

FORAGE FIRST

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\$10

Signs of Spring in the Peace



Managing spring runoff to prevent erosion in mid March in the Kilkerran area.

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2019/2020 Membership Renewal Notice

Visit us at www.peaceforage.bc.ca

Member Profile: Matthias Loeseken

By Erin Maxfield

Hello everyone, my name is Erin Maxfield and I am a recent graduate of the University of Alberta. I am currently working as a Junior Environmental Scientist at Blackbird Environmental. I was born and raised in Fort St. John and have been a summer student at Blackbird for the last two summers. I have had the pleasure of working on various Peace River Forage Association monitoring projects and you have probably seen me running around helping at several PRFA events, including the summer tours. This month I am going to be giving you some more insight on one of our members – Matthias Loeseken! So, let's hop into the interview.

Q: How long have you been a member of the PRFA?

A: 6 years!

Q: Why did you join the PRFA?

A: I joined for the opportunities for professional development and the ability to connect with stakeholders in agricultural and industrial settings. At a PRFA event you are able to sit down and talk with a cattleman, producer, and a professional performing reclamation. I really appreciate the opportunities to connect with other resource professionals and learn in the process.

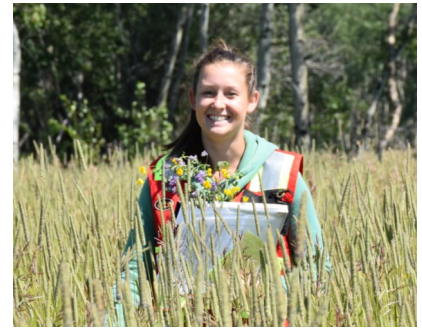
Q: What is your favourite memory at a PRFA event?

A: One year, Ron Buchanan excavated a massive soil pit that the entire tour fit into. It was a neat opportunity to look at soil and discuss it with a great range of people including farmers, agrologists, geomorphologists, and more. You don't often have the opportunity to look at such large soil pits. We were looking at how bale grazing and proper management influences soil structure.

Q: What parts of your current work overlap with the forage and livestock industry?

A: Most of them! I am the project manager for the agricultural monitoring and follow up program for Site C Clean Energy Project. We will be working with producers on monitoring crop loss due to wildlife damage. I have also actively been involved in the PRFA and Peace River Forage Seed Association applied research projects. Lastly, we are often working with producers using spatial analyses and remote sensing tools to assess things such as variable rate technology, drainage patterns in a field, and crop damage.

Erin Maxfield, is a Junior Environmental Scientist with Blackbird Environmental.



Q: Tell us a bit about your family?

A: My wife Theresa is working as a self-employed farrier in the North Peace. She grew up on a ranch on the upper halfway road, where they have a cow-calf operation to this day. I have two little girls, ages 1 and 4, who are infatuated with animals (cows, horses and sheep). Finally, we have an 8-year-old black lab whose name is Lucy.

Q: Tell us a bit about your business?

A: I work at Blackbird Environmental, it's a small natural resource consulting company based out of Fort St. John. We offer a wide range of assessment and consulting services in the agricultural, oil and gas, mining, forestry, and hydro electric sectors.

Q: What is your favourite part of your job?

A: Easy, birding!

Q: What is one thing you look forward to this summer?

A: I look forward to get going on the field assessment components of the hydro project and trying out new innovative approaches to assessing wildlife damage to forage and annual crops.



Matthias & Theresa Loeseken with their daughters.

A Visit to Coal Creek Valley Farm

by Andy Tschetter

I was always intrigued with the plump Suffolk and Dorset cross ewes at Coal Creek Valley Farm north of the Sweetwater Road, east of Farmington. Tucked into the crest of the hill, with neat spruce lined paddocks on the slope, the ovine populace here a seemingly happy bunch, who, on most visits to the farm appear content and well fed. In the summer months the ewes can be seen at pasture with the year's late May born lambs running and frolicking in the sun, or the rain, or the autumn cool as my periodic visits to Coal Creek Valley Farm prove both fun and educational.

Owners Deryle and Silvia Griffith apply valuable skill sets and experience to raising pasture based sheep. Sheep who literally do nothing but... well... eat grass. I found the operation similar to our own and was eager to learn from the Griffiths, who patiently endure my questions and cross examinations to them on pasture management and rotational grazing over many occasions.

The couple well qualified for the 'state department' by now, with Silvia agreeing to meet me one rainy August afternoon to preside over a viewing of a pen of ewe lambs on one occasion, dressed in her trademark gray winter coat and armed with a steaming mug of tea, happy to assist. With her keen observational skills sharpened from over the twenty years of retaining prolific, deep bodied ewes, she is a shepherdess that "knows her sheep", as husband Deryle, the farm's grazer, would often put it. A team effort for the couple who rotate the sheep in summer grazing months on 9 roughly 20 acre paddocks with forages consisting of clover, alfalfa, timothy and trefoil. "The sheep simply have improved the pasture over time", says Deryle. "They are really efficient at converting grass into meat." For the Griffiths, whose interest is in a low input, pasture based system for higher profit - grass is their key to success. The lambs grow to market age during the summer and are sold in the fall about the time when pasture begins to give out. Deryle prefers a mixture of grasses, legumes and forbs versus a monoculture of one kind of plant. The diversity providing a more balanced diet for longer periods during the growing season under different weather conditions. "Just like animals, plants need to eat and drink", he adds. Their food being absorbed through the roots, though a small amount can be absorbed through leaves, requiring nutrients like nitrogen, phosphorous, potassium, calcium and magnesium.



Deryle & Silvia Griffith with their dog Meeka (above left). Lambs having some play time on a mound of soil (above right). Ewes & lambs enjoying summer grazing (below).



By using managed grazing, controlling the flocks access time on the farms subdivided paddock, means peak performance for the lactating ewes and can be a complex skill that takes time to master but the payoff is well worth the effort for Deryle, who cites several authors whose written works have benefited the learning process for him. Among many, a book by Acres USA Magazine's executive editor and founder Charles Walters, whose *GRASS - The Forgiveness of Nature* is an important overview of grasses in our environment. Also, Andre Voisin's *Grass Productivity*, another must read on ecological pasture management, can be found in the Griffiths' ever growing home library, which boasts of a wide ranging assortment of books on agriculture. Alas, with the decided misery of the relentless August rain falling about, the ewe lambs in the pen looked rather good and remained plump. The decision was made and the ewe lambs were sold, Silvia's cup of tea by now long forgotten, sitting atop the gate post.

Shop Invasion

by Rebecca Handfield

If you've read my stories you know I have the most tolerant of husbands. If you haven't, I'm telling you now. He really tries to hide it but it's true. Last September we were married and were lucky enough to honeymoon to Portugal. While away my girls held down the farm fort and my mom graciously held down my girls. Sadly, Trombone, our resident bad boy decided to entertain himself by breaking the gate to his old flames. Little bugger.

Frantic herding and fence patching ensued and Trombone was safely ensconced away from his ladies again. Fast forward to February and again I am not home. I get a call that we have baby goats on the way. Miss Accordion (Cordy) had been showing signs of labour so had been moved into a kidding pen. It being cold she was checked often. The dutiful husband that he is, Murray went out to check only to find one of his favourites in labour. He called my mom out to help and called me to get my butt home. Cordy gave us our first set of triplets and I missed it. Three beautiful bouncing boys.

Finally, I was home and settled them all in the hotbox for the night. It was ready so not a huge task. I was on top of this. Madam Piccolo was beginning to show signs so was locked in a kidding pen with a heat lamp. The cold got colder. As it tends to do. Around noon the biggest fuzziest little bucking made his appearance. The cold persisted and my babies started standing oddly and seemed cold. I sent a picture to a friend experienced in winter kidding who told me they were in fact too cold and I was going to lose them if I didn't move fast. Thank you Kari.

Murray is very possessive of his precious shop. He keeps our world running so I don't begrudge him. One bay was happily open so in went foam tiles and rubber mats, lots of hay, a couple bent panels and we were ready to move some little mama's. Cordy went first, each of us girls with a baby in our coat and Murray leading a very distressed Mama we rushed our way to the warmth of the shop. Piccolo and baby were next. There we go. Two kidding pens filled with mamas and babies baking under their lamps. Everyone settled quickly and we were so relieved to see the babies perk up almost immediately.

I decided I should do a good bounce and bag check just to be sure everyone else would wait and kid in April like the well mannered ladies they are, only to find little Kazoo well bagged and clearly planning to give me a baby sooner rather than later. So the large kennel was brought in and prepped as an imminent nursery. Our Kazoo is just the teeniest little mama you ever did see so this wasn't overly cramped.

Rebecca Handfield snuggles one of her newborn goats in her husband's shop during the coldest part of the winter (*photo right*). Rebecca's daughters, Kimberly and Jessi, find room amongst the Suzukis to enjoy some goat time too! (*photo below*).



Two days later our Valentines baby arrived. As Murray would say, "the naked love babies carry harps and she was born on Valentines so her name should be Harp", Harp it is.

Naturally there was an engine hanging from some suspension apparatus and it would do rather a lot of damage if it became clogged with hay etc. Being the good and dutiful wife that I am, I wrapped it in a sheet and taped it closed. Now believe me when I tell you it looked very odd indeed. In fact, the entire shop looked like one big power struggle. Two little Suzukis on one side, both engineless, and three kidding pens complete with kids on the other.

One of the triplets was not growing as quickly as his brothers, common with triplets, so a little extra snack morning and night was decided on. Sitting in a comfy chair in a nice warm shop to bottle feed a very snuggly baby goat while watching his siblings flounce about, poking into things no little goat should is a rather nice way to start and end your day. I'm not going to lie.

However, when asked if I was going to insulate my barn in case this happens again, my answer was no. The construction of a new buck pen will be happening. Now if things go according to plan and I intend to make sure they do, the new buck pen will be capable of holding either a bull or a chicken. That little bugger will not be getting out again!

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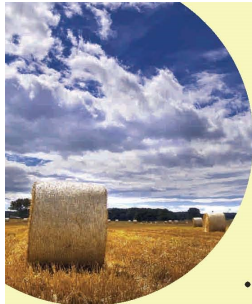
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Down Sheep Memory Lane

by Andy Tschetter

It was humid. It was hot and the weather was beautiful the last time the **All Canada Classic** was held in this province. Tiny Barriere, BC, nestled in the North Thompson River Valley, proved a fitting locale in representing the rugged beauty of BC. A social vanguard of sorts to the gathering of purebred sheep breeders from across Canada as it hosted the national purebred show in June of 2013.

Judges, Doug Higginson from Mill Bay, BC. and Raymond Read from South Africa had their work cut out for them when it came to the final showdown. They had to ponder how to pick the best of the 15 breeds of sheep that came in all shapes and sizes. Ultimately both judges agreed that a Charollais ewe and a Suffolk ram should be the supreme Champions at the show, both saying they liked the femininity of the ewe and the meatiness of the ram. The ram came from Keith Todd of Locknow, Ontario who made his first trip to BC. This Classic was also a first for John and Cathy Hope of Langley, BC, who brought the winning Charollais ewe. The Supreme flock title went to Don and Deborah Wytinck of Nanaimo, BC, whose North Country Cheviot sheep won out over strong classes of Dorset, Hampshire and Suffolk among others.

The "Classic Sheep Show and Sale" is the Canadian purebred sheep breeders' yearly premier event and is held in a different province each year, although alternating from east to west, sponsored by the provincial sheep association, allowing producers to see the different breeds and what level of development purebred sheep have attained.

The 2019 All Canada Classic will be held July 18 – 21 in Humboldt, SK. All entries may be registered with the Canadian Sheep Breeders Association before May 19, 2019.



This trio of Southdown ewes helped win the supreme flock title for Bill & Renee Higginson of Chilliwack at the 2017 Classic in Red Deere, AB. The Southdown is one of the most beautiful sheep, known for their terrific natural body conformation.

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"Grant is the mycorrhizal (fun guy)
of the forage industry."

-Doug Wray, rancher, Irricana



Shepherd's Diary

by Andy Tschetter

February 1: The day dawns with snow. Tiny flakes falling thick and fast with wind from the north adding extremity to brutish -30°C greeting the start of our shortest month of the year. With the early morning death grip on the air feeding my desire to get food to the sheep I make my way to the hilltop with fresh hay. My first priority on cold days. A pair of crows sit motionless near the top of the bush pile. Muffled banter between the two bloodless critters offers some semblance of life as the stiff legged sheep venture from the natural wind shelter to feed on good alfalfa/ brome grass put aside especially for colder days like this given added energy requirements the elements demand of the sheep. Oh the snow!

February 2: A near crisis duly averted today while visiting the local Tim Hortons in Dawson Creek in search of a sour cream glazed donut, a royal accompaniment to coffee laden with cream and sugar, doubly so. The tray was empty! Zero glazed donuts! Zilch! None! And this was only 1:00 pm, early enough in the day for the store to yield sufficient supply. Alas the fact that there prevailed in the cooking area of said establishment a tray of fresh baked sour cream glazed donuts awaiting at least a partial stiffening of the icing and subsequent authorization of sale - was information unclassified as the sympathetic store employee scuttled to the back to retrieve the baked treats. Whew! A full half dozen sour cream glazed donuts!

February 3: The cold front is firmly set and hunkered right down this Sunday. A pristine winter sun is out, with masterful artistry embracing the trees and snow. Our lone Border Leicester ewe is a positive nuisance. A dainty creature, her magnificent coat of wool is curly with a soft Mohair like sheen and ears pointed straight in the air, this one succeeds time and again in getting either the oat bucket or mineral tray stuck upside down on her head, showcasing her panicked antics to the other ewes, parading madly about in the snow - her vision obliterated with the bucket atop her head. The Bible's John 10 springs to mind as I free the perplexed creature, restraining myself from renaming her after Wallis Simpson (official lookalike). I digress: though our old Dorset ram, Diefenbaker, did bear a striking resemblance to the man himself. Our Lord likens Himself as the Shepherd of the Church or 'flock'. In like manner depicting the seemingly humble and adoring ovine as characterizing His Kindred subjects (mankind that is). The Shepherd makes provision for all the different sheep. For the regal Suffolk; the level headed Texel; the Cheviot; even the unsightly Norfolk Horn - our Lord makes no distinction for the better or worse.



Andy Tschetter, in charge of the sheep operation at Peace View Hutterite Colony providing a diary account of wintertime experience with the sheep and highlights from the past year in the Peace Region.

As He put it in verses 14 and 15, "I am the good Shepherd and know my sheep, and am known of mine. As the Father knoweth me, even so know I the Father: and I lay down my life for the sheep." Alas I beg to conclude here that Madame Leicester deserves the same love and attention as the sheep all do and take consolation that our dainty subject showed no apparent reaction to being told she could be sent to 'freezerland'.



A Dorset cross ewe with a set of twins on Peace View Colony.

February 4: The sheep are wintered out in the open fields from November through to mid April, when their 147 day gestation draws to a close. From there they meander closer to home quarters near the barn where a yearly allotment of royal treatment awaits them as we move closer to lambing where the pregnant ewes lounge in the barn upon fresh straw and birth their young with relative ease, each animal enjoying a two day 'hospital stay' in the lambing jugs set up for the birthing mothers.

Shepherd's Diary *continued*

In the fall after the lambs are weaned, separated and organized for sale as the feeder lambs or possible grain finishing, depending on prevailing prices - the ewes are then moved to what looks to be our best quality pastures the late summer can provide, to help them regain body condition after having subsequently been wormed in preparation for late November breeding. By this time with deepening snow being a detriment to the ewes getting adequate winter greenery by pawing in the snow, it is time to commence winter hay feeding. Paddocks that were over grazed during the summer as well as areas in immediate need of fertilizer make for ideal places to winter feed the ewes. The tight proximity of the animals feeding together leaves a wide swath of manure and straw clippings in the field, helping to regenerate the soil. Better yet, a hungry springtime ground is happy to 'swallow up' the added organic matter. I've noticed lush new growth in these areas otherwise sparse from overgrazing. A word of caution here - keep feeding on new ground every day to avoid buildup of too much matter, it'll suppress spring growth. Unless these 'compact' spots can be raked over, it'll take until the following year for grass to poke through. Our soil is a life force amazing enough that the extra organic matter isn't too big a dose of enzymatic pulp for there to rebound sufficient growth the following year. The human equivalent could be an overload on kefir, or yogurt. Mmmm. So there's tremendous benefit for all involved. We also talk about overgrazing, we all want to avoid it, but it certainly happens; more often than not by inadvertent sanctioning of this shepherd, given the ewes' preference for bedding down at the top of a hill or corner of the field closest to home base. The woolly, grass loving ovine never quite relinquishes her built-in eternal drive for home. All that manure deposited naturally out there on pasture is time and money saved not having to haul it there mechanically come spring. Hence a squeaky clean home base when the sheep come in for shearing and lambing. Sauerkraut anyone??

February 5: Coffee time! Brewed here in the cabin it is strong and quite organic with an extravagant dose of farm fresh cream topped with honey of the same caliber. The warm recipe-less concussion a nice fixture for this shepherd's chilled bones with the cool weather prevailing this week. Extreme cold during the night! Gave the ewes a third hay bale.

February 6: Besides being everyone's grandfather, former Alberta politician and Lieutenant Governor, Grant MacEwan was many things. Although he had been an historical author, statesman and politician it seems his personal qualities of integrity, determination and humour appear to have made him legendary.

Of Scottish lineage, MacEwan was born on August 12, 1902 and grew up in a farming community in Manitoba. His vested interest in farming and agriculture sciences included livestock judging and lead him to write over 50 books. Grant's contribution to writing extensively as he did about the history of the Canadian West led him to write a book on sheep! Spending countless hours as he did with numerous other assignments in his beloved Calgary Glenbow Museum and Library, MacEwan penned the title *Highlights of Sheep History in the Canadian West*, incredibly, at over 85 years of age, back in 1986 at the behest of the then Alberta Sheep and Wool Commission, who organized the project with the goal being to pay tribute to the pioneers of the sheep industry in Western Canada and ultimately realized with MacEwan delivering on a most enjoyable book! Detailing the arrival of the very first sheep in the west, the apparent largesse of the early 'sheepmen' strikes most, where bands of over 2000 sheep on many farms seemed the norm. An important read, available at *Alberta Lamb Producers* for \$15.

February 7: Consistent winter cold continues. Depending on who makes coffee in the cabin; java formulations differ with a rancid edition from being muddy to extra light. Worst case scenario being the, flicking the 'ON' switch edition, merely heating the brew from the morning or previous day in which case a dollop of honey might serve to alleviate the acidic recoil and is meant to be 'eaten' fast.

February 8: The operations foreman here on Peace Ewe Farm is deserving of mention. This fellow is dependable. Tasked with the heavy lifting of day to day operation, the ingenuous Mr. John Deere 6125R is superbly adept of multitasking and uniquely qualified for the role, delivering hay for the ewes who find him adorable as he is the provider of oats for them every other day. The small but mighty 4.5 L/ 4 cylinder powertech engine boasts 2 turbochargers in series - one a low pressure fixed, the other a high pressure VGT, allowing it to operate at peak efficiency through different RPM with a fast response rate. Air to air after cooled, along with HPCR injection allows the tractor to run all day at 120hp with a temporary power bulge of 10% above it for short periods of time. With no particular affinity for coffee whatsoever, there's virtually no rear implement the diesel and grease loving tractor can't power, with a choice of 2 mechanical, all the way up to 5 electronic SCV's, with the pressure/ flow compensated closed center hydraulic system that puts out 30.1gpm and 29psi - multifunctioning on the loader is usually no problem. Alas the question begs. One ponders whether company founder, John Deere, born February 7, 1804, envisioned his product to evolve as drastically as it did into the bolder style of tractor, enhanced with numerous technical applications?

Shepherd's Diary *continued*

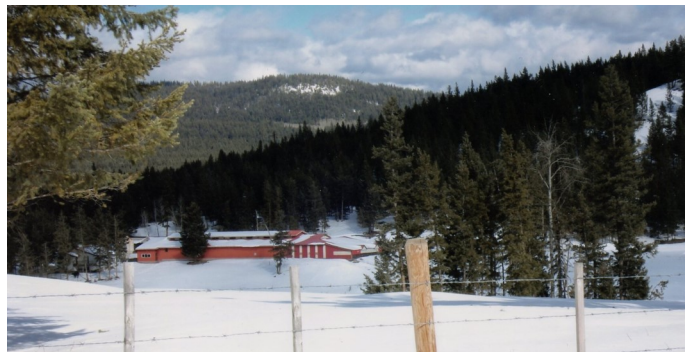
It is more certain he would have had faith in his company's goals, whose underlying base was one of virtually solid steel. As he himself put it, "I will never put my name on a product that doesn't have in it the best that is in me". He passed away in his home in Moline, Illinois on May 17, 1886. John Deere was 82.

February 9: British Columbia's Highway 97 serves well as a vanguard in connecting some of the rich geographical tapestry and diverse regions of the province. Back in December I took the drive down this oftentimes lonely trail with my colleague Jacob Tschetter, shepherd at nearby South Peace Colony, who was hauling a load of lambs to Meadow Valley Meats in Pitt Meadows and wanted me to assist him with the drive. I obliged, with his assurances of us having sufficient coffee breaks along the way. We found the southerly route almost bare with the province's autumn like lower half bathed in sunlight. Though leaving behind relative snow cover in the Peace the only other express sign of winter proved to be the Pine Pass which was heavily clad in snow. Splendour beyond diminishment as we made our way south through the epic cattle and ranch territory near Williams Lake, through to Clinton and Cache Creek. Here the blowing tumbleweed a wistful harbinger to the achingly lonely desert-like plain, a sporadic assortment of painfully abandoned farm buildings dotting the flat. We made our way into the Fraser Canyon with the evening sun hugging the towering fortresses of granite. An awesome canyon, which starts at the junction of the Thompson and Fraser Rivers extending to Hope at it's mouth. The reddish rocks near Lytton rise toward giant peaks, some over 7,000 feet before culminating in the heights of treacherous recoil that form Hell's Gate. Towering walls of rock stand resolute with the waters of the Fraser churning below before finally emptying into the forgiving open plain that is the beautiful Fraser Valley. We arrived in tiny Pitt Meadows in soft warm rainfall.

February 10: Production manager and purchasing liaison, Ashiq Saeed of Meadow Valley Meats, is a slight, bearded man of medium height, whose genteel warmth and ever present smile belies an otherwise keen understanding of the lamb industry and marketing unique in his role at the small abattoir in Pitt Meadows. "Local sourcing of lamb is priority for us", he says. Something, he adds, can be challenging with fewer province wide sheep farms in recent years resulting in his sourcing lambs from Alberta certain times of the year to meet demand. The plant slaughters over 100 lambs per week with preferred light weight lambs ranging from 65-105 lbs. and distributes whole carcasses mostly to butcher shops in the Lower Mainland.

February 11: High winds with mist sprinkling the canyon walls as we made our way towards Cache Creek and home. The coffee was good at the lone Tim Hortons situated in the country near Ashcroft.

February 12: Rambouillet sheep reign supreme at Tatton Lake Ranch near 100 Mile House, where Jacob and I stopped to catch up with old friends Klaus and Angelika Blanck, who raise purebred sheep here in the fairly wooded region of the Cariboo where the coffee is splendid and the home cooked food may well be the finest in the district courtesy of Mrs. Blanck! The farm is tucked into the sidehill northeast of town surrounded by magnificent groves of pine and spruce trees, with the lake shimmering below. Literally the 'Bavaria of Canada'! The elderly German couple chose to raise the dual purpose breed citing the large strong boned carcasses of the lambs that give good yield in trimmed meat cuts as well as good wool production.



Tatton Lake Ranch, 100 Mile House: Canada's Bavarian Forest (*above*). Lizzie! A favorite at the ranch. The purebred ewe births a beautiful set of twins every year (*below*).



Fetching a premium, the fleeces are less oily than that of the Merino, shrinking less. Taking note from the previous visits to the farm, of the remarkable strength and resilience of these particular type of Rambouillet ewes who show relatively strong resistance to internal parasites; the result of over 20 years of careful breeding and selecting for body conformation and size created for the Blancks amazingly deep bodied ewes! Unusual in many respects given the traditional lankiness and angularity of the breed!

Shepherd's Diary *continued*

We returned numerous times to buy ram lambs here, as breeding stock to bring back to the Peace Country to add size and wool quality to our own flocks. The sheep lamb in March and later retire to summer pasture in early June while the newly weaned lambs stay in the barn to be grain finished on barley and alfalfa hay. In the fall when pastures fade, Klaus lets the sheep out to graze the cutblocks adjacent to the ranch. A team of 5 Maremma guard dogs accompany the ewes out and see them home again before nightfall. The posse of canine police is led by 'Joe' a huge Anatolian Shepherd cross who is the 'King of the Valley' according to Blanck.

February 14: Finally, a tentative break to the winter cold. Only -15°C at noon hour today. Am moving further afield with the feeding. Unrolling hay upon the fresh snow for the ewes who can afford to wander below the field again. Dazzling afternoon sunshine.

February 15: It's Friday. I take the short drive up the road to neighboring South Peace Colony where I know my friend and colleague Jacob Tschetter is in the midst of lambing out the Colony's winter flock of 450 ewes. My own desire for the bleat of newborn lambs is somewhat appeased as I find Jacob and his younger brothers, Joseph and Albert, immersed in lambing activities in the barn. Moving fresh birthed lambs, with the mothers following close behind, from the larger holding pens to the smaller 5ft x 5ft jugs, where each ewe with offspring may bond appropriately, the lambs getting their vital first dose of colostrum. The air is charged with the energy of the noisy ewes calling for their babies. Pens farther down the aisle contain groups of ewes with earlier born lambs, some lounging lazily in the straw, others frolicking about, some lambs eating solid foodstuff alongside their moms at the bunk. The lactating ewes are fed a high protein silage and alfalfa hay mix with barley added. I finally catch up to Jacob who offers an apologetic shrug. My visits usually precipitate his making a pot of coffee, he has not had time to make. The coffee can wait on a day like this, in the February cold I'm inclined to roll up my sleeves to lend a hand. I share my friend's labors, hopes and aspirations. He tells me he is grateful his entire winter flock can be housed in the barn for the duration of lambing, given the brutal cold! The Colony lambs twice a year with a spring flock of 450 ewes lambing in late May and is able to market the lambs year round. Several marketing options are available for the Colony with grain finished lambs being sold to Sungold Specialty Meats in Innisfail, AB as well as Pitt Meadows Meats and Tofield Auction. Key for Jacob is the Colony's federally inspected slaughter facility which processes a percentage of the years lambs marketed mostly as whole carcasses to customers throughout. "I'm happy to see more of our lambs sold here in BC", he says. "I hope we can improve on local, direct marketing."

The Colony also buys feeder lambs in the fall months after the February born lambs are marketed and space becomes available in the barn. "It's great", he says, "We buy lambs mostly from the area here (*Peace Region*), so our end product is still good BC lamb." Back in 2015 with Jacob fairly new at the helm as shepherd, the Colony sought to expand on it's own commercial sheep operation by upgrading on some of it's aging facilities. First and foremost would be the construction of a new lambing barn. The insulated, steel beam structure, at 250 ft long x 80 ft wide, built during the summer of 2016 would be able to house an entire 450 ewe lambing. A twin bunk system designed for automated feeding provides adequate room for all lambs to be dry lotted after weaning, when the ewes return to summer pasture. Coffee is on now! As ever, I find my colleague tenacious and determined, never a waver in his daily application.

February 16: Cold again at -25°C this morning. Did enjoy a 3 day warm spell of -13°C or so! Gave the ewes oats this morning amounting to 3/4 lb. each. Two hay bales unrolled upon fresh ground is sufficient. The ewes will vocalize their displeasure over an occasional poor quality bale so oats are supplemented. The animal's body language a sure indicator of how much to feed most days. I caught up on current lamb prices with Doug Verstraete, manager at Beaverhill auction Services in Tofield, who is pleased to see lamb prices on the rise after a December slump that saw heavy lambs trade at \$1.40/ lb live weight. Heavy lambs now selling for \$1.71 - \$1.89/ lb Monday's sale. Lambs in the 86 - 105 lb range sold higher at \$1.73 - \$2.15/ lb, lighter lambs at 70 - 85 lbs sold over the \$2.00/ lb mark. Culled ewe prices strong at \$1.16 - \$1.40/ lb, lighter culls selling higher than fats. Bred ewes selling from \$200 - \$260/ head. Doug noted a slight decrease in volume given month long cold, but expects both price and volume increase in the weeks before Easter.

February 17: It's Sunday. A beautiful day. Calm. The sky beyond of deep azure blue. Delicately hewn snow-drifts piled in frozen heaps, immaculately sculpted by recent snow and wind. Our mischievous Border Leicester ewe in fairly good behavior in last while now. Looking ever guilty about something, I did find her dozing today in the afternoon sun, her eyes half closed, likely dreaming of her next wild episode, or casualty to put it mildly: ever testing the Shepherd's resolve. She has developed a habit lately of utilizing the tractor's undercarriage as a scratching post and got herself royally stuck between the machine's fuel tank and rear wheel. Alas, the words of the English literary great, Oswald Chambers ring true. "Life without war is impossible either in nature or in grace" he once wrote, referring to antagonism being the basis of physical, mental, moral and spiritual life. Our Lord put it more succinctly, "Be of good cheer, I have overcome the world." Shepherds all, abide in your endeavors. Increase your flocks! Across the nation you are just over 9,000 members strong. Your experience with your wooly subjects just might prepare you for heaven.

Soil Health Forum

By Monika Benoit

Peace Country producers were treated to a day of world-class instruction and left with lots to ponder on February 11th, as the Peace Country Beef & Forage Association and the North Peace Applied Research Association hosted the Soil Health Forum in Fairview (*photo top right*). The main focus of the forum was on the biology in our soils, with a serving of the economics of managing our agricultural soil for health and ecosystem functioning.

Dr. Elaine Ingham was the featured speaker of the day, and is known by many as a world-renowned soil biologist. She is the founder of Soil Foodweb Inc, and has been helping farmers to understand and improve their soil since the mid-nineties. Dr. Ingham emphasized the importance of properly functioning soil biology and its impact on productive agricultural systems. An interesting way to look at soil biology is as a communication system for our plants, so that they can get the nutrients they need to thrive. Biological life in the soil gives us healthy plants, and we must have the proper balance of organisms in the soil to release the nutrients plants need. Weeds, diseases, pests and poor fertility are messages that life is lacking in the soil.

Dr. Ingham demonstrated that we need to understand the role and function of the organisms in our soil to manage and encourage these beneficial creatures. Soil organic matter provides a home and food for soil organisms and is an important part of healthy soil. She said that soil needs at least 3% organic matter throughout the soil profile for microbiology to function. Soil organisms are an interconnected community and make up the soil food web. In a lab session, producers got to look at Peace Country and Alberta soil samples and observe living organisms such as nematodes, fungi and types of bacteria; *E. coli* was even spotted in a sample (*photo bottom right*). A few fascinating points on living organisms that Dr. Ingham shared included:

- ♦ Bacteria have been present on Earth for 4 billion years
- ♦ Fungi build micro-aggregates in the soil, and carbon sequestration is a result of fungi adding carbon atoms to their 'pipe.'
- ♦ Nematodes include different beneficial types with different functions; fungal feeding nematodes suck nutrients out of fungus, and then release these sugars, which results in extra nutrients being available to plants.



Dr. Yamily Zavala, of Chinook Applied Research Association (CARA), out of Oyen, AB presented on CARA's recently opened Soil Health Lab, where she is the lab manager. This will provide BC and Alberta producers with lab services previously only available in the USA, and will offer analysis beyond regular soil tests and focus on soil biology. The lab's analysis and reports are set up to offer producers a tool for benchmarking soil, so when management changes are made with goals of improving the soil, there is a method to monitor the effects of these changes. Tests available will include a list of Soil Food Web Indicators, including active and total bacteria, functional groups of protozoa and nematodes and root mycorrhizal colonization, as well as texture and wet aggregate stability and biological indicators that include soil microbial respiration and active carbon. For more information and to learn more about sending samples, visit: www.carasoilhealthlab.ca

The day was wrapped up with a local perspective, with **Sandra Burton** and **Julie Robinson** of the Peace River Forage Association of BC going through some of the economics of managing a farm or ranch with goals of improving the soil. One important and relatable fact presented was that for every 1% increase in a soil's organic matter, the water holding capacity is increased by 0.1" of available water per foot of soil. Managing to improve soil organic matter could have a significant effect on an operation's productivity in years of drought or excess moisture. Putting a dollar value on soil health is very challenging, but by monitoring costs associated with different practices, gathering data such as soil test results, and doing some cost calculations, producers can start to evaluate the economic side of managing to improve soil health.

Soil Health, Organic Matter & Soil Carbon Workshop

By Lori Vickers

Peace River Forage Association hosted a winter seminar on soil health, organic matter and soil carbon on February 14th at Tower Lake Hall. The seminar was a unique opportunity to connect producers, researchers, and academics from near and far to discuss common themes in soil health, organic matter and soil carbon that touch everyone involved in forage production.

We were introduced to the BC Agriculture Climate Adaptation Research Network (ACARN) - a group dedicated to connecting researchers, industry, policy, students and producers all involved in agriculture across the province in order to develop a network approach to address climate adaption research and needs in different regions of the province. It is an excellent synergy and smart partnership with the local Climate Action Initiative projects that have occurred and continue to occur across the region. PRFA, as well as various other local agriculture associations, are members of the network. The provincial network is designed to share research information and expertise, enhance accessibility of the applied research outcomes and coordinate collaborative research projects.

Kim Cornish, Director at Food Water Wellness Foundation, spoke on the soil carbon mapping initiative across western Canada and how her organization is promoting the use of soil to mitigate climate change, drought, flooding, increase biodiversity and produce healthy food. In essence, capturing CO₂ through soils helps to restore degraded soils, enhance biomass, offset emissions and help to mitigate against extreme weather events.



Jason Lusier, (ACARN), Foster Richardson, (Climate Action Initiative), & Kim Cornish, (Food Water Wellness Fdn) shared different perspectives.



We heard about how various groups are mapping soil carbon mapping on agriculture lands. These maps allow producers another tool to monitor how cropping practices affect soil health. Agriculture and Agri-Food Canada have a tool, HOLOS, that can be used to estimate the greenhouse gas emissions for an individual farm. It is a free program. All you have to do is select scenarios and farm management practices that best describe your operation and then you can see the effect of these practices on greenhouse gas emission. Make adjustments to see how management practices impact emissions.

Finally, participants rotated through groups where they could discuss local soil health and what is working well with crop rotation, legume incorporation, water feeding practices and grazing, field management and application of fertilizer and soil amendments.

All in all, having a better understanding how what is going on with soil carbon on your farm and how farm practices either lead to increased soil emissions or increase in soil carbon capture, will help your operation adapt and be more resilient to changing climate and start to prepare you for any future carbon offset programs.



Julie Robinson facilitated a pre-workshop gathering to share who's doing what.



Tobin & Kristine Dirks improved their soil by direct seeding fescue into clover.



Darryl Kroeker, Bruce & Cindy Zunti, & Cali Seater discuss soil health.

You & Your Horse Holistically Workshop

By Samantha Dilworth

I spent my -30 day learning about equine nutrition. It was incredible to me to learn how I can use my hay analysis and the label from my mineral supplements to design specific nutritionally balanced feed programs and save a ton of \$\$ on feed and vet costs. Thank you **Lori Vickers**. We are continuing this discussion in more depth with an evening session in mid April hosted by Lori and Sandra (see details below).

As well I learned about healthy pastures and soils. I can start a plan for designing my pasture forage around my horses nutritional requirements and what best suits horses overall needs to create a happy, healthy, high performance herd.

Julie Robinson & Sandra Burton will team up with Alexandra Rath to continue these discussions with an evening pasture walk in mid May in Doe River (see details below).

We laughed as we played a game of charades to learn about the M & Ms of controlling alsike clover in horse pasture. To control this prolific, adaptive plant you need a multi prong, multi year, multi-species but ultimately you will have money saved in vet bills.

The workshop was \$75 and I will figure out my feed and supplement savings soon and share this with everyone.



Samantha Dilworth & Horton
www.exceptionalequine.ca



Lori Vickers & Mystic



Julie Robinson & Socks



Lori Vickers,
Samantha
Dilworth,
Julie Robinson,
Sandra Burton,
Jodi Alison,
Alexandra
Walther Rath
& the M & Ms
of controlling
alsike clover in
horse pastures.

You & Your Horse Holistically

Next Events in this Series

Building Better Rations & Starch Testing

Tuesday April 16, 2019 from 6 to 8 pm (postponed, next date TBA)

Location: Sandra Burton's home & corral, Old Alaska Highway

Pasture Walk & Controlling Alsike Clover

Tuesday May 14, 2019 from 6 to 8 pm

Location: Alexandra Rath's barn & pasture, Doe River

Connecting with Your Horse Through Centering, Communicating & Using Essential Oils

Sunday May 26, 2019 from 10 am to 4 pm



Sandra Burton & Copper

Growing Soil From Plants

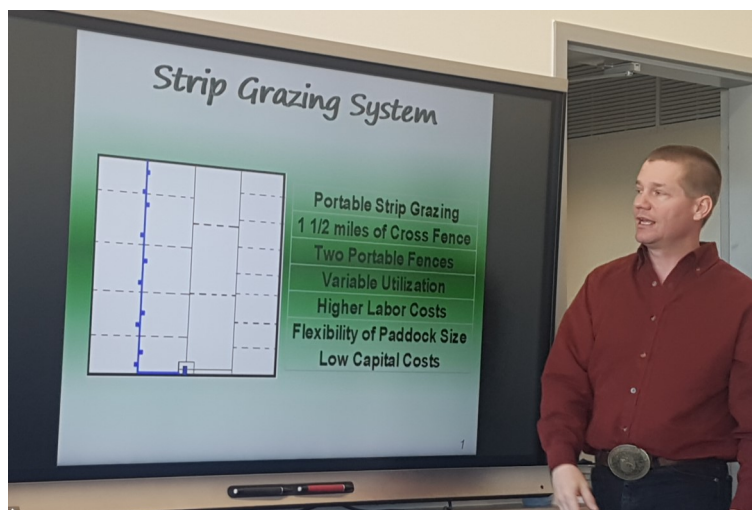
by Bess Legault

NEAT's Northern Co-Hort was pleased to collaborate with the Peace River Regional Cattlemen's Association to offer two days of Intensive Grazing workshops with **Steve Kenyon** on April 1 in Dawson Creek and April 2 in Fort St John. Despite being calving season, more than 93 people, primarily ranchers, came out to learn about intensive grazing.

Steve Kenyon is an engaging presenter and provided hours of insight about intensive grazing based on 20 years of experience practicing regenerative agriculture in Alberta. Participants learned about a host of topics including grazing principals, water cycles, energy flow, nutrient cycles, living organisms, mycorrhizal fungus, pest and weed management, grazing and rest periods, and 10 step cell design. There was something for everyone to learn!

Kenyon feels that regenerative grazing in the act of growing soil from plants, which is the opposite of modern agriculture where we grow plants from soil. "People should go to jail for what they are doing to their soil," he shared while explaining the challenge of nitrogen deficiencies to modern agriculture is a biology not fertility issue. Steve had participants repeat after him, "a monoculture is ugly," and had them chuckling as he referenced the song "She Ain't Pretty, She Just Looks That Way" by the Northern Pikes. Of course the opposite of monoculture is polyculture, which includes not only the plants, but their roots, and the biota that interact with those roots. When you take care of them all, you reap the reward: healthy soil!

If he could turn time back 20 years, and impart some wisdom on his younger self, Kenyon would focus on water management on his landscape. There was a strong emphasis on leaving residue on your pasture, which increases soil health. Healthy organic soils then absorb and retain moisture, which in turn retains nutrients to feed a healthy polyculture of plants in your pasture.



Steve Kenyan gave the participants in his April 1st & 2nd workshops a different perspective on the possibilities of their land and a tool kit full of resources to take home.

NEAT's Northern Co-Hort received lots of positive feedback about the workshops attended. Even seasoned Peace Region Ranchers reported they benefited from learning "that growing grass/pastures without the use of commercial soil amendments" is a positive business decision over the long term. Feedback also touched on "herd movement, zoning of grazing areas [that] were used to manage for noxious weeds and keep the grazing pasture utilization at its most optimal", "building grazing cells" and the potential for "carbon sequestration in grazing".

The Mission statement of Greener Pastures is "Economic and Environmental Sustainability for generations." The health of our soils and our soil organisms needs to be understood and protected in order to ensure that our agricultural businesses remain profitable and sustainable.

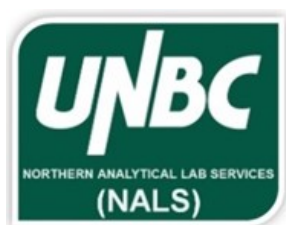
The workshops sent participants home with a full tool kit of resources and a different perspective on the possibilities on their land. Plans are already underway to bring Kenyon back to the Peace Region with additional workshops and courses so producers can continue learning about what converting to regenerative agriculture on their landscape looks like to them. Follow NEAT's Northern Co-Hort and the Peace River Regional Cattlemen's Association on Facebook for all of the details.

Bess Legault is the Northern Co-Hort Coordinator for Northern Environmental Action Team.

Thank You to Our Friends of Forage for Events



Peace River Forage Association
of British Columbia



Climate Action Initiative
BC AGRICULTURE & FOOD



BC Agricultural Climate Adaptation
Research Network

PRAD
Peace River Agriculture
Development Fund



**BC AGRI
Strategic Outreach
Initiative**



These winter events were partially sponsored by two R & D projects: Forage Starting Over Do's & Don'ts & Improving Productivity & Profitability of Forages. These projects are funded in part by Agriculture and Agri-Food Canada and the Government of British Columbia through the Agri-Food Futures Fund.

This program is delivered by the Investment Agriculture Foundation of B.C.

Peace River Agriculture Development Fund (PRAD).

The Improving Productivity & Profitability Project is partially supported through:

BC AGRI Strategic Outreach Initiative / Canadian Agricultural Partnership.

Upcoming Forage Event: June 20, 2019



Peace Region Forage
Seed Association

10:00 am: Meet & register with coffee at Beaverlodge Research Farm
10:30 am: Collaborative forage seed & forage tour begins
 Pre-register with: Talon Gauthier at 877 630 2198 (AB time)



7:00 am: Meet at NPARA Research Farm, Manning, AB
9:00 am: Meet at Alexander's in Rycroft, AB
 Pre-register with: Monika Benoit at 780 523 4033 or Nora Paulovich at 780 836 3354 (AB time)



Peace River Forage Association
of British Columbia



7:00 am: Meet South Peace Grain, 10540 Rd 213, Dawson Creek, BC
7:30 am Sharp: Bus leaves for AB
 Pre-register with: Julie Robinson at 250 262 7576 (BC time)

Solstice Collaborative Forage Tour

From seeding & processing to grazing & marketing
in the Beaverlodge area

Thursday, June 20, 2019

10:30 am Tour of forage research plots at **Beaverlodge Research Farm**
legume cultivar trials, annual & perennial species, cropping rotations, managing weeds & pests
12:00 noon Lunch & tour of agri-center hosted by **Foster's Feed & Seed**

Choose your adventure for the afternoon:

1:30 pm Seed Production

- ◇ Growth regulator trials
- ◇ Herbicide trials
- ◇ Variety trials
- ◇ Pest & disease management

5:00 pm Tour ends

Option for \$25: to join other forage groups for supper

1:30 pm Livestock & Forages

- ◇ Rotational grazing & watering systems in Rio Grande area
- ◇ Soil health & cropping options

5:00 pm Tour departs for supper

1:30 pm Direct Marketing

- ◇ Tips & experiences from over 30 years of First Nature Farms with Jerry Kitt
- ◇ New cattle operation with Clay & Ashley Armstrong

5:00 pm Tour departs for supper

Space may be limited!

Please pre-register by June 14th

by calling one of the phone numbers above or emailing:
prfaevents@gmail.com

Costs: \$20 Beaverlodge Research Farm, Fosters Feed & Seed & lunch only
 \$25 Solstice supper only
 \$75 Full day bus tours including lunch, supper & transport

5:30 pm Celebrate the summer solstice with supper together at Demmitt Hall, AB

7:00 pm Buses depart to return to their original meeting places in Manning, Rycroft & Dawson Creek