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Planning Grass-Pasture Fertilization

Dr. Rob Kalmbacher
University of Florida/IFAS
Range Cattle Research and Education Center

For questions or comments regarding this publication contact
Dr. Rob Kalmbacher

Pasture grasses, like people, differ in their capabilities. An organization selects people of diverse strengths that complement each other to serve a common end. So it is with a rancher who selects among grasses that are adapted to the particular conditions of his ranch to provide a year-round supply of forage which meets the seasonal needs of their cattle. Management of each grass, including fertilizer requirements and timing, is as varied as their capabilities. The time of year when fertilizer is applied is based on the ability of the grass to respond to fertilizer at that season and on the rancher's need for forage, and these often do not match. My objective is to review the growth characteristics of grasses that cattlemen would likely use in central and south Florida and relate these to timing of fertilization which will result in a supply of valuable forage.

Bahiagrass

Fertilization in late February to early March is recommended for grazed bahiagrass in central and south Florida. With rain typical for April and May in central Florida, bahiagrass produces 12 to 18% of annual production in these months, which is the equivalent of ~ 1600 lb dry matter / acre in April and May. While this may not seem like much grass, the relatively high nutritive value of bahiagrass at this critical spring period is very important because of the high nutritional demands of cows. Unless there is a specific need, fertilization at any other time of year is not recommended. Most cattlemen have more bahiagrass than they can use in July to October without use of fertilizer. While bahiagrass may again be in short supply after October, fall fertilization will not result in sufficient grass growth in fall or winter. Day length and warm temperature are too

limiting.

Limpograss or hemarthria

About a third of annual limpograss production occurs in fall, winter, and early spring. Coupled with its ability to maintain relatively high digestibility with age, limpograss is frequently used as a stockpiled grass for grazing from November to May. Fertilization in late August to early October is recommended for limpograss intended for stockpiled pasture. Frequently cattlemen need to postpone fertilization to wait for water to recede from pastures that are flooded due to excessive summer rain. For spring grazing, fertilize as needed in February or March.

Because of the low protein concentrations in limpograss, there are better grass options for the cow herd in summer. Unless there is a specific need, do not fertilize limpograss in summer.

Bermudagrass, stargrass, rhodesgrass

These speciality grasses are important for hay and highly nutritious pasture for growing cattle. All will provide reasonable growth in the cool season, provided there is no frost, and all will give a reasonable response to fertilizer if moisture is not limiting. Two hay crops can be made prior to June. For the first, fertilize in February and the second fertilization will follow first-crop removal in early to mid-April. A fall crop should be fertilized after excessive water recedes in September. For grazing, begin fertilization in February and continue as grass is needed through out the growing season. Unless there is a specific need for forage in summer, hold off fertilization through the wet months when pasture soils are saturated with excessive rain. Fertilize as needed for grazing in the fall after soil in pastures dries out.

Brachiarias

This group is very diverse, and it is difficult to generalize. Creeping signalgrass (Brachiaria humidicola) is similar to bahiagrass in that a single, annual fertilization is sufficient under our conditions for grazing, but signalgrass should never be fertilized before May. You will get little to no grass growth from fertilizer applied in February or March. Brizantha (B. brizantha) has about twice the production potential of bahiagrass in the cool season, so this grass will respond to February or March-applied fertilizer. Mulato, which is a relatively new brachiaria hybrid, is much like brizantha and responds well to fertilizer applied in February or March. Fertilization in the fall after pastures dry also provides a good response to fertilizer.

While every year is different, I do not think cattlemen will be disappointed with the results of a single fertilizer application to bahiagrass in February and March. Creeping signalgrass fertilization should be timed with the start of the rainy season (May). For grazing stargrass, bermudagrass, rhodesgrass, and Mulato or other brachiarias, February-March and September-October fertilization is recommended. Limpograss should be

fertilized in September-October for use beginning in November and in spring as needed. For hay, stargrass, bermudagrass, and rhodesgrass should be fertilized in February-March or September-October. Unless there is a specific need for forage, fertilization in wet summer months is not recommended. The Florida Forage Handbook (http://edis.ifas.ufl.edu/TOPIC_BOOK_Florida_Forage_Handbook) and your fertilizer dealer are good sources of information on fertilizer rates and formulations.