



Bull Buyer's Checklist



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With half of the genetics of your calf crop coming from the bull, having the right sire can have a huge impact on the bottom line of any beef operation. Here are a few recommendations that can help you decide which bull is right for you and your herd.

Set Your Goals

Many times we fail to set our selection criteria before going to a bull sale. It is important to ask yourself what the end goal of your calf crop is. Are you a cow-calf operation, backgrounder, finisher or desire replacement females? Expected Progeny Differences and ultrasound data are useful tools to determine which bull has the traits that will produce the best calves for your desired use. If you have trouble interpreting a catalogue full of numbers, ask the bull seller to go through it with you and help with your decision.

Visit the Seed Stock Producer's Operation

Seeing how your prospective herd sire was raised is very important. Was he at an all-you-can-eat buffet or did he have to work to put on the condition he is carrying? How was his mother cared for? If you plan to keep replacement females from your new herdsire, are his female offspring able to thrive in your production system?

Go to the producer's operation before the bull sale so you will get to see the bulls before they are clipped. If you plan on keeping calves to background, you are going to want a bull with a good hair coat. Slick cattle look fancy in Florida but tend not to perform as well when faced with a cold and windy Saskatchewan winter.

See the Records

It is important to know the history of the herd from which you are buying your bull. Ask about the vaccination protocols. Make sure performance data is available for the bull you are considering buying and don't forget to ask for a copy of the Breeding Soundness Evaluation.

Physical Selection

There are five key areas that you need to consider when determining the physical selection of a bull:

Head – should be of reasonable length but not too large because this trait could cause calving difficulties. Eyes should be well set into the head to reduce sun exposure and reduce incidence of cancer eye which is prevalent in some breeds. A strong forehead over the eye or hooding protects the eyes. The muzzle should be wide for efficient grazing.

Neck – The neck should be a good length as compared to the body and held high. Also watch the brisket for fat deposits. A bull should be trim in the brisket. Bulls that become overfed and over fat too early may be light in muscle and produce progeny with lower carcass weights.

Shoulders – Front legs and shoulders should be naturally sloped with a 45 to 60 degree slope on the front shoulder. If the shoulder is too straight, the bull has a choppy gait and carries his head low because it is difficult to raise his head too high. Usually a straight-shouldered bull will also be too straight in the hind end. These bulls break down through wearing of the leg joints. Shoulders should be smooth against the rib cage. Bulls whose shoulders are wide at the point of the shoulder or wide between the shoulder blades may produce heavily-shouldered calves, increasing calving problems.

Legs – The front legs of a bull should be straight when viewed from the front of the animal. On a structurally-sound animal, a vertical line may be drawn from the point of the shoulder to the middle of the claw. The line should intersect the knee in the centre. Half of the bull's body weight is carried by the knees. The hind legs should have well-defined angles in the joints at the hip, stifle, hock and pastern. The angles are critical, especially during breeding. If the angles have deviations from normal angles, there will be excess wear and tear on the joints leading to early breakdown.

Sheath – The sheath should be trim and close to the body. An angled or long sheath is more prone to injury or infection and should be avoided. A slack or low-hanging skin covering the penis should also be avoided.

If you would like to learn more about bull selection, make sure you register for Breeding for Profit – Bull Selection Workshop. A full listing of these workshops is located on the calendar of events.

FOR MORE INFORMATION

- Contact Nancy Gray, Regional Livestock Specialist in Watrous at (306) 946-3237; or
- Contact Travis Peardon, Regional Livestock Specialist in Outlook at (306) 867-5504.

GENETIC TOOLS FOR BEEF CATTLE EVALUATION

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In recent years, many research projects have tried to discover the genes influencing beef cattle production traits. The traits with the most interest include those that are hard to measure, like meat quality, feed efficiency and disease resistance.

New technologies are now available to identify individual genes and assess their relationship to these economically-relevant traits in the beef cattle industry. Identifying and selecting for the desired gene(s) is an alternative to progeny testing.

There are two basic types of traits: qualitative and quantitative.

Qualitative traits fall into a few distinct classes such as red or black coat colouring, horned or polled, double or normal muscled. Qualitative traits are normally determined by one gene (or only a few genes) which usually affects only one trait.

Quantitative traits show a continuous distribution such as performance traits and are influenced by many genes. Quantitative traits are the result of genes that influence growth, reproduction, fat deposition, muscling and others. Nearly every quantitative gene will have an effect on more than one trait.

Some effects associated with a favorable trait will be unfavorable for others.

Meat quality is an example of a quantitative trait. Producers can't select for meat quality by visually appraising an animal. It can only be accurately measured when the animal is slaughtered. Researchers have identified genetic markers associated with desired traits like meat tenderness. When combined with environmental and management practices, producers are able to select animals and feeding systems to more accurately and efficiently produce beef for a desired market.

Tests for genetic markers associated with simple traits such as coat colour, genetic defects and complex traits like marbling and tenderness are now being marketed commercially by several companies. Some backgrounders and feedlot managers use genetic markers to make decisions on how to manage a particular animal or a specific group of animals, in order to optimize feedlot performance and target niche markets.

Genetic markers are a tool to assist producers in making breeding, management and marketing decisions. As with all tools, the cost of genetic testing must be covered by the returns in the market place.

FOR MORE INFORMATION

- Contact your Regional Livestock Specialist; or
- The Agriculture Knowledge Centre at 1-866-457-2377.

