

Table 55 (Continued).

Lbs. feed per 100 lbs. gain:		
Milo	284.55	238.50
Alfalfa hay	213.41	712.30
Alfalfa silage	1905.48
Salt	3.56	2.30
Mineral ¹	7.57	5.75
Feed cost per 100 lbs. gain ²	\$17.31	\$14.76

1. Mineral composed of 2 parts steamed bone meal and 1 part salt.
2. Feed prices listed on page 3.

Wintering and Grazing Steer Calves

Methods of Wintering Steer Calves That Are To Be Grazed a Full Season and Sold Off Grass, 1954-55.

PROJECT 253-1

F. H. Baker, R. F. Cox, E. F. Smith, D. L. Good, and G. L. Walker

This is a progress report of the wintering phase of the second trial of this experiment. The results of the first trial were reported in Kansas Agr. Exp. Sta. Cir. 308. The experiment is designed to study management methods, levels of feeding, and supplements for wintering steer calves that are to be sold as stocker or feeder yearlings. Results of the experiment are measured by the combined winter and summer performance of the steers.

The current test includes the following comparisons:

1. Wintering in dry lot compared with wintering on dry bluestem pasture.
2. Levels of protein feeding on dry bluestem pasture.
3. A combination of grain and protein concentrate compared with protein concentrate fed on dry bluestem pasture.

Experimental Procedure

Forty choice Hereford steer calves, purchased from the Lonker Ranch in Barber county, Kansas, were used in this experiment. The steers of Lot 1 were wintered in a dry lot at the experimental barn, while those of the other lots were wintered on dry bluestem pasture at the experimental range unit. The pastures had been stocked at a normal rate the previous summer; adequate grass remained for winter pasture. The calves of Lots 2, 3, and 4 were moved from pasture to pasture monthly to minimize any differences due to pasture.

The rations used in the test as well as the results are presented in Table 56.

Table 56.—Wintering and grazing steer calves.
(Nov. 10, 1954-April 6, 1955—147 days)

Lot number	1	2	3	4
Number of steers	10	10	10	10
Place of wintering	Dry lot	Bluestem pasture	Bluestem pasture	Bluestem pasture
Initial wt. of steer, lbs.	521	523	522	519
Final wt. of steer, lbs.	653	534	561	561
Gain per steer, lbs.	132	11	39	42
Daily gain per steer, lbs.	0.90	0.08	0.27	0.29

Table 56 (Continued).

Daily ration per steer, lbs.:				
Soybean pellets	1.00	1.00	1.00	2.00
Prairie hay	12.11	1.59	1.59	1.59
Corn			1.00	
Dry bluestem pasture		Free choice	Free choice	Free choice
Salt	Free choice	Free choice	Free choice	Free choice
Minerals	Free choice	Free choice	Free choice	Free choice
Feed cost per steer*	\$24.11	\$11.17	\$14.99	\$17.49

* Feed prices listed on page 3 of this publication.

Observations

1. The winter was rather severe for feeding cattle on pasture. This, along with the fleshy condition of the calves at the beginning of the winter, may be responsible for the low gains of all the steers wintered on pasture.
2. The condition of the calves at the end of the winter appears to be as good as in years when the gains were higher.
3. The steers wintered in dry lot made gains comparable to those of steers on the same ration in previous years.

Wintering, Grazing, and Fattening Heifers 1953-54.

PROJECT 253-2

F. H. Baker, E. F. Smith, and R. F. Cox

This experiment was designed to study the effect of different wintering management systems on the grazing and fattening performance of beef heifers. Since this report concerns the third trial of the series, a brief summary table of the three years' results and the current year's results is included in the report.

Experimental Procedure

Twenty choice-quality Hereford heifer calves were used in the study. They were delivered to Manhattan, December 1, 1953, at \$18 per cwt., from the Pueblo, Colo., area. The system of management for each lot follows:

Lot 1—wintered on dry bluestem pasture with 1.31 pounds of cottonseed cake per head daily, grazed on bluestem pasture until July 2, full-fed in dry lot 112 days.

Lot 2—wintered on Atlas sorgo silage, 1 pound cottonseed meal, and 2 pounds ground milo per head daily, grazed on bluestem pasture until July 2, and full-fed in dry lot 112 days.

Observations

1. The winter of 1953-54 was mild and very favorable for wintering cattle on dry grass.
2. Although wintering heifers on dry bluestem pasture resulted in lower total gains, dressing percentages, carcass grades, and selling prices, they returned as much money above feed costs as did the heifers wintered in dry lot. This was due primarily to the higher grass gains the following summer and lower winter feed costs of the heifers wintered on bluestem pasture.