Carcass Ultrasound Scanning for Breeding Cattle Selection

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Why do we use ultrasound?

Ultrasound technology allows for the capture and standardization of carcass information on live cattle without the need for harvest. Research has indicated that cattle breeders can scan yearling bulls and heifers for carcass traits and have this information included for National Cattle Evaluation ultrasound Expected Progeny Difference (EPD) values. Ultrasound EPDs are equivalent to carcass EPDs and may someday completely replace carcass EPDs. Certified ultrasound technicians collect the images and send them to certified independent labs where the images are interpreted for:

> ➢ rump fat
> ➢ 12-13th rib fat thickness
> ➢ ribeye area
> ➢ percent intramuscular fat (marbling)

The measurements are sent to the appropriate breed associations for database storage and preparation of the performance records to be sent back to the breeder.   This tool is currently being used at Lake City for selection and breeding decisions in the Red Angus cow herd.

At what age do we scan cattle?

Yearling heifers and bulls

Scans: Yearling heifers and bulls are scanned when they are in a breed specific age range and adjusted to 365 days of age for bulls and 390 day of age for heifers. All cattle within a contemporary group are to be scanned on the same day or over no more than three consecutive days.

Weights: Body weight is a factor when calculating the carcass EPD values. Yearling heifer and bull weights are recorded within seven (7) days of the scan date.

Scanning for Harvest Timing;

Ultrasound can also be used to predict or schedule market readiness. This is done by scanning for 12th rib fat thickness and scheduling cattle for marketing. This creates a much more uniform product that hits specific marketing requirements. This tool is currently being used at Lake City for harvest timing for the grass finished cattle.