

AG HAPPENINGS

124 W. Bivar | De Leon, Texas 76444 | (254) 893-2566

Farley's Thoughts

It looks like winter has finally arrived. We didn't have much of a winter last year, but this winter is starting off with a bang. Excellent moisture is available for small grain crops from the recent rains. The only drawback to the moisture and humidity is that pecans, peanuts, cotton, and hay need to be harvested.

Winter is the time of year to assess the past year and start thinking about a plan for 2017. As a general rule, commodity prices and cattle prices are less than they have been in several years. That means that every aspect of an operation needs to be analyzed carefully. Now is the time to figure out what kind of protein supplement to use for your beef cattle. It is extremely important to keep the body condition of cows at a 5 or more. It is hard to replace body condition once it has declined. The key is keeping protein levels up. Most of you are aware that hay protein levels are down this year because of the delayed harvest after the May rains. Check out stories in the other articles of this newsletter to see the different (continued on next page)

Feed Supplements

Farley Farm Supply is now offering two types of liquid feeds, Farley's Beef Builder and Mix 30 Plus along with the usual tubs, blocks, cottonseed/range cubes and breeder cubes.

If you have fed a high molasses based liquid feed in the past and you like it and your cows like it then we have **Farley's Beef Builder**. It is a 32% crude protein mix made with cane molasses. The protein is based off urea but the feed is self limiting because of the phosphoric acid added to improve reproduction. This mix contains both a vitamin and mineral mix. When fed at 2 to 2.5 lbs a day it more than meets an animals daily requirements for crude protein and helps meet energy needs. Remember urea based feed products should only be fed to cattle and only when roughages are available at all times. Cost is \$243 picked up and \$263 per ton delivered.

Mix 30 Plus is made from corn and soy co-products including corn or soy fats. Mix 30 Plus supplies both energy and protein necessary for proper rumen function especially on poorer quality forages. Even on high protein forages Mix 30 Plus has fat energy to keep protein/energy in balance. It is 16.5% crude protein and 47% TDN with 10% of this energy from fat. Feeding rates are from 1lb. to 4 lb. per day. Cost of Mix 30 Plus is \$240 per ton picked up and \$260 per ton delivered.

Grass Tetany

Magnesium is essential for proper enzyme and nervous system function and for efficient carbohydrate metabolism. A magnesium deficiency is uncommon except for cows grazing lush-growth small grain pastures during the late winter and early spring, which may cause grass tetany, a serious and sometimes fatal metabolic disorder. A high rate of nitrogen and potassium fertilization contributes to grass tetany. Excess potassium inhibits magnesium absorption in both forage and animals. Grass tetany usually occurs following an extended period of cold weather combined with high levels of nitrogen and potassium fertilization. Mature lactating cows are particularly susceptible to grass tetany.

Grass tetany can usually be prevented by feeding cattle a

types of protein supplements that Farley's has to offer.

Another thing to consider this time of year is soil sampling. Farley's pulls a lot of soil samples in the winter because it is a slow time of year for us. Give us a call to get on the list for soil sampling. A soil sample gives all of us a lot of information that can be helpful in making decisions for next year. It is the same principle as getting a blood test when trying to figure out if something is wrong with your body. Hopefully, the soil sample shows no major problems with your soil, but checking the pH and the macronutrients such as phosphorus and potassium and magnesium and calcium are a good barometer of where your soil is. I recommend sampling dryland crops once every 3-5 years and irrigated pastures every 2-3 years. Higher dollar irrigated crops should be checked every year, including the micronutrients such as zinc, manganese, copper, and boron. Remember that if pH gets too high or too low it can tie up the nutrients that that would normally be available in the soil. Applying lime is the best way to bring up a low pH. Lime raises pH, calcium, and magnesium. I have seen more low pH's the last couple of

As we approach another new year, I would like to address one other topic. At 68 years old I am certainly not a spring chicken any more. I have people ask me all the time "Farley, when are you going to retire?" The answer is that I

mineral mixture containing magnesium oxide. A mineral mixture containing 10 to 14 percent magnesium consumed at 4 ounces per day should provide adequate magnesium. **Adequate salt intake is also important for preventing grass tetany.** Avoid using hard blocks to supplement salt when cattle are at risk for grass tetany; supply salt in a loose form to allow for adequate salt consumption.

When grass tetany is not a risk, blocks can be used to supplement minerals, provided trace minerals are elevated to account for lower intake of block versus loose salt minerals. Animals with grass tetany respond almost immediately to an intravenous infusion of calcium-magnesium gluconate.



Eye From The Sky!

Because of recent advances in technology, interest in Precision Agriculture is on the rise giving producers the ability collect crop information from a variety of sources (i.e. grid sampling and yield monitors) in order to apply crop inputs more efficiently. People within agriculture have recently begun to explore precision farming through the air to analyze crop status mid-season with drones. Most drones are equipped with a camera that is synced with a smart phone or tablet providing real time data for the drone pilot to either take a picture or video. Some drones are now equipped with infrared cameras to collect data that can instantaneously discover problems within the crop and analyze the plant health.

We recently purchased a DJI Phantom 4 to help scout crops more effectively; but if we told you exactly how this drone will help, we would be lying. What we can admit is that we are extremely happy with the high resolution of the camera at 100 feet in the air even on a cloudy day. The possibilities of drone technology are endless, and I hope we will be able to use this technology to better fulfill the needs of you as our customer. We have no intentions of using this equipment to spy on anyone or anything and are eager to hear your feedback on ways we can implement this in your operation.

don't have a clue. I still feel well for my age and I enjoy the challenge of running a business. I do realize, however, that my working days are numbered. That is why in 2007 I made Keith McIlvain a full partner in Farley Farm Supply. My goal is that Farley Farm Supply continues to serve our customers and be a sustainable business after I am gone. Many of my customers are actually my age or older. My hope is that each of you has a succession plan in place for your farm and family regardless of your age.

Thanks for your business this year and for the past 40 years. January 2, 2017 will mark the 40 year anniversary of the opening of Farley Farm Supply.

I do wish each of you a very Merry Christmas and a happy and prosperous New Year's season. *JIM*

Farley's Retail

Maybe you've not been by the Farley Retail store lately but there is a lot going on there! Over the past year we have been steadily adding products so that we have or can get (Cont on next page)



Hay Sampling

Most producers simply do not sample the hay they produce or the hay they buy. According to Dr. Larry Redmon, Extension Forage Specialist, it is not a sin to purchase hay low in hay test values but it is a sin to buy hay low in hay test values without knowing it is low!

This newsletter started with an article on feed supplements but how do you know if you need a feed supplement if you don't test your hay. If you base your supplement feeding on how well the cows eat the supplement then you're looking at the wrong thing! The simple rule of thumb is that the higher the quality of the hay, the more the cattle will eat and the more they eat the less supplement you need.

As you can see from the picture, hay sampling is easy and the cost is low. We take our samples to HiPro in Comanche and they run them for \$15.50 per sample.

Daily energy intake is the primary limiting factor affecting beef cattle performance on forage diets like coastal hay or pasture or even native grasses. This energy intake can be further limited when forages supply an inadequate amount of crude protein. The reason for this is that the amount of crude protein in the cow's diet needs to be in balance with the energy content. This is usually expressed as a ratio of 6 parts energy to 1 part protein.

For instance, hay with 60% total digestible nutrients or TDN would need a protein content of 10% to be in balance and allow the microbes in the rumen of the cow to properly digest all the energy and also have enough energy to digest all the protein.

The problem is that we allow pastures and hay fields to get too mature so that they have less protein and energy as a percent of the total. It is not unusual for coastal hay to test 45% TDN and have a 5% crude protein (CP). This is a ratio of 9 TDN:1 CP

which is way out of line.

This kind of ratio has been researched to limit dry matter intake to just 1.6% of body weight (BW) when it should be above 2% of BW. When the crude protein of a forage falls below about 8% the dry matter intake of cattle

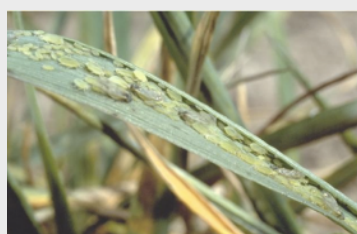


(Farley's retail cont.)

anything you need for the yard, garden, farm and ranch. We have all your gardening supplies, yard care, seeds, cattle minerals, sack feed, bird feed, fencing supplies, vet supplies, hunting products including game cameras, feeders and deer corn. It is worth your while to stop in and browse the shelves, you're sure to find something you didn't know we carried.

Winter Small Grains

The recent rains have benefited our small grains tremendously and growth has been better than we've seen in years. All this growth means that a lot of nitrogen fertilizer has been used to create cattle grazing. As you move into the longer days of January/February you need to remember that applying nitrogen fertilizer early encourages more tillers and more growth. Second keep an eye open for greenbugs. Cold weather won't slow them up much and they are sure to be a problem.



declines rapidly. This decline is attributed to a loss of rumen microbes as they die for lack of protein. This is why feeding a high quality protein supplement will improve both the protein and the energy status of cattle. This is simply because the rumen microbes can now work better so that they improve the forage digestibility for the cow and when this happens the cow can now take in more forage so that forage intake increases. I said earlier that at 5% CP, forage intake is limited to about 1.6% of the cow's BW. When the forage is improved to 8% CP or if a high CP supplement (25% or greater) is added with the forage then forage intake increases to 2.3% of BW. This is a 44% increase in forage intake or nearly half again more. This means that she will eat more of the lesser quality pasture or hay and lose less weight in the winter because as she eats more forage she gets more energy. If you remember what I first said was that energy is the limiting factor for cow performance on forage diets. Most of the time we say it is protein and we will usually buy hay based on protein but what we really mean is we want the higher protein in order to

balance the energy. Again that ratio needs to be about 6 TDN : 1 CP or you will find that the cattle will perform poorly even though you have plenty of feed.

Tarleton Interns

Over the past 12 weeks, we have had the unique opportunity to house two

Tarleton State interns: Dylan Nicholson and Dylan Melde. Neither student knew exactly what they were getting themselves into with the Farley organization, but their strong personalities allowed them to complete all tasks thrown at them as well as mesh with everyone within the company. Through the internship, they each have had the opportunity to look at a variety of crops, meet many local producers, pull soil and hay samples, and learn the ins and outs of the business. Dylan and Dylan, who we also refer to as DDT, come from noticeably different backgrounds; each possessing intangible assets that will allow them to succeed in life. It will be difficult to see them leave, but we look forward to seeing each enter the workforce and make an impact in agriculture. These individuals have a strong passion for agriculture and should provide a positive outlook for future farming. Good luck DDT!

