SPITZER RANCH Brangus Cattle Exhibit High Marbling

Recent beef industry discussions, general criticisms of Bos Indicus cattle on carcass quality and advertisements promoting carcass genetics from various ranching programs of several breeds prompted a critical evaluation of where the Spitzer Ranch cow herd stood as to genetic attributes for marbling as measured by %IMF. While a live calf and fast growth to weaning and yearling age are critical profit drivers in the beef industry, carcass quality is important and will become an even more critical consideration in the future.

USDA beef carcass graders use Marbling Scores to sort beef carcasses into the quality grades we know as Prime (P), Choice (C), Select (SL) and Standard (ST). These Marbling Scores are an evaluation of the amount and distribution of fat within the lean of the cut surface of the rib eye muscle between the 12th and 13th rib. Technically there are ten USDA Quality Grades for "A" maturity cattle (9 to 30 months of age). From the top: P+, P, P- then C+, C, C- then SL+, SL- and finally ST+ and ST-. Practically, however, the meat industry usually lumps carcasses from these grades to **PRIME**, **PREMIUM CHOICE** (Choice+ and Choice Combined), **CHOICE** (Choice-), **SELECT** and **STANDARD**. The negative stigma of the Standard grade is such that most carcasses that would grade Standard are not graded but called "NO ROLL".

Since carcass characteristics in bulls and replacement females cannot be directly measured, seedstock breeders use ultrasound scanning to measure percent intramuscular fat (%IMF) which is directly tied to the Marbling Scores used by USDA graders (See Table). Quite simply a feedlot steer or heifer with an ultrasound scan of a minimum 4.0% IMF would be

CHOICE and it would take a minimum of 5.8% IMF to be PREMIUM CHOICE with anything above 9.9% IMF being PRIME.

QUALITY GRADE	MARBLING SCORE	%IMF
PRIME-	Slightly Abundant	9.9%
CHOICE+	Moderate	7.7%
CHOICE	Modest	5.8%
CHOICE-	Small	4.0%

We also need to recognize that feedlot steers and heifers are usually fed to a finished weight based on a "fat endpoint" of 0.45 to 0.50 inches. This fat thickness is also estimated over the rib eye muscle and usually is a visual estimate but some feedlots are using ultrasound scans to get a better prediction. Therefore, these carcass quality grades are based off of a 9 to 30 month old steer or heifer on feed long enough to achieve, ideally, no more than one half inch of outside fat. Most data would indicate that an animal will either "grade" (that is have at least 4.0% IMF) at that amount of fat or they do not have the genetic capability to do so. Additionally 0.50 inch of fat also safely keeps animals in Yield Grade 3.

Finally is a little confusion because breed association records adjust %IMF to an age constant (365-Day Yearling) basis and ignore fat thickness. And, because of physiological differences, yearling bulls and replacement females (the way most are developed) are not the same as feedlot steers and heifers. Yearling bulls and heifers have less intramuscular fat than feedlot steers or heifers. Data are a little confusing, but would indicate yearling bulls will have 1.5% to 2.0% less IMF than if they were feedlot steers and yearling replacement females will have about 1.0% less IMF than if they were feedlot heifers.

On to the %IMF evaluation of the SPITZER RANCH cow herd. As of January 1, 2012 their cow herd numbered 63 **Brangus Females** carrying the SPITZER RANCH Box Corner S brand. Five of those were born before they began carcass ultrasound scanning in 2001. It is exciting to report that those 58 ten-year-old and younger females had an average **IMF of 4.5%**

at only 0.25 inches FAT as yearling heifers. At that age they were 300 to 400 pounds lighter and carried one quarter inch less fat than had they been feedlot heifers ready to process and they already graded CHOICE. Had those females actually been in the feedlot, they would surely have had an average IMF of 5.8% or more and would have graded PREMIUM CHOICE. Even more revealing is to break those **Brangus Females** by age grouping where females aged five and less average 4.7% IMF while yearlings, two-year-olds and three-year-olds average 4.9% IMF. The Spitzers must be driving genetic selection in the right direction since the 19 yearling Brangus heifers in this spring's breeding pasture average a fantastic 5.4% IMF. Not to forget other traits that are even larger drivers of profit, the entire SPITZER RANCH herd of 58 Brangus Females with a 4.5% IMF at 0.25 inches of fat when they were yearling heifers also averaged a REA scan of 9.6 sq in, a -0.2 # BW EPD and a 49 # YW EPD all on a frame score averaging 6.2.

Genetic selection works and you can genetically select a herd of Brangus Females that can compete with Angus from a %IMF standpoint. Additionally Brangus can provide industry leading genetics for growth traits while holding birth weights and calving problems in check. The final Brangus trump card is the amount of heterosis generated from crossing Brangus with other breeds predominant in the current commercial beef industry.

Do you need to **improve your Genetics for %IMF** while still herding birth weights and yearling weights in the right direction and holding frame score in check? Then please give SPITZER RANCH GENETICS a closer look! The 2013 SPITZER RANCH PROFESSIONAL CATTLEMEN'S BRANGUS BULL SALE and CUSTOMER COMMERCIAL BRANGUS FEMALE SALE are scheduled for Saturday, February 23, 2013. Please mark your calendar now so as not to miss out on an outstanding set of Brangus Bulls and a super set of Commercial Brangus Crossbred Females. They extend you a personal invitation to have your name added to their mailing list. Their twice per year Newsletters always provide current Bull Test

Performance Reports as well as educational tips, inspiration and insights into a variety of timely topics of interest to those cattlemen whose goal is increased profitability. Just call 864/972-9140, write SPITZER RANCH, 1511 HWY 59, Fair Play, SC, 29643 or send an email note to spitzeranch@mindspring.com. Be sure to visit them at www.srbulls.com and follow their posts and QUOTE OF THE WEEK on Facebook.

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