

Burning and Grazing Florida Flatwoods

Ed Sievers

Florida stockmen have traditionally burned their flatwood rangelands in an attempt to enhance forage quality. Ironically, these burning and grazing practices have actually reduced productivity and palatability of flatwood rangeland to only a fraction of their potential. Many stockmen now expect little from their native grazing areas and unwittingly insure this misconception by adherence to antiquated burning and grazing practices.

Florida's flatwoods developed under the influence of periodic wildfires and require occasional burnings to insure their longevity. Creeping bluestem is the dominant forage species of healthy flatwood rangelands. Lopsided indiagrass, chalky bluestem, and blue maidencane are associated preferred grasses. Frequent burning (every other year) and continuous grazing have led to the decline of these productive and palatable native grasses. These preferred grasses are sensitive to frequent burning and need periodic deferment from grazing during the growing season to remain healthy. Improper burning and grazing practices weaken the grasses, facilitating their replacement by wiregrass, saw palmetto, and other unpalatable fire tolerant species.

Creeping bluestem is more nutritious, palatable and productive than wiregrass. Creeping bluestem remains palatable year-round, whereas wiregrass is palatable for only two months after burning. On excellent condition flatwoods, creeping bluestem production may exceed 7,500 pounds per acre, with minimum wiregrass. Abused flatwoods in poor condition will produce little creeping bluestem and approximately 1,500 pounds per acre of wiregrass.

The objective of many Florida stockmen has been to optimize the palatability and nutritional value of wiregrass-dominated flatwoods through burning. Many stockmen have found themselves in this dilemma, unaware of an alternative. The alternative is to convert wiregrass into creeping bluestem by adjusting burning and grazing practices to meet the vegetative needs of creeping bluestem.

It is recommended that burning should be no more frequent than every third year, as creeping bluestem and the other preferred grasses are less tolerant of burning than wiregrass. The burn should be done in late winter, from January to March, when preferred grasses are dormant. It is best to defer grazing for at least 60 to 90 days following burning to insure the recovery of the preferred grasses and allow time for forage accumulation. On wiregrass-dominated ranges, it is acceptable to graze immediately after burn-



Creeping bluestem dominates flatwood ranges in excellent condition.



Wiregrass and saw palmetto dominate flatwood ranges in poor condition.



A six-week old burn excluded from grazing. The bunchgrass is wiregrass, and the rhizomatous grass is creeping bluestem.

ing to utilize wiregrass regrowth. The cattle must be removed in six to eight weeks to insure the establishment of creeping bluestem and other preferred grasses. The premise of this approach is that wiregrass will regrow earlier and faster than creeping bluestem and can therefore be grazed for several weeks after burning without a significant reduction of creeping bluestem establishment. This heavy seasonal use of wiregrass followed by a grazing deferment until fall has been shown to enhance creeping bluestem production.

On all native range operations, rotational grazing should be practiced throughout the year. A minimum of three pastures is suggested. One entire pasture could be burned each year and each pasture would be burned every three years. It is important to burn entire pastures, otherwise cattle will overgraze the burn areas. Since June, July, and August are the most detrimental months to graze creeping bluestem, a different pasture should be grazed each summer to maintain optimum yields. A six pasture rotation with a more rapid rotation allows for an early and late burn each year and extends the period of maximum forage quality during the winter.

In ranch operations with a combination of native and tame pasture, the native areas should be treated as previously described. Where cross fencing is adequate, the native range could be burned in March after the cattle have moved on to tame pastures. The herd could be returned for a light summer graze of the native range before the benefit of the burn diminishes. Another alternative would be to graze native range in the fall. This would allow forage accumulation on the vacated tame grass pastures for winter grazing. Fall grazing is especially advantageous on native rangelands where marshes and sloughs are common to insure the utilization of maidencane and blue maidencane before they die back from winter frost.

The burning of flatwoods may become infrequent as grazing management intensifies in the future. The manipulation of grazing may accomplish many of the objectives of burning. Grazing will initiate more nutritious and palatable regrowth and remove forage before it becomes rank. Grazing will remove excessive litter accumulations, which will increase productivity and encourage seeding. Grazing management will encourage healthier flatwood ranges, more resistant to brush encroachment and richer in species diversity. ●



Seminole Indian Ranching in Florida

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The Seminole Indian Tribe has traditionally raised cattle since the Spanish introduced cattle to Florida in the sixteenth century. Seminoles were first exposed to cattle by the missionaries who noted a Seminole affinity for cattle. The Seminoles began establishing their own herds, some of substantial size. However, these herds dwindled during the Seminole wars of the mid-1800's. Remnants of the Seminole tribe relocated in the unsettled lands of southern Florida, but their original cattle herds were gone.

Today the Seminole herds are prospering and growing on ranching operations located on the Brighton and Big Cypress Reservations. The 36,000 acre Brighton Reservation is located approximately 20 miles southwest of Okeechobee. Cabbage palm hammocks are scattered throughout the sweet (lesser acid) flatwoods range lands where bluestems and wiregrass dominate. Little blue maidencane sloughs and maidencane freshwater marshes serve as natural drainage ways and pro-

vide the most nutritious native forages. The 50,000 acre Big Cypress Reservation is located approximately 40 miles southeast of Immokalee. As indicated by the name, cypress is the dominant tree that is located in domes and strands throughout the area. The eastern portion of Big Cypress is dominated by sawgrass, the characteristic sedge of the Everglades. As on the Brighton Reservation, littleblue maidencane sloughs and maidencane marshes drain the flatwoods sites.

Seminole ranching enterprises began rebuilding in 1936 when the United States Government shipped 500 head of drought relief Hereford cattle from Arizona to the Seminole Indian Agency. Some cattle died en route due to the severe drought in the West and the long trip by rail. Others died on the overland drive to the Brighton Reservation just north of Lake Okeechobee. Many local stockmen speculated that the Hereford cattle, a breed more accustomed to a temperate climate, would not survive. Natural selection took its toll, but those that survived were very hardy and became very good brood stock.

Florida operated under an open range policy until the fence law of 1949. Therefore, fencing of the Reservations' open range was a necessity to keep their herds from mixing with herds of neighboring ranches.

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