

# FORAGE FIRST

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

86<sup>th</sup> Edition

Spring 2021

\$10

## Show Us Your Boots !



Cartoon Reprinted with Permission from Artist: Sue Hansen

### Inside This Issue:

*(for paid up members)*

President's Message	pg 2
Directors & Committees	pg 2
Peace Pioneers	pg 3 & 4
Tribute to Henry Nagel	pg 5
Tastes of the Peace	pg 6
Where Are These People?	pg 7
Perennial Plants & Dormancy	pg 8
Feeding & Rumen Health	pg 9 & 10
Equipment Rentals	pg 11&12

### Inserts: *(for paid up members)*

*Past Webinars in Review*

*Foxtail Barley Infestation Management*

*Friends of Forage Ads*

*BC Agri Update*

### Inserts: *(for renewing members)*

*2021/ 2022 Membership Form*

*Friends of Forage Ads*

## How do I know if I've paid my membership?

*By Chris Thomson*

Insert label  
here

We appreciate you keeping your membership current. Sometimes, it is hard to remember if you need to renew or if you are paid up for several years. To help you figure this out, we have implemented a new tracking system. If you look at the **top right of your mailing label, there is a date. This is the date that your membership expires!** After this date, you will receive membership renewal forms. We start with gentle pastel colors progressing to your **4th & last chance reminder to renew in bright pink.**

Visit us at [www.peaceforage.bc.ca](http://www.peaceforage.bc.ca) or  
visit our Facebook page

Please keep us informed if your email or  
contact information changes.

# President's Message

By Neil Ward



It's springtime in the Peace and everything is as clear as mud! The weather can't decide if it's going to rain, not rain, snow, or be sunny. So we need to be prudent as we plan our forage and grazing for this season.

The Forage Association has been working on a 5 year strategic plan. Last fall we collected your feedback (see summary in the Winter 2021 Forage First newsletter). Based on what you told us, we had detailed discussions with 4 focus groups to translate your ideas into an action plan. This is now being reviewed and carefully implemented. Here are some examples of actions moving forward from each focus group.

## Member Services & Equipment Rentals:

Please review the equipment available for rent by paid up members on page 11 & 12. Josh Stobbe is leading this effort & can be contacted for more information at 587 986 1041.

## Events, Webinars & Podcasts:

There was a series of 13 webinars this winter (see special insert & thankyou to Samantha Dilworth). We hope to provide paid up members access to these through our website soon.

Bess Legault, Julie Robinson and Nadia Mori are writing up proposals for a project that would produce the good news stories from Peace farmers and ranchers as podcasts.

## Communications:

We are working with Chad Anderson of New Harvest Media on a website redesign that will have new benefits for paid up members. Watch for updates in our summer issue of the newsletter.

## Research & Development Projects:

There has been a lot of discussion about future R&D projects over the winter months and proposals were submitted by Julie Robinson & Nadia Mori. There are exciting new opportunities partnering with AAFC to create a Peace Agroecosystems Living Labs project. We are actively involved and will share more as things develop.

We were hoping to have the challenges of COVID19 behind us but here we are, with things still clear as mud.

**But the grass is turning green in April!** This is shaping up to be a really good year for forage!



Moving 650 cows down the highway on April 19, 2021.



First born heifer calves on stockpiled grass.



Fixing log jam that is flooding our hay fields.



Success with last year's fall seeding.

## Board of Directors

### Directors:

Neil Ward, President, Fort St John	403 512 0518
Jackie Thiessen, Vice Pres., Charlie Lake	250 644 4988
Bess Legault, Treasurer, Charlie Lake	778 256 3353
Kristina Schweitzer, Director, Rolla	250 759 4614
Shaun Grant, Director, Dawson Creek	250 782 7820
Josh Stobbe, Director, Goodlow	587 986 1041
Shellie English, Director, Montney	250 262 5402

### Advisors:

Brenna Schilds, BC Ministry of Agriculture	877 772 2200
Nadia Mori, BC Ministry of Agriculture	250 787 3241

### Committees:

Equipment Rentals: Josh Stobbe, Stan Smithard, Art Seidl  
AB Beef Forage & Grazing Advisory: Ron Buchanan  
Site C Consultation: Heather Fossum  
BC Climate Action: Bill Wilson, Darryl Kroeker

### Current Projects & Lead Contractors:

Membership & Bookkeeping: Chris Thomson  
Interseeding to Improve Forage Project: Julie Robinson  
Communications: Heather Fossum, Sandra Burton



# Peace Pioneers

By Brette Madden

*Stories of our Forefathers  
and Agricultural History*

The Maddens have been involved in farming in the South Peace since 1931. The Madden family, originally from Minnesota, moved from their farm in Saskatchewan to the Peace Country in 1931, when my great grandfather, Michael (Mike) Madden's doctor thought that a change in climate would benefit his health. After homesteading here, a couple sons left the area, but most of the family stayed, set down roots and continued to farm for as long as their health would allow.

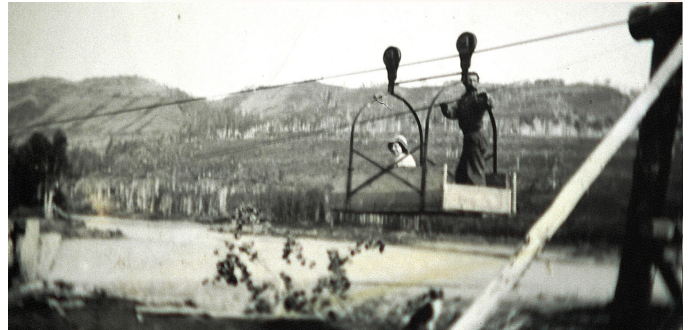
Michael (Mike) Madden arrived in Dawson Creek on a train box car with their machinery, a small amount of cows, and household items in June 1931. Three of his sons, Leonard, Roy, and Al arrived the next day with the wagons and some horses; while his wife Celia, son Frank and daughter Sarah, drove up shortly thereafter. Leonard would later return to the trail to meet up with brother Leo and drive up their herd of nearly 50 horses. The family was fully settled in lush Lone Prairie by winter of 1931.

The early days in the Peace River country presented the Madden family with a series of challenges. Lone Prairie's remote landscape proved to make ranching in the area difficult, traplines were scarce, and the lack of access to medical care pushed the family to East Pine in 1934, where they would continue to farm and raise cattle.



Alice Madden, pictured 2nd from right in front of the East Pine Post Office, arrived in Lone Prairie to help Celia after the loss of Sarah in 1933. Alone, Alice traveled West from Winnipeg via train to Dawson Creek, hitched a ride from Dawson Creek to East Pine on the mail rig (team and buck-board at the time), and then rode horseback over the mountain to Lone Prairie.

Hardship would strike the family once again when an ice jam at the junction of the Murray and Peace filled the valley with water, flooding the Madden's farm. The flood caused a massive loss of cattle and horses and left Mike literally clinging to a tree branch for survival as the barn got swept down river.



There was no bridge across the Pine when the Maddens settled in Lone Prairie, but baskets were installed in 1933.

In addition to farming, the family owned a stopping place which served meals to highway workers. Daughter Alice cooked and ran the Post Office; and the sons packed for different outfitters & surveyors. Frank, Roy, and Leo all enlisted in WWII.



Al, Roy, Alice, and Leonard Madden



Frank Madden with a couple of his pack horses

As the children aged, Al and Leo moved away and the rest of the Madden family slowly migrated across the Pine to Groundbirch.



Madden horses tied at the Groundbirch Store (estimated ~1950)

Frank married Irene Wartenbe, a Lone Prairie neighbour, in 1935 and had five children: Yvonne (Berg), Billie (McGuire), Blondie (Berg), Frankie (Schreiber), and Roddy.



# Peace Pioneers

The Madden Family continued...

Frank and his family set roots in Groundbirch where they farmed and raised cattle while Frank also worked off the farm as a camp cook. Frank remained in Groundbirch until his passing in 1971. Three of Frank's daughters remained active in the South Peace agriculture community, with Blondie residing in Groundbirch to this day.



Roy and Hettie started their family in what Hettie would later describe as a "very small but comfortable temporary home", a 28' x 12' cabin, at East Pine. During the Winter of 1949, Roy skidded the little cabin to Groundbirch to set up their permanent home. The family of 4 would remain in that cabin until 1962 when they added another 18' onto it. Hettie lived in that home until her passing at the age of 93.

Upon returning to East Pine after the WWII, Roy married Hettie Erdely- sister of one of his platoon-mates in 1947, and had two children: Dennis and Sharon (Postle). In December of 1949, Roy skidded their cabin from East Pine to a piece of farmland in Groundbirch where they made their home. Roy, Hettie, and the children continued to farm and raise cattle until Roy's passing in 1964 when Dennis would continue Roy's farming legacy. To this day, Roy's farm is still used for forage production and remains under Madden ownership, though Dennis has since moved the cattle ranch to Jack Fish Lake.

Alice remained in East Pine cooking at the stopping house and caring for Mike and Celia as their health deteriorated. She married Walter Linsley in 1954 and made the move across the Pine to Groundbirch. Walter and Alice farmed just one mile South of Roy's farm until Walter became ill and the couple moved to Dawson Creek in 1984.

Leonard made the move to Groundbirch in 1955 where he set up his own farm and raised cattle. Although Leonard never married, he had close ties with his siblings and enjoyed the company of his nieces and nephews. Leonard continued to outfit and farm until his health deteriorated forcing him to move into Rotary Village at the age of 77.



Dennis and Sharon (Roy's children) in Potato Patch in Groundbirch.



Dennis helping Roy get the hay up as a young boy.

Sadly, the generation that came and settled here is now all gone. However, my Dad (Dennis) is still actively farming his family's (Roy's) original Groundbirch farmland even though he is nearing retirement; and his cousin Blondie still holds Madden farmland (formally Uncle Leonard's land). Both farms are still used in forage production.

There are members of the 3rd generation keeping the Madden agricultural legacy alive. Myself and my partner, Craig Fossum, have become active in the South Peace farming community over the last few years. My sister Brandi Sather continues to farm with husband Trevor in the Alberta Peace (near Demmitt), as does cousin Crystal Field (Frank's great granddaughter) with her husband Ashely Johnson (near Cherry Point). We have numerous cousins living throughout the BC & AB Peace. Our current opportunities would not be possible without the sacrifices and hard work of Mike, Cecilia and their children.



Brette was raised on working cattle ranches & now lives in Arras with her partner, 2 children & multiple mini-pasture ornaments. They grow forage & cattle. Brette is a poor but determined beekeeper. She also has a small business which sews baby items & she volunteers with the DC Hospital Foundation, Deveraux PAC, Cutbank Community Club & Kiskatinaw Fall Fair.

I love reading the stories and learning what brought people and their families to the Peace. I hope that Peace Pioneers will become a regular article in the Newsletter. Can you help?

## CALLING ALL MEMBERS

If you have photos and short stories, no matter how short, of Peace Pioneers we would LOVE to hear from you (*maybe your parents, grandparents or great grandparents*). Likewise if you have any photos and information regarding Peace Agricultural History **please email them to [coordinator@peaceforage.bc.ca](mailto:coordinator@peaceforage.bc.ca)** Thank you, Heather Fossum



## Long Term Member Tribute: Henry Nagel



Henry with his prize Hereford bull.

Henry Paul Nagel left this world on December 26, 2020, three weeks short of his 93<sup>rd</sup> birthday. He leaves to mourn his wife of 68 plus years, Patsy, his daughters, Pauline Lea (Gordon), Sally Barkwell (Grant), Christine Haddow (Randy), and Vikki Ross (Kelly). Henry was grandfather to 11 grand children and their spouses and Great Grandfather to 23 great grandchildren.

Henry was well known in the Peace River area for his agricultural activities and his support of the cattle industry. He had a special love for the Hereford Breed. He received awards for his bulls in the local bull sales and supported the Dawson Creek Bull Sales since the first sale in 1972. He promoted the Hereford breed by entering his bull calves in Bull Test Stations in Tranquille, BC and Fairview, AB. He was recognized by the Canadian Hereford Association for his 30 years of raising registered Hereford cattle. He was also recognized for his dedication to the cattle industry when he received the Cattleman of the Year award. Henry has one grandson, Chad Haddow, still raising Registered Hereford bulls for sale in the Peace River area.

Henry operated a mixed farm on Highway 49 on the BC/AB border. He produced prize winning alfalfa hay and grain to feed his calves and bulls. Much of his farm land was covered with trees and bush, which meant many days of hard work to bring it into production. He bought an old sawmill to utilize the trees into lumber to build barns and corrals. He also did custom sawing for many farmers in the area.

Having 4 lovely daughters did not deprive him of help! His girls learned to operate all the machinery and even did custom haying to earn money for higher education. The 4-H clubs taught them how to raise prize winning steers, which also helped their bank accounts!



Patsy & Henry celebrating their 67th anniversary.

When the farming industry could not support the farm, Henry operated his Case Cat for the government, clearing snow in winter and doing road work in the summer.

Patsy remembers Henry saying "I want to try something different while we are still young." In the 1980's they raised reindeer for over 10 years. Their farm was covered on a CBC nationwide program bringing Ian Hanamansing up to the Peace to interview them as they were fencing.

Henry had a long and very productive life and he will be greatly missed by his family and many friends.



Family photo taken in summer 2020. Back row: Four daughters: Vikki Ross, Polly Lea, Sally Barkwell & Chris Haddow. Front row: Henry & Patsy Nagel.

Henry & Patsy have been Forage members since the beginning. Patsy wrote for Beef in BC & Northern Horizon for 20 years.

# Tastes with Peace-agg

## Cider Beef Stew

Makes 6 to 8 servings

By Diane Fossum

2 pounds beef stew meat  
(preferably Peace Country beef)  
3 tablespoons all purpose flour  
2 teaspoons salt  
1/4 teaspoon pepper  
1/4 teaspoon dried thyme, crushed  
3 tablespoons cooking oil  
2 cups apple cider or juice  
1/2 cup water  
2 tablespoons vinegar  
4 carrots, quartered  
3 potatoes, peeled, quartered  
2 onions, sliced  
1 rib celery, sliced  
1 apple, chopped  
1 small turnip, chopped (optional)

Combine herbs with flour & toss with meat pieces to coat. In Dutch oven, brown meat in hot oil. Sir in cider or juice, water & vinegar. Cook & stir till boiling. Reduce heat & simmer until meat is tender, about 1 1/2 to 2 hours. Add vegetables & apple. Cook until tender, about 30 minutes. Season to taste with salt & pepper.

Slow cooker directions: Combine herbs with flour & toss meat pieces to coat. Brown meat in large skillet in hot oil. Place chopped vegetables into slow cooker. Add apple & meat pieces on top. Combine cider with only 1 tablespoon vinegar & do not add water. Pour over meat & vegetables. Cover & cook on low setting 10 to 12 hours. Season to taste with salt & pepper.

Serve with hot biscuits or dumplings.



Three Fossum generations rounding up cattle in the Bear Mountain Community Pasture & trailing them home in the fall of 2015.



After the honey was harvested, the Van Han Apiaries crew prepared their bees for over wintering in the Peace or selling in Washington State, U.S. (Sept 1996). The crew (from left to right) included Chris Thomson, Carl VanWechel & Rick Thomson. Other crew not shown in photograph included Alice VanWechel, Dale & Sue Hansen.

## Luau Short Ribs

Makes 5 to 6 servings

By Chris Thomson

3 pounds lean Peace Country beef short ribs  
1/2 cup flour  
1 tsp. salt  
1/2 tsp. pepper  
1 medium onion, sliced  
1 cup hot ketchup  
2 tablespoons wine vinegar  
2 tablespoons Worcestershire sauce  
1/2 cup Peace Country honey  
1/4 cup water

Wipe short ribs with damp paper towel. Mix flour, salt and pepper. Coat ribs with mix. Arrange in large baking dish. Place sliced onion on top. Mix remaining ingredients. Pour over ribs. Cover. Bake at 350 degrees 2 hours or until tender. For crisp ribs remove cover last 30 minutes.

Note: I do the ribs in a slow cooker. About an hour to an 1 1/2 hours before serving, I add the sauce and leave to finish in the slow cooker.

Please join us for the Peace Products Cookoff Contest.

Send us your favorite recipe with a photo & a story or caption about your farm operation. We have prizes for the top 3 winners! Send your entries to [coordinator@peaceforage.bc.ca](mailto:coordinator@peaceforage.bc.ca)



# 2021 Winter Webinars in Review

## Farm & Ranch Management

During the last 3 months since the last newsletter 11 webinars were offered.

The PRFA of BC is investigating options to make these webinars available for members to watch. Please stay tuned for details.



Do you live and farm in the BC Peace?

Are you growing food for human or livestock consumption?

Is one of your farming goals to maintain environmentally sustainable land?

If you answered yes to any one of these questions, we need to talk. The Environmental Farm Plan is a free program, that's right, FREE. Not only that, if your farm falls within the qualifications of the program, your farm would qualify for up to \$70,000 in program funding to assist you improve your best management practices in your farming operations.



Presented by: Kari Bondaroff  
Planning Advisor

Webinar Jan 30 / 2021 @ 12:00pm - 12:30pm

### GOOD NEWS STORIES In The Peace

Dan and Trudy Loewen

stuck it out during hard times and now they have improved their grazing practices and watering systems with the EFP.

Ben Harrington & Tara Holmes

"If you want to keep and improve the wild areas and maintain the beauty of the wild areas on your farm land, the Environmental Farm Plan is worth completing"

Deny and Amanda Chramosta

"It has already saved extra time and air emissions due to hauling water to the livestock with our vehicles. We would have never been able to afford to do this project without the program funding, and it has knocked years off our goals and protected our environment!"

For more Good News Stories Visit

[https://www.facebook.com/krbondaroffpeacecountry/?ref=page\\_internal](https://www.facebook.com/krbondaroffpeacecountry/?ref=page_internal)



### When Is The Best Time To Sell Your Calves?

Brian Perillat will be discussing

The importance of looking at all the variables in the market & in your herd

How the seasonal price fluctuations from the ten year market trends can give you a more calculated understanding

The decision making process from assess all expenses and create a budget

Putting Market Trends and Budgets Together to see what would best suit your operation

### 10 YEAR MARKETING TREND



Presented by: Brian Perillat  
Manager/Senior Analyst at Canfax

Webinar - Feb 8 / 2021 @ 12:00pm

Cost: \$25.00 for PRFA Members  
\$30.00 for Non-Members

### Marketing Analysis Articles

Authored by: Brian Perillat Manager/Senior Analyst at Canfax

Calf Price Considerations for Ranchers and Feeders  
<https://www.realagriculture.com/2012/08/calf-price-considerations-for-ranchers-and-feeders>

Calling All Culls

<https://www.realagriculture.com/2012/06/calling-all-culls>

Canfax Releases the AB/SK April 1st Cattle on Feed Report  
<https://www.realagriculture.com/2012/04/canfax-releases-the-absk-april-1st-cattle-on-feed-report/>

### The Forage Extension & Mentorship Community Outreach Project provided:

- ◇ 6 pasture walks (2020)
- ◇ 5 clinics (2020-21)
- ◇ 2 online courses (2020)
- ◇ 11 webinars (2021)



### Finding Your Herds Hidden Profits

Brian Perillat will be discussing

Cow Market Seasonality?

Feeding Culls Versus Marketing In The Fall

- Marketing opportunities versus costs

How To Project Calf Prices Using Future Markets

- Understanding why heavier calves are worth more in the fall versus the spring
- Why such a large spread between steers and heifers
- Understanding the impact of the Canadian dollar, feed costs, etc. on calf prices

### READING AND APPLYING MARKET SIGNALS



Presented by: Brian Perillat  
Manager/Senior Analyst at Canfax

Webinar - Feb 22 / 2021 @ 12:00pm

Cost: \$25.00 for PRFA Members  
\$30.00 for Non-Members

### Marketing Analysis Articles

Authored by: Brian Perillat Manager/Senior Analyst at Canfax

Calf Price Considerations for Ranchers and Feeders  
<https://www.realagriculture.com/2012/08/calf-price-considerations-for-ranchers-and-feeders>

Calling All Culls

<https://www.realagriculture.com/2012/06/calling-all-culls>

Canfax Releases the AB/SK April 1st Cattle on Feed Report  
<https://www.realagriculture.com/2012/04/canfax-releases-the-absk-april-1st-cattle-on-feed-report/>

For information on pasture walks & clinics please see write-ups in the **Forage First** newsletters:

- ◇ Fall 2020
- ◇ Winter 2021



# 2021 Winter Webinars in Review

## Pasture & Grazing Management



### The PROS & CONS of Seeding Into Winter Frost

Julie Robinson will be discussing

The Advantages and Disadvantages between fall and spring seeding.  
Management practices for successful winter frost seeding

- Species selection and seeding rates
- Reduction in plant competition
- Seeding Time and Method

Re-vegetation project results that brought surprisingly stronger result for the success of winter frost seeding

### SEEDING INTO WINTER FROST IN NORTHERN BC



Presented by: Julie Robinson, P.Ag  
Sr Agrologist for Forage Friendly Enterprises Ltd

Webinar Jan 25 /2021 @ 7:00- 7:30pm

Cost: \$10.00 for PRFA Members  
\$15.00 for Non-Members

### Peace River Forage Association of BC Research and Development Forage Facts

#### How Important is Timing of Seeding?

Each timing of seeding has its own pros and cons. Spring seeding provides a lower level of risk, more opportunities to incorporate seed into the soil and adding fertilizer. As seen in the re-vegetation demo most forage species emerged better in the spring .... read more click on the link below  
[http://peaceforage.bc.ca/forage\\_facts\\_pdfs/FF\\_78\\_Timing\\_of\\_Seeding.pdf](http://peaceforage.bc.ca/forage_facts_pdfs/FF_78_Timing_of_Seeding.pdf)

#### Emerging Re-vegetation Superstars

[http://peaceforage.bc.ca/forage\\_facts\\_pdfs/FF\\_77\\_Emerging\\_Re-vegetation\\_Superstars.pdf](http://peaceforage.bc.ca/forage_facts_pdfs/FF_77_Emerging_Re-vegetation_Superstars.pdf)

### Please Note:

The summer tour will take a break again this year & resume in 2022.

However, if current Covid-19 restrictions change, we may be able to host small summer & fall pasture walks.

For more info:  
Follow updates on our website  
[www.peaceforage.bc.ca](http://www.peaceforage.bc.ca)  
OR  
follow us on Facebook  
OR  
email  
[prfaevent@gmail.com](mailto:prfaevent@gmail.com)



### Can Seeding Alfalfa Into Old Hay Fields Improve Yields ?

Julie Robinson will be discussing :

- What it means to Interseed?
- Can Alfalfa be interseeded into an established alfalfa ?
- Can I infill gaps in an old hay or pasture field to improve production without the cost of full rejuvenation
- Is there things I can do, to help improve success in interseeding ? (such as grazing, mowing, bale grazing)
- Are there certain species that interseed better
- Is timing of interseeding important

For More Details On Upcoming Events :  
[www.peaceforage.bc.ca](http://www.peaceforage.bc.ca)

### Interseeding Research and Development Project



Presented by: Julie Robinson, P.Ag  
Sr Agrologist for Forage Friendly Enterprises Ltd

Webinar Feb 15 /2021 @ 7:00- 7:30pm

Cost: \$FREE for PRFA Members  
\$15.00 for Non-Members

### Peace River Forage Association of BC Research and Development Project

Julie has completed two years on her three year Interseeding Research & Development Project with the Peace River Forage Association. Learn about her finding during this webinar.

Article From: Alfalfa & Forage News  
<https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=22549>



### Is There A Silver Bullet To Eliminate Foxtail Barley

Julie Robinson will be discussing :

- What Eliminates Foxtail Barley?  
- Chemical Products - Mowing - Rotational Grazing  
- Interseeding - Rejuvenation
- Why does Foxtail Barley flourish in certain areas?  
- Spring Calving Pastures - Bale Yards - Over Grazed Area
- Positive result during the Interseeding R & D Project at the Sunset Community Pasture.
- How can these results be replicated on a working ranch?

For More Details On Upcoming Events :  
[www.peaceforage.bc.ca](http://www.peaceforage.bc.ca)

### Interseeding Research and Development Project



Presented by: Julie Robinson, P.Ag  
Sr Agrologist for Forage Friendly Enterprises Ltd

Webinar Mar 15 /2021 @ 7:00- 7:30pm

Cost: \$FREE for PRFA Members  
\$15.00 for Non-Members

### Peace River Forage Association of BC Research and Development Project

Julie has completed two years on her three year Interseeding Research & Development Project with the Peace River Forage Association. Learn about her finding during this webinar.

Article From Alberta Ministry of Forestry and Agriculture  
[https://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex856/\\$file/519-15.pdf?OpenElement](https://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex856/$file/519-15.pdf?OpenElement)

This Pasture Management & Grazing webinar trio was made possible through contributions from the Interseeding to Improve Forages Project  
For more info:  
Follow updates on our website  
[www.peaceforage.bc.ca](http://www.peaceforage.bc.ca)



# 2021 Winter Webinars in Review

## Feed and Nutrition



### Nutritional Changes In Later Gestation

Barry Yaremicio will be discussing :

#### The Why & How...

...Supplying older or lower quality feeds to cows in mid- to late pregnancy when nutrient requirements are lower and using higher quality feeds for calves and lactating cows reduces overall winter feed costs

...Custom mineral may be required to meet mineral, trace mineral, vitamin, and ionophore requirements.

...Evaluating information is necessary to determine the strengths and weaknesses that exist in your herd. For example: the calving profile reflects on pre- and post-calving nutrition

For More Details On Upcoming Events :  
[www.peaceforage.bc.ca](http://www.peaceforage.bc.ca)

### Transitioning Nutrition Requirements For Calving



Presented by: Barry Yaremicio P.Ag., MSc  
Yaremicio Ag Consulting Ltd.

Webinar Feb 26 /2021 @ 7:30- 8:30pm

Cost: \$25.00 for PRFA Members  
\$30.00 for Non-Members

### Yaremicio Ag Consulting Ltd.

Providing sound independent beef nutrition and management consulting services to cattle producers and the industry.

Articles From Yaremicio Ag Consulting Ltd.

<https://www.beefconsultant.com/post/two-year-old-hay>

<https://www.beefconsultant.com/post/net-wrapped-bales-can-create-health-problems>

### Please Note:

PRFA of BC's AGM  
will be held on  
December 1, 2021

Details will be provided  
in the fall newsletter &  
on the website.

**Please Note:**  
If you didn't hear  
about these webinars,  
please make sure  
your membership is  
paid up  
& we have your  
current email  
address.



### Prepping Yearlings For Spring Sales & Guidelines For Transitioning Purchased Yearlings

Barry Yaremicio will be discussing  
The Why & How's & What's...

Why is it important and how to have the animal looking good for the spring sale?

How much shrinkage occurs when animals are under stress? What are the long term consequences?

What are you wanting to give stressed calves for rations?

What is the need for additional vitamin E and Selenium?

For More Details On Upcoming Events :  
[www.peaceforage.bc.ca](http://www.peaceforage.bc.ca)



Presented by: Barry Yaremicio P.Ag., MSc  
Yaremicio Ag Consulting Ltd.

Webinar Mar 26 /2021 @ 7:30- 8:30pm

Cost: \$25.00 for PRFA Members  
\$30.00 for Non-Members

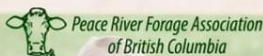
### Yaremicio Ag Consulting Ltd.

Providing sound independent beef nutrition and management consulting services to cattle producers and the industry.

Articles From Yaremicio Ag Consulting Ltd.

<https://www.beefconsultant.com/post/two-year-old-hay>

<https://www.beefconsultant.com/post/net-wrapped-bales-can-create-health-problems>



### Preparing Your Project For The Finishing Stages

Barry Yaremicio will be discussing :

#### The What's, How's and Why's

... What is the animal weight now? How much does it need to gain? How many days to sale day?

... How to increase grain intake without animals going off feed?

... Importance of consistency - both in amounts fed and time of day.

For More Details On Upcoming Events :  
[www.peaceforage.bc.ca](http://www.peaceforage.bc.ca)

### 4-H & Youth Cattle Groups



Presented by: Barry Yaremicio P.Ag., MSc  
Yaremicio Ag Consulting Ltd.

Webinar Mar 12 /2021 @ 7:30- 8:00pm

Cost: \$25.00 for PRFA Members  
\$30.00 for Non-Members  
\$100.00 Youth Cattle Group/Club

### Yaremicio Ag Consulting Ltd.

Providing sound independent beef nutrition and management consulting services to cattle producers and the industry.

Articles From Yaremicio Ag Consulting Ltd.

<https://www.beefconsultant.com/post/adding-ingredients-to-rations>

<https://www.beefconsultant.com/post/net-wrapped-bales-can-create-health-problems>

To contact Barry  
Yaremicio for future  
consultations:

See page 7 of this  
spring 2021 newsletter



# 2021 Winter Webinars in Review

## Soil Health and Livestock Health



Peace River Forage Association  
of British Columbia

### Creating Resilient Farms and Farmers

Brooke Hayes will be discussing

Farmers are increasingly seeking opportunities to diversify their operations and maintain economic viability while preparing for and adapting to climate change, a challenge more likely to be realized by smaller, more agile producers, typical of those in BC. With some of the lowest paid farmers in Canada, and increasingly variable economic conditions, the mental health of farmers is a critical ingredient to successful and sustainable food systems in BC. Join us to discuss this subject in an upcoming webinar

### IMPROVING MENTAL HEALTH AND SOIL QUALITY



Presented by: Ms Brooke Hayes  
M.Sc Student

Webinar Jan 28 /21 @ 11am-12pm

Cost: \$25.00 for PRFA Members  
\$30.00 for Non-Members

#### Survey:

#### Soil Quality, Farmer Health, and Product Quality - Reinventing Policy Paradigms

**Calling all BC farmers that care about the soil!**

Help us to change the policy paradigm of BC agriculture by completing a survey at

<https://www.surveymonkey.ca/r/QRZMDF>.

Your input will help to draw connections between farmer health, soil quality and product quality, AND you will have a chance to receive free soil and food product testing for your farm. For more information about this research, visit:

<http://web.uvic.ca/~jpv/research/healthyfarms/>

The Forage Extension & Mentorship Community Outreach Project was funded by the BC Hydro Agricultural Compensation Fund.

The timeline was:  
July 1, 2020 to  
March 31, 2021

You too can be a  
**Friend of Forage !**

The newsletter  
advertising rates are:

\$ 75 business card  
\$125 1/4 page  
\$200 1/2 page  
\$300 full page  
\$500 full 2 pages

Or call us with your idea  
at 250.789.6885 or  
email coordinator  
@peaceforage.bc.ca



Peace River Forage Association  
of British Columbia

### "WHAT'S IN THEIR DUNG? "

How do you know your deworming practices are  
giving you the result you are wanting?

Dr John Gilleard will be discussing

Understanding which roundworm parasites are present  
and of concern in Cows, Sheep, Goats, Buffalo, and Horses

The Basic principles of roundworm parasite control and  
the problem of anthelmintic drug Parasite Chemical  
Resistance

How/Why checking parasite loads using fecal egg  
counting in your herd can benefit livestock producers

Good parasite control practices to minimize the risk of  
drug resistance

<https://www.eventbrite.ca/e/whats-in-their-dung-parasite-identification-tickets-133932775537>

### Parasite Identification



Presented by: Dr John Gilleard  
BVSc, PhD, DipACVM, MRCVS

Webinar - Mar 19/2021 @6:00pm

Cost: \$25.00 for PRFA Members  
\$30.00 for Non-Members

### Learning the McMaster Grid

Dr John Gilleard will be presenting a visual lab on  
The McMaster Grid

- Prepare and look at fecal egg counts in flotation using sheep manure
- Interpret the slide using McMaster grid under microscope
- Recognize parasites
- How to use the results



Peace River Forage Association  
of British Columbia

Forage Extension & Mentorship Community Outreach Project  
funded by

BC Hydro's  
Peace Agricultural Compensation Fund

**THANK YOU**

to our **Events Coordinator Samantha Dillworth** for her dedication, resilience & creativity in finding ways to provide events & extension during these Covid-19 times.

Even though the Forage Extension & Mentorship Community Outreach Project is finished we hope there will be opportunities to work together with Samantha in the future.



# Where Are Those Great People We Worked With?

by Julie Robinson & Sandra Burton



*"Dare to grow pink!"*

## Grant Lastiwka

Since leaving Alberta Agriculture my wife, Della & I continue to run our small grazing cow/calf operation at Innisfail. I now work with Union Forage as a Forage Specialist in a support & marketing role. When not working there, I do some forage consulting work on the side & sit on a few forage committees. Recently I was hired to help support the Agricultural Research & Extension Council of Alberta's & one other Forage & Applied Research Groups more challenging producer requests & Association extension needs.

## Grant Lastiwka, P. Ag.

Forage & Grazing Specialist  
Innisfail, Alberta  
grant.lastiwka59@gmail.com  
**1-403-350-6394**  
Innisfail, Alberta

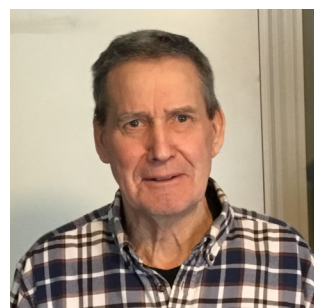
*"Forages & Grasslands -  
The crops of greatest value."*

## Duane McCartney

I retired several years ago from Agriculture Canada Lacombe but stay active in the grazing & cattle management area by writing articles for Canadian Cattlemen magazine. I also do photo essay historical stories for the Western Producer. I am heavily involved with the Central Alberta Wood Workers Guild by doing their monthly newsletter & building all sorts of projects. When there is snow I do a lot of cross country skiing; & when it is hot I wind surf & paddle board at our cabin north of North Battleford Sask.

## Duane McCartney

Forage Beef Systems Research Sc. (retired), Lacombe, AB  
Email: [mccartneyduane@gmail.com](mailto:mccartneyduane@gmail.com)



## Barry Yaremcio

Ruminant Nutritionist

Box 286  
Stettler AB  
T0C 2L0  
☎ 403-741-6032  
✉ [bjyaremcio@gmail.com](mailto:bjyaremcio@gmail.com)



## Barry Yaremcio

Barry is an independent beef nutritionist & is not affiliated with or working for any individual feed company. He has over 25 years of experience working as a beef nutritionist for Alberta Agriculture & 11 plus years in private industry.

**Yaremcio Ag Consulting Ltd.** is offering 3 types of services: annual contracts, ration balancing & casual inquiries. Email [bjyaremcio@gmail.com](mailto:bjyaremcio@gmail.com) or through his website: [beefconsultant.com](http://beefconsultant.com)



## Calvin Yoder, P.Ag.

Calvin works for SARDA & the Peace Region Forage Seed Commission. He will continue with similar duties as he had with Alberta Agriculture & Forestry in terms of carrying out forage seed research & extension activities.

Research funding through the Peace Region Forage Seed Association & AAFC Agri-Science Innovation Program has been secured for the next 3 yrs to conduct forage seed projects through SARDA & AAFC Research Farm at Beaverlodge.

Although the main focus will be on co-ordinating forage seed research projects in the Peace Region, Calvin will continue to be active in forage seed extension activities. Similar to the past he will be available to growers, agronomists & seed trade companies for one on one consultations through phone calls, farm calls or email: [calvinyoder123@gmail.com](mailto:calvinyoder123@gmail.com)

# Perennial Plants & Seasonal Dormancy

By Brenna Schilds



Cold hardening, entering dormancy in the fall and breaking dormancy in the spring are complicated processes with many factors including genetics, hormones, and environmental triggers.

The most important aspect, from the perspective of the plant, is protecting the **meristem** (the growth center). Plants have several different meristems that produce growth in the roots, laterally in the stem, and most importantly at the top of the shoot (See figure below of root apical meristem, lateral meristem and shoot apical meristem).

The shoot apical meristem controls how tall the plant will grow, when/if it will grow a flower and when it will enter dormancy. Throughout the growing season the shoot apical meristem is mainly controlled by a hormone called auxin. The amount of auxin in the meristem will determine the height, width, and direction of growth in the plant (sidenote: group 4 herbicides are synthetic auxins, the deregulation of auxin in the weed causes it to grow itself to death). As the days grow shorter, the plant will trigger a hormonal response with Absciscic Acid (AA).

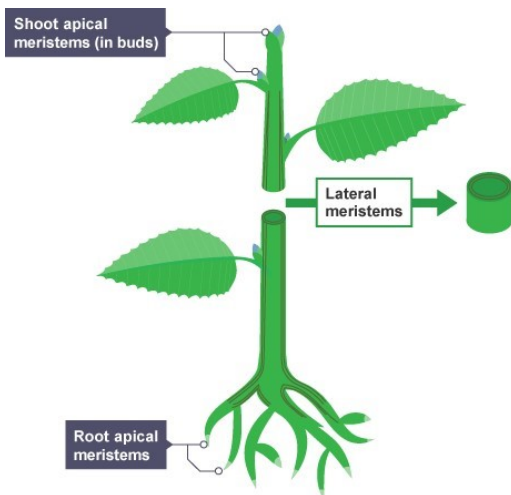


Figure 1: Meristem locations in a growing plant.

Source: <http://www.bbc.co.uk/education/guides/z9t4jxs/revision/2> as part of a BBC article.

When this photoperiodic response occurs is dependent on the cold hardening genetics of the plant. For some plants it could be when the night is longer than 12 hours, for others it could be when the night is longer than 8 hours. Once the AA is triggered it takes control of the meristem and sends all of the nutrients/energy in the plant that were being used for upward growth to the roots for storage.

As the nutrients flow to the roots, the AA hormone also causes the plant to start shedding its no longer necessary organs, like the leaves and stems. That way by the time the harsh, cold temperatures of winter come around the plant is prepared with its growth center and roots protected underground.

Over the course of winter the plant remains static. Once the temperatures are low enough to freeze water it loses its main method of nutrient transportation. The plant will stay dormant underground, insulated by both soil and snow until spring.

**To break dormancy**, perennial plants are again reliant on different genetic, hormonal and environmental factors. Perennials possess a form of memory in that they can “remember” what the temperature was when they last sprouted (either from seed or in the previous growing season). Once the soil warms up enough to trigger that temperature memory for several days (warm enough for water to flow as well), the plant’s genetics trigger a hormone called Gibberellic Acid (GA). The GA hormone wakes up the meristem and tells it to start making and elongating cells again. The plant will use the energy it has been storing in its roots all winter to start growing a shoot. Once this new shoot is out of the ground it reacts to the photoperiod. The photoperiod becomes the dominant force for the plant breaking dormancy (rather than temperature). If a plant emerges but finds the days are still short (i.e. sudden thaw), it will re-fortify its growth center and re-enter dormancy until the appropriate day length comes. Once both the daylength is long enough and the temperature is high enough, the plant will fully break dormancy and begin to grow upwards again.

In summary, the **shoot apical meristem is vital** in spring as it is the only meristem available for growth. Later in the season axillary meristems (located by the leaf buds) can be used as backup and will grow branches if the shoot apical meristem becomes damaged or is removed through grazing. If both the apical and axillary meristems are removed (all of the leaves and stems are eaten), the plant will die.

## What does all this mean for my forages?

1. It is important to allow perennial forage plants to go through the cold hardening process, cutting them too late in the season will lead not only to low nutrients in the feed, but possibly harm the growth back of that crop in the spring.
2. If you have to cut or graze in the fall make sure not to cut or graze too close to the bottom of the plant, otherwise livestock may eat the meristem.
3. Plants are hardier than we think if there’s a late frost your plant may not have fully exited dormancy and be ok. **So long as the growth center is still green, it’s still alive.**

Brenna was born & raised in Dawson Creek. She started as a Resource Development Agrologist for the BC Agri in November. She has a B.Sc in Crop Science, & has worked mainly with grain & oilseed agronomy for the past 6 years.



# Feeding and Rumen Health

by Dana Bergen, DVM



We became a 4-H family this winter. Our kids had been asking for some time. Covid 19 has lead to more time at home and the perfect opportunity to let them start feeding and caring for their own calves. As a 4-Her from many years ago, I don't think there are many youth groups that teach as many life skills as are offered in 4-H.

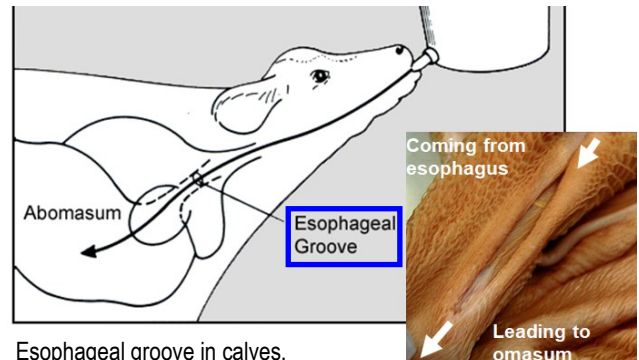
One of the first events they attended was a nutrition seminar which was organized by the local forage association. The members got an overview of how to feed their calves to get the ADG they wanted while keeping the rumen healthy. When it comes to the overall health of any ruminant animal, and especially the growing feeder animal, rumen health is so important.

Ruminants have an incredibly amazing system for digesting their food. **At birth, they have an esophageal groove that allows milk to bypass the rumen** so that the abomasum is their primary stomach for digestion and absorption. If a calf is not nursing the cow, allowing them to suck a bottle/nipple is the best way to allow this groove to function. At about 3-4 months of age they start to transition to becoming more focused on rumen fermentation and utilizing forage as feed.

In a mature cow the rumen has a volume of up to 40 gallons. **Each ml of rumen fluid is filled with billions of micro-organisms** including bacteria, protozoa and fungi. These all play a **role in breaking down complex feed starches and fibers**, through fermentation, so that they can be utilized as food for their host. Gas is a by-product of fermentation and it is removed by burping regularly. **When the rumen is stretched with gas, a sensor in the rumen wall is triggered which connects to a nerve that runs up through the chest to the brain, initiating the belch.** Gas production can amount to 30-50 liters per hour in adult cattle and **if the sensor or nerve is damaged then gas builds up leading to free gas bloat.** Frothy bloat caused by eating leafy legumes that form bubbles to trap air in the rumen is another process. Pneumonias can also lead to free gas bloat. If the nerve that sends the message to the brain becomes inflamed as it runs through the chest it cannot tell the rumen to release gas with a burp.

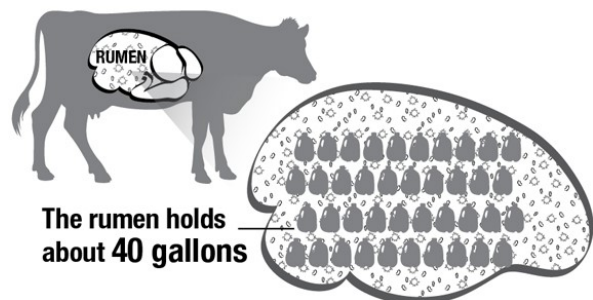
**The feeder animal is most prone to conditions resulting in acid in the rumen (acidosis)** that can lead to inflammation of the rumen wall, reduced rumen contractions, digestive upset and sometimes free gas bloat, founder or liver abscesses. In the 2016/17 Nat Beef Quality Audit liver abscesses resulted in discounts of about \$21 per head on average, an increase from the last study and one noted as needed to be addressed.

When dealing with an acidosis, looking at your feeding program and reducing grains and fines in the diet and supplying lots of good quality hay is recommended. **Forage helps with rumen motility and increases saliva production which buffers acid.** Forage based diet typically result in a rumen pH of 6-7. High grain diets can cause levels to drop to 5-6 and when pH remains below 5.2 we usually see symptoms of acidosis. **When adding or increasing grains, do so gradually.** The rumen likes a constant and consistent supply of feed.

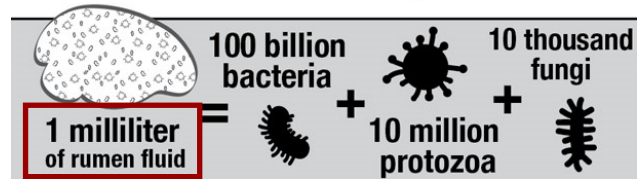


Esophageal groove in calves.

Source: <https://extension.psu.edu/feeding-the-newborn-dairy-calf>



The rumen holds about 40 gallons



**≥ 1,000,000,000,000,000 rumen bugs per cow**

Source: [www.progressivecattle.com/topics/feed-nutrition/rumen-bugs-101-feeding-the-microbes-not-just-the-cow](http://www.progressivecattle.com/topics/feed-nutrition/rumen-bugs-101-feeding-the-microbes-not-just-the-cow)

Some animals can tolerate a hotter ration than others. Sometimes the only symptom may be reduced feed efficiency or an animal may only be a bit off its feed or have loose manure. **When animals go off feed a diet high in forage allows cattle to recover faster** than those on a moderate forage diet.

If severe and bloated, gas should be removed with a stomach tube. If critical, puncturing the rumen to allow gas to escape can save the animal if suffocating due to the pressure.

# Feeding and Rumen Health *Continued...*

by Dana Bergen, DVM

Consulting with your vet and determining if the bloat is secondary to inflammation within the chest or the rumen helps guide further treatment. There are many rumen supplements that can be drenched or tubed to promote normal rumen motility and help with acid and inflammation. In cases of severe acidosis the microbial rumen population can be damaged. Harvesting rumen juice from another animal by stomach tube or from an abattoir (from your own herd or Johne's/disease free) may help get the rumen healthy again. Sometimes no matter what we do, damage is so severe that the animal continues to bloat. We can often save these animals and get them to slaughter weight with a permanent fistulation where the wall of the rumen is sutured to the body wall so gas has a permanent exit hole.

**A healthy rumen needs healthy micro-organisms.** Rumen micro-organisms require nitrogen to flourish. When the diet gets heavier in grain and lower in forage, if forage does not have adequate protein, the microbial population can become unhealthy and limit digestion and nutrient absorption of the forage provided. This is true in the cow herd too. **If you are supplementing your cow herd with grain but protein in the forage is inadequate, you may actually see a decrease in cow performance.**

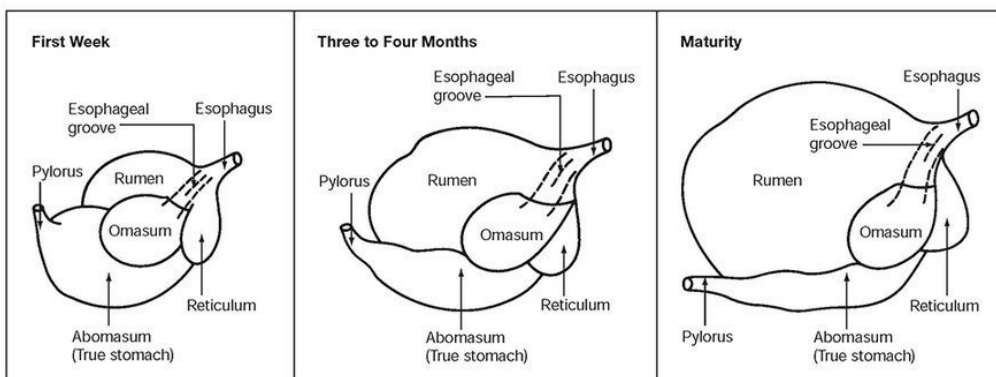
As the microbial population type shifts with the addition of grain, forage digestion decreases so the animal is not fully utilizing the diet provided. Adding protein to the diet can help in these cases. **We always recommend feed testing to recognize protein deficiencies as well as other problems.** This will make sure you are not throwing money away on speculative feed decisions.

We know in human health that a healthy gut population can have numerous health benefits beyond digestion such as immune system and even mental health benefits. More research is being done all the time on this topic in ruminants. Certain feed supplements have their place.

Ionophores (Bovitec, Rumensin) can increase the energy yield from feed by shifting the bacterial population in favor of starch fermentation and by preventing acidosis. Ionophores show a benefit of increased weight gain in growing cattle in the pasture as well. Ionophores also prevent coccidiosis when fed to the cow herd and can reduce shedding of the bacteria causing Johnes disease when given as a continuous release bolus.

Probiotics, or as they are usually referred to in beef feeding as direct fed microbials (DFMs) have been studied to various degrees. Bacterial, yeast and cell fragments have been added to the diet to determine if any benefits are possible. There is promising research on this topic and possible improved feeding performance, animal health and even reduction in antimicrobial use could be a positive spin off. We use probiotics often in scouring calves.

**Cattle have an amazing ability to use their rumens to digest plant material relatively indigestible by other animals** and convert it to milk, meat and other by-products. **Knowing how the rumen works and what processes can lead to an unhealthy rumen can help keep our cattle healthy** and guide us in decision making should problems with digestion arise.



Development of bovine stomach compartments from birth to maturity  
Source: <https://extension.psu.edu/feeding-the-newborn-dairy-calf>

Dana grew up near Dawson Creek & was a summer student for the PRFA. She & her husband practiced in southern Saskatchewan for 5 years before moving closer to home & starting a family. They currently own & practice at the Chetwynd Veterinary Hospital.



*The Chetwynd Veterinary Hospital, (250) 788-9374,  
<https://www.chetwyndvethospital.com/>*



# Equipment Rental Information

May 2021 edition

## Zero Till VREDO Drill

The drill is a zero till with the V-shaped disc that creates a slit in the soil. Then the smooth roller closes the slit by compacting the ground reducing 90% of soil erosion.

- ⇒ Empty weight of the drill is 3108 lbs.
- ⇒ Requires a three-point hitch
- ⇒ Min 90 horsepower.
- ⇒ working width of the drill is 2.85m (9'4")
- ⇒ Transportation widths is 3.00m (9'10")
- ⇒ Seeder can place the seed at a depth between 0-0.98 inches
- ⇒ Seed row spacing is 2.9 inches apart.

The meter wheel is ground driven and 28 cranks is 1/100 of acre. The drill is easy to calibrate and can seed from 2 to 30 lb/ac.

Transportation of the drill is the responsibility of the renter.

**\$150/day for members** (\$200/day for non-members).

Contact Fred Schneider  
250-219-1221



Refer to Forage Fact 122 on our website [www.peaceforage.bc.ca](http://www.peaceforage.bc.ca) for more information.



## Water Pumps and Pipes

Three Berkley irrigation pumps and 3 miles of 6" irrigation pipe have traditionally been used to refill dugouts in dry years as well as other water pumping jobs.

- ⇒ Berkley pumps are driven by a 540 PTO drive.
- ⇒ The pumps can discharge 1000gpm with an elevation lift of 10 ft. Longer pumping distances and/or increases in elevation will reduce the amount of discharge.
- ⇒ Pipe is mounted on a trailer and comes in 30" lengths.
- ⇒ Pipe trailers should be towed at a maximum 40 km/hr.

North Peace  
Contact Josh Stobbe  
587-986-1041  
[Josh.Stobbe46@gmail.com](mailto:Josh.Stobbe46@gmail.com)

Sunset Prairie Area  
Contact Stan Smithard  
250-834-7222

Tomslake Area  
Contact Art Seidl  
250-786-5558

Water Pumps & Pipe	Members	Non-Members
1 <sup>st</sup> day pump + 1 mile of pipe	<b>\$500</b>	\$600
Additional 1 mile of pipe	<b>\$400</b>	\$480
Additional pump	<b>\$100</b>	\$120
1 <sup>st</sup> day pump only	<b>\$350</b>	\$420
1 mile of pipe only	<b>\$400</b>	\$480
Additional days both pump & pipe	<b>\$250</b>	\$300
Additional days pump only	<b>\$100</b>	\$120
Additional days pipe only	<b>\$150</b>	\$180





# Equipment Rental Information continued...

May 2021 edition

## Pasture Pipeline Plough

This plough enables placement of water pipe up to 18" deep for 1 mile or more from a water source.

Polyvinyl chloride (PVC) or polyethylene (PE) pipe can be used and will need to be purchased separately.

**\$75/day for members** (\$100/day for non-members)

Contact Josh Stobbe

587-986-1041

Josh.Stobbe46@gmail.com



## Tree Mulcher (aka Plastic Mulch Spreader)

This piece of equipment makes it easy to spread plastic mulch around tree plantings and thereby control weeds.

The plastic mulch needs to be purchased from the PRFA and is an additional cost.

**\$75/day for members** (\$100/day for non-members)

Contact Josh Stobbe

587-986-1041

Josh.Stobbe46@gmail.com

## Tree Planter

This tractor pulled tree planter efficiently plants tree and shrub seedlings in rows. It can be moved using a 1/2 ton truck with a 2" ball hitch.

**\$75/day for members** (\$100/day for non-members)

Contact Josh Stobbe

587-986-1041

Josh.Stobbe46@gmail.com



## Feed Sampling Probes

A variety of feed probes are available to rent — drill or push type. Drill-driven probes require an 18 volt drill. Battery power drains quickly so have an extra one on hand for repeated sampling.

**\$10/day for members**

Contact Josh Stobbe

587-986-1041

Josh.Stobbe46@gmail.com

