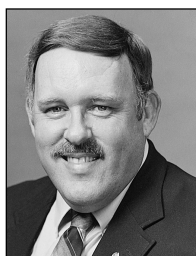
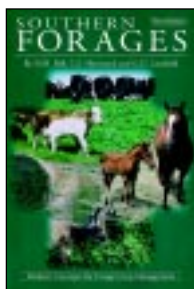


Ten Keys To A Profitable Forage Program

Forage typically accounts for over half the cost of production of forage-consuming animals and provides most of their nutrition. Thus, it has a major impact on both expenses and income. The basic commodity is forage and animals are the harvesters or consumers. Efficient forage production and utilization are essential to a profitable operation.

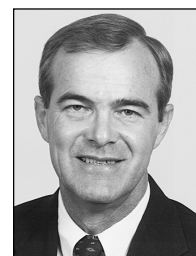
- I KNOW FORAGE OPTIONS AND ANIMAL NUTRITIONAL NEEDS.** Forages vary as to adaptation, growth distribution, quality, yield, persistence, and potential uses. Also, various types and classes of animals have different nutritional needs. Good planting decisions require knowing forage options for the land resources and nutritional needs of the animals.
- II ESTABLISHMENT IS CRITICAL.** Good forage production requires an adequate stand of plants. Mistakes during establishment often have long-term consequences. Use of high quality seed of proven varieties, timely planting, and attention to detail lead to establishment success.
- III SOIL TEST, THEN LIME AND FERTILIZE AS NEEDED.** This practice, more than any other, affects the level and economic efficiency of forage production. Fertilizing and liming as needed help ensure good yields, improve forage quality, lengthen stand life, and reduce weed problems.
- IV USE LEGUMES WHENEVER FEASIBLE.** Legumes offer important advantages including improved forage quality and biological nitrogen fixation, whether grown alone or with grasses. Every producer should regularly consider on a field-by-field basis whether the introduction or enhancement of legumes would be beneficial and feasible. Once legumes have been established, proper management optimizes benefits.
- V EMPHASIZE FORAGE QUALITY.** High animal gains, milk production, and reproductive efficiency require adequate nutrition. Producing high quality forage requires knowing the factors that affect forage quality and managing accordingly. Matching forage quality to animal nutritional needs greatly increases efficiency.
- VI PREVENT OR MINIMIZE PESTS AND PLANT-RELATED DISORDERS.** Diseases, insects, nematodes, and weeds are thieves that lower yields, reduce forage quality and stand persistence, and/or steal water, nutrients, light, and space from forage plants. Variety selection, cultural practices, scouting, use of pesticides, and other management techniques can minimize pest problems. Knowledge of potential animal disorders caused by plants can reduce or avoid losses.
- VII STRIVE TO IMPROVE PASTURE UTILIZATION.** The quantity and quality of pasture growth vary over time. Periodic adjustments in stocking rate or use of cross fencing to vary the type or amount of available forage can greatly affect animal performance and pasture species composition. Knowing the advantages and disadvantages of different grazing methods allows use of various approaches as needed to reach objectives. Matching stocking rates with forage production is also extremely important.
- VIII MINIMIZE STORED FEED REQUIREMENTS.** Stored feed is one of the most expensive aspects of animal production, so lowering requirements reduces costs. Extending the grazing season with use of both cool season and warm season forages, stockpiling forage, and grazing crop residues are example of ways stored feed needs can be reduced.
- IX REDUCE STORAGE AND FEEDING LOSSES.** Wasting hay, silage, or other stored feed is costly! On many farms the average storage loss for round bales of hay stored outside exceeds 30%, and feeding losses can easily be as high or higher. Minimizing waste with good management, forage testing, and ration formulation enhances feeding efficiency, animal performance, and profits.
- X RESULTS REQUIRE INVESTMENTS.** In human endeavors, results are usually highly correlated with investments in terms of thought, time, effort, and a certain amount of money. In particular, the best and most profitable forage programs have had the most thought put into them. Top producers strive to continue to improve their operations.



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