# Fundamental Skills of Selecting the "Best" Bull

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Bull selection is an important building block in a beef cattle operation. Selected bulls have a direct effect on calving ease, calf growth, calf market weight, carcass quality, and more. An informed, and well thought out, bull selection decision will make a substantial impact on the production level. And, if you are retaining replacement heifers, your bull selection decisions further form your future cowherd in cow performance. Mastering fundamental skills in bull selection is very valuable.

# Production Goals - Why?

Setting production goals is critical for many aspects of beef production, especially in the breeding program. Asking questions such as what type of animal will I market and how will I market it? How can I produce a feeder calf or breeding animal to capture the most value? These are simple, but important, questions to be asked. Production goals will determine selection criteria and traits important to your operation in selecting herd sires. Consider your cow herd to select bulls who complement to meet production goals. What is the size of your herd? What is the major breed composition of your cows? How are you marketing your feeder calves or breeding animals?

# How Many Bulls Do I Need?

Planning for your breeding season should account for how many bulls are needed to successfully breed cows and heifers. To determine how many herd bulls are required, it directly depends on the age of bull and the number of breeding females. How many do you have to breed? In looking to the age of the bull, younger bulls who are 15-18 months of age or "long yearlings," a ratio of I bull to 12 to 18 breeding females is recommended. For bulls older than 24 months of age, a ratio of I mature bull to 25 to 35 females is best.

# **Evaluate Bull Conformation**

Proper confirmation of cattle is extremely important. Correct structure increases longevity and function of the herd. Bulls, cows, and calves need to be evaluated for structural correctness and soundness of feet and legs. Evaluate potential herd sires for proper confirmation with correct skeletal and hoof structure. Look closely at the feet, leg, shoulder, and hoof structure to detect improper angles and toe shape. Improper confirmation can easily result in lameness. Selecting herd sires who are structurally sound will decrease lameness issues and provide a genetic foundation of proper conformation.

### **Examine Bull Breeding Soundness**

A Breeding Soundness Exam (BSE) is a method of evaluating a bull's ability to breed and establish pregnancy in an appropriate number of healthy, cycling cows or heifers in a defined breeding season. A BSE consists of a physical exam and a semen evaluation. The physical exam evaluates a bull's feet, legs and eyes, reproductive tract and measures scrotal circumference. The semen evaluation evaluates quantity, structure, and movement of sperm cells.

An annual BSE needs to be done 30 to 60 days before EACH breeding season. Why 30 to 60 days? To be prepared for the breeding season to begin on time. A BSE classifies a bull as a satisfactory breeder, unsatisfactory breeder, or deferred for re-examination. With an unsatisfactory or deferred result, this time frame allows for another BSE or to purchase another bull. Performing an annual BSE on each bull is like "cheap insurance." The cost of a BSE is a fraction of the income for I feeder calf. Having a bull who is not fertile, or sub-fertile, will not produce a calf crop or produce a smaller calf crop. Make sure a bull has passed a BSE before you purchase, and make sure to perform a BSE each year on bulls you already own.

### **Evaluate Expected Progeny Differences (EPDs)**

Expected Progeny Differences (EPDs) are genetic prediction tools beef producers can use when making selection decisions. EPDs are generated by a breed association and are breed specific. EPDs can be used to compare bulls for multiple traits and to the breed average. A vast number of EPDs are available, such as calving ease, birth weight, weaning weight, yearling weight, milk, marbling and ribeye area, among many others. Your set production goals will guide your emphasis in evaluating EPDs. It is indeed very easy to be overwhelmed with the broad array of traits. Prioritize EPDs to be more impactful for your marketing situation.

#### **Prioritize Focus on EPDs**

For producers who market feeder calves at weaning, growth and muscling traits are a priority. Focus on weaning weight and yearling weight EPDs for producing calves who grow to a heavier market weight. Performance data such as frame scores, adjusted weaning and yearling weights with ratios are also key. If you are retaining replacement heifers, maternal traits do not need to be ignored. Look to maternal traits such as calving ease, milk, heifer pregnancy, stayability, etc. in retaining heifers. Analyzing the performance data of a heifer's dam is also very valuable. For producers who produce freezer beef or retain ownership, focus would also include meat yield and carcass quality. Focus on ribeye area, marbling, carcass weight and backfat EPDs. Performance measurements such as frame score and carcass ultrasound data can also be helpful.

### Budget for Buying a Bull

One proven "Rule of Thumb" to determine how much to pay for a bull has been in the industry for quite a while and can help in developing a budget. This "rule of thumb" looks at the total market value of 5 steers from your marketing system