

The Quarterly Beef News

Spring Edition Newsletter



McDowell County Center

April 2023

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Contact Us!

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April Cattlemen's Meeting

I hope everyone is looking forward to the next cattlemen's meeting. The next meeting will be held, <u>April 18th at 6 PM at the Senior Center</u>. There will be a guest speaker from the Virginia Cattlemen's Association, coming to talk about livestock insurance.

With warm weather starting to arrive it's time to start thinking about your mineral program and pasture rejuvenation. I have included an article about how important minerals are for cattle, I am not advertising or sponsoring BioZyme, I just thought their article was well written. Also, now is a good time to start taking soil samples so you can get the results, so you can apply the right amount of lime and fertilizer. You don't want to waste your money on nutrients that you don't need, that's why it is important to do a soil test.

Please **RSVP** for the cattlemen's meeting by **April 13th**, you can call the

office at (828) 652-8104.



Are Minerals Really Worth It?

It is that time of year when the winter is starting to come to an end, and everyone's pastures and hay fields are starting to green up. It's time to start putting minerals out to your livestock if you have not already started doing that this year. One of the biggest questions producers ask themselves is "Do my animals really need it?" The answer is YES! Minerals are very important for livestock to perform well. Minerals have an impact not only on bone structure but also on conception rates, can influence weight gain, and hoof health. Before purchasing your minerals this year, you may want to take a look at the mineral tag. You want to make sure your livestock are getting the right amount of macro- and micro-minerals for them to perform at the maximum level.

Some minerals may be overpriced and not even have the recommended amounts needed in them. That's why it is important to understand how much of each nutrient is needed. For minerals that have fly repellent in it you want to have that early on in the spring if not a couple months before the end of winter. Something else to also keep in mind is we are deficient in selenium in this area. If your animals do not have adequate levels of selenium it can cause poor growth, fertility problems, high mortality rates, etc. Therefore, it is important to purchase minerals that have adequate levels of selenium in it as well.

If you are already having fly problems you may want to consider minerals with fly repellent in it. When purchasing minerals with fly repellent in it make sure to read the label closely and carefully. Some minerals may be advertised as having properties to keep flies away, be sure to read those claims closely & carefully. Some minerals may say that to get you to buy them, when it is only in very small amounts to where it will not do anything for your livestock. This is why I cannot stress enough the importance of reading the label.



Why it Makes "Cents" to Provide Cattle With a Good Mineral Program

BioZyme Incorporated

The main nutrient requirements for livestock are water, energy, protein, minerals and vitamins. In many cases, producers do a good job of providing enough water and adequate energy and protein sources. However, many producers fall short in providing the best nutritional program possible by purchasing "cheap" vitamin and mineral sources or failing to provide a vitamin and mineral source at all. Mineral nutrition for the cow is important year-round, but is particularly important during late gestation, calving and re-breeding. Management of the maternal unit throughout gestation and lactation not only impacts her productivity, but the performance and efficiency of her calf as well.

Why do animals need a good mineral program?

All animals have a defined set of nutritional needs. When nutrients run out, that is where performance stops. Minerals are an important component of these nutritional needs, and there is a delicate balance that is needed for maximum biological efficiency to be realized. Selecting the correct mineral supplement is essential for maintaining healthy animals, optimal growth and improved reproduction efficiency.

Nutritionally speaking, animals require two types of minerals: macro and trace minerals.

- 1. Macro minerals required in concentrations greater than 100 ppm
 - o Calcium, Phosphorus, Potassium, Magnesium, Sulfur, Sodium and Chlorine
- 1. <u>Trace minerals</u> required in concentrations less than 100 ppm
 - o Cobalt, Copper, Iodine, Manganese, Selenium, Iron and Zinc

How do I select the appropriate mineral program?

There are several factors to take into consideration when selecting a mineral program that is appropriate for your operation:

- Type of forages available and the season
- Grains and by-products fed
- Ca:P ratio
- Salt level

- Level of trace minerals
- Additives
- Bioavailability
- Performance goals of the operation

Are all minerals created equal?

Absolutely not. Minerals can come in organic and inorganic forms. Organic minerals are more bioavailable than inorganic minerals. This means that the more bioavailable a mineral is, the lower concentration that is needed to meet the animal's requirements.

How much does a good mineral program cost?

A mineral program could cost anywhere from \$20-40 per head annually, but feed additives included in some mineral mixes (i.e. Rumensin, Bovatec, Amaferm, etc.) can add \$15-20, annually.

Let's say a good mineral program costs \$30 per bag (\$1,200 per ton). For some, that may seem expensive and some producers may be tempted to buy the cheapest mineral possible. Mathematically, however, purchasing the cheaper mineral program doesn't always pay in the long run.

- At a 4-ounce per day intake, the mineral only costs \$.15 per day.
 - \circ \$1,200 per ton \div 2,000 pounds = \$.60 per pound
 - \$.60 per pound × .25 [4 ounces = .25 pounds] = \$.15 per day
- The cost per year would be \$54.75.
 - \circ \$.15 per day \times 365 = \$54.75 per year
- Let's say the cows nutritional needs are not being met because she is consuming a "cheap" mineral source, and doesn't conceive on her first time coming back in to heat.
 - Assume the price of a 600-pound feeder calf is worth \$1.50 per pound
 - If a calf weighs 80 pounds at birth, it needs to gain 2.5 pounds per day to reach 600 pounds at weaning (205 days of age)
 - Remember that most operations wean all calves in one day
 - If a calf is born just one cycle (21 days) later, a producer is losing 53.3 pounds of weaning weight
 - 21 days \times 2.5 pounds per day = 53.3 pounds
 - At \$1.50 per pound, that is \$79.95 per head you can miss out on or \$25.20 MORE than the cost of a "good" mineral program for the entire year.
 - \$1.50 per pound × 53.3 pounds = \$79.95 LOST

The benefits of a good mineral program are research proven. There are numerous research articles available that support the case for providing cattle with a high quality, highly bioavailable mineral source. Some examples include:

- Fieser et al., 2006
 - Documented an increase in performance of 0.27 lb. day over non-supplemented cattle.
- Horn et al., 2002
 - Increased ADG of 0.16 (yr 1) and 0.26 (yr 2) lb. by steers given free-choice, non-medicated mineral compared to those with no supplement.
- Stanton et al., 2000
 - Cows with high-level of inorganic trace minerals lost more weight than cows receiving organic trace minerals.

- Calves from cows on the high organic trace minerals saw higher ADG from birth to September.
- Pregnancy rate to AI was higher when cows were fed high levels of organic trace minerals.

What role does BioZyme's proprietary prebiotic Amaferm® play in a good mineral program?

Amaferm is a natural feed additive used to improve the digestibility of feedstuffs and overall digestive health. Through increased feedstuff digestibility, more energy and microbial cell proteins are available to the animal for increased gain/body condition and feed efficiency to be achieved (Beck, 2012; Zerby et al., 2011; Caton et al., 1993). A healthy digestive system allows an animal to better utilize nutrients consumed, which translates into improved animal performance. Seventy percent of an animal's immunity lies within its digestive system. Therefore, an animal with a healthy digestive system is more likely to perform to their genetic potential.



BEEF TOP SIRLOIN & POTATO KABOBS

INGREDIENTS:

- 1 pound beef Top Sirloin Steak boneless, cut 1 inch thick
- 1 pound red-skinned potatoes
- 2 medium yellow or zucchini squash
- Sauce:
- 3/4 cup steak sauce
- 2 teaspoons minced garlic

COOKING:

- 1. Cut potatoes into 1-1/2-inch pieces. Place in microwavesafe dish; cover with vented plastic wrap. Microwave on HIGH 6 to 8 minutes or until just tender, stirring once. Cool slightly.
- 2. Combine sauce ingredients in 1-cup glass measure. Microwave on HIGH 1-1/2 minutes, stirring once.
- 3. Cut squash lengthwise in half. Cut beef Top Sirloin Steak and squash into 1-1/4-inch pieces. Combine beef, squash, potatoes and 1/3 cup sauce in large bowl; toss. Alternately thread beef and vegetables onto metal skewers.
- 4. Place kabobs on grid over medium, ash-covered coals. Grill, covered, 11 to 15 minutes (over medium heat on preheated gas grill, 13 to 16 minutes) for medium rare (145°F) to medium (160°F) doneness, turning once and brushing with remaining sauce during last 5 minutes.

Preparing your Pastures for Spring

Jessica A. Williamson, Ph.D. Former Extension Forage Specialist Pennsylvania State University

As the blanket of snow that covered the majority of the state throughout the winter continues to melt away, seedlings of perennial forages will begin to emerge from the ground, reflecting a hint of green across pastures as a reminder that spring is on the way. When planning to get your pastures ready for spring, the earlier the planning begins the better.

Soil Fertility

Applying fertilizer according to your fall soil sample will ensure optimum pH and soil fertility according to your targeted forage species. Ensuring proper soil fertility provides your desirable plants a competitive advantage over undesirable species which may reduce your pasture's value by reducing carrying capacity, lowering the quality of available forages, and reducing the aesthetic appeal of your operation. Maintaining the proper pH increases the availability of other nutrients to forages by releasing them from the soil, as well as increases the activity of beneficial soil bacteria. If a pasture is in need of a production boost, applying 30-40 lb. of nitrogen per acre can help not only increase forage yield, but also improve pasture carrying capacity, increase plant nutrient reserves, help to build a denser root system, and could result in improved forage quality. An application of N will give the desirable plants the added benefits they need to out-compete undesirable weeds, leading to greater forage yield. However, if forage quality and yield are not a factor in the spring, consider waiting to apply N to pastures when it is needed; when plant growth slows and forage resources are more limited.

Dragging Pastures

One benefit of grazing livestock is that 80 percent of the nutrients that animals consume are returned to the soil. Dragging pastures that have wintered livestock allows the manure to be better distributed and prevents forage from being smothered by manure piles. Dragging is recommended as soon as manure piles are no longer frozen to disperse forage seeds within the manure and provide them the proper seed-to-soil contact needed to germinate. This is particularly important in grass-legume mixtures, as legume seeds benefit from the frost-thaw cycles in early spring. Fields where livestock were fed heaviest during the winter should be dragged first, where the greatest accumulation of manure occurred.

Later in the grazing season, the control of parasites is also increased by breaking-up manure piles and disrupting their life cycle. External parasites, such as flies, prefer fresh manure piles for laying their eggs. Dragging pastures breaks up these piles, in turn exposing the moist manure to sunlight and allowing it to dry, killing the larvae and potentially reducing the overall external parasite load on the operation.

Grazing Management

After evaluating past managed grazing systems and determining what did and did not work on your operation, early spring can be the best time to plan how to improve your grazing system in the upcoming grazing season. Walking fencelines and repairing where necessary is a task that can alleviate a lot of headache later in the season. Splitting a large pasture in half to improve grazing efficiency and eliminate selective grazing, improving watering systems to allow for easier and more environmentally-friendly watering of livestock, or adding another strand of barbed wire to a perimeter fence to keep those calves from going over into the neighbor's yard are just a few examples of what may be lingering on your to-do list in the upcoming weeks.

Now is the time to capitalize on warm, early spring days by preparing for the upcoming growing season!

Cow Herd Management Calendar March/April/May:

- Make sure bull is in good breeding condition. Trim hooves, conduct breeding soundness exams, body condition needs to be at least a 6.0, may need to provide additional feed to get to that score.
- Make sure cattle have access to minerals, and order more as needed.
- Start thinking of grass mixtures you would like to plant in pastures or hayfields.
- Monitor for flies, start watching for pinkeye.
- Make sure the cattle maintain a body condition score of 5 to 6, provide additional feed if necessary.

Upcoming Events:



- Barnett Angus Ranches Spring Production Sale, Washington, Ga.-March 4
- March Madness Cattle Sale of the Carolinas, Monroe, NC.- March 18
- Knoll Crest Farm's Spring Bull & Female, Red House, VA.- April 8
- 55th Annual NC Hereford Classic Sale, Union Grove, NC- May 13
- South Carolina Hereford Association/ Red Angus of the Carolinas Annual Sale, Pendleton, SC- May 6



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