How To Judge Livestock
How To Judge Livestock

By A. C. ALLEN and H. A. SANDHOUSE

CATTLE

Types of Cattle.—There are three types of cattle: 1. Beef type; 2. dairy type; 3. dual-purpose type.

What Is Type?—Type is that combination of characteristics which causes an animal to be valuable and efficient for a specific purpose. The special and distinctive features which are associated with one breed alone constitute what is commonly called breed type.

Breeds of Cattle.—The breeds included under beef type are: Shorthorn, Hereford, Aberdeen Angus, Polled Shorthorn, Polled Hereford, and Galloway.

Breeds classed as dairy type are:—Holstein-Friesian, Jersey, Guernsey, Ayrshire, and Brown Swiss.

Those of dual-purpose type are:—Red Polled, Milking Shorthorn, and Devon.

The beef steer should 1.—have a short, wide, clean-cut head; 2.—have short, thick neck; 3.—have a full neck vein; 4.—be well-filled in the crops; 5.—have a straight, strong back; 6.—have a wide, deep, firm-fleshed loin; 7.—have a full, level rump; 8.—have a thick, deep thigh; 9.—be well-filled in rear flank; 10.—have a straight, well-covered side; 11.—be filled low in the foreflank, and 12.—have a wide chest floor.
Judging Beef Cattle

Points of General Appearance.—1. A blocky conformation with emphasis upon depth and width, with length relatively short.

2. Body
   a. Rectangular in shape
   b. Short from shoulder to hip
   c. Deep
   d. Wide and carried-out evenly from front to rear
   e. Top line and underline parallel

3. Legs short and placed squarely under body

4. Head short and broad

5. Neck short and thick.

Head.—There is a correlation between a short, wide head and a wide, compact, thick-fleshed body.

Back.—The back is that part of the top from the shoulders to the last rib. It carries the high-priced cuts of the beef carcass. It is desirable that it be straight and strong. Great width is important as it enables the back to carry the maximum of flesh. This width is obtained by the ribs arching boldly out from the backbone.

The desirable back is straight from the shoulders to the tailhead, covered with a thick and evenly distributed covering of flesh, which is judged by handling with the fingers. A deep and mellow fleshing is desired. Bare spots, uneven patches of fat, and flesh too hard or too soft are common faults.

Ribs.—It is important that the ribs come straight out from the backbone, and the turn of the rib be far removed from the spinal column. The rib must carry down deep, to give the desirable depth to the side, and give digestive capacity. The ribs of the beef animal should be close together, and the last rib close to the hipbone. This gives the short-coupled and compact conformation which contributes to beef type. Over the ribs, the flesh should be thick and evenly distributed.

A deep rib or a well-arched rib must not be confused with "paunchiness." This is an undue distention of the paunch, which is objected to by the butcher, as it lowers the dressing percentage.

Loin.—That part of the top between the last rib and the hip is the loin. It is composed of large muscles, from which the sirloin and porterhouse steaks are cut. It is the most expensive cut of the carcass. For this reason a critical examination should be given the loin. It must have great width and depth. Thick and firm flesh padding
the loin out smooth is desired. A "live loin" is one which, to the touch, has springiness caused by the desired combination of fat and muscle. A "dead loin" is one which is too fat, and is soft to the touch. A "bare loin" is lacking in covering of flesh.

**Thigh.**—The thigh begins at the rump and extends down the outside of the leg. A maximum amount of flesh is desired and this is obtained by the thigh being wide and full. The thigh naturally narrows down near the hocks, and the flesh should come down with some bulge at this point. It is important, also, that the flesh be carried well down to the hocks. As viewed from behind, the animal should be thick from thigh to thigh.

**Quality.**—Quality is an indication of high-dressing percentage, good breeding, good-feeding qualities, and fineness of muscle tissue. It is shown in bone, hide, hair, head, smoothness of frame, and evenness of flesh. The high-quality bone is fine, with small, smooth, and well-chiseled joints. One of the best indications of quality is the hide which should be thin, soft, and pliable. The hair should be soft and fine. The head is also an excellent place to judge quality; it should be of medium size and the lines clean, sharp, and distinct. In the
head of poor quality the impression of heaviness, plainness, and lack of expression is given. Smooth shoulder, a rump which is smooth and even around the tailhead, and an even covering of flesh are points of high quality.

The judge must always beware of animals with too much quality. It is very difficult to describe the most desirable degree of quality, which lies some place between coarseness and excessive refinement. Quality is a necessity, but constitution, conformation, and size must not be sacrificed at the expense of quality.

**Fleshing.**—Strictly speaking, the term “fleshing” refers to the muscling or amount of lean meat. It is of supreme importance as it is the flesh that is desired and consumed. This flesh is particularly desired in the region of the back, loin, and hindquarters. Over these parts there should be a deep and even covering of mellow flesh. This is best judged by pressing with the flat of the hand. This flesh or muscling is sometimes spoken of as “natural flesh,” and in the very fat animal the amount of natural fleshing may be difficult to determine. As the thigh, arm, and neck do not take on much fat, they will give evidence of the amount of natural fleshing even in the very fat animals. Great width over the crops also indicates heavy muscling.

**Condition.**—If fleshing means the amount of muscle or lean meat carried by the animal, we may define condition as the amount of fat deposited between the muscle tissues and upon the outside of the carcass. This is accomplished by feeding. The condition of the animal is judged by handling it over the back, loin, and down the ribs. An animal in high condition feels mellow or springy to the touch, which may be considered the opposite to hard and unyielding.

There are several things which may be taken as indications of high condition. A fat steer has a cod which is completely full of fat. A thin steer is often light in the hindflank, while the fat steer will feel full and heavy, when the hand is placed under the rearflank, and lifted gently. At the tongue root, fat will accumulate when the animal is in high condition. This is judged by pressing with the thumb and fingers. The fat steer has a characteristic walk which is never seen in the thin steer. The walk may be described as a rolling, waddling, or rocking gait.

A very undesirable condition which is found occasionally is described as “rolly” or “patchy.” This is commonly found at the tailhead, end of the rump, upon the ribs, or at the edge of the rump. The butcher dislikes it for it indicates an uneven distribution of fat, and a rough unsightly carcass when hung in the cooler.
The ultimate object of the beef animal is the meat that he produces. The steer is bid for upon the market by a buyer who is a student of beef carcases and the slaughtering business. Obviously the judge of beef cattle should be familiar with most essential points.

Dressing Percentage.—Two important facts affecting the selling price of a beef animal upon foot are:

1. The dressing percentage
2. The price of carcass beef*

The proportional weight of the chilled carcass to the weight of the animal on the hoof expressed in percentage is known as the dressing percentage.

Wholesale Cuts.—After the carcass has ripened in the cooler, it is then cut into the wholesale cuts. The carcass is cut into the two sides and then divided between the twelfth and thirteenth ribs into the hindquarter and forequarter. According to Illinois Bulletin 147, the hindquarters sell for 25 percent more during the winter months and 40 percent more in the summer. These are significant facts to keep in mind when judging a beef animal.

*Types and Market Classes of Livestock.—Vaughn.
The forequarter is then divided into the chuck, shank, ribs, and plate, and the hindquarter is cut into the loin, flank, and round.

**High-Priced Cuts.**—A study of weights, prices, and values of wholesale cuts reveals the fact that the loin, rib, and round are the highest-priced wholesale cuts of beef. The cattle buyer then looks for smooth cattle and thick cattle, which are well-covered over the back, loin, rump, and developed in thigh and twist.

**Judging Dairy Cattle**

**Points of General Appearance.**—1. A lean, angular, or triple-wedged conformation with emphasis upon length and depth, with width a minor consideration except in the hindquarter and chest floor.

2. Body
   a. Wedge-shaped
   b. Medium length from shoulder to hip
   c. Deep
   d. Well-sprung rib

3. Chest deep and wide

4. Hindquarter
   a. Wide
   b. Thigh thin and well-divided

The dairy cow should 1.—be deep and full through the heart; 2.—be deep through the middle; 3.—have a long, level rump; 4.—show a well-defined side wedge, and 5.—have large, strongly attached, well-balanced udder.
5. Legs—medium length and straight
6. Head—wide and short to medium long, depending upon breed. Lean and clean cut
7. Neck—lean and long.

**Triple-Wedge Shape.**—The ideal form of the dairy cow is well described by the phrase "triple-wedge shape." One wedge is observed from the side view of the animal, as it is much deeper from the loin to the underline than it is from the withers to the chest floor. If a line were extended along the back and forward in front of the head, and another line extended from the underline forward, the two lines would meet at a point in front of the head.

The second wedge is obtained by the hindquarters being considerably wider than the chest. Two lines starting at the withers as the vertex of an angle, would widen out at the hipbones, forming a wedge. It should be emphasized that this second wedge must not be obtained at the expense of a constricted chest. The chest must be wide and deep for adequate chest capacity, but the hindquarters must be just that much wider and deeper to give the desired wedge shape.

The third wedge is obtained by the shoulders gradually widening out below, as they proceed downward from a pair of sharp withers.

**Chest.**—A large chest capacity is necessary to insure the purifying of large quantities of blood in the lungs, which is needed in high-milk production. Chest capacity is obtained by depth and width, and in the dairy cow perhaps more is obtained through depth than through width. This does not mean that too much narrowness is tolerated in the dairy cow. The foreribs should arch out well, and there should be a fullness in the foreflank. The width of the chest can be judged also by the distance between the forelegs. This is usually spoken of as the width of chest floor. To insure capacity for heart and lungs, the foreribs should also be deep.

**Back.**—A strong and straight back, of moderate width and of fair length, is desired in dairy cattle. A great amount of discussion is found upon the importance of a prominent backbone and its reliability as an indication of high-milk qualities. Suffice it to say for the time being, that the prominent backbone is an indication of freedom from beefiness, which is an important qualification of a dairy cow. While the ideal back is described as straight, and it is a point to be desired, yet in the judging of dairy cattle for commercial purposes, a judge cannot afford to be too critical over this point. It is known that flesh helps to make straightness of top line, and as this is absent in a good dairy cow, the back line may lack in straight-
ness. Old dairy cows are quite apt to show a drop in the back. As straight a back as possible with other indications of good dairy type is the point sought. Judges of purebred cattle in the large rings become very critical concerning the back.

**Loin.** — The loin should be very level, long, of fair width, and give the judge the impression of strength. This strength may be judged also by feeling for a strong development of muscle over the loin. Such development is not considered as opposed to dairy type. This muscle prevents a depressed or slack loin, which is always looked upon with disfavor by the dairy judge.

**Barrel.** — Great emphasis was placed upon the chest due to its importance in the purifying of large quantities of blood, for production of large quantities of milk. The barrel, like the chest, is of extreme importance in judging dairy cattle. The dairy cow manufactures her milk from the food she eats. A small barrel capacity indicates a smaller consumption of food, and this in turn means a proportionately smaller milk production.

The capacity of the barrel is obtained by depth and width. This is largely obtained by a well-arched rib, and a rib which is long. In speaking of a well-arched rib in a dairy cow, it cannot be expected that the same degree of arch will be found as in the beef cow. Upon the other hand, the dairy cow should never be flat-sided. The desired degree of arch is a happy medium between the two extremes.

**Rump.** — The rump should be long, level, wide, and free from fleshiness. A long and level rump improves the general conformation of the animal and is associated with a long and level underline. Great stress is laid upon the width of rump, particularly
the width between the p i n b o n e s. Animals wide in this point rarely have difficulty in calving, and generally have room for a wider, higher - attached rear udder.

**Thigh.** — The thighs should be long and thin. They may be said to be just the contrast of the ideal thigh described under beef cattle. No flesh between thighs is desired, but they should be open to allow the high attachment of a full and wide udder. The ideal thigh is sometimes described as being muscular, but no idea of fleshiness is ever intended.

**Udder.** — It is often said that three most important points in dairy-cattle judging are the chest, barrel, and udder. The udder is best described under the headings of size, shape, quality, and teat placement.

The udder should be **large.** This **size** is obtained by its length and width, which together make for a large circumference of bag. Considerable attention is paid to the udder attachment. The udder is hung well forward along the belly, extending back until the swell is clearly seen beyond the hindlegs when viewed from the side, and hung very high between the thighs. A fullness of udder is desired from side to side, and floor of the udder should be wide. The udder is hung to the abdominal wall by muscles, which, with age or due to weakness, may allow the udder to hang down pendulous and prominent. Such a condition must not be misinterpreted as greater size of udder. An udder breaking away from the abdominal wall is very objectionable.
The ideal udder is described as well-balanced and shapely. This is obtained by the four quarters being equally developed. Very often the hindquarters are developed more than the forequarters, and in such a case, the balance or symmetry of udder is destroyed. The floor of the udder should be flat, with no tendency to being cut-up between the halves and quarters.

**Quality** is one of the important points in judging a dairy cow's udder. It should be known that the udder is made up of two kinds of tissue, namely glandular and connective. The connective tissue gives the support to the udder, while the glandular tissue is the seat of milk secretion. Obviously we desire as large an amount of glandular tissue, and as little connective tissue as is possible to give some balanced shape to the udder. Unfortunately some of the highest-producing cows, with their abundance of glandular tissues, have udders of poor shape due to the lack of connective tissues. To balance properly these points calls upon the experience and judgment of our judges. The quality of the udder is judged with the hand. A high-quality udder feels mellow, while one made up of too much connective tissue is spoken of as "meaty." The skin and hair on the udder should be soft and fine.

The **teats** should be evenly placed upon the udder, and of such size as to make milking easy. They should be cylindrical in shape. Leaky teats are objected to, and it is desired to have only four teats; additional teats that show any indication of giving milk are objectionable.

**Milk Veins and Wells.**—The milk veins are large veins passing along the belly from the udder, and they enter the abdominal cavity through the milk wells. The milk veins are carrying blood from the udder to the heart, and their diameter is taken as some indication of milking power. They should also be long, tortuous, and branching. It should be remembered that the young heifer will have milk veins which are small in diameter and more or less straight. It is necessary to keep age in mind, when examining the milk veins. The wells should be large and placed well forward.

**Quality.**—As in beef cattle, quality is judged by the fineness of hide, hair, ear, horn, head, and bone. We have two schools of thought in regard to quality of dairy cattle. One school is picking a large rugged type, at the expense of quality, while the other school is picking a very delicate and highly refined type. As in most differences of opinion, the truth must be some place between the two extremes. H. M. Vaughn suggests that we insist "upon constitution first and then upon as much quality as may be had without delicacy."
**DAIRY COW SCORE CARD**

Ideals of type and breed characteristics must be considered in the application of the terminology of this score card.

### Based on Order of Observation

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Perfect Score</th>
<th>COW A</th>
<th>Off. COW B</th>
<th>Off. COW C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. GENERAL APPEARANCE</strong></td>
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<tr>
<td>Attractive individuality, revealing vigor, femininity with a harmonious blending and correlation of parts. Impressive style and attractive carriage with a graceful walk.</td>
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<tr>
<td>BREED CHARACTERISTICS (see below)</td>
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<tr>
<td>HEAD — medium in length, clean-cut; broad muzzle with large open nostrils; lean, strong jaw; full, bright eyes; forehead broad between the eyes and moderately dished; bridge of nose straight; ears medium size and alertly carried.</td>
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<tr>
<td>SHOULDER BLADES — set smoothly against chest wall and withers, forming neat junction with the body.</td>
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<tr>
<td>BACK — strong and appearing straight with vertebrae well defined.</td>
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<tr>
<td>LOIN — broad, strong and nearly level.</td>
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<tr>
<td>RUMP — long, wide; top-line level from loin to and including tail head.</td>
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<td>HIPS — wide, approximately level laterally with back, free from excess tissue.</td>
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<td>THURLS — wide apart.</td>
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<tr>
<td>PIN BONES — wide apart and slightly lower than hips, well defined.</td>
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<tr>
<td>TAIL — long and tapering with nicely balanced switch.</td>
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<tr>
<td>LEGS — wide apart, squarely set, clean-cut and strong with fore legs straight.</td>
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<tr>
<td>HIND LEGS — nearly perpendicular from hock to pastern. When viewed from behind, legs wide apart and nearly straight. Bone, flat and flinty, tendons well defined.</td>
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<tr>
<td>Pasterns, of medium length, strong and springy. Hocks cleanly moulded.</td>
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<td>FEET — short and well rounded, with deep heel and level sole.</td>
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<tr>
<td><strong>2. DAIRY CHARACTER</strong></td>
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<tr>
<td>Animation, angularity, general openness, and freedom from excess tissue, giving due regard to period of lactation.</td>
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<tr>
<td>NECK — long and lean, blending smoothly into shoulders and brisket; clean-cut throat and dewlap.</td>
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<tr>
<td>WITHERS — well defined and wedge-shaped with the dorsal processes of the vertebrae rising slightly above the shoulder blades.</td>
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<tr>
<td>RIBS — wide apart. Rib bone wide, flat and long.</td>
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<tr>
<td>FLANK — deep, arched and refined.</td>
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<tr>
<td>THIGHs — curving to flat from the side; wide apart when viewed from the rear, providing sufficient room for the udder and its attachment.</td>
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<tr>
<td>SKIN — of medium thickness, loose, and pliable. Hair fine.</td>
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<tr>
<td><strong>3. BODY CAPACITY</strong></td>
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<tr>
<td>Relatively large in proportion to size of animal, providing ample digestive capacity, strength and vigor.</td>
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<tr>
<td>BARREL — deep, strongly supported, ribs wide apart and well sprung; depth and width tending to increase toward rear of barrel.</td>
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<tr>
<td>HEART GIRTH — large, resulting from long, well sprung forelegs, wide chest floor between front legs, and fullness at the point of elbow.</td>
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<td><strong>4. MAMMARY SYSTEM</strong></td>
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<tr>
<td>A capacious, strongly attached, well carried udder of good quality, indicating heavy production and a long period of usefulness.</td>
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<tr>
<td>UDDER — CAPACITY and SHAPE, long, wide and of moderate depth. Extending well forward, strongly attached, reasonably level floor. Rear attachment, high and wide. Quarters evenly balanced and symmetrical.</td>
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<tr>
<td>TEXTURE — soft, pliable and elastic. Well collapsed after milking.</td>
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<tr>
<td>TEATS — uniform, of convenient length and size, cylindrical in shape, free from obstructions, well apart and squarely placed, plump.</td>
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<tr>
<td>MAMMARY VEINS — long, tortuous, prominent and branching, with numerous large wells.</td>
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<tr>
<td>Veins on udder numerous and clearly defined.</td>
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</tbody>
</table>

**TOTAL** 100
Guide to Evaluation of Defects in Judging Cows

Note.—In a showing, disqualification means that the animal is not eligible to win a prize. Any disqualified animal is not eligible to be shown in the group classes. In slight to serious discrimination, the degree of seriousness shall be determined by the judge.

Eyes.—1. Total blindness: Disqualification. 2. Blindness in one eye: Slight discrimination.

Parrot Jaw.—Slight to serious discrimination.

Shoulders.—Winged: Slight to serious discrimination.

Capped Hip.—Slight discrimination.

Wry Tail.—Serious discrimination.

Legs and Feet.—1. Marked lameness—apparently permanent and interfering with normal function: Disqualification. 2. Lameness—apparently temporary and not affecting normal function—bucked knees, crooked hindlegs, weak pasterns: Slight to serious discrimination. 3. Enlarged knees: Slight discrimination.

Absence of Horns.—An animal that has been cleanly and neatly dehorned, and whose head shows true-breed character: No discrimination.

Lack of Size.—Slight to serious discrimination.


Dry Cows.—In case of cows of apparently equal merit: Give preference to cows in milk.

Overconditioned.—Serious discrimination.

Temporary or Minor Defects.—Blemishes or injuries of a temporary character not affecting animal’s usefulness: Slight to no discrimination.

Evidence of Sharp Practice.—1. Animals showing signs of having been operated upon or tampered with for the purpose of concealing faults in conformation, or with intent to deceive relative to the animal’s soundness: Disqualification. 2. Heifer calves showing evidence of having been milked, in an attempt to deceive regarding natural form of udder: Serious discrimination.
JUDGING SHEEP

Breeds of Sheep

<table>
<thead>
<tr>
<th>Long Wool</th>
<th>Medium Wool</th>
<th>Fine-Wool Type</th>
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</thead>
<tbody>
<tr>
<td>Cotswold</td>
<td>Shropshire</td>
<td>Rambouillet</td>
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<tr>
<td>Lincoln</td>
<td>Hampshire</td>
<td>Delaine Merino</td>
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<tr>
<td>Leicester</td>
<td>Oxford</td>
<td>Amer. Merino</td>
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<td>Romney Marsh</td>
<td>Dorset</td>
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<td>Southdown</td>
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<td>Cheviot</td>
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<td></td>
<td>Suffolk</td>
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<td>Tunis</td>
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<td></td>
<td>Corriedale</td>
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</table>

Mutton Type

Fine Wool

There are several breeds of sheep making up the two types of sheep. For Colorado conditions and for the purpose of this bulletin, it has been deemed advisable to limit our description to lambs and sheep fattened for market.

General Appearance.—1. A blocky conformation almost identical with that desired in beef cattle.

2. Body
   a. Broad and deep
   b. Symmetrical
   c. Side lines straight
   d. Top line and underline straight and parallel

3. Rump—broad, level, and as wide as the rest of body

4. Legs very short.

Back.—As the back furnishes one of the most valuable cuts of the carcass, it should be carefully examined. In judging sheep, the hand is used to a greater extent than the eye, due to the fleece, which hides that which is beneath. The hand should be held flat with the fingers together, and the body felt over the backbone. The back should be wide, short, and straight, and in working over the backbone and ribs, a thick, even, and firm covering of flesh is desired. A weak back is found by pressing the back with the hand. In a weak back a dip or depression is noted.
The sheep should have 1.—width between the eyes, well-set ears, and show character in the face; 2.—a short, thick neck; 3. a wide, full brisket; 4.—a straight, strong back; 5.—a good depth of body from loin to flank, and 6.—a good depth of body through the heart.

Ribs.—The ribs should be well-arched and deep. The arch of the rib gives width to the back, which makes for carrying the maximum amount of flesh. The deep rib gives plenty of room in the chest for large vital organs, and a good capacious middle for feeding capacity. The ribs should be placed closely together, and to secure the desired compact conformation, the last rib should be as close to the hipbone as possible. Firm, thick flesh covering the ribs evenly is important.

Loin.—The loin is the highest-priced cut of the carcass. It should combine width and thickness, and be covered with firm, thick and evenly distributed flesh. A sheep is very apt to be well-covered over its back, and bare over the loin. The opposite condition may also exist. It is important then that the judge work over all parts of the sheep carefully.

Rump.—The rump should be long, level, and wide. It is very important that the top line should carry out level from hips to tail-head. A very common fault in sheep is a sloping rump, which not only spoils the blocky conformation of the sheep, but is generally associated with a short leg of mutton. Often the rump is found to be sloping and peaked besides. Such a rump is associated with a leg of
mutton which lacks thickness and fullness at the top. The covering of flesh should be abundant but smooth. Very often the flesh around the tailhead is soft and inclined to be patchy.

**Thigh and Twist.**—These two parts are described together as they constitute the "leg of mutton." The back, loin, and leg of mutton are the three highest priced parts of the mutton carcass. In judging the leg of mutton it should be firmly grasped between the thumb and fingers of each hand, by placing one hand in front of the thick part of the leg and high up, and the other hand on the rear part. It has been the writers' experience that students fail to get a good idea of the leg of mutton, because they do not grasp the leg high enough. The leg should be full and the flesh should come well down to the hocks.

**Quality.**—High-quality sheep are desired by the butcher as they are "good killers" and dress out an even line and attractive carcass. Quality is judged by the head, bone, wool, hair on face and legs. and the smoothness of frame and fleshing. Quality is easily seen in the head, and the head may be taken as an important evidence of quality. Certainly a sheep with a coarse head will not be of high quality throughout. The bone should be fine and strong. The hair on the face and legs should be fine and soft. A sheep covered evenly and with straight and trim lines is one possessing quality.

**Condition.**—The condition is judged by the covering of the spinal column, the neck, the breast, the foreflank, the dock, and the purse. (The purse is the scrotum of the wether, corresponding to the cod of a steer.) The covering of the spinal column is of first import-
ance, for the back and loin are two of the choice cuts of the carcass. The backbone should never be prominent and in a sheep of high condition a hollow is felt along the backbone with the flesh bulging on each side. The neck and breast are plump, and the fore-flank full. The dock should be thick when felt with the thumb and finger, and the purse well-filled with fat. Lambs rarely become too fat or "overdone" but it is common among older sheep. In such cases the flesh is soft, and in bunches. Such a carcass is wasty.

**Dressing Percentage.**—A high-dressing percentage in sheep is indicated by their being:

1. Heavily fleshe
2. Neat in form
3. Free from paunchiness
4. Light of pelt.

The dressing percentage of sheep is not as important as in cattle due to the fact that the offal has a higher value than that from cattle, and also because of the value of the pelt. A judge, however, should discriminate against those animals which are paunchy and lacking flesh.

**High-Priced Cuts.**—The back, loin, and leg of mutton are the high-priced cuts. These parts average about 66 percent of the weight of the carcass, but make up about 87 percent of the value.
JUDGING HOGS

Breeds of Hogs.—The lard type includes the Duroc-Jersey, Poland China, Chester White, Hampshire, Berkshire, and Spotted Poland China.

The Bacon Type includes Yorkshire and Tamworth.

General Appearance.—The hog most desired should meet the following requirements:

1. Body
   a. Long
   b. Deep
   c. Reasonably wide
   d. Smooth

2. Height
   a. Tall from back to ground
   b. Rather upstanding from belly to ground

3. Top line
   a. Arched

4. Underline
   a. Straight, trim and level

5. Legs
   a. Medium long and straight

6. Flank
   a. Well let-down

7. Bone
   a. Medium to large, but not coarse

8. Active.

Shoulders.—A common fault in hogs is shoulders which are too open and too heavy. As the shoulders are a cheap cut of meat, it is not desired that they be heavy and prominent. Such shoulders spoil the balance and symmetry of the animal. They should be the same width as the hindquarter, being smoothly laid in, and the top smoothly and thickly fleshed.

Back and Loin.—The back and loin are two important cuts of the hog carcass. They should be long, and medium in width. A back which is very wide is usually associated with a short-bodied, small hog which quickly fattens but never attains size. A very narrow-backed hog on the other hand is usually a hog which is deficient in constitution and feeding qualities. When viewed from the side, the back should show a marked arch. The flesh of the back and loin should be thick and smooth. A weak back or loin not only detracts from the appearance of the hog, but it is an indication of a lack of muscling, hence the back and loin will be deficient in lean meat.
The hog should have 1.—a strong well-arched back; 2.—a long, smooth side; 3.—a deep, smooth side; 4.—a smooth shoulder; 5.—a clean-cut face; 6.—a smooth, clean-cut jowl, and 7.—a long, deep ham, well-filled.

Sides.—As suggested in the outline given for general appearance, the sides should have length and depth, the side being straight and smooth. If a straight edge were laid along the side of the hog, the side should touch the straight edge at every point. Straightness or evenness of surface is also desired from any point on the top line to a corresponding point on the underline. The side should be smoothly covered with thick flesh. A common fault in the sides is the presence of wrinkles and creases. A wrinkle is in the skin only, while a crease is not only in the skin but in the flesh beneath. They are both objected to because they denote lack of quality and detract from the appearance. The butcher objects particularly to creases, because they are apparent even after the carcass is dressed, pressed, and cured. Such carcasses do not bring as high a price as smooth ones.

Rump.—The rump of the hog should be long and just as wide as the rest of the body. The rump is sometimes described as level, but one cannot expect the levelness in the rump of a hog as that in a steer. It is better to say that the rump should have a slight curve downward, and this curve coinciding with the arch of the back. A short rump and a steep rump are always in disfavor. Such a combination destroys the general balance, lightens the hindquarter, which is a desirable cut of the carcass, and causes a faulty set of the hind-
legs. The rump should also carry its width out from front to rear.

**Hams.**—The ham of the hog includes the rump, thigh, and twist. A ham which is large, well-developed and meated full to the hocks is in demand. Particular attention should be paid to the firmness and neatness of the ham. In the opinion of the writers the student does not fully realize the objection to a soft and flabby ham. Such a ham must lose considerably in trimming, and this loss runs as high as 15 percent in some cases.

**Quality.**—The quality of the hog is judged by the head, hair, bone, evenness of finish, and freedom from wrinkles and creases.

**Finish.**—A proper finish is secured by that amount of flesh which will give the hog a smooth, firm, and well-rounded-out appearance. The flesh should be firm, particularly when felt along the top line, below the shoulders, and at the lower end of the hams.

**Dressing Percentage.**—A high-dressing percentage is secured by fatness and a lack of paunchiness.

**High-Price Cuts.**—The ham, loin, and belly constitute 47 percent of the weight of a 250-pound hog and 60 percent of the value. It may be said that the valuable part of a hog lies behind his shoulders.

![Image of a hog](image)

The hog should have 1.—a strong pastern, standing up well on the toes, and 2.—straight, strong legs.
JUDGING DRAFT HORSES

Draft horses are bred for performance rather than for meat for human consumption. Muscles similar to the muscling of a meat animal are necessary but for a different purpose—power and strength.

Breeds of Draft Horses

The different breeds of draft horses are:
- Percheron
- Belgian
- Shire
- Clydesdale
- Suffolk

General Appearance

**Weight.**—1600 pounds or over

**Height.**—16 to 17 hands

The draft horse should 1.—show a clean-cut and strong head; 2.—have a sloping shoulder; 3.—have a well-muscled forearm; 4.—be deep through the heart; 5.—have a wide chest floor; 6.—have a short, strong back and coupling; 7.—have a well-muscled croup; 8.—have a well-muscled gaskin; 9.—have a clean-cut, wide hock; 10.—have a short, sloping pastern, and 11.—have a clean, wide cannon bone.
Form.—Massive, broad, deep, symmetrical, heavily muscled, stylish and attractive.

Head.—A lean, clean-cut head, chiseled out in appearance, with a prominent, bright, clear eye accompanies a horse with snap and life, not a sluggish deadhead.

Shoulder.—A heavily muscled shoulder gives strength. A horse with a sloping shoulder generally has a longer stride, a longer pastern and more spring to his step. This absorbs the shock of his heavy weight and lessens the degree of unsoundness in his joints and feet.

Back.—A wide, heavily muscled back is needed to give the horse power to push into the collar. A short back gives more strength than a long back and is more desirable. The wide spring of rib gives more room for stronger, wider muscling on the back.

Hindquarters.—This region includes the hips, croup, and thighs. Since the horse in going into the collar does his pushing with these muscles, it is necessary that they be wide and well-filled out in each of these points. This is true in the croup as it should not droop. A sloping croup is generally correlated with crooked hindlegs.

Constitution.—The draft horse's efficiency is partly governed by his constitution—or chest capacity. A deep, wide, roomy chest is as necessary to a draft horse as a big steam chest is to a steam engine. This is seen by his spring and length of forerib and width between the forelegs.

Feet and Legs.—This is by far the most important part of the horse. It is obtained by breeding. A horse with poor feet and legs has a terrible handicap. The bone must be smooth, flat and hard. The legs should be straight as shown in the illustration on page 25.
Position of the legs of a horse when standing

**Forelegs**

- **Viewed from in front**
  - Correct 4 A position
  - Deviations
  - A vertical line downward from the point of the shoulder should fall upon the center of the knee, cannon, pastern, and foot.
  - Knees too close—knock-kneed—4 F
  - Knees too wide apart—bow-kneed—4 C
  - Fetlocks close, toes wide—splay-footed—4 D
  - Toes turned in—pigeon-toed—4 G

- **Viewed from the side**
  - Correct 2 A position
  - Deviations
  - A vertical line should fall from the center of the elbow joint upon the center of the knee and pastern joints and back of the foot.
  - Another vertical line from the middle of the arm should fall upon the center of the foot.
  - Back at the knee—calf-kneed—2 E
  - Forefeet too far advanced—camped—2 C
  - Forefeet too far back—standing under—2 B
  - Knee-sprung—2 D

**Hindlegs**

- **Viewed from the rear**
  - Correct 1 A position
  - Deviations
  - A vertical line from the point of the buttock should fall upon the center of the hock, cannon, pastern, and foot.
  - Hocks too wide apart—1 B
  - Hocks too close together—cow-hocked—1 E
  - Close fetlocks—1 D
  - Toed-in—1 C

- **Viewed from the side**
  - Correct 3 A position
  - Deviations
  - Sickle-hocked—3 B
  - Hock straight or open-angled—3 D
  - Leg too far back—3 C

See illustrations on page 25.
Name the faults of these underpinnings.
A study of the lines drawn shows the correct set of the legs. The pastern must be reasonably long and sloping. A pastern too sloping is weak—too straight absorbs the shock of the weight and tends toward stiffness and unsoundness. The hoof must be large, hard, and free from constriction at the head and heel.

**Action.**—A good draft horse should not be just big and clumsy. A good, free snappy action is wanted. A long, straight, snappy stride covers the ground without any waste of time and energy and is most desirable. While a large part of the work of the draft horse is done at a walk, sometimes necessity demands his work be done at a trot. This he must be able to do freely and actively.

**Quality and Substance.**—The term "quality" refers to fineness of texture, while "substance" refers to size. Quality associated with substance in the feet and legs of a horse denotes good-wearing ability. The term "clean" is often used in the judging of horses, and it refers to freedom from meatiness. The quality and substance of a draft horse is judged in head, hair, hoofs, bone, and joints. The head is described as being of medium size, carrying neat ears, a trim muzzle, and all lines of the head well-defined, distinct, or of a well-chiseled appearance. The hair should be soft and fine. The hoof to have good-wearing qualities should be of fine texture. The bones must be hard and smooth, and particularly the cannon bones and the pastern joints should be clean or free from meatiness. All joints, especially the knees and hocks should be well-defined and clean. It should be impressed at all times that the feet and legs of the horse are the most important points in judging.
A GOOD LIVESTOCK JUDGE

Judging livestock is the making of a thorough analysis of an individual animal and measuring it to a standard—an ideal. There are men who have acquired knowledge in stock judging through years of experience in growing and handling livestock. Others lacking in experience seek information that enables them to judge animals intelligently.

There are four essential characteristics of a good livestock judge:
1. Knowledge of individual excellence
2. Accurate powers of observation
3. Common sense judgment
4. Ability to evaluate and balance superior and uniform qualities.

Guide in Preparing Reasons*

Organization of Reasons.—1. Mention point of greatest difference first. 2. Mention only what is true. 3. Tell facts—not fancies. 4. Compare; don’t describe. 5. Compare only two cows at one time. 6. Call attention to good points about cow that you put down. 7. Do not confine your remarks only to the good points in the cow you place up, but also tell the weakness of the cow you placed down. 8. It is very seldom that the reason for placing the second cow over the third cow will be the same as for placing the first cow over the second. 9. Organize your reasons so as to take about one and three-quarters minutes of the two minutes allowed for oral reasons, and 15 minutes for written reasons. 10. Spend the most time between the pair with the greatest difference and state whether placings were close or not. 11. Be very brief in discussing the bottom cow, and mention any good point she may have. 12. Do not overemphasize any point. Tell facts in justice to the cow.

Presentation of Reasons.—1. Stand erect with hands behind your back. 2. Speak distinctly in oral reasons, and write plainly in written reasons. 3. Cultivate a convincing tone of voice. 4. Avoid oratorical or memorized forms of reasons. 5. Present the reasons so convincingly that the judge will have a high respect for your reasons, although he may differ with you.

Constant attention to instructions and in the judging of rings, with careful preparation and untiring effort, as well as earnest concentration in the study and delivery of reasons, is the price of being a good judge.

*Courtesy of Extension Service, Oklahoma A & M College.