

FATTENING HEIFERS FOR THE SUMMER OR EARLY FALL MARKET

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Experiment III - 1946-47

1. Without pasture.
2. With pasture.
3. Mustard seed meal versus cottonseed meal.

INTRODUCTION

The two preceding tests with heifer calves were conducted without the use of grass. Varying amounts of grain and protein supplements were fed with silage during the winter season and then a full feed of grain was used to finish these heifers for the summer or early fall market.

Now that experimental pasture is available, plans are to develop a system of fattening heifers for the summer market or early fall market which uses grass to the fullest extent. Dry lot feeding will continue as a check.

EXPERIMENTAL PROCEDURE

All five lots of heifers, numbered 3 to 7 inclusive, received a full feed of silage, 1/10 pound of ground limestone daily, and salt. Lot 3 was full fed ground shelled corn; 1 pound of cottonseed meal was fed the first 35 days and then increased to 1½ pounds. Lots 4 and 5 were fed a full feed of silage and ½ feed of ground shelled corn. The only difference was that the cottonseed meal was increased from 1 pound daily to 1½ pounds daily in lot 4 at the same time it was increased on lot 3. Lot 4 will be fed out in the dry lot following this winter phase, but lot 5 will go to grass and be fed out later.

Mustard Seed Meal. Lots 6 and 7 were wintered on a full feed of silage, 1/10 pound of ground limestone and 1 pound protein supplement. Lot 6 received 1 pound mustard seed meal daily, while lot 7 was fed 1 pound of cottonseed meal daily. Both lots will be grazed and fed out later.

OBSERVATIONS

1. Lot 3 heifers were fatter at the close of the winter period than the other lots.

2. The extra 50 pounds of cottonseed meal, ½ pound daily for 100 days, received by lot 4 over lot 5, accounted for 25 pounds of extra gain. The heifers also showed a slightly greater degree of finish and more bloom.

3. While consuming only 25 percent as much grain as lot 3, lot 4 gained

approximately 80 percent as much as lot 3. Cost of gains in lot 4 was \$4.39 per cwt. less than in lot 3.

4. Mustard seed meal gave practically the same gains in lot 6 as did cottonseed meal in lot 7. More tests need to be made before definite conclusions are made but on the basis of this first test the mustard seed meal is equal to cottonseed meal.

5. Due to a lower cost price, mustard seed meal made cheaper gains than cottonseed meal.

6. A study of the table will provide details of this test.

*with gain at 2.00 -ilage or grass
was worth so much*

Feed cost

Phase I - Wintering, December 5, 1946 to April 24, 1947 - 140 Days

Aug
check lot
Wintering
weel
Roads
winners

1-Lot number	<i>July 2</i>	<i>Aug 11</i>	5	6	7
2-Number of heifers in lot	11	11	11	11	11
3-Ration fed	Silage Ground corn Cotton seed meal Ground Limestone Salt	Silage Ground corn Cotton seed meal Ground limestone Salt	Silage Ground corn Cotton seed meal Ground limestone Salt	Silage Mustard seed meal Ground lime- stone Salt	Silage Cotton seed meal Ground lime- stone Salt
4-Average daily ration:	Pounds	Pounds	Pounds	Pounds	Pounds
Silage	10.66	24.90	25.32	26.63	26.69
Ground corn	1.69	2.17	2.17	---	---
Cottonseed meal	1.39	1.39	1.00	---	1.00
Mustard seed meal	---	---	---	1.00	---
Ground limestone	0.09	.09	.09	.09	.09
Salt	0.05	.05	.06	.07	.10
5-Average initial weight	407	400	401	405	406
6-Average final weight	665	605	580	531	544
7-Average gain	258	205	179	126	134
8-Average daily gain	1.84	1.46	1.28	.90	.96
9-Feed required for 100 pounds gain:					
Silage	578	1701	1980	2959	2789
Ground corn	472	148	170	---	---
Cottonseed meal	75	95	78	---	104
Mustard seed meal	---	---	---	111	---
Ground limestone	5	6	7	10	9
Salt	2	3	5	8	11
10-Cost of feed for 100 pounds gain	\$16.68	\$12.29	\$12.78	\$10.28	\$11.74
11-Feed cost per heifer	43.02	25.18	22.89	12.95	15.77
12-Initial cost of heifers at \$17.40 per cwt.	70.82	69.60	69.77	70.47	70.64
13-Total cost per head to date	113.84	94.78	92.66	83.42	86.41
14-Necessary selling price per cwt. to pay for feed and initial cost	17.12	15.67	14.25	15.71	15.88
15-Appraised value per cwt. May 3					

FEEED PRICES: Corn, \$1.40 per bu.; cottonseed meal, \$90 per ton; silage, \$5 per ton; oats straw, \$15 per ton; mustard seed meal, \$50 per ton; ground limestone, \$20 per ton; alfalfa hay, \$25 per ton.