Grazing management of perennial grass pasture: preparing for the winter

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Most of the growth of perennial grasses used in south Florida occurs during the summer and early fall. Toward the end of the fall there is an accumulation of standing forage. The conservation of this standing forage for winter grazing is termed stockpiling. As much forage as possible should be carried into the winter for grazing, and it should be of acceptable quality.

All perennial grasses become mature as they are stockpiled, resulting in higher fiber, lower digestibility and lower crude protein. However, each of our major grasses react differently as to how it much it grows and accumulates during the summer and fall, how it reacts to fertilization, and how its quality changes with increasing maturity. These distinctive characteristics must be considered to properly manage each grass for subsequent winter use.

A field study by the South Florida Beef/Forage Program showed that bahiagrass forage accumulated during the summer and fall under grazing contained 7% crude protein and 47% TDN in December. This is the quality of bahiagrass that would likely be carried into the winter. Bahiagrass of this quality does provide an acceptable nutritional base for producing cows, along with a moderate supplementation program.

What cattlemen must avoid is very mature, overgrown bahiagrass pasture that would contain crude protein and TDN levels much below those stated above. Such bahiagrass is usually unpalatable to cattle, especially when frosted, and should be burned when conditions permit. This situation can be avoided by grazing or mowing these pastures in late summer or early fall such that bahiagrass is maintained to a less mature, vegetative state.

Some cattlemen say that a fall application of nitrogen (50 lbs./acre) will cause cattle to eat mature bahiagrass. The study mentioned above did not show a large increase in bahiagrass yield or TDN content from a fall nitrogen application, but the crude protein content of bahiagrass increased 1 to 2 percentage points. This supports the observation that fall nitrogen application would improve the intake of mature bahiagrass. It is not known if this practice is economical.
‘Floralta' hemaarthria is the second most popular grass in south Florida and the best grass for stockpiling. It should be moderately grazed throughout the summer and possibly harvested for hay in early fall, then fertilized with about 50 lbs. of nitrogen/acre in September to prepare it for winter utilization.

There is a misconception that ‘Floralta' hemaarthria can be allowed to grow during much of the summer and fall without grazing, carrying a large mass of forage into the winter. This practice results in very mature forage that is extremely low in crude protein, relatively low in TDN, and very unpalatable. If ‘Floralta’ cannot be grazed during the summer and early fall, it should be mowed in September, then fertilized with about 50 lbs. of nitrogen/acre to prepare it for winter utilization. Also, ‘Floralta' hemaarthria should not be allowed to become too rank because of its susceptibility to spittle bugs that thrive in tall, heavy grass and moist conditions.

The stargrasses/bermudagrasses are the forages that least lend themselves to stockpiling. They are very sensitive to frost and freezing temperatures, and once exposed to these conditions become unpalatable within days and offer little nutrition until they grow back in the spring. These grasses need to be fertilized with a complete formula (56-28-56 lb/A N-P2O5-K2O) in September and grazed relatively hard, but maintaining a stubble, until frosted. These grasses will grow all winter in the warmer, frost-free areas of south Florida. In these areas stargrasses/bermuda grasses need to be managed to prevent overgrazing, but not stockpiled.

For questions or comments regarding this publication contact Findlay Pate