

CHARACTERISTICS OF 2017 HOUSTON TOP-PLACING STEERS

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Live weight and carcass data are collected on the top two steers in each class at the Houston Livestock Show and Rodeo, a total of 114 head this year. A summary of data from 1974 to 2017 is at <http://animalscience.tamu.edu/livestock-species/beef/publications/#youthprojects>.

The following summarizes 2017 data by characteristic according to type (British, American, Continental). This year, the former Chianina Cross and All Other Breeds and Crosses divisions were combined and separated in three divisions according to dominant hair color (Black, Red, or Other). For averages by type, those three divisions will be included in Continentals.

LIVE WEIGHT – for the eighth year was turned in by the exhibitor, with placing animals reweighed for compliance within five percent. The average was 1253 lb, 11 lb below last year. The recent national average of finished steers is around 1350-1400 lb (closer to that in heavyweight classes in the show), which continues to increase over time. British classes averaged 1256 lb, Americans 1257 lb, and Continentals 1249 lb. The individual range was from 1025 lb to 1453 lb.

CARCASS WEIGHT – averaged 810 lb, ranging from 626 lb to 936 lb. Only 9 (8%) of carcasses weighed more than 900 lb. No carcass was disqualified from carcass premiums for being below 600 lb or above 1000 lb.

DRESSING PERCENT – averaged 64.7%, which is slightly above the industry average of finished cattle. Individuals ranged from 57.2% to 70.2%. Dressing percent averaged 66-67% in the 1980s, when show steers were being shrunk more to produce the relatively shallow bodies generally preferred by most judges at the time.

FAT COVER – averaged 0.50 inches; range was 0.24 to 0.80. Only one carcass was below the minimum requirement for carcass awards of 0.25 inches. British steers averaged highest in thickness and Americans were lowest. Average fat thickness over the last 10 years is 0.48. Lowest average fat of 0.35 to 0.40 occurred in the late 1970s to mid 1980s.

RIBEYE AREA – averaged 16.1 sq in (largest ever), ranging from 12.0 to 20.1. Continentals were slightly larger than British and American. Over the last 10 years, the average has ranged from 15.2 to 16.1. Ribeye area has increased over the years as steers have increased in weight. In the late 1970s, ribeyes averaged from 12.5 to 12.9, but carcass weights averaged only about 700 lb. Many of the high-quality branded beef programs, such as Certified Angus Beef®, have a maximum ribeye area of 16.0 sq in. There were 35% of the 2015 carcasses which exceeded that size.

RIBEYE AREA / CWT CARCASS – is a better indication of muscularity than area alone without consideration of weight. The average this year was 1.98 sq in/cwt carcass. Since 1974, the range had been from 1.73 to 1.92, so the average this year is the largest ever. Continentals were highest and British lowest. There was some thinking that slick-shearing would lead to more muscular animals being favored by judges. Slick-shearing started in 1993 and so has been in effect for 25 years. For the first half of that period the average REA/cwt averaged 1.80 to 1.85. For the last half the average has been about 1.91. So, muscularity of the top two steers at Houston appears to have increased slightly over the last several years.

USDA YIELD GRADE – is based primarily on fat thickness and ribeye area in relation to carcass weight to predict percent lean yield from the high-priced cuts (round, loin, rib, and chuck). Lower numerical Yield Grade equals higher percent lean. This year's average was 2.08 (ranging from 0.8 to 3.5). No carcasses were disqualified from the carcass contest for exceeding Yield Grade 3.5 (industry price discounts usually don't apply up to 4.0). Continentals averaged lower numerical Yield Grades, followed by Americans and British.

MARBLING – is the primary factor in USDA Quality Grade. The average this year was Small 46. (For A Maturity, which was true of all these carcasses, Small 00 is the minimum for USDA Choice.) Continentals were highest and Americans lowest. Marbling has averaged about one-half degree higher since 2000 than in the 1980s to early 90s.

PERCENT LOW CHOICE OR HIGHER – was 68%; current industry average is around 75%. Only three carcasses were disqualified this year for grading Standard. British were highest and Americans lowest. The average marbling of the American group was barely high enough for low Choice grade, so only 48% graded low Choice or higher because a number of American carcasses were just slightly below the minimum marbling for Choice. The average of the past 10 years is 63% compared to an average of only 25% over the 1980s to early 90s.

DARK CUTTER – is a condition generally caused by pre-slaughter stress. In the mid-80s to early 90s there were generally around 25% of carcasses that cut dark. In recent years this has declined significantly and there were only three dark cutters this year.

SUMMARY - Considering the wide range in muscling and fat among these top-placing steers, it is apparent that show judges consider factors, such as structure and general appearance, other than estimated carcass composition. Compared to current industry-wide averages these steers were desirable on average, being only slightly lower in USDA Quality Grade and superior in USDA Yield Grade.