

We found a Better Way to identify genetics that improve Ranchers' profitability.

Multiple factors influence profit and genetics is definitely one of those that we can help you with. During the past three decades, pork and poultry have used genetics to increase feed efficiency, improve their product and take some of our market share. During that same time period, beef has used superior genetics to improve our industry averages from 50% to 80% Choice or better and from 3% Prime to 9% Prime. Our R.A. Brown Ranch carcass data over the past 5 years is averaging 100% Choice or better and 49% Prime. Genetic selection helps you make long term improvements by reducing input costs and improving profit margins. But there are so many traits that contribute to a healthy bottom line, and so many EPDs that describe those traits. American Angus currently publishes 22 EPDs and 7 economic selection indexes. How does a rancher find the time to understand and then prioritize all those different numbers? Then they have to start all over if they have a second or third breed? What if all of that could be boiled down to one number that would be relevant for all cattlemen - regardless of when they market their cattle, and regardless of which and how many breeds they utilize? We've found that tool. **It's called \$PROFIT, and it includes and weighs all of the economically relevant traits and returns one number that predicts each animal's impact on your bottom line.**

How \$PROFIT works:

\$Profit assumes that the average commercial bull will produce 100 calves during 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 finishing and sell them on a value-based grid. The \$PROFIT simulation model then adds up impacts of all the revenue generating traits and subtracts the effects of the expense traits to produce a net profit figure for each animal. \$PROFIT boils all of those traits down to one number, and allows you to compare any two bulls and calculate the difference in profit that they are expected to generate over their useful lifetime in your herd.

\$PROFIT Example:

Good Bull A: \$11,000 \$PROFIT

Great Bull B: \$15,000 \$PROFIT

Top 1% Bull C: \$20,000 \$PROFIT

Bull C exceeds Bull B by \$5,000 (\$50 per calf*)

Bull C exceeds Bull A by \$9,000 (\$90 per calf*)

Bull B exceeds Bull A by \$4,000 (\$40 per calf*)

**Remember, \$Profit assumes each bull produces 100 calves over their service to your herd, so divide \$PROFIT by 100 to find differences in profitability on a per calf basis.*

*"We've invested significant resources in tools to help our customers make the best informed bull selection decisions; 20+ years of structured carcass testing, Total Herd Reporting, DNA/Genomic Enhanced EPDs and more recently Feed Efficiency data. **\$PROFIT is the #1 tool that simplifies the selection process.** It considers all the data for all the traits and returns one number that reflects each bull's contribution to ranchers' Profit."*

- Donnell Brown, R.A. Brown Ranch



What traits are 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 contribution towards profit:

Profit from Birth to Weaning = \$Ranch

- Fertility - more calves and more calves born early in the season
- Calving Ease - more live calves born with less labor and therefore more calves to sell, plus females that breed back earlier due to less stress
- Milk - enough but not too much
- Growth (Weaning Weight) - bigger pay-weights
- Cow Feed Intake - 70% of annual cow cost
- Mature Cow Size - not too big, not too small, just right to fit your environment

Profit from Weaning to Harvest

- Feed Efficiency - cost of gain
- Growth (post-weaning gain) - reduce days to harvest, heavier pay-weights
- Quality Grade - premium prices for premium-Choice, big premiums for Prime
- Yield Grade - 1's & 2's earn premiums, 4's & 5's earn discounts
- Carcass Weight - heavier pays more up to 1050 lbs.

\$ PROFIT = One Number that Predicts your Bottom Line!

\$PROFIT understands the concept of diminishing returns! Some traits' impact on profit are not so easily characterized. Milk and cow size, for example, are good things until you get too much, then they increase the cow's nutritional requirements beyond the environment's capacity. This outcome often results in a negative effect on fertility that is greater than its positive effect on weaning weight. This outcome often results in a negative effect on fertility that is greater than its positive effect on weaning weight. This ability to seek optimal levels of trait is a more recent development in selection index science that is used in \$Profit and \$Ranch.



The entire suite of \$Profit indexes are comparable across breeds, so they work equally well for our Angus, Red Angus, Black/Reds and SimAngus.



Measuring the Expense side of Ranchers' Profit Equation

Since the first time we ran calves across the scales one at a time - the contest was on. It became about bragging rights. Bigger was better, heavier was better, faster gains were better; Always...Right? For decades that mindset drove selection. Maximum performance, no matter the cost. We were gaining more weight but not necessarily very efficiently - nor profitably. And sometimes that "max growth" came with collateral damage: YG 4 & 5 discounts, cows that ate us out of house and home, feedlot mortality increased as skeletal and muscle growth exceeded the organs' capacity to support it. In 2016 we invested in the hardware, software and labor to measure individual feed efficiency, and the results were eye opening. We found that improved feed conversion comes in all shapes and sizes, more importantly we identified the sire lines that convert feed more efficiently and more profitably. Even more exciting is the positive relationship between the feed efficiency of a bull in a feedlot and that of his sister on pasture. In other words, efficiency gained in yearling bulls will translate to better efficiency in his daughters that go back into your cow herd.

Feed:Gain (F:G)

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

F:G Example:

Bull A:	-.25	F:G EPD
Bull B:	.00	F:G EPD

Bull A would be expected to sire progeny that consume 1/4 lb less feed for each pound of gain.



"Maternal traits are the immediate profit drivers for ranchers, but if we want to build repeat buyers who compete on our calves annually, then we must continue adding growth & carcass traits when making our bull selections."

*- Clint Berry,
Superior Livestock*

But I sell calves at weaning...why should I care about feed efficiency or any other post weaning traits?

Most of our customers don't retain ownership; they sell weaned calves or yearlings. However, our experience is that those ranchers who do the best job of quantifying the genetics behind the calves they sell are the ones featured in the sale reports. Cattle Feeders have repeatedly shown their willingness to pay premiums for calves with known genetics for profitable feed conversion and premium carcass merit. Repeatable performance enhances the reputation of your cattle for the traits that dictate post-weaning profitability. It becomes part of your brand - worn by the cattle you bring to market, and anticipated by the folks bidding on your calves.



Selecting for higher **\$PROFIT** earned this ranch an extra \$122/hd.

By changing their bulls from \$8,400 \$Profit to \$10,600 \$Profit, the L U Ranch dramatically improved the closeouts on their 675+ steers at the Decatur County Feed Yard.

	More Gain lbs/day	Less Feed DMI/hd/day	Improved Efficiency feed:gain	More Ribeye sq in.	More Marbling % Premiums	Heavier Carcass Wt lbs	Profit Advantage
2008	3.6	19.8	5.4	12.5	26%	816	
2012	3.8	18.4	4.9	13.4	49%	862	+ \$122 [1]

[1] - Profit advantage based on constant feed costs and the same market prices during that period of time)



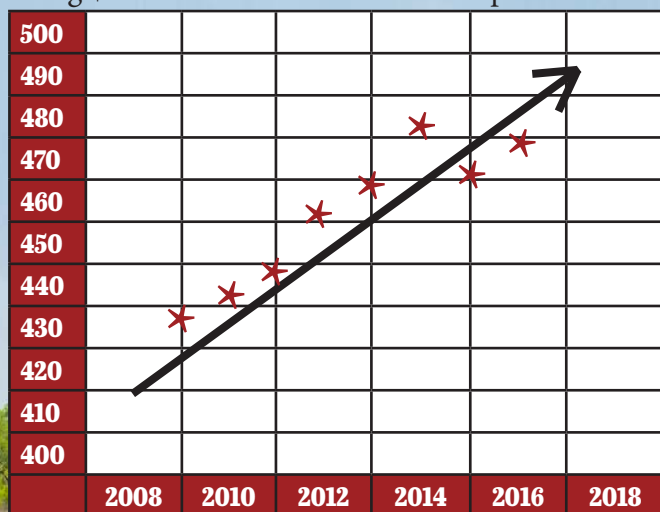
Buyers Know!

When feeder cattle are backed by generations of high **\$PROFIT**, feed efficient bull selection decisions!

Rob A. & Talley Brown, Stinnett, TX (pictured left) topped Superior's Bighorn Classic in August, 2020, when their 825 lb yearlings fetched \$170.50/cwt. - that dollars out at over \$1400 per head!

Use **\$RANCH** to improve cow herd efficiency.

Using \$Ranch to select over 250 bulls purchased since 2007, the IX Ranch in Big Sandy, MT has these results:



- Weaned calf crop percentage up 6%!
- Pounds weaned per cow exposed up 12%!
- Cow size down.

Selection for \$RANCH improves all the cow herd building traits that result in more total pounds weaned off a fixed land or feed resource.



Two Annual Bull Sales
2nd Wednesdays of March & October.
Throckmorton, Texas • 940-849-0611

RABrownRanch.com

