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## **Feeding Early Weaned Calves**

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Early weaning is an option that beef cattle producers may utilize to decrease the nutritional requirements of cows and heifers, resulting in prompt recovery of body condition and higher pregnancy rates. Producers from the United States, Brazil, and Australia, have documented that early weaning is a management practice to increase

cowherd productivity.

In the United States, ranchers have two options for the management of early-weaned calves, 1) market the calves immediately after weaning, or 2) manage the calves on the ranch. The mild winters associated with Florida offer a unique opportunity to manage calves on a forage-based grazing system using highly nutritious winter annual forages. When supplemented on pastures, early-weaned calves are exceedingly efficient, thereby decreasing the cost of the gain.

Over the past five years, early-weaned calf feeding studies were conducted in both South (Ona) and North-Central Florida (Gainesville). In these studies, calves were weaned from first-calf heifers in early January prior to the start of the breeding season. Calves averaged 80 days of age with an average body weight of 200 pounds.

In the south Florida studies, calves are put on ryegrass ('Jumbo' variety; planted into a prepared seedbed) in October at a stocking rate of four to five calves per acre. A commercial supplement (14% protein and 72% TDN) is provided at a target rate of 1.0% of body weight daily. Ryegrass production has been highly variable among months and years, but even during drier months, a stocking rate of five calves per acre was maintained with an average daily gain of 1.7 pounds per day. The average cost of gain obtained in South Florida during these winter studies was \$ 0.40 per pound of gain.

In North-Central Florida, a mixture of rye and ryegrass was planted by drilling into a chemically burned bahiagrass pasture in October. The objective of planting these two species in North Florida was to provide a more uniform forage distribution during the winter. In this study, three levels of supplement (1.0, 1.5 and 2.0% of body weight daily) were examined. Calves of similar age and weight were used (80 days and 200 pounds). Calf daily gain was 1.6, 1.7 and 2.0 pounds per day for the three levels of supplement, respectively. The higher concentrate levels resulted in calves substituting concentrate for forage intake. Therefore, as forage intake was lower in calves receiving 2.0% of body weight as supplement, more forage was available on the pastures, which resulted in higher stocking rates (6 calves per acre). In drier and/or colder years, when the winter grasses are short, higher levels of concentrate might be used to maintain the stocking rate and performance of early-weaned calves.

Summer studies were also conducted in South and North Central Florida to verify the potential of various tropical grasses for early-weaned calf management. These studies were conducted from May to August after the winter annuals declined in the late spring. In South Florida a comparison of stargrass and suerte, were tested in 2001. Calves grazing stargrass had a greater daily gain (1.3 pounds per day) compared to calves grazing suerte (1.0 pounds per day). In North-Central Florida, Tifton 85 bermudagrass pastures were grazed by early-weaned calves provided the same three levels of supplement. Calf daily gain was 1.2, 1.5 and 1.6 pounds per day for calves consuming supplement at 1.0, 1.5 and 2.0% body weight daily. The average stocking rate was 12 calves per acre.

Early weaning of calves also offers advantages to producers who choose to retain ownership. Recent results have shown that early-weaned Florida calves have lower levels of stress when transported into the feedyard. This response translated into a significant improvement in feed efficiency over the entire feeding period. The important factors that influence the decision to manage early-weaned calves on the ranch are: 1) availability of labor, 2) availability of forage, 3) price of supplement, and 4) calf market prices. Based on our initial studies, early weaning is an efficient tool that can be used by Florida Cattlemen to improve the profitability of their cow-calf enterprise.

For more information on early calf weaning please visit: <http://edis.ifas.ufl.edu>, author keyword = Arthington.