



Ridin' Herd

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Planning forage needs for the beef cow herd

Many regions of the United States received moisture this winter. Even though some areas have received much-needed moisture this spring, there is still a need to begin planning for forage needs. Although many producers manage forage resources and production systems to meet the beef cow nutrient needs with grazing, there is still a need to plan for some harvested forages as part of the back-up plan.

Drought forces forage/livestock producers to develop strategies that deal with indirect economic and biological effects of too many animals for the available feed resources, as well as direct effects of reduced water supply for plants and animals. Drought management strategies can be subdivided into three categories: livestock inventory, use of existing forage resources and alternative feeding programs. This article will focus on use of existing forage resources and alternative forages for feeding programs.

Use of existing forages

Use existing forage resources efficiently. It seems that the greatest benefit of cross-fencing pastures and having a rotational-grazing system occurs in managing through drought conditions. Grazing systems don't have to be extensive, but allowing pastures to have a rest period in drought condition aids grass persistence.

In addition, if carrying capacity is lowered during drought, improved grazing management minimizes the impact of drought on grasses. Consider some of the following grazing-management techniques if drought occurs.

1. Delay turnout to permanent pastures by feeding carryover hay or by grazing meadows, early alfalfa growth or winter cereal-grain pastures.
2. A one- to two-week delay in turnout can increase forage production 10% or more when soil moisture is limited.
3. Construct temporary cross-fences within larger pastures to concentrate grazing. This encourages cattle to more completely use whatever forage is available and defers grazing on the other

pastures, allowing them to accumulate more growth before being grazed.

Be sure to provide enough time for adequate plant recovery before grazing the pasture again. This management technique is important even in non-drought conditions.

4. Consider skim- or flash-grazing each pasture very briefly with a high concentration of livestock early in the grazing season to use plants that otherwise would become mature and left ungrazed if grazing is delayed. Typical examples include sedges, cheatgrass and downy brome, bluegrass, and early forbs.

Temporary electric fencing and hauling water may be needed to control when and where cattle graze certain areas. Be especially cautious of poisonous plants, as well as nitrates, prussic acid and grass tetany. Some plants that are not normally consumed may poison livestock when forage supply is low. Avoid overgrazing rangeland, otherwise recovery following drought will be slow and production depressed for an extended time.

Time the grazing of pastures with questionable water supply or quality to coincide with when water demand by cattle is lower.

Alternate feeding opportunities

Additional forage supplies can be developed. These options, though, must be chosen with great care because they may be expensive relative to other alternatives.

Following are some forage feeding opportunities.

- Cut winter wheat for hay instead of grain, especially if low grain yields are expected.
- Consider planting oats as early as possible for grazing or hay. Oats use spring moisture very efficiently to produce forage.
- Plant summer annual forage grasses like Sudangrass and millets. These plants are drought-resistant, but will need some summer moisture for economical growth. Always test summer annuals for nitrates. If nitrates are high, mix with low-nitrate feeds and adapt cows.

With the current cattle, corn and pasture prices, producers have been asking, "Should I convert some of my irrigated crop acres to grass?" In the last two years corn prices have decreased 47%. At least in Nebraska, pasture rental rates per acre have increased 36%, whereas irrigated cropland rental rates have decreased by about 12%.

Cash rental rates in central Nebraska average \$246 per acre and range from \$190



to \$330 per acre for irrigated cropland. In central Nebraska, around 0.8 to 1 acre per pair of irrigated cool-season grass on marginal (~150 bushels per acre corn yield) cropland would be needed to allow grazing from May through October.

A simple budget analysis that includes establishment costs amortized over 10 years, fertilizer [150 pounds (lb.) nitrogen per acre], irrigation (16 acre inches per year) and cash rent for marginal land at \$220, suggests that under current market conditions converting marginal irrigated acres to forage production may be viable, as this would result in a forage cost of \$63-\$79 per pair per month. This price of forage is competitive with current pasture rental prices in areas of Nebraska, which averages \$62 per pair per month and ranges from \$48 to \$83 per pair per month.

Given the current market and economic climate, there may be an opportunity to expand the beef herd by converting marginal crop acres to grass. However, this will vary significantly across regions and specific operations. Thus, producers will need to take a serious look at their own situation before

incorporating this sort of change into their operation.

There are many factors to consider beyond current market conditions that could come into play during the next several years. Producers can find the full article at <http://beef.unl.edu/converting-marginal-irrigated-cropland-forage-production>.

Seeding the correct grasses and legumes is important for high production from irrigated pasture. The best management cannot overcome the limitations of poorly adapted species that lack the characteristics necessary for high production. Selecting the right plant materials is an important decision that should be made early in the planning stage.

Plant materials selected for irrigated pasture should consist of known varieties. Varieties are selected to express important traits of a particular species and can influence performance of an irrigated pasture. Choosing superior varieties is just as important as choosing the right species.

Final thought

Plan now for forage needs if you haven't already. With the reduction in forage acres,

grazing opportunities in many locations will be limited. Producers will, again, need to be creative to inventory all forages and feeds that are available to them and determine the best use for them in economically feeding the beef herd.

Harvested forages can be inventoried and used as part of a back-up plan, but quality will need to be accessed to determine if supplementation is needed. Because of limited availability of pasture, to expand their forage inventory, producers have approached the idea of converting crop acres to forage for the cow herd. It is critical, in this situation, to work through a budget to determine the cost effectiveness of this management alternative. Calf prices at weaning, weaning weight and the number of calves weaned per female exposed will impact the economics.



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