GRI CONCEPTS

THE CUTTING EDGE OF NUTRITION

The Bulletin *for Alumni of the Beef Cattle Nutrition School*

June 1996

Lonesome

In the School and through this newsletter, we've pushed for you to learn and employ certain "tools" for least cost production. While we have been well supported, at times we feel quite alone in making such recommendations. Therefore, it is most comforting when we hear others voicing similar programs.

Old Refrain

Perhaps you read, in the April '96 Grass Farmer, the Allan Nation interview with Dr. David McCall, a New Zealand nutritionist[1]. McCall said, "The two major management components we have to work with are the time of calving and the use of cow body-fat reserves." He pointed out that the cow's natural ability to breed back improves the closer she calves to the longest day of the year. He noted further that all low-cost production methods are very seasonal in nature and animal requirements must fit the pasture growth curve to be profitable. McCall went on to describe how lactating cows, grazing low quality pasture, can strip the fat from their backs to keep calves growing at an acceptable rate. Once the fat is removed, the calf should be weaned and the cow dropped to maintenance.

I wonder how frequently Dr. McCall hears the comment, **"it won't work"**.

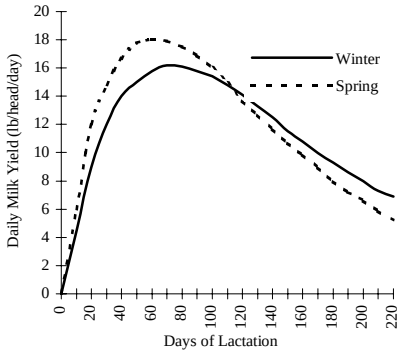
Calve Early/Wean Heavy

"If calves are not sold at weaning, ...weaning weight becomes a fairly unimportant number." This statement was found in the conclusions drawn from a U of MO study of winter vs. spring calving[2]. Mac Scott graciously provided us with a copy of this report. Using data from their own cow herd, the researchers examined the performance of 2,288 cow/calf pairs between the years 1982 and 1994. Calving at the research facility is Feb. 15 through Apr. 15. Those calving prior to Mar. 15 were placed into the winter calving group and those calving after Mar. 15 went into the spring calving group. Milk production data were available so the two groups were divided into high and low milk production groups. Thus, four herds were compared: winter-low milk (**WL**), winter-high milk (**WH**), spring-low milk (**SL**) and spring-high (**SH**). The data are summarized in the table below.

Calf data from winter and spring calving cows of different milk production.

Herd	Birth Wt	ADG	Wean Wt
WL	80.3	2.03	443
WH	85.9	2.43	525
SL	81.5	2.03	398
SH	88.6	2.56	518

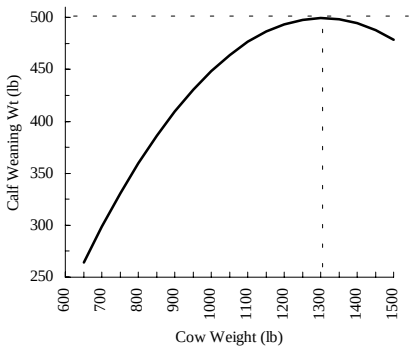
High milk-producing cows were about 100 lb heavier than the low producers; therefore, the birth weights of their calves were heavier. Calves from high milk producers gained faster than those from low producers. Spring-born calves from high milk-producing cows gained faster than their winter-born counterparts. Further, their weaning weights were similar although the spring-born calves were an average of 26 days younger.



Rapid gain of the SH calves resulted from their dam's earlier onset of peak lactation (shown in the previous graph).

Bigger Is Better

One other parameter examined by the Missourians was the relationship of dam weight to calf weaning weight. The following graph indicates that weaning weight increase begins to slow significantly around 1100 lb cow weights. The conclusions were that cows over 1250 lb quickly become very inefficient in terms of lb of calf weaned per lb of cow maintained.



Linneus, MO, where this research was conducted, is situated immediately south of the 40° parallel. As you may surmise, we would recommend calving much later than April 15. It must be considered for a least cost production program. Energy supplement in the winter should not be part of the program. Calving closer to the longest day of the year gives the cows the opportunity to increase BCS prior to calving and helps to reduce the postpartum interval.

Schools In '96

Grand Junction, CO July 8 - 11
Albuquerque, NM August 5 - 8
North Platte, NE September 10 - 13
Kerrville, TX October 7 - 10
Redding, CA October 28 - 31

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[1] Nation, A. 1996. Managing Spring Pasture Surpluses Without Machinery. The Stockman Grass Farmer. 53:4.

[2] Gerrish, J., R. Griebenow, R. Morrow and Fred Martz. 1996. Effect of Calf Birth Date and Milk Supply on Calf Growth. Forage Systems Update. The Forage Systems Research Center, Linneus, MO 64653. 5:2.