

17. Daily gain per steer (all phases)	1.26	1.21	1.27	1.31	1.38
18. Feed cost per 100 lbs. gain	\$8.55	\$10.13	\$9.53	\$10.74	\$11.87
19. Total cost of feed	\$32.12	\$36.78	\$36.14	\$42.23	\$49.04
20. Initial cost/steer @ \$32.33 cwt.	\$133.52	\$133.52	\$133.85	\$133.52	\$133.85
21. Selling price per steer @ \$29.67 cwt. for Lots 3, 4, 5; \$29.33 for Lots 1 and 2	\$231.41	\$227.60	\$235.28	\$239.14	\$245.37
22. Return/steer above steer and feed cost	\$65.77	\$57.30	\$65.29	\$63.39	\$62.48

1. In 1949-50, ground shelled corn was fed; in 1950-51 and 1951-52, ground milo grain was fed.
2. Prairie hay was fed to Lot 1 only when snow covered the grass.
3. Mineral fed last two years only; 2 parts steamed bonemeal to 1 part salt.
4. Feed prices: corn, \$1.25 bu.; milo, \$2.45 cwt.; soybean pellets, \$83.33 ton; prairie hay, \$13.67 ton; sorghum silage, \$6.50 ton; salt, \$12.00 ton; mineral, \$5.25 cwt.; dry bluestem pasture, \$.50 per head per month; summer bluestem pasture, \$17.33 per head for season.

Project 253-2: Wintering, Grazing, and Fattening Heifers

Wintering Heifer Calves That Are To Be Fattened for the Fall Market, 1952-53.

E. F. Smith, D. L. Good, R. F. Cox, and D. L. Mackintosh

This is a report of the wintering phase. Following this phase the heifers will be grazed until July 15 and full-fed grain 100 days in the drylot. The object of this test is to compare different methods of wintering heifer calves that are going to be full-fed after a summer grazing period.

Experimental Procedure

Thirty good quality Hereford heifer calves, 10 head to a lot, are being used in this study. They were delivered to Manhattan, Kansas, on September 15, 1952, at a cost of 29 cents per pound. They originated in the Sterling City, Texas, area. From delivery date until November 15, 1952, they were fed prairie hay and 1 pound of soybean oil meal pellets per head daily. The system of management planned for each lot follows.

Lot 19—Wintered on brome pasture supplemented when necessary with protein; grazed on brome pasture until July 15; full-fed in the drylot 100 days.

Lot 7—Wintered on dry bluestem pasture supplemented with 1½ to 2 pounds of concentrate feed per head daily; grazed on bluestem pasture until July 15; full-fed in drylot 100 days.

Lot 8—Wintered on Atlas sorgo silage, prairie hay, 1 pound of soybean pellets and 2 pounds of corn per head daily; grazed on bluestem pasture May 1 to July 15; full-fed in drylot 100 days.

A bonemeal and salt mixture and salt were offered free choice to all lots.

It was necessary to move Lot 19 to drylot on January 1 due to a shortage of grass which resulted from a lack of moisture during the summer and fall. They will be returned to pasture in April, 1953.

Prairie hay was fed to Lot 7 only when snow covered the grass.

Observations

1. The winter in general was mild and favorable for wintering on grass with the exception of three storms; one in the latter part of November left snow on the ground covering the grass for three weeks.
2. The heifers wintered on dry bluestem pasture, Lot 7, made a very favorable gain at a rather low feed cost. They had sufficient dry grass to winter on in pastures that were normally stocked during the previous summer.
3. The heifers in Lot 8 made an exceptionally good gain of 1.64 pounds per head daily and show considerable "fleshing."

Table 17.—Wintering Heifer Calves That Are To Be Fattened for the Early Fall Market.

Phase I—Wintering—November 15, 1952, to April 9, 1953—145 days (for Lot 7 to April 1, 1953—137 days)

1. Lot number	19 on brome pasture	7	8
2. Place of wintering	On brome to January 1 then to drylot	Dry bluestem pasture	Drylot
3. Number of heifers per lot	10	10	10
4. Initial weight per heifer	446	443	445
5. Final weight per heifer	625	546	683
6. Gain per heifer	179	103	238
7. Daily gain per heifer	1.24	.75	1.64
8. Daily ration per heifer:			
Soybean oil meal pellets	1.00	1.28	1.00
Ground shelled corn .....	.....	.32	1.92
Atlas sorgo silage	17.76	.....	20.21
Prairie hay	6.66	2.29	5.84
Salt .....	.09	.05	.04
Mineral (bonemeal and salt) .....	.18	.04	.07
Dry bluestem pasture .....	.....	ad lib	.....
Brome pasture	ad lib	.....	.....
9. Feed cost per heifer ¹	\$38.20	\$16.33	\$40.59
10. Feed cost per 100 lbs. gain	\$21.34	\$15.85	\$17.05

1. Feed prices may be found on the last page of this publication.

Project 253-2: Wintering, Grazing, and Fattening Heifers, 1951-52

E. F. Smith, D. L. Good, and R. F. Cox

The objective of this test is to compare different methods of wintering heifer calves that are to be grazed until mid-summer and then finished for fall marketing. Of particular interest is the influence of