



Texas Tech University

Carcass Data Collection and Management

1. Always define the data collection rules and expectations when training new personnel. It is everyone's responsibility to make sure the data is collected in a professional, organized manner with only the highest quality of data being accepted.
2. Texas Tech personnel should collect all data on approved data sheets using a black sharpie or black ballpoint pen.
3. All data sheets shall contain the project name, date and data recorder.
4. Any mistakes shall be crossed thru one time and initialed and the new information recorded next to the incorrect information.
5. All data sheets shall be copied at the end of each working day and filed in two separate notebooks (one containing copies and one containing originals). Any work done on disk shall be backed-up on a specified hard drive and additional disk at the end of each working day.
6. Always define the following for new carcass data collection personnel during their training:
 - A. Rail out: Is a carcass that is retained on the slaughter floor from the rest of the lot as a result of either contamination or pathological problems. If the carcass is not condemned and can be trimmed and pass USDA inspection, then it will be put in the cooler at a later time.
 - B. PYG – Preliminary Yield Grade: The measure of fat thickness at three - fourths the distance across the ribeye from the backbone end at the 12th rib
 - C. APYG – Adjusted Preliminary Yield Grade: The adjustment to the PYG as a result of looking at the fat in all places on the carcass.
 - D. REA – Ribeye Area: The area of the ribeye in square inches.
 - E. Dark Cutter: Is a carcass that has dark purple muscle color and is reduced in USDA Quality Grade by either 1/3, 1/2, or 1 full USDA Quality grade. Dark cutting is a condition that results from long-term stress before slaughter. The stress depletes the glycogen from the muscle and causes the pH to be higher after the muscle goes into rigor.
 - F. Blood splash: A condition in which a carcass had capillaries rupture in the muscle during bleeding on the slaughter floor. It results in a large discount for most carcasses.

G. KPHF %: Kidney, pelvic and heart fat percentage – the kidney, pelvic and heart fat in a carcass expressed as a percentage of hot carcass weight. A carcass with 3.5% KPH is adjusted -.0 of a yield grade; a carcass is adjusted $\pm .1$ for each 0.5% increase or decrease in KPH. For example: 4.5% = -.2, 4.0% = +.1, 3.5% = .0, 3.0% = -.1, 2.5% = -.2, 2.0% = -.3, 1.5% = -.4, 1.0% = -.5, and 0.5% = -.6.

H. Heat ring: A condition that results from the rapid chilling of prerigor muscle and can result in a lower quality grade.

Heat ring, dark cutter and blood splash all are recorded on a 5-point scale with 5 = no heat ring, dark cutter or blood splash, and 1 = extreme heat ring, dark cutter or blood splash as shown on the attached Texas Tech University beef carcass data collection sheet.

I. Lean Color: The evaluation of the color of the cut surface of the ribeye. It is used to determine the quality of the lean.

J. Lean Texture: The evaluation of the fineness or coarseness of the lean of the cut surface of the ribeye.

K. Lean Firmness: The evaluation of the firmness or softness of the cut surface of the ribeye and should be made by touching the ribeye surface by the evaluator.

Lean color, texture and firmness all are evaluated on an 8-point scale with 8 = extremely bright cherry red, fine and firm lean and 1 = extremely dark purple red, coarse and soft lean as shown on the attached Texas Tech University beef carcass data collection sheet.

All beef carcass evaluations at Texas Tech University follow the guidelines set by the American Meat Science Association and the National Live Stock and Meat Board Beef Carcass Evaluations Booklet MJ009, 3rd Edition, 1990 and the National Cattlemen's Beef Association Training video.