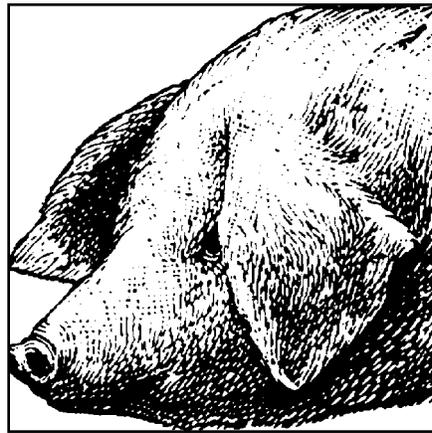

Beef Cattle



BREEDS OF BEEF CATTLE

Table 1 outlines some breeds of beef cattle that are common in the United States. Each breed is categorized by frame size, muscling, mature cow weight, milking ability, and some of the more distinguishing features of the breed.

Frame size is divided into three categories: small, average, and large. Muscle is divided into three categories: flat, medium, and thick. Average mature cow weight is listed in pounds and describes the size of cows of this breed relative to other breeds.

It is important to remember that this table is for reference only. As much variation exists within a particular breed of livestock as among breeds for such characteristics as milking ability, muscle, and so on. Therefore, the data contained in this table represent averages, not absolute values, for particular breeds. The table is provided as a reference to help you better distinguish one breed from another.

Table 1. Breeds of Beef Cattle

Breed	Frame Size	Muscle	Avg. Cow Wt.	Birth Weight ^a	Wean Weight ^a	Post Wean Weight ^a	Characteristics
Angus	avg.	med.	1,100	2	4	4	black; polled; pigment; fertility
Beefalo	small	med.	varies	---	---	---	brown; ½ Buffalo, ½ Bovine
Beefmaster	avg.	med.	varies	4	2	2	½ Brahman, ¼ Hereford, ¼ Shorthorn
Blonde d'Aquitaine	large	thick	1,500	4	3	2	blonde; terminal sire
Braford	avg.	med.	1,250	---	---	---	reddish; ¾ Brahman, ¼ Hereford
Brahman	avg.	med.	1,400	4	1	3	various colors; heat tolerance; "hump"
Brangus	avg.	med.	1,250	3	3	3	black or red; ¾ Brahman, ¼ Angus
Charbray	large	med.	1,500	---	---	---	whitish gray; ¾ Brahman, ¼ Charolais
Charolais	large	thick	1,550	5	1	1	white; muscle; growth
Chianina	large	med.	1,600	5	1	1	white, silver, brindle, or black; terminal sire
Devon	small	flat	1,100	3	4	2	dark red; carcass quality
Galloway	small	flat	950	3	4	3	black; long, curly hair; late maturing
Gelbvieh	avg.	thick	1,450	4	1	2	pale brownish-orange; milk; growth
Hereford	avg.	med.	1,100	3	4	3	red with white face; adaptability; fertility
Limousin	avg.	thick	1,300	4	3	3	pale brown, golden; muscle; cutability
Longhorn	small	flat	varies	1	5	5	various colors; late maturing; long, slender horns
Maine-Anjou	large	thick	1,600	5	1	1	deep red and white; frame; growth rate; muscle
Marchigiana	large	thick	1,500	---	---	---	grayish-white; muscle; terminal sire
Murray Grey	small	med.	1,150	3	3	4	gray; low birth weights
Pinzgauer	avg.	thick	1,350	4	2	2	brown with white topline, underline; hardiness
Red Angus	avg.	med.	1,100	2	4	3	red; polled; fertility
Salers	avg.	med.	1,300	---	---	---	dark red or black; low birth weight; growth
Santa Gertrudis	large	med.	1,450	4	2	3	deep red; ¾ Brahman, ¼ Shorthorn
Scotch Highland	small	flat	900	2	4	4	dun; long, dense, shaggy hair
Shorthorn	avg.	med.	1,100	3	4	3	red, roan, or white; calving ease; early maturing
Simmental	large	thick	1,500	5	1	1	red, cream, or black with white; muscle; milk
South Devon	large	flat	1,450	---	---	---	light red; milk; growth rate

^aRanking based on 1 (most desirable) through 5 (least desirable). Insufficient data for comparison are indicated by ---.

Adapted from Beef Production and Management, 2nd edition, 1979, Gary L Minish and Danny G. Fox.



Angus



Beefmaster



Brahman



Brangus



Charolais



Hereford



Limousin



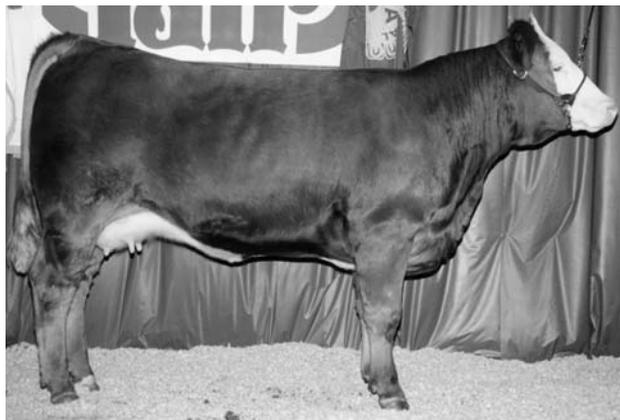
Santa Gertrudis



Shorthorn



Simbrah



Simmental

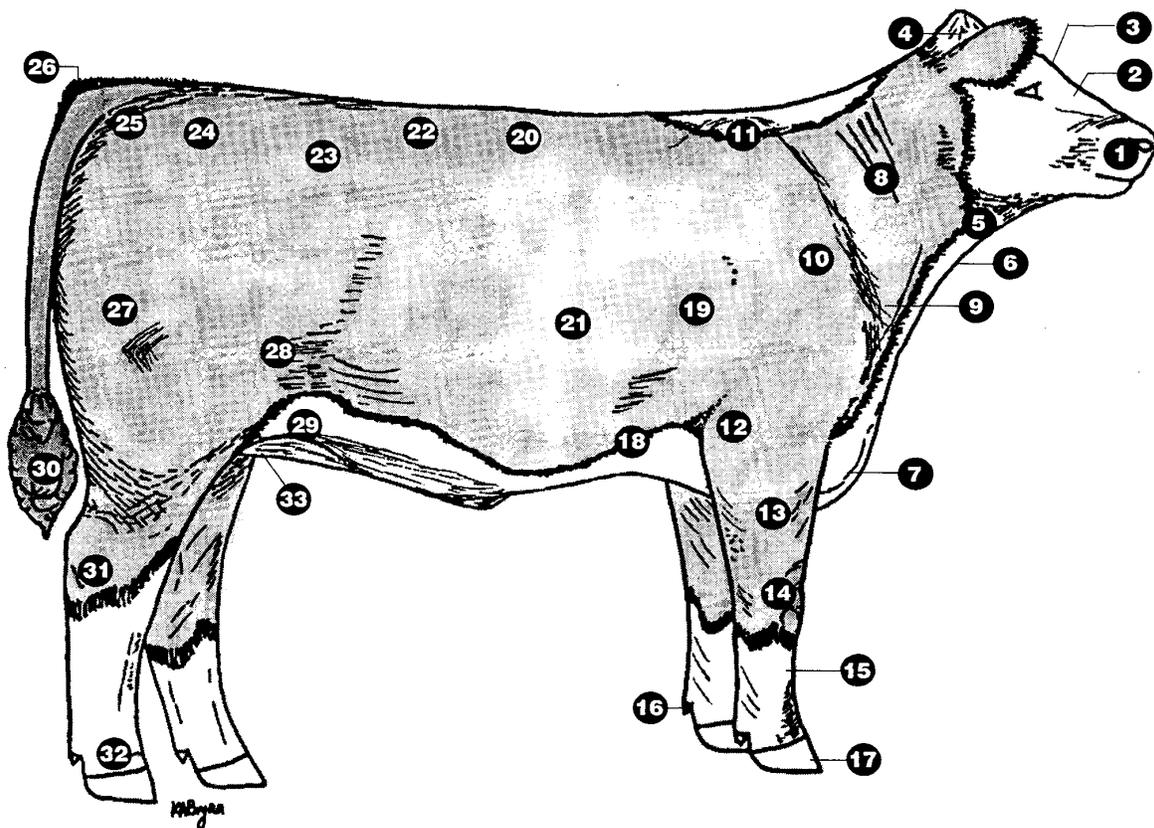
PARTS OF BEEF CATTLE

After you have become familiar with the breeds of beef cattle, learn the external parts and carcass regions. This section provides diagrams of the external parts (Figure 4), characteristics of an ideal breeding heifer (Figure 5), and characteristics of an ideal market steer (Figure 6). Take time to study all of the parts and to become familiar with them so you can refer to them without hesitation. Use these terms as part of your reasons.

Characteristics of the ideal breeding heifer and the ideal market steer are included for reference only. Depending on the location and production situation, an ideal can take on various shapes and forms.

Feet and leg placement is illustrated in Figures 7 through 10.

Figure 4: External Parts



- | | | |
|---------------------|------------------------------|---|
| 1 muzzle | 13 forearm | 25 pin bone |
| 2 face | 14 knee | 26 tailhead |
| 3 forehead | 15 cannon | 27 quarter |
| 4 poll | 16 dewclaw | 28 stifle |
| 5 throat | 17 hoof | 29 rear flank |
| 6 dewlap | 18 lower forerib, fore flank | 30 switch |
| 7 brisket | 19 forerib | 31 hock |
| 8 neck | 20 back or top | 32 pastern |
| 9 point of shoulder | 21 rib | 33 udder (cow, heifer),
cod (steer),
scrotum (bull) |
| 10 shoulder | 22 loin | |
| 11 top of shoulder | 23 hook or hip | |
| 12 elbow | 24 rump | |

Figure 5: Characteristics of an Ideal Breeding Heifer

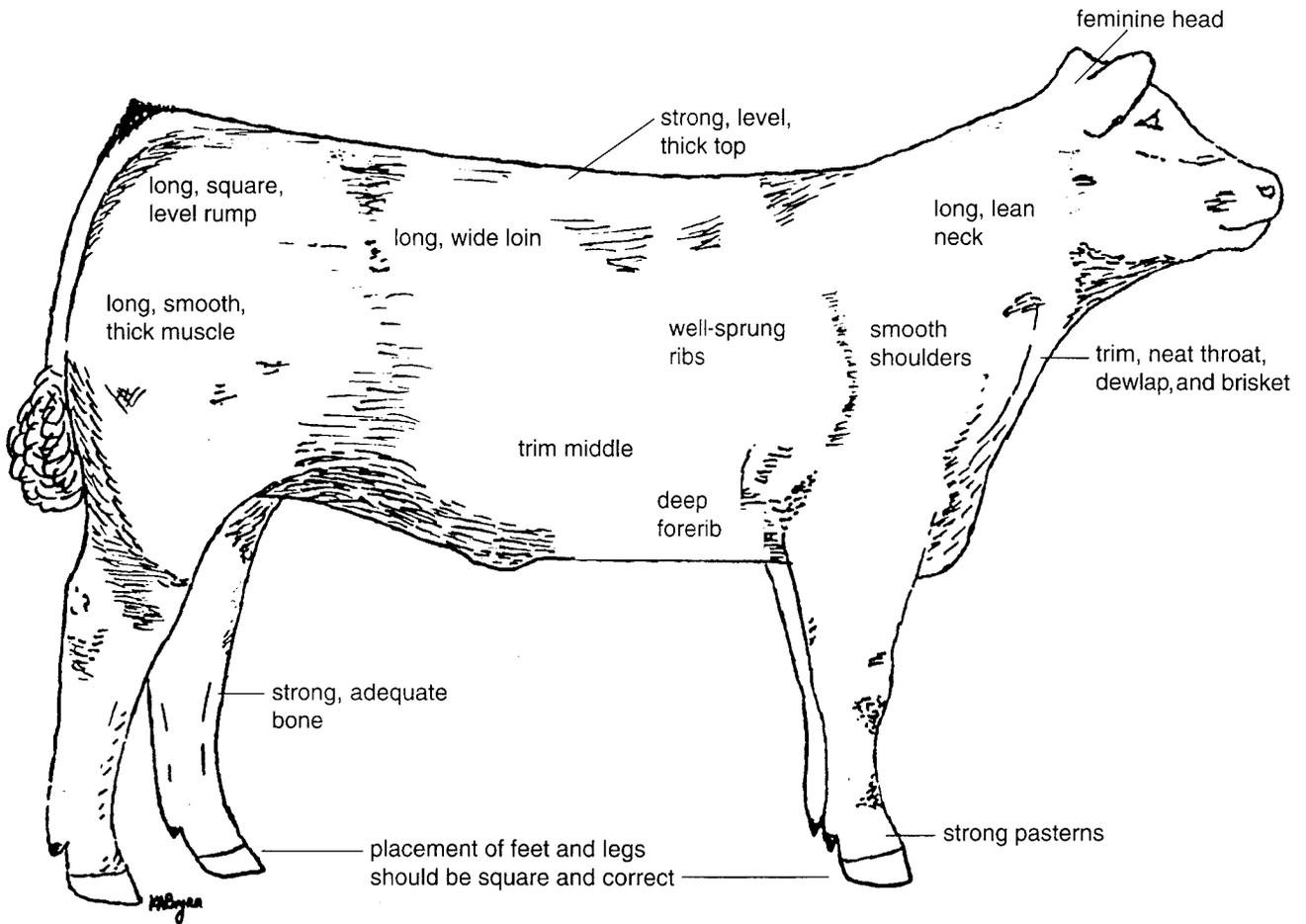
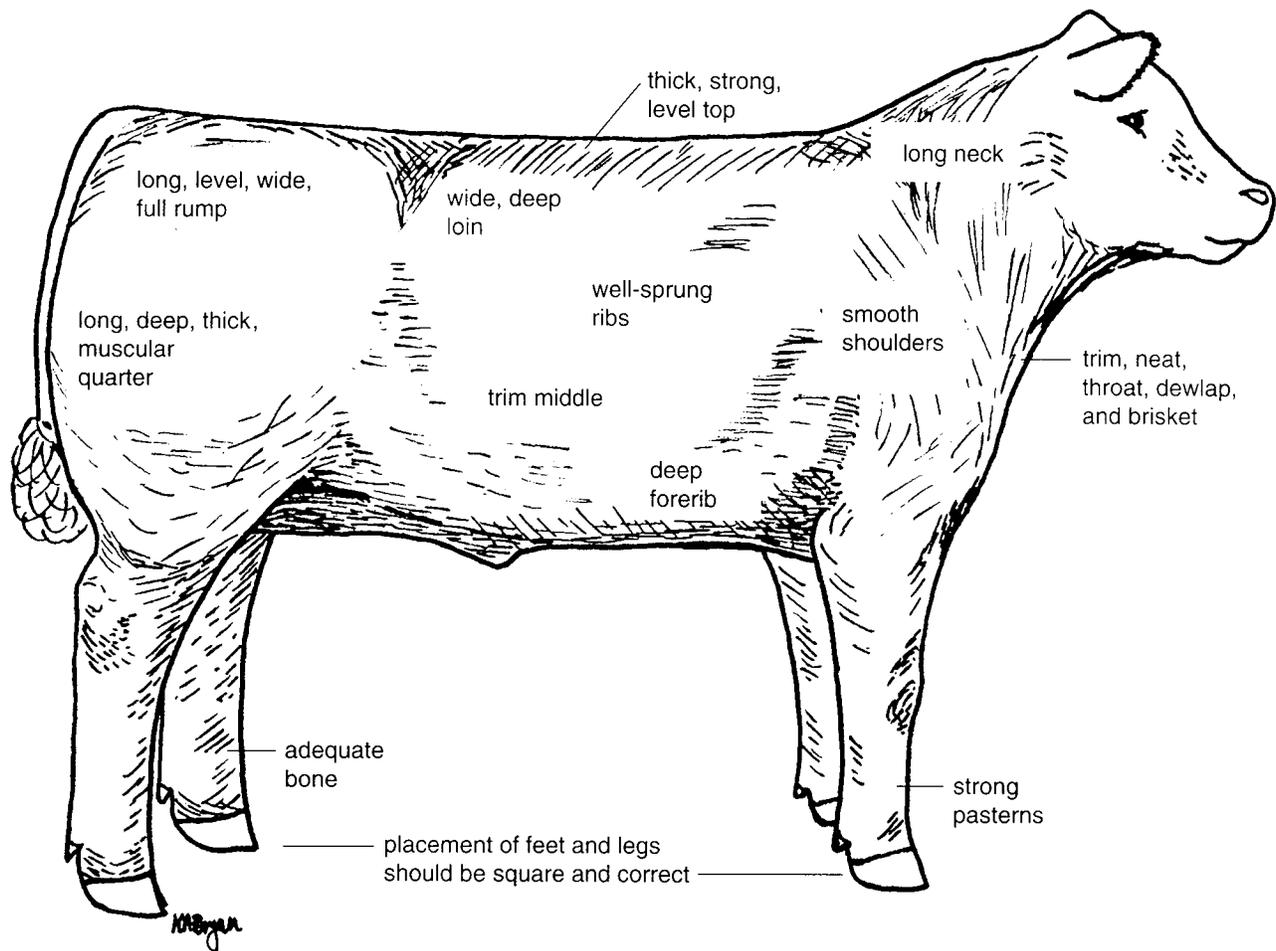


Figure 6: Characteristics of an Ideal Market Steer



	NORMAL RANGE	AVERAGE	IDEAL
Live weight (lb)	900 - 1,400	1,150.0	1,220.0
Dressing percentage	55 - 67	62.0	62.0
Fat thickness (in)	.15 - 1.0	.50	.30
Ribeye area (sq in)	8 - 16	11.5	13.3
KPH fat percentage	1 - 6	3.5	2.0
Quality grade	Low Select - Avg. Prime	Low Choice	Avg. Choice

Adapted from *Live Animal Carcass Evaluation and Selection Manual*, 4th edition, 1993, Donald L. Boggs and Robert A. Merkel.

Feet and Leg Placement

Figure 7: Characteristics of an Ideal Market Steer

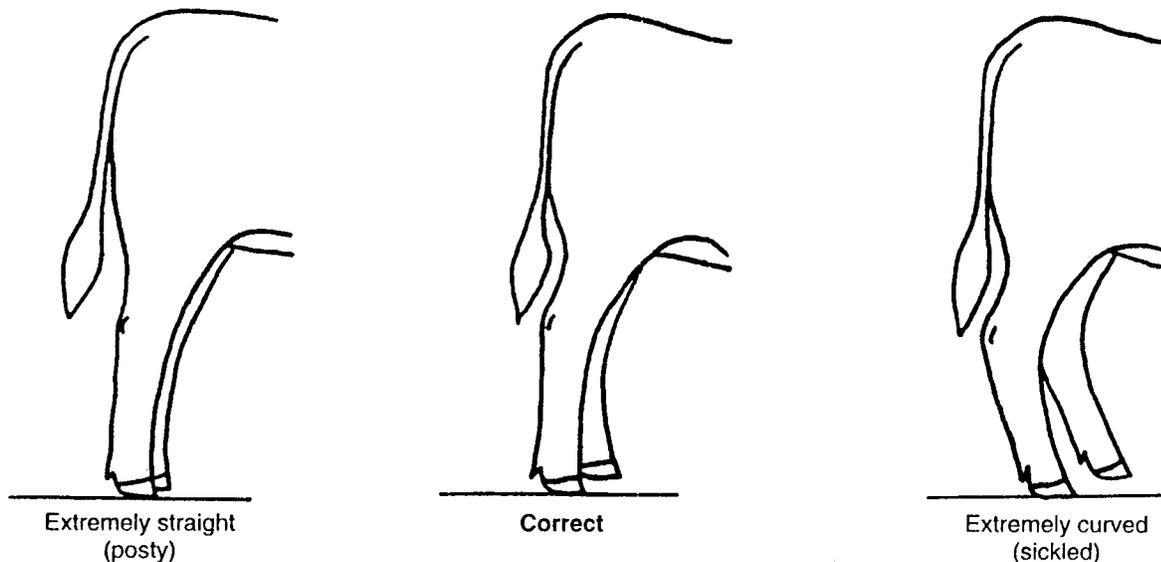


Figure 8: Rear Leg Alignment

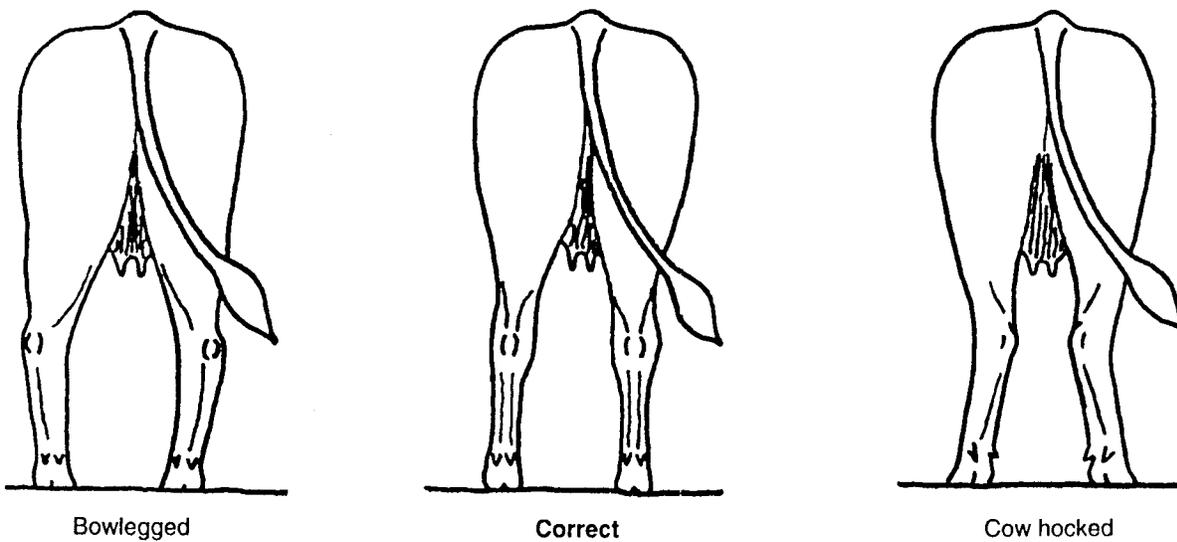


Figure 9: Front Leg Set

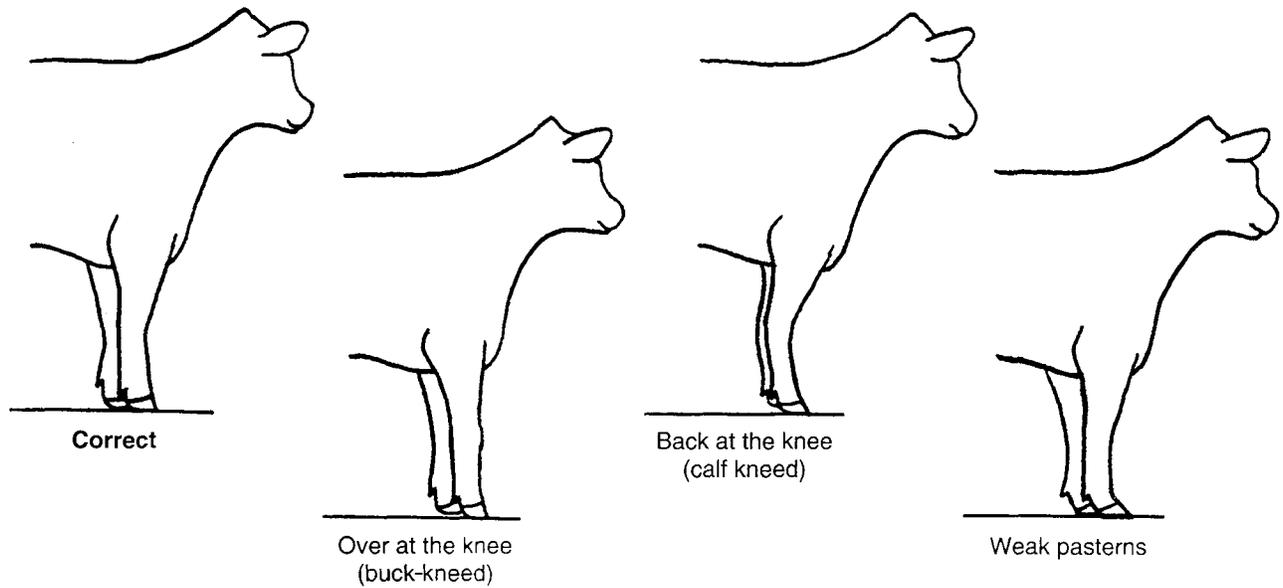
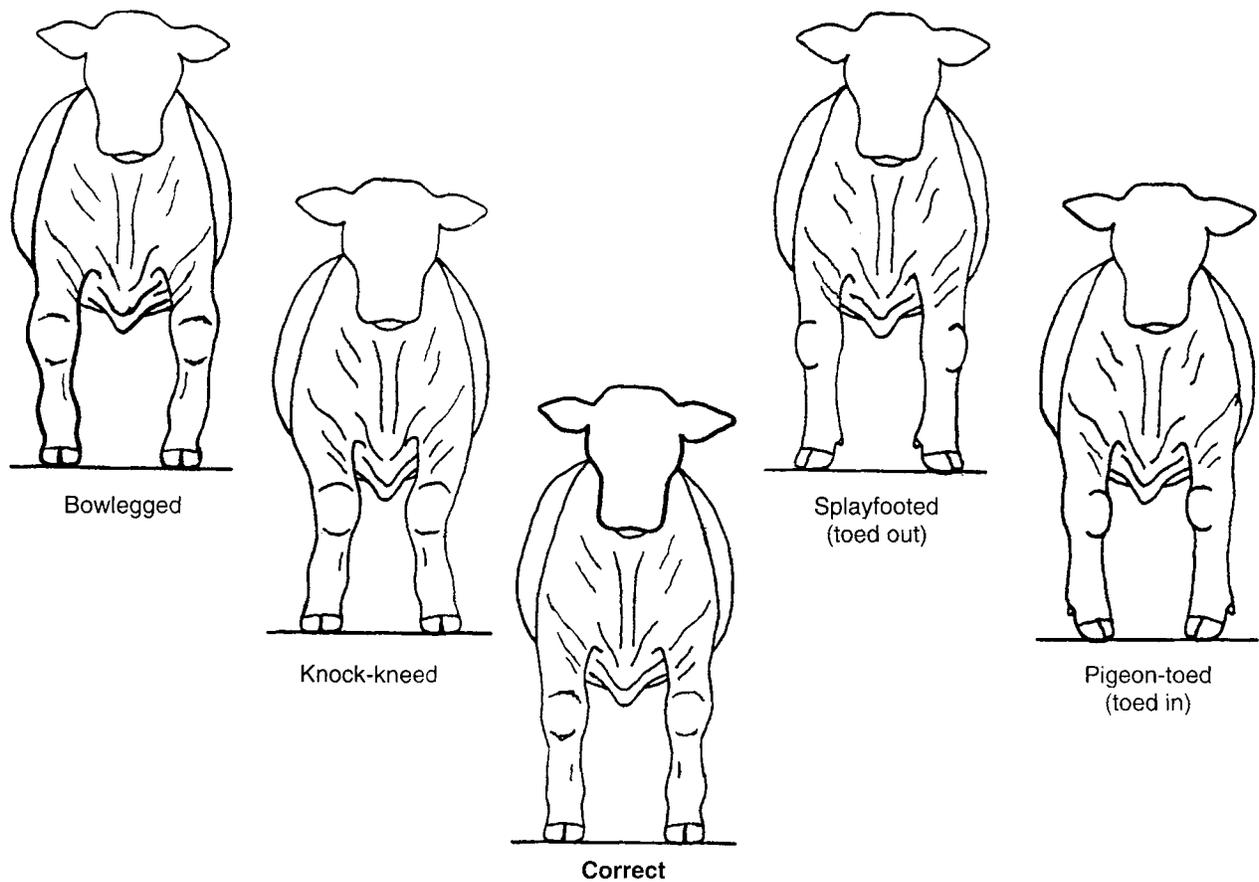


Figure 10: Front Leg Alignment



HANDLING MARKET STEERS

There are no predetermined guidelines for handling steers. The primary objectives when handling steers are to estimate accurately the amount and uniformity of finish and to determine the quantity of muscle in the loin – and maybe in the rump or in the quarter – as an indicator of total muscle volume.



Step 1. With fingers extended and together, place the palm of your hand and fingertips on the steer at the top to determine the quantity of muscle down his top. Heavily muscled steers will be wide and full; lightly muscled steers will be narrow. Move your hand down his topline and toward his loin.

Cup your hand and place the palm of your hand on the loin of the steer and evaluate the depth and width of his loin. The loin should be wide and deep with muscle.



Step 2. Determine the amount of finish over the last rib and along the edge of the topline, progressing toward the top of his shoulder.



Step 3. Determine the finish behind the shoulder of the steer.



Step 4. Move your hand toward his last rib. Analyze the amount and uniformity of finish over the various areas of the steer's rib region. Press firmly to detect the differences between fat, muscle, and bone. Fat will feel soft, like jelly; muscle will feel firm; and bone will feel hard.

BEEF CATTLE TERMINOLOGY

General

More Desirable Characteristics

more progressive
more dimensional
stouter
more upstanding
growthier

Less Desirable Characteristics

conventional

needs more size and performance

lacks growth and do-ability

Structure

More Desirable Characteristics

fault free
problem free
straighter lined
more structurally correct
better balanced
tighter framed
stronger topped, loined
squarer, leveler rumped
higher and wider at the pins
more nearly level in the rump

Less Desirable Characteristics

ill structured
poorer structured
slack framed
structurally incorrect, poorer structured
more off-balance, poorly balanced

weaker topped, loined
dropped at the pins
narrower at the pins
steeper in the rump

Frame and Growth

More Desirable Characteristics

more moderate framed
larger framed
smaller framed
more size and scale
longer _____
more ruggedly designed
higher weight per day of age
more performance oriented

Less Desirable Characteristics

smaller framed or larger framed
smaller framed
larger framed
lacks size and scale
shorter _____
finer boned, frailer made
lower weight per day of age
lacks growth and performance

Head, Neck, Chest, and Shoulder

More Desirable Characteristics

fresher appearing
later maturing
more future growth potential
more extended through the front end
longer, leaner neck
laid in more neatly about the shoulder
smoother, tighter shouldered
smoother neck/shoulder junction
more desirable slope to the shoulder
wider chested

Less Desirable Characteristics

staler appearing
earlier maturing
less future growth potential
shorter fronted
shorter, leathery fronted
coarser fronted
more open shouldered
coarser neck/shoulder junction
straight shouldered
narrower chested

Condition

More Desirable Characteristics

trimmer, cleaner patterned
cleaner conditioned
more ideal in (his/her) condition
trimmer dewlap, brisket
easier fleshing

Less Desirable Characteristics

heavy conditioned
less ideal in (his/her) condition
wastier through the front end
harder doing, harder fleshing

Volume and Capacity

More Desirable Characteristics

wider sprung
deeper _____
more capacious, higher capacity
bigger volumed
more dimensional _____
more arch and spring of rib
bolder spring of rib
longer ribbed
more dimension through center of the rib

Less Desirable Characteristics

narrower made
shallower _____
less capacious
less volume
less dimensional _____
flatter ribbed
pinched in the forerib
shorter ribbed
less dimension through center of the rib

Muscle and Muscle Design

More Desirable Characteristics

longer, smoother muscle design
_____ muscle make-up
heavier muscled
thicker made
deeper quartered
thicker top
thicker loin

Less Desirable Characteristics

shorter, tighter muscle design

lighter muscled

shallower quartered
narrow topped

Feet and Legs

More Desirable Characteristics

stood on more bone
heavier boned
stood on more rugged bone
stood squarer in (his/her) foot placement
greater diameter of bone
stands wider both front and rear
more desirable set to the hock
stronger pasterns

Less Desirable Characteristics

stood on finer bone
finer boned
stood on finer bone
splayfooted, pigeon-toed, toes out
finer boned
stands narrower both front and rear
posty legged, sickle hocked
weak pasterned

Stride and Movement

More Desirable Characteristics

more mobile
more fluid moving
easier moving, sounder footed
moved out freer and easier
farther reaching in (his/her) stride
truer tracking

Less Desirable Characteristics

restricted in (his/her) movement
stiff strided
restricted in (his/her) movement
shorter strided
shorter strided
narrower tracking, cow hocked

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longer strided
 moves with more strength of top
 moves with more levelness of rump

shorter strided
 roaches (his/her) top on the move
 drops (his/her) pins on the move

Bull

More Desirable Characteristics

stouter
 more powerful
 cleaner sheath
 neater sheath
 more scrotal circumference
 greater testicular development
 more testicular distention
 more uniform-sized testicles
 testicles hang more correctly
 more ruggedly designed
 wider chested

Less Desirable Characteristics

 pendulous sheath
 pendulous sheath
 less scrotal circumference
 less testicular development
 less testicular distention
 uneven-sized testicles
 twisted testicles

 narrower chested

more potential to sire calves with _____	should sire calves with more _____	less potential to sire calves with _____	should sire calves with less _____
	frame length volume growth muscle trimness performance weight per day of age		frame length volume growth muscle ----- performance weight per day of age

Heifer

More Desirable Characteristics

broodier
 more angular
 more stylish
 easier fleshing
 easier keeping
 combines correctness, length,
 and eye appeal
 nicer brood cow prospect
 larger vulva
 trim-clean navel

Less Desirable Characteristics

 less angular, coarser

 harder fleshing
 harder keeping

 smaller vulva
 loose, wasty navel

Steer

More Desirable Characteristics

moderate framed
 nicer balanced
 tighter framed
 trimmer, cleaner patterned
 heavier muscled
 more total muscle mass
 wider, thicker topped
 wider, more expressively muscled
 longer _____
 deeper, wider, thicker quarter
 pushes more stifle on the move
 more ideally finished
 handles with _____
 cleaner in his condition
 possesses less waste through _____
 trimmer _____
 should rail a carcass with a _____
 higher lean-to-fat ratio
 more desirable yield grade

Less Desirable Characteristics

taller
 more off-balance
 slack framed
 heavy middled, off-balance
 lighter muscled
 less total muscle mass
 narrow down his top

 shorter _____
 narrower based, lighter muscled quarter

 patchy, uneven finish

 wastier, fatter, overfinished
 waistier _____
 should rail a carcass with a _____
 lower lean-to-fat ratio
 less desirable yield grade

PERFORMANCE DATA FOR BEEF CATTLE

Performance data, or performance records, allow producers to objectively evaluate economically important traits associated with livestock production. The major production traits of beef cattle include the following:

- ✗ Measurement of reproductive performance and mothering ability
- ✗ Quantification of growth rate and efficiency of gain
- ✗ Objective analysis of carcass merit

Performance evaluations can be reported as performance records, or as genetic evaluations of those records and of an animal's relatives.

In the past several years, an ever-increasing emphasis has been placed on the understanding and use of performance evaluations. The next sections will discuss the importance and application of performance evaluations to beef cattle judging and the combined use of visual appraisal and performance records (actual or genetic) for live animal selection.

Beef cattle performance data can be listed in several different ways. For example, an Angus bull calf might have a 600-pound weaning weight, or a Polled Hereford heifer might have a 750-pound yearling weight. Both of these examples represent actual records of the individual, but they don't depict how these animals have performed relative to other animals in the herd. Therefore, a more accurate representation of performance would be to rank animals within the same herd. However, ranking animals within the same herd can be biased if they are born at different times of the year or if they are housed and managed differently. Thus, we often need to rank animals within a contemporary group, which is comprised of animals that are of the same breed, age, and sex and that have been raised in the same management group (same location and access to the same feed).

Generally, use a ratio to rank animals within a contemporary group in the herd. A ratio consists of a number, typically around 100 (average), that compares each animal to the other animals in a par-

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ticular group. Any number below 100 indicates that the animal's performance was below the average of the group. A ratio of 110 for weaning weight means the animal was 10 percent above average for weaning weight. Likewise, a ratio of 85 for weaning weight means the animal was 15 percent below average for weaning weight. However, use of ratios does not indicate the exact average for a certain trait. Also, ratios may only be used to compare animals within a contemporary group.

When judging livestock and evaluating performance records, select animals for a particular purpose. Ideally, a comparison is made between progeny, or offspring, of one animal with progeny of another animal for a certain economically important trait.

Producers need to be able to compare animals on the same farm that were raised in different contemporary groups or to compare one animal on a particular farm with another animal on a different farm. However, neither actual records nor ratios allow producers to compare animals accurately from different contemporary groups or herds.

In order to compare animals accurately within a breed and across different herds, an expected progeny difference (EPD) must be used. EPDs are a reliable tool to predict the true genetic value of an animal because they consider the individual performance of the animals as well as data from parents, full siblings, and other relatives in all herds that report the information. The biggest advantage is that EPDs allow producers to make comparisons across contemporary groups and herds. However, you cannot compare EPDs of one breed against the EPDs of another breed (example: EPDs of Brangus cannot be compared to the EPDs of Angus). Therefore, a bull with a yearling weight EPD of +55.0 would be expected to sire offspring that are 55 pounds heavier at 365 days of age than offspring from a bull with a yearling weight EPD of 0 (zero). Likewise, a bull with a weaning weight EPD of +45.0 would be expected to sire progeny that are 30 pounds heavier at weaning than the average of the progeny from a bull with a weaning weight EPD of +15.0.

The student who wishes to excel in beef cattle judging must fully understand the importance and accuracy of using actual records on an individual, ratios from within a herd, and EPDs for the following beef cattle production traits:

- X Birth Date** – The actual date an animal was born.
- X Birth Weight** – The weight of a calf taken at birth. Heavy births are associated with calving problems and sometimes death of the calf or cow (actual, ratio, or EPD). Birth weight EPDs are more reliable than actual birth weights when predicting calving problems.
- X Weaning Weight** – The weight of a calf taken between 160 and 250 days of age and then adjusted to a constant age of 205 days (actual, ratio, or EPD).
- X Yearling Weight** – The weight of an animal taken between 330 and 440 days of age and adjusted to a constant age of 365 days (actual, ratio, or EPD).
- X Hip Height or Frame Score** – Height at the hip in inches, or height at the hip in inches for a particular age (actual or ratio).
- X Maternal Milk EPD** – The difference in pounds of a calf expected at weaning because of differences in the milking and mothering ability of the cow.
- X Yearling Scrotal Circumference** – The distance measured in centimeters around the testicles in the scrotum of a bull at 365 days of age. A greater scrotal circumference indicates that a bull should have the capacity to produce greater volumes of semen, and his progeny should reach puberty at earlier ages (actual or ratio).

When presenting more than one type of data for a particular trait, such as ratios and EPDs for weaning weight, rank and use the data according to the accuracy with which future performance of offspring can be predicted. Give emphasis to the data in the following sequence:

1. EPD
2. Ratio within a contemporary group
3. An individual animal's actual records

PRODUCTION SITUATIONS FOR BEEF CATTLE

The types of beef cattle data and the selection of livestock based solely on visual appraisal have been discussed previously. When practical, use additional information to aid in the selection process. The availability of actual data, ratios, and EPDs allows judges to compare animals using objective criteria of performance. However, without some guidelines, the justifications for various placings of a class with performance data may be even more numerous than the reasons based on visual appraisal alone.

Understanding the scenario is possibly the most important factor when placing a performance class. A scenario is the assumed situation you are in while ranking the class. In each scenario, address three important factors for a complete description:

X Breeding Program

- What type of breeding program is being used?
- How are the selected animals to be used in that program?
- What are the goals or objectives of this breeding program?

X Feed and Labor Resources

- Under what conditions are the animals being raised?
- Are feed resources readily available or limited?
- Are labor resources readily available or limited?

X Marketing Program

- How are the cattle marketed?
- At what age and/or weight are the cattle to be sold?
- For what type of buyer are the cattle being produced?

Using the three factors discussed above, analyze the following three scenarios and data:

Scenario 1

Angus Bulls

These bulls will be used as natural service sires in a two-breed rotational crossbreeding system with Hereford. Cows are medium mature weight and moderate for milk production, and they will be maintained similar to range conditions, with low labor and limited feed availability for larger sizes of cattle. The top 20 percent of heifer calves will be retained as replacements, and the remaining heifer and steer calves will be sold at weaning to be finished in a feedlot.

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Table 2. Performance Data for Angus Bulls

NO.	BIRTH DATE	BIRTH WEIGHT EPD	WEANING WEIGHT EPD	YEARLING WEIGHT EPD	MATERNAL MILK EPD
1 (7028)	2/06/97	+2.1	+26.0	+35.0	+5.0
2 (7126)	2/25/97	+0.9	+33.0	+59.0	+11.0
3 (7003)	1/28/97	+5.3	+29.0	+38.0	-3.0
4 (7114)	2/24/97	+4.0	+28.0	+40.0	0.0
Breed Avg. EPDs:		+3.0	+29.1	+52.5	+11.5

Scenario 2

Simmental Heifers

These heifers will be used in a purebred Simmental herd that produces commercial bulls. The bulls will be used on Angus x Polled Hereford crossbred cows and heifers. Mature cow size in the commercial herd is 1,000 to 1,150 pounds. Feed and labor resources in this purebred Simmental herd are adequate to maintain a mature cow size of 1,300 to 1,500 pounds. The primary income is from the sale of commercial bulls, but some income is from the sale of a few purebred bulls and heifers to other purebred Simmental breeders.

Table 3. Performance Data for Simmental Heifers

NO.	BIRTH DATE	BIRTH WEIGHT EPD	205-DAY WEIGHT EPD	365-DAY WEIGHT EPD	MATERNAL MILK EPD
1	1/30/94	+4.7	+24.2	+44.0	+1.5
2	3/01/94	+11.1	+42.7	+68.0	+11.0
3	1/22/94	+4.0	+28.0	+51.0	+1.0
4	2/11/94	+3.8	+24.0	+53.0	+0.8
Breed Avg. EPD's:		+3.3	+21.0	+33.8	+0.6

Scenario 3

Brangus Bulls

Rank these bulls in the order they should be selected as potential herd bulls for a commercial cattle operation. This progressive ranch is looking for a terminal sire to breed to 1,200-pound Black Baldie cows (Angus X Hereford). The progeny from these bulls will be retained by the ranch in the feedlot and sold on a value-based program using a grid that pays premiums for high cutability cattle. Feed and labor resources are abundant.

Table 4. Performance Data for Brangus Bulls

NO.	TAG	BIRTH WEIGHT EPD	WEANING WEIGHT EPD	YEARLING WEIGHT EPD	MATERNAL MILK EPD
1	604	+3.9	+18.2	+33.0	+4.0
2	666	+1.3	+9.8	+25.0	+5.4
3	699	-1.5	+19.2	+43.0	-1.0
4	714	+3.2	+28.5	+47.9	+1.8
Breed Avg. EPDs:		+1.3	+15.5	+27.1	+0.9

First, describe the **breeding program**. Is this a purebred or a commercial operation? If cattle are crossbred in this operation, what other breeds are being used? A class of heifers could be replacement females for a purebred program, or a class of bulls could be intended as natural service sires for a purebred or a commercial program. Regardless of the situation, outline an accurate and complete description of the breeding program. Following are analyses of scenario examples of possible breeding programs:

Angus Bulls – Use them as natural service sires in a two-breed rotational crossbreeding system with Hereford. Cows are medium for mature weight and moderate for milk production.

Simmental Heifers – Assume these heifers will be used in a purebred Simmental herd that produces commercial bulls. The bulls will be used on Angus x Polled Hereford crossbred cows and heifers. Mature cow size in the commercial herd is 1,000 to 1,150 pounds.

Brangus Bulls – Use them as natural terminal service sires in a commercial operation with 1,200-pound Black Baldie cows (Angus X Hereford).

Second, discuss the **feed and labor resources**. Specifically, describe the quality and quantity of feed. For example, cattle that are managed on low-feed resources or range conditions need ample capacity to efficiently use the limited nutrients and probably should not have excessively high milk production. Labor resources will impact body type and birth weight performance records of cattle to be selected. Cattle with high birth weight, coarse shoulders, and narrow rump design with narrow pin placement typically require more physical-labor assistance in the calving process than cattle with low birth weight, smooth shoulders, and wide rump design with added width at the pins. Even with adequate labor available at calving, calves with high birth weights can create unwanted problems and economic hardships for cattle producers. Feed and labor resources are as follows:

Angus Bulls – Cows bred to these bulls will be maintained similar to range conditions, with low labor and limited feed availability for larger sizes of cattle.

Simmental Heifers – Feed and labor resources in this purebred Simmental herd are adequate to maintain a mature cow size of 1,300 to 1,500 pounds.

Brangus Bulls – Feed and labor resources are abundant.

Third, the scenario should discuss the **marketing program** in enough detail so that performance traits and physical characteristics of the animals can be prioritized. Depending on the marketing program used, place emphasis on traits and characteristics that optimize production of beef cattle for the desired market. Examples follow of marketing programs from each scenario:

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Angus Bulls – Retain the top 20 percent of heifer calves as replacements and sell the remaining heifer and steer calves at weaning to be finished in a feedlot.

Simmental Heifers – Sale of commercial bulls is the main benefit, but some income comes from the sale of a few purebred bulls and heifers to other purebred Simmental breeders.

Brangus Bulls – The ranch retains the progeny in the feedlot and sells on a value-based program using a grid that pays premiums for high cutability cattle.

After looking at each part of the scenarios, consider the following priorities:

Scenario 1

Priorities: Select bulls that will maintain mature weight and milk production (maternal traits – birth weight EPD and maternal milk EPD). Maternal traits are very important because top heifers are retained. Remaining heifers and steers are sold at weaning; therefore, paternal traits (weaning weight EPD) are very important.

Scenario 2

Priorities: Maintain a balanced program in all areas. Select cattle that maintain or slightly increase performance in maternal (birth weight EPD and maternal milk EPD) and paternal (weaning weight EPD and yearling weight EPD) traits. Extremes are faulted.

Scenario 3

Priorities: Select bulls that will produce fast-growing calves; therefore, paternal traits (yearling weight EPD) are very important. Maternal traits in this scenario are not really considered because of the abundance of labor and feed; however, extremes are faulted.

SAMPLE ORAL REASONS FOR BEEF CATTLE

Junior Yearling Brangus Heifers

3-4-2-1

“After analyzing this class of Brangus heifers, my placings were 3-4-2-1. I started with the split-eared heifer in the class, as she was the freest-moving and the longest, smoothest muscled, patterned heifer in the class. I realize 3 could have been heavier muscled throughout; nonetheless, I used 3 over 4 in my top pair, as 3 was a more moderate framed, smoother shouldered heifer that shows more femininity and refinement about her front. She was especially freer from excess leather in the dewlap and brisket and was cleaner and trimmer in the navel. 3 was the most progressive heifer in terms of her muscle length and smoothness, and she moved out with a freer, easier, and more ground-covering stride. She stood on more length of cannon and more closely follows that modern Brangus ideal. I must admit that 4 was a deeper ribbed heifer that showed more thickness down her top and through the center and lower portions of her quarter, while standing on more substance and diameter of bone. However, I would like to see 4 flatter and smoother in her muscle structure and more refined about her front end.

In spite of this, I preferred 4 over 2 in my middle pair, as 4 more closely followed my top heifer in terms of skeletal size and scale. Of the pair, 4 was a larger framed, deeper ribbed, wider sprung, higher capacity heifer that exhibited more total volume and capacity from end to end. She was a more ruggedly made heifer that showed more thickness of muscling down her top and through all dimensions of her quarter. She stood on more substance of bone and more correctly on her feet and legs. I must admit that 2 did more closely follow my top heifer in terms of muscle length and smoothness and was more refined about her front end, but she splayed out up front and was cow hocked.

But I did prefer to use 2 over 1 in my bottom pair of smaller framed heifers, as 2 was a growthier

heifer that was cleaner about her middle, trimmer about her front, and showed more youthfulness and growth potential about her head and neck. She was more progressive in her muscle length and smoothness and blended in neater and smoother through her shoulders. She appeared to be a later maturing heifer that should grow into a more progressive and productive herd matron. I must admit that 1 was a straighter, stronger topped, leveler rumped heifer that was more structurally correct, but I faulted 1 and placed her last in this class as she was the smallest framed, lowest set, heaviest fronted heifer that had the most leather in her dewlap, brisket, and navel. She lacked the overall size, scale, balance, and smoothness of the heifers placed above her in the class today. *Thank you.*"

Limousin Heifers

2-1-4-3

"Selecting the most production-oriented heifer that best combines volume, structural soundness, and balance, I chose the alignment 2-1-4-3 for the Limousin heifers. I realized 2 could be trimmer in her condition and wider tracking, but compared to 1 in my initial pair, she was a broody-appearing, easy-fleshing heifer that carried more length and spring from fore to rear ribs.

Sure, 1 was a stout-made, powerfully constructed heifer, but she was short bodied and restricted in her movement. However, with these faults aside, it was the muscle and volume of 1 over the balance of 4. Also, 1 was wider chested, being deeper and bolder sprung. Likewise, she carried more width and dimension down her top while maintaining this advantage into a more three-dimensional quarter.

Yes, 4 was a more feminine-fronted heifer, but at the same time, she was narrow tracking off both ends and tapered through her lower quarter. Even so, in my concluding pair, 4 beat 3. She was a more attractive profiling, more eye-appealing heifer that was more angular fronted. In addition, she was straighter, stronger down her top, and longer and leveler out of her hip, allowing her to be longer striding off her rear legs.

I realize 3 was a long-bodied, deep-sided heifer. However, this does not allow for the fact that she was the narrowest made, lightest muscled heifer that was the poorest structured; so she was last. *Thank you.*"

Prepared by
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Market Steers

4-2-1-3

"My placing of the market steers is 4-2-1-3. I started the class with 4, the most powerfully muscled, most correctly finished steer in the class. I realize he was wastier fronted and middled; nonetheless, I used 4 over 2 in my top pair because he was a thicker made, heavier muscled steer throughout. He was a leveler topped steer that was longer in his rump. He had more thickness working down his top and out through a fuller rump. As viewed from behind, he had more thickness of muscle in the upper and center portions of his quarter and pushed more stifle on the move. He handled with more condition over his loin edge and down over his rib and should be more apt to reach that Choice quality grade. However, I do realize that 2 was a cleaner middled, trimmer fronted steer, but he simply lacked the volume and dimension of muscle of my top steer.

Concerning my middle pair, I placed 2 over 1, as 2 was a longer bodied, more upstanding steer that was trimmer through his front and middle. As viewed from behind, he had more thickness through the center and lower portions of his quarter and should go to the rail and hang a higher cutability carcass. I will admit that 1 was a deeper ribbed, wider sprung, higher capacity steer that stood down on more substance of bone. Also, he was a squarer rumped steer that was more ideal in the amount and uniformity of his finish.

I confidently placed 1 over 3 in my bottom pair, as he was a thicker made, heavier muscled steer that was more nearly ideal in his finish. He had more natural thickness down his top and through his quarter. He should hang a heavier muscled carcass that should be more likely to grade Choice. I do realize that 3 was a trimmer made steer, having less waste throughout. However, he was the lightest muscled, most underfinished steer of the class. He would hang up the least merchandizable carcass and, therefore, cannot merit a higher placing today. *Thank you.*”

Performance Limousin Bulls

1-4-2-3

“With the given scenario in mind, I placed my emphasis on weaning and yearling weight expected progeny differences as well as structural correctness and found that 1 best satisfied the scenario.

I realize 1 was not the highest in his growth data. Even so, the dehorned bull easily beats 4 in the top pair as he was the heaviest muscled, nicest balanced, easiest fleshing bull in the class. Plus, he’s the deepest ribbed, the heaviest boned, and the straightest in his lines.

Yes, 4 had the highest weaning and yearling weight EPDs, but he was also the poorest structured bull that was straight in his shoulder and hock, was steep hiped, and was restricted in his movement, so he’s second.

Still, I opted to use 4 over 2 in the middle pair, as 4 simply dominated in terms of weaning and yearling weight EPDs. In addition, he’s a larger framed bull that was stronger topped, smoother shouldered, and cleaner fronted.

I admit 2 was leveler hiped and took a longer, freer stride from behind, but his weaning weight EPD of +6.9 was the lowest in the class; he’s deep and course fronted, weak topped, and sickle hocked, so he’s third.

Even so, I used 2 over 3 in the bottom pair as he’s higher in his yearling weight EPD. He was thicker down his top and through his quarter, leveler hiped, and he tracked wider based behind.

I realize 3 was taller fronted, deeper ribbed, and straighter on his hind legs. But, at 9.7, he had the lowest yearling weight EPD of the class. He was the lightest muscled, narrowest chested, hardest doing bull that’s steep hiped and twisted in his scrotum, so he’s last. *Thank you.*”