
- ⇒ The photo point monitoring method helps in comparing forages over the season and helps determine the intensity needed for scoring GRI. Even if everybody is busy, there should be enough time to take some quick pictures and notes, with this quick, easy method. Consistent picture taking, following an easy system is important and enables better grazing management.
- ⇒ *"GRI is rancher friendly monitoring!"*

Simon von der Wall and **Lori Vicker's** station asked "What are the links between riparian areas, water quality & livestock health?" We had good discussions about water quality and the economic value of clean water in a cow calf herd. At approximately 20 additional lb per calf, a producer can pay for a solar waterer in as little as one grazing season. Herd health benefits are in addition to that. We talked about balancing water quality, spring runoff and the need to redistribute manure back onto the fields. With a long term manure managing approach, it can be adjusted according to fall/winter conditions. Last fall we had good snowfall prior to the ground freezing so that moisture soaked into the ground throughout the winter. Knowing that, a rancher might choose to winter feed on some riskier areas (e.g. more slope, less cover or closer to water), anticipating that most of the runoff in spring would soak into the soil rather than flow down hill. But if fall conditions produced a solid frost seal (precipitation during freezing), a producer would avoid those areas in favour of fields with lots of cover, less relief and farther from water.



Lori Vickers, Agrologist & Simon von de Wall, Hydrologist, discuss riparian areas, dugouts, water quality & properties important for both fish & livestock health.

- ⇒ *"Riparian area improvement is good for both the environment and herd health."*

Grazing Management & Pasture Longevity *continued*



Serena Black & Bill McGill discussed soil aggregate stability, slaking & their relation to erosion.

- ⇒ *"Organic matter is good!"*
- ⇒ *"Soil with no tith (or aggregation) easily washes away."*

At a 4th station, **Michael Nimitz** and **Julie Robinson** addressed the question "How do grazing management, fencing & water systems all enable healthy animals, plants & soils?" Here we had many conversations about grazing:

- ⇒ Smaller pastures allows Michael to fine tune his grazing and get better/ more uniform forage utilization.
- ⇒ The bale grazing sites were very interesting, but we had to get on our knees for the full story. While we noticed mostly dandelions from a distance, good things were happening in the soil. If you dug around, more desirable plants were taking advantage of improved soil organic matter.
- ⇒ Rotational grazing management keeps the forage cover throughout the year and livestock get the opportunity to have nutritious diet.
- ⇒ Distance to water as an important consideration for layout of electric fences.
- ⇒ Grazing can be managed to achieve desired species.

At the day's end, **Bill Wilson** and **Bill McGill** integrated the lessons learned from each station. The common themes that emerged were: 1. the varied lenses or viewpoints people brought to each station, 2. the need to decide clearly what your goals are, and 3. the take home tools to help you get where you want to go.

Thank you to our hosts: Michael, Ernie & Joanne Nimitz, Nimitz Beef & Kiskatinaw River Ranch

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, Serena Black, Mahesh Khadka, Richard Kabzems, Simon von de Wall, Lori Vickers, Michael Nimitz, Julie Robinson

Thank you to our knowledgeable mentors:

Matthias Loeseken, Darryl Kroeker, Talon Johnson, Chandra Khadka

Photo Credits: Sandra Burton, Chandra & Mahesh Khadka

A soil erosion station was led by **Bill McGill** and **Serena Black**. At this station we learned that:

- ⇒ The probability of erosion depends on the size of aggregates, soil stability and soil slaking.
- ⇒ Slaking (breakdown of larger aggregates into smaller ones due to internal stress as a result of immersion in water) was a great way to quickly assess erodibility and compare different soils.
- ⇒ The importance of maintaining stable aggregates e.g. through grazing practices that encourage an increase in soil organic matter was evident in the discussions.
- ⇒ The soil tool kit found a lot of admirers in the green group: an ingenious way to get a lot of information about soils without spending a lot of money.
- ⇒ This kit is a cheap, easy and simple way to assess soil quality on the spot in the field.



Michael Nimitz & Julie Robinson shared ideas for livestock waterers, fencing systems & grazing management.

- ⇒ *"Feeding and watering cattle in targeted areas improves productivity."*



A wise trio of graziers:
John Kendrew, Ernie Nimitz & Sarah Davies.