Planning a Spring Grazing System

Eric Mousel, University of Minnesota

The polar vortex which has swept down upon us has made it a little harder to believe spring will be here soon. However, it is important for most beef cow producers to start thinking about the coming grazing season.

First, consider cow nutritional status as they transition from winter feed to spring and summer grass. Although spring grass is usually high in crude protein and total digestible nutrients, often times forage water content is so high cows can struggle to slow rumen kinetics enough to optimize digestion. Thus, heavy-milking cows in rough shape coming off of winter feed will probably not be able to put much condition back on in preparation for breeding.

Another issue with high-moisture spring grass is vitamin and mineral nutrition. Although the grass contains adequate vitamin and mineral levels important to ruminant function, the actual concentration can be fairly low. Supplementing vitamins, minerals, salt, and especially critical minerals like copper prior to breeding are important to consider in a spring grazing plan.

Spring grass is not always the best for putting condition on cows, but it is still cheaper than feeding a winter ration, thus, for many it is tempting to get them out of winter lots and on to grass as soon as possible. This is not a good practice for ensuring long-term health of grazing resources. Research has shown grazing grass species prior to the 4th leaf stage will reduce season-long yields as much as 30%. Over the long term, the benefit of feeding cows to keep them off grass unitl it is ready will outweigh the cost of reduced grazing capacity. Frequently moving cattle will also be beneficial to both cattle and grass. Giving grass some time to rest, especially as summer approaches, will increase grazing capacity and utilization of grass resources.

Supplementation may have practical applications in certain situations. Spring and early summer grazing may lend itself to energy supplementation, dry matter (DM) supplementation, or both. The need for supplementation is largely driven by cow condition in relationship to the breeding season. Hoping thin cows gain enough weight on spring grass to cycle normally during the breeding season is not an effective practice. It is not always a guarantee cows will gain weight rapidly on very lush spring grass. Thin cows going onto spring grass can have an extremely adverse effect on conception rates. Bunk feeding energy concentrate (i.e., corn or distillers grains) on pasture can result in very effective weight gains in a short time. A University of Minnesota study confirms thin cows turned out on spring grass and supplemented with 3 lbs/head/day of dry distillers grains had similar conception rates to adequately conditioned cows not supplemented. This is in contrast to thin cows turned out on grass and not supplemented, having conception rates 12% lower than adequately conditioned cows on grass. Supplementing a high-quality hay simply to add more DM to the diet can be a practical way of improving nutritional status. However, it also is important to point out that nutritionally balanced cows in good condition following calving and going into the grazing season, should have no problem maintaining condition and cycling during the breeding season.

Supplementing energy concentrates has been shown to reduce overall grazing intake, resulting in more grazing days per acre. In a Minnesota study conducted on quackgrass and Kentucky bluegrass pasture, grazing days per acre increased 15% by supplementing 5 lbs/head/day of oats every other day to cows through the grazing season. Increasing grazing capacity can be achieved with this method – economic practicality will vary by situation.