Texas Dairy Matters

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CONSIDERATIONS FOR IMPROVING HEIFER REPRODUCTION

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Dairy producers often overlook their heifer reproduction program due to the assumption that their heifer reproduction is doing good. When compared to lactating dairy cattle, this assumption is probably correct; however, heifer reproduction can be improved on most dairies, saving a substantial amount of money.

First assess is if your heifers are being bred at the optimal time for improved profitability. Dairy heifers should be at 60% of mature bodyweight by first breeding. Goals should be to get all heifers pregnant between 14 and 16 months of age so that they calve between 23 and 25 months of age. Strive for at least a 60% conception rate. Heifers that calve at 23 months versus 26 months of age result in substantial economic benefits. Heifers cost a producer on average $1200 to raise from birth to calving. The later the heifer's age at first calving the higher the cost. In addition, by extending the age at first calving, a greater number of replacement heifers are needed to maintain herd size, again increasing costs.

To get heifers bred on time, move them to the breeding pen in a timely fashion. Move heifers weekly to the breeding pens or at least bi-weekly to ensure heifers are bred as soon as they reach target height and weight requirements.

Utilize an injection of prostaglandin at the time

they are moved into the breeding pens and again 10 to 12 days later for heifers not yet inseminated. Thus by 28 days, or 6 days after the 3rd prostaglandin injection after entering the breeding pen, more than 95% of heifers are inseminated. With the remaining heifers either give another injection of prostaglandins 10 -12 days from previous injection or enroll them into an Ovsynch + CIDR timed AI program to ensure all heifers get inseminated.

Conduct routine pregnancy checks weekly or bi-weekly at minimum. Reconfirm all pregnancies as early as 60 to 90 days carried calf. Move pregnant heifers out of the breeding pens to make room for new heifers moving in. When a heifer is diagnosed open at pregnancy check, administer prostaglandins or enroll them into an Ovsynch + CIDR timed AI protocol.

Lastly, evaluate your heifer reproductive performance. DO NOT just look at average age at first calving, average conception rate, and number pregnant at pregnancy check as these metrics DO NOT reflect current performance. Instead evaluate Voluntary Period Compliance (are heifers being moved into the AI pens often enough and according to plan?), distribution of first breedings (how long after moving into the breeding pen is it taking to get first insemination into heifers?), pregnancy rate, insemination risk (heat detection rate), and conception risk.

Pregnancy rate is often overlooked in heifer reproduction as dairy farmers tend to look at conception risk and (or) insemination risk. The reason pregnancy rate is probably the number one key metric to evaluate on heifer reproduction is due to the equation that is used to come up with a pregnancy rate. This is the number becoming pregnant in a 21-day period divided by the number eligible to become pregnant in a 21-day period. This is important because pregnancy rate has two major components: conception risk and insemination risk. Pregnancy rate measures the speed at which heifers become pregnant.

In conclusion, there is a substantial economic opportunity to get heifers bred successfully and in a timely manner. Reducing the age at calving from 26 months to 23 months improves profitability despite the incremental costs to achieve better pregnancy rates.