Selecting For Fertility
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Reproductive traits are considered to be lowly heritable in cattle since environmental effects, particularly nutritional status, have such great effect on expressed fertility. However genetic variation exists and due to the huge impact of reproductive traits on cow-calf profitably, selection for fertility should be a priority. Further-more the relationship of genetic merit to nutritional requirements is of importance to achieve high reproductive rates within feed and resources constraints.

Selecting for fertility begins with using sires capable of servicing and impregnating cows and passing on genes to daughters that will be developed into brood cows that contribute to high breeding rates. Visual appearance of early sexual maturity displayed by masculine characteristics and well developed and structured testicles and scrotum should be evident. This should be reinforced by passing an actual Breeding Soundness Exam and with high and favorable genetic predictions (EPDs) for yearling scrotal circumference and yearling heifer pregnancy rates if available. The satiability estimates on sires for the percentage of daughters remaining in the herd at age six, can also be considered a reproductive trait, since the majority of cows culled at this stage are for failing to breed, breeding late, or loosing calves.

Additionally it may be easier to achieve target reproductive rates if growth and milk traits in cows are optimized rather than maximized. When cows have higher maintenance and lactation needs than can be met by economically available feeds and current management, condition suffers and fertility falls.

Studies have shown heifer calves which were born early in their calving season and developed appropriately to breed early in their first breeding season will statistically have better odds of being regular breeders and remaining in the herd. Additionally first calf heifers which experience an easy calving will have greater likelihood of the calf surviving and a faster breed back. Therefore we can select for fertility by keeping heifers meeting these criteria and mating them to carefully selected calving ease services sires. Daughters of sires with favorable maternal calving ease will be helpful and, not to be overlooked is the need for proper heifer nutrition and development to be well grown and fleshed at time of calving.

Finally we select for fertility by disciplined culling. By limiting breeding seasons, or checking pregnancies and identifying late bred and open heifers or cows, and then culling from the herd, we will be selecting for both adapted types and for fertility.