

**VALUE OF BEDDING FOR REPLACEMENT HEIFERS WINTERED
IN A SLATTED BOARD FENCE SHELTER**

Feedlot cattle have been successfully housed with only a slatted board fence for weather protection at the Dickinson Experiment Station since 1964. This trial was conducted to determine what advantage bedding the animals with straw and building up a manure pack would have on winter gains and feed efficiency.

This trial has been continued for two years using Hereford replacement heifers. In both 1969-70 and 1970-71 the heifers started the trial in November and were held in the lots until the following May. Both lots had a nine foot high slatted board fence shelter on the north and west sides. The heifers received a high roughage growing ration and were wintered for approximately 190 days. One lot of heifers was bedded with straw at weekly intervals, and more often when the weather made it necessary. The other lot received no bedding during the entire trial.

Table 17 shows the two year weights and gains with or without bedding. Table 18 shows the 1970-71 ration fed and cost of the feed.

Table 17. Data on Weights and Gains in the Bedding Evaluation Trial

	Lot With Bedding			Lot Without Bedding	
	1969-70	1970-71		1969-70	1970-71
Data on:					
Number head per lot	11	12		11	12
Initial weight					
Per lot	4875	5210		4880	5210
Avg. per head	443.2	434.2		443.6	434.2
Final weight					
Per lot	7340	8315		7250	8130
Avg. per head	667.3	692.9		659.1	677.5
Gain per lot	2465	3105		2370	2620
Number of days on trial	197	183		197	183
Avg. daily gain per head	1.14	1.41		1.09	1.19
Two year combined Avg. daily gain	<u>1.28</u>			<u>1.14</u>	

Table 18. Ration, Feed and Bedding Costs in Bedding Evaluation Trial (1970-71)

Ration:	Lot With Bedding			Lot Without Bedding		
	Total lbs.	Avg. lbs. / hd.	Cost / lot	Total lbs.	Avg. lbs. / hd.	Cost / lot
Alfalfa hay	4,512	2.1	\$56.40	4,512	2.1	\$56.40
Corn silage	51,815	23.6	\$186.53	51,790	23.6	\$186.44
Barley	8,832	4.0	\$156.33	8,832	4.0	\$156.33
Minerals	432	0.2	\$20.74	432	0.2	\$20.74
Bedding (straw)	130 bales @					
	15¢ / bale		\$19.50	----		
Total cost-feed and bedding	\$439.50			\$419.91		
Cost / cwt gain	1970-71		\$14.15			\$16.03
	1969-70		\$17.72			\$17.56
Avg. cost / hundred pounds gain			\$15.94			\$16.80
Difference			+\$ 0.86			

Summary

Over the two years, bedding the heifers with straw on a weekly schedule improved rate of gain an average of 0.14 pound per head per day. When straw is valued at 15 cents per bale, the advantage of using straw for bedding amounted to 86 cents per hundredweight cheaper gains over the two years. The heifers that were bedded appeared to be more comfortable and had a better appearance than those not bedded. However, there was no difference in the health of the animals as both lots consumed the same feed, and neither lot required special treatment. Depending upon cost of straw and labor, it is probably a sound management practice to utilize bedding whenever possible.