

**Bull Power**  
**Purebred Bull Specifications: Purebred**

Martin Jorgensen  
Ideal, S. Dakota

We are at the crossroads in our decision making process in selecting a genetic road map that will in fact create the beef animal for the changing market. The present mix on our commercial genetic pool reminds me of a cake batter formulated without a recipe. We need to review this situation and attempt to redirect our efforts towards the development of a product possessing great appeal at the market place with predictable uniformity for qualities and somewhere near a uniform slaughter weight. The question, can we do these things with the tools we have at hand today? I say yes we can and we must address this course in great haste.

For too long the beef industry has struggled as though each segment could be indifferent about the financial health of other beef segments even though it takes only a very short time for shock waves to emerge throughout the beef industry when red ink emerges somewhere along the line of production, processing or marketing. The purebred seedstock breeders for the most part have no idea what kind of animal they are producing for several very important traits and rarely are they mentioned; I make reference to feed efficiency and carcass merit. For example, I recently reviewed some feed efficiency test data from a state test center where 33 Angus bulls were compared for gain, feed efficiency, and frame. The range for feed efficiency was 12.43 to 1 with a ratio of 60 to the most efficient bull posting a 5.32 to 1 with a ratio of 140. It was interesting to note the bulls with the highest frame score did not necessarily relate to the best feed efficiency scores.

The same range of extremes exist in product cutout when we compare carcass weights. These are several of the major value differences we must address along with production traits such as maternal and growth.

I realize the existing carcass data is very limited in most breeds; however, the responsibility of generating this data clearly rests with the purebred breeder and it should be a part of his genetic data bank for the benefit of his bull customers. We are at a time in production history when a mechanical measurement system on live cattle with a high degree of accuracy would serve the industry well. We simply don't have time playing catch up realizing a bull is three years of age before his progeny are old enough for carcass evaluation, and worse yet when only a small group of breeders show concern for carcass data.

The present system of buying cattle on averages through the finishing phase should in no way be construed to mean that all cattle are similar for value at a given weight. Fortunately, most breed associations are equipped with measurement procedures similarly designed for ease of application. The nationally recognized system of measuring predictability within a breed makes it possible to accurately select sires by trait comparisons.

It is difficult to accept the fact that many breeders continue to use adjectives rather than documented trait records when presenting their production to the beef industry. A good example of this was the 1988 Western Stock Show, where bulls representing one of the major breeds were sold without performance data, simply because only a small percent of the lots offered had supporting performance data. This will change as more and more commercial producers out bid the so called purebred producer for the bulls with genetically superior traits of meaningful value. The printed Expected Progeny Difference plus the accuracy level presented in national sire directories will be the moving force in directing the industry to rapid changes. Simply put, we as breeders now have a road map to create seedstock that can and will enhance the industry for a stronger competitive position.

When I started producing a few purebred Angus in 1956, it was like having a machine break down and being unable to locate repairs when searching out a new sire. If you were not a student of pedigrees you possessed no knowledge about breeding cattle. How many of you remember how small they had to be to make the winning end of the show strings? Cattle with growth records were very rare and only a few breeders persistently pursued the possibilities from performance records. The pendulum reversed when the common sense commercial cattleman refused to continue the compress contest. Thirty years later we find the industry in the final stages of a reversed cycle where excellence was measured with a yard stick. Again, the commercial producer waved a flag of resistance for the sake of practicality. I dare say the above scenario would apply to birth weight, muscling, leanness and milk if we exert all selection pressure for either the minimum or maximum. There is an optimum level for all traits and the variable is mostly determined by environmental and managerial control.

Can we have optimum EPD's for the purebred cow herd and herd sires? I say yes, however, with qualifications. The optimum level for EPD's will vary a great deal for most traits from region to region in this country. Coming from thirty two years of continuous performance selection, it is my belief we have nearly reached the optimum balance of EPD's in our Angus herd. The average on the 99 bulls cataloged in our most recent production sale had the following averages:

Birth EPD	Weaning EPD	Milk EPD	Yearling EPD
+5.3	+25.8	+5.4	+52.6

This herd is managed very similar to top commercial herds in central South Dakota. The reproduction response is acceptable and the growth level will support our goal of selling finished cattle at 12 to 13 months of age. We are using a two and three way cross program in our commercial herd with optimum production results. The life cycle of these progeny can easily achieve the finish stage in the 12 to 13 month time span.



I have serious doubts about the influence of EPD's at the major cattle shows as the EPD concept continues to make inroads with the general cattle industry. However, the forward thinking seedstock breeder will make haste to be totally identified with supporting records identifying breed comparison EPD's.

In the process of searching out the proper balance on our trait selection we must first determine our most likely bull market. I personally choose to favor the commercial producer as the most stable and continuous market for selling bulls. This has been the primary reason why we track our sires through their progeny to a finished product.

The business cow/calf producers are very familiar with the value differences of EPD's and this trend will accelerate from this time forward. I find this to be our most important merchandising tool. Our latest calf crop was computer mated, primarily to produce a larger supply of acceptable bulls with optimum figures on important traits. We are pleased with the results and of course are anxious to follow them through their development period. I don't expect to produce purple ribbon winners with computer mating; however, I have never had much flare for ribbons unless they were awarded in a carcass contest.

I made reference earlier to the phenotype race and now we run the risk of concentrating too much selection pressure on a given trait such as milk. This is a direct result of over emphasizing a single trait and creating an animal that is sadly lacking in traits that suddenly become very important when they are out of balance for total optimum production. It is for this reason I believe seedstock breeders should be very informed about the total beef industry and meet the challenge of breeding for efficiency and finally develop the product to the demands of the consumer.