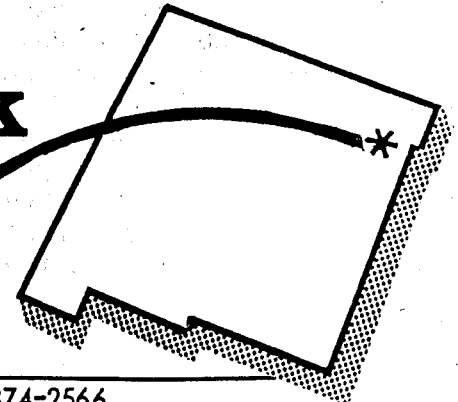




Clayton Livestock Research Center

PROGRESS REPORT



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

Progress Report No. 29 (February, 1983)

THE EFFECTS OF PROCESSING NEWLY RECEIVED STOCKER CALVES ON DAYS 1, 3, 6 AND 12

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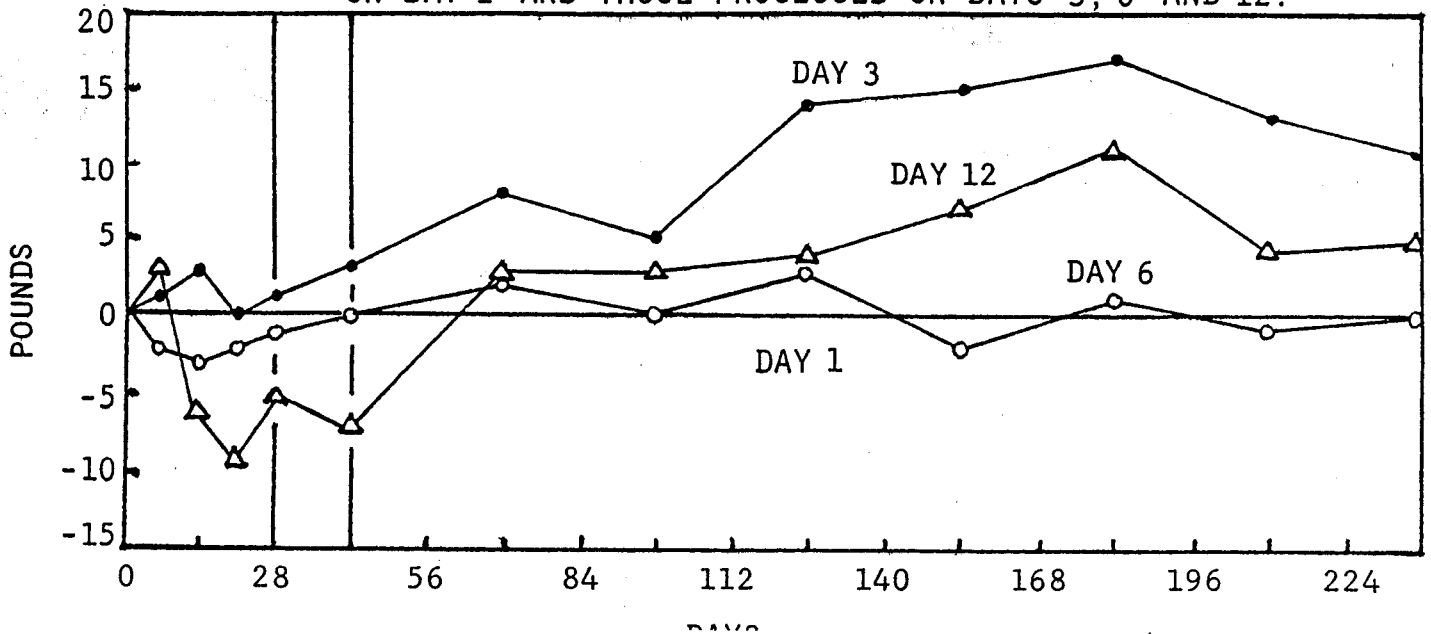
Previous work in California and this Center has shown depressed performance when processing of newly received stocker calves is delayed for 2 or 3 weeks following arrival. However, processing off truck or the first day following arrival is often difficult or impossible due to heavy work schedules when many calves are being received and processing must be delayed for varying periods of time. Therefore, a study was undertaken to determine if processing could be delayed for periods less than two weeks without significantly depressing performance.

Three loads (377 head) of calves weighing approximately 370 pounds were shipped from Florida to Clayton, New Mexico. Within each load, calves were processed on days 1, 3, 6

or 12 following arrival. Processing consisted of weighing, ear tagging, branding, castrating and dehorning as necessary, deworming, administering IBR and four-way blackleg vaccine, injection of LA 200® at 9mg per pound body weight, administration of 25g of Albon SR®, injection of 500,000 IU of vitamin A and implanting with Ralgro®. After a total of 238 days the cattle were slaughtered and carcass data obtained.

The accompanying graph shows the differences in weight gains between those processed on day 1 and those processed on days 3, 6 and 12. During the 28-day receiving period the gains made by those processed on days 1, 3 and 6 remained within 3 pounds of each other while after 3 weeks those processed on day

DIFFERENCE IN GAIN PER CALF BETWEEN THOSE PROCESSED ON DAY 1 AND THOSE PROCESSED ON DAYS 3, 6 AND 12.



12 had dropped 9 pounds below those processed on days 1 and 3. After 42 days those processed on day 3 had gained 3 pounds more than those processed on day 1, those processed on days 1 and 6 made the same gain while those processed on day 12 remained 7 pounds behind those processed on day 1. However, after 70 days the 12-day group had regained the 7 pounds. At slaughter there were no statistically significant differences in the gains made by any of the four groups.

The accompanying table presents the carcass data. None of the differences is statisti-

cally significant.

It appears from these data that the day of processing up to 12 days may not permanently affect cattle performance. During the receiving period, however, processing on day 12 has a pronounced effect upon weight gains. Calves suffering from severe bovine respiratory disease could be severely hampered in their recovery by delaying processing for 12 days. Day 6 caused a slight depression in gain during the receiving period while those processed on day 3 never gained less than those processed on day 1.

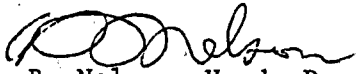
Item	Day Processed			
	1	3	6	12
Gain per head from purchase, lb.	641	652	641	646
Dressing percent	64.8	64.8	65.0	64.9
Back fat, in.	.60	.58	.57	.59
Kidney, heart and pelvic fat, %	2.1	2.2	2.1	2.1
Marbling score ¹	4.9	4.8	4.9	4.9
Quality grade ²	10.9	10.7	11.0	11.1
Yield grade ³	2.9	2.9	2.9	2.9
Rib eye area, sq. in.	12.0	12.3	12.1	12.3

¹ Modest = 6, small = 5, slight = 4, traces = 3.

² Choice = 13, low choice = 12, high good = 11, good = 10.

³ Rated from 1 through 5 with 1 being the highest yield.

"Brush Management" and "Maximizing Reproductive Efficiency" are the topics to be discussed at the Livestock Research and Cattle Growers' Short Course at New Mexico State University on February 21-22, 1983. The program begins at 1:00 p.m. on Monday in the Ag Building Auditorium and will be over at noon on Tuesday.


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