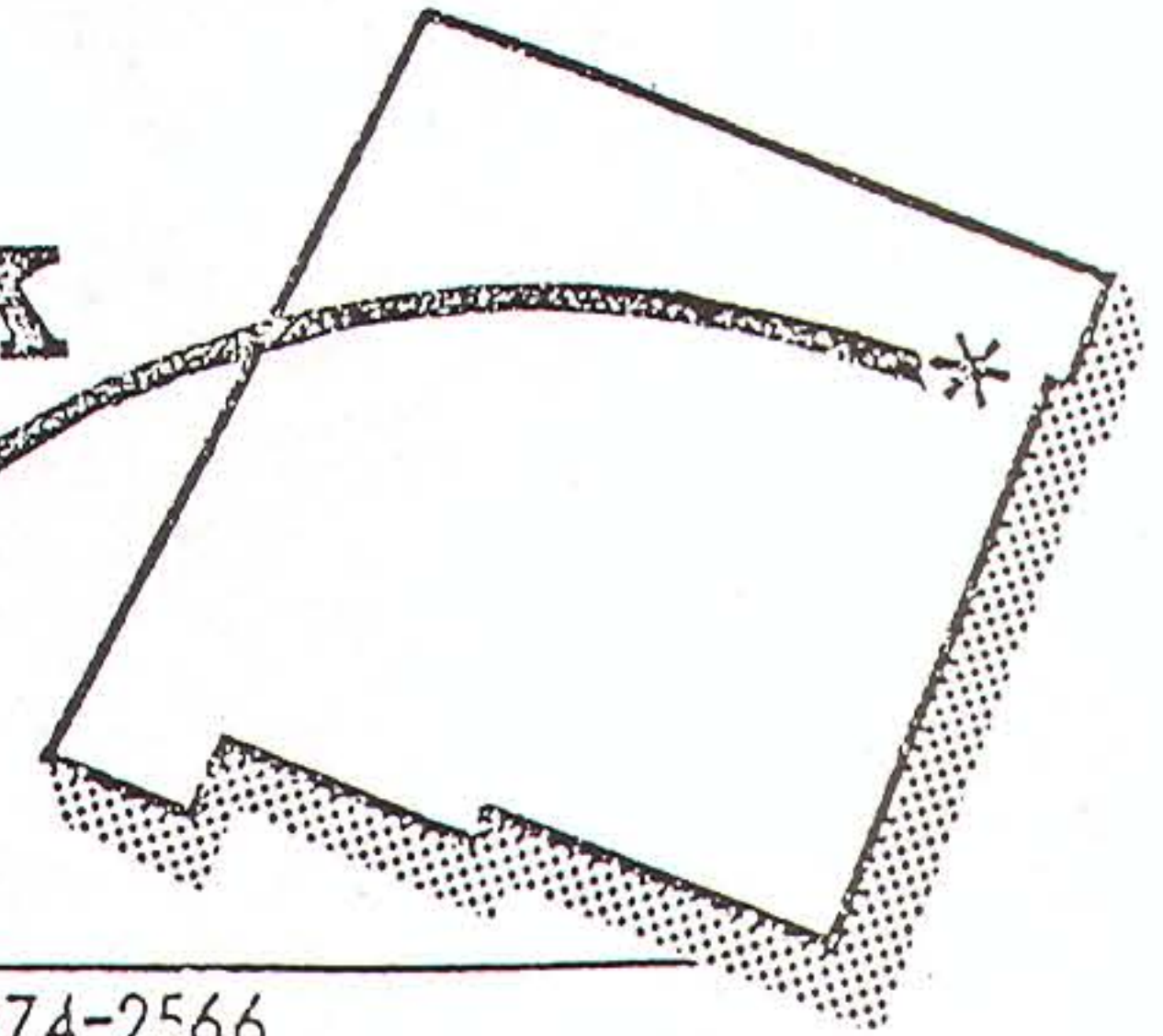




Clayton Livestock Research Center

PROGRESS REPORT



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THE EFFECTS OF IMPLANTING NEWLY RECEIVED CALVES WITH RALGRO® OR SYNOVEX®

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Should stocker or feeder calves be implanted with a growth stimulant as part of the processing procedure? One may hesitate to use an implant because it may add extra stress at the time when efforts are being made to overcome the effects of stress. Additionally, one may wonder if growth stimulating im-

plants will be effective during the receiving period when shipping fever is being experienced and calves are being adapted to a new environment. A trial has been conducted at this center to study implanting newly received calves. One load of highly stressed calves was shipped from Florida to Clayton

Item	Implant at time of processing		
	None	Ralgro	Synovex
Number of calves	37	37	37
Purchase weight, lb	363	361	368
Number treated for BRD ¹	10	11	11
Total sick days	49	46	42
Sick days per calf treated	4.9	4.2	3.8
Sick days per calf purchased	1.3	1.2	1.1
Returns	1	1	0
Deaths	1	0	0
Daily feed intake, lb	10.12 ^a	10.26 ^{ab}	10.75 ^b
Daily gain from purchase weight, lb	1.58 ^a	1.68 ^a	1.89 ^b
Feed per pound gain, lb	6.41	6.11	5.69
Cost per pound gain, ¢ ²	61.55	58.31	53.42
Gain per head in 28 days, lb	44	47	53
Value of gain @ 65¢/lb, \$	28.60	30.55	34.45
Cost of gain, \$ ³	27.08	27.41	28.31
Net value of gain, \$	1.52	3.14	6.14
Increased value over controls, \$	-	1.62	4.62

¹ Bovine respiratory disease

² Includes costs of processing, medication and feed.

³ Does not include cost of implant

^{a, b} Means in appropriate comparisons having different superscripts are different at a probability of 99:1

in January of 1981 when Florida was experiencing unusually cold weather. When the calves arrived in Clayton after 36 hours in transit they were in extremely poor condition. They were allowed free access to hay and water over night and were processed the following morning. Three calves were still too weak to go through the processing procedure which consisted of weighing, ear tagging, branding, castration and dehorning as necessary, worming, vaccination, administration of vitamins A and D, and giving LA200® (9mg per pound) and 25g of Albon SR®. Fifty percent of the calves had a rectal temperature of 104F or above at the time of processing. One-third of the calves received no implant while one-third received Ralgro® and one-third Synovex S® implants. The receiving ration was the same for all groups. The calves were inspected each morning for sickness and were weighed every 7 days during a 28-day receiving period.

The health and performance data are shown in

Please inform Dr. Glen Lofgreen of health, nutrition and management problems that might be studied at the Clayton Livestock Research Center.



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the accompanying table. Apparently neither kind of implant caused a measurable increase in stress. No increase in sickness was observed and there was no depression of performance. Both Ralgro and Synovex increased feed intake and daily gain above purchase weight. However, only the Synovex response was statistically different from the unimplanted controls. Both implants caused improvement in conversion of feed to gain.

Application of costs current at the time of the experiment results in a net value of the weight gain above costs of \$1.62 and \$4.61 per calf for Ralgro and Synovex, respectively. The cost of the implant would have to be taken from these amounts.

On the basis of this one study it appears that administration of Ralgro or Synovex at the time of processing is not stressful as measured by sickness level and performance and appears to be cost effective.

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