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### **Minerals for Beef Cows**

It's come to my attention that there have been a few herds chowing down on mineral this winter. While this can be common and probably not toxic, it is costly!

Most of the time, this is not due to some great deficiency, but maybe just something new or something to do. How much is too much? All minerals should have a label that has a suggested consumption rate. If your cattle are consuming too much, you can either mix the mineral with loose salt. The rate would be  $\frac{1}{4}$  or  $\frac{1}{3}$  salt to the mineral. This will slow down consumption. The other option is to figure out how many days the mineral is supposed to last (consumption rate X number of cattle). Suppose that bag of mineral should last two weeks. Then in two weeks, you put more out, not just when it runs out.

Most mineral bag labels will have consumption at 3-5 ounces a day. Some of the reports I'm hearing are cows eating pounds of mineral within a few days.

Research and studies on minerals and vitamins are very difficult because of the differences in soil types and forages consumed. Finding a good mineral starts with salt; it is one of the cheapest minerals to provide. If you are grazing cool-season grasses in the spring, magnesium should be added weeks before grazing season to avoid grass tetany. Calcium and phosphorus should be the major players in your mineral program. Phosphorus is the most expensive component, and it needs to be in the mineral beginning before calving season and through the breeding season. After breeding, it will depend on the forages whether or not to include in the mineral. Distiller's grains are high in phosphorus, so if you supplement DDG, you will not need additional phosphorus. If you are feeding DDG's supplemental calcium should be included in the mineral. Mineral needs vary by the region you are in and what forages cattle are consuming. Some minerals interact with each other; for instance, an oversupply of potassium in areas of grass tetany problems will produce tetany as the potassium will tie up the magnesium.

To design a good mineral program, first, you need to know what the cattle need. There are at least 17 different minerals required by beef cattle. These minerals and their required amounts can be found in the [Nutrient requirements of beef cattle](#).

Forages are the most economical source of minerals. The National Research Council report gives the average amounts supplied by various forages. These amounts are just averages, as the real amount is based on forages' quality and quantity. Data shows that as a plant matures, mineral availability in the forage decreases. Some complex interactions in the cow's body complicate things even more.

You can usually count on 85 to 92 percent of the plant or grain phosphorus, potassium, manganese, and iron are available. Calcium in the plant or grain is available at 50-65%, 40-70% of the zinc is available, and 50—60% of copper in the plant is available to the animal.

The exception to this is manganese; it can be considerably lower in some forages. If grass tetany can be a problem, I would always add it to the mineral.

Mineral supplementation is complicated and can be expensive. Talk to your veterinarian about your mineral program. This may be an area where you can cut some costs!

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***Plan Now (CHECK)...Order Soon (CHECK)...Plant Later...***

Over the last two weeks, this space has been devoted to outlining the suggested planning steps for a windbreak planting. If you want to revisit them, check out either column under the Weekly News Articles heading at: <https://www.meadowlark.k-state.edu/lawn-garden/> .

At the risk of thinking *too far* ahead in the process, there is some merit in thinking a little bit about the planting process. In fact, there may even be some steps you can take in preparation of the planting.

If you order trees from the Kansas Forest Service Conservation Tree Planting Program, you're going to get some excellent information on planting the trees in your order. There will be some slight differences in the pre-planting storage of your plants, so make sure you properly store prior to planting. In most cases, immediate planting is recommended, so plan for delivery or pickup when that will work best for you.

Prior to planting, plan for weed and grass control. Weeds should be controlled for a minimum of three years. Weed barrier fabric is a great option, but mechanical cultivation and herbicides are excellent choices as well. Weeds should be kept below a height of six inches.

Fertilization isn't usually needed unless planting on a very poor sites. Over-fertilization can cause problems for some species. Only apply when a soil test deems it necessary.

New plantings will need irrigation unless even precipitation through the summer keeps soils moist. Irrigation management requires regular monitoring rather than scheduled watering for best results. Soils should be watered to the point of saturation and then allowed to dry out to a degree before watering again.

If you aren't using weed barrier fabric, mulching is recommended. A three to four-inch deep mat of old straw, hay, corn cobs, or wood chips approximately 12 to 18 inches around the seedling will reduce competition, conserve soil moisture, and reduce the soil temperature.

Animal damage control should be a consideration as well. Tree tubes are an option, as is caging, to help prevent damage from deer, rabbits, and squirrels hunting for tender vegetation.

Planting a windbreak isn't easy, but the value they provide to the home or farmstead makes it worth it many times over. For information about getting started, check out Windbreaks for Kansas, available online at: <https://bookstore.ksre.ksu.edu/pubs/MF2120.pdf> ) or upon request from any District Extension Office.

Cindy Williams  
Meadowlark Extension District  
Food, Nutrition, Health, and Safety

**Families Living Well Together: K-State offering free online sessions to boost together time**

We've all spent a lot of time with family and friends living in our pods during the coronavirus pandemic and looking for creative, positive ways to spend that time together.

Extension professionals from Kansas State University have been in the same situation with their families. As a result, they've created a series of virtual programs, titled Living Well Together, as a way for individuals and families across the state to capitalize on that time.

"Just like other families, we, in extension, have spent a lot of time with our families during COVID-19," said Sharolyn Jackson, family, and consumer sciences specialist for northeast Kansas. "Since we're in the business of helping families every day through our work in extension, it made sense for us to put our heads together---virtually, of course---and figure out ways to help other families make the most of their time together."

Participation is free to all Kansans, but registration is required. Participants can choose to register for one session or as many as they like. Once registered, a Zoom link will be sent to the registrant's email address.

"Living Well Together is a series of one-hour sessions that touch on a wide variety of essential skills that empower individuals and families to live, work and thrive," Jackson said. The series was developed by extension agents and specialists in northeast Kansas but open to everyone. Programs will be recorded for those who cannot participate in the live sessions.

Starting January 7, Living Well Together weekly virtual sessions are planned on Thursday evenings at 6:45 CST. Sessions are scheduled through at least March 25. Some topics planned for early 2021 are the Mediterranean eating style, checking your credit, home organization tips, family mealtime, and more. For more information, contact Sharolyn Jackson at [sharolyn@ksu.edu](mailto:sharolyn@ksu.edu) or Cindy Williams at [csw@ksu.edu](mailto:csw@ksu.edu)

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Family Life

### **Seasonal Affective Disorder**

If you have noticed significant changes in your mood and behavior when the seasons change, you may be suffering from seasonal affective disorder (SAD). According to the National Institutes of Mental Health, people may start to feel “down” when the days begin to get shorter in the fall and winter and begin to feel better in the spring with longer daylight hours.

In some cases, these changes can become more severe and affect how a person feels, thinks, and handles daily activities.

Not every person with the seasonal affective disorder will experience all of the symptoms listed below: feeling depressed most of the day, losing interest in activities you once enjoyed, experiencing changes in appetite or weight, feeling sluggish and agitated, having low energy, feeling hopeless and worthless, having difficulty concentrating, having frequent thoughts of death or suicide, oversleeping, overeating, and social withdrawal.

Research indicates that people with SAD may have reduced serotonin activity, which helps regulate mood, and suggests that sunlight controls levels of molecules that help maintain serotonin levels. For individuals with SAD, this regulation does not function properly, resulting in lower serotonin levels in the winter. Vitamin D deficiency may also play a role in Seasonal Affective Disorder because Vitamin D is believed to promote serotonin activity.

Treatments available to help individuals with the seasonal affective disorder include light therapy, vitamin D, psychotherapy, and antidepressant medications. If several of the signs and symptoms listed above apply to you, it is essential to see your doctor so you can feel better.