

# MANAGEMENT NOTES

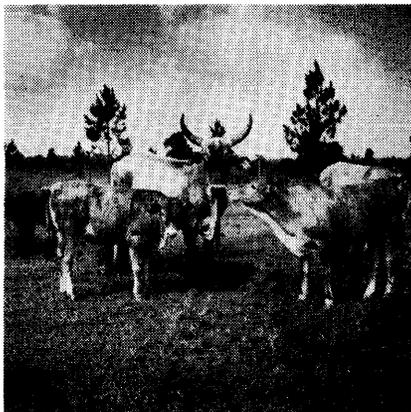
## BENEFITS FROM GOOD MANAGEMENT ON SOUTHERN FOREST RANGES

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The cover photo on this issue depicts a new look in beef production on southern forest ranges. The author's entry, adjudged grand champion of the contest at the Seventeenth Annual Meeting of the Range Society, shows native Brahman-type cows and their Shorthorn-cross offspring on the Palustris Experimental Forest in central Louisiana. In appearance the cows are about par for the area. In earnings, however, they rank almost 300 percent above the average.

The story behind the picture began when range researchers at the Southern Forest Experiment Station started testing management programs aimed at boosting beef yields. Calf crops on forest range were pitifully low, averaging less than 50 percent. Moreover, 7-month weaning weights were below 300 pounds, and mortality was high among both cows and calves.



Several deterrents to efficient production were evident. Foremost among these were nutritional deficiencies. Grass, though usually plentiful, was always low in phosphorus, and protein content was generally insufficient from July to mid-April. Grazing intensity was seldom controlled and unregulated yearlong breeding was common. Also, the toll of diseases and parasites was heavy.

Supplemental feeding during winter was a prominent feature of experimental management programs devised to resolve these problems. Grazing was controlled at moderate intensity, and range units were ro-

tationally burned to improve forage quality. Breeding was regulated so that calves would be born during fall and winter. Cattle were immunized against common diseases, and regular spraying controlled external parasites. Salt and steamed bonemeal, provided free-choice, corrected mineral imbalances.

At first the test programs failed, because supplementation was inadequate. Rations that were theoretically ample did not improve calving percentages or weaning weights. For example, cows receiving 3.3 pounds of cottonseed cake (41 percent crude protein) per head daily from December 15 to March 15 produced 53-percent calf crops, and 6-month weaning weights were 253 pounds.

Although expenditures for feed had returned nothing so far, researchers decided to increase the ration. Of several programs tested, the most profitable fed 375 pounds of cottonseed cake during the period from November 1 to May 5. Because cows in previous studies apparently consumed insufficient forage in late winter when quality was lowest, 4 bales of hay per cow were added.

These changes brought spectacular results. During the first year, the calf crop soared to 73 percent and

weaning weight to 467 pounds. For a five-year test period, calving percentage averaged 83 percent and 192-day weaning weights were 433 pounds.

Despite its relatively high cost, the program was financially successful. Expenditures for supplements, insecticides, veterinary supplies and services, and National Forest grazing fees averaged about \$18 per adult animal annually, or \$22.46 per calf marketed. Calves sold for an average of \$90.10 each. Thus, return above costs was \$67.64 per calf. In commercial operations, this should leave a substantial profit after deductions for labor, interest, and other costs. Other winter management programs produced comparable calf crops and weaning weights, but none were equally profitable.<sup>1</sup>

The cow and calf featured in the photograph are good examples of how forest range cattle respond to sound management of herds and forage. Though not the best among test cows, this 12-year-old grade Brahman is one of the real money-makers. During 9 years she weaned 7 calves—one died at birth and in May, 1964, she has another at side—averaging 474 pounds at 197 days and grossing \$719. Her 1962 steer calf (left foreground), pictured here in June, is typical in quality. He weighed 510 pounds when marketed in August, graded middle Good, and sold for \$122.91.

For information of photography buffs, the camera that took the winning photo was a 2¼ x 2¼ twin-lens reflex, with a f:2.8 lens. No filter was used.

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<sup>1</sup>For detailed results of the supplementation trial, see *Louisiana Agricultural Experiment Station Bulletin 564*, "Supplemental feeding increases beef production on blue-stem-longleaf pine ranges," by V. L. Duvall and L. B. Whitaker; April, 1963.