

## **Interpreting the Ultrasound Data**

*Please feel free to print this in your catalog as an explanation of the ultrasound data for your customers.*

The ultrasound traits measured are rump and rib fat, ribeye area, and % intramuscular fat (IMF). The ribeye image is collected between the 12-13th ribs where the rib fat and ribeye area are measured. The IMF images are evaluated between the 12-13th ribs as well, but in longitudinal images instead. In fact, a minimum of four IMF images are collected and the values are averaged. This value would be correlated to the marbling trait for quality grade. The rump fat image is collected between the hooks and the pins of the animal and gives another indication of external body fat.

Ultrasound data can be evaluated similarly to other performance traits. Ultrasound EPD's should be the best indicator of an animal's carcass trait potential. Like other performance traits, find the breed average of each trait and compare that to the animal's EPDs in question. Above average means the offspring are likely to have a higher than average value of a given trait (depending on the accuracy value). To increase values of a certain trait in your herd, choose the higher EPDs for that trait.

Another method of reporting ultrasound data is in ratios, 100 being average. The ratios of any given trait take into consideration the average of the contemporary group (animals of the same sex managed together with the same diet and environment). An animal with a ratio above 100 for a given trait would have a higher than average adjusted value for that trait. Again, if you are looking to increase a trait's value, look for a ratio over 100. Ratios do not have the benefit of utilizing ancestral information as EPDs do, but can still be a meaningful tool within the contemporary group.

Age adjusted values or the actual values may be reported in some instances along with EPDs or ratios. Like other performance data, actual values are more of an indication of management or age of an animal. For instance, a 600 pound weaning weight is not an indication of an animal's performance without knowing if 600 pounds is above or below average in its contemporary group. Likewise, ultrasound values, adjusted or actual, do not indicate the potential of an animal. It is unfair to compare one ranch to another based on actual or adjusted values. That would only be differentiating management practices or feeding programs. Actual values should be adjusted and adjusted values should be evaluated within contemporary groups.

Ultrasound has become a useful tool in evaluating live animals for carcass traits. The ultrasound measurements correspond to the carcass traits evaluated to determine Yield Grade and Quality Grade. Perhaps the greatest advantage of ultrasound data is that the dams, as well as the sires, can be included in an individual's EPD's.

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