Use EPDs to Design Your Beef Production Plan

By Kris Ringwall Extension Beef Specialist NDSU Extension Service

The learning curve for a new management concept within the beef industry usually is steep and unfortunately splits somewhere on the way up. The sam"Why should I use EPDs when I select bulls?" As the bull buying season heats up, I wish again I had a dollar for every time I was asked that question. Even 50 cents would make me rich.

The beef industry moved to the EPD concept more than a decade ago, but producers still struggle with the idea. As noted last week, the learning curve for any concept is steep and usually splits on the way up. (As was noted by a local editor, I even forgot to define what the letters EPD stand for–a definite indicator of a break in the learning curve.)

Expected Progeny Difference is commonly abbreviated as EPD. Some producers understand and utilize the concept, some never understand the concept but use it anyway and some fail to adapt.

To show the value of the comparative numbers that EPDs bring to bull buying, let's use an analogy from the motor vehicle industry. I have little knowledge about motorized vehicles but I can utilize printed information when purchasing a pickup.

For example, I may be interested in two pickups, both with acceptable body appearances. I may ask the dealer the basic engine type, valve train, bore/stroke in inches, displacement in cubic inches or cubic centimeters, compression ratio, horsepower at a set rpm and conclude with a discussion of gear and transfer case ratios.

Then I would need to ask myself how the pickup would be used. Pulling full stock trailers of cattle across tough terrain versus scenic highway miles would greatly impact the need to pick the correct vehicle. One pickup could have an exceptional engine with more power and a transmission designed for tough pulls. The other pickup could look identical to the first but have an engine for highway driving.

The point is, the automotive industry has developed numbers to help describe each particular vehicle, including the power unseen by the naked eye. Most people don't question the numbers, they simply accept and use the numbers to assure a better purchase for the desired need.

Another analogy would be livestock gates, fences or panels, common purchases by beef producers. As you visit fellow producers' operations, how often do you see a bent panel or gate? At the Dickinson Research Extension



Center, we have a few of our own. Why does one producer have more bent panels than the next producer? Yes, there may a difference in the temperament of their cattle, but in reality all fencing materials are not the same.

The North Dakota State University Dickinson Research Extension Center sought a bid for continuous fence. I thought this would be a simple procedure, but I was in for a surprise. Fences come in all shapes and strengths, and guess what, the industry assigns number to various characteristics of fence so the consumers (you and I) can better match our needs to the product we are buying.

Fences, gates and panels have various outside diameters (OD), various steel types, various gauges, yield strengths and weight per foot of fence. The product we purchased to meet our needs was a 1.66 OD, 1010 steel, 14 gauge, 42,000 pounds per square inch (psi) tensile and 10.5 pounds per foot of fence with six bars. In a nutshell, the calves bounce off the fence when they hit—and the fence will not bend. I don't need to be a steel expert, but with a little reading and understanding, I have confidence in the comparative value of the numbers. The center selected a fence that would meet our needs within the appropriate price.

Now, back to bulls and EPDs. The same is true when buying bulls. A bull buyer cannot know what's "under the hood" of each bull, but the purebred beef industry has made it simple: compare the appropriate trait EPD value between bulls and buy the one that fits your needs.

Don't question the numbers. If you need horsepower, check the window sticker, if you need pipe strength, check the label, and if you need calf growth check the EPD. A bull with a yearling weight EPD of 50 has 10 more pounds of growth potential than a bull with a yearling weight EPD of 40. It works in pickups, it works for fence, and it works for bulls. May you find all your ear tags.

Your comments are always welcome at *www.BeefTalk.com*. For more information, contact the North Dakota Beef Cattle Improvement Association, 1133 State Avenue, Dickinson, ND 58601 or go to *www.CHAPS2000.com* on the Internet. In correspondence about this column, refer to BT0077.

Performance Related to EPDs for Angus and Herford Cross Bred Heifers NDSU Dickinson Research Extension Center

		EPD for Yearling Weight	EPD for Milk
Angus Breed Average		62 pounds	17 pounds
DREC Angus Sires		63 pounds	22 pounds
Hereford Breed Average		60 pounds	13 pounds
DREC Hereford Sires		63 pounds	19 pounds
Weights of Bred Heifers			
	July 23	December 12	January 17
Angus Sired	955 pounds	5 1081 pounds	1108 pounds
Hereford Sired	949 pounds	5 1085 pounds	1118 pounds