

FATTENING YEARLING STEERS ON ROUGHAGE AND ON GRAIN

OBJECTIVE:

To determine suitable rations for fattening yearling steers in Western North Dakota.

PRESENT STATUS:

Two lots of eight steers each were fed from November 1, 1952, to March 19, 1953, on rations which utilize the kinds of roughage and grains commonly available to cattle feeders in this area. One lot was fed 47 pounds corn silage, 6 pounds crested wheatgrass hay, 1 $\frac{21}{11}$ pounds soybean oil meal, and after the first 60 days, 5 pounds of ground barley and oats mixed 2:1. The second lot was fed the maximum amount of grain they would consume which was slightly more than 11 pounds, plus 12 pounds of crested wheatgrass hay per head per day. The grain mixture initially was oats and barley 2:1, but the ratio was reversed after one month. Initially, the grain mixture was ground, then pelleted in an attempt to get increased consumption.

[Table V](#) shows the actual amounts of each feed consumed and the gains made during the two years this experiment has been conducted.

There is little difference in return above fed cost for two rations. The steers on the high corn silage ration made the better gains both years, but they were penalized .60 per cwt. at market time this year because the buyers, who knew the feeding history, feared they would shrink more than the grain fed steers. The feed for both lot was raised, except for soybean oil meal, on the Dickinson Experiment Station. In computing costs of feed, however, we have used the prices which these feed stuffs were selling for during the feeding period. In 1951-52, both lots of steers sold high enough to pay more than our established price for feed,

Table V - High Roughage vs High Grain Ration for Fattening Steers

	Roughage Ration		Grain Ration	
	1951-52	1952-53	1951-52	1952-53
No. Steers per lot	5	8	5	8
Av. Initial Wt.	779	831	774	832
Av. Finished Wt.	1034	1077	1016	1054
No. Days on Feed	150	139	150	139
Av. Gain per hd. per day	1.70	1.77	1.61	1.60
Av. Daily Ration:				
Corn Silage	47.0	47.2	0	0
Crested Wheatgrass Hay	6.4	5.9	15.0	12.3
Ground Barley	3.3*	3.33*	7.2	6.87
Ground Oats	2.2*	1.67*	4.6	4.21
Soybean Oil Meal	1.5	1.47	0	0
Total Feed Cost per hd.	\$65.35	\$61.20	\$65.13	\$53.58
Selling Price per hundred	29.20	19.40	29.20	20.00
Selling Price per hd.	301.93	203.46	296.67	205.25
Return above feed per hd.	236.58	142.26	231.54	151.67
Selling Price of feed lot gains, per hd.	74.46	47.77	70.66	44.37

*Ground grain was fed in roughage lot only during the last 63 days in 1951-1952, and during last 76 days in 1952-1953.

Steamed bonemeal and salt were kept before the steers at all times.

Price used in computing feed costs were: corn silage \$10 ton; crested wheatgrass hay \$25 ton; oats \$.72 bushel; barley \$.96 bushel; soybean oil meal \$5 cwt.

but in 1952-53, the price received for finished steers only paid 78% of the feed cost in the silage lot and 83% of the feed cost in grain lot. Applying these percentages to the prices we have set for feed, we find that our feed was actually sold through these steers at the following prices:

SILAGE LOT		GRAIN LOT	
Corn silage	7.80 ton	Crested Wheatgrass Hay	\$20.75 ton
Crested Wheatgrass Hay	19.50 ton	Oats	.60 bu.
Oats	.56 bu.	Barley	.80 bu.
Barley	.75 bu.		
Soybean oil meal	3.90 cwt.		

SUMMARY:

We have not been satisfied with the gains we were able to get in either lot of steers. The high condition of our steers going into the feed lots is in part responsible for their low gains. We will discontinue the grain fed lot next winter and add a third lot to our steer feeding trial. All rations will have corn silage as a base and only the supplements will vary. We feel that fattening steers on roughage offers a great opportunity for cattle feeders in Western North Dakota. The details of the rations most suitable will be worked out.

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