

# ECONOMICS OF BULL SELECTION

**Minnie Lou Bradley**

Bradley 3 Ranch Ltd.  
Memphis, Texas

Commercial cattlemen are asking what can you afford to pay for a bull and the purebred breeder is asking how much he can ask his customers to pay for a bull.

Bulls come in an assortment of packages, and their real value varies with each package. If I were an economics professor, I would not give you a straight answer but would tell you that it depended on conditions, for once I guess I can agree with the professors. It depends on information that is available on the bull.

Each set of cows has different needs to improve their calves genetics as does each cowman who sets his goals to improve his bottom line through his cattle's ability to perform efficiently. How does one determine the value of a bull?

When we go to purchase a bull, do we look at the *cost* that day or are we thinking of him as an *investment*.

Let's visit with a cowboy neighbor of mine who looks at that day's *cost* when buying a bull. He called me the other day and asked if I might have a low birth weight, calving ease bull for sale. I told him I believed I did and gave him the bull's birth weight, his sire and dam's birth EPD and then the actual weight of the other calves sired by the bull. Second question, he wanted to know what the bull would *cost*. He said the bull was too high but would come and look.

Up-front *cost* is his problem, instead of treating the bull as an *investment* his only concern is *cost* the day of purchase.

When he arrived later that day, I could tell he was stressed out. I have some real

comfortable chairs in the office and I could tell he was tired and just wanted to sit a while and relax. He then began to tell me of all his problems in calving out his first calf heifers. He had lost a lot of sleep, he was tired, the ordeal had been costly, he had lost calves, had to assist around 70% of the heifers and had to have the veterinarian out on some occasions.

Trying to figure out where things went wrong, I asked him to tell me about the bull that was siring the big calves. Did he purchase him for a light birth weight bull, what was his accuracies, and what was his breeding?

His answers took away any sympathy I might have had for his plight. The fellow he purchased the bull from didn't keep any records nor furnish papers on the bull, he was a low cost purebred breeder who sold his bulls cheaper than others, all he really knew about the bull was that he was *supposed* to be an *Angus*. With information available on most all breeds of cattle, how could anyone put an *unknown* out with a set of 27 heifers when it has been proven over and over that you have \$1000 in each replacement heifer by the time she is up to calving. How do you figure that kind of *cost*?

Perhaps we can price a bull with some degree of real value by following the automobile industry. They price the basics and then add dollars for the extras. Since our ranch's livelihood comes from the sale of bulls, to the commercial cowman, I thought it imperative that I derive some method of determining a base price and then adding to the price according to a bull's chance of producing a calf superior in economic traits over the average bull in our herd.

### BASE PRICE

Before we place a base price on a bull he has to pass the basic test for fertility, scrotal circumference, semen quality, structural soundness, must be a bull that will sire a calf that will not cause trauma to a mature cow, must have a gentle quite temperament and cannot have had his feet trimmed.

If he passes all of the above the base price is placed on him, if he fails on any of the above he is removed from the sale list.

Base price is the value of 400 - 500 lb steer calves based on the markets across the country on the date we are ready to price our bulls. At \$77.00 COOT, the base price becomes some \$1540.

A bull adds value to the base price by being above the herd average, we use ratios and all our bulls are in one contemporary group, the larger the group the more accurate the ratios become.

	Ratio	Added Value
Weaning wt	100-105	\$100
	106-110	\$200
365 day wt	100-105	\$100
	106-110	\$200
Conversion	100-105	\$100
	106-110	\$200
Carcass	Y.G. 1	\$200
	Y.G. 2	\$100

Yield grades are determined by a formula that uses the size of the rib-eye, carcass weight, back fat, kidney and pelvic fat. Ultrasound now has the capabilities of measuring these areas on a bull.

Quality grades denotes marbling score, Choice or above	\$200
Clean health record	\$100
Lifetime production of dam, calved every 12 mo.	\$100
Dam of bull has weaned at least 50% of her body wt.	\$100

### SALE PRICE

If a bull was number one in each trait listed, his value would be base price, \$1540 plus \$1300, for a TOTAL of \$2840

Is he worth that amount in a commercial cow herd?

Total cost of bull	\$2840
Interest 10%, 3 yrs	\$852
<b>TOTAL</b>	<b>\$3692</b>
Plus death loss or cripple	\$369 (10%)
Less salvage value	\$1000 (2000 lb)
<b>TOTAL</b>	<b>\$3061</b>

\$3061 ÷ 125 calves, cost to sire a calf: \$24.48

Can we afford the better performing bulls?

**Example:**

Conversion 7 to 1 .06 cost of gain (600 lbs)	\$252
5 to 1 .06	\$180
A difference of \$72.00 per head	
Weaning wt. 600 lbs @ .65	\$390
500 lbs @ .70	\$350
A difference of \$40.00 per head	
Yield grade 1 (vs.) yield grade 3 (700 lbs)	\$70

Pretty exciting when we can see only one economic trait can pay for the entire cost of a calf's sire by having information available. A bull is just another bull without information. Competition may be great for those bulls exhibiting high performance in several of the economic traits so a \$3000 - \$4000 figure may be pretty realistic but I doubt a commercial operator should pay much more.

From these figures, the commercial man can afford to buy the better bulls and the purebred operator can afford to sell them, each profit from having this information.