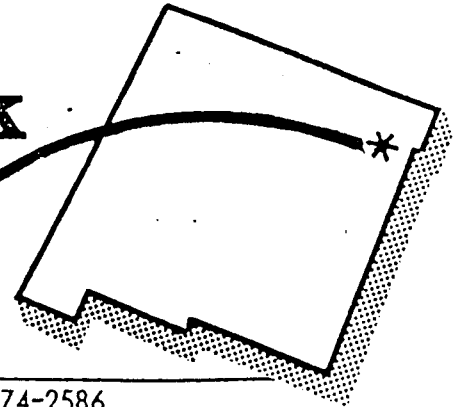




# Clayton Livestock Research Center

## PROGRESS REPORT



Route 1 Box 109 Clayton, New Mexico 88415 Tel. (505) 374-2586

Progress Report No. 7 (January, 1979)

### CONTINUED STUDIES ON STARTING RATIONS FOR NEWLY-RECEIVED STRESSED CALVES

G. P. Lofgreen

Previous work (Reports 1 and 2) at this station showed that when flaked milo rations were fed to newly received calves, best results were obtained when 50 or 75% concentrate levels were used rather than lower levels. It was also found that providing free choice alfalfa hay with the milled feed improved performance over that achieved on the milled feed alone. Additional studies have been initiated to determine if newly received calves would do just as well on hay alone as on hay plus the higher energy milled rations. A comparison was made, therefore, of millet hay alone, alfalfa hay alone and each hay in combination with a 50% concentrate milled feed. One hundred thirty-two calves shipped from Florida and 200 head of native calves purchased in the Clayton area have been used on the study to date.

The table below shows the performance for the four weeks receiving period. Performance was poorest on the millet hay alone. Performance was greatly improved with the alfalfa hay alone and was further improved by providing a 50% concentrate ration with either millet or alfalfa hay. If both the hays are charged at \$70 per ton and the milled feed at \$125 per ton, the alfalfa hay alone provided the cheapest receiving gain, followed closely by the 50% concentrate ration plus alfalfa hay. One must consider if the better start provided by the latter combination is worth 1.69¢ per pound additional cost of this treatment compared to alfalfa hay alone. Apparently, low protein hays such as millet do not provide sufficient nutritional value to be used as the sole starting feed for new calves.

#### Four Week Performance

| Item                     | Treatment        |                   |                      |             |
|--------------------------|------------------|-------------------|----------------------|-------------|
|                          | Millet Hay Alone | Alfalfa Hay Alone | 50% Concentrate Plus |             |
|                          |                  |                   | Millet Hay           | Alfalfa Hay |
| Daily feed intake, lb    |                  |                   |                      |             |
| Milled feed              | 0                | 0                 | 8.85                 | 8.36        |
| Hay                      | 8.73             | 9.30              | 3.07                 | 2.55        |
| Totals                   | 8.73             | 8.30              | 11.92                | 10.91       |
| Daily weight gain, lb    | .26              | .92               | 1.65                 | 1.65        |
| Feed per pound gain, lb  | 33.58            | 10.11             | 7.22                 | 6.61        |
| Feed cost per lb gain, ¢ | 117.53           | 35.39             | 40.00                | 37.08       |

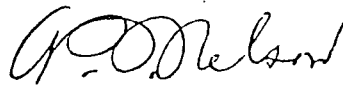
an additional treatment in the above studies, one group of calves was fed the combination of the 50% concentrate milled feed and free choice alfalfa hay limited to the first two weeks. They received only the milled feed for the next two weeks. These calves ate an average of 11.48 lb of feed per day and gained 1.84 lb per head per day at a conversion of 6.24 lb of feed per lb of gain, costing 36.88¢ per pound of gain. This indicates there may be no advantage of sup-

plying the hay after the first two weeks.

Approximately 250 more calves will be used in this comparison. In addition, data are being accumulated on different medication programs as well as the effect of dipping. These results will be presented in future reports. (The cooperation of O.C. Kimble, who provided the load of Florida calves used in this study, is gratefully acknowledged.)

The annual Livestock Research and Cattle Growers Short Course will be held at New Mexico State University in Las Cruces on February 19-20. Highlights of the conference will be talks by out-of-state authorities, including Dr. Richard Willham of Iowa State University on "What the Breeder Sells and the Producer Buys: Breeding Value" and "Historic Perspectives in Evaluation of Cattle," Dr. Nelson Adams of Texas A&M University on "Proposed Changes in Feeder Cattle Grades," Dr. Jim Cothorn, University of California - Davis, on "Short-Term Outlook and Long-Range Economic Outlook in the Beef Industry" and Zay Gilbreath, Caprock Industries, Gruver, Texas, on "The Cattle We Buy and Why".

New Mexico cattle producers will take part in two panels, "Marketing Your Livestock" and "Handling Female Cattle for Maximum Production". Reports of results of New Mexico State University research will be presented by many faculty members. Dr. Glen Lofgreen will summarize recent findings at the Clayton Livestock Research Center and Dr. John Owens will discuss the large caterpillar research program. All interested persons are cordially invited to attend the conference.



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