

# 4-H Market Steer Handbook:

## Terms

### Carcass Evaluation Terms

Evaluating the carcass produced is an important phase of the market steer project and is highly recommended as a continuation for 4-H'ers in the program.

You should learn about USDA Quality and Yield Grades of market steers and relationship of muscling and finish to quality and yield grades.

1. Hot carcass weight: Hot carcass weight is the weight taken soon after slaughter before the carcass was chilled. This value is generally obtained from the tag on the carcass in the packing plant.
2. Ribeye area: The ribeye area is measured on the cross section of the ribeye (*longissimus dorsi*) muscle between the 12<sup>th</sup> and 13<sup>th</sup> ribs. A plastic grid overlay is an easy method of measuring the ribeye area.
3. Fat thickness: Fat thickness is the depth of fat over the ribeye muscle at the 12<sup>th</sup> rib. Fat thickness is usually measured to the nearest 0.005 inch with a metal fat probe at a point 3/4 of the length of the ribeye muscle and perpendicular to the outer surface of fat. Fat thickness over the ribeye muscle has the greatest influence on yield grade of your steer than any other carcass trait. The greater the fat, the higher or less desirable is the yield grade.
4. Kidney, pelvic and heart fat percentage should be estimated to the nearest 0.5 percent by a federal grader.
5. Yield grade is a number that represents the percent cutability. Cutability is an estimate of the percentage boneless, closely trimmed retail cuts from the round, loin, rib, and chuck. Yield grade 1 carcasses have a better cutability than yield grade 5 carcasses.
6. Carcass quality grades (Prime, Choice, Select, Standard, etc.) depend largely on the amount of marbling in the ribeye in relation to the age of the animal. Marbling is the small flecks of fat deposited in the ribeye muscle. Marbling is usually evaluated by a USDA grader. To grade Choice, slaughter animals between 10 to 48 months of age, require at least a small degree of marbling.

### Cattle Terms You Should Know

Average Daily Gain(ADG): The weight gain during a feeding period divided by the number of days of the feeding period. For example, if a steer gained 300 pounds during a 100 day period, then its ADG 3.0 pounds per day.

Breed: A group of animals that have similar characteristics which are passed from generation to generation.

Breeder: The owner of the cow (dam) of a calf at the time she was bred.

British breeds: Hereford, Angus, Shorthorn -introduced to the United States in 1800s and of British origin.

Bulls: Uncastrated male cattle of any age.

Calves: Young cattle of either sex less than one year of age.

Castrate: To remove the testes of male cattle.

Concentrate: A high energy feed that is low in fiber and high in energy.

Crossbred: An animal with parents of different breeds.

Dehorn: To remove a calf's horns by mechanical dehorners, sawing or chemical paste. All steers exhibited in 4-H and FFA steer shows must be dehorned.

Dressing: The washing, clipping and grooming of steers before entering the show ring.

Exotic breeds: Breeds of cattle introduced into the United States in the mid 1900s. Most had increased size and growth characteristics. Examples are Charolais, Chianina, Simmental Limousin and similar others.

Finished: A term indicating the steer is sufficiently fattened and grown out for slaughter.

Frame: The size and height a steer possesses.

Grooming: Washing and brushing to train a steer's hair coat in preparation for a show.

Heifers: Female cattle which have not had a calf.

Marbling: The intramuscular or flecks of fat that are distributed throughout the muscle. Marbling is the primary factor that influences quality grade.

Polled: Naturally hornless.

Prospect steer: A 400- to 700-pound weanling calf selected for future show purposes.

Purebred: An animal whose parents are of the same breed and are recorded with the breed's registry.

Registry: An association of one pure breed of cattle designed to keep of official registrations of cattle and to regulate breed activities.

Roughage: A highly fibrous feed such as hay, grass or silage.

Set-up: To position a steers feet properly with a show stick.

Show stick: A metal or wooden stick about 4 1/2 feet long with a hook on the end used to position a steer's feet in the show ring.

Stag: Male cattle that were castrated after secondary sex characteristics developed. Stags appear "bullish". They are coarse at the head, crest and shoulder. Stags do not make good show steers.

Steers: Male cattle that are castrated before reaching sexual maturity.

Straightbred: A purebred animal that is not registered.

Tattoo: Permanent identification of cattle placed in the ears.

TDN: Total digestible nutrients; a valve that indicates the relative energy value of a feed. The greater the valve, the greater the energy content of the feed.

Weanling: A young calf of either sex, usually 6 to 9 months of age, that had been separated or "weaned" from its mother.

Weight Per Day of Age (WDA): The weight of the steer divided by his age in days.

Quality Grade: An evaluation of eating quality based upon carcass marbling and maturity. Example USDA quality grades are Prime, Choice, Select and Standard.

Yield Grade: A number grade from 1 (best) to 5 (poorest) that is used to identify the percent boneless, closely trimmed retail cuts from the round, loin, rib, and chuck..