Determining Stocking Rate

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A question often asked about a south Florida ranch is how many brood cows will it carry. Some of the humorous procedures supposedly use to determine cow stocking rate are: keep adding cows until they start dying off; if cows are not grazing the smutgrass, pastures are understocked; and if you can't see cow patties from the highway, pastures are understocked.

On the serious side, it is important to stock pastures properly to efficiently utilize available forage, but not overgraze. However, there is no magic formula to determine stocking rate. This decision falls under the classification of experience and the art of cow/calf production.

There is an old saying, "the eye of the master fattens his stock." This can be restated, "the eye and the brains of the cattleman efficiently manages his pastures and cattle to make a profit over many years in the cow/calf business."

An important factor that determines stocking rate is the quantity and quality of forage produced, and specifically how it is managed going into and through the winter period. Forage yields can be increased during the growing season by planting better grass varieties, pasture fertilization, and weed and pest control. The increased yield can be carried into the winter as stockpiled forage. But, the most effective management practice to bridge the winter forage gap and increase production and stocking rate is the feeding of concentrate supplements and/or hay. It is through the use of these management practices that south Florida cattlemen can maximize stocking rate, and the efficiency and profitability of their cow/calf operation.

Indicators of a proper stocking rate are mostly visual observations by the ‘eye of the master.’ Ranchers need to constantly evaluate the availability of forage throughout the year. Pastures are overgrazed if they go into the winter with little standing forage or have no available forage during most of the winter and early spring. Overgrazing also contributes to the loss of better grass varieties in a pasture and excessive mole cricket damage of Bahiagrass. Undergrazing is easily recognized by an abundance of mature forage going into the winter, and especially if this forage is still around at the end of the winter. This is not a good situation either, because over mature forage is usually of poor quality and unpalatable to cattle.
A second visual indicator of a proper stocking rate is cow condition. For efficient production, brood cows should have an average body condition score of about 6 going into the fall-winter (calving season) period. They should have an average body condition score of 4 plus at the end the winter-early spring period. Obtaining the latter body condition score is where the feeding of supplements and/or hay becomes an important management tool. Supplement and/or hay feeding can be periodically adjusted, up or down, to maintain cows at a targeted body condition score.

The last, but most important indicator of a proper stocking rate is production performance. South Florida cattlemen who properly stock pastures usually have a 80 to 90% weaned calf crop and a 450 to 550 pound average calf weaning weight. It is realized that a very high stocking rate may produce a few more calves that weigh 250 to 350 pounds at weaning. These smaller calves sell for a high price per pound, but a lower price per head. Also, overstocking is very risky during hard times, such as an extended drought or cold winter, that can result in a complete disaster or require extremely high supplemental feed or hay cost. Often a reduction in the number of cows in an overstocked pasture will increase production per unit area and increase profitability over the long haul.

For questions or comments regarding this publication contact Findlay Pate