



Vet Call

► by **Bob Larson**, Kansas State University

Grazing cover crops

Crop farmers are increasingly using cover crops for fallow fields or as part of planned crop rotations to suppress weeds, sequester nutrients and water, enhance soil health, and improve subsequent crop productivity. While many fields planted to cover crops are not grazed, some experts have recognized the additional benefits for soil health when cattle grazing is incorporated into the system to provide manure and plant biomass for the soil. Of benefit to cattle producers is the potential for low-cost feeding systems that extend the number of days that cows are grazing, thereby reducing the inputs associated with mechanically harvested forages.

Know the crops for optimal results

Cattle producers who also have cropping enterprises may have the greatest opportunity to incorporate cover crops into their grazing management plan. Even if you do not farm, you may be able to negotiate mutually beneficial agreements with crop-producing neighbors. Both cows and postweaning cattle can graze cover crops, but the timing during

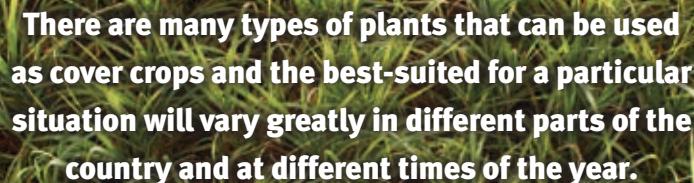
the year when cover crops are available and the production cycle of a particular herd will influence the extent of the advantage obtained over other feed options.

One important consideration from the cattle production perspective is whether or not the field is fenced or whether electric fencing would provide an adequate enclosure based on the class of cattle, as well

as the location of neighboring fields, pastures and human activities. Also, the availability of water and the ease of getting cattle into and out of the field should be considered, along with the soil type. In general, grazing can cause soil compaction in wet conditions and with heavy soils; therefore, the time of year, soil type and ability to remove cattle for short periods of time when grazing is less ideal will all contribute to the decision of whether or not a specific field could be grazed.

Choosing your cover

There are many types of plants that can be used as cover crops, and the best-suited for a particular situation will vary greatly in different parts of the country and at different times of the year. Much of the recent interest in grazing cover crops has been focused on the use of mixes of different types of plants. These mixes may include cereal grains,



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legumes, root-bulb plants and grasses.

It is important for cattle producers to understand that some plants used as cover crops can be highly toxic to cattle and should not be grazed. Other cover crops can occasionally cause health problems for cattle. These risks should be recognized and managed to avoid substantial losses.

Know the risks

Some of the cattle health risks associated with grazing cover crops include bloat, prussic-acid poisoning, nitrate toxicity, sulfur toxicity and grass tetany. Bloat can be a concern if clovers and legumes make up a high percentage of the cover crop, or if the forage is high in protein and moisture and low in fiber.

Avoid turning cattle into cover-crop fields when they are hungry early in the morning or after coming off of heavily grazed pastures,

but rather allow them to have first access to the lush, green cover crop later in the day after grazing or eating hay.

Prussic acid and nitrate toxicity can often be caused by the same plants, but at a different stage of plant growth. Prussic-acid poisoning is of greatest concern when cattle graze young or regrowth sorghum or sorghum-Sudan grass hybrid plants, or immediately after these plants are exposed to a killing frost. Wait to turn cattle into fields with these types of plants until the plants are at least 18 inches tall, and remove cattle if a drought or nonkilling frost is followed by growing conditions that allow regrowth.

Nitrate toxicity can be a concern for sorghum and Sudan grass, as well as a number of other types of plants such as turnips, radishes and similar plants. Nitrate tends to accumulate when the plants are growing slowly due to cloud cover or cool

temperatures, or if the plants are stressed by drought, hail or disease.

Some plants used as cover crops, including canola and some lupin species, can accumulate sulfur. If the cattle's water source is high in sulfur, nervous system problems such as head-pressing, blindness, staggering, convulsions and death can lead to serious losses. If cereal grains are used as cover crops, grass tetany due to low magnesium can be a problem, particularly in the early spring. Feeding a mineral mix that is high in magnesium will help prevent this problem.

While there are some risks when grazing cover crops, in most situations the risks are likely low and manageable if you are familiar with the plants being used. It is important to frequently monitor cattle while grazing and be prepared to move the animals or change feed sources if necessary. Working closely with your veterinarian, seed suppliers and extension experts may allow you to take advantage of cover crops as a cost-effective method to expand available grazing.



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