

IS FEED CONVERSION A MUCH MORE ECONOMICALLY IMPORTANT TRAIT THAN QUALITY GRADE AND IF SO – HOW MUCH MORE??

For the last 10 to 15 years a lot of emphasis has been placed on carcass traits – mainly yield grade and quality grade. Remember the war on fat? Where did that concern go since we have not heard much about it for a long time? Did we wage a war? I don't think we even put up a good scrimmage much less a war. A lot of finished cattle today are 10 to 15% Y.G. 4's. When we "waged the war" it was about 5 to 7%.

Now let's address quality grade. There is no doubt that all research shows that increased marbling makes beef more juicy and favorable and maybe a little more tender, but for sure more juicy and with more flavorful. We do not need much research to prove this point. We all know the high end restaurants usually serve high marbled beef. It's also a given that we want beef to taste good, therefore I have no argument with trying to make cattle marble. Where I disagree is with the mindset that marbling also adds big bucks to the bottom line. Let's examine the economics of that idea.

Cattle purchased at sale barns with unknown genetics by a cattle feeder and fed with a modest implant program will grade on the average about 55% choice. Cattle bred for high marbling will average about 85% choice. There is the occasional pen that will grade 90 to 95% choice, but if you try to accumulate numbers of cattle you cannot maintain 90 to 95% choice. So, we mostly have a 30% increase in quality grade with genetic selection. The value per head of this 30% increase is as follows:

The last 15 years the average spread between choice and select grades has been \$7/cwt. $\$7 \times 30\% = \$2.10/\text{cwt}$ $\times 800$ lbs of carcass weight = \$16.80 per head. How do some people come up with numbers so much higher? They assume cattle not bred and selected for marbling will grade 0% choice. It would take a real poor order buyer and a poorer cattle feeder to get 0% quality grade on a set of cattle. Sponge Bob could get better than 0% choice cattle. Using 0% and a \$7 spread the math shows: $\$7 \times 100\% = \$7/\text{cwt} \times 800$ lbs = \$56 per head. This is voodoo economics big time.

Now let's look at feed conversion. Most steer cattle will convert on a good nutritional program at about 6.5 to 1. A small 7.5% change in conversion (not a 30% change as above with marbling) results in a ½ pound improvement in conversion (i.e. 6 pounds of feed for each pound of gain vs. 6.5 pounds for each pound of gain). The dollars per head profit are as follows:

- 1.) Assume you are putting on 700 pounds of gain on a 600 pound calf.
- 2.) 700 lbs $\times .5$ lb improvement in conversion = 350 lbs of feed savings.
- 3.) At a feed cost of $\$250/\text{ton} = \$.125/\text{pound}$ of feed $\times 350$ lbs of feed = \$43 per head or approximately 3 times more economically important than quality grade. Last summer with \$8/bushel corn this number was approximately \$62/head.

The bottom line to all of this is we should be and can be selecting for both traits. This is one more example of the problem with single trait selection. We have to do what is good for beef quality, but we must look out for ourselves and pay lots of attention to traits that help the cattlemen with their bottom line.

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