For the past few weeks we have discussed almost every factor that can affect the fertility and reproductive ability of a bull. This includes everything from the structural soundness of the bull, to his health and body condition, to his reproductive tract and the quality of his semen. Though each of these are important and should be given proper attention when considering a bull for breeding, producers should not neglect to consider a factor that first begins with the producer himself. As with any aspect of a cattle operation, the quality of management that it is given greatly impacts how successful that specific area will be. The same can be said of the fertility and reproductive assets of the bull. Thorough management of the bull(s) used for breeding is absolutely critical and should be done properly throughout the year- not just before and during the breeding season. This week we will discuss some areas of management a producer should pay most attention to, and how proper management can greatly impact the conception rates in your operation.

Before turning a bull out to breed cows you should first take into consideration his age. Though they may prove to be fertile in the BSE, it has been found that yearling bulls typically have a lower servicing capacity compared to older bulls. A good general rule of thumb to keep in mind is that an 18 month old bull can service 15-20 cows, and a bull 2 years old or older can service 25-30 cows. Remember that this is simply a basic guideline. To determine the specific ideal bull to cow ratio for your herd, consider the bull's age and physical condition, combined with his proven ability to service females. If you decide you need more than one bull in order to get all of the females bred, you will need what is considered a "multiple sire herd". If this is the case, keep in mind the issue of social dominance between the bulls. Older bulls will generally fight off the younger bulls. Thus, the bulls should be managed in a way that eliminates the likelihood of them fighting each other off the cows during the breeding season. Social dominance should be controlled, as it can negatively affect pregnancy rates in a herd. For example, a dominant bull with poor semen quality or low libido can greatly reduce pregnancy rates for the herd simply because he fought off the younger, more fertile bulls in the herd. In other words, the young bulls that were physically able to service females were fought off by older bulls that were physically unable to service females. Special care should be taken to prevent this from occurring, as it can hurt the operation in a huge way.

It is also beneficial for the producer to keep detailed records on the cows throughout the breeding season. One of the easiest ways to do this is with the calendar method. Using a calendar, a producer would write the cow's ID number on the date that he saw the bull service her. Then, he would make a note 21 days later in the calendar to watch for that same cow to come back in heat. Research shows that approximately 65% of cows should conceive the first time they are serviced in the breeding season. The easiest way to know if the female conceived the first time is by whether or not she comes back in heat 21 days later. This is how the calendar method is very beneficial. By simply keeping individual ID's on the females, and recording any time you see females in heat or serviced by the bull, a producer can use this information to calculate conception rates and detect some reproductive issues that may be present.

The last step is best summed up as overall good herd management. Bulls (and all of your cattle) should be handled with technique that elicits low stress. Cattle that are not stressed and have good

temperaments typically perform better than cattle under high stress and with poor temperaments. It is also important that you see to it that the bull is in good health and condition year round. As we previously discussed, illness can have a detrimental effect on the fertility of the bull. It is your responsibility to make sure that the bull is meeting his nutritional requirements, and is in the right body condition. In addition to this, it is the producer's responsibility to check the bull regularly and examine him to confirm that he is injury free. Checking the bull frequently will help you more easily detect if he has an injury, or if there is something wrong. If you notice that the bull is acting unusual, i.e. laying around by himself, limping, not eating, etc. he should be examined immediately to diagnose and treat the issue so that he can get back to breeding the cows.

Lastly, and perhaps most important, you should watch to see that the bull is actually mounting and successfully servicing the females. All of the things we have talked about over the past few weeks are important for bull fertility, but useless if the bull will not mount and service females. This can be likened to a vehicle. The car may be in great condition, with high quality, state of the art features. However, if you don't know how to start the car it cannot fulfill its purpose. As you have seen, a number of things can affect a bull's ability to breed females. Bulls require special care and attention so that they can perform their job, and perform it well. If you have any questions about bull fertility or reproductive ability, please contact us.

Prices for feeder steers medium and large 1 sold through the Oklahoma National Stockyards on Monday, March 2, 2015 are as follows: 529lb-\$267.23, 629lb-\$239.01, 708lb-\$207.52, and 770lb-\$204.32. Please note that the stockyards state that "Receipts are light this week due to a cold front bringing snow and ice into the state late last week and through the weekend." The price for March 2015 750lb feeder steers on the Chicago Mercantile Exchange was \$203.925 on closing Monday, March 2, 2015.

Thanks,
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