

Mineral Supplement Selection Tips

Rachael Boyle
Phillips-Rooks District Extension Agent
Agriculture and Natural Resources

One of the challenges cattle producers face is determining which mineral supplement they will use during the upcoming grazing season. Often this decision is based on the information provided on the mineral tag and price sheet. Although price is an important consideration, other factors such as the concentrations of the minerals in the mix relative to the animals' requirements and sources of minerals used should be considered.

The first step in selecting a mineral supplement is to know what you are shopping for. Mineral mixes are often categorized based on the concentration of phosphorous in the mineral mix. Phosphorous is often deficient in cattle consuming forage-based diets and is our first priority in developing mineral supplements for grazing cattle. The amount of phosphorous required in a mineral mix to meet the requirements of a cowherd is a function of forage phosphorous content (determined via forage mineral analysis) and animal requirements, which are driven by mature body weight and production stage. A mineral mix that contains 6 to 10% Phosphorous would be adequate in many situations.

The next step is to spend some time reading the mineral tag. The guaranteed analysis section of the tag guarantees the concentration of the minerals listed. In general, the more guarantees the better, and if a mineral is not listed then it is not guaranteed to be in the mineral. The sources of the minerals used in the mix also warrant consideration as mineral sources differ in bioavailability. For example, copper sulfate is 100% available to the animal, whereas copper oxide is 0% available.

For more information about mineral supplementation, see "Questions and Answers on Beef Cattle Nutrition" (<https://bookstore.ksre.ksu.edu/pubs/C733.pdf>).

For more information, please contact the local K-State Research and Extension Office. K-State Research and Extension is an equal opportunity provider and employer.