

The Value of Dehydrated Alfalfa
and Delayed Grain Fed to
Young Cows on Winter Bluestem
Pasture, 1965-1968 (Project 253)

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This test was to compare the following three winter treatments for young cows on bluestem pasture. Treatment 1 -- One pound of soybean oil meal and 2 pounds of ground sorghum grain per head daily during the entire winter feeding period. Treatment 2 -- One and a half pounds of soybean meal fed per heifer daily until 50 days before the feeding season ended, then ground sorghum grain was fed. The same total amount of sorghum grain as fed under treatment 1 throughout the winter was concentrated during the last 50 days with the soybean oil meal discontinued when grain feeding reached the quantity to supply the same amount of protein as those on treatment 1 received. Treatment 3 -- Dehydrated alfalfa fed at 3.3 pounds and ground sorghum grain at 1 pound per heifer daily during the entire winter feeding period.

In addition to the above all cows were fed 5 pounds of ground sorghum grain per cow daily from March 1 to April 20, 1968, because they were thin.

The above three rations were formulated to supply approximately the same amount of protein and total digestible nutrients for the total winter period. In addition, each heifer received daily an average of 20,000 I.U. of Vitamin A, and 0.05 lb. of monosodium phosphate. Salt was fed free choice.

There were three recorded periods of winter supplementation which started in November and closed in April.

- (1) Open calves, winter of 1965-66
- (2) Bred Yearlings, winter of 1966-67
- (3) Bred two year olds, winter of 1967-68

The cows were grazed together on bluestem pasture each summer with no supplementation other than salt and were exposed to the same bulls. They were bred as yearlings in the summer of 1966; the results reported are for the calf crops produced in 1967 and 1968.

Results

Results are reported in table 9. There were no significant differences among treatments. Delayed grain feeding reduced the average weight of the cows which was probably due to the larger number of calves weaned. For the year 1967 pounds of calf weaned per cow was greatest for delayed grain feeding, largely a result of more calves weaned. The cows fed dehydrated alfalfa calved later the first year and weaned fewer pounds of calf per cow.

Table 9

The Value of Dehydrated Alfalfa and Delayed Grain Feeding
of Young Cows on Winter Bluestem
November to April, 1965-66, 66-67, 67-68

	Soybean oil meal and sorghum grain fed at same rate <u>all winter</u>	Soybean oil meal and sorghum grain, grain feeding delayed until <u>spring</u>	Dehydrated alfalfa and sorghum <u>grain</u>
Pasture number	12A & 15	12C & 7B	12B & 7A
Number of cows, Dec. 18, 1965	28	27	27
Av. wt. of cows that raised calves, Sept. 5, 1968	882	826	872
Gain per cow (cows that raised calves) Dec. 18, 1965 to September 5, 1968	417	380	402
1967 calves			
No. of cows in herd at breeding time	28	27	27
Calving date	3/12	3/14	3/21
Birth wt., lbs.	61	59	61
Calves born alive, %	75	81	71
Calves weaned, %	71	74	71
Weaning wt., sex adjusted to steer basis	372	374	348
Weaning wt. adjusted to 210-day steer basis	382	390	367
Pounds of calf weaned per cow in the herd at breeding time (sex and age adjusted)	264	277	247
1968 calves			
No. of cows in herd at breeding time	28	25	27
Calving date	3/5	3/14	3/13
Birth wt., lbs.	60	59	62
Calves born alive, %	89	88	89
Calves weaned, %	86	88	89
Weaning wt., sex adjusted to steer basis	441	430	428
Weaning wt. adjusted to 210-day steer basis	421	424	410
Pounds of calf weaned per cow in the herd at breeding time (sex and age adjusted)	379	378	381