Feeding a Mineral Mixture Is Good Insurance

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Even when we have low cattle prices, one input a rancher should not cut back on is mineral supplementation. A good mineral supplementation program should cost about $7 to $9 per cow annually. This is a very low-cost insurance policy.

Research has shown that perennial grasses grown in south Florida responds to less phosphate fertilizer than previously recommended. In fact, phosphate fertilization is not recommended for bahiagrass in south Florida. Fertilization research shows that phosphorus is 20 to 25% lower in bahia forage not fertilized with phosphate. With modern fertilization practices it is very important that a good mineral supplementation program be followed.

Other mineral nutrients that can be deficient in forages grown in south Florida include copper, cobalt, iron, zinc, iodine, manganese, and selenium. Even if these minerals are not needed in every situation, the amounts added to a mineral mixture is low and the cost is minor. Also, borderline deficiencies of trace elements may be present in the forage which could affect cow reproduction and/or calf growth, and the problem not visually recognized.

The Ona Station Mineral No. 2 mixture developed and fed at the Range Cattle REC for decades contains 12% calcium, 12% phosphorus, 25% salt, 1% iron, .13% copper, .03% cobalt, 0.1% zinc, .04% iodine, .05% manganese, .0016% selenium, and 200,000 USP units of vitamin A per pound. This mixture presently cost $382/ton. It is recommended that this mineral mixture be fed at a rate of approximately 0.1 pound per head per day to cattle grazing sandland pastures.

There is nothing magical about this mineral formula. Other mineral mixtures which provide similar quantities of the mineral nutrients known to be limiting in south Florida forages are equally as good. The important thing is to provide cattle with mineral year round and watch out for cost.

One cost saving measure is to prevent over consumption. Some formulas are very palatable, and at certain times of the year cattle will eat two or three times more than recommended if the mineral is fed free-choice. This can be controlled by placing a
measured quantity of mineral in the mineral box for a specific number of cattle for a specific period (for example three weeks). If cattle eat all the mineral before the next feeding it will not present problems. Excess minerals are stored in bones, liver and other tissues, and will provide for the animal's needs over several days or even weeks when mineral is not available. However, you don't want cattle to consume all the mineral mixture during the first few days after it is offered.

At the other extreme, cows may eat little or no mineral mixture for long periods, often months. The formulation of the mineral mixture may need to be changed to encourage intake. This is often accomplished by increasing the percentage of the palatable component, such as cottonseed meal, citrus pulp, cane molasses, or similar ingredients. Low mineral intake can result from high salt content in the drinking water, and the salt level in the mineral mixture may need to be reduced.

Work with your mineral mixture supplier and a good formula which supplies adequate quantities of mineral nutrients, at a reasonable cost, can be accomplished.

For questions or comments regarding this publication contact Findlay Pate