A real-world comparison of progeny from two different bulls

The Real Value of Genetics

By Brian Bertelsen, VP, Field Operations

Much has been said about the value of genetics. We now have a multitude of genetic prediction values available on commercial bulls offered for sale. The American Angus Association even has economically driven $Value Indexes which estimate the overall value of how future progeny of each sire are expected to perform compared to other sires and are reported in a dollar value format. Many USPB producers pay close attention to the Beef Value ($B) index when purchasing bulls. The $B value estimates postweaning and carcass trait economic value into one number.

But how often do we really get actual, "real-world" data to compare the economic value of progeny from two different bulls? I had just that opportunity when I visited long-time USPB unitholder, Gene Wagner from Concordia, MO, this past winter. Gene purchases Angus bulls from a USPB Qualified Seedstock Supplier (QSS) and then finishes the calves at his farm before delivering all of them to USPB.

One bull that was purchased in 2007 (QSS Bull A) had to be unexpectedly taken out of service after only two years of breeding. Caught in a pinch, there was not time to get a replacement from the QSS breeder. So for the next breeding season, Gene went to a local Angus breeder and rented a "good" bull (Bull B) until the QSS breeder could provide a replacement.

The table below shows current Expected Progeny Differences (EPD's) for postweaning traits from the American Angus Association for the two bulls. These values are updated as of August 2, 2012. Both bulls were similar or better than breed average for carcass EPD's. Breed average of current sires for the entire breed is +54.13 for $B value. So both bulls were significantly above average for $B value.

Gene is also good at maintaining a complete and thorough database of his individual carcass data from USPB. So he was able to look at the differences in the progeny from these two bulls which were used on the exact same group of cows during two subsequent years. Calves were born in the fall and then harvested in November and December of either 2010 or 2011 at approximately 14.5 months of age.

Gene Wagner, Concordia, MO.

Performance of the progeny from the two bulls is listed in Table 2 below. Since calves were marketed at various times, with various base prices, I recalculated both groups on exactly the same USPB Base grid using average grid inputs from delivery year 2012. The Choice/Select spread was $10.00/cwt, Prime premium was $25.06/cwt and CAB premium equaled $5.00/cwt.

The calves from bull "A" graded outstanding. By most people's standards, the calves sired by temporary replacement bull "B" also graded quite well, but not as well as those sired by bull "A". In addition, calves from bull "B" also had lighter carcass weights. The calves from bull "A" were **$181.91 more valuable** when priced on the same grid, due to their superior quality grading and heavier carcass weight.

Table 1. Current Expected Progeny Differences

	QSS Bull "A"	Bull "B"
Yearling weight	+105	+67
Marbling	+0.59	+0.37
Ribeye	+0.56	+0.44
Backfat	-0.037	-0.017
$B Value	+78.72	+66.00

Table 2. Progeny Data From Two Sires

	QSS Bull "A"	Bull "B"
Harvest year	2010	2011
Head	25	28
Carcass weight	756.00	697.70
Prime, %	23.28	0
Choice & Prime, %	100.00	85.73
CAB, %	65.65	31.42
BCPR, %	6.70	21.09
Select, %	0	14.27
Yield Grade 1, %	4.01	0
Yield Grade 2, %	20.98	28.91
Yield Grade 3, %	71.03	60.52
Yield Grade 4, %	3.98	10.58
Carcass $/cwt	$207.98	$199.26
Carcass $/head	$1572.21	$1390.30

Bull "A" sired 25 calves during his initial breeding season, which produced a total **added value of $4,548**. If he had produced a more normal industry average four calf crops, he would have added **$18,191 more value**. However, Gene Wagner has both a spring and a fall calving herd. So double the total number of calves, and that now translates to a grand total of **$36,382 more total <u>additional</u> value** of carcasses produced from a "great" bull compared to a "good" bull. That makes spending more for a better bull look like a much better investment. Remember, this is just the **DIFFERENCE** in value, not the **TOTAL**!

You might point out that any bull has the risk of becoming injured or needing to be culled early like bull "A" did. Well, Gene returned the salvage value of the bull to the breeder and then received a full credit, equal to his original payment for bull "A", on his next purchase in that QSS breeder's next sale. Now that's great customer service!

And, by the way, Gene reports that, so far, the bull he purchased to replace bull "A" is doing even better: 56% Prime, 100% Choice & Prime. So it really does pay to turn genetics over and move on to the next, newer, better generation!

If you are interested in learning more about USPB's Qualified Seedstock Supplier members, visit www.uspremiumbeef.com/QualifiedFYSS.aspx. ♦