** August NEWSLETTER 2019**

**Summer Days and Summer Nights**

Two days ago, I was going to note how lovely the weather had been and then we had a nasty hail-storm roll through Stettler and area. In my recollection I hadn’t seen hail that large or cause that level of damage since August of 2013. Damaged crops can be an opportunity to purchase extra silage or greenfeed but nitrate levels can pose a risk to ruminants (see article below). August in the clinic from the large animal side of things usually gives a bit of breathing room which gives us a chance to catch up on some administrative tasks—dreaded but necessary! Veterinarians are often much more geared to clinical work and far less motivated to do paperwork though it is fast becoming a major part of our jobs. Farmers are often similar in terms of preference to farm work and an aversion to bookwork. August can be a good time to undertake a mid-season financial checkup, catch up on books, do a little forward planning, and take stock of where you are in your short and long term goals. If last calving season left you wondering about adding a scour vaccination program now is a great time to discuss this and plan an implementation strategy. If you’re planning to expand your herd this fall a strategy to safely integrate new arrivals can avoid some of the health risks that can crop up. Perhaps you are not planning any major changes; this may still be a great opportunity to review your costs of production and see where potential improvements lie in the everyday scheme of things. An interesting article in the Country Guide showed how much variation can exist between seemingly similar operations with a spread as wide as 60% between the lowest and highest earnings (or losses). Last year was a financial challenge. This year will be different in many ways and while the picture is always a moving target the goal of maximizing income and minimizing loss will stay the same. We hope the summer days and summer nights are being good to you!

**Hail Damaged Crops for Feed: Be Sure to Test for Nitrates**

The recent hailstorm left many area crops with damage ranging from slight to severe. Salvage of damaged crops for feed can be an opportunity to preserve value when hail damage is extensive. The caveat to harvesting or purchasing these crops to feed cattle is the real risk of high nitrate levels. Damage to plants can result in problems with nitrate accumulation, especially if the plants were heavily fertilized during seeding to optimize yield. Nitrates are a poison that can kill ruminants with cattle being most susceptible and sheep and goats less so, though still susceptible. Unfortunately, with nitrates, it is impossible to know the levels until the crop is cut and the forage tested. In plants damaged by hail, nitrates take about 4-5 days to reach peak levels and depending on the level of damage do not return to near normal levels until up to 10-12 days post-insult. This challenge of timing comes up against another problem: loss of leaf material as the leaves die and fall off the plant results in lower feed value and tonnage per acre. When faced with losing yield and quality you need to get in and harvest the forage in which case it becomes essential the feed be tested for nitrates and the levels be known before any is used as feed. In ruminants, nitrates are metabolized to nitrites which are even more deadly. The toxins turn the hemoglobin (how red blood cells carry oxygen to the entire body) to methemoglobin (no capacity to carry oxygen) and thus lowers oxygen perfusion to all organs and the fetus in pregnant animals. Further, the nitrites act to dilate blood vessels and thereby lower blood pressure, compounding the low oxygen level as blood flow becomes less effective. Clinical signs of acute nitrate toxicity include low body temperature, muscular tremors, weakness, staggering or recumbency, brown-blue mucous membranes, trouble breathing, rapid breathing, frequent urination, and even sudden death. Subclinical nitrate poisoning can reduce weight gains, lower milk production, depress appetite, cause abortions in both early and late gestation as well as increase susceptibility to infections by suppressing the immune system. These problems may not be readily recognized but tend to occur when nitrate levels are at 0.5 to 1.0 per cent of the feed consumed on a dry matter basis. Management of nitrates becomes imperative. Knowing the levels in feed is absolutely necessary to determine how to mix off and develop a feeding program to safely use the feed. Nitrate testing is easily accomplished alone or as an add on to regular feed testing. Be certain to obtain a true representative sample or take multiple samples. Test probes are available at the clinic to use and samples can be sent with very quick turnaround for results. Damaged crops can certainly be a great opportunity for feed but take time to know the risks and plan safe feeding!

**Pulling the Bulls: An Olympic Event**

You pull into the pasture with your trailer bumping along behind. The cattle all approach you in curiosity, swishing their tails wondering if you’ve brought some chop. The bull lazily moves to the front as he hears the handle on the pail and walks on the trailer towards a small pile of grain as you close the door. Bull pulled no problem! While this is possible and we’ve heard some of you really do have it that easy, this is not the common experience when it comes to pulling bulls. In some situations, even with the most carefully synchronized chasing, panel strategy, and colorful language, the damn bulls just won’t come out. They seem to know where the trees are and will take great lengths to avoid being caught. Generally, after an appropriate length of breeding season (typically about 60-65 days) it is recommended to pull the bulls. Defining the breeding season now means a defined start and endpoint for the upcoming calving season which further lends to a more uniform calf crop at sale time, avoiding larger early calves mixed with smaller stragglers born late. It also avoids what we commonly call “creep” in the calving season, whereby cattle that calved late are kept and continue to breed back late in subsequent seasons, and worse yet where their heifers are kept as replacements. These heifers are then younger at first breeding so may mature and breed later than desired and over time shift the peak of calving further from the desired first cycle. Pulling bulls can be trying at times and will depend a lot on the ability to sort, catch, and haul them. This often becomes the limiting reason why bulls are not pulled (“to be completely honest we have a hard time catching them on some of our pastures too”-JD). Don’t lose heart though if you can’t catch them. Preg-testing can afford the opportunity to cut off cattle bred later than desired and allow best management decisions. Consider preg-testing a little earlier when possible to get the most accurate dating. If pulling your bulls was an Olympic event or something that could contend for first place on America’s Funniest Home Videos—stop in and share it with Jackie over a cup of coffee—she’d like the break from her desk chair and can always enjoy a good laugh!

**Shedding Light on Laser Therapy**

Advances are made daily in the treatment of the myriad of conditions we see in veterinary medicine. Laser therapy has become a more widely used tool in everyday practice and the results we are seeing here at the clinic are simply amazing! Cold laser therapy works via a process called photobiomodulation - quite simply put, the wavelengths of light emitted work to stimulate cells to increase their activity to help the body heal itself. This stimulation triggers each cell to increase the energy, pain mediators and healing factors they produce - all great things when it comes to healing wounds and treating painful conditions. Often the use of laser therapy reduces healing time (making wounds heal faster) and reduces the amount of medications needed to treat various conditions including both pain medications and a lower need for antibiotics. The most common question we’re asked about laser therapy is "does it hurt?" The answer is no - the patients may experience a warm sensation on their skin during or just after, and most often they just lay there happily accepting the treatment! From skin infections to fractured legs, and from cats to horses or even cattle, there are very few situations that the laser cannot be used! Most of our staff are certified to use the laser and have taken the comprehensive training required. Ask us today if laser therapy makes sense for your animals—big or small there are many benefits to laser therapy!

**Around the Clinic…**

Barb was able to take a well deserved break and head out fishing in Saskatchewan with family which will be a special memory now that both her girls are soon launching from the nest! Andrea and Cheryl are gearing up to host the Donalda Light Horse Show sure to be a great time for all. Terra recently spent a great holiday touring the Maritimes and Melissa tackled her annual tradition of mud football which sounds like a tradition that might fit right in with our annual staff barbeque! While much is going on in clinic, it is good for everyone to take a few well deserved breaks and recharge! Enjoy these last few weeks of summer!

**Calling Long Distance? Use our toll-free number 1-888-GET VETS (1-888-438-8387)**

**Barb Munholland, DVM, Jackie Dobinson, DVM, & Associates**

**Cheryl Malin, DVM, Tara Snow, DVM, Mirjam Stigter, DVM**

**Michelle Hymers, RVT, Helene Neale, RVT, Melissa Whelpton, RVT, Athena Peters, RVT,**

**Andrea Muhlbach, Joanne Halseth, Terra Heier, VPM, Brittany Strandquist, Kim Schipper, Rachael Deaver**

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