

ONA REPORTS

published in

THE FLORIDA CATTLEMAN AND LIVESTOCK JOURNAL

May-1996

Using Limpoglass for Growing Replacement Heifers

By W. F. Brown

University of Florida, Range Cattle REC



For questions or comments regarding this publication contact [William F. Brown](#)

Survey results indicate that less than 50 percent of Florida replacement heifers calve at two years of age, compared with 85 percent for other areas of the U.S. In some cases, Florida producers are successful in breeding heifers to calve at two years of age, only to have problems with re-breeding to calve at three years of age. Although the slow rate of maturity of Brahman breeding is partially the problem, low availability and quality of forage during the fall and winter is also a factor. A heifer development program is needed which will support required levels of production at an economical cost.

Growth characteristics and winter hardiness of limpoglass (*Hemarthria altissima*) compliment other tropical grasses in a complete grazing program. Floralta limpoglass is better suited to "muck-type" soils which are higher in organic matter, and to sites which retain moisture, but is also established on typical flatwoods soils. Limpoglass begins growth earlier in the spring and maintains growth later into the fall than many other grasses. It can be stockpiled during the summer and fall for grazing during the winter and early spring, and when frosted will remain green within the canopy, and continues to be palatable to cattle.

At a similar regrowth level, limpoglass is usually lower in crude protein (CP), but greater in total digestible nutrients (TDN) than other grasses. Because of its low CP relative to TDN, several research studies have investigated protein supplementation to cattle grazing limpoglass.

At Ona, Brahman-cross heifers were weaned in September 1995, and fed a weaning feed for three weeks. In October, 40 head (460 to 600 Ibs; average 530 Ibs) were selected, and 10 head were placed on each of four sections which were 7 acres each (stocking rate of 1.4 head per acre). Each section was divided into five, 1.4 acre pastures for rotational

grazing. From October through breeding (May 1), heifers grazed limpograss and were fed 6 lbs per head daily of either molasses-urea, or molasses-urea-feather meal (20 percent CP). The breeding season was 60 days beginning March 1. After breeding, heifers were re-allotted to either a control (grazing only, no supplement), or 2.0 lbs per head daily of a 32 percent CP molasses-urea supplement until calving in December. Pastures were fertilized in September (60 lbs N/acre) and March (60 lbs N/acre).

The objective of the grazing management was to stock the pastures at a rate so that no hay would be required during the winter and early-spring. Therefore, excess forage accumulated during the summer and fall. There was sufficient stockpiled forage for the cattle during the winter, but forage became limiting during our seasonally dry period of April and May. Even though forage availability became marginal, no hay was fed. No difference in daily gain was found between the two supplementation treatments from weaning until the start of the breeding season. Daily gain for both treatments was greater than 1.0 lb, resulting in heifers ranging in weight from 570 to 780 lbs, averaging 670 lbs at breeding. In 1996, the first freeze at Ona occurred in early-January, with a second freeze in early-February. From early-January until the bulls were removed, heifers fed the molasses-urea-feathermeal supplement maintained their daily gain of 1.2 lbs, while heifers fed the molasses-urea supplement had a daily gain of .7 lbs. However, pregnancy rate did not differ between the two treatments, averaging 70 percent.

No response to protein supplementation was obtained during the summer-fall grazing season. At the start of calving, heifers on the control treatment were heavier than those fed the molasses-urea supplement; however, all heifers were of adequate weight and excellent body condition. At the start of calving, heifers ranged in weight from 930 to 1200 lbs.

Limpograss can be a base forage of acceptable quality which can provide year-round grazing (by stockpiling during the summer and fall) to support heifer development with limited, or no hay feeding. A proper stocking rate should be determined so that forage accumulates during the summer and fall for grazing during the winter and especially the dry early spring. Heifers did not respond to natural protein supplementation until after freezing temperatures reduced forage quality. There was no advantage to providing supplemental protein in the form of urea to coming two-year-old bred heifers during the subsequent summer-fall grazing season. These results are from the first year of a two to three year experiment.