Florida's Grazable Resource

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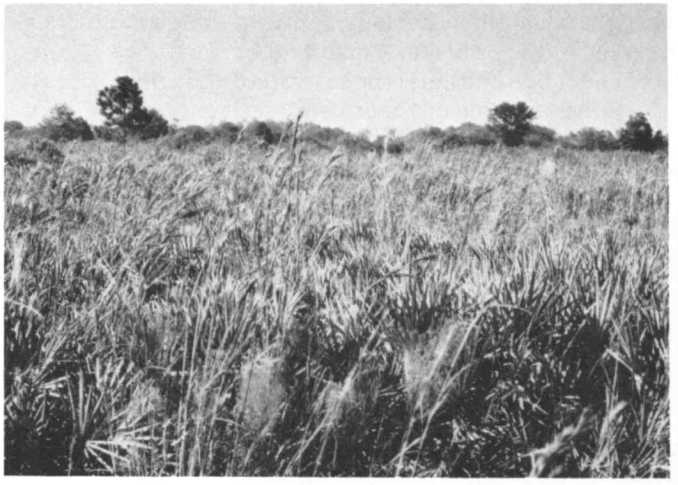
FLORIDA IS NOTED for its crystal clear waters, sugar sand beaches, tropical vegetation, the space shuttle, and Disneyland. What is not generally known is that the Sunshine State ranks ninth in beef cattle numbers with just over 1 million head. With an average of 55 inches or more of rain per year and a growing season longer than 270 days, Florida is an ideal environment for growing grass. Commercial cow-calf operations are the major livestock production systems and can be found in each of Florida's 67 counties. Beef cattle operations range in size from over 2,000 animals to 100 animals or less. The larger operations usually depend upon a combination of rangeland and tame pasture for forage, while smaller operations usually use only tame pastures. Florida's grazable resource includes approximately 6 million acres of rangeland, 5 million acres of grazable woodland, 3 million acres of perennial tame pasture and 1 million acres of annual tame pasture.

The vegetation in Florida is quite diverse. The U.S. Department of Agriculture's Soil Conservation Service (SCS) recognizes 26 distinct ecological plant communities. Thirteen of these 26 are important range sites. A range site is a distinctive kind of rangeland that differs from other kinds of rangeland in its ability to produce a characteristic natural plant community. Each range site is typified by an association of species that differs from that of other range sites in the kind or proportion of species or in total production. Average annual forage production (assuming excellent range conditon) ranges from 10,000 pounds of air-dry material per acre on the marsh type range sites to as low as 1,500 pounds per acre on the well-drained sandhill sites. The term "range condition" is commonly used to express the degree to which the composition of the present plant community reflects that of the climax. Excellent range condition indicates that 76 to 100 percent of the present plant community is climax for the range site.

The Flatwoods range site, which makes up most of Florida's rangeland, is identified by sparse stands of slash pine and longleaf pine and an understory of creeping bluestem, chalky bluestem, indiangrass and saw palmetto. This site can produce 4,500 to 6,000 pounds of air-dry material per acre each year if it is in excellent range condition and growing conditions are favorable. This translates into a carrying capacity of approximately 6 to 8 acres per cow per year.

MOST OF FLORIDA'S RANGELAND is grazed during late fall and winter when perennial tame pastures are dormant. Much of the native forage remains green year round. Two exceptions are the forages found in the sloughs and freshwater marshes. These forages are susceptible to frost and are usually grazed March to October.



South Florida Flatwoods range site with an abundance of creeping and chalky bluestem as shown by the seed heads.

Most of the grazable woodland is in forests dominated by slash pine. Available forage in woodland areas can be either native or introduced, depending on the intensity of site preparation that occurred prior to tree planting. Most tree planting has occurred on the North Florida Flatwoods range site in the north and northwest portions of the state and a significant amount of pine plantations have been planted on the South Florida Flatwoods site in the central portion of the state. Usually the site preparation prior to tree planting stimulates the more desirable bluestem grasses and the area is often managed as native rangeland.

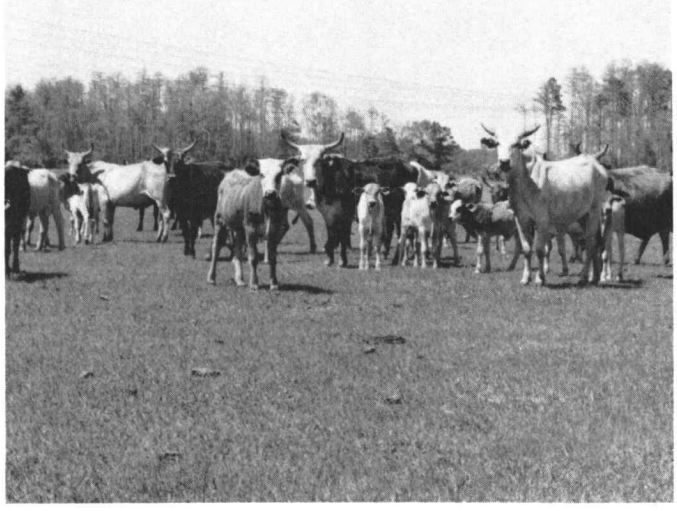
ANOTHER COMMON TIMBER MANAGEMENT PRACTICE IS to plant pines in an existing stand of perennial tame pasture grasses such as bahiagrass. Under these circumstances the bahiagrass is still managed as a tame pasture.

Pine spacing and age of stand major factors that affect

South Florida Flatwoods site that has been planted to slash pine. Site preparation has enhanced forage production and the pasture is managed as native rangeland. Photo courtesy of US Forest Service.

forage production. Typically, planting densities used for beef cattle operations sustain moderate forage production levels for 7 to 12 years until maturing tree canopies reduce light penetration and thus reduce forage production. Recently, wider tree spacing has been used and is expected to allow sustained forage production to at least 15 years after planting. Improved thinning and prescribed burning practices will also help sustain forage production beyond 15 years.

Florida's 3 million acres of perennial tame pasture play a major role in supporting the state's beef cattle industry. Major warm-season grasses include: bahiagrass, digitgrass, limpograss, bermudagrass, with bahiagrass being the predominant grass. The popularity of the bahiagrasses can be attributed to their tenacity even with low fertility. It is a competitive grass when fertilized and has the ability to withstand intense grazing. The average bahiagrass pasture in Florida produces 4,000 to 10,000 pounds of dry matter per acre at moderate to high fertility rates, respectively. Bahiagrass in Florida generally produces forage from May to October.



Most of the tame perennial pastures are established to bahiagrass.

Warm and cool-season annual grasses are also used to a lesser degree to help fill nutritional gaps that occur in fall, winter, and late summer. Commonly used winter annuals include ryegrass, rye, oats, and wheat, pearlmillet, and sorghum are common summer annuals.

Between 1940 and 1960 many pastures of bahiagrass, digitgrass, and bermudagrass were established. The low cost of fertilizer and equipment during this period contributed to the large-scale conversion of rangeland to pastureland. With today's high costs the economical maintenance of these tame pastures is a major challenge on the low fertility soils of Florida. These factors have sparked a renewed interest that is moving away from the intensive agronomic management approach to a more extensive ecologically based management of Florida's resources.

The current status of Florida's grazable resource indicates that the potential for increasing red meat production is high, if and when the need should arise. Only 10 percent of Florida's rangeland is in excellent condition and producing at its potential, leaving a lot of room for improvement. Much of the grazable woodland is still not utilized due to a misconception that trees and cattle are not compatible. Finally, research to find alternatives to high fertilizer costs is a high priority need. As progress is made in these and other areas of the cattle business, Florida will continue to be a leader in the beef industry well into the next century. •