

Method of Procedure

Animals.—Florida steers were used in all three feeding trials and represented native cattle and those crossed with the English beef breeds and with Brahman. Those fed in 1943 were produced in Okeechobee, St. Lucie and Martin counties and were two-year-olds with native breeding predominating. In 1944 the steers were yearlings. About half of them were from the Range Cattle Station and half were grade Herefords raised on the range in Okeechobee County. The group fattened in 1946 included 12 native two-year-old steers from Polk County and 38 head, nearly all two-year-olds; sired by purebred Brahman or Shorthorn bulls from the Range Cattle Station. These included 24 grade Brahman and 14 from bulls of the English beef breeds. All were accustomed to being weighed individually and to being fed and were a higher feeder grade than the steers used in the first and second trials.

Each year the steers were carried on pasture without grain supplement for several months previous to the beginning of the feeding trial. They were graded as feeders at the beginning and as slaughter steers at the completion of each trial. Carcass grades were established by the Federal grader on duty in the packing plant in Tampa where the steers were marketed.

At the beginning of each trial the steers were divided into uniform lots of 10 each according to grade, weight, breeding, approximate age and source. Following a preliminary period of 10 to 21 days the feeding trials were conducted for 120 days. Individual weights were taken on three consecutive days at the beginning of the preliminary period and at the beginning and end of the feeding trial. Single individual weights were taken at 28-day intervals during the trials.

Feeds.—During the first and second trials several varieties of grass were used, which caused some differences in the pasture between lots, although the amount of grass for each lot was considered adequate. Five acres of St. Augustine provided more grass than each lot of 10 steers could consume during the last trial.

In addition to grass and a uniform feed of cottonseed meal, carbohydrate concentrates were fed as follows: Lot I, equal parts of blackstrap molasses and ground snapped corn; Lot II, blackstrap molasses and ground snapped corn in the proportion of 3 to 1; Lot III, blackstrap molasses in a self-feeder; Lot IV, equal parts of blackstrap molasses and shredded sun-dried sweet