$PROFIT™

Why $Profit:

Today, ranchers have to make proper genetic decisions to improve profitability and the return on their investment. However, most seedstock providers confuse potential customers with too many EPDs. Most Angus have over 25 EPDs plus DNA rankings are also often provided. While this data is useful, it is also very hard to analyze. This makes buying the best bull very difficult. Every bull is good on some traits and weak on others. The challenge is figuring out how each of those traits is going to impact your bottom line. Buyers try to determine which bull will make the most money from birth to slaughter, but most of the time, they end up guessing.

When Boeing Airlines starts to build a plane, do you think they guess how it is going to fly? How much fuel it is going to use? How many pounds of cargo it can carry? No, they don't guess – instead they use their knowledge to build a computer program the simulates the outcomes based on the design of the plane that they have in mind. This same simulation technology can be used in beef cattle to improve selection decisions.

How $Profit works:

$Profit is based on results from an advanced simulation model, developed by Dr. Steve Miller (now the Director of Genetic Research at the American Angus Association) in conjunction with other geneticists at Guelph University. The simulation develops partial budgets that look at how a genetic factor influences cost and/or revenue. The model factors in all of the effects on both income and expense to come up with a net profit figure for each bull.

$Profit assumes that the average commercial bull will have 100 progeny over its lifetime. The model assumes that you keep 30% of your heifers as replacements and that you retain ownership on the remainder of the calves through harvest. Further, it assumes that you will sell on a grid with premiums for quality grade and yield grade.

Most importantly, $Profit allows you to easily compare any two bulls and calculate the difference in profit that they are expected to generate in your herd. Let's compare a $14,000 $Profit bull to $10,000 $Profit bull. The predicted difference between the bulls is $4,000 or about $40 per calf. For comparison, the average 2015 Angus bull has a $Profit of approximately $9000.

What traits are included in $Profit:

$Profit includes nearly every trait that impacts profitability. The effect of most traits on profit is fairly simple to understand. Here is the list of what is included and its effect:

Revenue Traits

Calving ease = more calves means more revenue.

Weaning & yearling EPD = more weight equals more revue.

Fertility (days to conception) = more weight and more calves

Carcass weight = worth more up to 477 kg.

Marbling = valued based on grid premiums

Ribeye area = value as impacts yield grade

% Retail Product = more yield is more saleable meat

Cost Traits

Cow mature size = bigger eats & costs more

Cow intake = more intake eats & costs more

Feedlot feed efficiency = more feed per kg of gain means more cost

Some traits are not so easily characterized for $Profit. Milk, for example, is a good thing until you get too much. When over +25, milk EPD has a more negative effect on fertility than it has a positive effect on weaning weight. There are a few traits not yet included in $Profit: longevity, structure, and disposition. These traits are important but difficult to express in dollars.

Feed Efficiency EPDs Explained:

Feed:Gain: Difference in the amount of feed a bull's progeny will consume to produce one pound of gain.

Example: *A -0.50 F:G EPD means this animal's progeny will consume 1/2 pound less feed per pound of gain than would progeny of a zero F:G EPD sire.*

Feed Intake: Difference in feed consumption of each of a bull's progeny in a 112 day feeding period.

Example: *A steer whose sire has a -100 Intake EPD will eat one hundred pounds less feed in 112 days than one whose sire had a zero Intake EPD.*

EPD Definitions

Genetic prediction values from the $Profit Share program are generated on an across breed basis. This means that all animals can be compared regardless of their breed or breed mix. Further, when applicable, all EPD values are directly comparable to their equivalent in the American Angus Association. Definitions for the values on each trait follows:

1. Birth weight EPD is expressed with a base equivalent to that of the American Angus Association. Weaning weight EPD is expressed on an American Angus Association scale.

2. Yearling EPD is expressed on an American Angus Association scale.

3. Milk EPD is expressed on an American Angus Association scale. This is the best predictor of a bull's daughter's ability to milk. It measures the difference in weaning weight that will be produced between one bull's daughters and another bull's daughters due solely to milk.

4. IMF is the ultrasound based EPD and is expressed on an American Angus Association scale.

5. REA is the ultrasound based EPD for ribeye area and is expressed on an American Angus Association scale.

6. MWT is the predicted mature weight of daughters from your bull. A bull with a MWT of +0 should produce 1250 pound cows under most conditions. From this, simply add the MWT EPD to 1250 to get a good prediction of what a particular bull's daughters will weigh. If your conditions are better, then you will experience heavier weights than those predicted. This EPD is the best indicator of daughter size -- far better than frame score or yearling height.

7. F:G is the pedigree estimated feed to gain EPD that predicts the feedlot efficiency of the bulls offspring. A negative number means that the bull's progeny will use less feed to gain a pound of live weight. Example: -0.50 means that the bulls progeny will require ½ pound less dry matter feed per pound of gain.

8. Intake: is an estimate of the amount of feed that the bull's progeny will consume over a 112 day feeding period. Animals with higher intake will consume more throughout their life. Animals with lower intake will consume less. This is the best prediction of the feed needs for a bull's steer offspring and for the feed needs of daughters.

9. YHT is an EPD predicting a sire's ability to transmit yearling height, expressed in inches, compared to the that of other sires.

10. SC is an EPD expressed in centimeters, predicting the difference in transmitting ability of scrotal size compared to that of other sires.

11. $Ranch EPD: This Leachman profit index predicts weaning profitability based on calving ease, weaning weight, maternal milk, cow cost, and FERTILITY. It is based on producing 100 calves. Selection for this index will increase profit per acre and decrease cow size.

12. $Feeder: This number is expressed in terms of the bull's added value to the sale price of your feeder calves. It is expressed in dollars per head. Thus when comparing a +100 bull vs. a +50 bull, we expect the first bull to sire calves worth $50 per head more at weaning (regardless of their weight).

13. $Profit™ EPD: One, simple, proven number that gives each trait a weight according to its impact on profit. This takes into account fertility, growth, feed intake, and carcass merit. This index is the fastest method to improve the overall profitability of a herd of beef cattle.

Quote from Lee or to use without a source:

"On the Ranch, In the Feedlot, & On the Rail, $Profit™ simply works!"

~ Lee Leachman