Selection Decisions Using Ultrasound Measurements

The use of real-time ultrasound offers beef producers a new tool to make genetic improvement within their herds. The measurement for ribeye area (REA), fat thickness (or back fat) and percent intramuscular fat (%IM/FAT or marbling) are taken at the 12-13th rib of each animal as we take the bulls off of test. Back Fat, %IM/FAT and REA area will be printed on the sale day data sheet.

**RIBEYE AREA (REA)** is measured in square inches. The heritability of this trait is moderately high, meaning that the trait will most likely be passed on to progeny. REA/CWT of 1.11 is the industry average.

**FAT THICKNESS** is measured in inches. Fat thickness is slightly lower in heritability than ribeye area.

**MARBLING** is measured as percent of fat (%IM/FAT). Heritability for marbling is in the moderate range. Real-time ultrasound has the capability to predict the actual percent fat (marbling) in the ribeye muscle which is what the USDA grader is trying to visually evaluate.

According to ultrasound technician Raethel King, a score of 3.5 for a bull would be a choice grade. Scan data is most useful in identifying sires or bloodlines that are superior or inferior for a particular trait.