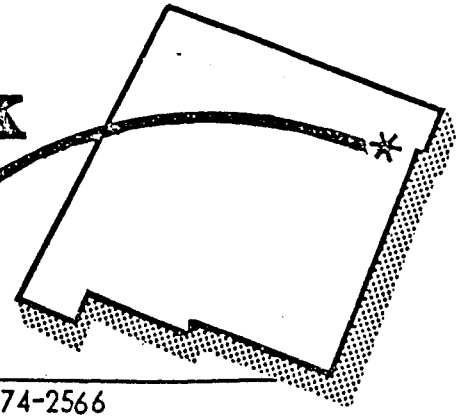




# Clayton Livestock Research Center

## PROGRESS REPORT



Route 1 Box 109 Clayton, New Mexico 88415 Tel. (505) 374-2566

Progress Report No. 10 (August, 1979)

### A COMPARISON OF NATIVE AND SOUTHERN CALVES ON THREE RECEIVING RATIONS

Glen P. Lofgreen

When work on newly received calves was initiated at this Center calves were shipped from Florida to Clayton to obtain the maximum amount of shipping stress. These calves were used in studies to compare various receiving programs. To compare the response of native and southern calves to various receiving programs last October 200 native calves were purchased in the Clayton area and were received on hay alone, 75% concen-

trates alone or 75% concentrates plus free choice hay. Three loads of Florida calves (393 head) were also fed the same receiving rations. The results are shown in the following table. The similarity in response to the three receiving rations of the Florida and native calves is quite consistent. In both groups more days treatment were required and there were more returns on the 75% concentrate fed alone. The highest medica-

#### Performance during a 28-day receiving period

Item	Florida calves			Native calves		
	Hay alone	75% concentrate alone	75% concentrate plus hay	Hay alone	75% concentrate alone	75% concentrate plus hay
Number of calves	131	66	196	66	34	100
Purchase weight, lb.	363	358	359	408	422	405
Percent of calves treated	38	53	49	97	97	93
Days treated	3.7	4.3	4.1	4.1	4.8	4.1
Percent returns	0	8.6	5.2	9.4	12.1	7.5
Percent death loss	5.3	3.0	2.6	0	0	2.0
Medication cost, \$ per head	4.00	4.24	4.01	4.37	5.20	4.27
Daily feed intake, lb.						
75% concentrate milled ration	0	11.64	8.03	0	12.67	10.71
Hay	8.67	0	3.25	10.58	0	2.04
Totals	8.67	11.64	11.28	10.58	12.67	12.75
Daily weight gain, lb. <sup>1</sup>	1.05	2.82	2.54	1.53	3.35	2.47
Feed per pound gain, lb.	8.26	4.13	4.44	6.92	3.78	5.16
Feed, processing and medication cost per pound gain, ¢ <sup>2</sup>	46.77	32.76	31.63	37.34	30.51	37.96
Value of weight gained during receiving period, \$ <sup>3</sup>	20.58	55.27	49.78	29.99	65.66	48.41
Cost of gain, \$	13.75	25.87	22.50	16.00	28.62	26.25
Net value of receiving gain, \$	6.83	29.40	27.28	13.99	37.04	22.16

Footnotes to table:

- <sup>1</sup> Weight gains include a deduction for death loss.
- <sup>2</sup> Hay and 75% concentrate milled feed charged @ \$70 and \$125 per ton respectively. Processing cost was \$1.25 per head.
- <sup>3</sup> Gain valued @ 70¢ per pound.

tion cost was observed on this ration in both Florida and native calves. In both groups the lowest feed intake and lowest rate of weight gain was observed on the hay ration with the highest rate of gain achieved on the 75% concentrate ration alone. In both groups of calves the 75% concentrate ration produced the most efficient gain and the highest net value of gain over cost. The differences observed between Florida and native calves were not in their response to receiving programs but in sickness and death loss. More native calves required medica-

tion, however more Florida calves died. The death loss comparison may not be valid, however, since all Florida calves were not received at the same time. In one load of Florida calves received just prior to the native calves no death loss was observed during the 28-day receiving period. The important finding is that southern and native calves respond similarly to different receiving rations and observations made on one source of cattle will generally apply to the other.

---

Please visit the Clayton Livestock Research Center at your convenience. Center personnel would be happy to show the facilities and explain the research program.

Most of our studies are with cattle owned by New Mexico State University; however, we have completed some studies where the cattle were owned by a cooperator. We wish to continue this program in which the cooperator retains ownership of the cattle but we would collect research data of value to the industry. If you might be interested in furnishing cattle as a cooperator, please contact Dr. Lofgreen at Clayton or me at Las Cruces (505-646-2514).



A. B. Nelson, Head  
Department of Animal and Range Sciences

Agricultural Experiment Station  
**NEW MEXICO STATE UNIVERSITY**  
Las Cruces, New Mexico 88003

L. S. Pope, Director

**FREE-ANNUAL REPORT OR BULLETIN  
OR REPORT OF PROGRESS**

POSTAGE AND FEES PAID  
U. S. DEPARTMENT OF AGRICULTURE  
AGR 101

