

FORAGE FIRST

"Published by the Peace River Forage Association of British Columbia"

Twenty Seventh Edition

October 2000

\$10.00

Annual General Meeting Slated for Farmington on Friday, December 1, 2000

Our AGM will in the Farmington Community Hall this year. We have a change in format as well as location. This year we shall start off the AGM with a luncheon and guest speaker. There will be no charge to members and guests for the luncheon.

Our guest speaker will be Grant Lastiwka. Grant is the Extension Pasture Agronomist with the Western Forage & Beef Group in Lacombe. Some of the members will remember him from our Summer Tour to the Rimbey, Alberta area in 1996 as he helped organize our tour stops there. He is very knowledgeable about many state of the art pasture management techniques such as stockpiled grazing. His major work activities with Alberta Agriculture Food and Rural Development have included involvement in planning and organizing several summer Pasture Management Schools in Lacombe and several winter Western Canadian Grazing Conference in Alberta. Grant will address the topic **"Optimizing Profit with a Grazing System"**.

Western Canadian Grazing Conference Set for Red Deer on December 6, 7 and 8th

The Capri Centre in Red Deer is once again hosting the Western Canadian Grazing Conference on December 6, 7th and 8th.

Keynote Speakers for December 7th are Doc and Connie Hatfield, well known graziers and beef marketers from Oregon. Their topic is "Grazing for the 21st Century". Keynote speaker for December 8th is Harlow Hughes, well known Agricultural economist and knowledgeable beef Specialist from the midwestern U.S.. His topic is "Back in Black."

Several concurrent sessions will be held both Thursday and Friday featuring outstanding speakers from around North American. Plan to attend this important, educational grazing function and learn how to improve your profit and pasture in your own livestock operation.

For further information on this conference please contact Richard DeBruijn, Alberta Forage Council, (403) 82-0772.

Our Association has funding in place to assist several members in defraying their costs substantially to attend this exciting event. Please contact Sandra Burton (250) 789-6885 if you are interested.

Editorial



How about all of the lush grazing this year! - Hasn't it been great for all of our domesticated four legged ruminant friends and other domesticated graziers.

A host of Thank you's are in order as we complete another successful season as a Forage Association.

Burnem Grant, committee Wildlife Policy Development Chair and the Directors take this opportunity to extend a hearty thank you to the numerous farmers and ranchers who participated in the Associations undulant wildlife count and survey last winter. This survey has helped open some eyes in the correct places.

A big vote of thanks to Julie Robinson our Summer Forage Technician, for a job well done on behalf of our members.

A huge vote of Thanks for all of the great work Sandra Burton has done in the last 12 months on behalf of the membership whilst performing her duties as Cross Commodity Manager for us and two other agricultural commodity groups. And a further great, big thank you to her for her substantial efforts in providing most of the excellent content of this Forage First.

A special thank you to Lesley Dampier, the BCFC summer student for all her good work and especially for the tremendous effort she put into our Summer Forage Tour in the Peace River Valley which helped make it so successful.

Special thank yous are extended to the following folks for their part in helping make our June 2000 Summer Forage Tour in the Peace River Valley around and about Hudson Hope a great big success.

- ★ Ernie and Rose Fuhr, Fort St. John Bus Loading Site.
- ★ Prairie Farm Rehabilitation Administration who sponsored the Forage Bus.
- ★ Brad Arner and Murray Clark of Ducks Unlimited Canada for the Watson Slough tour stop
- ★ Wes McKnight tour host stop near Watson Slough
- ★ Canadian Imperial Bank of Commerce for coffee at this stop.
- ★ Larry Jernigan family tour host stop
- ★ Rich and Linda Sewell tour host stop and lunch site.
- ★ Bank of Montreal for lunch.
- ★ Dick and Renee Ardill tour host stop
- ★ Village of Hudson Hope Refreshment Break and Museum Tour
- ★ Doug and Shari Summer of Rocky Ridge Ranch, Beryl Prairie as tour stop hosts and site of evening BBQ.
- ★ Local school group from Hudson Hope for providing noon lunch and also supper accessories to BBQ
- ★ Special refreshments at evening Barbeque courtesy of Nelson Bros. Inc. of Clyde
- ★ Kenver Equipment Ltd. for providing the steak and hamburgers for the Barbeque
- ★ The World Famous Kenver BBQ Crew, Alex Reachny and Mike Rose for barbequing up the great beef in excellent style.

2000 Directors of the Peace River Forage Association of British Columbia

"Dedicated to putting forage first in the hearts, minds and pocketbooks of livestock producers and other forage enthusiasts"

Arnold Bennett	Doug Bentley	Bill Wilson	Ernest Nimitz	Fred Burres	Michael Cowger	John Kendrew
President	Vice President	Treasurer	Secretary	Director	Director	Director
789-3350	843-7364	782-2866	843-2300	843-7074	787-1790	786-5652

Committee Chairmen: Wildlife Policy- Burnem Grant 786-5566; R & D - Glenn Hogberg 843-7653

B.C. Forage Council - John Kendrew; Communications and Information - Ernest Nimitz

My Summer's Work with the PRFA of BC
Excerpts from monthly reports by Julie Robinson



Aerway Project: (Total Time in Summer 2000: 17 days)

- * Visited each of the people who rented the AerWay this spring, took photos and talked with them about their methods of rejuvenation, goals and expectations.
- * Talked with many people, comparing pros/cons of Aerway for rejuvenation to plowing/ other methods.
- * Collected information from Wayne Eazard at Peace Tractor.
- * Made the invoices and compiled a list of past/ future rentals.
- * Revisited the AerWay sites or followed up over the telephone about each user's perceived results.
- * Went to trial site at Ben Hansen's, took pictures and compiled a detailed map of Ben's trials.
- * Produced diagrams of AerWay sites for several 2000 locations.
- * Discussed AerWay with some of the renters from previous years.
- * Collected/ weighed yield samples from Ben Hansen's site.

Liming Project: (Total time in 2000: 28 days)

- * Took measurements for detailed plot diagram took soil samples, and dug soil pits at Hogbergs' site in Progress and Armstrongs' site in Rolla.
- * Background reading about forms of lime, soil ph, nutrients and interactions.
- * Detailed pH testing in fields to see the effects of liming on surface and subsoils.
- * Painted Liming Trial signs and put them up at the two sites.
- * Collected tissue and yield samples at Dave Armstrong's field.
- * Took pictures and monitored growth at Glenn Hogberg's field.
- * Worked on collecting liming research information.
- * Worked with Lesley on analyzing and interpreting data from soil and tissue analysis.

Intensive Grazing in Logged Lands
(Total Time in Summer 2000 on Intensive Grazing Project: 23 days)

- * Met with 3 cooperators Fred Burres, Ernie Nimitz and Glenn Hogberg to discuss methods.
- * Selected monitoring benchmarks at each of three sites, visited them every two weeks to take pictures to the N, W, E and S.
- * During each visit: recorded growth, took notes on pasture appearance & cattle visits.
- * Did species ID at all of the sites, at selected bench marks at each site.
- * Took pictures of different fencing and water systems used at the sites.
- * Sorted and started to label pictures.
- * Did weed ID one afternoon.
- * Took Grass ID course July 21-23; and did more grass ID at all three sites after course.

Forage Facts (Total Time in Summer 2000 on Forage Facts Project: 9 days)

- * Have looked at electric fencing systems at intensive grazing sites.
- * Looked at the watering systems at Fred's, Ernie's, and Glenn's including the nose pumps.
- * Discussed topics, layout and style of Forage Facts with Ernie Nimitz and Sandra.
- * Completed drafts & selected photographs for the following topics: water systems, fencing systems, AerWay rejuvenation, intensive grazing of logged lands.
- * Went to Ben Hansen's, looked at his AerWay site, watering and fencing systems.
- * Went around with Ernie Nimitz to look at his fencing and watering systems.
- * Visited Horst David for fencing and watering system info.
- * Drafted AerWay Forage Fact and scanned pictures for it.

Tours and Other Projects: (Total Time in Summer 2000: 6 days):

- * Helped Lesley seed at Bob Tubb's, collected some information on solar fencing and talked to him about silage pits and Fodder Gallega.
- * Helped Lesley weed the forage variety plots at Baldonnel.
- * Took yield samples at Brian Clarke's in Baldonnel, of his 7 field scale alfalfa variety trials.
- * Weighed 140 alfalfa square bales at Brian Clarke's.

Forage Fact #1

Date:
September, 2000

Peace Region Ranchers Knife Life into Forage Fields

AerWay's Features:

- * 12 foot ballasted unit
- * Alternating tines on a metal roller
- * Includes chain harrows
- * Can be pulled with 85 to 100 hp field tractor
- * 1000 lb weights can be added to each side for better soil penetration
- * Axles can be set at an aggressive angle, if necessary.

Benefits of the AerWay

During the last four years several PRFA of BC members have been using the AerWay as a method of rejuvenating fields. Many of these rancher's fields (alfalfa/ grass hay fields and pastures) have been suffering from low plant vigor, soil compaction, or decreased yield; and they feel that rejuvenation of some sort is necessary.

Farmers integrated the use of the AerWay into their farm management practices for several reasons. Plowing, discing and cultivating of fields exposes soil to moisture loss, water and wind erosion, which may be necessary if the field does not consist primarily of desired plant species. However, if the field does consist primarily of the desired species then the AerWay can be used for field rejuvenation.

The top 6-8" of the soil can be aerated without destroying the existing crop cover, because of the shattering and fracturing action of the AerWay. This relieves the compaction by loosening the soil structure.



The alternating tines on the AerWay perforate the soil surface, without destroying crop cover.

In addition, it increases the water holding capacity of the soil to absorb spring runoff and winter snowfall. With the unique design of the AerWay, a rancher can accomplish this without creating surface conditions that are conducive to erosion. The tines are alternating on the roller, so that there is never a continuous furrow or groove to channel water.

For more information or to rent the AerWay:

- * Call Glenn Hogberg at (250) 843-7653.

Rental Rates (fall 2000):

- * \$2.50/ac for members;
- * \$3.00/ac for non-members.

AerWay Ideal for Many Uses

Based on the experiences of association members from 1997-2000, we believe that the AerWay may be well suited for:

- * Aerating and rejuvenating old hay fields in lieu of discing and reseeding.
- * Aerating old pastures that need rejuvenation. Fertilizer or manure may be

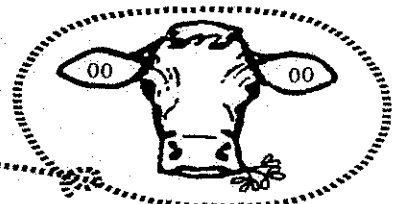
applied in conjunction with this field operation if you desire, spring or fall.

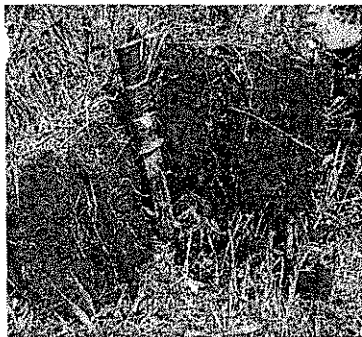
- * Rejuvenating calving pastures, either spring or fall. Aggressive settings and double passes may be required.
- * Rejuvenating cattle wintering grounds where build up of manure is only a few inches deep.

Published by P.R.F.A. of BC:

P.O. Box 908
Dawson Creek, B.C.
V1G 1L6

Peace River Forage Association
of British Columbia





Dave Armstrong of Rolla used the AerWay to help incorporate lime into his alfalfa grass hay field.

Members' Experiences with Aerway

There are various reasons why ranchers choose to use the AerWay. The way they each use the AerWay also varies greatly; i.e. time of year, the combinations with seeding or fertilizing.

Dave Armstrong of Rolla says, "The AerWay should be used for several years before the full benefits can be reaped. I'd like to use the AerWay after each hay harvest." He uses the AerWay on his timothy hay-fields expecting that it will increase the longevity of his fields.

Dan Rose of Groundbirch used the Aerway this spring in a pasture, consisting of alfalfa and orchard grass, where he calves in the spring. He aerated instead of discing because he wanted his field rejuvenated without the muddiness and looseness it gets with discing. He also wanted to incorporate the manure and fibers on the ground from winter-feeding. He said "aerating in a less aggressive mode and dragging harrows behind broke up the clumps of manure and feed and resulted in a more even spread of nutrients." However, Dan was concerned that using the Aerway in an alfalfa field might disturb the roots and kill some of the alfalfa crowns.

"Using the AerWay can only improve my forage stand and the condition of my soil."
Glenn Hogberg

Barry Berg of Groundbirch used the AerWay on an alfalfa field. He feels that "it did a good job, with the most aggressive setting." He also used it in a field where he winter fed his animals; and he feels that "the hay and manure left on the field from the winter was well spread by the AerWay throughout the field."

This spring **Jim Strasky** of Farmington used the Aerway on 15 ac of hay land which he also pastures cattle on, regrowth permitting. He seeded 2 ½ bushels of oats, 55 lbs of a alfalfa/ timothy mix and fertilized with 100 lbs/ac of 24-24-0. He seeded and fertilized after a once over pass with the Aerway and chain harrows, at the most aggressive setting. He harrowed the field again after seeding.

Glenn Hogberg of Progress has used the AerWay several times on his alfalfa hay fields. Glenn says, "Using the AerWay can only improve my forage stand and the condition of my soil. I expect to increase the longevity of my hay field by a couple of years. I think that maximum benefit can be reaped if the field is exposed to multiple passes with the AerWay."

Ongoing Work With the AerWay

Other farmers plan to use the AerWay in the fall, hoping to better utilize the snowfall and spring runoff. They also feel that less moisture will be lost from disturbance with the AerWay in the fall

Ben Hansen of Taylor has lent some of his pasture land to the Peace River Forage Association (PRFA of BC) to evaluate the AerWay. He set up a plot with one pass, two passes and no passes; and he

applied fertilizer to these different rates of AerWay use. He is keen to watch this site over this season and subsequent years to gain a better understanding of the most effective use of the AerWay.

To date approximately two dozen farmers and ranchers in the BC Peace have used the PRFA of BC's AerWay. Everybody seems to be satisfied with the results they are seeing.



Ben Hansen set up AerWay plots in his pasture northeast of Taylor.

Compiled by: Julie Robinson and Sandra Burton in Summer of 2000

AerWay Project Funded by: PFRA of BC & Agriculture Canada through Peace River Agriculture Development Fund
Forage Facts Project Funded by: The PRFA of BC thank all the donators and supporters at their Forage Goods & Services Auction on Feb. 5, 2000.

**Cross Commodity Manager's Update on her Activities
for the PRFA of BC from April 1 to September 30, 2000**

This spring, the CCM helped the directors of the Peace River Forage Association organize the funds for to hire summer students to work on forage variety trials under guidance from Jim Forbes and to work on Aerway project, liming trials, intensive grazing logged lands and forage facts under guidance from Sandra Burton. Jim and Sandra reviewed applications, interviewed short list of candidates and hired Lesley Dampier and Julie Robinson.

The CCM spent time with Julie in May to familiarize her with the 4 projects and the cooperators she was working with over the summer months. Various people were consulted to fine tune methodology for the projects. As required, the CCM helped Lesley, Jim and Ernie organize the annual PRFA tour (Sat. June 17). She and Jim also organized an "in-the-field" soils of the Peace workshop for the summer students.



Two "dirt ladies" deep in discussion... how did these soils get here?

The PRFA of BC had only a few directors/committee meetings over the summer. The CCM organized agendas and copies of materials for those meetings. The directors also required assistance with a change in direction and roles with the PFRA assisted dugout pumping program. News articles were written and emailed to the Peace Prospects, Peace Block News and Alaska Highway News and Forage First editors (copies available by request).

During the summer months, the CCM continued supervising Julie Robinson and occasionally Lesley Dampier on forage projects. Forage harvests were taken at a number of sites, but with the weather related delays this summer, several harvests were still outstanding when our summer students returned to their studies. Alternative arrangements were organized to meet our commitments and finish harvesting, processing samples and compiling the data.

In September, reports were compiled for our PRAD funding requirements on Liming Project, Research Consultation Project and Aerway Project. The CCM also began work on the final editing and publication of five Forage Facts compiled by Julie on (Rejuvenating Pastures with the AerWay, Liming Forages, Electrifying Fences, Intensive Grazing/ Pasture Management, and Watering Systems).

Total actual time spent April 1 to September 30, 2000 was 28 days.

The total time allocated by the Steering Committee for this 6 month period was: 28 days or 25% of the total CCM Project time and budget. (For detail about activities for other associations, contact me directly.)

Respectfully submitted,
Sandra Burton

Forage Tour Attracts 100 People

By Sandra Burton

The forage tour on Saturday, June 17th was a rich and varied learning experience from its early morning launch in Dawson Creek until its evening windup with the Summer brothers near Hudson Hope. Tour organizers, Ernie Nimitz and Lesley Dampier, were "pleased to have so many people come out that we filled the bus, and had 20 vehicles trailing behind!" Prairie Farm Rehabilitation Administration sponsored the Forage Bus.

Check out the great
pictures on the next
page

Wes McKnight hosted the first stop at Watson Slough. We viewed a Ducks Unlimited Wetlands project, where a subsurface weir maintained a uniform water level by tricking the beavers into leaving the dam alone. This arrangement encouraged waterfowl, while simultaneously protecting the highway from water surges. Thanks Canadian Imperial Bank of Commerce for coffee and refreshments at this stop.

Next a site belonging to Larry Jernigan that was being converted from forest to grazing land was visited. A gigantic chipping machine on site cut the wood into pieces that met the specifications of mills like Fibreco in Taylor. The chipping process left the site cleaner, with less debris, making it easier to convert to forage fields, with no additional costs to the landowner.

One of the highlights of the day was a tour around the Sewell Seed Farm. We broke into smaller groups of about a dozen people with Rich, Linda and Justin, to look around their operation and go into the incubators with their cutter bees. Those waiting for their turn to tour were treated to a lunch, organized by Bonnie Pringle and the Grade 11 Class of the Hudson Hope High School and sponsored by the Bank of Montreal. We also visited some of the Sewell's fields and discussed the challenges of growing an alfalfa seed crop.

The tour moved onto the historic Ardill Ranch along the Peace River. The original log home and barn provided an interesting backdrop for a discussion of some sidehill silage systems. Dick also told us horses always were and still are the center of our ranching operation."

We paused at Hudson Hope for cold drinks (sponsored by the Village of Hudson Hope) and a wander through the museum and tourist information center. Glenn Hogberg, long time director with the Peace River Forage Association of BC was heard to remark, "this is a great tour! Especially looking around at the number of people here today who don't usually come to our events!"

When we arrived at Ridge View Ranch, Doug Summer and his daughter Carolyn, took us on an extensive crop tour through orchard grass and tall fescue seed crops, alfalfa stands, oats, barley and various pasture mixtures. We were all quite impressed with Doug's "spraying mistake" that ultimately resulted in very successful pasture rejuvenation. How suiting that our crop tour ended in the middle of a forage field for a steak supper, complete with cattle wandering by! The infamous BBQ crew from Kenver Equipment complimented the efforts of the high school class to provide us with our "banquet in the field". I personally will never forget the view of or over 100 people enjoying their supper and chatting in the middle of that pasture with the sun setting on Butler Ridge in the background ... A great windup for a great day.

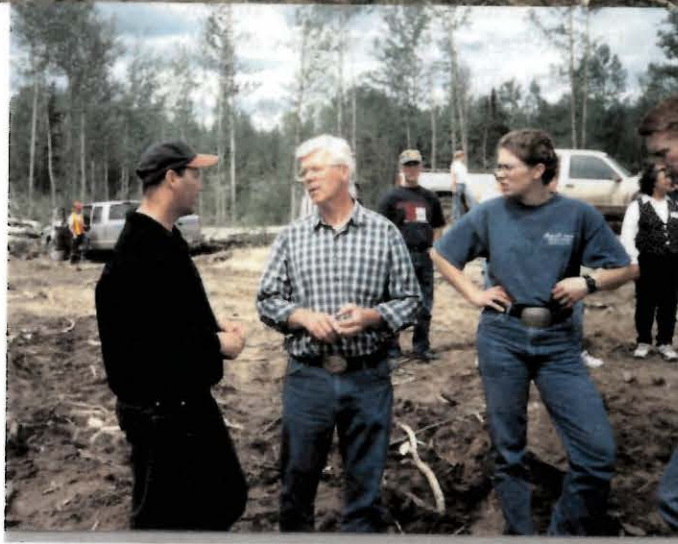
Interpretive Summary from the Council for Agricultural Science and Technology

Grazing on Public Lands

This CAST report discusses and provides scientific information concerning livestock grazing on public lands in the western United States. Concerns have been expressed that livestock grazing has caused diminished biodiversity, poor range conditions, soil erosion, depleted riparian areas, reduced wildlife and wildlife habitat, and decreased recreational opportunities. Another perception is that grazing fees paid to the government to graze livestock on public land are too low.

Approximately 262 million acres of public land in the West are grazed by domestic livestock. The common intermingled public and private land ownership patterns resulting from railroad land grants, homesteading, and other programs cause management problems for both federal and private land owners and managers.

(Please turn to Page 15 for a continuation of this Summary)





Summer Forage Tour June 17th



Hot Tips from Electric Fencers

Hot tips:

- * Use quality materials, in particular insulators for the corners; they are cost effective in the end.
- * Buy a larger energizer than you need; your system will grow into it.
- * Ground effectively with several galvanized ground rods 6-8' long.
- * For fence lengths >900' reduce stress on corners by putting strainers in the middle so they tighten both ways.
- * Build sturdy 2 post corners with 8' ties between 7 to 8' posts.
- * Include portable step-in posts with poly twine in your grazing program.

For more information about electric fencing call:

- * Glenn Hogberg of Progress at (250) 843-7653, or
- * Horst David of Tomslake at (250) 786-5931.

Published by P.R.F.A. of BC:

P.O. Box 908
Dawson Creek, B.C.
V1G 1L6

Cost Efficiency of Electric Fencing

Fencing plays a major role in most forage managers' planning. There are several choices and considerations to make when constructing a fence. Cost and time are the most important factors for ranchers.

Glenn Hogberg of Progress, feels that "electric fencing is more cost efficient than the standard 4 strand barb-wire fence I build. I use primarily electric fencing for my intensive grazing program and feel it is definitely as effective as barb-wire fences." Glenn uses one strand for his portable divider fences, and 2 strands of electric wire

for his permanent perimeter fences. Both wires are kept hot.

Horst David of Tomslake, however uses primarily only one strand fences. Ninety nine percent of his fences are only one strand and he feels that one strand is adequate and is planning to remove his second strand from his two stranded fences.

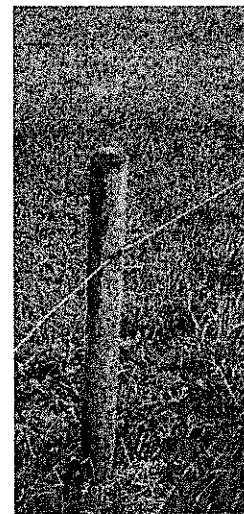
Jim Strasky of Farmington, feels "the materials for the electric fences I put up this summer were cheaper than for barb wire fences I put up in other years."

Tips on Choice of Insulators

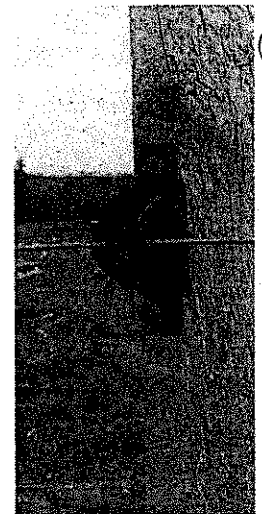
There are many kinds of insulators.

Fred Burres of Farmington suggests "Insulators with plastic pins are the kind of insulators I prefer to use. They enable me to raise the wire at any spot along the fence." Fred intensively grazes his cattle and moves them on a daily basis.

Horst David says "a corner insulator should be thick so that it can stand many years of constant voltage passing by it without disintegrating. I have some corner insulators which only last three years; they are not robust enough to handle constant voltage. I think that the plastic tubing insulators work well, but I have to be careful when attaching them to the post, I can't pound the staple in too far or the plastic breaks and the insulator shorts out. I find I have to try everything once to find out what works best for me on my ranch."

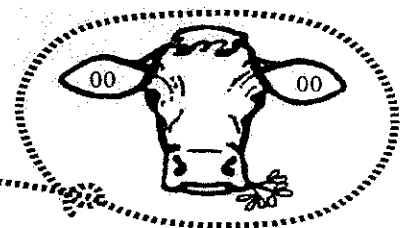


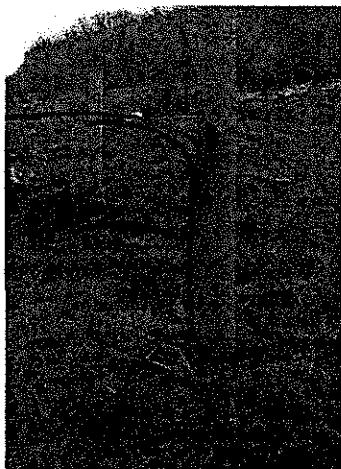
Fred Burres prefers insulators with plastic pins to enable him to raise the wire at any spot on a daily basis.



Heavy insulators, especially for corners, are suited to handling the strain of the high tensile electric wire.

**Peace River Forage Association
of British Columbia**





Underground wires at a gate in a pasture on Hogberg Ranch.

"The key to electric fencing is not to be cheap. Pay the extra for quality and buy a larger energizer than you think you need."
Horst David



Step-posts made from rebar by Ben Hansen add to flexibility and portability of electric fences.

Gates for Electric Fencing

There are several considerations when constructing the electric wire gate. Firstly, how will the gate be fastened? There are many fasteners available in stores today. The most frequently used one in the Peace country has a hook on one end, an insulated spring handle in the middle, and is permanently fastened to the wire on the other end. The gate can easily be fastened and unfastened by people but not by animals.

The second factor is how will the electrical circuit be maintained when the gate is open? **Glenn Hogberg** runs a hot wire underground in a plastic tubing at his gates. **Horst David** and **Jim Strasky** have underground wires as well, so that the circuit is always complete even if some gates are open.

Fred Burres runs an overhead wire above his gates by attaching a 2x4 to the top of his gate posts. This enables a hot wire to run over the gate, while vehicles or cattle can pass underneath without receiving a shock.

Ben Hansen of Taylor, uses both methods for his gates. These overhead/ underground wires at the gates keep the fence hot at all times. "Even when gates are open, there is always a complete circuit with no loss of energy or volts." Ben has also built a self closing gate (see future forage fact for details). Ben has this advice for easy moving between gates: "unhook the wire from 2 or 3 posts, then use a 2" plastic pipe notched in the top, to hook and raise the wire for the animals to move under."

Energizers for Your Electric Fence

There are several choices of energizers. Energizers are powered either by solar energy or by electricity. Solar powered may be cheaper to run, but one drawback of these energizers is the fact that the sun is not up 24 hours a day.

Jim Strasky says "you don't need to tighten your wires as tight because the imprinting with a good energizer, not the tension keeps your animals in." **Ernie Nimitz** advises "imprint your livestock with

a 5-15 joules energizer."

Horst David feels "The key to electric fencing is to pay the extra for quality, buy a larger energizer than you think you need. You will probably be adding more wire." Horst runs 12 ½ gauge tensile wire and aluminum wire from the energizer to get enough volts out to the field fences. Isolation switches are a good investment to turn off the electricity around some of your pastures when not in use.

Summary Comments about Electric Fencing

Fencing is a major part of a forage managers plan; and electric fencing seems to be the choice of more and more ranchers... especially ranchers who are intensively grazing, and moving their cattle and fences regularly. Electric fencing is considered by many a cheaper and more effective method of fencing.

Ernie Nimitz summarizes in these words "I would never consider any other method of fencing. A one or two wire high tensile electric fence is generally cheaper to build than a 3 or 4 strand barb wire fence. The bonus is: it is much more effective at containing your livestock. Electric fence is new technology; barb wire is old technology."

Compiled by: Julie Robinson and Sandra Burton in the Fall of 2000

Forage Facts Project Funding: The PRFA of BC thank all the donators and supporters at their Forage Goods & Services Auction on Feb. 5, 2000.

Wisdom from Watering Holes

Water Wisdom:

- * Animal health/nutrition advantages are a major bonus of offsite watering systems.
- * Funding is regularly available to assist livestock owners to set up watering systems.
- * Good water is essential to good pasture & livestock management for a proper economic return.

Considering Alternatives to Dugout Watering

The watering systems of a ranch play a key role in the pasture management plan. Several options exist when planning a water system. Animals can be watered directly from the dugout or the water can be removed from the dugout and placed in a trough or tub for the animals.

There are 3 main problems with watering livestock directly from dugouts without a ramp, or some sort of offsite watering system. First of all, they will be forced to drink muddy water, due to the disturbance they cause, which can lead to intestinal problems. Secondly, they are also more susceptible to foot rot, because they are exposed to the conditions which are favorable to this illness. Thirdly, livestock tend to destroy the dugout by tramping soil back into the dugout.

Horst David, of Tomslake, built a ramp with geo-grid plastic and crushed gravel.

Horst says, "The cows seem to do better and prefer to drink the water from the gravel ramp rather than from the muddy edge of the dugout."



Horst David built a ramp with geo-grid plastic and crushed gravel.

For more information about water systems call:

- * Glenn Hogberg at (250) 843-7653,
- * Ben Hansen of Taylor at (250) 789-3484, or
- * Garth or Brett at the PFRA office in Dawson Creek at (250) 782-3116.

Nose Pumps and Gravel Foundations

To remove the water from the source and provide it for the animals in a trough or tub, several different systems are available that have been successfully used in the Peace River area.

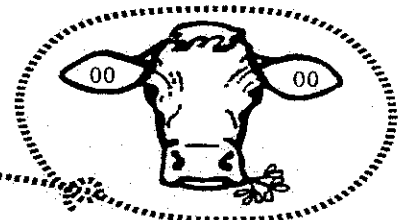
Nose Pumps: A nose pump is a small pump which enables the cows to pump with their nose as they desire water. The Peace River Forage Association of BC (PRFA of BC) has 3 nose pumps for rent, a Lister, Ider and Aquamat. These water pumps can water approximately 35 head.

Glenn Hogberg, of Progress, has laid down a foundation of grade one gravel on a snow fence around the nose pump. The gravel allows the water to filter through and penetrate the soil without making it muddy around the waterer. The snow fence prevents the gravel from being worked into the ground and disappearing. In essence this foundation prevents erosion around the waterer.

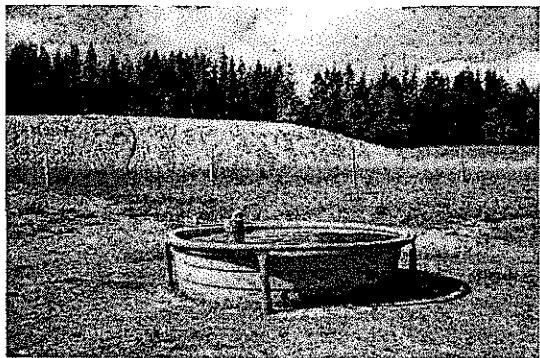
Published by P.R.F.A. of BC:

P.O. Box 908
Dawson Creek, B.C.
V1G 1L6

**Peace River Forage Association
of British Columbia**



Methods of removing water from the dugout



A gravity fill watering system filling a water tub on a ranch in Cecil Lake area.

Glenn Hogberg also has a gravity watering system. Glenn said, "My dugout fills 7 water tubs, four 300 gallon (gal) tanks and three 100 gal tanks. The tubs' water flow is governed by a Gallagher float and fills by gravity from a PFRA assisted dugout. I think that the 300 gal tubs are better than the 100 gal tubs because more cows can water at one time."

Ben Hansen, Taylor, has a solar pump, but his solar pump fills a water tub that is controlled by a float. As the cows have access to this tub, it fills. He would like to add a holding tank to his system. The holding tank would be located close to the solar

pump; therefore, less pressure would be needed to fill this tank than the cows' water tank further away from the dugout.

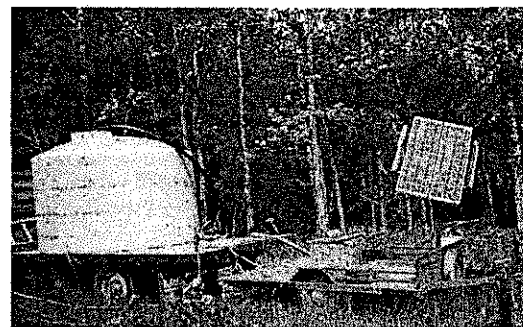
Ben Hansen has also developed a foundation to go under his watering tubs. "I like to lay geo-grid, plastic that pulp mills use to strain pulp, then a layer of used rubber tires (any old size will do), then I pour crushed gravel overtop of the tires and carefully fill them. The finished product is a packed, stable watering foundation for the cows, that resists erosion due to the traffic and water spillage." His 450 gallon water tub sits in the middle of his foundation.

Arnold & Nelda Bennett, of Two Rivers use a windmill to pump water from their dugout.

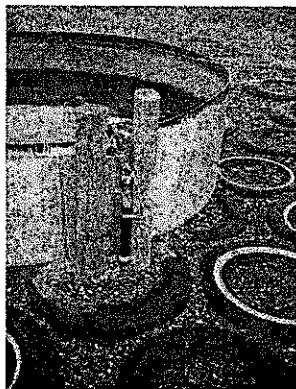
Fred Burres, of Farmington, pumps his water out of his dugout with a solar water pump. He has a completely portable system that moves between several dugouts during the course of the grazing season.



Arnold & Nelda Bennett of Two Rivers, use a windmill to pump water from their dugouts.



Fred Burres of Farmington, uses a solar pump to pump stock water to a tank loaded on his truck.



Ben Hansen's foundation of geo-grid and rubber tires filled with crushed gravel.

Summary Comments about Watering Systems

When developing a watering system one must plan whether they are going to water directly from their source of water or at a separate offsite location. If one wishes to move the water then a plan must be made as to how the water will be removed and where it will be stored. There are many options available to the forage manager for improving their watering systems. Our advice is: go out, look at what other ranchers have done, then consider how it could work in your own situation.

This Forage Fact is the first of a series dealing with water. In future ones we will cover in depth other offsite delivery systems such as:

- * gravity flow Mirafonts,
- * gravity flow out of dugouts using centrifugal gas pumps and storage tanks,
- * windmill pumps, sling pumps for rivers more on geogrid/ gravel pads and
- * other methods of stabilizing watering areas for cattle.

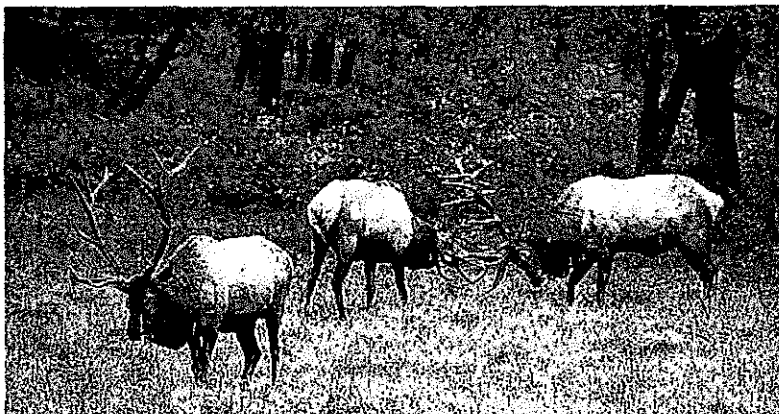
Compiled by: Julie Robinson and Sandra Burton in the Fall of 2000

Water Projects Financially Assisted by: Prairie Farm Rehabilitation Administration office in Dawson Creek
Forage Fact's Project Funding: The PRFA of BC thank all the donators and supporters at their Forage Goods & Services Auction on Feb. 5, 2000.

Plan Now to Attend.....

Wildlife Agricultural Symposium Slated for January 26-27, 2001

The Wildlife Committee as constituted by the Peace River Regional District is hosting a Wildlife and Agricultural Symposium. Tentative date is the last week in January and the likely location is Fort St. John.



Plans are underway to invite experts and government agencies from Saskatchewan, Alberta, British Columbia and various U.S. States for their participation.

Featured Speakers:

Bob Budd - Southern Wind River Landscape Director, Nature Conservancy, Red Canyon Ranch, Lander, Wyoming. Residing at the Red Canyon Ranch, a nature conservancy Bob deals daily with wildlife and recreation issues and impacts on grazing areas.

Miles Anderson, - Past President of the Saskatchewan Stockgrowers Association (1996-98). A successful cattleman and a member of a historic ranching family in the Fir Mountain area of Southern Saskatchewan near the Montana border. In the mid 1990's Miles served on two province wide task forces with multistake-holder representation: The Wildlife Damage Task Force and the Wildlife Diversification Task Force. These groups are responsible for helping greatly improve the existing situation in Saskatchewan between agricultural producers and wildlife enthusiasts. A parallel group with Miles as co Chair representing the Saskatchewan Stockgrowers Association developed the Prairie Care Action Plan. This plan is a successful rewrite (by Saskatchewan Environment and Resources Management) of a failed World Wildlife Fund plan developed previously in Saskatchewan without agriculture producer input.

Other plans include producer presentations from various sectors and guest speakers from producer organization. The Symposium will also incorporate working groups and a field trip to look at damage and solutions that local producers have used. The PRRD Wildlife Committee believes that the more information the NEBC producers have, the better solutions they can implement in their particular circumstances.

This symposium will provide an opportunity to pull together a lot of resources into a central Peace River location for extensive exploration of situations and solutions. Members of the Forage Association and other Agricultural community groups are encouraged to attend and participate in this Symposium in January.

For further information on the Symposium please contact one of the following : Karen Goodings, Chair PRRD (250-784-3200; Andy Ackerman, Regional Fish and Wildlife Manager, MELP, Fort St. John (250) 787-3426; Burnem Grant (250) 786-5566; Sandra Burton (250) 789-6885; Ernest Nimitz (250) 843-2300.

(Continued from page 7 -Summary from Council for Agricultural Science and Technology)

Sustainability of Grazed Ecosystems

Proper grazing of rangelands is sustainable. For several decades following settlement, however, western public rangelands were not managed and most were over grazed. Livestock grazing was regulated first in 1897 on the Forest Reserves and then in 1934 on the rest of the public rangelands. After management began, deteriorated range conditions began to improve. United States rangelands, with some exceptions are now in their best condition this century.

Range Condition

The range condition concept used in the United States predicts that, in areas where species composition has changed due to grazing, cessation of grazing will result in return to the former "natural" or "climax," state. Newer ecological information indicates that this may not occur in a time frame meaningful to management, i.e. years to decades, especially in ecosystems dominated by shrubs. Restoration of areas to their presettlement" state may be impossible or require greater manipulation than a mere decrease of grazing. Newer range-condition models better explain the dynamics of rangelands but have not been adopted.

Effects of Grazing on Other Rangeland Uses and Values.

Biological Diversity: Livestock grazing can either increase or decrease diversity. Both ungrazed and heavily grazed areas often will be less diverse than moderately grazed areas.

Riparian Acres: Stream corridors in the West have been altered by road building, mining, timber harvesting, recreation, diverting water and irrigating as well as by grazing. Improper livestock grazing can damage riparian areas. Most riparian areas, however, can be grazed safely if stocking rate, season, and length of grazing period are proper.

Wildlife Habitat: Well managed livestock grazing generally is compatible with habitat needs for many game and non game wildlife species.

Timber Production: Many western mature forest types have minimal or temporary forage values. Managed grazing, especially by sheep or goats, can stimulate growth of young trees by removing competing plants.

Recreation: The impacts of livestock grazing on out door recreation and aesthetics vary. Conflicts occur, but well-planned livestock grazing and recreation can peacefully coexist for mutual benefit.

Tools for Management of Rangelands

Grazing systems rotate use, among pastureland control time of grazing, stocking rate, and utilization levels.

Fire was a natural part of most rangeland. Fire return intervals lengthened because early heavy grazing and deliberate fire control depleted fine fuels. Without fire, sagebrush and juniper trees invaded areas. Fire now is being returned to many ecosystems.

Other range improvements such as herbicides, mechanical methods and biological controls (including grazing) can be used to manage unwanted shrubs and weeds.

Seeding can increase forage production or ground cover for erosion control, but costs are high. Most seeding is done on drastically disturbed sites.

Socioeconomic Implications of Public Land Grazing

Future of Public -Land Grazing

In 1992, a 48% increase in demand for grazed forage was predicted to be met, mainly from private rangelands by 2030. The structure of the western rangeland make it unlikely that this projected increased forage demand can be met exclusively from Private rangelands. . A decline in public-land grazing also was predicted.

About 20% (6million) of beef cattle in the United States are in the 11 western states. More than half of these animals graze the 262 million acres of Bureau of Land Management or U.S. Forest Service lands. Federal grazing permits complement the common cow-calf and cow-calf yearling operation and help stabilize the western livestock industry. In most western states, beef cattle are the highest or the second highest income producer in agriculture.

When grazing on public lands was initially regulated by the federal government, permits to graze allotments were awarded to local ranchers who owned private land and /or water rights and historically had used these rangelands. In Western states in which a large percentage of land is federally owned, there is insufficient private land to substitute for public land, should grazing be prohibit on it.

The Grazing Fee Issue

Private grazing rental rates are higher than the federal grazing fee, but the two types of leases are not analogous. Most federal land is extensive, steep, and difficult to manage; homesteaders settled on more productive lands. Also, private leases generally include all improvements and may include management and exclusive use of the land. Federal grazers must share the land with other users; and management agencies restrict the time and pattern of livestock grazing, require construction and/or maintenance of improvements, and impose ever increasing overhead (non fee) costs.

If federal grazing fees were increased to the level of private lease rates, grazing on public lands would not be economically feasible for many public land dependent livestock ranchers and would contribute to the decline of western rural communities. Some ranchers priced off of public lands would have to sell their livestock and subdivide or sell their private land holdings to developers. Others would greatly intensify their livestock operations on private land. Either action can have serious ecological consequences and affect valuable winter wildlife habitat for big game herds.

Grazing on Public Lands was written by a task force of 7 scientists. The 70 page publication, Report 129, is available for \$20.00 plus \$3.00 shipping from CAST. Individual and student members of CAST may request a free copy; please include \$3.00 shipping. CAST, 4420 West Lincoln Way, Ames IA 50014-3447, (515) 292-2125, fax: (515) 292-4512, Internet cast@cast-science.org, World Wide Web: <http://www.netins.Net/showcase/cast/> Fax your order toll free to 1-800 375-CAST.

Notice of Annual General Meeting and Luncheon
Farmington Community Hall
11:30 a.m. Friday December 1, 2000
Peace River Forage Association of B.C.

Agenda

1. **11:30am - 1:00 pm Luncheon and Guest Speaker Grant Lastiwka, P.Ag., Extension Pasture Agronomist, Western Forage and Beef Group, Lacombe, Alberta "Optimizing Profit with a Grazing System"**
2. **1:00 p.m. Call to order of AGM and approval of Agenda.**
3. **Minutes from December 1999 AGM**
4. **Association Business, Directors and Committee Activities in 2000.**
 - A. Correspondence
 - B. Presidents Report (Arnold Bennett)
 - C. Auditors Report
 - D. Treasurer's Financial Reports (Bill Wilson)
 1. General Association Account 1036-796
 2. Project Account 1038-791
 3. Project Account 1042-758
 - E. Advisory Committee Report
 - F. Nominations for Directors (Directors whose terms are expiring: Doug Bentley, Fred Burres, Michael Cowger, Ernest Nimitz)
 - G. Wildlife Policy Development Committee Report (Burnem Grant)
 - H. Research and Development Committee Report (Glenn Hogberg)
 - I. B.C. Forage Council Report (John Kendrew)
 - J. Secretary's Report, including "B.C. Peace River Country Forage Development Project"
 - K. Special Report Kiwanis Enterprise Center Activities (Frances Armstrong)
5. **Coffee and Refreshments Break**
6. **3:30 p.m. Cross Commodity Manager Report, Sandra Burton, P.Ag.**
7. **Association Business and Programs for 2001**
 - A. Election of four Directors
 - B. Election of two Auditors
 - C. Winter Forage Seminar January 2001 at Fort St. John.
 - D. Summer Forage Tour June 2001 (who, where, what, when?)
 - E. R & D Projects
 - F. Working with Sandra Burton, the Cross Commodity Manager
 - G. Forage First & Communications Projects including B.C. Peace River Country Forage Development Project
 - H. Wildlife Policy Development Committee Projects
 - I. Winter Forage Club Meetings
 - J. Working with Advisory Committee.
 - K. Any other pertinent business matter or forage subjects which the membership wish to bring to the floor for discussion.
8. **5:30 p.m. Adjournment**



Members, please note, this is your opportunity " to get a free lunch" and to hear our guest speaker.

Director's Business Meeting and Supper to follow the AGM 6:00 - 7:30 p.m.

Preceding the AGM, Directors met for business at 10:00 am