

PERFORMANCE TESTING PUREBRED BULLS IS IMPORTANT

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Bulls are evaluated using many criteria. These criteria may vary somewhat depending on the purchaser's goals and the type of operation he or she has (i.e. commercial, vs. purebred). Basic attributes we want to know in a bull include:

*Structural Soundness

*Libido

*EPD's as they affect calving, weaning and yearling weights, milk production, etc.

*Scrotal Circumference

*Semen Quality

For purebred purposes producers also look at bloodlines and genetics to determine what sire and dam he may be from as well as family groups of which he may be a member. Additionally we may also look at how well he has performed on the show circuit.

Commercial cattle producers may look at all this information to some degree, especially that information pertaining to reproductive performance. However, in most cases they are concerned to a large degree on what type of effect the bull he is considering may have on the subsequent performance of the calf crop. Depending on his marketing program, his concern may be on the bull's effect on weaning weights if he sells at weaning or possibly on yearling weights if he retains ownership into the growing or finishing phase.

Performance testing, in many situations, focuses on how a bull performs in terms of average daily gain as well as feed conversion – how much feed it takes to put on a pound of gain. When you step back and consider that we are in the business to produce beef, or more specifically – red meat – at the best cost possible, we begin to see the inherent value of testing these parameters and determining how a given bull or sire group performs. In other words, when a given bull is used to produce calves that will go into the beef production pipeline, will his influence improve performance and economics or reduce that performance? In the market and economy we currently enjoy, a producer CANNOT afford to utilize bulls that don't enhance his program.

Likewise, purebred or seed stock producers need to focus on the collection of this data so they can effectively market their product to the commercial cattleman. Within a given breed, purebred producers have a tremendous need to develop a sound commercial market. In other words, the purebred cattleman has to develop an outlet for his cattle to go to the commercial producers and therefore affects production economics to at least some degree in the industry. Purebred operators have to remember that they can only sell to one another for so long and then they have to go outside to develop their market. This is the only consistently sound means of maintaining cash flow and profitability. For this reason the need for performance testing in purebred bulls is imperative.

Purposes for Performance Testing

As alluded to above, performance testing is used primarily to evaluate gains and feed conversions in a given animal or possibly in a sire group (group of bulls from the same sire). Technically, the purposes of testing include:

- 1) To observe and compare gain ability of individual bulls (and sire groups when feasible), as well as pen feed conversion.
- 2) To encourage and assist in the use of performance records as a means to more efficient beef production.
- 3) To encourage herd improvement through the use of performance tested bulls.

We see here that testing of performance in this manner helps us to determine how individual animals perform as well as provide a means of improving efficiency of beef production by improving herds of cattle. We can also use this data to continually strive to improve the overall consistency of the beef product. Additionally, depending on how the test is designed, it can provide a cross reference to compare one breed to another. This is useful in helping the cattleman determine if he needs to use one breed or another in his program. It helps the purebred breeder determine where he is in the industry and in many cases can help a breed as a whole assess what changes may be necessary to maintain competitiveness in the industry.

The one shortcoming to bull performance testing is that it does not allow us to examine grade and yield of the carcass although much modern ultrasound technology does provide a means to evaluate fat covering and rib-eye areas without having to slaughter the animal. This would kind of defeat our purpose! Bull performance testing needs to be used in combination with breed carcass evaluations to determine how a given breed or combination affects the carcass of a calf carried to slaughter and hung on the rail. More specific carcass data can be attained by evaluating a given bull's

progeny and how they hang on the rail. Any progressive breeding operation should implement a feed-out program of some type where a portion of the cattle produced are carried through the feedlot and carcass data is collected. Subsequently, this information can be used in their marketing effort as well and is a valuable part of this marketing program.

The data generated from bull performance testing tests is related directly to the economics of producing beef – producing beef at the most optimal cost available. The economics of finishing cattle is to minimize the pounds of feed required to put on a pound of gain. This brings up an interesting point. When considering performance tests and testing organizations (we'll examine this in a bit), one focal point needs to be on what type of feeding program the testing protocol uses. In other words, is the ration on which the bulls are maintained high roughage or high grain. Some feeding programs actually are based on pasturing the bulls while providing some supplemental protein, energy, vitamins and minerals. This is important to remember when evaluating gain and conversion data. Obviously, bulls fed a high grain, high energy ration will produce higher gains than those fed a roughage based ration. One thing to consider though is that since cattle spend a significant portion of their life on forage based nutritional programs, evaluation of performance on both systems is pertinent. Obviously both types of programs have positive and negative points. Forage-based performance tests will illustrate how well bulls perform in a more natural environment but they don't give as clear a picture of a given animal's genetic potential for gain and feed efficiency. High grain-based tests provide better gain and feed efficiency data but are more expensive to maintain (much higher feed costs) plus the bulls run the risk of becoming fat. Bulls in these types of programs must be taken off these programs several months before sale and allowed to “cool-down.” Many buyers have purchased bulls immediately off test that were accustomed only to a high-energy diet. They did not maintain this diet once they got them home and only put them out directly with a group of cows. In many cases the results were very detrimental and very costly when the bull “fell apart” or in some cases have even died. High-energy performance testing programs have to be managed carefully.

Where Can a Producer Enroll Bulls in These Programs?

Many performance tests are available year-round. These programs are commonly administered by the university systems, most commonly by their extension or experiment stations. Additionally you will find programs that are overseen by the breed associations themselves. Finally, quite a number of private or commercial programs are also available for consideration. Each has it's own set of parameters and each views the data a bit differently. While it's not important that one program is very similar to another, it is important that within that program, all animals are evaluated identically.

Typically there are certain criteria which must be followed or met in order to participate. As mentioned these will vary from test to test. They may also vary from breed to breed depending on which association you are working with. Examples of some of the criteria you may encounter are as follows:

1) Must be registered in their respective recognized beef breed associations, and shall be acceptably marked as to breed specifications.

2) Must have been born on or between September 1 of preceding year and March 31 of current year.

3) Questionable over-age bulls (as per recorded calving date) as indicated by excessive tail growth, horn growth, etc., are subject to inspection and detailed age determination by use of various technical methods, expense of which shall be borne entirely by the breeder (or breeders) whose animals are involved.

4) All breeders are required to sign a statement of "no-contest" in regard to age determination, indicating that they relinquish their right to protest and will accept the decision of the age determination committee and/or individual as final.

5) Registration certificates **MUST** be filed with the test manager upon delivery of bulls to test site (OR AS SOON THEREAFTER AS RECEIVED FROM BREED ASSOCIATION OFFICE), and will be returned to cooperator or transferred to new owner upon full settlement of test and/or sale expenses. There will be no exception to this rule. (Breed Associations will normally respond quickly if instructed that bulls are assigned to the test).

6) A minimum delivery weight-per-day-of-age shall be 2.35 pounds on all senior calves and 2.50 pounds for all junior calves. It is suggested that you check-weigh your calves by August 1. Four percent (4%) of arrival weight will be added to compensate for shrink encountered in hauling up to 100 miles and six percent (6%) allowed on those hauled over 100 miles.

7) It is strongly recommended that all nominated bulls be officially weighed **BETWEEN 160 AND 250 DAYS OF AGE, THESE WEIGHTS AND BIRTH DATE OF DAM** should accompany calves as they are delivered to test site. This will generally be profitable to you as our sale order and sale price have in the past shown preference for the qualifying bull over non-qualifiers.

These rules were established by a well-recognized bull testing program and are a good indicator of the stringency which is required in a well managed program. These are not standard by any means but are fairly common in this type of a program.

Additional guidelines will be included that outline how bulls will be handled, data collected and reported, costs of the program and so on.

As mentioned, the breed association which the bull is from may establish additional guidelines. This creates standardization within the breed for comparisons of bloodlines, and individual animals.

Conclusions

Like so many other management tools, bull performance testing has a cost to the producer. The information, however is invaluable and vital to the development of a sound marketing program. This is true not only of individual operations but for associations as well. Collection of information pertinent to the performance and economics of a specific breed is essential to cattlemen desiring to improve their performance and their profitability.

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