Shortening the Breeding Season at Deseret

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Introduction

Prior to 1981, Deseret's breeding season exceeded 120 days. From 1981 to 1994, the breeding season was 120 days in length and, from 1995 to 1997, the breeding season was gradually shortened to 90 days. At present, Deseret exposes the mature cows to bulls from March 15 to June 15 each year. Evaluating the actual economic and production results directly correlated to this decision is tough to do. Differences due to other factors such as genetic selection, vaccination programs, supplement programs, and weather are hard to partition out of the results. However, except for the initial year of change, shortening the breeding season has not decreased our conception rates or lowered our pounds weaned per cow exposed.

Discussion

Deseret's decision to shorten the breeding season hinges on the following assumptions:

1. Fat cows breed back earlier and wean heavier calves (J.N. Wiltbank).

   Fat cows increase total pounds of calf weaned (J.N. Wiltbank).

- Calves suckling cows in moderate or good condition grow faster than calves suckling thin cows.
- More cows in moderate or good body condition will be pregnant at the end of the breeding season.
- More cows in moderate or good body condition will calve early next year.
- Age of calf has the greatest influence on average weaning weight.

2. Nutritional needs of cows differ greatly between trimesters of pregnancy (NRC).

   How can you efficiently manage the nutrition of a herd of cows that have different nutritional needs? Attempting to increase body condition after a cow calves is mostly and usually ineffective.

3. Feed supplement and pasture fertilizer are significant costs of Deseret's cow-calf enterprise.

   With the slim profit margins the cow-calf producer is faced with today, efficient use of these supplemental inputs is mandatory to cut the cost of production. We can't afford to over feed or over fertilize; however, we also can't afford to have thin cows.

4. Other factors such as calf uniformity, replacement heifer selection, vaccination efficacy, and herd performance data collection were also considered in the decision to shorten the breeding season.

- The smaller the group of calves the greater the need for calf size uniformity due to the lack of numbers to sort into uniform size groups. However, larger producers can achieve uniformity by sorting.
- The closer the age of the heifer calves, the easier it is to manage the replacements for conception to calve at two years of age.
- Timing herd health procedures to specific growth and reproductive points will increase the efficacy of those products.
- Being able to have a standard measurement of economic and production performance at certain periods during the year benefits future decision making.

Conclusion

Deseret Cattle and Citrus exposes the mature cows with calves by side to bulls for 90 days from March 15 to June 15 each year. Open cows are exposed for 75 days from March 15 to June 1. Replacement heifers are exposed to bulls also for 75 days from February 15 to May 1. Cows are given two chances to raise a calf. If she comes in open or dry twice in her life she is culled. If she doesn't breed as a yearling to calve as a two year old, none of her female progeny are kept for replacements.

What's the next step? Do we go to 75 days now? Or do we go back to a 120 days and trust our pregnancy testers to sort off the late bred cows then find someone who wants to be supplied quality pregnant females in November that calve from April 1 to May 1 at reasonable premium to cull cow prices???

Table 1. Body condition and pregnancy rate on Deseret cows with calves at side.

	Body condition near calving	
No. of cows	1224	578
Pregnant after 60 days, %	16	47
Pregnant after 120 days, %	59	90

Table 2. Daily nutrient requirements for a mature 1000 lb. cow.

	Total Protein, lbs.	TDN, lbs.	NE_m (Mcal)
Middle third of pregnancy	1.3	8.8	7.57
Last third of pregnancy	1.6	10.5	9.7
Cows nursing calves 1st 3-4 months postpartum	2.0	11.5	10.98

NOTES: