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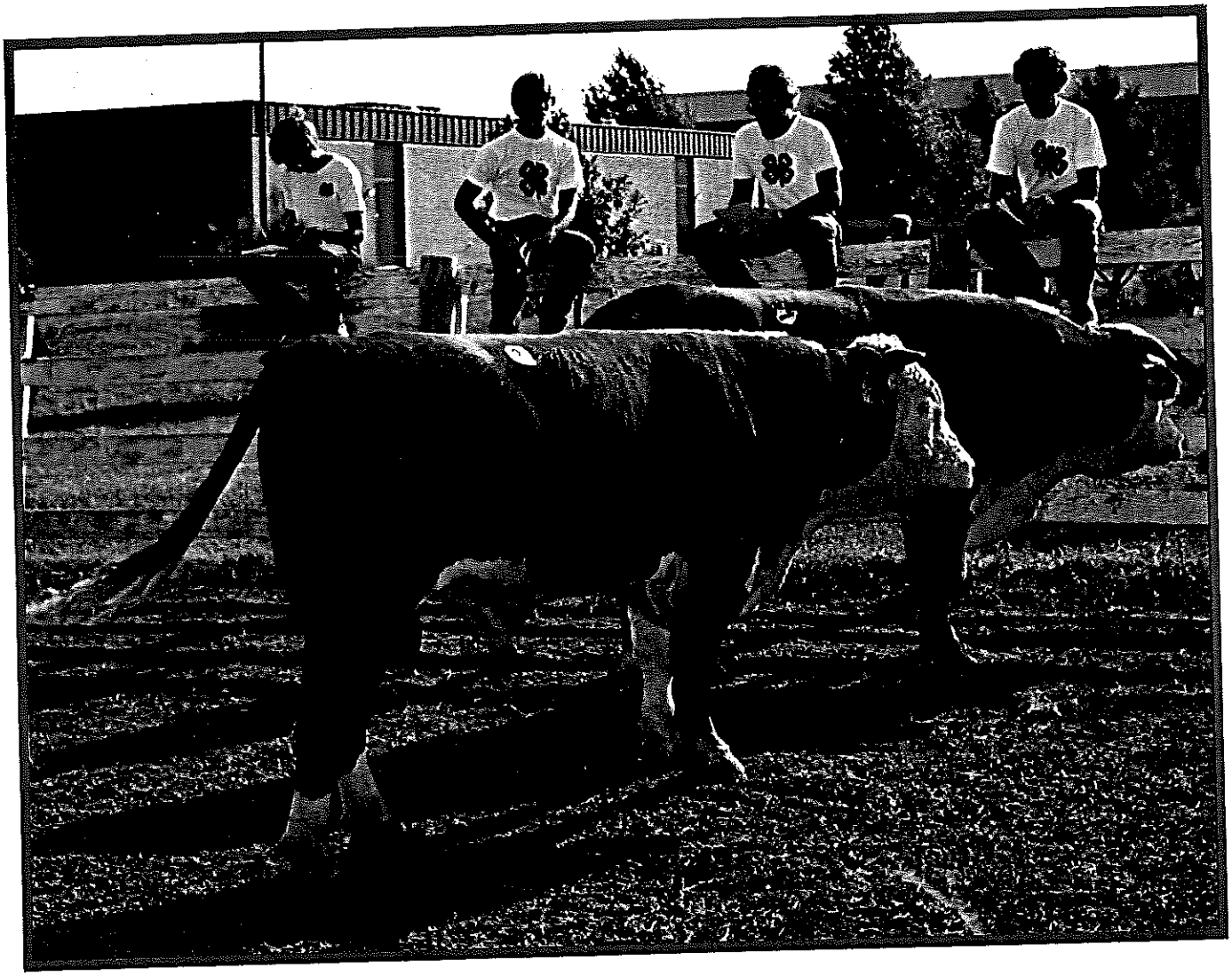

# LIVESTOCK JUDGING GUIDE

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Kenneth R. Bolen, Director of Cooperative Extension, University of Nebraska, Institute of Agriculture and Natural Resources.

# LIVESTOCK JUDGING GUIDE

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# Introduction

Nebraska is a great state in livestock production. Nebraska ranks:
4th in beef cows and heifers that have calved, January 1, 1997
3rd in fed cattle and calves marketed (1,000 capacity lots), 1996
6th in all hogs and pigs, December 1, 1996
11th in sheep and lambs on feed, January 1, 1993
18th in all sheep and lambs, January 1, 1997
1st in commercial cattle slaughter, 1996
5th in commercial hog slaughter, 1996

Livestock judging is used every day in Nebraska to look at breeding and market livestock and to make decisions regarding selecting, culling, buying and selling livestock.

Therefore, this Livestock Judging Guide illustrates and discusses how to make livestock judging a very useful, practical and enjoyable experience.

# How to Judge

The three major traits involved in livestock production are reproduction, production and carcass. The animal's conformation affects these important traits. Therefore, livestock judging should be concerned with selecting those livestock that are functionally efficient in regard to the reproduction, production and carcass traits. Conformation (form) should meet the functional needs of the animal.

Modern livestock type is an ideal or standard of perfection, combining all the characteristics which contribute to the animal's value and efficiency for the purpose specified. **We look for the most of the best.**

To be an accurate livestock judge, the judge must know what a modern livestock type is.

Livestock type should fit the function of the animal. In other words, the form of the animal should fit its function.

When judging livestock, the breeding or market animal selected as the most ideal should have **the most of the best.**

In order to make this correct decision, a knowledgeable and capable judge should know the following:

1. Parts of the animal,
2. Purpose of the animal,
3. Desirable conformation of an animal that is functionally efficient,
4. Conformation problems of an animal that is not functionally efficient,
5. How to evaluate the factors in selecting the animal with **the most of the best** and make a final decision.

After these points are learned, the individual is ready to judge a class of livestock. A procedure for judging follows:

## Beef Cattle and Sheep

1. Carefully study the livestock at a reasonable distance, side, rear and front view.
2. Livestock should then be walked out.
3. Move in at a closer distance for a more detailed examination. In addition, market cattle, market sheep and breeding sheep should be handled. Do not handle breeding cattle. (Note - Breeding cattle are more easily observed when running loose.)
4. Go back to a reasonable distance for making a final decision on the class.
5. Make the final decision after careful observation and analysis. Place a class of beef cattle or sheep based on **the most of the best.**

## Swine

1. Swine should be judged in a pen with a minimum size of 25' x 25' (7.6 m x 7.6 m).
2. Carefully study the livestock while standing around the pen.
3. Make the final decision after careful observation and analysis. Place a class of swine based on **the most of the best.**

### Filling out the Card

A card commonly used in Nebraska Livestock Judging contests is shown in Figures 1 and 2. The contestant checks one of the 24 possible placings shown on the front of the card in Figure 1. The back side of the card, shown in Figure 2, is for answering questions. The number of the animal that is the answer to the question is placed in the appropriate circle.

Contestant No._____ Placing_____ Reason_____

Indicate your placing by an "X" in the middle column.

Class No. _____

PLACING CARD

Form 0-17-75

| | | |
|---|---|---|
| 1234-A | | |
| 1243-B | | |
| 1324-C | | |
| 1342-D | | |
| 1423-E | | |
| 1432-F | | |
| 2134-G | | |
| 2143-H | | |
| 2314-I | | |
| 2341-J | | |
| 2413-K | | |
| 2431-L | | |
| 3124-M | | |
| 3142-N | | |
| 3214-O | | |
| 3241-P | | |
| 3412-Q | | |
| 3421-R | | |
| 4123-S | | |
| 4132-T | | |
| 4213-U | | |
| 4231-V | | |
| 4312-W | | |
| 4321-X | | |

Extension work in "Agriculture, Home Economics and subjects relating thereto." The Cooperative Extension Service, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln, Cooperating with the Counties and the U. S. Department of Agriculture
Kenneth R. Bolen, Director

**Figure 1. An example Contestant No., Class No. and Placing.**

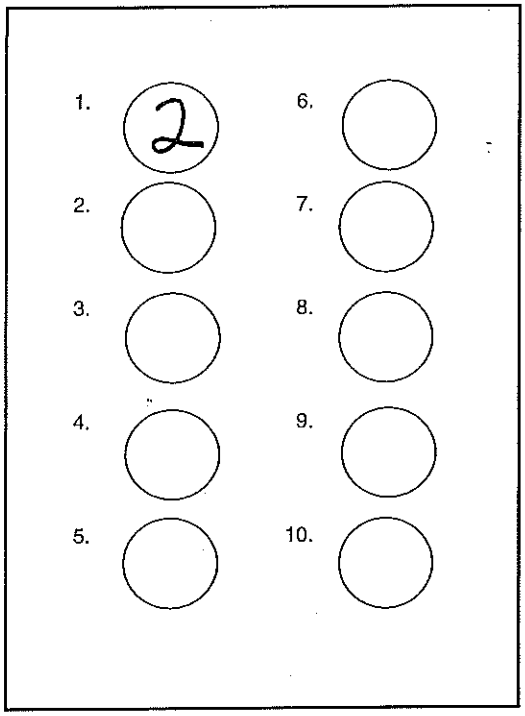
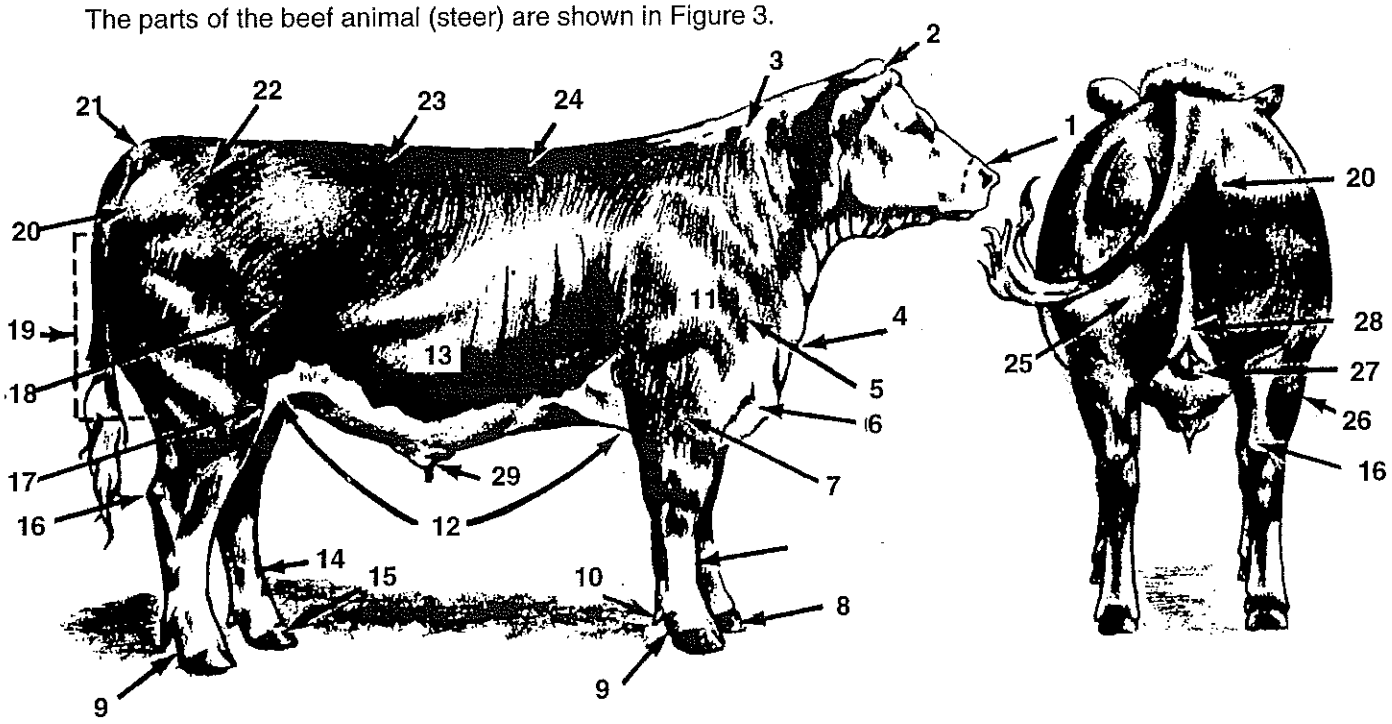



**Figure 2. An example answer to a question.**

# Beef Cattle Judging

The parts of the beef animal (steer) are shown in Figure 3.




1. Muzzle
2. Poll
3. Crest (neck)
4. Dew lap
5. Point of shoulder
6. Brisket
7. Forearm
8. Hoof (toe)
9. Pastern
10. Dew claw
11. Shoulder
12. Flank
13. Belly-middle
14. Cannon (shank)
15. Hoof (foot)
16. Hock
17. Stifle joint
18. Stifle muscle
19. Quarter (round)
20. Pins
21. Tail head
22. Rump
23. Loin
24. Rib
25. Inside of round
26. Gaskin
27. Cod
28. Twist
29. Sheath

**Figure 3. Parts of the Beef Animal (steer).**

## Breeding Cattle

A modern Hereford bull is shown in Figure 4. Note the frame and growth. He is smooth and long-muscled, masculine and exhibits excellent testicle development and suspension.

Please note that modern bulls should be acceptable in their birth weight and possess a desirable weaning weight, yearling weight and weight per day of age. A modern bull should be long, smooth and thick in his muscle structure and clean conditioned. In Figures 5-7, modern Angus, Simmental and Charolais bulls, respectively, are shown.

**Figure 4.** A Modern Hereford Bull. Note the desirable frame, long muscle structure, masculinity and testicle development and suspension.

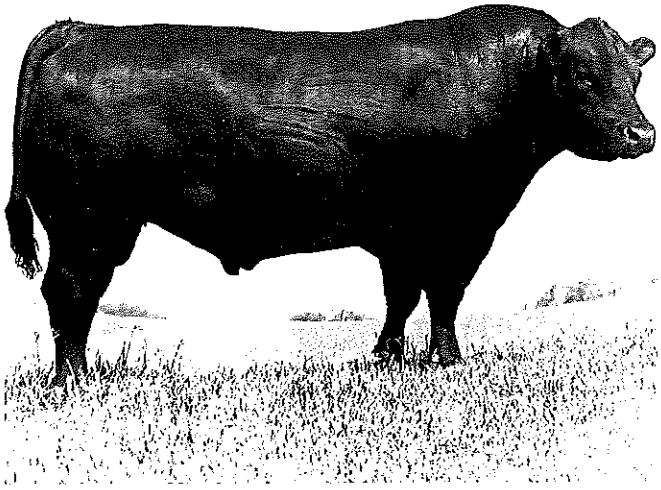


**Figure 5.** A Modern Angus Bull. Note the desirable growth, frame, long-smooth and thick muscling, structural soundness, trimness and overall appearance of productivity.

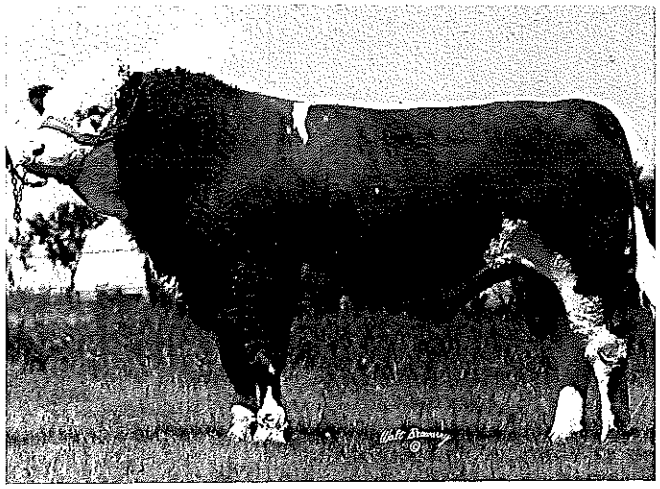


**Figure 6.** A Modern Simmental Bull. Note the balance, length, smooth muscle pattern and structural soundness.

**Figure 7.** A Modern Charolais Bull. Note the frame, smooth and thick muscling, testicle size, masculinity and overall balance.

Figures 8-12 show five modern breeding heifers. A modern breeding heifer should be medium or large in frame, sound in her skeletal structure, clean conditioned, long- and smooth-muscled, long- and clean-necked, neat-shouldered, sharp-withered, sound and free moving, large in her vulva, correct in her udder and teat development, adequate in her weight for age, feminine and give an overall impression of productivity.

A modern cow is shown in Figure 13. Observe her femininity, structural soundness and desirable type of udder.

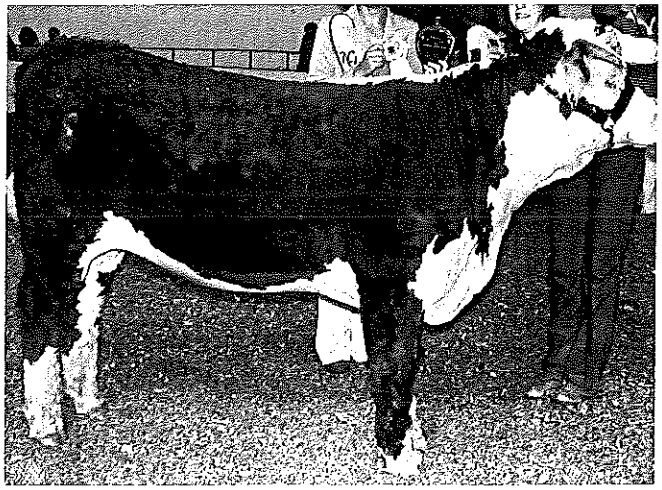


**Figure 8. A Modern Hereford Breeding Heifer. Note the smooth muscle, long neck and femininity.**

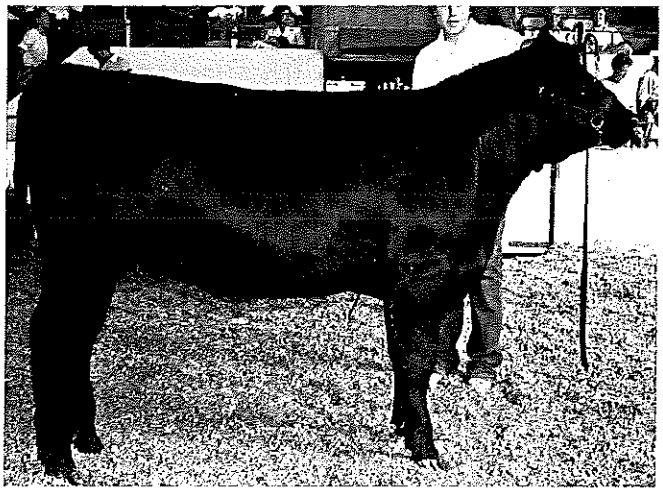


**Figure 9. A Modern Angus Breeding Heifer. Note the growth and structural soundness.**

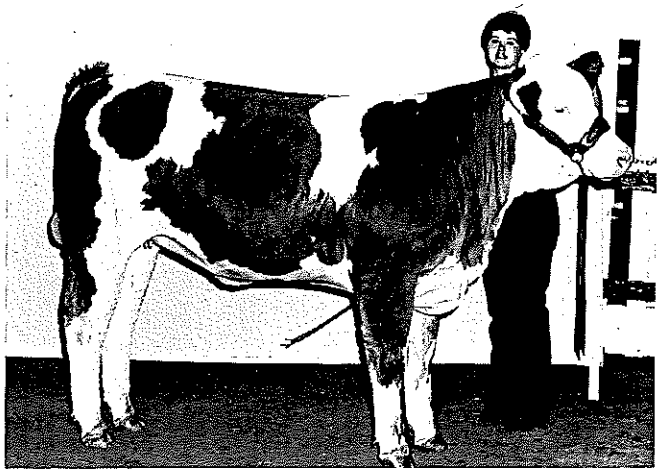


**Figure 10. A Modern Simmental Breeding Heifer. Large-framed, smooth- and thick-muscled and feminine.**

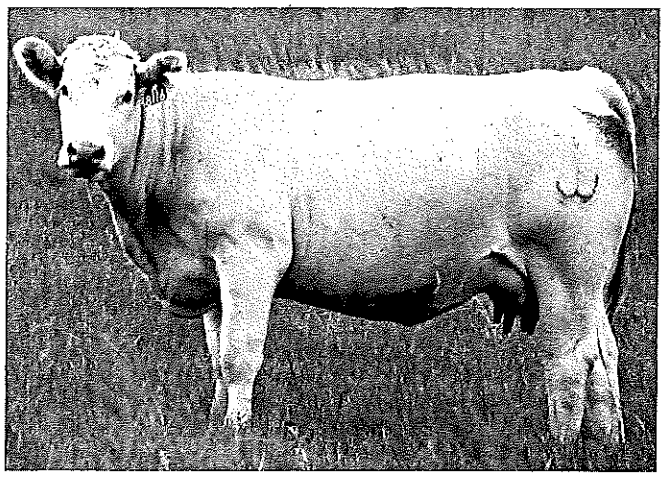


**Figure 11. A Modern Charolais Female. Note the femininity-cleanness, desirable udder and overall appearance of productivity.**

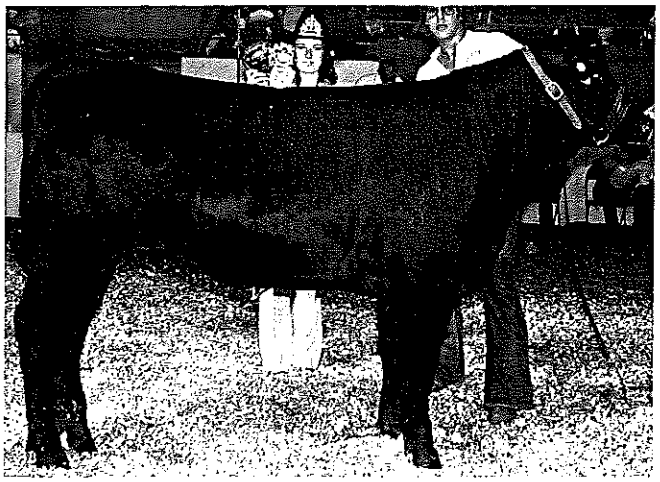


**Figure 12. A Modern Crossbred Breeding Heifer. Note the length, smooth muscle structure and structural soundness.**

**Figure 13. A Modern Angus Cow. Note the desirable frame, cleanness, femininity, structural soundness, desirable type of udder, smooth muscle, long and neat neck and overall appearance of productivity.**

## Market Cattle

Modern market steers are shown in Figures 14, 15 and 15A. A modern market steer should be medium- to large-framed, fast gaining, long-, smooth- and thick-muscled, correct in his fat cover (.30 to .50 in. or .76 to 1.27 cm), trim in his brisket, flank and twist, sound in his skeletal structure, sound and free moving, smooth shouldered and produce a Yield Grade 2-Choice carcass somewhere between a live weight of 1,000 to 1 ,400 pounds (454 to 635 kg). An overfat market steer is shown in Figure 16.

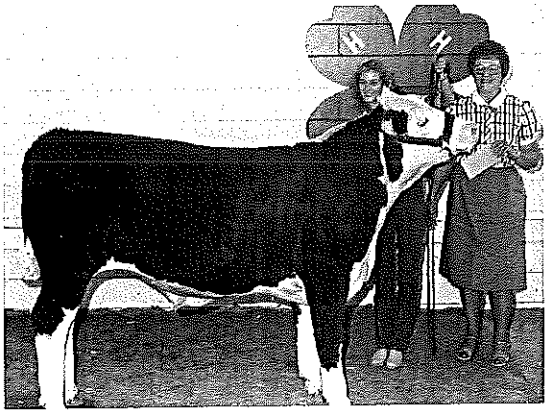


**Figure 14. A Modern Market Steer. Note the trim, thick-muscled appearance. He still displays an adequate amount of condition over his rib. This Hereford steer weighed 1,156 lbs. (524 kg), had .30 in. (.76 cm) of fat cover and 15.6 in.$^2$ (100.6 cm$^2$) of rib-eye area. He had a 1.4 Yield Grade and a Quality Grade of Low Choice.**

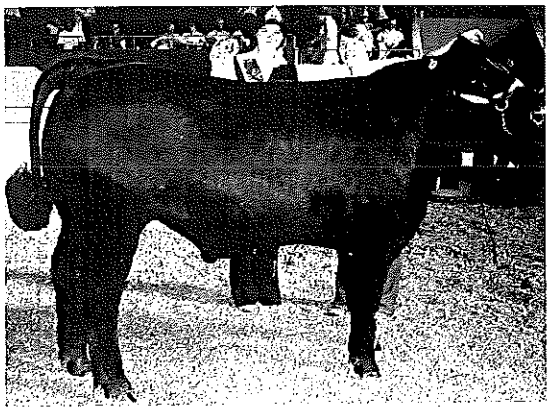


**Figure 15. A Modern Market Steer. Note the trimness and thickness of muscling. This Angus Steer weighed 1,238 lbs. (562 kg). He had .35 In. (.89 cm) of fat cover and 15.3 in.$^2$ (98.7 cm$^2$) of rib-eye area. He had a Yield Grade of 1.8 and a Quality Grade of Low Choice.**

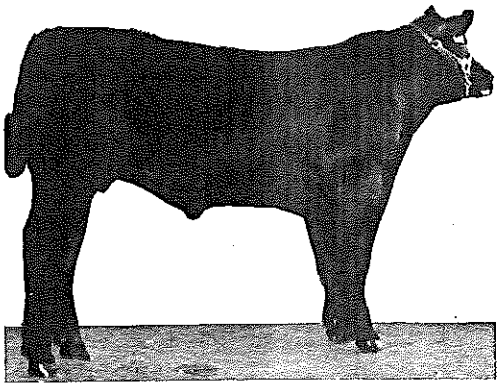


**Figure 15A. A Modern Market Steer. Observe the muscular shape of shoulder, forearm, loin, rump and quarter. He also was carrying an adequate amount of fat cover. He weighed 1,248 lbs. (566 kg), had .30 in. (.77 cm) of fat thickness, 16.7 in.$^2$ (107.7 cm$^2$) of rib-eye area, a 1.4 Yield Grade and a Quality Grade of Low Choice.**

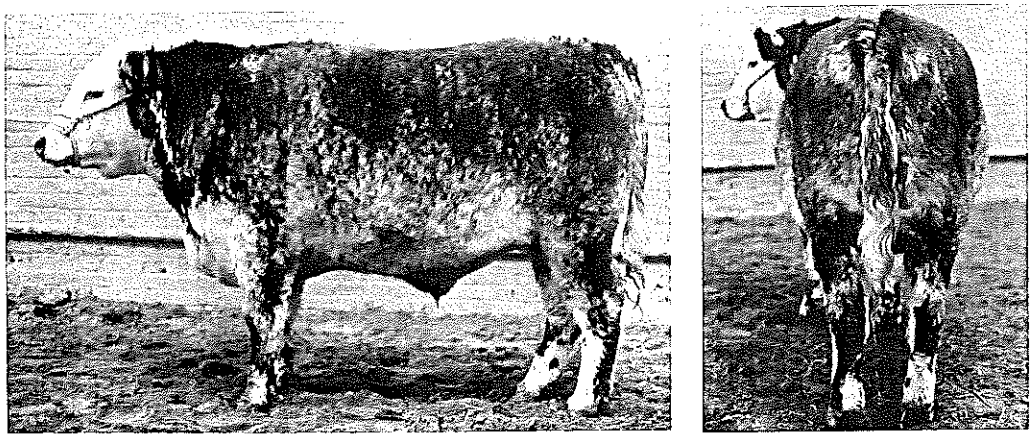


**Figure 16. An Over-Fat Market Steer. Note the wasty brisket-rib and flank, and narrow-weak muscling. This Crossbred Steer weighed 1,315 lbs. (596 kg). He had 1.35 in. (3.43 cm) of fat and 10.3 in.$^2$ (66.4 cm$^2$) of rib-eye area. He had a Yield Grade of 5.9+ and a Quality Grade of Low Choice.**

A narrow, weak muscled steer is shown in Figure 16A.

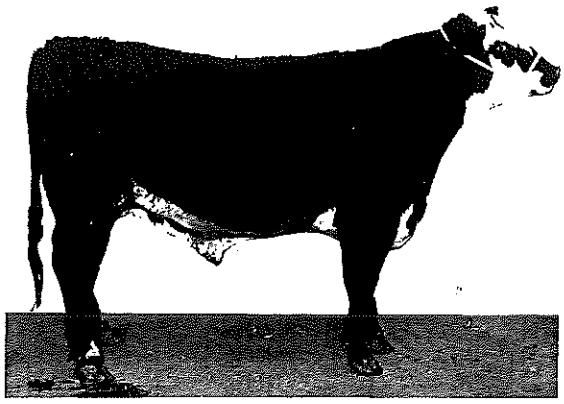
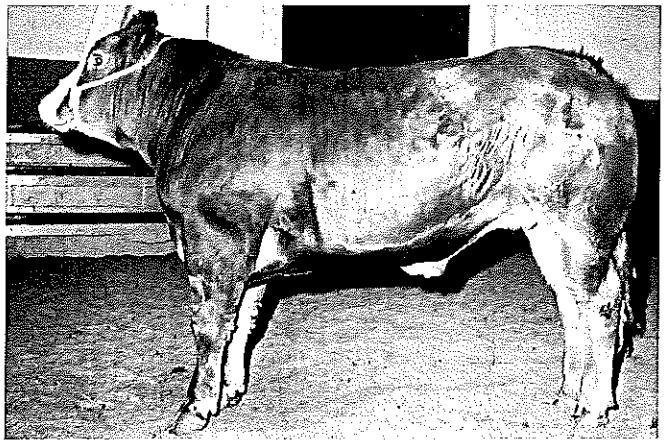


**Figure 16A. A Narrow, Weak Muscled Steer. Note the weak and flat muscular expression through his shoulder, forearm, loin and quarter. He weighed 1,380 lbs. (626 kg), had .50 in. (1.28 cm) of fat thickness, 9.7 in.$^2$ (62.6 cm$^2$) of rib-eye area, a Yield Grade of 4.3 and a Quality Grade of High Select.**

Under-fat market steers are shown in Figures 17 and 17A. A modern market heifer is shown in Figure 18. Note her long, smooth, and thick-muscle and correctness of fat cover.



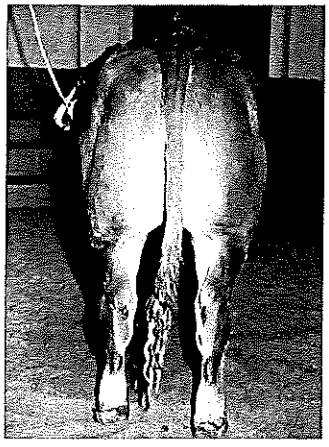


**Figure 17. An Under-fat Market Steer. Note the bare rib, brisket and flank. Also, observe the undesirable, tight, bubble shaped muscle structure. This steer had many characteristics of Double-Muscling. He weighed 1,215 lbs. (551 kg), had .10 in. (.25 cm) of fat thickness, 17.9 in.$^2$ (115.5 cm$^2$) of rib-eye area, .4 Yield Grade and a Quality Grade of Middle Standard.**

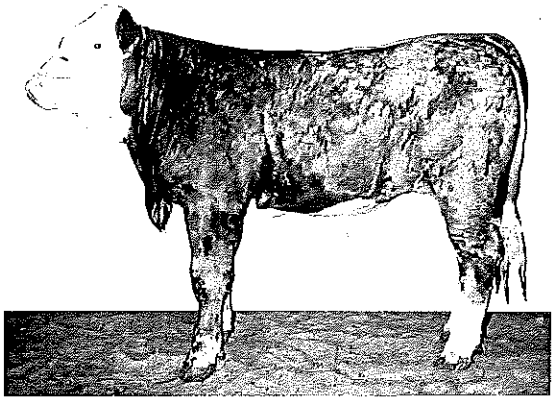


**Figure 17A. An Under-Fat Market Steer. This steer appears hard and bare over his rib. In addition, he needs more natural thickness of muscling. He weighed 1,315 lbs. (596 kg.), had .20 in. (.51 cm) of fat thickness, 13.9 in.$^2$ (89.7 cm$^2$) of rib-eye area, a 2.1 Yield Grade and a Quality Grade of High Standard.**

**Figure 18. A Modern Market Heifer. Note the long-smooth and thick muscling and trim condition. This Crossbred Heifer weighed 1,157 lbs. (525 kg). She had .30 in. (.76 cm) of fat cover and 15.4 in.$^2$ (99.3 cm$^2$) of rib-eye area. She had a Yield Grade of 1.5 and a Quality Grade of Low Choice.**

### Stocker-Feeder

A modern heifer calf is shown in Figure 19. Note the length, feet and leg soundness, trimness and femininity.

A modern feeder steer is shown in Figure 20. A modern feeder steer should be medium- or large-framed, long-, smooth- and thick-muscled, sound in his skeletal structure, sound and free moving, neat-shouldered, and have a thrifty, productive and fast growing appearance. He should possess the potential for producing a carcass with .30 - .50 in. (.76 to 1.27 cm) of fat cover and preferably a Yield Grade 2-Choice carcass somewhere between a live weight of 1,000 - 1,400 lbs. (454 to 635 kg).

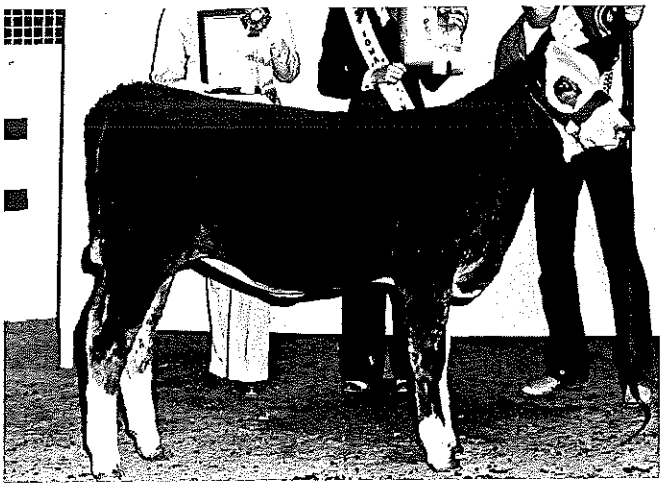


**Figure 19. A Modern Heifer Calf. She is long, smooth muscled, feminine and structurally sound.**

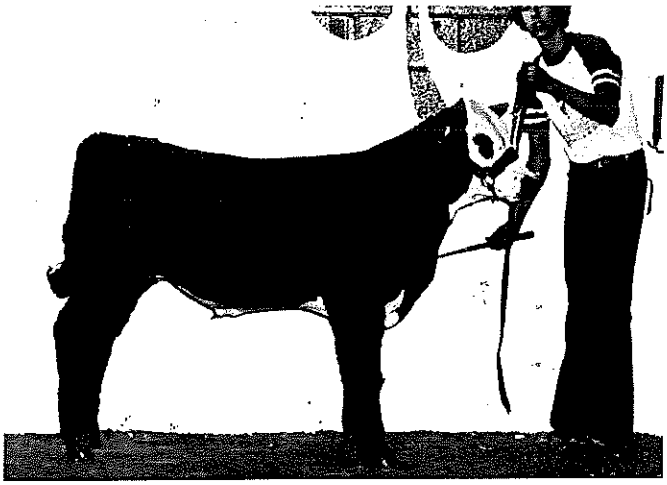


**Figure 20. A Modern Feeder Steer. Note the frame, smooth muscle, trimness and structural soundness.**

# How to Handle Market Cattle

The main purpose in handling market cattle is to determine the amount and distribution of fat (finish). This should be done primarily by handling over the fore and rear rib. The fore rib of over-finished cattle will handle with a high amount of fat. The fore rib of under-finished cattle will be quite bare. Over the rear rib, cattle with a correct amount of fat cover (.40 in. or 1.02 cm) will not be bare or excessive in finish. The rear rib on cattle with .20 in. (.51 cm) or less of fat will be very easy to feel. The rear rib on cattle with .60 in. (1.52 cm) or more of fat will usually not be as easy to feel. Cattle with .40 in. (1.02 cm) of outside fat cover over the last rib should have an opportunity to grade at least low choice.

Cattle can also be checked for fat in the rear flank. Cattle under-finished will often feel bare in the flank. In contrast, cattle over-finished will often feel quite full of fat in the flank.

Figures 21-23 demonstrate how to properly handle market cattle.

In all instances, safety should be practiced when handling market cattle.

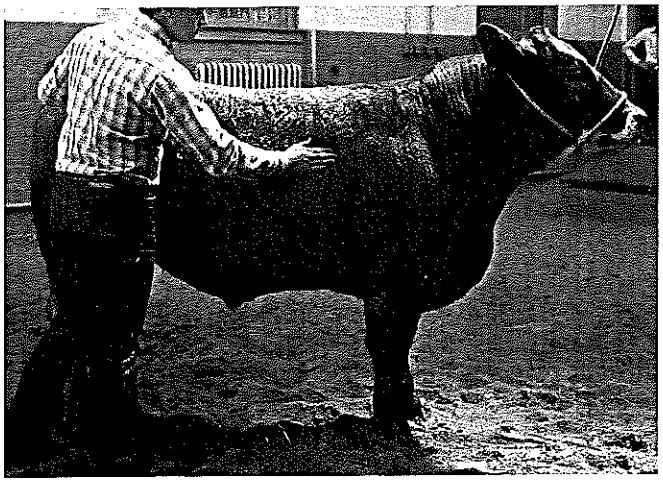


**Figure 21. Handling a Market Steer for fat cover over the fore-rib.**

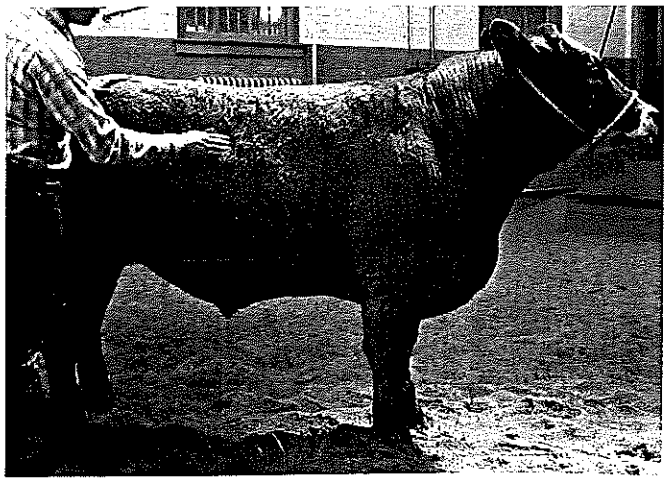


**Figure 22. Handling a Market Steer for fat cover over the last rib.**

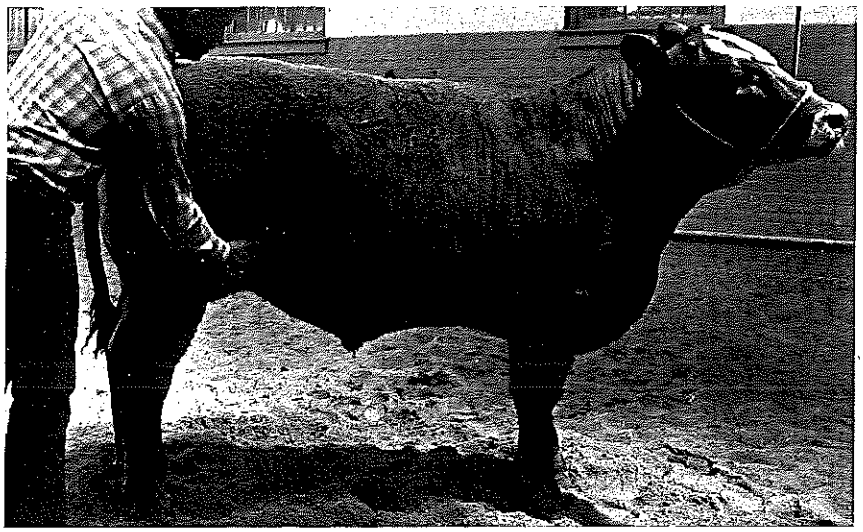


Figure 23. Handling a Market Steer for fat deposition in the rear flank.

# Feet and Leg Problems In Beef Cattle

Figures 24-27 show examples of feet and leg problems in beef cattle.

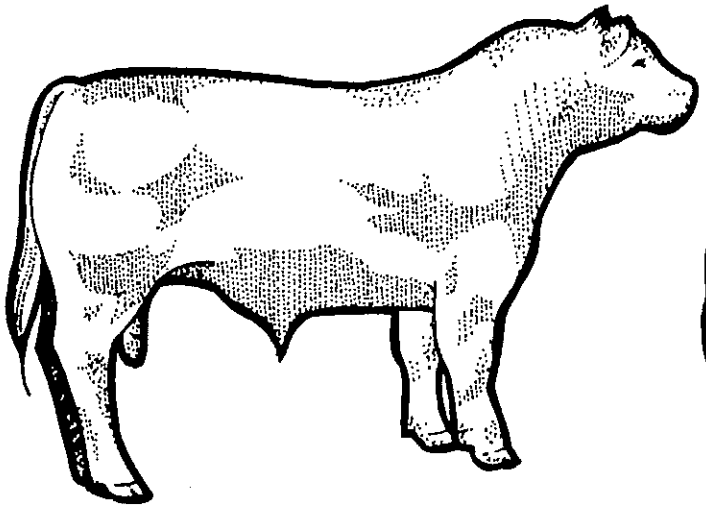


Figure 24. Sickle-hocked

Calf-kneed

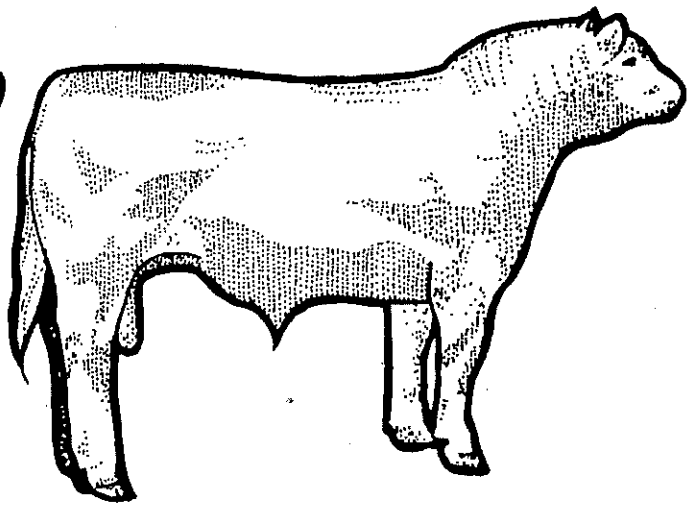


Figure 25. Posty-legged

Buck-kneed

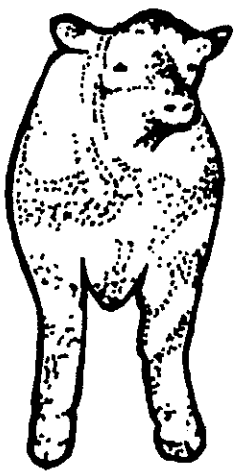
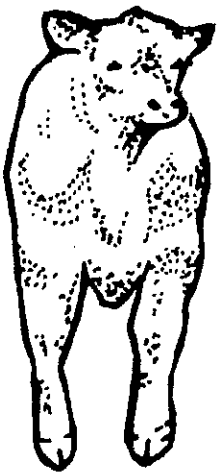


Figure 26. Toes-out



Toes-in

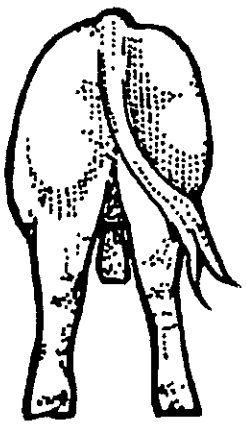
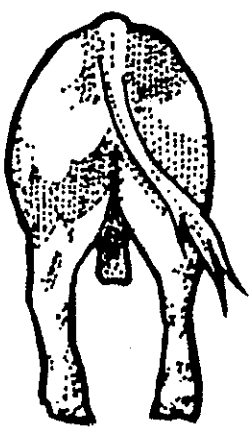


Figure 27. Cow-hocked



Bow-legged

# Feeder Cattle Grades

The Feeder Cattle Grades involve evaluation for frame size and muscle thickness. In addition, unthrifty and double-muscled cattle are placed in the inferior grade. The main purpose of frame size and muscle thickness evaluation is to estimate carcass composition when slaughtered. The frame sizes are shown in Figure 28. The muscle thickness scores are shown in Figure 29.

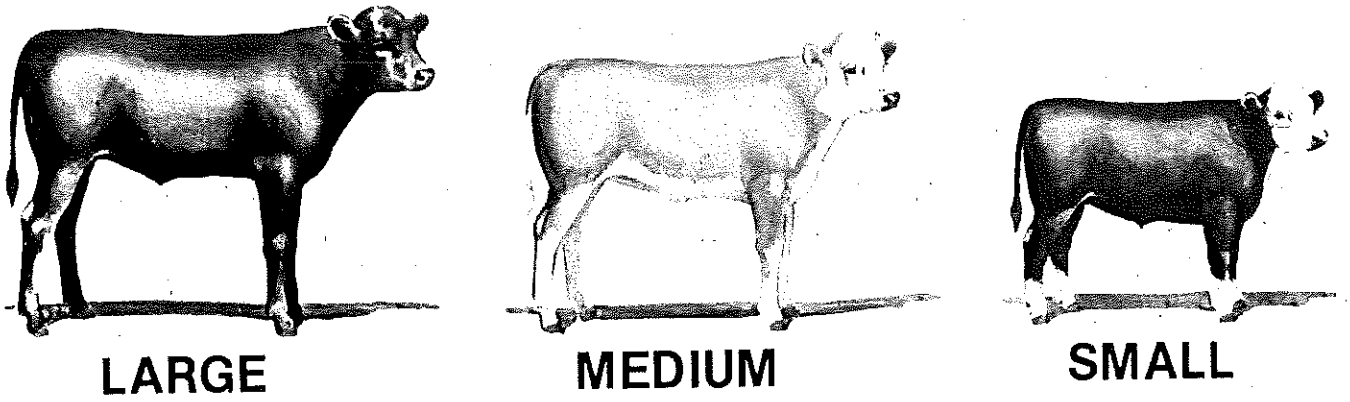



**Figure 28. Frame Sizes of Feeder Cattle.**

(a) *Large Frame (L).* Feeder cattle which possess typical minimum qualifications for this grade are thrifty, have large frames, and are tall and long-bodied for their age. Steers and heifers would not be expected to produce U.S. Choice carcasses (about .50 in. or 1.27 cm fat at 12th rib) until their live weights exceed 1,200 lbs. (544 kg) and 1,000 lbs. (454 kg), respectively.

(b) *Medium Frame (M).* Feeder cattle which possess typical minimum qualifications for this grade are thrifty, have slightly large frames, and are slightly tall and slightly long-bodied for their age. Steers and heifers would be expected to produce U.S. Choice carcasses (about .50 in. or 1.27 cm fat at 12th rib) at live weights of 1,000 to 1,200 lbs. (454 to 544 kg) and 850 to 1,000 lbs. (386 to 454 kg), respectively.

(c) *Small Frame (S).* Feeder cattle included in this grade are thrifty, have small frames, and are shorter-bodied and not as tall as specified as the minimum for the Medium Frame Grade. Steers and heifers would be expected to produce U.S. Choice carcasses (about .50 in. or 1.27 cm fat at the 12th rib) at live weights of less than 1,000 lbs. (454 kg) and 850 lbs. (386 kg), respectively.

(a) *No. 1.* Feeder cattle which possess minimum qualifications for this grade usually show a high proportion of beef breeding. They must be thrifty and slightly thick-muscled throughout. They are slightly thick and full in the forearm and gaskin, showing a rounded appearance through the back and loin with moderate width between the legs, both front and rear. Cattle show this thickness with a slightly thin covering of fat; however, cattle eligible for this grade may carry varying degrees of fat.

(b) *No. 2.* Feeder cattle which possess minimum qualifications for this grade are thrifty and are narrow through the forequarter and the middle part of the rounds. The forearm and gaskin are thin and the back and loin have a sunken appearance. The legs are set close together, both front and rear. Cattle show this narrowness with a slightly thin covering of fat; however, cattle eligible for this grade may carry varying degrees of fat.

(c) *No. 3.* Feeder cattle included in this grade are thrifty animals which have less thickness than the minimum requirements specified for the No. 2 grade.

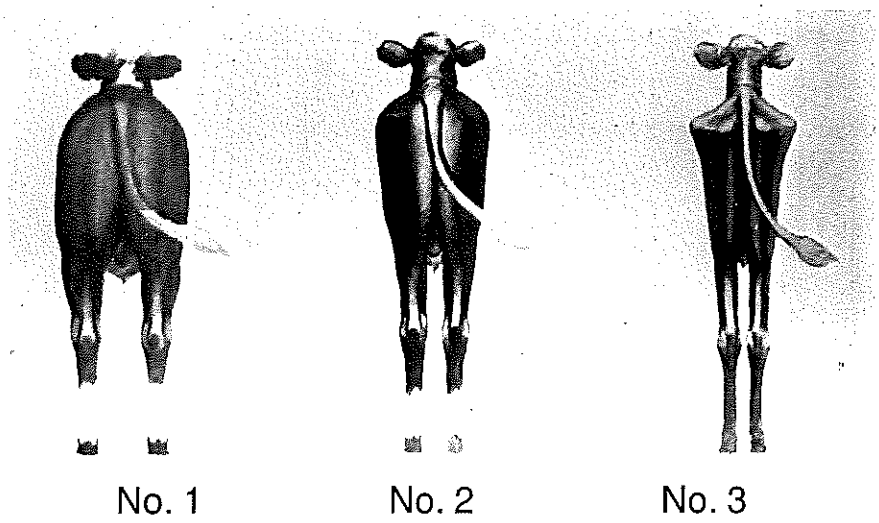



**Figure 29. Muscle Thickness Scores of Feeder Cattle.**

The Inferior Grades include those feeder cattle which are not expected to perform normally in the present state (unthrifty) and those that are "double-muscled." Cattle in this grade may have any combination of frame size and muscle thickness. An example of an unthrifty animal is shown in Figure 30. A double-muscled animal is shown in Figure 31.

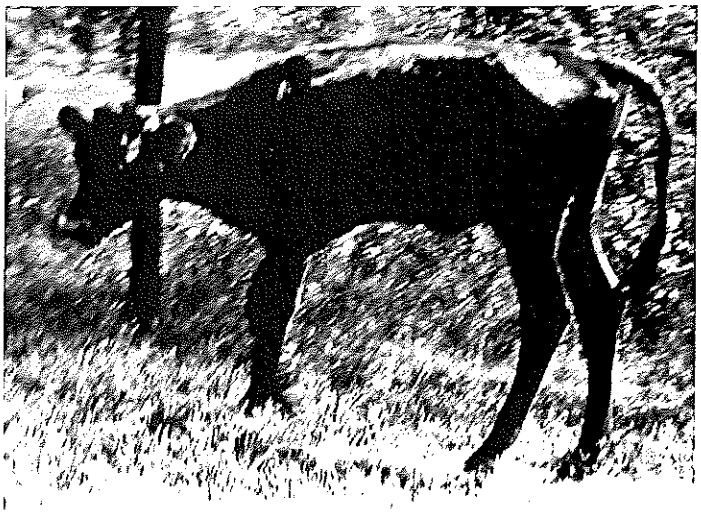


**Figure 30. Inferior Grade of Feeder Cattle (unthrifty).**

There will be 10 possible grades of feeder cattle:
L - 1 = Large Frame - No. 1 Muscle Thickness
L - 2 = Large Frame - No. 2 Muscle Thickness
L - 3 = Large Frame - No. 3 Muscle Thickness
M - 1 = Medium Frame - No. 1 Muscle Thickness
M - 2 = Medium Frame - No. 2 Muscle Thickness
M - 3 = Medium Frame - No. 3 Muscle Thickness
S - 1 = Small Frame - No. 1 Muscle Thickness
S - 2 = Small Frame - No. 2 Muscle Thickness
S - 3 = Small Frame - No. 3 Muscle Thickness
Inferior = Unthrifty cattle and "double-muscled" cattle.

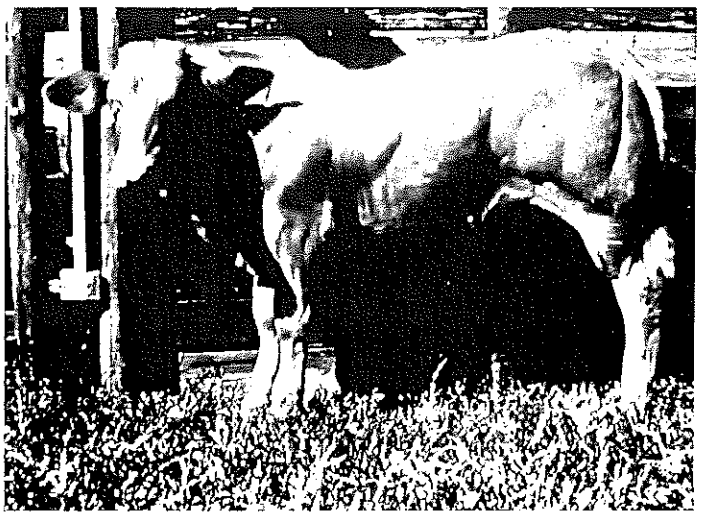


**Figure 31. Inferior Grade of Feeder Cattle (double-muscled).**

# Beef Cattle Judging Terms

(Both desirable and undesirable terms should be used where suitable when giving oral reasons.)

| Desirable | Undesirable |
|---|---|
| **Breeding** | |
| **General Appearance** | |
| Well-Balanced | Poorly-Balanced |
| Stylish | |
| Straight Top | Weak Top |
| Rugged Heavy Bone | Light-Refined Bone |
| Growthy | Small |
| Structurally Correct | Structurally Incorrect |
| High Performing | Poor Performing |
| Strong Rib | Shallow-Narrow Rib |
| Long | Short |
| Productive | Lacks Productiveness |
| Useful | Lacks Usefulness |
| Modern Type | Off Type |
| More Constitution | Refined |
| **Frame** | |
| Medium | Small |
| Large | |
| **Muscle** | |
| Long | Short |
| Thick | Weak |
| | Narrow |
| | Shallow |
| Smooth | Bunchy |
| | Double-Muscled |
| | Bulging |
| Loose | Tight |
| | Excessive |
| **Fat (condition)** | |
| Clean | Wasty |
| Correct Condition | Over-Condition |
| Trim | Under-Condition |
| Composition of Gain = Lean | Composition of Gain = Fat |

| Desirable | Undesirable |
|---|---|
| **Femininity** | |
| Long-Smooth-Trim Neck | Thick-Cresty Neck |
| Smooth-Neat-Clean Shoulder | Coarse Shoulder |
| Trim-Clean Brisket | Wasty-Coarse Brisket |
| Trim-Clean Condition | Fat-Over-Condition |
| | Excessive-Bulging Muscle |
| Smooth Muscle | Bunchy Muscle |
| | Double Muscle |
| Sharp Wither | Coarse-Flat Wither |
| Hip Width | Narrow Hip |
| Pin Width | Narrow Pin |
| Large Vulva | Small Vulva |
| | Tipped Up Vulva |
| Feminine Head | Masculine Head |
| Four Adequate Size Teats-Well Placed | Less Than Four Teats - Poor Placement |
| | Abnormal Teat Size |
| Neat, Well-Attached Full Udder at Calving | Pendulous Udder |
| **Masculinity** | |
| **Testicles** | |
| Large | Small |
| Well Developed | Under Developed |
| Firm | Soft |
| Well Suspended | Too Close To Abdominal Cavity |
| Even Size | Uneven Size |
| Even Suspension | Crooked Suspension |
| | Crooked |
| **Head** | |
| Masculine Head | Steer-Like Head |
| | Heifer-Like Head |

**Skeletal Structure**

| Desirable | Undesirable | Desirable | Undesirable |
|---|---|---|---|
| **Front** | | **Rear** | |
| | Buck-Kneed | Structural | Posty-Legged |
| | Knock-Kneed | Correctness | Sickle-Hocked |
| | Calf-Kneed | | Cow-Hocked |
| | Peg-Legged | | Bow-Legged |
| | Bow-Legged | | Toes Out |
| | Stiff Pastern | | Toes In |
| | Straight Pastern | | Stiff Pastern |
| | Cocked Pastern | | Straight Pastern |
| | Cocked Ankle | | Cocked Pastern |
| Structural Correctness | Weak Pastern | | Cocked Ankle |
| Sound Feet & Legs | Splay-Footed | Sound Feet & Legs | Weak Pastern |
| Smooth Shoulder | Pigeon-Toed | Heavy Bone | Puffy-Hocked |
| Heavy Bone | Puffy-Kneed | Straight Top | |
| Straight Top | Uneven Size Toes | | |
| | Small Toes | | |
| | Small Foot | | |

## Skeletal Structure (Continued)

| Desirable | Undesirable |
|---|---|
| Deep Heel | Shallow Heel |
| Wide Heel | Contracted Heel |
| Smooth Shoulder | Rough Shoulder |
| | Coarse Shoulder |
| Slope of Shoulder | Straight Shoulder |

## Movement

| Desirable | Undesirable |
|---|---|
| Free | Restricted |
| Sound | Unsound |
| Straight | Crooked |
| Flexion | Ropes |
| Correct | Toeing In |
| Bold | Toeing Out |
| Aggressive | Camped Under |
| Desirable Angle To Hock | Posty-Legged |
| | In at the Hocks |

## Other

| | |
|---|---|
| Neat Sheath | Pendulous Sheath |

## Market
## General Appearance

| | |
|---|---|
| Growthy | Small |
| Rugged | Refined |
| Long | Short-Dumpy |
| Well-Balanced | Poorly Balanced |
| Stylish | |
| Useful | Lacks Usefulness |
| Productive | Lacks Productiveness |
| High Performing | Poor Performing |
| Structurally Correct | Structurally Incorrect |
| Modern Type | Off Type |
| More Constitution | Refined |
| Beefier | Lacks Beefiness |

## Frame

| | |
|---|---|
| Medium | Small |
| Large | |

## Muscle

| | |
|---|---|
| Long | Short |
| Thick | Light |
| | Weak |
| | Bunchy |
| Smooth | Bulging |
| | Excessive |
| | Double-Muscled |
| | Tight |

| Desirable | Undesirable |
|---|---|
| **Fat (condition)** | |
| Correct In Fat Cover | Wasty |
| Correctly Finished | Over-Fat |
| Correctly Conditioned | Over-Finished |
| | Over-Conditioned |
| | Under-Finished |
| | Under-Conditioned |
| | Bare Rib |

**Skeletal Structure**

| Desirable | Undesirable | Desirable | Undesirable |
|---|---|---|---|
| **Front** | | **Rear** | |
| | Buck-Kneed | | Posty-Legged |
| | Knock-Kneed | | Sickle-Hocked |
| | Calf-Kneed | | Cow-Hocked |
| | Peg-Legged | | Bow-Legged |
| | Bow-Legged | | Toes Out |
| | Stiff Pastern | | Toes In |
| | Straight Pastern | | Stiff Pastern |
| | Cocked Pastern | | Straight Pastern |
| | Cocked Ankle | | Cocked Pastern |
| Structural Correctness | Weak Pastern | Structural Correctness | Cocked Ankle |
| Sound Feet & Legs | Splay-Footed | Sound Feet & Legs | Weak Pastern |
| Smooth Shoulder | Pigeon-Toed | Heavy Bone | Puffy-Hocked |
| Heavy Bone | Puffy-Kneed | Straight Top | |
| Straight Top | Uneven Size Toes | | |
| | Small Toes | | |
| | Small Foot | | |
| | Shallow Heel | | |
| | Contracted Heel | | |
| | Rough Shoulder | | |

**Movement**

| | |
|---|---|
| Sound | Unsound |
| Straight | Crooked |
| Free | Restricted |

**Live As Related To Carcass**

| | |
|---|---|
| Higher % Cutability | Lower % Cutability |
| Higher % Retail Cuts | Lower % Retail Cuts |
| Higher % High Priced Cuts | Lower % High Priced Cuts |
| Thick-Muscled | Light-Muscled |
| Higher Quality Grading | Lower Quality Grading |
| Produce a Carcass With More Consumer Acceptance | Less Valuable Carcass |
| A Carcass With More Retail Value | |
| A Carcass With a More Correct Amount of Outside Fat | |

# Swine Judging

The parts of the pig (barrow) are shown in Figure 32.

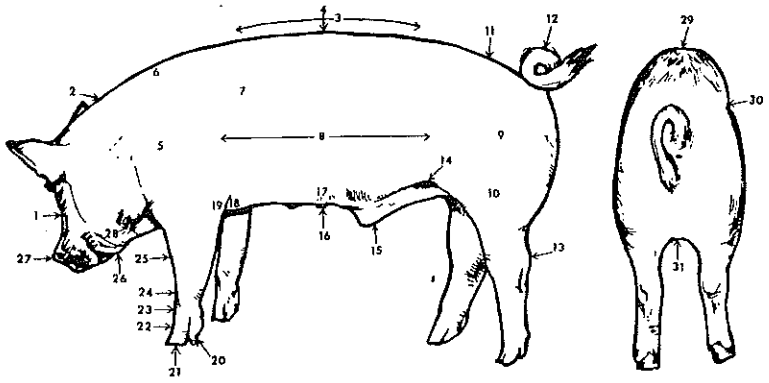


Figure 32. Parts of the pig (barrow).

1. Head
2. Neck
3. Back
4. Loin
5. Shoulder
6. Shoulder Blade
7. Rib
8. Side
9. Ham
10. Stifle
11. Rump
12. Tail
13. Hock
14. Flank
15. Sheath
16. Teat
17. Underline
18. Chest
19. Elbow
20. Dewclaw
21. Foot
22. Pastern
23. Cannon
24. Knee
25. Forearm
26. Jowl
27. Snout
28. Jaw
29. Mid-line Groove
30. Tuck to Loin
31. Twist

## Breeding

A modern breeding gilt should be feminine, long, clean-conditioned, heavy-boned, deep and strong in her rib, loose muscle structured, sound in her skeletal structure and movement including skeletal cushion in her feet and legs, have at least six well-spaced and prominent teats on each side (including three ahead of the navel), have a large foot with two even-sized toes and possess a large vulva with a tip lying flat.

Breeding gilts should take a long step off both ends, have great extension of stride, possess skeletal flexion and cushion and exhibit great mobility. Desirable breeding gilt conformation is illustrated in Figures 33-36.

Figure 33A. Modern Landrace Breeding Gilt. Observe the length, level top, looseness of muscle structure, feet and leg cushion, depth of fore-rib and rear flank, long, feminine neck and head, and numerous, prominent and well-spaced teats.

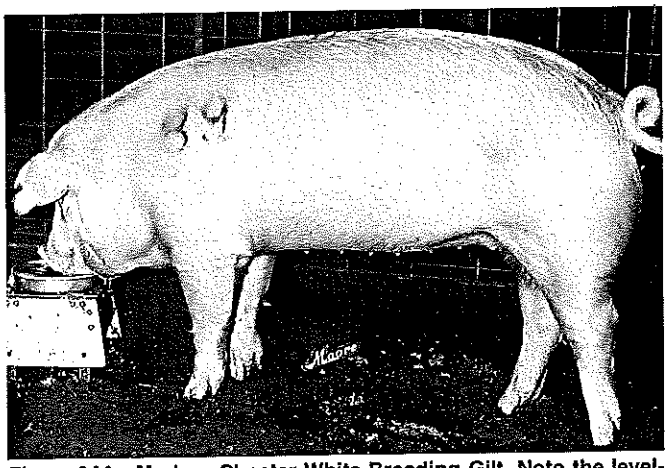


Figure 34A. Modern Chester White Breeding Gilt. Note the levelness, loose, thick muscle pattern and depth of body.

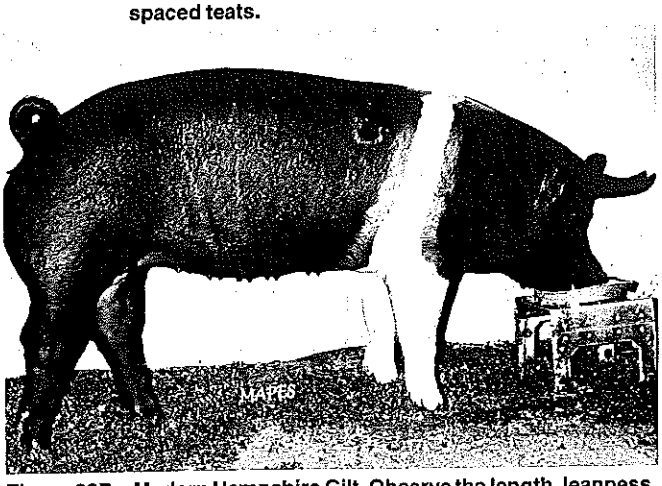


Figure 33B. Modern Hampshire Gilt. Observe the length, leanness, muscle thickness, skeletal width, total dimension of frame, feminine front, flat vulva shape, pronounced underline and structural soundness through the shoulder, knee and pastern.

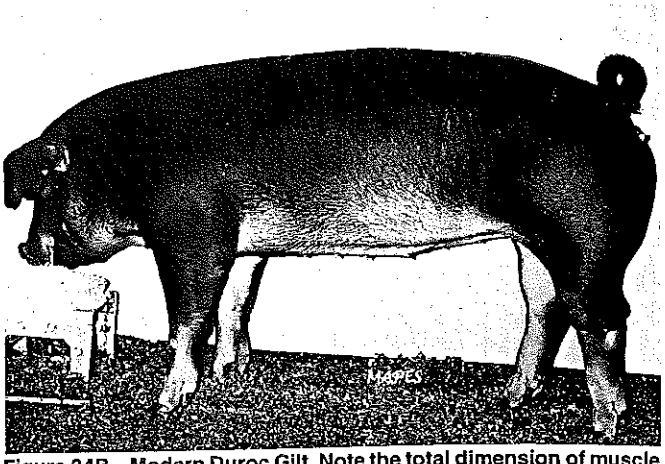


Figure 34B. Modern Duroc Gilt. Note the total dimension of muscle and frame, heaviness of bone and lean growth.

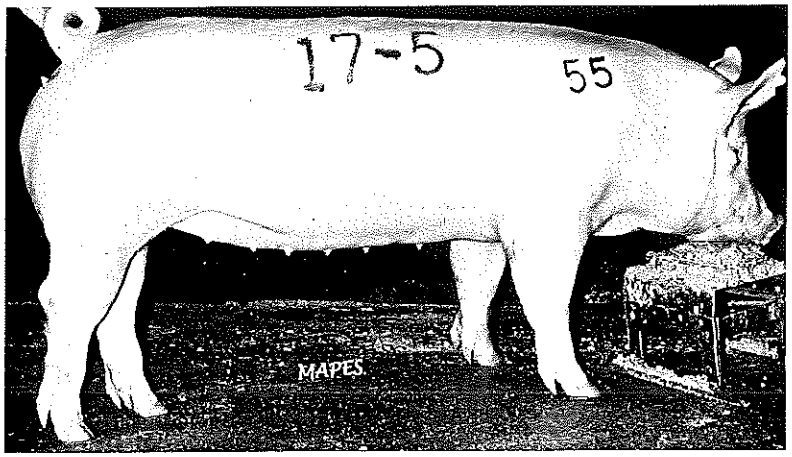



Figure 35. Modern Yorkshire Gilt. Observe the levelness, leanness, muscular shape, skeletal cushion, structural correctness, well-spaced and prominent underline, feminine head and depth of rib.

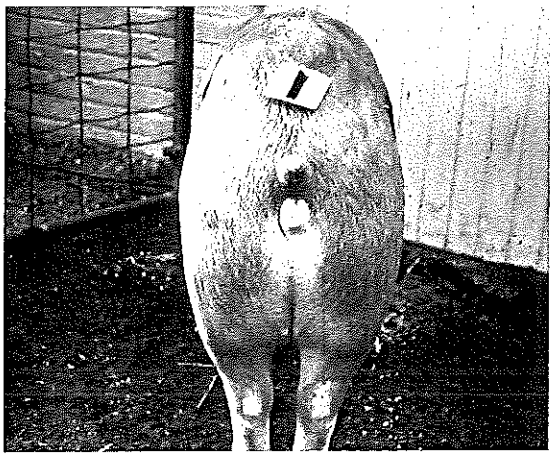


Figure 36. Desirable Gilt Vulva. Note the desirable size and shape of vulva.

A modern boar should be long, big and stout-framed, lean, thick but loose-muscled, heavy-boned, deep and strong in his rib, demonstrate skeletal soundness including cushion in his feet and legs, have at least six well-spaced, prominent and sound teats on each side (including three ahead of the navel), possess a large foot with two even-sized toes and have two large, even size testicles. A modern boar should take a long step off both ends, have great extension of stride, have skeletal flexion and cushion in his movement, and exhibit great mobility. In addition, he should be masculine in his features including a stout jaw.

Desirable boar conformation is shown in Figures 37-39.

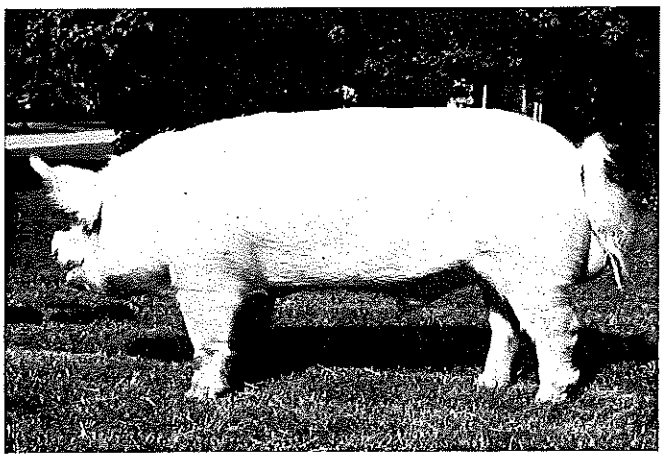


Figure 37A. Modern Yorkshire Boar. Note the levelness, muscle volume-looseness, depth-width of rib, stoutness of bone-head, skeletal cushion in the shoulder-knee-hock-pastern, length and scrotal size.

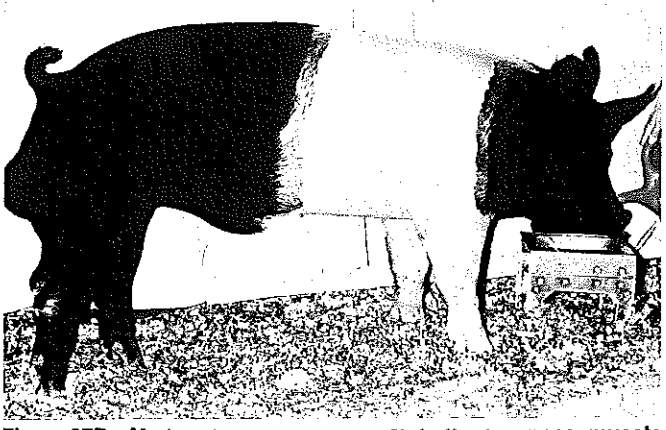


Figure 37B. Modern Hampshire Boar. Note the leanness, muscle thickness, trimness underneath, knee cushion, scrotal circumference, levelness of top, chest width, cleanness of sheath and overall appearance of balance.

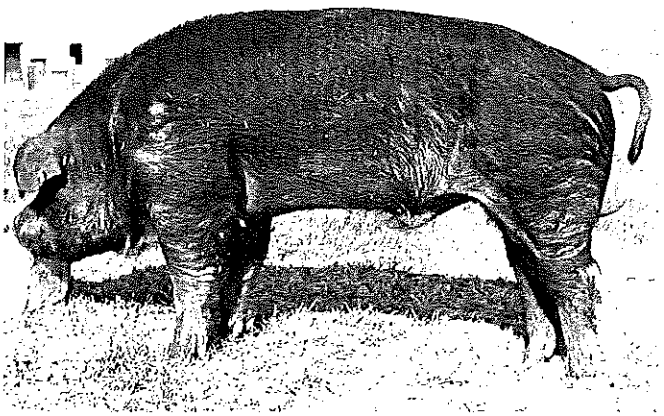


Figure 38. Modern Duroc Boar. Note the depth of rib, heavy bone, looseness of muscle structure, testicle size and overall massive appearance.

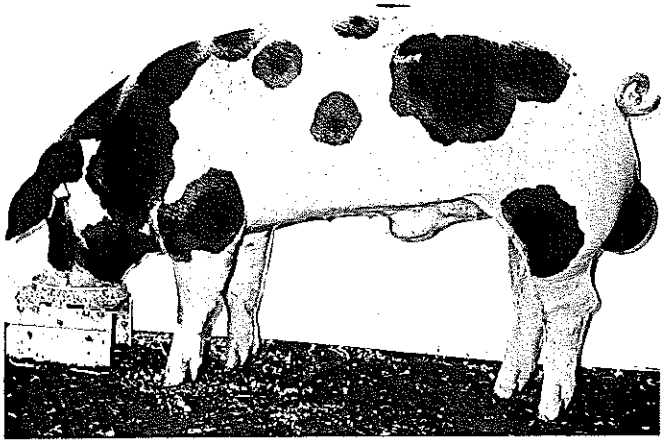


Figure 39. Modern Spotted Boar. Note the frame, muscle thickness, depth of rib, scrotal circumference, length of body and overall appearance of lean muscle growth.

Undesirable skeletal structure of swine is shown in Figures 40-48.

Figure 40. Undesirable Skeletal Structure. Note the straight shoulder, buck knee, steep front pastern, left hock being sickle shaped, cow-hock condition, and steep arch and rump.

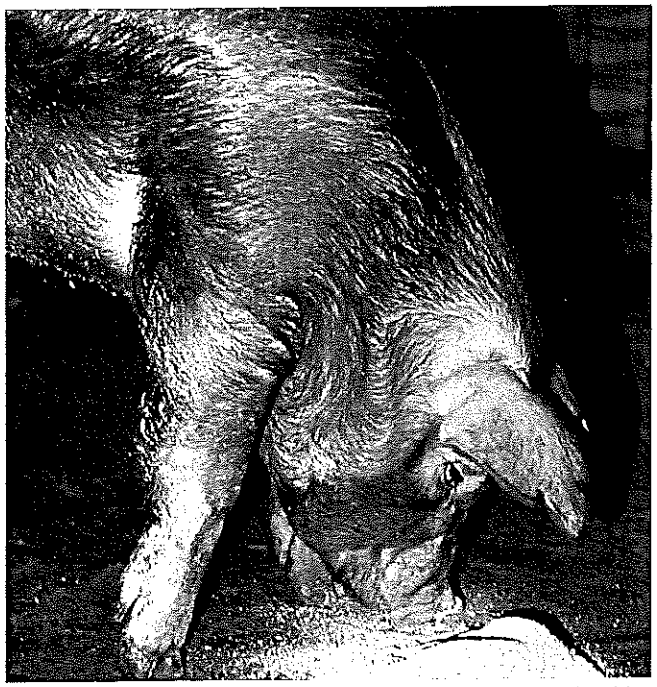


Figure 41. Undesirable Skeletal Structure. Note the steep shoulder and peg leg condition.

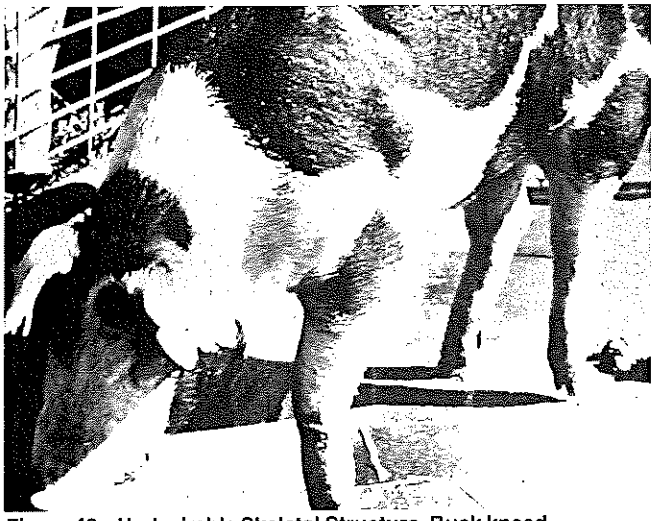


Figure 42. Undesirable Skeletal Structure. Buck kneed.

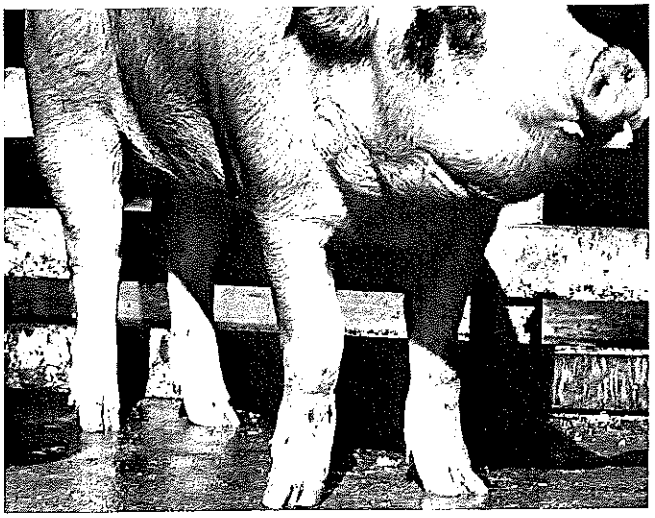


Figure 43. Undesirable Skeletal Structure. Note the splay footed, knock-kneed condition. On the left foot, the inside toe is smaller than the outside toe—an undesirable condition.

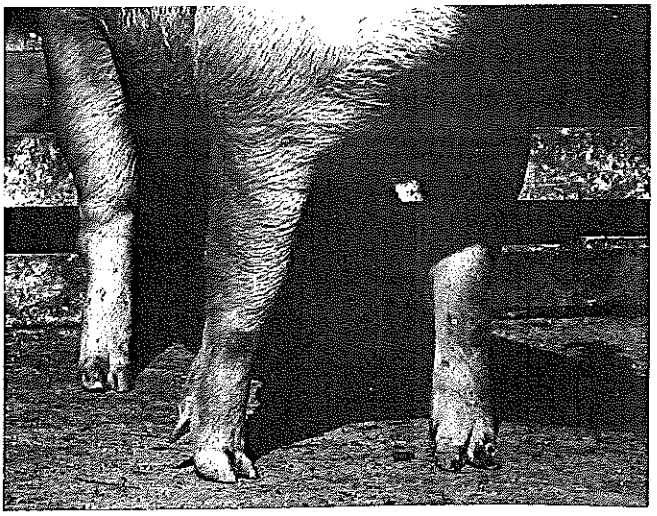


Figure 44. Undesirable Skeletal Structure. This pig is pigeon toed (toes in).

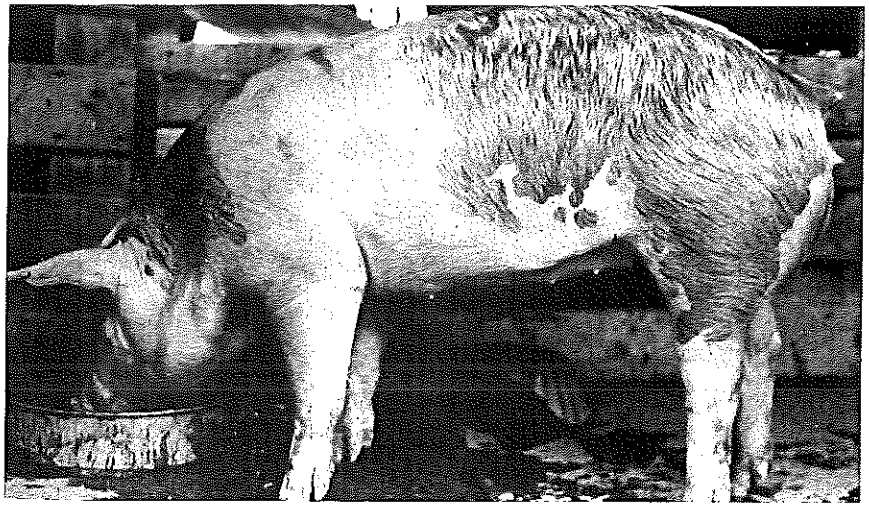


Figure 45. Undesirable Skeletal Structure. Observe the posty hind leg.

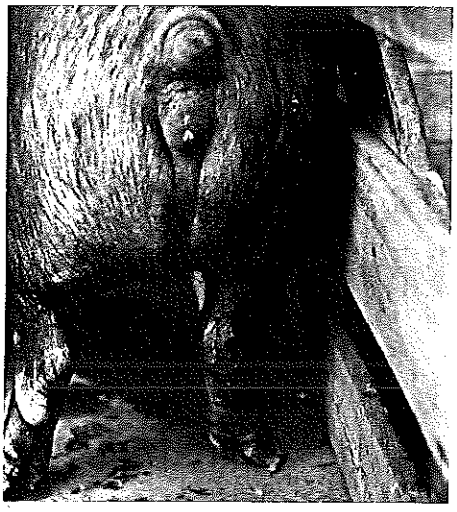


Figure 46. Undesirable Skeletal Structure. This gilt is cow-hocked.

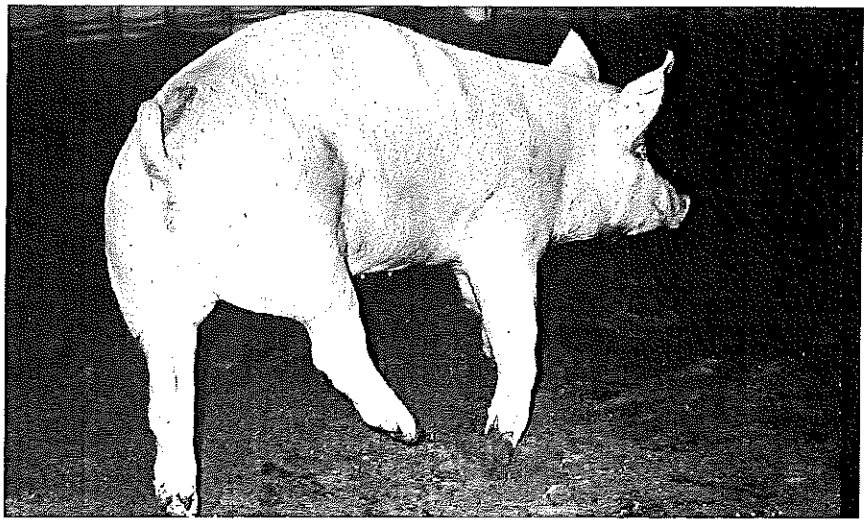


Figure 47. Undesirable Skeletal Structure. This gilt is too steep in her arch and rump and goose steps.

Figure 48. Undesirable Skeletal Structure. This gilt is cocking her pastern and ankle.

Undesirable underlines are shown in Figures 49-55.

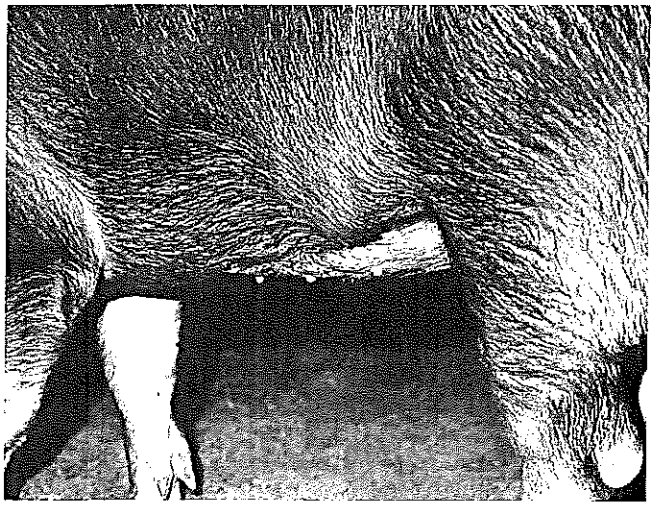


Figure 49. Undesirable Underline. Note the poor teat development and inadequate number.

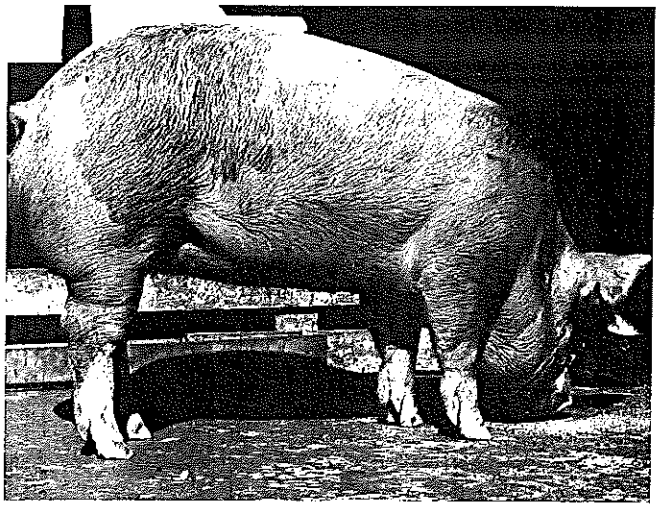


Figure 50. Undesirable Underline. Note the poorly developed underline. This gilt has inverted teats.

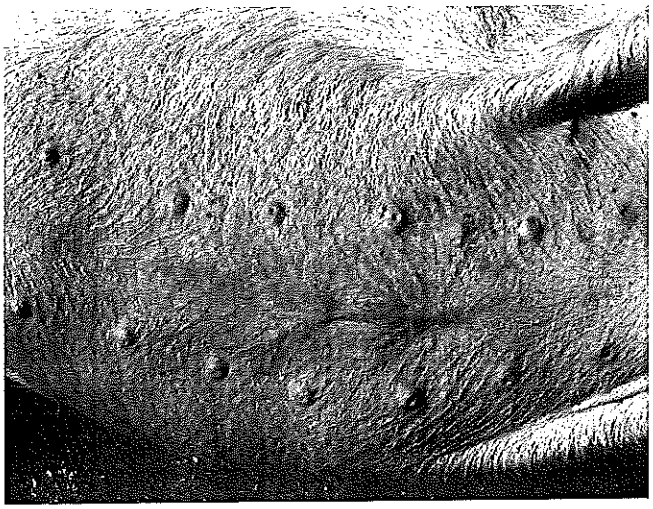


Figure 51. Undesirable Underline. Note the high percentage of inverted teats.

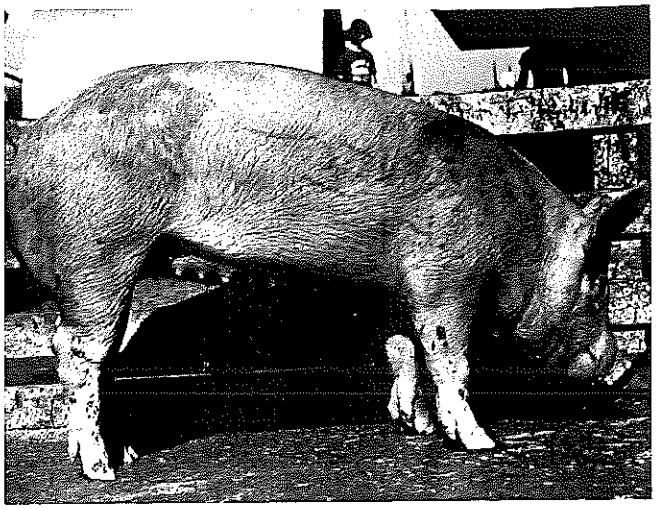


Figure 52. Undesirable Underline. Note the large inverted teat located fourth from the front on the right side.

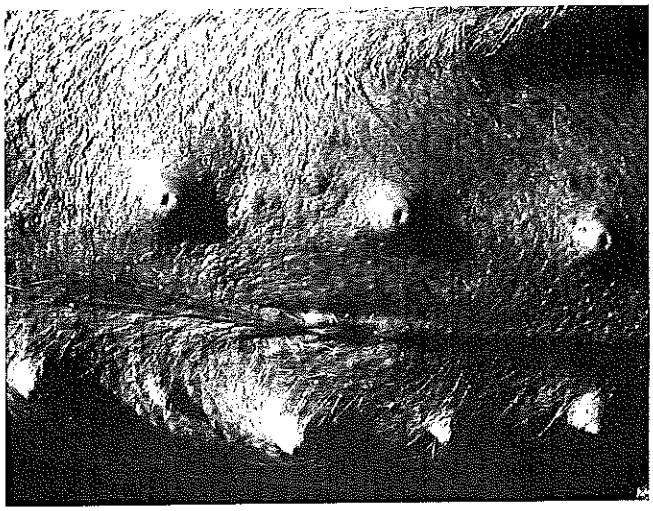


Figure 53. Undesirable Underline. Note the inverted teats on top row.

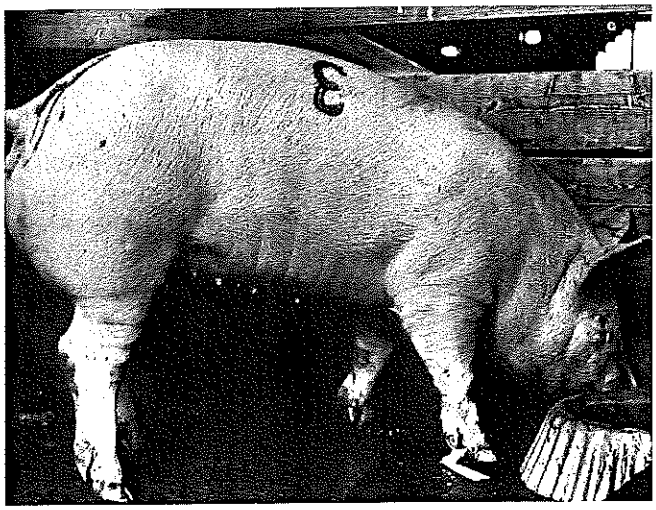


Figure 54. Undesirable Underline. Note the pin teat, third from the front.

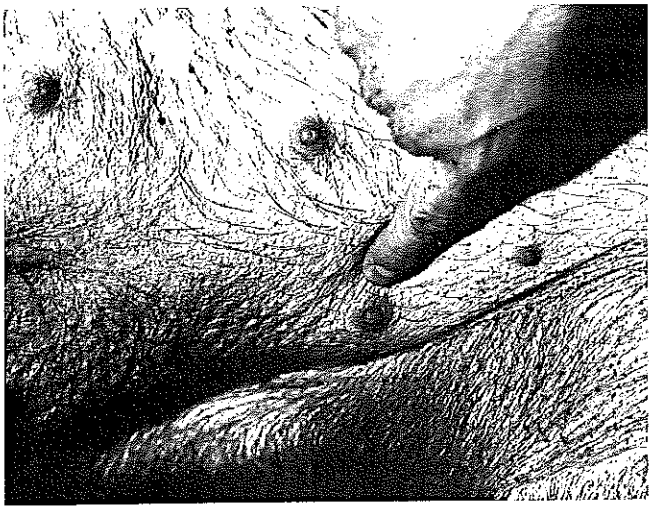


Figure 55. Undesirable Underline. Note the teat concealed in the skin and fat.

An undesirable breeding gilt conformation is shown in Figure 56.
An undesirable gilt vulva (too small) is shown in Figure 57.

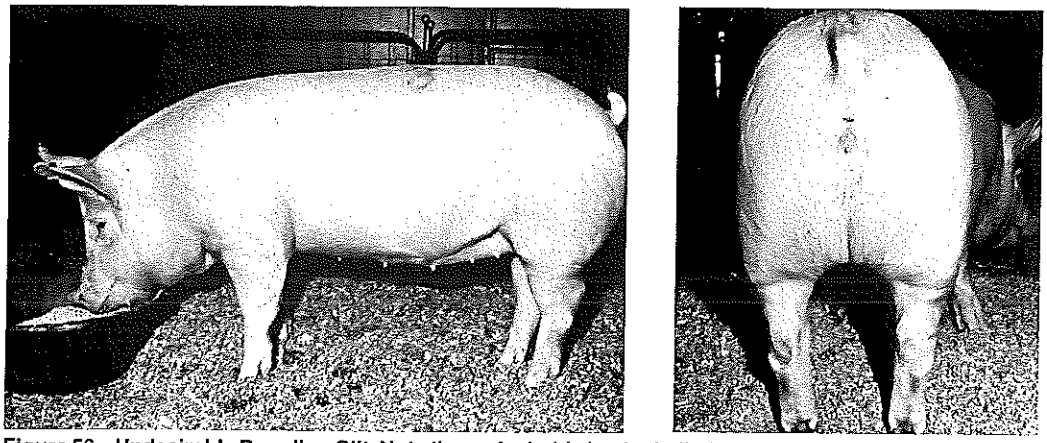


**Figure 56. Undesirable Breeding Gilt. Note the undesirable basketball-shaped ham, small vulva and short side.**

**Figure 57. Undesirable Vulva. Vulva too small.**

## Market Hog

A modern market hog should be low in backfat, trim in his jowl, long, loose and thick in his muscle structure, big-framed, growthy and stout. He should be long and deep in his rib and flank, large and loose in his skeletal structure, heavy-boned and sound, free and flexible in his skeleton and movement including feet and leg cushion. A modern market hog should hang up a carcass with at least 50 percent muscle.

Please note that the estimated Percent Muscle stated for the pigs shown in the Livestock Judging Guide was based on the short-cut method for Percent Muscle (contains 5% Fat) shown on page 46.

A modern market hog is shown in Figure 57A.

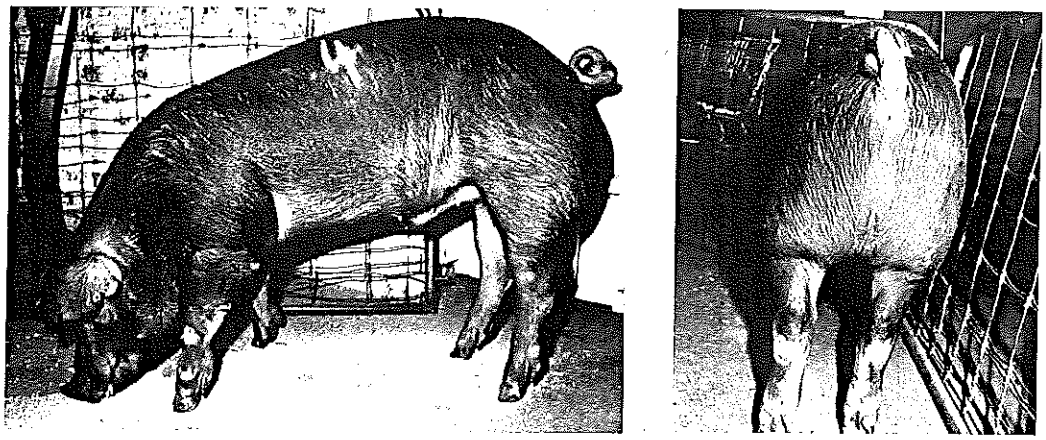
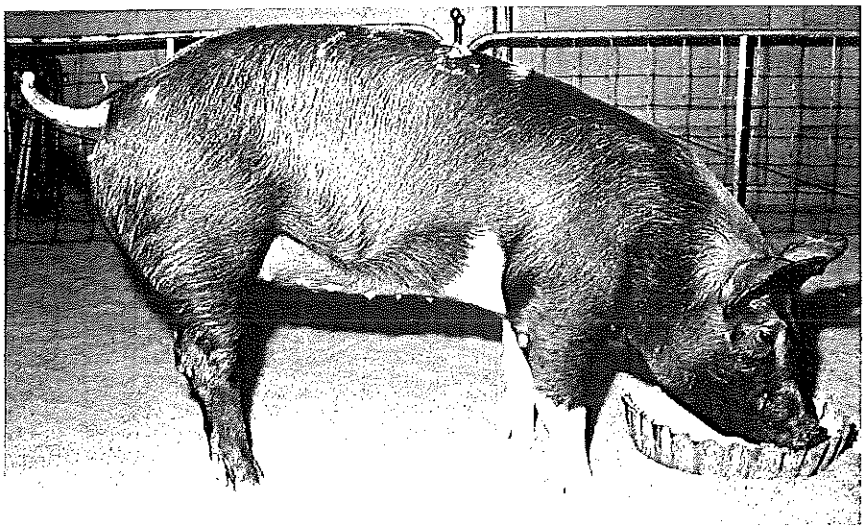


**Figure 57A. Modern Market Hog. Note the overall combination of frame, trimness and muscling. This barrow needs more structural soundness in front in that he is buck-kneed. He weighed 238 lbs. (108 kg), was 33.5 in. (85.9 cm) long, had .70 in. (1.80 cm) of fat at the 10th rib, 6.9 in$^2$ (44.5 cm$^2$) of loin-eye area and 54.8 percent muscle.**

Desirable market hog conformation is shown in Figures 58-60.



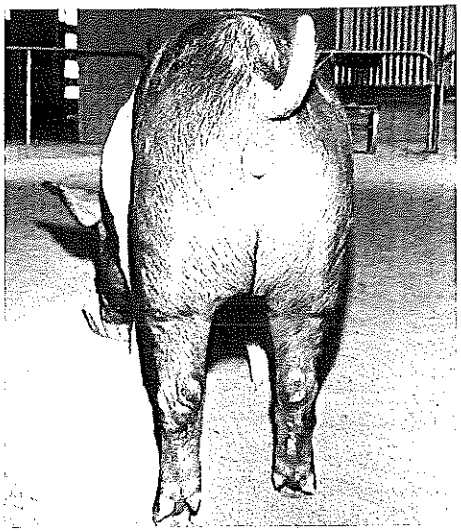


Figure 58. Modern Market Hog. Note the stoutness of rib, trimness, muscular thickness, growth, soundness and appearance of productivity. This market gilt weighed 247 lbs. (112 kg). She was 32.6 in. (82.8 cm) long, had 1.12 in. (2.84 cm) of average backfat, .70 in. (1.78 cm) of backfat at the 10th rib, 5.4 in.$^2$ (34.8 cm$^2$) of loin-eye area and 51.7 percent muscle.

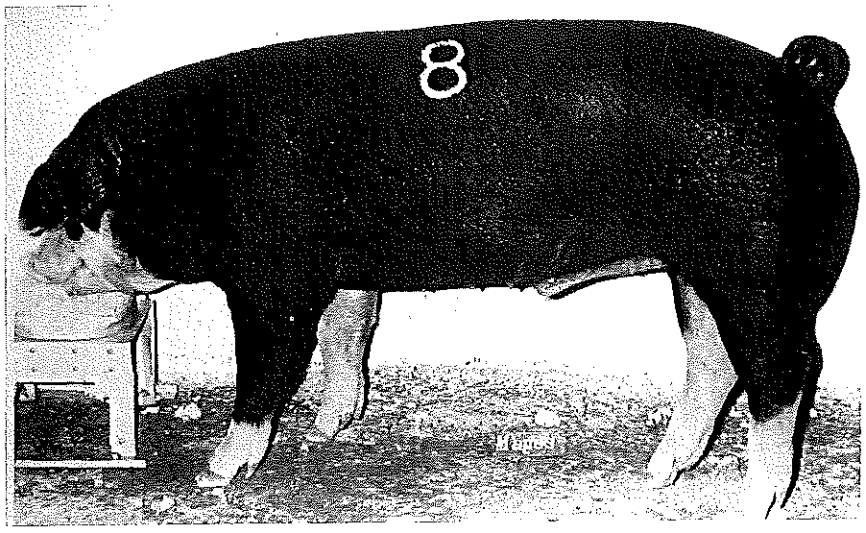



Figure 59. Modern Market Hog. Note the levelness, muscle, leanness, length, width of rib and structural soundness as shown by the backward slope to the knee and correct angle to the shoulder, hock and pastern. This barrow was 33.0 in. (84.6 cm) long, had .80 in. (2.05 cm) of backfat at the 10th rib, 7.30 in$^2$ (47.1 cm$^2$) of loin-eye area and 54.6 percent muscle.

Figure 60. Note the stoutness of frame, width of chest, heavy bone, length, smooth and thick muscling, trimness, depth of side, structural soundness and overall appearance of productivity. He weighed 218 lbs. (99 kg), was 31.7 in. (80.52 cm) long, had .60 in. (1.52 cm) of fat at the 10th rib, 5.75 in.$^2$ (37.09 cm$^2$) of loin-eye area and 53.9 percent muscle.

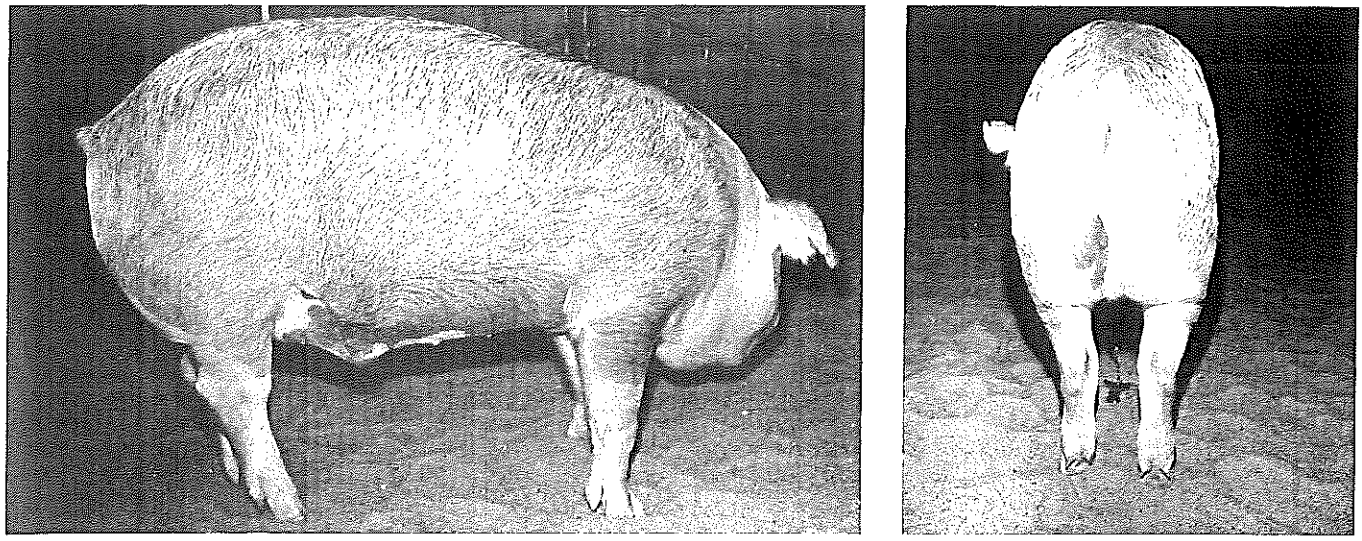


Figure 61. Undesirable Market Hog. Note the wastiness of jowl and ham, excess backfat, weak muscling, light bone, and slight buck kneed condition. This blue roan barrow weighed 253 lbs. (115 kg). He was 32.3 in. (82.0 cm) long, had 1.41 in. (3.58 cm) of average backfat, 1.40 in. (3.56 cm) of backfat at the 10th rib, 4.3 in.$^2$ (27.7 cm$^2$) of loin-eye area and 42.3 percent muscle.

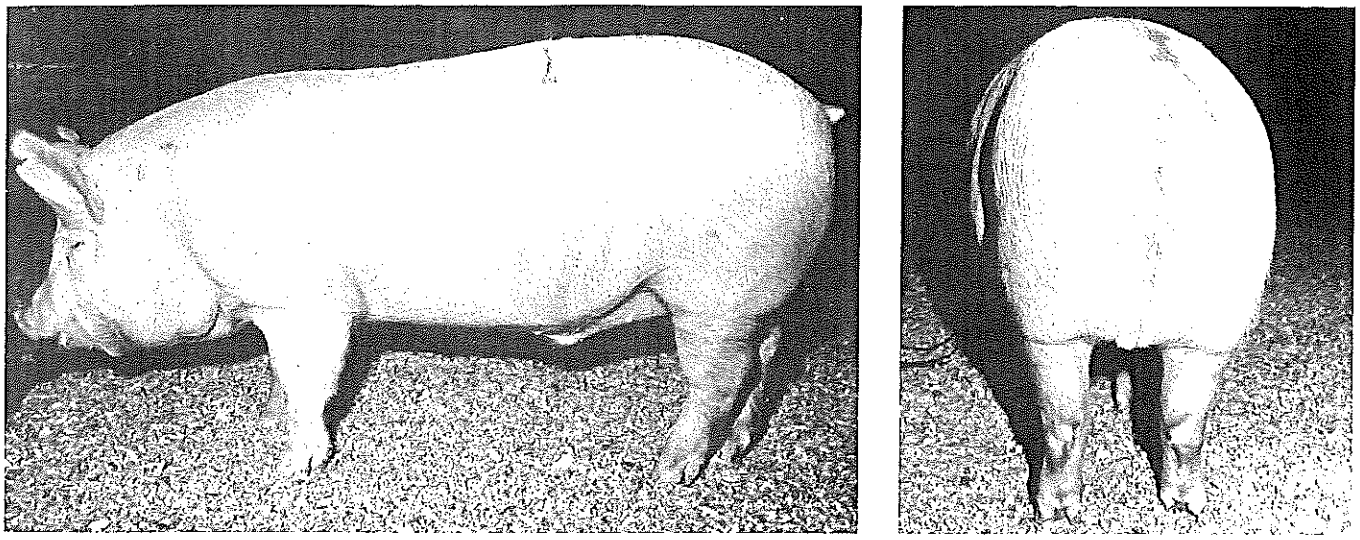


Figure 62. Undesirable Market Hog. Note the over fat condition. This barrow weighed 250 lbs. (113 kg). He was 30.5 in. (77.5 cm) long, had 1.52 in. (3.86 cm) of average backfat, 1.50 in. (3.81 cm) of backfat at the 10th rib, 5.1 in.$^2$ (32.9 cm$^2$) of loin-eye area and 43.0 percent muscle.

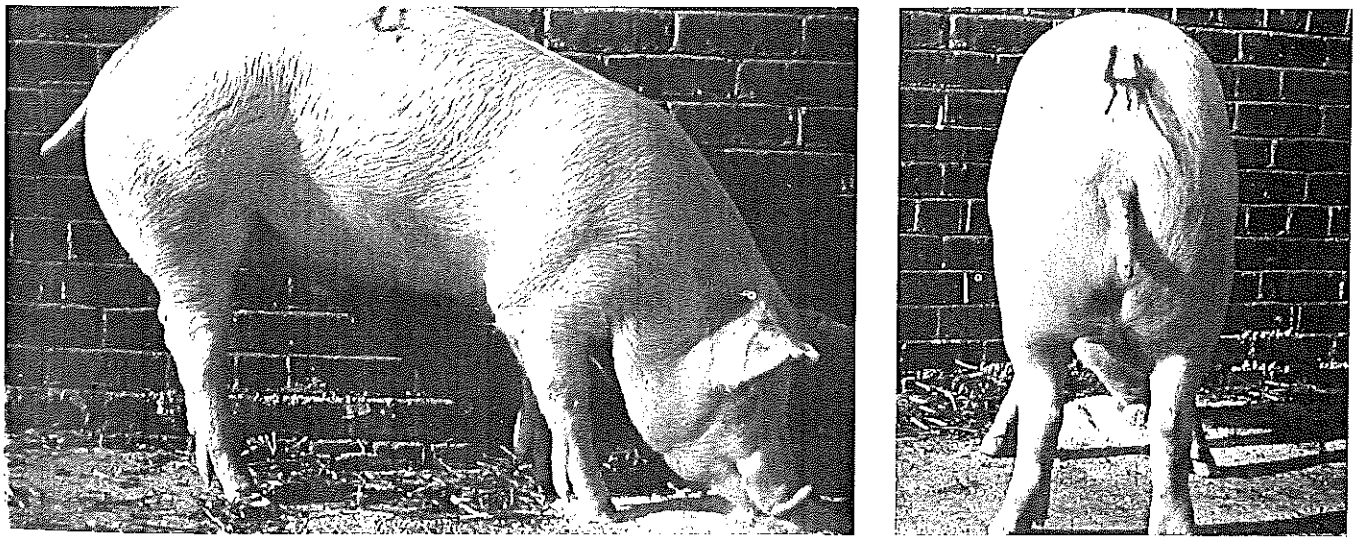


Figure 63. Undesirable Market Hog. Note the light muscling, wasty condition and narrowness of skeletal structure. This barrow weighed 256 lbs. (116 kg). He was 32.0 in. (81.3 cm) long, had 1.66 in. (4.22 cm) of average backfat, 1.70 in. (4.32 cm) of backfat at the 10th rib, 3.80 in.$^2$ (24.5 cm$^2$) of loin-eye area and 38.3 percent muscle.

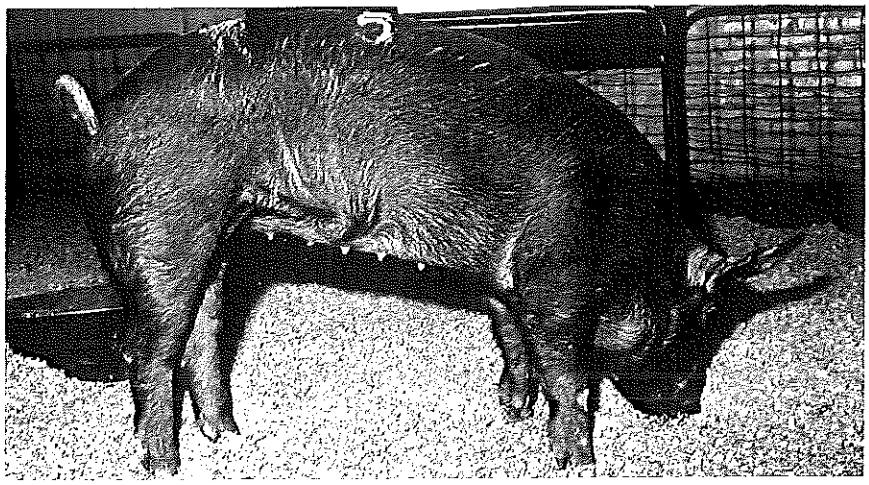


Figure 64. Undesirable Market Hog. Observe the shallow body and poor productive appearance. In addition, this gilt is too steep in her arch, buck kneed and posty legged.

Figure 65. Undesirable Market Hog. Observe the narrow chest and unthrifty head appearance.

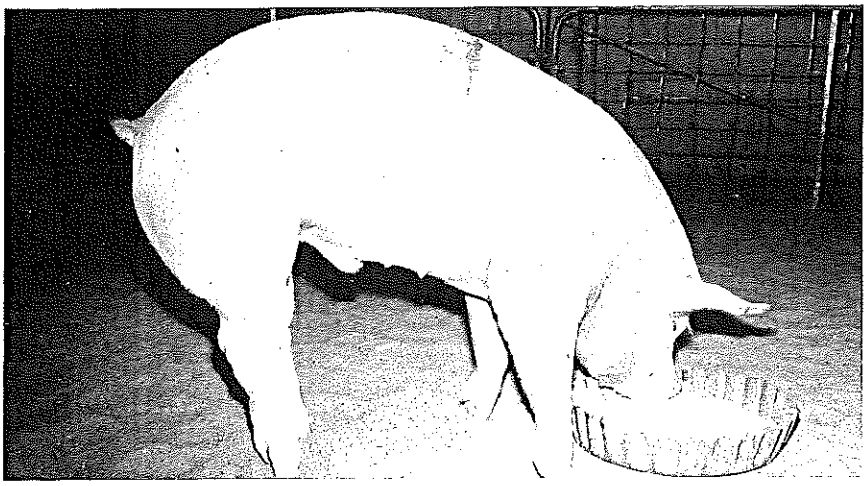


Figure 66. Undesirable Market Hog. Observe the tight muscle structure, buck knee, steep arch, steep rump and posty leg.

## Feeder Pig

A modern feeder pig should be trim, loose but thick in his muscle structure, big-framed, growthy, stout, long and deep in his rib and flank, large and loose in his skeletal structure, heavy-boned and sound, free and flexible in his skeleton and movement including feet and leg cushion.

Desirable feeder pig conformation is shown in Figure 67.

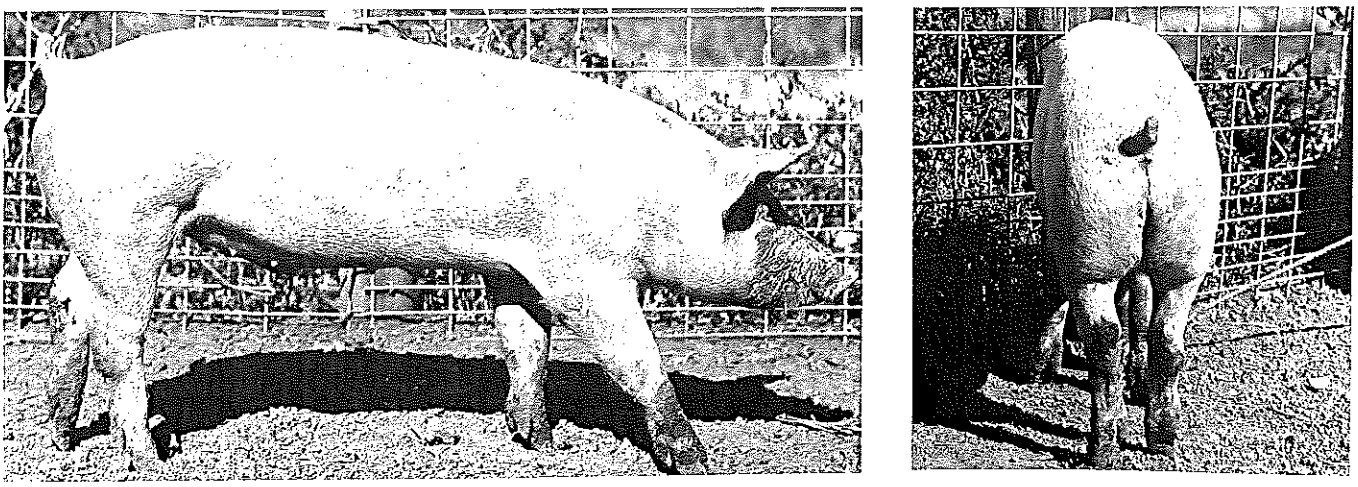


Figure 67. Desirable Feeder Pig. Note the length, trimness, thickness of muscling, structural soundness and appearance of productivity.

Undesirable feeder pig conformation is shown in Figures 68 and 69.

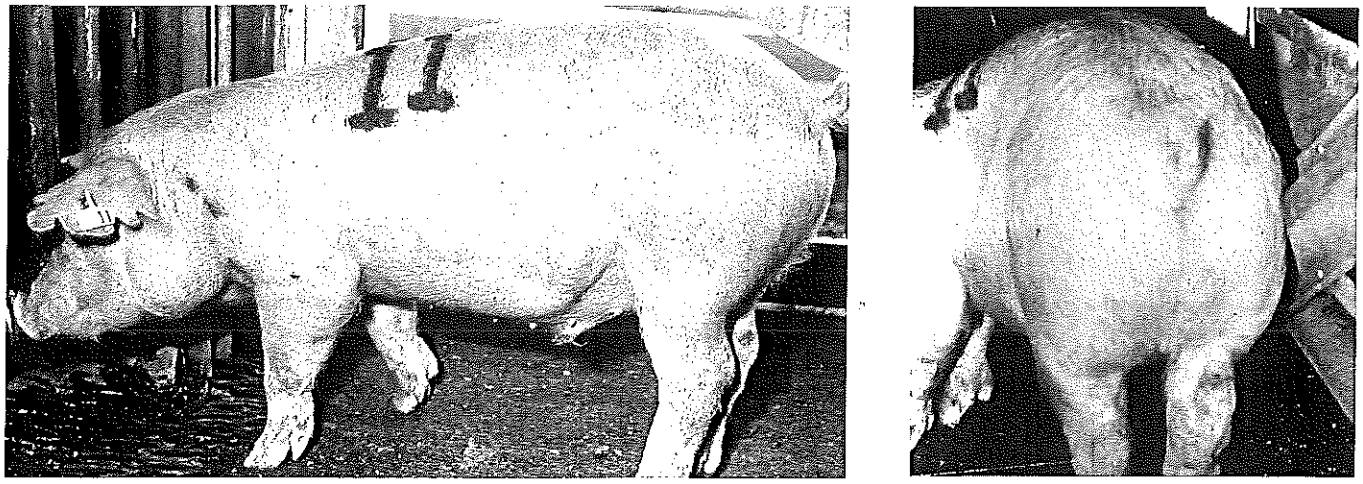


**Figure 68. Undesirable Feeder Pig. Short - wasty.**

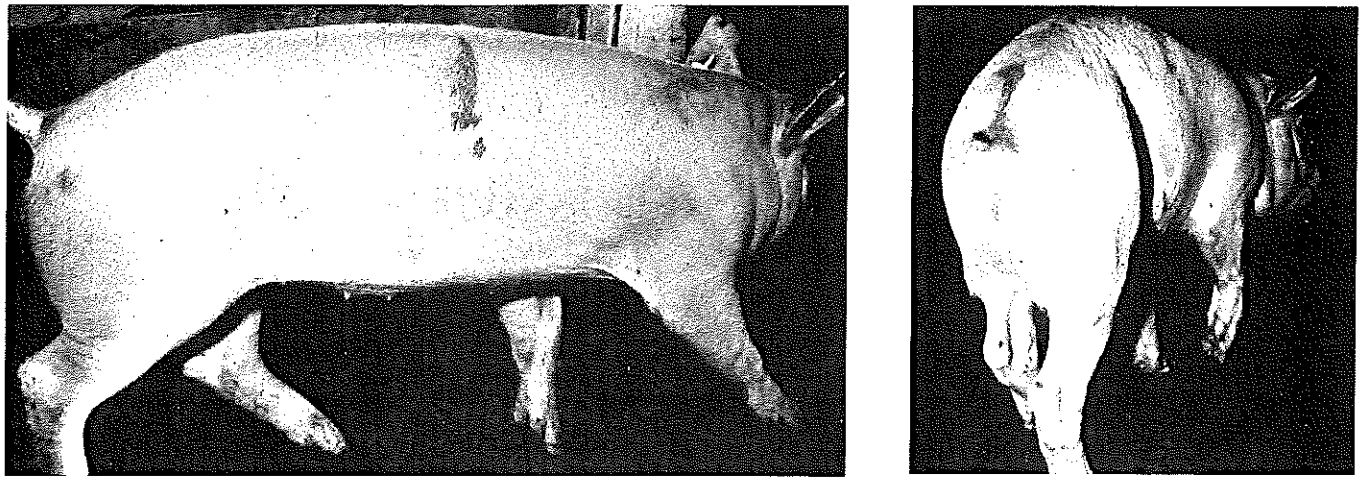


**Figure 69. Undesirable Feeder Pig. Shallow, narrow, light muscled, light boned and non-productive appearing.**

# Swine Judging Terms

(Both desirable and undesirable terms should be used where suitable when giving oral reasons.)

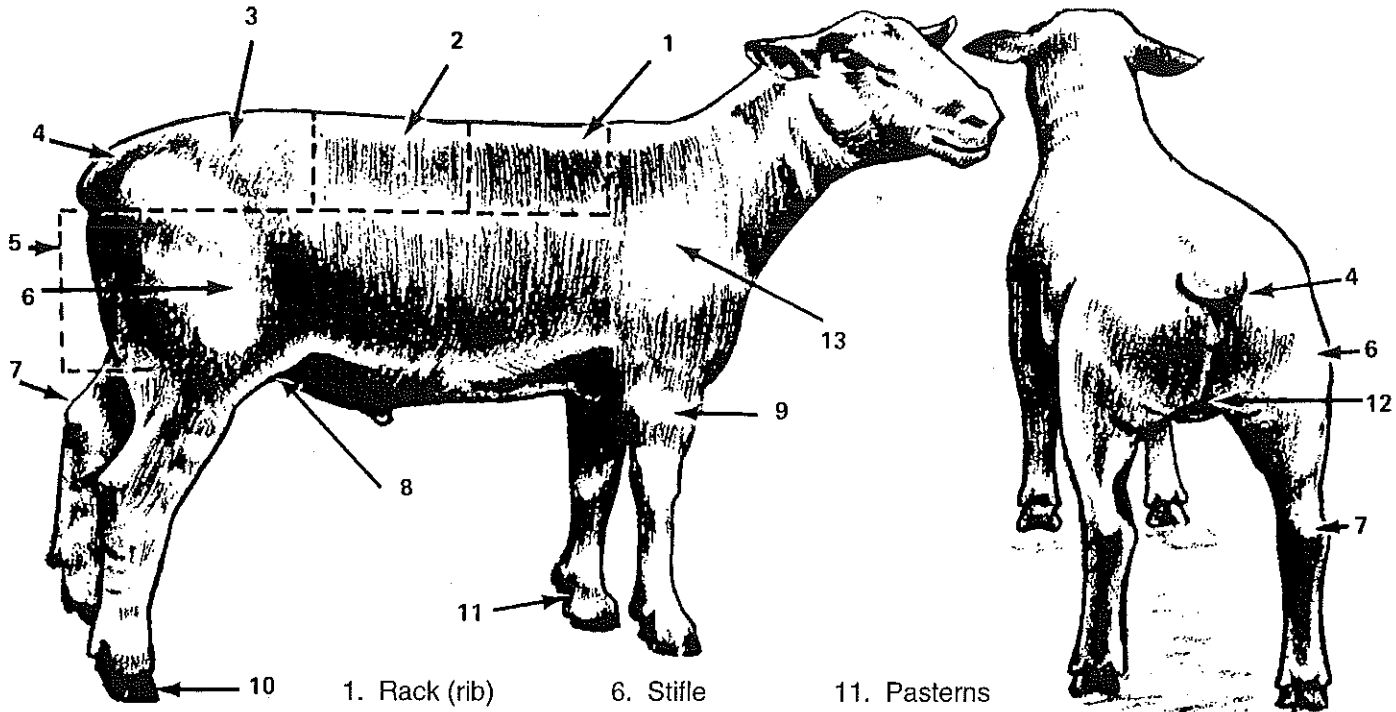
| Desirable | Undesirable |
|---|---|
| **General** | |
| Growthy | Small |
| Massive | Unsound |
| Trim | Fat |
| Clean | |
| Thick-Muscled | Weak-Muscled |
| Longer | Short |
| Productive | Non-Productive |
| Freer Moving | Restricted Moving |
| Durable | Fragile |
| Large Skeletal Dimension | Small Skeletal Dimension |
| Loose Muscle | Tight-Muscled |
| Heavy Bone | Light Bone |
| Lean | Fat, Light-Muscled |
| More Productive Underline | Less Productive Underline |
| **Frame** | |
| Large-Framed | Small-Framed |
| Big Skeleton | Small Skeleton |
| Heavy-Framed | Light-Framed |
| Heavy Skeleton | Light Skeleton |
| Long-Sided | Short-Sided |
| Loose-Framed | Tight-Framed |
| Skeletal Extension | Skeletal Restriction |
| Stout | Refined |
| Rugged | Fragile |
| Deep Rib | Narrow-Shallow Rib |
| Wide Chest | Narrow Chest |
| **Muscle** | |
| More Total Volume of Muscle | Light |
| Loose | Bunchy |
| Smooth | Tight |
| Thick | Bubble-Shaped |
| | Bulging |
| | Creased |
| | Double-Muscled |
| | Lacks Total Volume of Muscle |
| Long | Short |
| **Fat** | |
| Trimmer | Excess |
| Cleaner | Wasty |
| Freer of Fat | Flabby |
| Less Backfat | Wrinkled |
| Leaner | More Backfat |
| Lower Probing | Higher Probing |

| Desirable | Undesirable |
|---|---|
| **Skeletal Structure** | |
| Slope In Shoulder | Steep Shoulder |
| Adequate Length in Pastern | Straight Shoulder |
| | Peg-Legged |
| | Buck-Kneed |
| | Knock-Kneed |
| | Bow-Legged |
| | Pigeon-Toed |
| | Splay-Footed |
| Correct Cushion In Shoulder, Knee, | Steep Pastern |
| Pastern, Hip, Hock and Foot | Straight Pastern |
| | Short Pastern |
| | Uneven Size Toes |
| | Small Toes |
| | Stiff-Fronted |
| | Shoulder Too Close to the Ear |
| | Stiff Hip |
| | Posty-Legged |
| | Cow-Hocked |
| | Sickle-Hocked |
| | Cocked Ankle |
| | Goose Step |
| Large Foot | Small Foot |
| Level Top | High Arch of Top |
| Level Rump | Steep Rump |
| High Tail Setting | Low Tail Setting |
| **Underline** | |
| Prominent | Inverted Teat |
| Well-Developed | Pin Teat |
| Well-Spaced | Blind Teat |
| At Least Three Teats Ahead of Navel | Fatty Teat |
| Forward Reaching | Poorly Spaced |
| | Only 5 on Each Side |
| | Attached to the Sheath |
| **Vulva** | |
| Large | Infantile |
| | Small |
| Loose | Tight |
| Pliable | Tipped Up |
| **Testicles** | |
| Large | Small |
| Firm | Soft |
| **Sex-Boars** | |
| Masculine-Headed | Feminine-Headed |
| Stout-Headed | Weak-Headed |

| Desirable | Undesirable |
|---|---|
| **Sex-Gilts** | |
| Feminine-Headed | Masculine-Headed |
| **Carcass** | |
| Longer | Shorter |
| Trimmer | |
| Leaner | Wasty |
| Less Backfat | More Backfat |
| Cleaner | Thin Belly Wall |
| Thicker Muscled | Weakly Muscled |
| Larger Loin-Eye | Smaller Loin-Eye |
| Higher % Muscle | Lower % Muscle |
| Higher % Saleable Product | Lower % Saleable Product |
| Firm and Thick Belly Wall | Too Much Marbling |
| Small Amount Of Marbling | Not Enough Marbling |

# Sheep Judging

The parts of the sheep (wether) are shown in Figure 70.




1. Rack (rib)
2. Loin
3. Rump
4. Dock
5. Leg
6. Stifle
7. Hock
8. Flank
9. Forearm
10. Hoof or Foot
11. Pasterns
12. Twist
13. Shoulder

**Figure 70. Parts of the sheep (wether).**

### Breeding Sheep

Modern rams are shown in Figures 71 and 71A. A modern ram should be large-framed, growthy, sound in his skeletal structure, sound and free moving, well developed in his scrotum, long-smooth and thick-muscled, rugged-boned, trim-conditioned, smooth in his shoulder, masculine-featured, sound in his mouth, open-faced and have a long, dense, clean and high yielding fleece that possesses a grade representative of the breed.

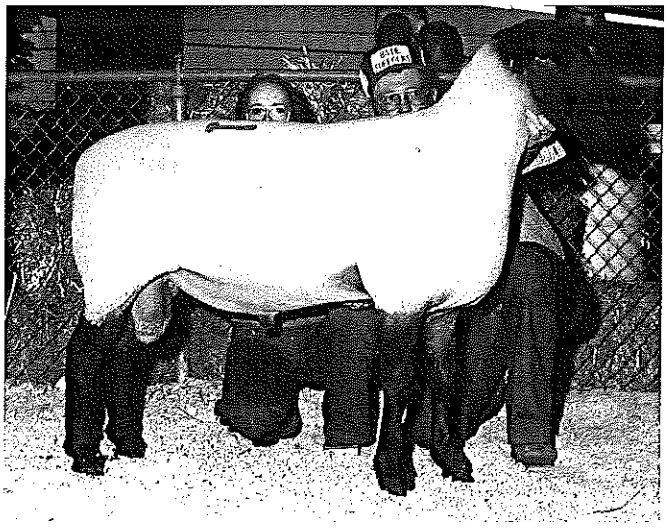


**Figure 71. Modern Suffolk Ram. Note the size, smooth and thick muscling, depth and length of body, heavy bone, structural soundness and masculinity.**

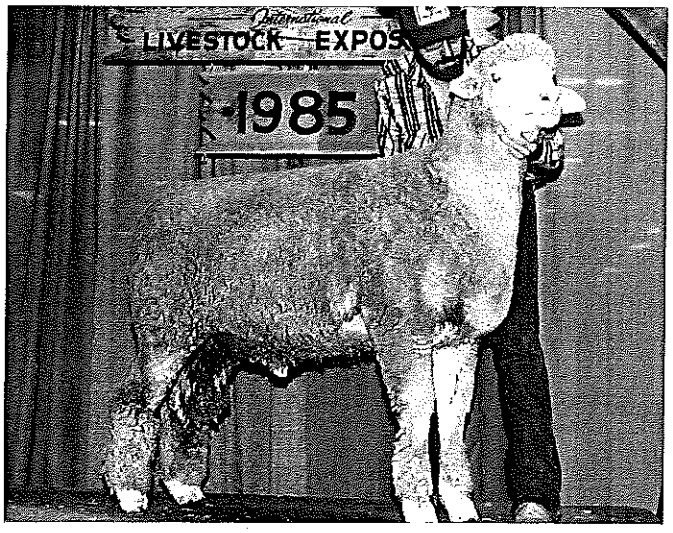



**Figure 71A. Modern Columbia Ram. Note the growth, straightness of top, length, smoothness of front, structural correctness, scrotal development and open face.**

Modern breeding ewes are shown in Figures 72, 73 and 73A. A modern ewe should be large-framed, growthy, sound in her skeletal structure, sound and free moving, well developed about her vulva and teats, long and smooth in her muscle, clean conditioned, neat-fronted, feminine-featured including a long and trim neck, sound in her mouth, open-faced and should produce a long, dense, clean and high yielding fleece that possesses a grade representative of the breed.

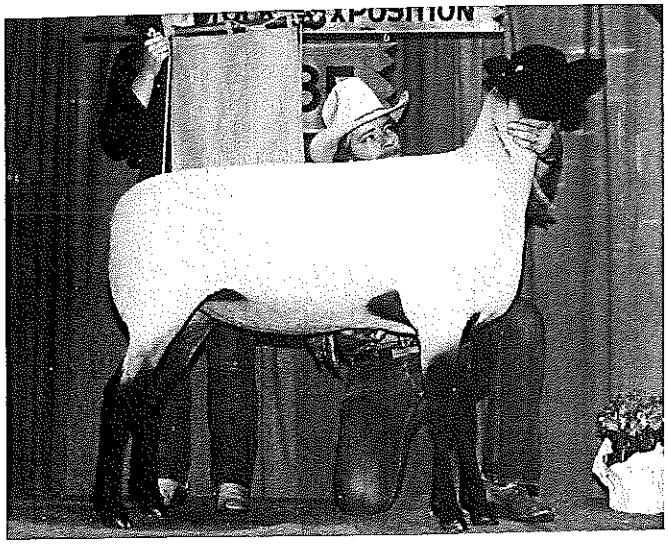


Figure 72. Modern Suffolk Ewe. Note the length of hind-saddle, femininity, feet and leg correctness, smooth-thick muscle pattern and capacity.

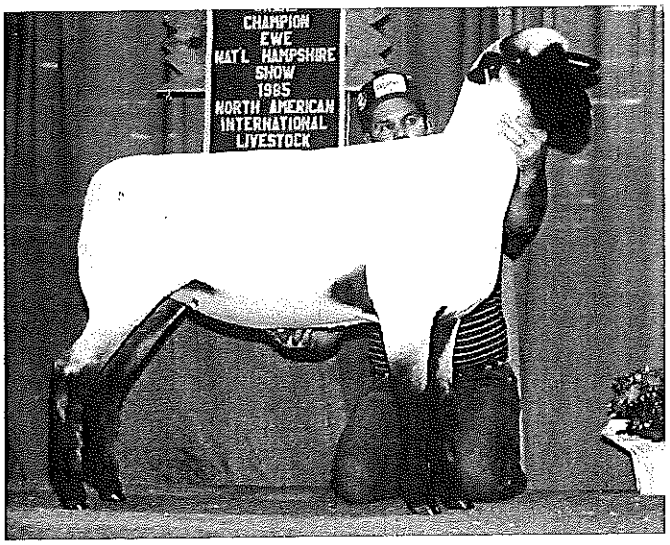



Figure 73. Modern Hampshire Ewe. Observe the height, length, muscular thickness, structural soundness, depth of rib, length of neck, Hampshire breed character about her broody head and open eye channel.

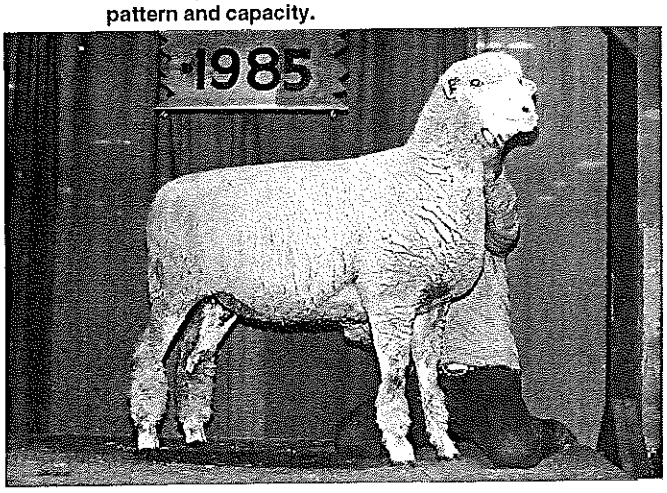



Figure 73A. Modern Columbia Ewe. Note the size, capacity, high volume of wool, muscular thickness of rack and loin, open face and overall productive appearance.

## Market Lamb

Modern market lambs are shown in Figures 74 and 75. A modern market lamb should be big-framed, growthy, fast gaining, sound structured, sound and free moving, long-smooth and thickly-muscled, correctly finished (.10 to .20 in. or .25 to .51 cm) and produce a Yield Grade 1 or 2-Choice carcass between a live weight of 100 to 125 lbs. (45 to 57 kg). Please note that the Yield Grade stated for the market lambs shown in the Livestock Judging Guide was based on the new (1992) Yield Grade formula shown on page 51.

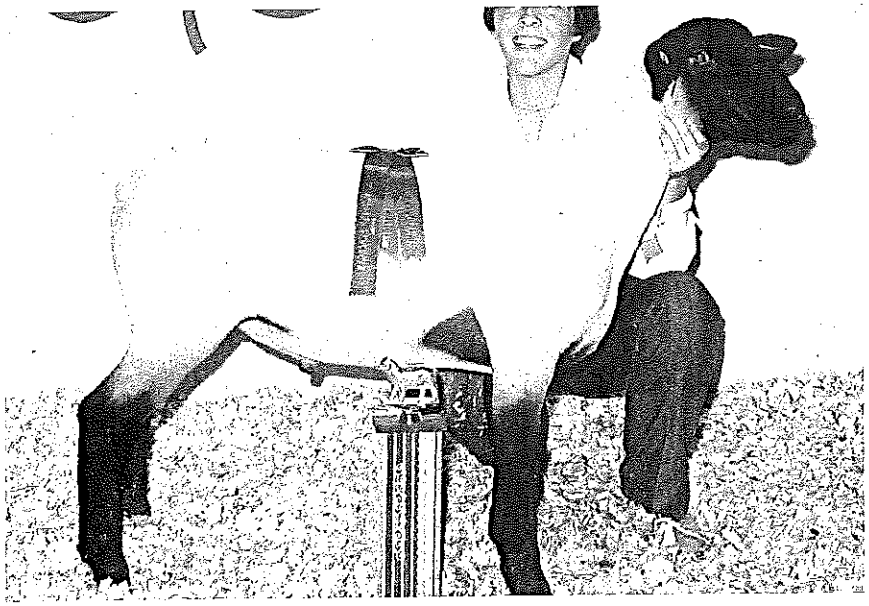


Figure 74. A Modern Market Lamb. Trim, muscular, rugged and sound structure. This Suffolk wether weighed 126 lbs. (57 kg). He had .15 in. (.38 cm) of fat cover, 3.0 in.$^2$ (19.4 cm$^2$) of rib-eye area, a 1.9 Yield Grade and Low Prime Quality Grade.

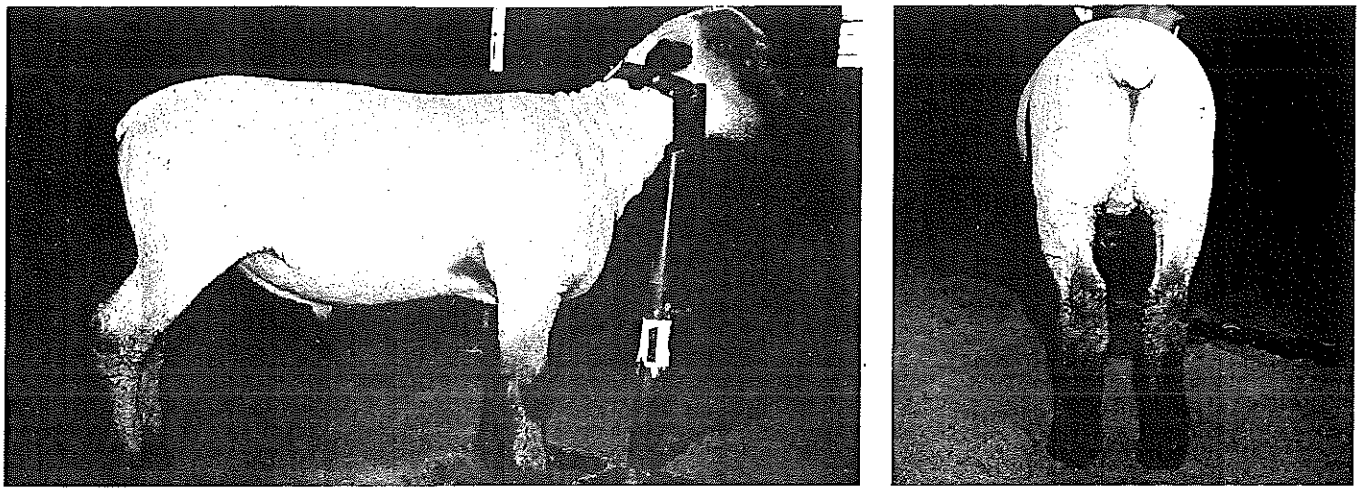


Figure 75. Modern Market Lamb. Trim-smooth and thick-muscled. This Hampshire wether weighed 114 lbs. (51.7 kg). He had .20 in. (.51 cm) of fat thickness, 3.1 in.$^2$ (20 cm$^2$) of rib-eye area, a 2.4 Yield Grade and a Low Prime Quality Grade.

An over-fat market lamb is shown in Figure 76. A very weak-muscled market lamb is shown in Figure 77.

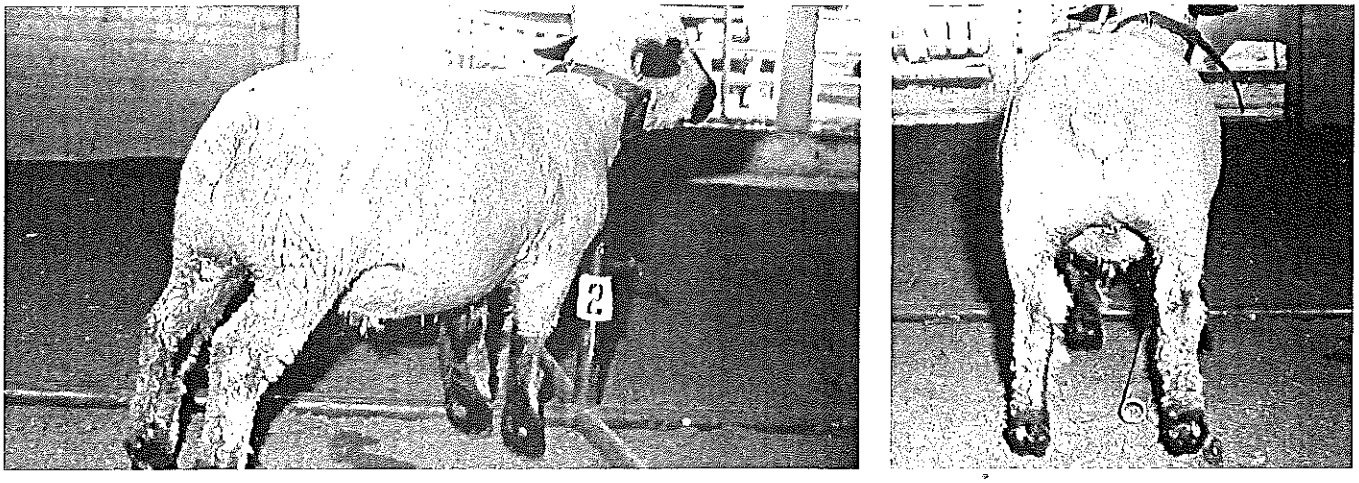


Figure 76. Over-Fat Market Lamb. Excessive fat cover over the rib and top and fat deposition in the flank. This wether weighed 136 lbs. (62 kg). He had .30 in. (.76 cm) of fat cover, 2.9 in.$^2$ (18.7 cm$^2$) of rib-eye area, a 3.4 Yield Grade and Middle Choice Quality Grade.

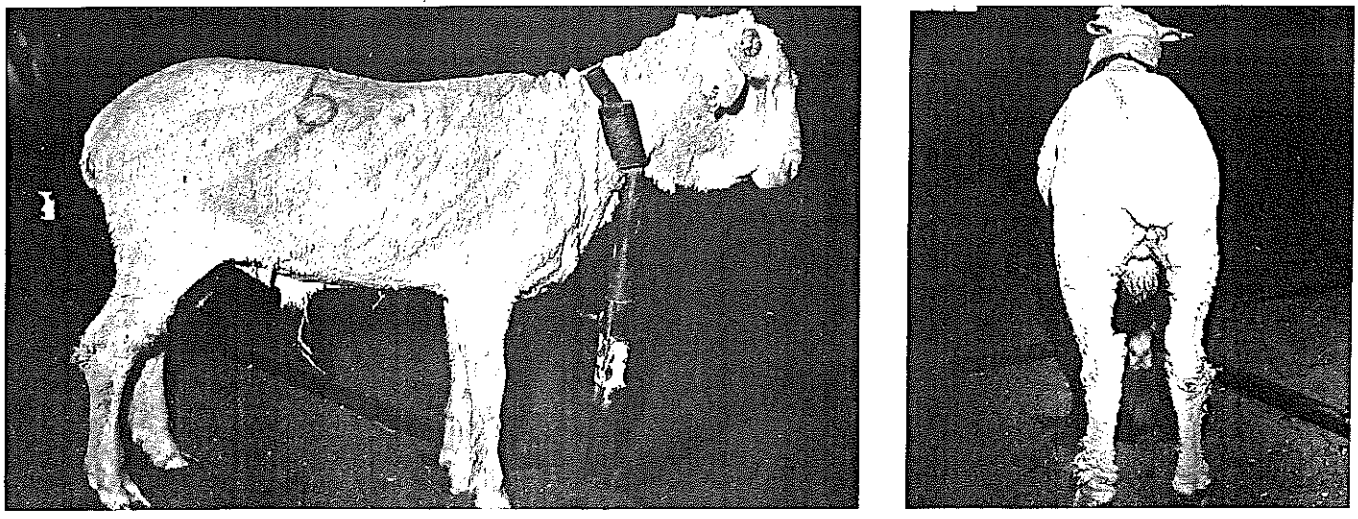


Figure 77. Weak-Muscled Market Lamb. Narrow muscled in loin, rump, and leg. This wether had only 1.9 in.$^2$ (12.3 cm$^2$) of rib-eye area.

## Feeder Lamb

A modern feeder lamb should be big-framed, growthy, fast-gaining, sound-structured, sound and free moving, long-smooth and thickly-muscled and be capable of producing a Yield Grade 1 or 2-Choice carcass between a live weight of 100 to 125 lbs. (45 to 57 kg). A desirable type feeder lamb is shown in Figure 78.

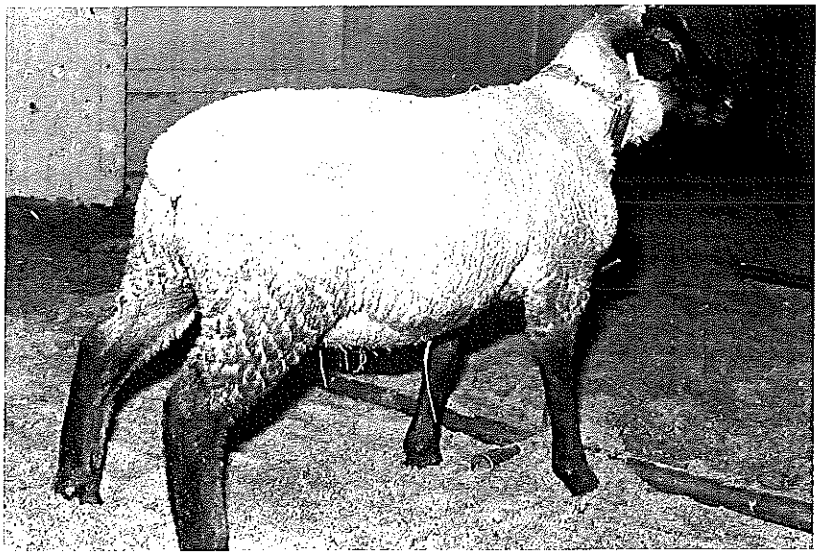


**Figure 78. A Desirable Type Feeder Lamb. This lamb has good capacity, thickness of muscling and the appearance of being fast growing, thrifty and productive. Although adequate in frame, he could be longer and taller. In addition, he needs more trimness, and should be standing more structurally correct.**

## How to Handle Market Lambs

The two main purposes for handling market lambs are to: (1) estimate amount of fat (finish) and (2) estimate the amount of muscling.

Handling for fat can best be determined over the top and fore and last rib. Under-finished lambs (less than .10 in. or .25 cm of fat) will have their back bone sharp and the rear rib bare, ridge-like and easy to feel. Correctly finished lambs (.15 in. or .38 cm of fat) will have less sharpness of back bone and the last rib will have a slight film of fat over it and be not as easy to feel. Over-finished lambs (more than .25 in. or .64 cm of fat cover) will have a smooth handle over the top with the back bone not easily felt, and will feel like a noticeable amount of fat cover over the last rib. Figures 79-81 show how to properly handle for fat cover.

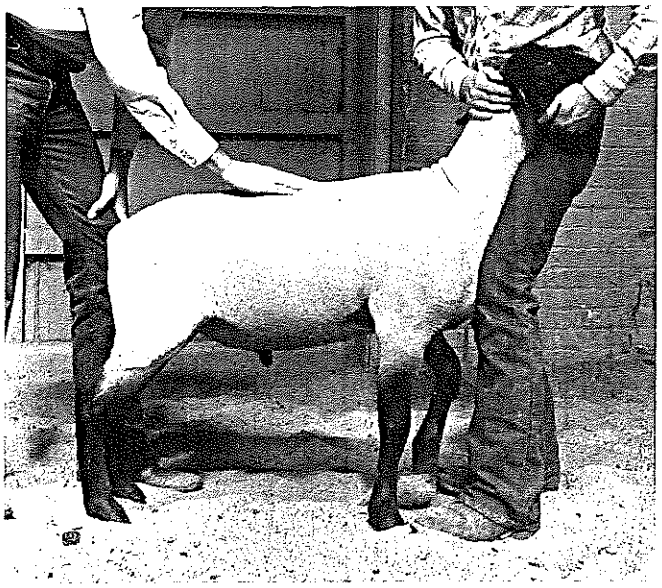


**Figure 79. Handling fat cover over the top.**

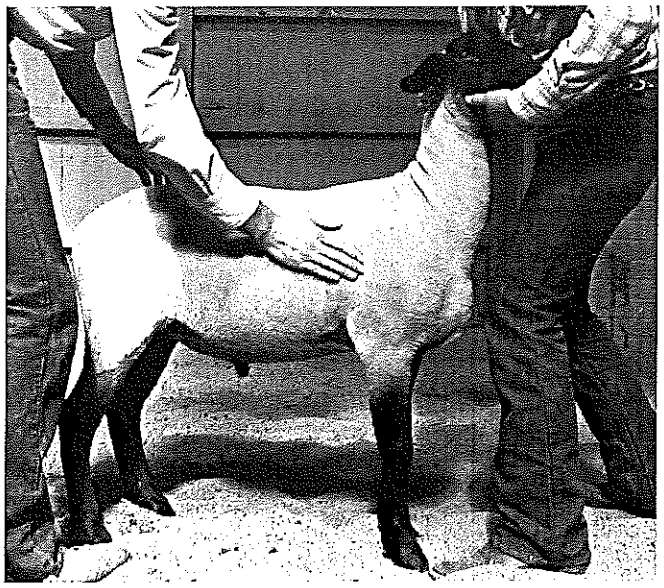


**Figure 80. Handling fat cover over the fore-rib.**

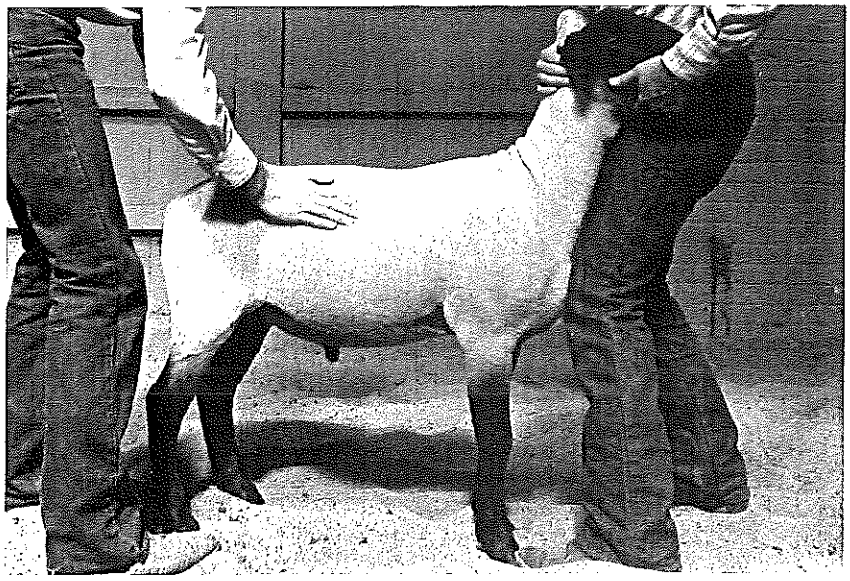


Figure 81. Handling fat cover over the last rib.

To properly handle for loin-eye area, the judge should feel the width and depth of loin and handle the tubular loin-eye at about the eighth rib. Figures 82-83 illustrate handling to determine loin-eye area. Figure 84 shows handling for leg muscling.

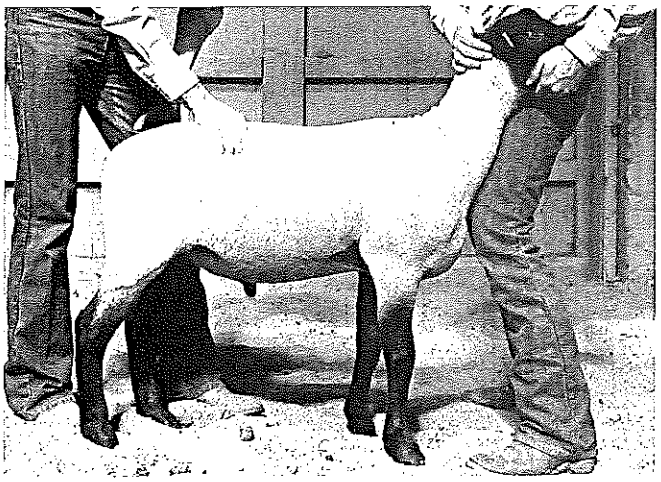


Figure 82. Handling Width and Depth of Loin - Indicator of Loin-Eye area.

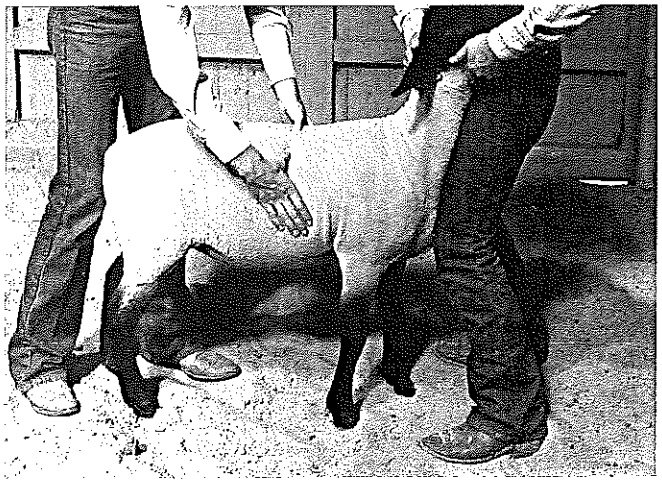


Figure 83. Handling the Tubular Shaped Loin-Eye Muscle - Indicator of Loin-Eye area.

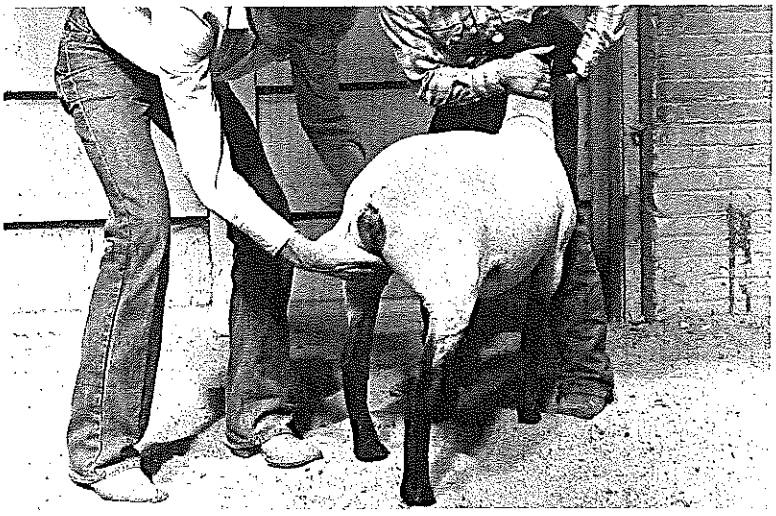


Figure 84. Handling for leg muscling.

## How to Handle Breeding Sheep

Breeding sheep should be checked for soundness of mouth as shown in Figure 85. Then breeding sheep should be handled for width and depth of loin, length of loin and rump, and thickness of leg. Figures 86A and 86B show handling for length of loin and rump. Figure 87 shows handling for thickness of leg. Rams should be checked for testicle size and firmness as shown in Figure 88. Next, breeding sheep should be checked for fleece length, yield and density over the rib as shown in Figure 89.

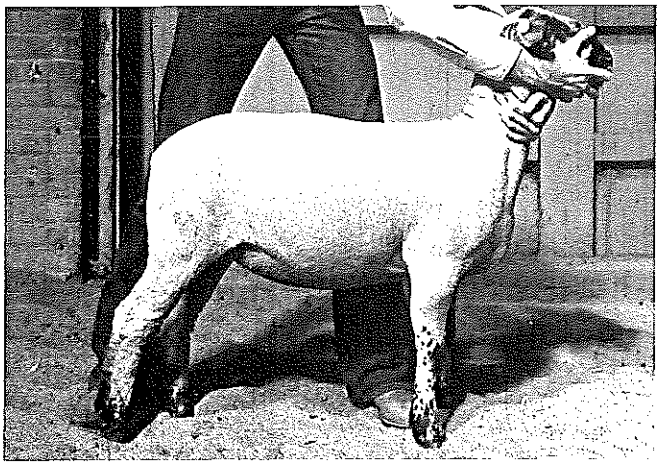


Figure 85. Checking soundness of mouth in breeding sheep.

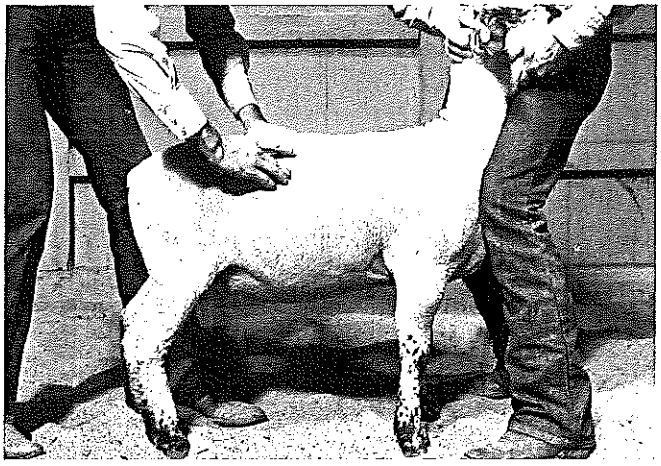


Figure 86A. Handling for length of loin.

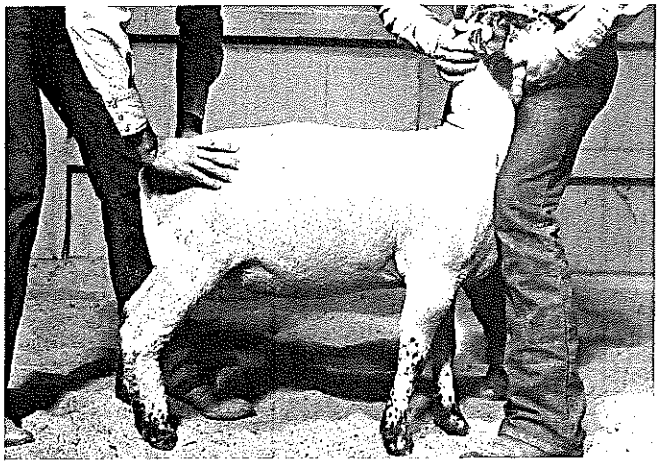


Figure 86B. Handling for length of rump.

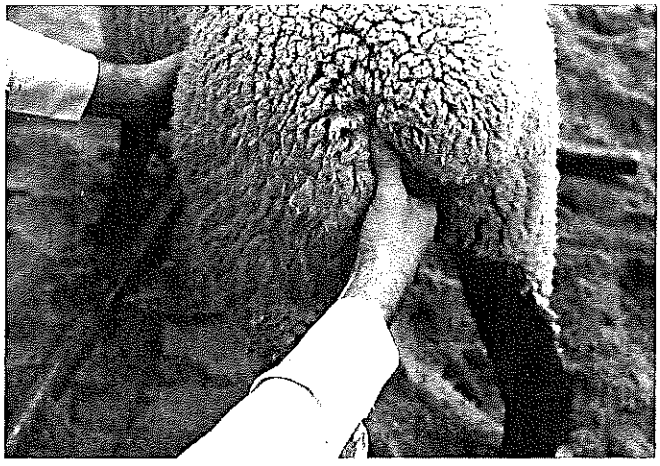


Figure 87. Handling for thickness of leg.

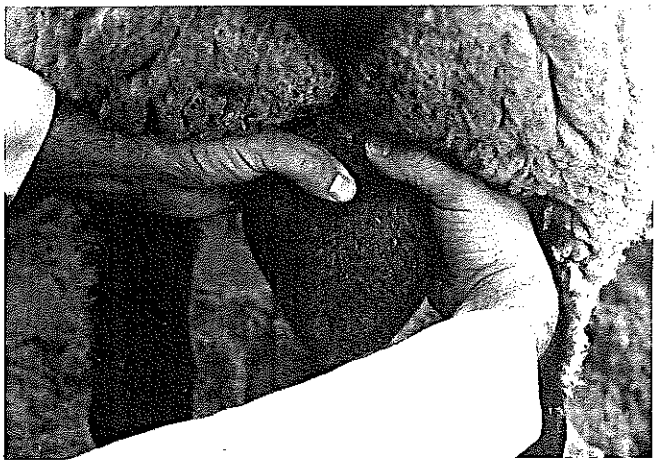


Figure 88. Checking for testicle size and firmness.

Figure 89. Checking for fleece length, cleanness, yield and density.

# Sheep Terms

(Both desirable and undesirable terms should be used where suitable when giving oral reasons.)

| Desirable | Undesirable |
|---|---|
| **General** | |
| Growthy | Short |
| Useful | Dumpy |
| Size | Early Fat & Muscle Maturity |
| Scale | Small |
| Long | Light-Boned |
| Adequate Height | Narrow |
| Heavy-Boned | Poorly-Balanced |
| Well-Balanced | |
| Rugged | |
| Tall | |
| **Frame** | |
| Medium | Small |
| Large | |
| **Skeletal Structure** | |
| Sound Feet and Legs | Cow-Hocked |
| Structural Correctness | Bow-Legged |
| Heavy-Boned | Sickled-Hocked |
| Straight Top | Posty-Legged |
| Smooth Mouth | Straight Pastern |
| Sound Mouth | Stiff Pastern |
| Smooth Shoulder | Cocked Ankle |
| | Buck-Kneed |
| | Knock-Kneed |
| | Splay-Footed |
| | Pigeon-Toed |
| | Soft Pastern |
| | Toes In |
| | Coarse Shoulder |
| | Light-Boned |
| | Weak Top |
| | Parrot Mouth |
| | Over Shot Jaw |
| | Under Shot Jaw |
| | Rough Mouth |
| | Toes Out |
| **Muscle** | |
| More Total Development of Muscle | Poorly-Muscled |
| Thicker-Muscled | Weakly-Muscled |
| Smooth Muscular Shoulder | Light-Muscled |
| Muscular Rack | Narrow Rack |
| Broader, Thicker-Muscled Rack | Shallow Loin |
| Thicker-Muscled, Deeper Loin | Narrow Rump |

| Desirable | Undesirable |
|---|---|
| Longer Loin | Short Loin |
| Longer Rump | Short Rump |
| Longer Hind-Saddle | Short Hind-Saddle |
| Thicker-Muscled Leg | Narrow-Muscled Leg |
| More Muscular Stifle | Weakly-Muscled Leg |
| Longer Stifle | Light-Muscled Leg |
| Deeper-Muscled Leg | Shallow Leg |
| Fuller, Thicker, Longer-Muscled Leg | Tight Muscle Structure |
| Deeper Rib | Bubble-Shaped Muscle Structure |
| Smooth Muscle Structure | |

**Fat (Market Lambs)**

| | |
|---|---|
| Correctly Finished | Over-Finished |
| Carry .10 to .20 in. (.25 to .51 cm) | Wasty |
| of Fat at the Last Rib | Excessive Finish |
| Trim Breast, Flank and Twist | Rolling With Fat Over the Rib |
| | Wasty Breast |
| | Excessive Fat Over the Fore and Last Rib |
| | Wasty Flank |
| | Wasty Twist |
| | Under-Finished |

**Fat (Breeding Sheep)**

| | |
|---|---|
| Correct-Conditioned | Over-Conditioned |
| | Under-Conditioned |

**Carcass (Market Lambs)**

| | |
|---|---|
| Muscular | Weakly-Muscled |
| Correctly Finished | Over-Finished |
| Long Hind-Saddle | Wasty |
| More Desirable Yield Grade | More Undesirable Yield Grade |
| Higher % Cutability | Lower % Cutability |
| Higher Quality Grade | Lower Quality Grade |
| Higher Dressing % | Lower Dressing % |
| High % Retail Cuts | Low % Retail Cuts |

**Breeding Sheep Terms**

| Desirable | Undesirable |
|---|---|
| **Wool** | |
| Open Face | Closed Face |
| Dense | Coarse |
| Free From Black Fiber | Contains Black Fiber |
| Free From Kemp | Kempy |
| Long | Short |
| Grade Typical of Breed | Lacks Uniformity of Grade |
| Uniformity of Grade | |
| Clean | Greasy |
| High Yielding | Low Yielding |

| Desirable | Undesirable |
|---|---|
| **Testicles** | |
| Correct Development | Small |
| Straight Suspension | Crooked Suspension |
| Large | Swollen |
| **Udder** | |
| Two Sound Teats | Only One Teat |
| Even Placement | Uneven Placement |
| **Vulva** | |
| Large | Small |
| Flat | Tipped Up |
| | Tight |
| **Sex - Rams** | |
| Masculine-Headed | Feminine-Headed |
| Bold-Headed | Weak-Headed |
| **Sex - Ewes** | |
| Feminine-Headed | Masculine-Headed |

**Wool**

A desirable fleece should be long, clean, dense, not greasy, high-yielding, strong, possess a desirable crimp, be free of black fiber and kemp, and have a grade typical of the breed or breeds.

In contrast, an undesirable fleece is short, dirty, open, greasy, low-yielding, weak, has an undesirable crimp, contains black fiber and kemp, and has a grade not typical of the breed or breeds. Figure 90 shows an undesirable woolly face.

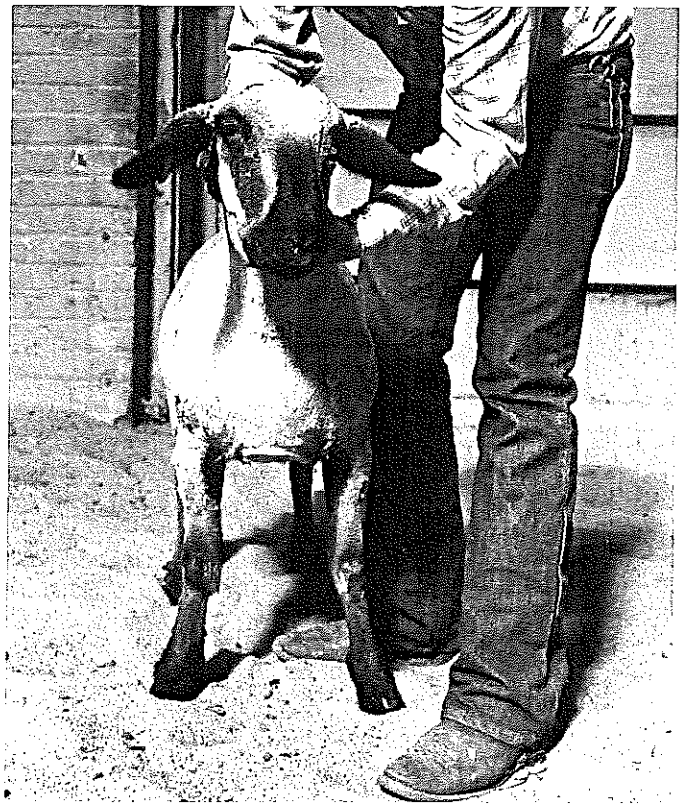


**Figure 90. Woolly Face (Undesirable).**

# Carcass Evaluation

## Beef Carcass

The wholesale cuts of a beef carcass are shown in Figure 91. The two main factors determining the value of a beef carcass are Quality Grade and Yield Grade.

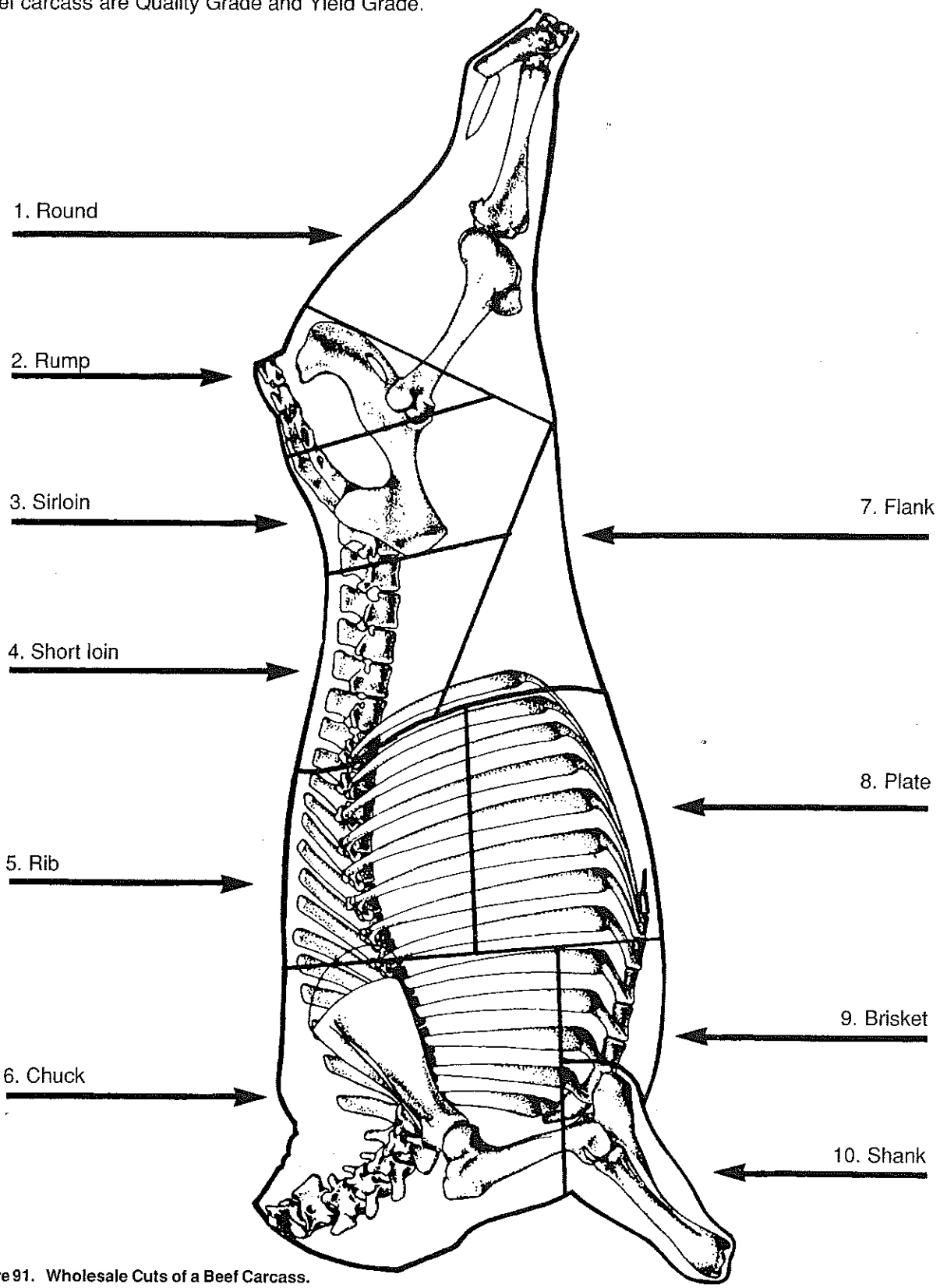



**Figure 91. Wholesale Cuts of a Beef Carcass.**

## Quality Grade

The Quality Grade of market steers and heifers and their carcasses are:

Prime - Choice - Select - Standard - Young Utility - Commercial - Utility-Cutter and Canner

Quality Grades are an indication of the expected tenderness, juiciness and flavor of the meat. The two main measurements of carcass Quality Grades are marbling (fat within the muscle) as shown in Figure 92 and maturity (age of the carcass) as shown in Figures 93 and 94. It should be noted that outside fat cover is positively related to marbling; however this relationship is not real high

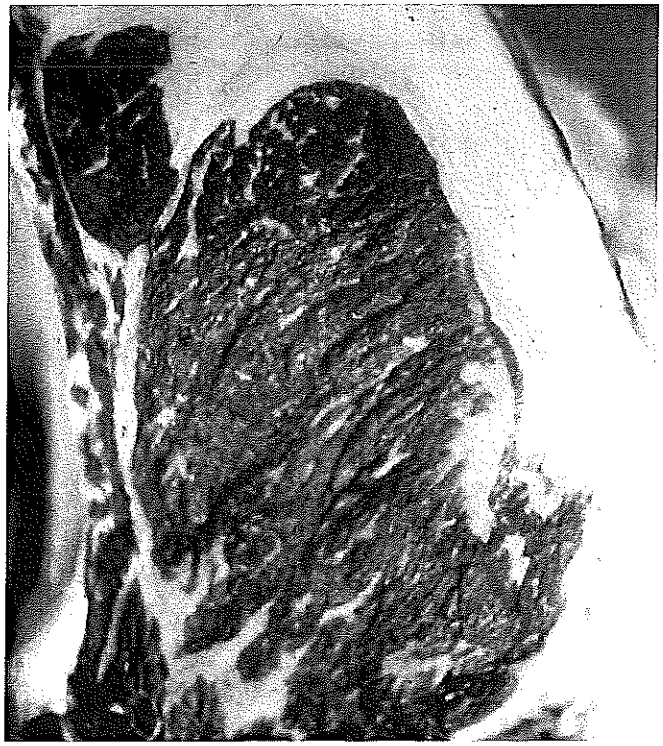


**Figure 92. Marbling - Speckles of fat within the muscle.**

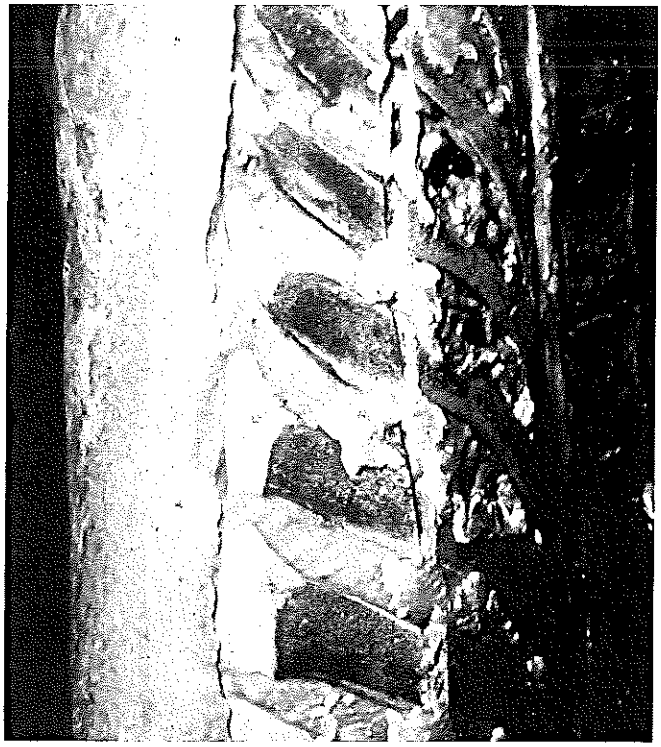


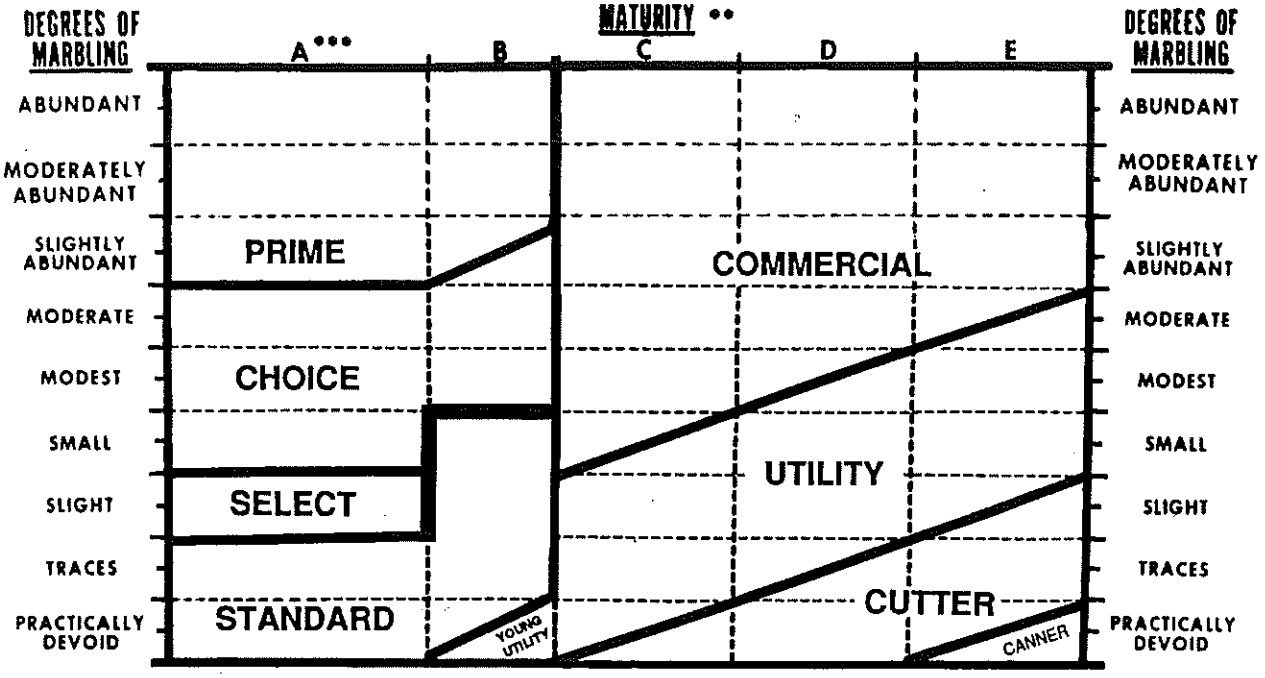
**Figure 93. Determining Maturity of a Beef Carcass - A Maturity. Note the cartilage on the tip.**

**Figure 94. Determining Maturity of a Beef Carcass - E Maturity. Note the bone ossification on the tip.**

A beef cattle carcass with .40 in. (1.02 cm) of fat cover, three-fourths of the distance over the rib-eye between the 12th and 13th rib, is often related to enough marbling for a low choice Quality Grade.

Maturity is largely determined by bone ossification. Older carcasses have more ossification of bone. Figure 95 shows the relationship between marbling and maturity to determine Quality Grade of a beef carcass.

**RELATIONSHIP BETWEEN MARBLING, MATURITY AND CARCASS QUALITY GRADE* (January 31, 1997)**




* **Assumes that firmness of lean is comparably developed with the degree of marbling and that the carcass is not a "dark cutter."**

** **Maturity increases from left to right (A through E).**

*** **The A maturity portion of the Figure is the only portion applicable to bullock carcasses.**

**Figure 95. Relationship of marbling and maturity to determine the Quality Grade of a beef cattle carcass.**

| Beef Cattle Carcass Maturity | Approximate Age |
|---|---|
| A | 8-30 months |
| B | 30-42 months |
| C | 42-72 months |
| D | 72-96 months |
| E | 96 months and older |

### Yield Grade

The Yield Grades of market steers and heifers and their carcasses are:

1-2-3-4-5

Yield Grades are a numerical score for percent cutability. For example, a Yield Grade 1 carcass has a higher percent cutability than a Yield Grade 5 carcass as shown in the following:

| Yield Grade | %Cutability |
|---|---|
| 1 | 54.6 |
| 2 | 52.3 |
| 3 | 50.0 |
| 4 | 47.7 |
| 5 | 45.4 |

Cutability is the estimated percentage of the hot carcass weight in boneless, closely trimmed of fat retail cuts from the round, loin, rib and chuck.

Therefore, low-fat, heavy-muscled carcasses are high in percentage of cutability and are Yield Grade 1 or 2.
However, high-fat, poor-muscled carcasses are low in percentage of cutability and are Yield Grade 4 or 5.
Yield Grade 3 carcasses tend to be average in fat and muscle.
Figure 96 shows the location of the fat cover measurement on a beef carcass.
Figure 97 shows measurement of the rib-eye area.
Figure 98 shows the kidney and pelvic fat.

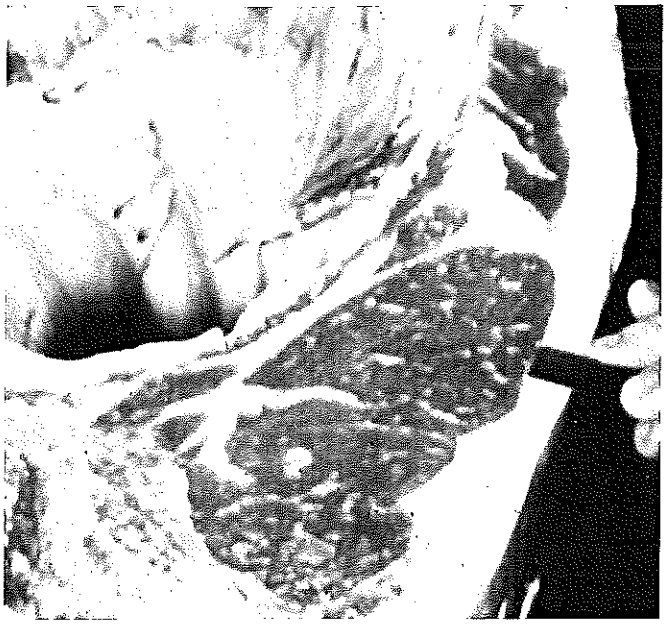


**Figure 96. Fat Thickness Measurement in a Beef Carcass is between the 12th and 13th rib. Measured 3/4 the distance over the rib-eye from the chine bone end.**

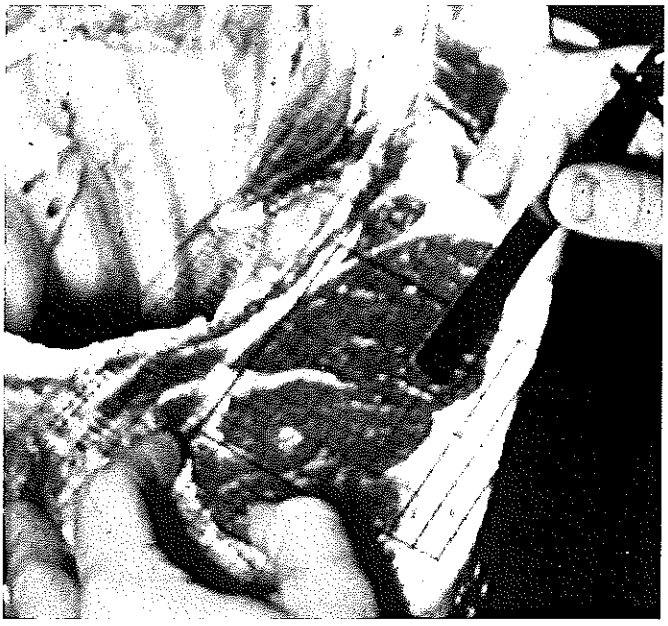


**Figure 97. Measurement of Rib-Eye Area in a Beef Carcass is between the 12th and 13th rib.**

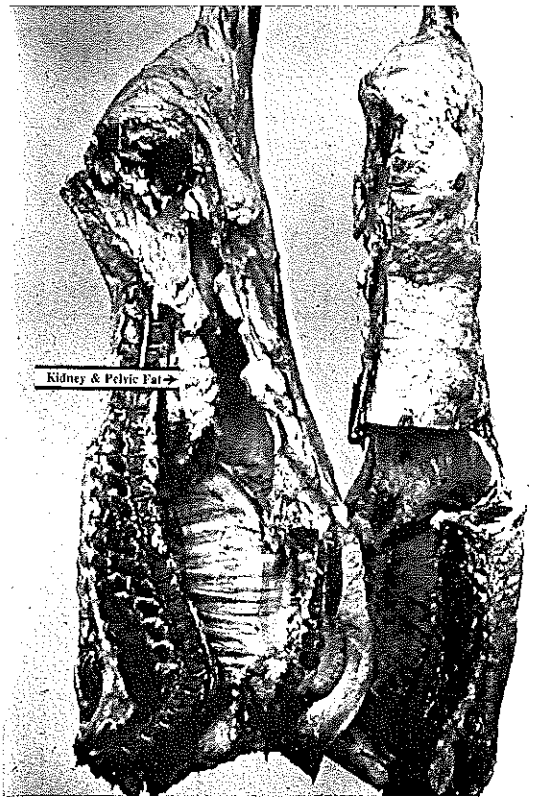



**Figure 98. Kidney, Pelvic and Heart Fat In a Beef Cattle Carcass. Estimated as a percent of hot carcass weight.**

Figure 99 shows how to determine the Yield Grade of live beef cattle and beef cattle carcasses.

It should be noted that Quality Grade and Yield Grade are negatively related. That is, as cattle get fatter, they tend to have a higher Quality Grade, but an inferior Yield Grade. Therefore, Yield Grade 1 -Choice carcasses are not common. However, Yield Grade 2-Choice Carcasses are common and represent a desirable, practical combination of Yield Grade and Quality Grade.

Beef cattle carcasses should be correct in weight, at least low choice, acceptable in fat cover (.30 in. to .50 in. or .76 to 1.27 cm) and heavy-muscled.

## U.S.D.A. Beef Cattle Yield Grades (Y.G.)

Step 1 Determine Preliminary Yield Grade

| Fat Thickness (in.) | Fat Thickness (cm) | Preliminary Y.G. |
|---|---|---|
| .00 | (.00) | 2.00 |
| .05 | (.13) | 2.13 |
| .10 | (.25) | 2.25 |
| .15 | (.38) | 2.38 |
| .20 | (.51) | 2.50 |
| .25 | (.64) | 2.63 |
| .30 | (.76) | 2.75 |
| .35 | (.89) | 2.88 |
| .40 | (1.02) | 3.00 |
| .45 | (1.14) | 3.13 |
| .50 | (1.27) | 3.25 |
| .55 | (1.40) | 3.38 |
| .60 | (1.52) | 3.50 |
| .65 | (1.65) | 3.63 |
| .70 | (1.78) | 3.75 |
| .75 | (1.91) | 3.88 |
| .80 | (2.03) | 4.00 |
| .85 | (2.16) | 4.13 |
| .90 | (2.29) | 4.25 |
| .95 | (2.41) | 4.38 |
| 1.00 | (2.54) | 4.50 |
| 1.05 | (2.67) | 4.63 |
| 1.10 | (2.79) | 4.75 |
| 1.15 | (2.92) | 4.88 |
| 1.20 | (3.05) | 5.00 |
| 1.25 | (3.18) | 5.13 |
| 1.30 | (3.30) | 5.25 |
| 1.35 | (3.43) | 5.38 |
| 1.40 | (3.56) | 5.50 |
| 1.45 | (3.68) | 5.63 |
| 1.50 | (3.81) | 5.75 |
| 1.55 | (3.94) | 5.88 |

Step 2. Adjustment For Rib-Eye-Area (R.E.A.)

| Hot Carcass (lb.) | Hot Carcass (kg) | R.E.A. (sq. in.) | R.E.A. (sq. cm) |
|---|---|---|---|
| 500 | (227) | 9.8 | (63.2) |
| 525 | (238) | 10.1 | (65.1) |
| 550 | (249) | 10.4 | (67.1) |
| 575 | (261) | 10.7 | (69.0) |
| 600 | (272) | 11.0 | (71.0) |
| 625 | (284) | 11.3 | (72.9) |
| 650 | (295) | 11.6 | (74.8) |
| 675 | (306) | 11.9 | (76.8) |
| 700 | (318) | 12.2 | (78.7) |
| 725 | (329) | 12.5 | (80.6) |
| 750 | (340) | 12.8 | (82.6) |
| 775 | (352) | 13.1 | (84.5) |
| 800 | (363) | 13.4 | (86.4) |
| 825 | (374) | 13.7 | (88.4) |
| 850 | (386) | 14.0 | (90.3) |
| 875 | (397) | 14.3 | (92.2) |
| 900 | (408) | 14.6 | (94.2) |

a. For each sq. in. more R.E.A. than shown in the above table, subtract .3 from the preliminary Y.G.

b. For each sq. in. less R.E.A. than shown in the above table, add .3 to the preliminary Y.G.

Step 3. Adjustment for % Kidney, Pelvic and Heart Fat (% KPH Fat)

a. For each % KPH fat more than 3.5%, add .20 to the adjusted Y.G. found in Step 2.

b. For each % KPH fat less than 3.5%, subtract .20 from the adjusted Y.G. found in Step 2.

THE FINAL YIELD GRADE HAS BEEN DETERMINED

Step 4. Round the Final Yield Grade down to the nearest .1

| Example |
|---|
| 2.73 = 2.7 |
| 2.78 = 2.7 |

**Figure 99. How to determine the U.S.D.A. Yield Grade of live beef cattle and beef cattle carcasses.**

## Swine Carcass

The wholesale cuts of a swine carcass are shown in Figure 100.

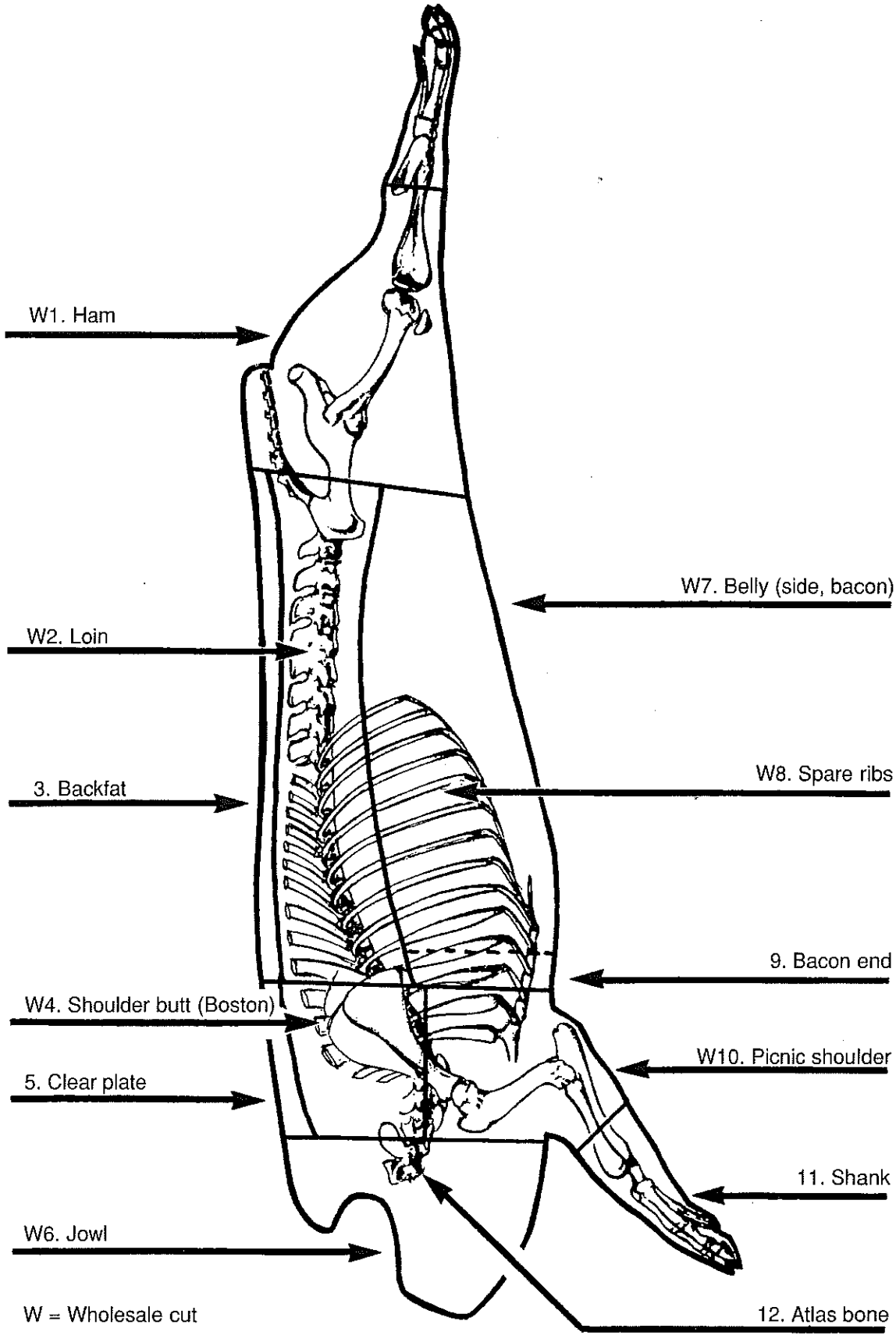
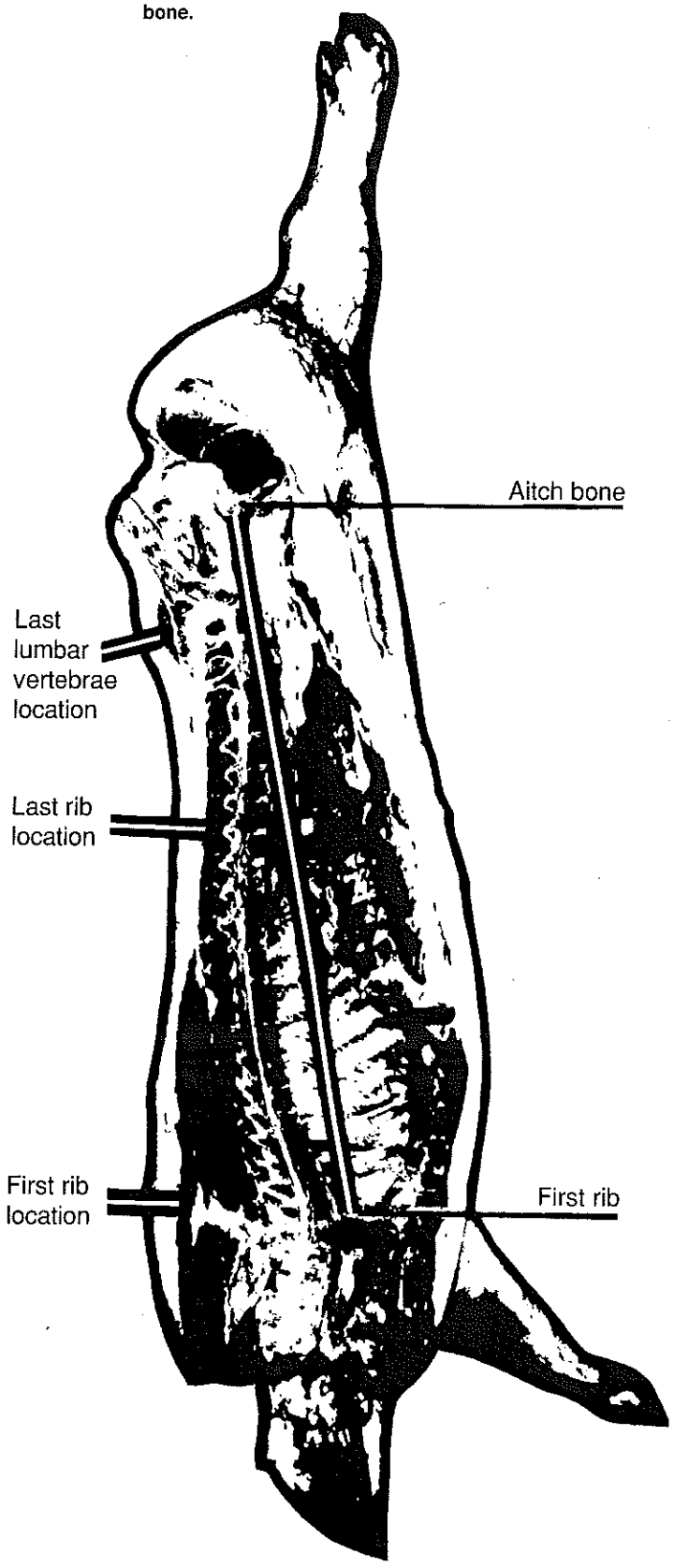



**Figure 100. Parts of the Pork Carcass. The Wholesale cuts are marked with a W.**

Figure 101 shows the three locations used to determine average backfat thickness and where length is measured on a pork carcass. Figure 102 shows where backfat at the 10th rib and the loin-eye are measured on a pork carcass. Figure 103 shows five of the six degrees of muscling. Very thin is not shown.

**Figure 101.** **In a pork carcass, average backfat is the average of three measurements - across from the first rib, last rib and last lumbar vertebrae. Measurements include the skin. Carcass length is measured from the first rib to the aitch bone.**



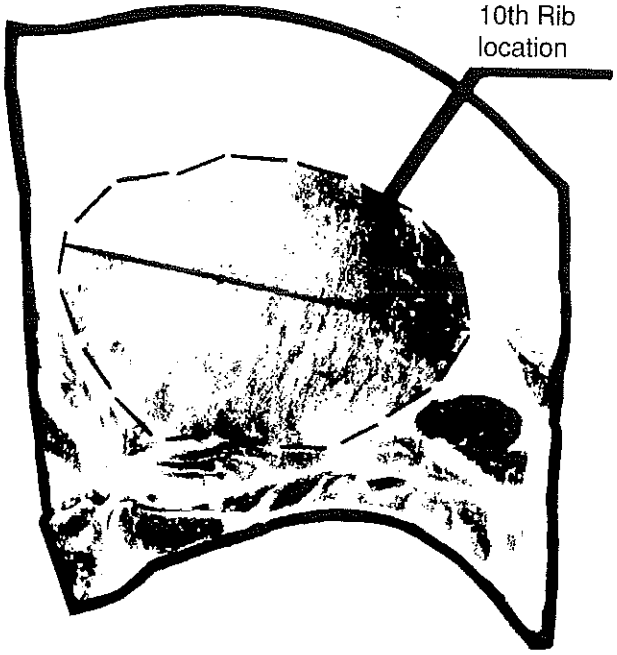




**Figure 102.** **Backfat measurement (10th rib - skin included) 3/4 the distance over the loin-eye from the chine bone end between the 10th and 11th rib. Loin-eye area is also measured at this location.**

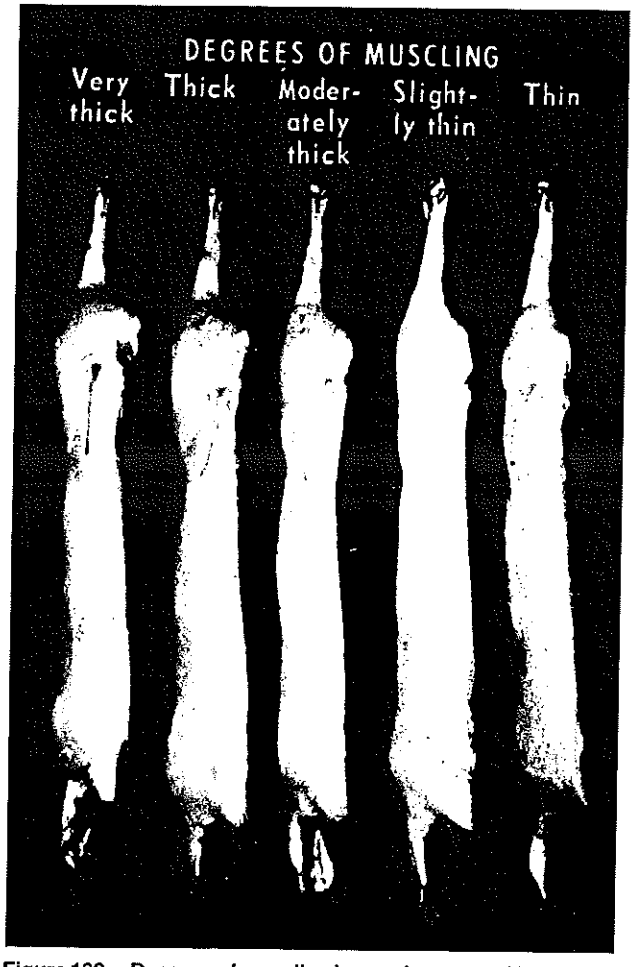



**Figure 103.** **Degrees of muscling in a pork carcass. Very thin is not shown.**

A desirable swine carcass should be correct in weight, long, low on backfat and heavy-muscled. One method of evaluating live market hogs and pork carcasses is the U.S.D.A. Grading System. The U.S.D.A. Grades for live market hogs and pork carcasses are:

No. 1 - No. 2 - No. 3 - No. 4 - Utility

**Determining the U.S.D.A. Grade of Live Market Hogs and Pork Carcasses**

| *Last Rib Backfat Thickness* | *Muscling Score* | *U.S.D.A. Grade* |
|---|---|---|
| Less than 1.00 in. (2.54 cm) | Average | 1 |
| 1.00 to 1.24 in. (2.54 to 3.15 cm) | Average | 2 |
| 1.25 to 1.49 in. (3.18 to 3.78 cm) | Average | 3 |
| 1.50 in. and over (3.81 cm and over) | Average | 4 |

If pigs or carcasses have a Thick Muscling score, favorably adjust one full U.S.D.A. Grade. The only exception is that pigs or carcasses with 1.75 in. (4.45 cm) or more of Last Rib Backfat Thickness cannot be graded a U.S.D.A. No. 3, even with a Thick Muscling score. If pigs or carcasses have a Thin Muscling score, unfavorably adjust one full U.S.D.A. Grade. Pigs or carcasses with a Thin Muscling score cannot be graded a U.S.D.A. No. 1. The present muscling scores include the previous muscling scores as follows:

| **Present Muscling Scores Used in U.S.D.A. Grading System** | | **Previous Muscling Scores Used in U.S.D.A. Grading System** (Shown in Figure 103) |
|---|---|---|
| Thick = 3 | = | Very Thick |
| Average = 2 | = | Thick and Moderately Thick |
| Thin = 1 | = | Slightly Thin, Thin and Very Thin |

Figure 104 explains how to adjust for Muscling Score.

**Figure 104. Example Adjustment for Muscling Score**

| **Last Rib Backfat Thickness** | **Muscling Score** | **U.S.D.A. Grade** |
|---|---|---|
| Less than 1.00 in. (2.54 cm) | Average | 1 |
| | Thick | 1 |
| | Thin | 2 |
| 1.00 to 1.24 in. (2.54 to 3.15 cm) | Average | 2 |
| | Thick | 1 |
| | Thin | 3 |
| 1.25 to 1.49 in. (3.18 to 3.78 cm) | Average | 3 |
| | Thick | 2 |
| | Thin | 4 |
| 1.50 to 1.74 in. (3.81 to 4.42 cm) | Average | 4 |
| | Thick | 3 |
| | Thin | 4 |
| 1.75 in. and more (4.45 cm and more) | Average | 4 |
| | Thick | 4 |
| | Thin | 4 |

The following equation can be used: U.S.D.A. Grade = (4 x Last rib backfat thickness, in.) - (1.0 x Muscling score)
Example: Last rib backfat thickness, in. = 1.0; Muscling score = 2 (Average) (4 x 1.0) - (1.0 x 2) = 4 -2 = 2.0

Carcasses with Thin muscling cannot grade U.S. No. 1. Carcasses with last rib backfat thickness of 1.75 in. or more cannot grade U.S. No. 3, even with Thick muscling. This equation does not apply to the Utility grade.

The live Utility grade is rarely used. These are pigs which are extremely narrow and often unthrifty appearing. Utility carcasses are one or a combination of the following (regardless of the degree of muscling or backfat thickness over the last rib):

1. Unacceptable quality of lean
2. Pale, soft and exudative
3. Soft and/or oily
4. Too thin of belly wall

*Short Cut Method for Estimating Percent Carcass Muscle (Contains 5% Fat) For Live Market Hogs*

Base is 50 percent for Loin-Eye Area (LEA) of 5.0 in.$^2$ (32.3 cm$^2$), and fat depth of 0.80 in. (2.03 cm) at the 10th rib for a 240 lb. (109 kg) pig.

A. For every .1 in.$^2$ (.65 cm$^2$) LEA above 5.0 in.$^2$ (32.3 cm$^2$), add .2% muscle.
For every .1 in.$^2$ (.65 cm$^2$) LEA below 5.0 in.$^2$ (32.3 cm$^2$), subtract .2% muscle.

B. For every .1 in. (.25 cm) FAT above 0.80 in. (2.03 cm), subtract 1.0% muscle.
For every .1 in. (.25 cm) FAT below 0.80 in. (2.03 cm), add 1.0% muscle.

C. For every 10 lbs. (4.5 kg) live weight above 240 lbs (109 kg), subtract .2% muscle.
For every 10 lbs. (4.5 kg) live weight below 240 lbs (109 kg), add .2% muscle.

**Examples:**

A.
5.6 in.$^2$ (36.1 cm$^2$)
1.2 in. (3.05 cm) 10th RIB FAT
250 lbs (113 kg)
50.0% for BASE
+1.2% for LEA

51.2
-4.0% for FAT

47.2
-.2% for WEIGHT
47.0% MUSCLE

B.
4.4 in.$^2$ (28.4 cm$^2$)
0.60 in (1.52 cm) 10th RIB FAT
220 lbs (100 kg)
50.0% for BASE
-1.2% for LEA

48.8
+2.0% for FAT

50.8
+.4% for WEIGHT
51.2% MUSCLE

---

This Short Cut Method is fairly accurate on hogs in the middle range of composition. For extremes in composition, the Short Cut Method is not as accurate.

---

**Equation**

$$\% \text{ Muscle} = \frac{7.231 + (\text{Hot carcass wt} \times .437) + (\text{Loin-Eye Area} \times 3.877) - (\text{10th Rib Fat} \times 18.746)}{\text{Hot Carcass Weight}} \times 100$$

## Sheep Carcass

The wholesale cuts of a sheep carcass are shown in Figure 105. The two main factors determining the value of a sheep carcass are Quality Grade and Yield Grade.

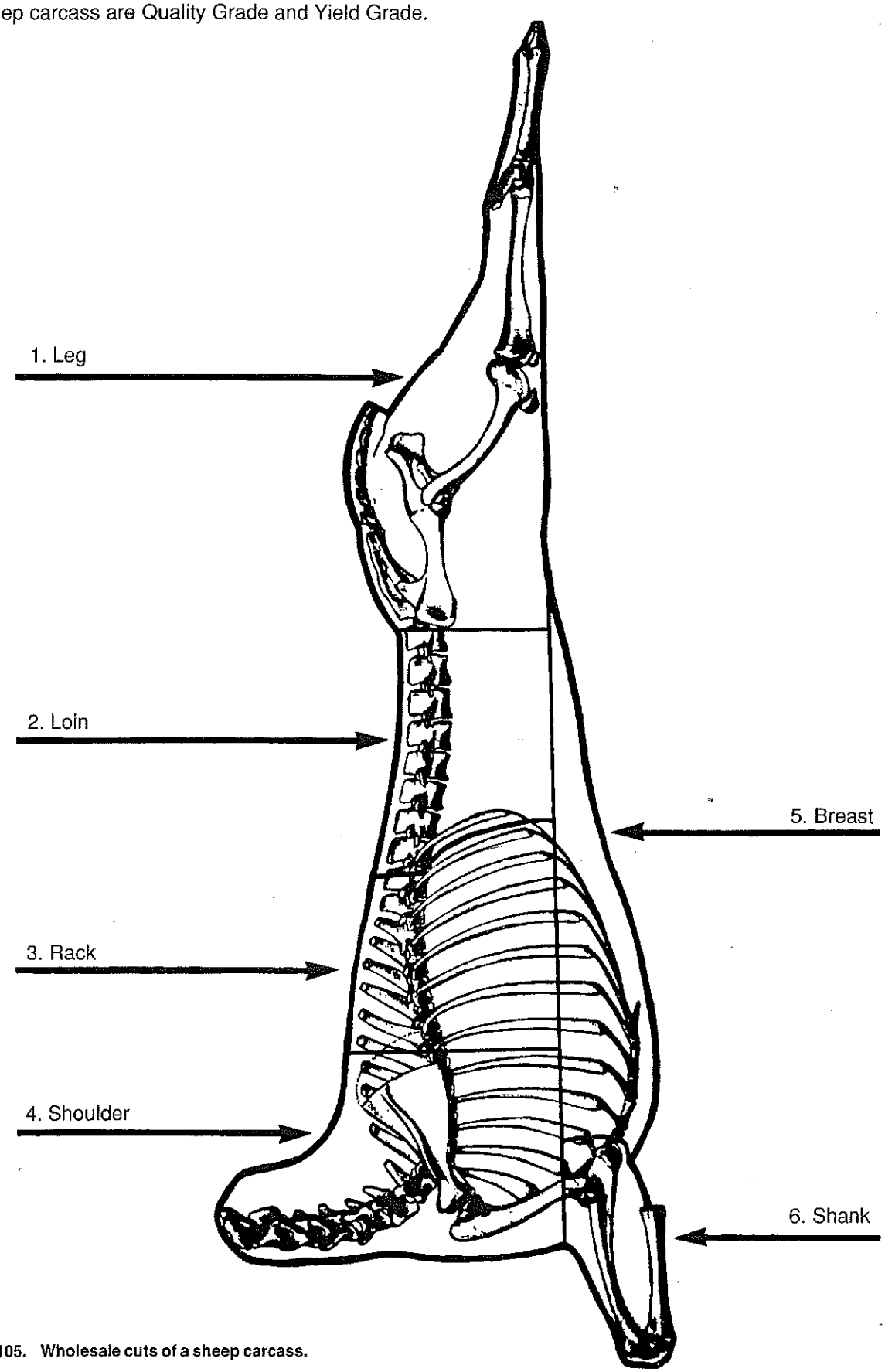



**Figure 105. Wholesale cuts of a sheep carcass.**

## Quality Grade

The Quality Grades of lambs and yearling mutton and their carcasses are:

**Prime - Choice - Good - Utility - Cull**

Lamb carcasses may have either break joints on both their front shanks or a break joint on one front shank and a spool joint on the other front shank. Yearling mutton carcasses may have either break joints or spool joints on their front shanks.

A break joint is shown in Figure 106.

A spool joint is shown in Figure 107.

The Quality Grades of mutton sheep and their carcasses are:

**Choice - Good - Utility - Cull**

Mutton carcasses always have spool joints on their front shanks.

Quality Grades are an indication of the expected tenderness, juiciness and flavor of the meat plus they indicate carcass conformation. The main measurements of carcass Quality Grades are: conformation, firmness and fullness of flank, flank streaking and maturity.

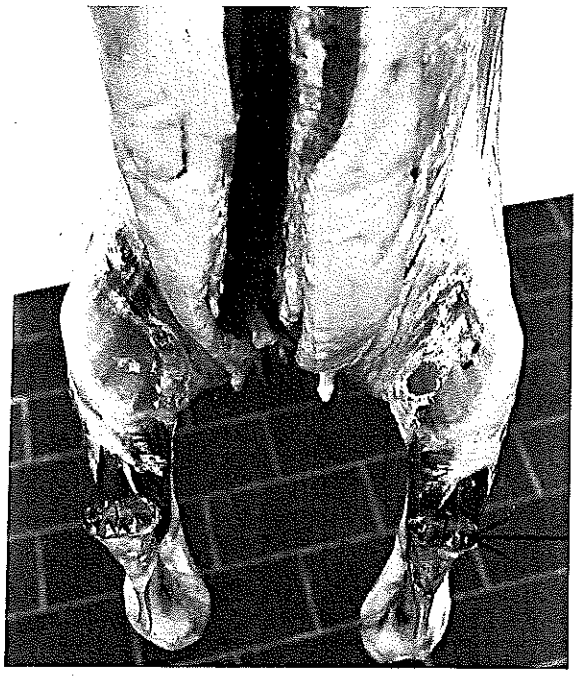


Figure 106. A Break Joint. Found on lamb carcasses.

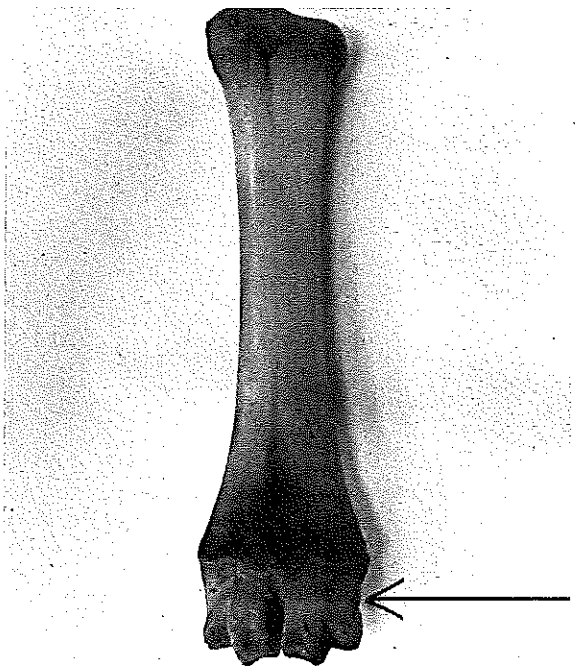


Figure 107. Spool Joint. Found on mutton carcasses.

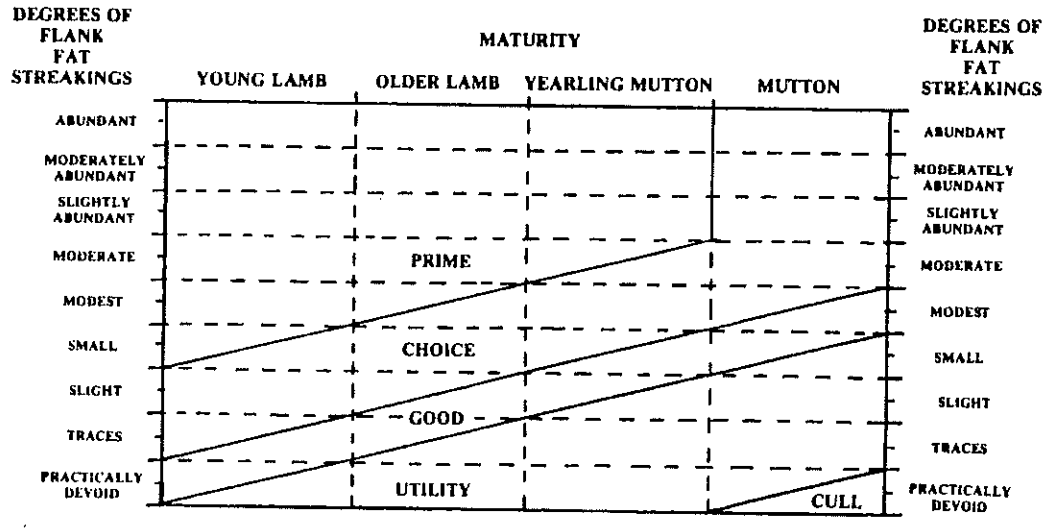



Figure 107A. Quality Grades of market sheep.

# Sheep Quality Grading

### Balancing Quality with Conformation

**Rule 1** - If quality is superior to conformation, then average.

| Flanking Streaking | Maturity | Quality Grade (Quality) | Quality Grade (Conformation) | Final Quality Grade (Quality + Conformation) |
|---|---|---|---|---|
| Small$^{+}$ | Young Lamb$^{-}$ | Prime$^{-}$ | Choice$^{0}$ | Choice$^{+}$ |
| Slightly Abundant$^{+}$ | Young Lamb$^{0}$ | Prime$^{+}$ | Choice$^{0}$ | Prime$^{-}$ |

**Rule 2** - If conformation is superior to quality, conformation can raise grade by only 1/3 of a grade.

| Flanking Streaking | Maturity | Quality Grade (Quality) | Quality Grade (Conformation) | Final Quality Grade (Quality + Conformation) |
|---|---|---|---|---|
| Slight$^{0}$ | Older Lamb$^{-}$ | Choice$^{-}$ | Prime$^{0}$ | Choice$^{0}$ |

**Rule 3** - Conformation cannot bring quality (below Prime) into Prime.

| Flanking Streaking | Maturity | Quality Grade (Quality) | Quality Grade (Conformation) | Final Quality Grade (Quality + Conformation) |
|---|---|---|---|---|
| Modest$^{+}$ | Yearling Mutton$^{-}$ | Choice$^{+}$ | Prime$^{0}$ | Choice$^{+}$ |

**Rule 4** - Conformation can bring quality (Good) into Choice; however, only by 1/3 of a Grade.

| Flanking Streaking | Maturity | Quality Grade (Quality) | Quality Grade (Conformation) | Final Quality Grade (Quality + Conformation) |
|---|---|---|---|---|
| Traces$^{+}$ | Older Lamb$^{-}$ | Good$^{+}$ | Choice$^{0}$ | Choice$^{-}$ |
| Traces$^{-}$ | Young Lamb$^{0}$ | Good$^{+}$ | Prime$^{-}$ | Choice$^{-}$ |

**Rule 5** - If Quality differs from conformation by 1/3 grade, give emphasis to Quality. If Quality differs from conformation by one grade, give emphasis to Quality.

| Flanking Streaking | Maturity | Quality Grade (Quality) | Quality Grade (Conformation) | Final Quality Grade (Quality + Conformation) |
|---|---|---|---|---|
| Small$^{+}$ | Young Lamb$^{+}$ | Choice$^{+}$ | Choice$^{0}$ | Choice$^{+}$ |
| Moderate$^{-}$ | Older Lamb$^{+}$ | Prime$^{-}$ | Prime$^{0}$ | Prime$^{-}$ |
| Moderate$^{-}$ | Young Lamb$^{0}$ | Prime$^{0}$ | Choice$^{0}$ | Prime$^{-}$ |

**Rule 6** - if a carcass has Bucky (ram) characteristics, final Quality Grade can be lowered up to two full grades depending on degree of Buckiness.

| Flanking Streaking | Maturity | Quality Grade (Quality) | Quality Grade (Conformation) | Final Quality Grade (Quality + Conformation) |
|---|---|---|---|---|
| Modest$^{-}$ | Older Lamb$^{0}$ | Choice$^{+}$ | Prime$^{0}$ | Choice$^{+}$ |

Carcass shows Bucky shoulders and neck = Discount One Grade

| Final Quality Grade after Bucky discount = Good+ |
|---|

To be eligible for the Prime or Choice Grades, a slaughter sheep must have at least approximately 0.07 in. (.18 cm) of fat cover over the back.

# Sheep Yield Grading

The Yield Grades of sheep and their carcasses are: No. 1, No. 2, No. 3, No. 4, No. 5

Yield Grades are a numerical score for percent cutability. For example, a Yield Grade 1 carcass has a higher percent cutability than a Yield Grade 5 carcass.

Cutability is the estimated percentage of the hot carcass weight in boneless, closely trimmed of fat retail cuts from the leg, loin, hotel rack and shoulder.

Therefore, low-fat, heavy-muscled carcasses are high in percent cutability and are Yield Grade 1 or 2. However, high-fat, poor-muscled carcasses are low in percent cutability and are Yield Grade 4 or 5. Yield Grade 3 carcasses tend to be average in fat and muscle.

On July 6, 1992, new U.S.D.A. Yield Grade Standards for live sheep and sheep carcasses went into effect. **How to determine the new U.S.D.A. Yield Grades is shown in Figure 110.**

A method of evaluating the % of the hot carcass weight in boneless, closely trimmed retail cuts from the leg, loin, rack and shoulder is the following:

% boneless, closely trimmed (.1") retail cuts =
49.936 - (.0848 x hot carcass wt) - (4.376 x fat thickness) -
(3.530 x body-wall thickness) + (2.456 x rib-eye area)

Body-wall thickness is measured one side 5 inches from the mid-line or backbone.

**SHEEP**
% boneless, closely-trimmed (.1") retail cuts
(Short-Cut Method - Dr. Dennis Burson - UN-L)

**BASE**

47%

60 lbs. = Hot Carcass Wt.
.20 in. = Fat Thickness
.80 in. = Body-Wall Thickness
2.4 sq. in. = Rib-Eye Area

**ADJUSTMENTS**

For every change of 10 lbs. Hot Carcass Wt. = ± .85%

Add .85% for every 10 lbs. under 60 lbs.
Subtract .85% for every 10 lbs. over 60 lbs.

For every change of .10 in. Fat Thickness = ± .44%

Add .44% for every .10 in. under .20 in.
Subtract .44% for every .10 in. over .20 in.

For every change of .10 in. Body-wall Thickness = ± .35%

Add .35% for every .10 in. under .80 in.
Subtract .35% for every .10 in. over .80 in.

For every change of .10 sq. in. of Rib-Eye area = ± .25%

Add .25% for every .10 sq. in. over 2.4 sq. in.
Subtract .25% for every .10 sq. in. under 2.4 sq. in.

Figure 108 shows the location of the fat cover measurement and measurement of rib-eye area on a sheep carcass. Figure 109 shows the kidney and pelvic fat. Figure 110 illustrates how to determine the Yield Grade of live sheep or sheep carcasses (effective July 6, 1992). Figure 111 shows evaluation of leg score.

Sheep carcasses should be correct in weight, at least low choice, acceptable in fat cover and heavy-muscled.

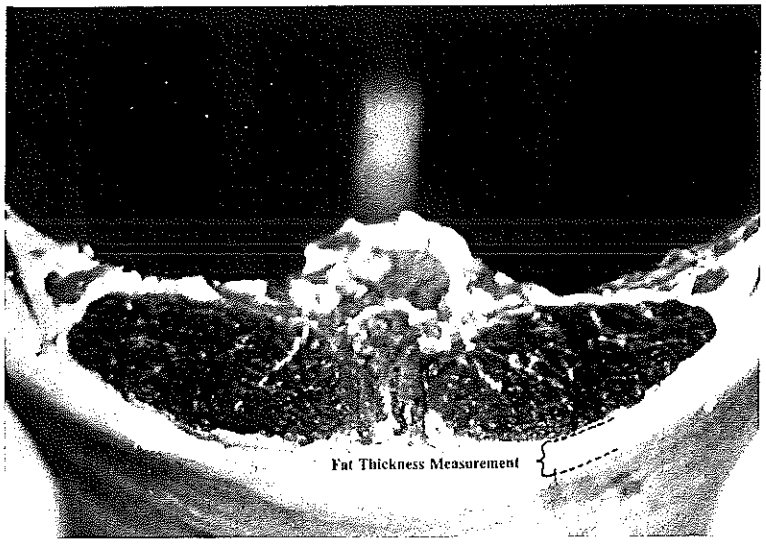



**Figure 108. In a sheep carcass, the hind-saddle is divided from the fore-saddle between the 12th and 13th rib. Fat thickness is measured over the center of the rib-eye. Rib-eye is also measured at this location.**

**Yield grade 0.4 + (10 x Adjusted Fat Thickness, In.)**

| Fat Thickness (in.) | Fat Thickness (cm.) | Yield Grade | Fat Thickness (in.) | Fat Thickness (cm.) | Yield Grade |
|---|---|---|---|---|---|
| .00 | (.00) | .40 | .31 | (.79) | 3.50 |
| .01 | (.03) | .50 | .32 | (.81) | 3.60 |
| .02 | (.05) | .60 | .33 | (.84) | 3.70 |
| .03 | (.08) | .70 | .34 | (.86) | 3.80 |
| .04 | (.10) | .80 | .35 | (.89) | 3.90 |
| .05 | (.13) | .90 | .36 | (.91) | 4.00 |
| .06 | (.15) | 1.00 | .37 | (.94) | 4.10 |
| .07 | (.18) | 1.10 | .38 | (.97) | 4.20 |
| .08 | (.20) | 1.20 | .39 | (.99) | 4.30 |
| .09 | (.23) | 1.30 | .40 | (1.02) | 4.40 |
| .10 | (.25) | 1.40 | .41 | (1.04) | 4.50 |
| .11 | (.28) | 1.50 | .42 | (1.07) | 4.60 |
| .12 | (.30) | 1.60 | .43 | (1.09) | 4.70 |
| .13 | (.33) | 1.70 | .44 | (1.12) | 4.80 |
| .14 | (.36) | 1.80 | .45 | (1.14) | 4.90 |
| .15 | (.38) | 1.90 | .46 | (1.17) | 5.00 |
| .16 | (.41) | 2.00 | .47 | (1.19) | 5.10 |
| .17 | (.43) | 2.10 | .48 | (1.22) | 5.20 |
| .18 | (.46) | 2.20 | .49 | (1.24) | 5.30 |
| .19 | (.48) | 2.30 | .50 | (1.27) | 5.40 |
| .20 | (.51) | 2.40 | .51 | (1.30) | 5.50 |
| .21 | (.53) | 2.50 | .52 | (1.32) | 5.60 |
| .22 | (.56) | 2.60 | .53 | (1.35) | 5.70 |
| .23 | (.58) | 2.70 | .54 | (1.37) | 5.80 |
| .24 | (.61) | 2.80 | .55 | (1.40) | 5.90 |
| .25 | (.64) | 2.90 | | | |
| .26 | (.66) | 3.00 | | | |
| .27 | (.69) | 3.10 | | | |
| .28 | (.71) | 3.20 | | | |
| .29 | (.74) | 3.30 | | | |
| .30 | (.76) | 3.40 | | | |

NOTE: The Kidney, Pelvic and Heart Fat must be removed from the carcass prior to grading with no more than one percent of the carcass weight in Kidney, Pelvic and Heart Fat remaining.

**Figure 110. How to determine the U.S.D.A. Yield Grade of live sheep and sheep carcasses. (Effective July 6, 1992).**

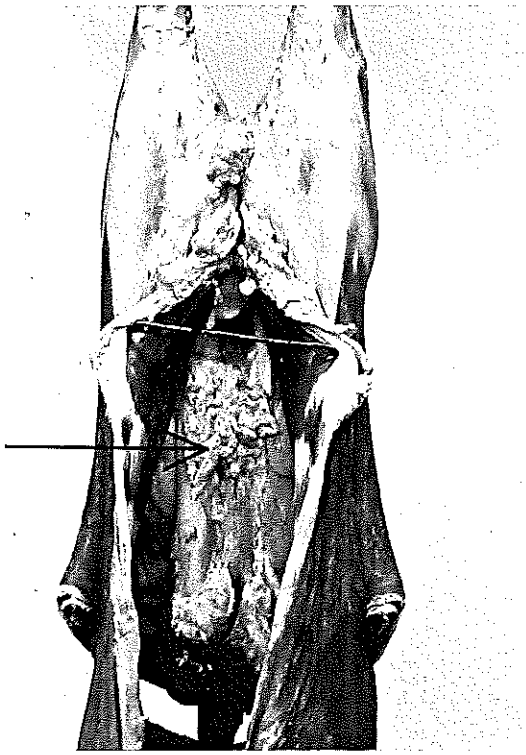


**Figure 109. Kidney and Pelvic Fat in a Sheep Carcass. Estimated as a percent of the hot carcass weight.**

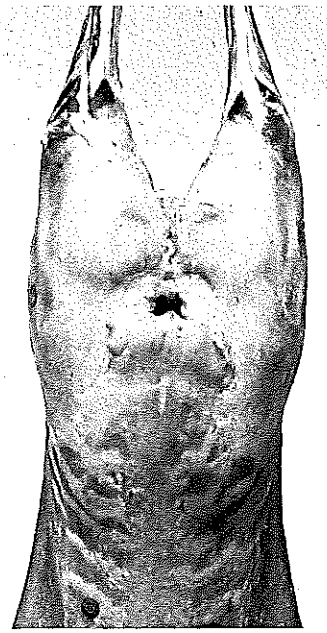


**Figure 111. Evaluation of Leg Score.**

| **Example:** Leg Scores = | | | | |
|---|---|---|---|---|
| $Pr^{+}$=15 | $Ch^{+}$=12 | $Gd^{+}$=9 | $Ut^{+}$=6 | $Cu^{+}$=3 |
| $Pr^{o}$=14 | $Ch^{o}$=11 | $Gd^{o}$=8 | $Ut^{o}$=5 | $Cu^{o}$=2 |
| $Pr^{-}$=13 | $Ch^{-}$=10 | $Gd^{-}$=7 | $Ut^{-}$=4 | $Cu^{-}$=1 |

# How to Give Oral Reasons

Presentation of oral reasons allows defense of placing on a class. The length of oral reasons **should not exceed two minutes**. Prior to giving a set of oral reasons, an accurate set of notes should be taken.

The following method of taking notes is shown in the Oral Reasons Guide in Figures 112 and 113. The front side of the guide shows example notes taken. The back side of the guide is the blank form to fill out to take notes.

ORAL REASONS GUIDE

CLASS = HEREFORD YEARLING BULLS
FIRST IMPRESSION = 1 2 3 4
FINAL PLACING = 1 2 3 4

| Admission | Comparison | Identification and /or weakness of the 1st animal of pair |
|---|---|---|
| 1 / 2 — Trimmer front | Larger framed, growthier, more total dimension of muscle and Hereford breed character, sounder moving on heavier bone. Greater length and masculinity of head, red eye-lid pigment, cannon length, strength of rib, muscularity of loin, rump and quarter. Larger development and suspension of testicles, longer stride on a larger foot. | Curly Haired<br>Wasty throat, dewlap brisket and sheath |
| 2 / 3 — Straighter front leg structure, more masculinity of head and muscular width of quarter | Heavier, longer, taller, trimmer, tighter framed, looser muscle structure, more balance. Greater indication of growth potential. Cleaner front, smoother shoulder, neater middle, straighter top, longer rib, rump and quarter, straighter moving behind. | Dark Red, Up-Headed<br>Splay-footed, soft pasterns, weak head, narrow quarter |
| 3 / 4 — Trimmer, tighter shoulder | Greater total skeletal structure, scale, massiveness, ruggedness, muscle and bone. More Hereford bull power, serviceability, width of chest, depth of rib, muscular loin, rump and quarter. Taller at the shoulder and hip, tracks freer and truer in front. | Branded Hip<br>Wasty, too early maturing, coarse shoulder, cow-hocked |
| 4 — Tidy | Small, weakly muscled, light boned, shallow bodied, steer-like head. Narrow front, pigeon-toed, posty-legged, short muscle, tight and round rib and small testicles. Lacks growth, Hereford masculinity, muscle and soundness. | Broken Horn |

Figure 112. Example Set of Notes For Giving Oral Reasons.

CLASS =
FIRST IMPRESSION =
FINAL PLACING =

| Admission | Comparison | Identification and/or weakness of the 1st animal of pair |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

Figure 113. Example Form for Taking Notes for Giving Oral Reasons.

A 6" x 9" (15.2 cm x 22.9 cm) notebook with a spiral ring on the top, as shown in Figure 114, can be used to outline this method of taking notes and giving oral reasons. This form can be made on the notebook pages prior to each workout or contest as shown in Figure 115.

Giving an excellent set of oral reasons should involve the following:

(1) Accuracy
A canned set of reasons should never be given.

(2) Clearness
Reasons should be easy to hear.

(3) Terms
The reasons should consist of a large variety of terms that are meaningful and pertinent.

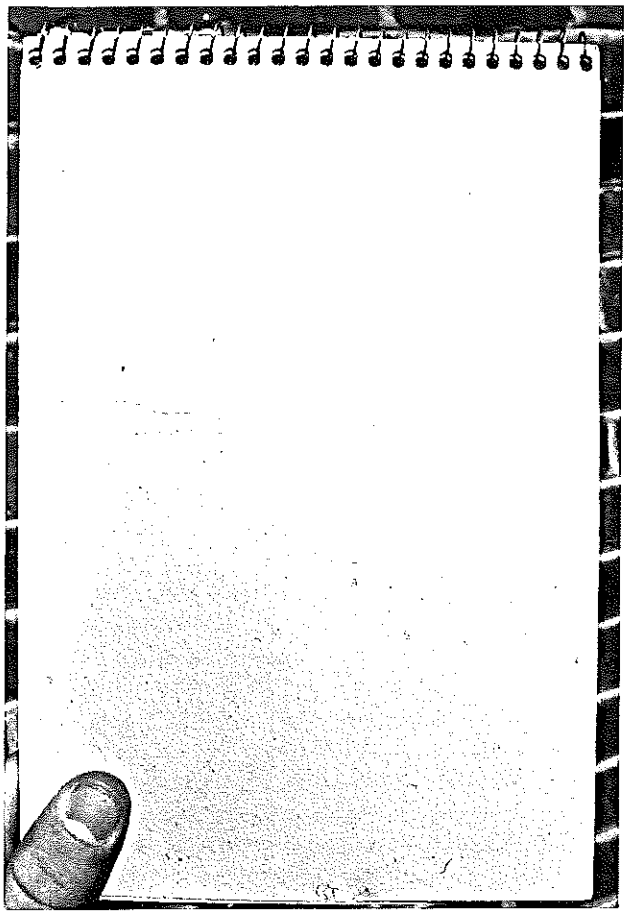


Figure 114. Notebook for taking notes for oral reasons.

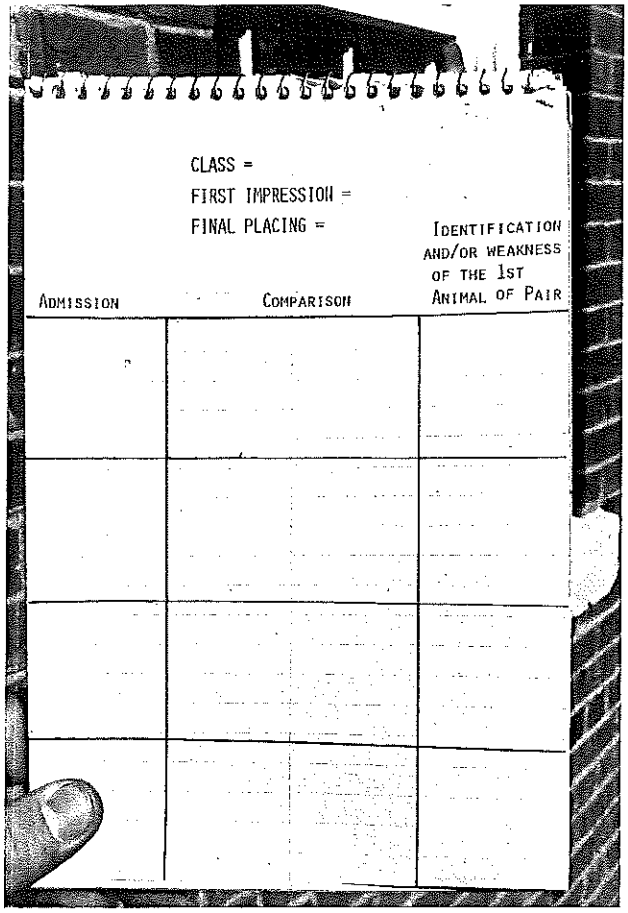



Figure 115. Outline of form for taking oral reasons in notebook.

(4) Organization

The reasons should be well organized and easy to follow. An example of organizational format is in Figure 112.

(5) Delivery

Reasons should show personality, emphasis, persuasion and influence; all in a very convincing manner.

(6) Major Points Compared

Oral reasons should be a comparison of the major traits that affect the functional efficiency of the animal. Only important differences should be discussed. Compare the class, do not describe it.

(7) Appearance

The reason giver should be clean, neat and not chewing gum or wearing any type of cap or hat.

(8) Length

Oral reasons should not exceed two minutes. Excess length will often rush the individual and not properly allow a logical, pleasant and convincing set of oral reasons.

(9) Confidence

Practice, knowledge and a detailed, accurate observation of the livestock builds confidence.

(10) Determination

Hard work and determination are necessary to deliver a high scoring set of oral reasons.

Oral reasons can be practiced by saying them in a mirror and to a friend or they can be recorded. Oral reasons take practice. Examples of oral reasons are shown on the following pages.

Two main types of oral reasons approaches are:

(A) After the admission and general comparison in each pair, then the top animal of each pair should be placed over the bottom animal in each pair by comparing the major difference from front to rear in a logical sequence for easy listening.

(B) In this approach, after the admission in each pair, each pair is compared in certain areas such as Frame, Size, Muscle, Fat, Structural Soundness, Underlines, Breed and Sex Character, Carcass Characteristics, etc. It should be noted that some areas would not pertain to some classes, such as underlines in a market hog class or hanging carcasses on a rail in breeding classes.

The following oral reasons examples use some aspects of both approaches.

# Examples of Oral Reasons

Please note that the following sets of example oral reasons are longer than an actual set of oral reasons should be. The example oral reasons are longer because the author is attempting to use a great variety of example terms.

### Hereford Yearling Bulls

I placed this class of Hereford Yearling Bulls 1234. I placed 1 over 2. Although 2 was trimmer-fronted, 1 was larger-framed, growthier and had more total dimension of muscle. This curly-haired bull had more Hereford breed character, was sounder moving on heavier bone and had greater length and masculinity of head. He demonstrated more red eyelid pigment, greater cannon length and strength of rib, more muscularity of loin, rump and quarter, larger development and suspension of testicles and a longer stride on a larger foot. I fault 1 for being wasty in his throat, dewlap, brisket and sheath.

In placing 2 above 3, I found 3 moving more correctly in front and having greater masculinity of head and muscular width of stifle. However, the dark red, up-headed bull was heavier, longer, taller, trimmer, looser in muscle structure and more correctly balanced. He showed greater indication of growth potential, was cleaner in front, smoother in his shoulder, neater through the middle, had a straighter top, longer rib, rump and quarter, and moved straighter behind. I criticize 2 for being splay-footed, soft in his pastern, weak-headed and narrow-stifled.

I placed 3 over 4 admitting that 4 was tighter in his shoulder, and trimmer. Three, though, showed greater total skeletal structure, scale, massiveness, ruggedness, muscle and bone. The branded hip bull had more Hereford bull power, serviceability, width of chest, depth of rib, and muscular dimension of loin, rump and quarter. He was taller at the shoulder and hip and tracked with more freedom and trueness in front. I would improve 3, however, because he is wasty, too early about his growth maturity, coarse shouldered and cow-hocked.

Although 4 was tidy, I placed him bottom. This bull with a broken horn was small, weakly muscled, light-boned, shallow-bodied and had a steer-like head. He was narrow-fronted, pigeon-toed, posty-legged, short-muscled, tight and round in his rib and too small in his testicles. He lacked the growth, Hereford masculinity, muscle and soundness to place any higher in this class of Hereford Yearling Bulls.

### Angus Breeding Heifers

I placed this class of Angus Breeding Heifers 3214. In analyzing this class, I found two heifers with frame, muscle and femininity to start with and two small, coarse heifers to place bottom.

I placed 3 over 2, although the heifer with white about her udder was longer. However, I saw the taller 3 heifer showing more growth, bone, udder development and total volume of muscle and fleshing ability. This longer-headed heifer stood and moved straighter in front. I would improve the growthy 3 heifer with more length.

I placed 2 over 1 recognizing that the heifer with a wart on her neck was more correct in her front leg structure. I found, though, the trim 2 heifer to follow the type of my top heifer in her frame, growth, femininity, smoothness of muscle structure and soundness of vulva. This big-scaled heifer was heavier-muscled, longer and trimmer in her neck, smoother in her shoulder, sharper at her wither, taller at the hip, larger and flatter about her vulva, and moved sounder behind. I criticize this fertile appearing number 2 heifer for being splay-footed in front and lacking the stoutness of my top heifer.

I placed 1 over 4 even though the slick-haired 4 heifer is trimmer fronted. I thought 1 was growthier, sounder in her front leg structure, smoother in her muscle structure, had more skeletal size and moved on heavier bone. The warty-

necked heifer was leveler in her rump, had a more correct position of her tail-head and was looser in her frame. I would improve 1 in that she was masculine appearing about her head, cresty neck and coarse shoulder. In addition, this small-framed heifer was wasty in front, small in her tipped vulva and stood posty-legged.

I placed the tight-muscled heifer bottom. In addition, she was the smallest-framed, lightest-boned, least reproductive appearing heifer in the class. She possessed a recessed tailhead, infantile udder and vulva and was sickle-hocked. She lacked the reproductive soundness to place any higher in this class of Angus Breeding Heifers.

**Crossbred Market Steers**

I placed this class of Crossbred Market Steers 4132. In analyzing this class, I started with the two steers that each had the best combination of growth, quality grade and cutability.

In placing the chocolate baldy steer over the red baldy steer, I admit that the red baldy steer is carrying more condition over the last rib, approximately .50 in. (1.27 cm), versus approximately .30 in. (.76 cm) for the chocolate steer, making the red steer possibly safer into the choice quality grade. However, the chocolate steer is growthier, trimmer and more muscular in his shoulder, rib, loin, rump and quarter. He should produce a higher cutability carcass, being a Yield Grade 2, that will still have an opportunity to grade choice. I criticize number 4 for being wasty in his throat.

I placed the red baldy over the roan 3 steer even though the roan steer was trimmer, nicer balanced, and will produce a more desirable Yield Grade carcass. I felt number 1 larger-framed, growthier, more correct in his market weight, and more desirable in his condition to grade choice, carrying approximately .50 in. (1.27 cm) of fat over the last rib versus approximately .15 in. (.38 cm) of fat on the roan steer. I would improve the red baldy by having him carrying less condition.

I placed 3 over 2, although the yellow steer was higher in his quality grade and dressing percent. I considered the 3 steer to be more valuable because of his cutability. The roan steer was cleaner-fronted and trimmer over his rib and through his flank and cod. In addition, he displayed a deeper and thicker loin, longer and fuller rump and a longer, thicker quarter. He will produce a carcass with a higher percent of the boneless, trimmed high priced cuts and a higher muscle/bone ratio. I fault him for being underfinished, indicating no better than a Select Quality Grade.

In placing the 2 steer bottom, I credit the yellow steer for his structural soundness, high quality grade and dressing percent and appearance of thriftiness. However, he was very small-framed, over-finished, carrying approximately 1.0 in. (2.54 cm) of fat over the last rib, and light-muscled. He was extremely wasty in his brisket, rib, edge of loin, flank, cod and twist, narrow in his shoulder and rib, shallow in his loin, and possessed a short rump and stifle. He will produce the lowest cutability carcass in the class, being a Yield Grade 4, and couldn't place any higher in this class of Crossbred Market Steers.

**Duroc Boars**

I placed this class of Duroc Boars 2341. In analyzing this class, I found two massive, sound, rugged boars to start with. I placed the cherry red boar first even though the erect-eared boar was leveler in his top and rump and had more teats on each side. I thought the massive, cherry-colored boar was longer, deeper, leaner, heavier-muscled, heavier-boned and more correctly spaced in his underline. I fault this stout boar for being higher in his arch and steeper-rumped than 3.

I placed number 3 over the curly-haired boar although 4 had less backfat, was looser in his muscle structure and was more rectangular-shaped in his rib. I felt the erect-eared boar was larger-framed, stouter, heavier-boned, had more total volume of ham and loin, and was sounder in his skeletal structure and movement. The 3 boar was longer-sided, deeper in his rib and flank and moved with more freedom in his hip, and cushion in his hock and pastern. He tracked on a larger foot with more even-sized toes. This stouter-headed boar with a deeper jaw also had more correct type of teats on each side. I would improve this rugged boar by placing at least three teats in front of the sheath on each side, seeing him looser in his muscle structure and more rectangular-shaped in his rib, and carrying less backfat.

I placed 4 over 1 realizing the sandy red boar is the lowest probing in the class. However, I thought the level top boar was looser in his muscle and skeletal structure, larger in his skeletal outline, exhibited more cushion in his shoulder, knee and pastern, and appeared free of stress. In addition, this longer-necked, longer-sided boar was larger in his testicles and wider at the base of his chest. I criticize the curly-haired boar for lacking the skeletal size and ruggedness of my top pair of boars, for being posty-legged behind, carrying a pin teat adhered to the sheath on each side, and having small inside toes.

I placed the sandy red boar bottom, admitting he was lean. I found, though, that he was the smallest-framed, tightest-muscled, most unsound boar in the class. In addition, this shaky, stressful boar was too round and tight in his skeletal structure, small in his testicles, and carried inverted teats on each side. This high-arched, steep rump boar was sickle-hocked and goose stepped. He was too straight in his shoulder, and was buck-kneed, steep in his front pastern, and pigeon-toed. He lacked the reproductive and productive soundness to place any higher in this class of Duroc Boars.

## Crossbred Breeding Gilts

I placed this class of crossbred breeding gilts 1234. In analyzing this class, I placed a pair of growthier, more correctly designed, heavier-muscled gilts top, and placed a pair of smaller, tighter-muscled gilts bottom.

I placed 1 over 2 realizing that the red roan gilt was heavier-boned and wider-chested. However, the blue roan gilt was longer, taller, trimmer, more prominent about her underline, and moved with more cushion in front. She was cleaner in her jowl and shoulder and displayed the most total combination of muscle and leanness in the class. I would fault her for being lighter-boned and narrower-chested than 2.

In placing 2 above 3, I recognize that the black gilt is trimmer and is carrying a higher number of functional teats. However, the red roan gilt followed the type of my top placing about her more growth, larger frame, longer body, more capacity, looser and thicker muscle structure and sounder skeletal structure. Two was taller-fronted, deeper- and squarer-ribbed, leveler-topped, higher in her tail setting, and stood with more cushion in her hock and pastern. I criticize this roan gilt for being wasty in her jowl, shoulder and loin, and being poorly pronounced about her underline.

I placed 3 over 4, although the red gilt was freer moving behind and was stouter-fronted. The black gilt showed more growth potential about her longer and taller frame. She was leaner, heavier-boned, displaying more cushion in her knee and front pastern, more rectangular-shape in her rib, more femininity about her head, was larger about her vulva, and was more obvious and numerous about her teats. I would improve the floppy-eared black gilt in that she was posty-legged and goose-stepped; was smaller-framed, tighter-muscled, higher-arched, and lower in her tail setting than my top pair.

I placed the red gilt bottom, realizing she was sound behind. But this stiff-eared gilt was small, tight-wound, wasty, light-boned, buck-kneed and too early about her growth maturity pattern. She was round in her rib and muscle structure, short-sided, infantile about her vulva, carried only 4 functional teats on the left side, in that the other 2 were an inverted and pin. This small-framed gilt lacked the modern skeletal and muscle pattern, and soundness of vulva, underline and front leg to place any higher in this class of Crossbred Breeding Gilts.

## Crossbred Market Hogs

I placed this class of crossbred market hogs 4321. In assessing this class, I found a large-framed, lean, heavy-muscled, sound barrow on top and a smaller skeleton, wastier barrow on the bottom.

Although the belted barrow showed more width of rib, the white barrow was more correct about his skeletal and muscular design. Four exhibited a longer frame, heavier muscle structure, leveler top, and more cushion in his knee, hock and pastern. In addition, he was longer in his neck, higher in his tail setting, heavier-boned, and had a longer ham. He was cleaner in his jowl, showed more shoulder blade action, and would hang up a longer carcass with less back-fat and more muscle thickness. I would improve the white barrow with more strength of rib.

In placing 3 above 2, I recognize that the red gilt with a swirl was trimmer, leveler-topped, and sounder-legged. The belted barrow, though, was more massive, heavier in his skeleton, more rugged in his bone, deeper in his rib, longer-sided, and had more total development of muscle. This wider-chested, growthier barrow was more thrifty appearing and will have a carcass with a larger loin-eye area. I criticize 3 for being peggy-legged in front, posty-legged, wasty in his jowl, shoulder and elbow, too steep in his arch and tight in his muscle structure.

I placed 2 over 1, realizing that the spotted barrow was freer moving. However, the red gilt was taller-fronted, longer, trimmer, and leaner. She was neater in her jowl, cleaner over her shoulder and loin, trimmer-sided, and showed more firmness at the base of her ham. In addition, she displayed a more muscular-shaped ham and loin. The red gilt would hang up a longer carcass with a higher percent muscle. I fault her for being shorter, lighter-boned and lacking stoutness compared to my top pair.

I placed the spotted barrow bottom, recognizing his soundness of feet and legs. But he was too short in his leg and side, wasty, and weakly-muscled. He was especially flabby in his jowl, right-angled in his shape of top, and wedge-shaped as viewed from the rear. The floppy-eared barrow was too early maturing, lacked modern market flexibility and pattern, and would yield a carcass too low in percent muscle to place any higher in this class of Crossbred Market Hogs.

## Hampshire Rams

I placed this class of Hampshire Rams 3124. In evaluating this class, I found two sound, growthy, trim, muscular rams to start with. In placing this big-framed ram over the splay-footed ram, I realize the 1 ram had a denser fleece. However, I placed the tallest, longest, thickest-muscled loin and leg ram in the class first. This longer-headed 3 ram was more modern, trimmer, sounder in his front leg structure, longer in his hind-saddle, heavier-boned, and longer in his fleece. I fault this tall ram for being coarser in his fleece.

I placed 1 over 2, even though the woolly-headed ram was taller. The stouter, thicker, 1 ram was sounder in his skeletal structure. Number 1 was much heavier and displayed more width of chest, depth of rib, muscular thickness of rack, loin, rump and leg, and soundness in his hind leg structure. In addition, he was more open-faced, sounder in his mouth, and carried less black fiber. I would improve my second placing by seeing him taller and longer, standing more correctly in front, and carrying less condition.

I placed 2 above 4, although the straighter-lined 4 ram was more open in his face, sounder in his mouth, and showed less black fiber. I preferred the woolly-headed ram because of his altitude, length, masculinity, and testicle size. The 2 ram was cleaner in his condition, showed more Hampshire ram power about his bolder and more masculine head, was heavier-boned, had larger, more correct testicle development, and was more uniform in grade about his 3/8 blood fleece. I criticize 2 for being closed-faced, pigeon-toed, sickle-hocked, rough-mouthed, weak in his top, carrying black fiber, and lacking muscular thickness in his loin and leg.

I placed the smallest ram in the class bottom, even though he was open-faced. This small ram was buck-kneed, posty-legged, extremely small in his testicles, and light-boned. In addition, he was feminine appearing about his head and he had a fleece grade ranging from 1/2 to 1/4 blood. He lacked reproductive and productive soundness to place any higher in this class of Hampshire Rams.

## Suffolk Breeding Ewes

I placed this class of Suffolk Breeding Ewes 4321. In examination of the class, I found two big-framed, heavier-muscled ewes on top and two short-bodied, short-legged ewes on the bottom.

I placed the heavy-boned ewe on top even though 3 was broader in her rack. Four was taller, longer, fuller-muscled in her loin and leg, easier conditioning and sounder. She was longer in her neck and stood with a more correct angle to her hock. I fault 4 for being narrower in her rib.

In placing 3 above 2, I grant that 2 was showing more Suffolk character about her blacker head, ears and legs, stood more correct behind, was heavier-boned, and denser in her fleece. However, the longer-eared number 3 ewe was taller, longer in her hind-saddle, showed more total volume of muscling, sounder in her mouth and front legs and longer in her fleece. I criticize 3 for being brown about her head and ears, light-boned, posty-legged and very coarse about her fleece.

I placed 2 over 1 although the woolly-headed ewe was sounder in her shoulder, front leg structure and mouth. The black-headed, thick number 2 ewe had more scale, total dimension of muscle, was trimmer, stood more correct behind and had less black fiber. Number 2 displayed more Suffolk breed character, a more open face and massiveness. I would improve the number 2 ewe in that she was open in her shoulder, buck-kneed, had a rough mouth and was small-framed.

I placed the small ewe bottom. I realize she is sound in her front and mouth. However, she was the smallest-scaled, over-conditioned ewe in the class. She stood sickle-hocked, had excessive black fiber and was too off type to place higher in this class of Suffolk Breeding Ewes.

## Crossbred Market Lambs

I placed this class of Crossbred Market Lambs 1234. In studying this class, I found two larger-framed, more correctly finished, more muscular lambs to start with. I placed the long-eared lamb over the speckle-faced lamb, realizing the number 2 lamb had a leveler rump. The 1 lamb, though, was taller, longer in his loin and rump, showed more muscular thickness in his width and depth of loin and leg, and was more correct about his fat cover over the last rib, carrying .15 in. (.38 cm) versus .20 in. (.51 cm) on the number 2 lamb. This long-eared lamb will hang up a trimmer, more muscular carcass with a higher percent of boneless, closely trimmed retail cuts from the leg, loin, rack and shoulder. I would improve my top lamb with a leveler rump.

I placed the speckle-faced lamb above the lamb with a black spot on his rump although the 3 lamb, having .05 (.13 cm) of fat cover, was trimmer and will hang up a higher percent cutability carcass. The speckle-faced lamb was larger-scaled, growthier and much thicker-muscled in his shoulder, rack, deeper loin and longer rump and leg. This heavier-boned, stouter lamb is higher dressing, and will produce a higher quality grading carcass with more packer and consumer acceptance. I fault my second place lamb for carrying more condition than necessary.

In placing 3 over 4, I admit that the brown-faced ewe will produce a carcass with a larger loin-eye and higher leg

score. However, I thought the black spot lamb was bigger in frame, trimmer, longer in his loin and rump, and will hang a carcass with a greater percent cutability and more desirable Yield Grade. I fault my third place lamb for being underfinished and light-muscled.

I placed the brown-faced ewe last, even though she demonstrated balance, adequate muscular thickness, and is most likely to produce the highest quality grade carcass in the class. She was too small-framed, short in her hind-saddle, and overfat. She was extremely heavy in her condition over the last rib, carrying near .50 in. (1.27 cm), making her produce a carcass very low in percent trimmed retail cuts and undesirable in Yield Grade. She lacked the growth, skeletal size, trimness and industry acceptance to place any higher in this class of Crossbred Market Lambs.

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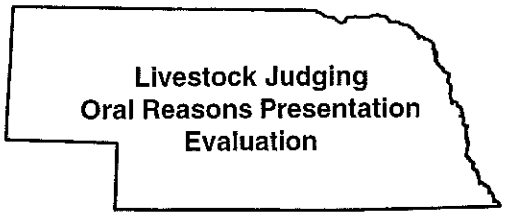
**Name** _____

**Contestant No.** _____

**Score** _____



**Livestock Judging**
**Oral Reasons Presentation**
**Evaluation**

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**RATIONALE**

SOUND REASONING, ACCURACY OF SUPPORTING INFORMATION, WELL THOUGHT THROUGH AND COMPLETE

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**ORGANIZATION**

- Opening Statement
- Logical Sequence of Ideas
- Summarized
- Closing Statement

---

**DELIVERY**

- Eye Contact
- Voice Natural & Audible
- Words Distinct
- Grammar Correct
- No Distracting Gestures

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**POISE AND GROOMING**

- Confidence
- Good posture
- Neat and Clean Appearance

---

**GENERAL COMMENTS**

_____

_____

_____

_____

## SCORING LIVE ANIMAL EVALUATION

### Scores for Fat Thickness
Cattle
Swine (10th Rib Fat Depth.)

| Points | (Deviation - In.) |
|---|---|
| 10 | 0.00 - 0.04 |
| 9 | 0.05 - 0.09 |
| 8 | 0.10 - 0.14 |
| 7 | 0.15 - 0.19 |
| 6 | 0.20 - 0.24 |
| 5 | 0.25 - 0.29 |
| 4 | 0.30 - 0.34 |
| 3 | 0.35 - 0.39 |
| 2 | 0.40 - 0.44 |
| 1 | 0.45 - 0.49 |
| | ≥0.50 |

### Scores for Cattle Rib-Eye Area, Swine Loin-Eye Area, Lamb Rib-Eye Area

| Cattle | | Swine | | Lambs | |
|---|---|---|---|---|---|
| Points | (Deviation-sq in) | Points | (Deviation-sq in) | Points | (Deviation-sq in) |
| 5 | 0 - 0.49 | 5 | 0 - 0.29 | 5 | 0 - 0.19 |
| 4 | .5 - 0.99 | 4 | .3 - 0.59 | 4 | .2 - 0.39 |
| 3 | 1.0 - 1.49 | 3 | .6 - 0.89 | 3 | .4 - 0.59 |
| 2 | 1.5 - 1.99 | 2 | .9 - 1.19 | 2 | .6 - 0.79 |
| 1 | 2.0 - 2.49 | 1 | 1.2 - 1.49 | 1 | .8 - 0.99 |
| 0 | ≥2.5 | 0 | ≥1.5 | 0 | ≥1.0 |

### Scores for U.S.D.A. Grades

| Beef and Lamb Quality Grades | |
|---|---|
| Points | Deviation |
| 10 | 0 |
| 8 | 1/3 grade |
| 6 | 2/3 grade |
| 4 | 1 grade |
| 2 | 1-1/3 grade |
| 0 | 1-2/3 grade |

| Beef Yield Grades | |
|---|---|
| Points | Deviation |
| 15 | 0.0 - 0.29 |
| 13 | 0.3 - 0.59 |
| 11 | 0.6 - 0.89 |
| 9 | 0.9 - 1.19 |
| 7 | 1.2 - 1.49 |
| 5 | 1.5 - 1.79 |
| 3 | 1.8 - 2.09 |
| 1 | 2.1 - 2.39 |
| 0 | ≥2.4 |

| Lamb Yield Grades | |
|---|---|
| Points | Deviation |
| 10 | 0.0 - 0.29 |
| 9 | 0.3 - 0.59 |
| 8 | 0.6 - 0.89 |
| 7 | 0.9 - 1.19 |
| 6 | 1.2 - 1.49 |
| 5 | 1.5 - 1.79 |
| 4 | 1.8 - 2.09 |
| 3 | 2.1 - 2.39 |
| 2 | 2.4 - 2.69 |
| 1 | 2.7 - 2.99 |
| 0 | ≥3.0 |

| Swine Grades | |
|---|---|
| Points | Deviation |
| 10 | 0.0 - 0.1 |
| 9 | 0.2 - 0.3 |
| 8 | 0.4 - 0.5 |
| 7 | 0.6 - 0.7 |
| 6 | 0.8 - 0.9 |
| 5 | 1.0 - 1.1 |
| 4 | 1.2 - 1.3 |
| 3 | 1.4 - 1.5 |
| 2 | 1.6 - 1.7 |
| 1 | 1.8 - 1.9 |
| 0 | ≥2.0 |

### Scores for Swine Length and Swine % Muscle and Lamb % BCTRC

| Swine Length | |
|---|---|
| Points | (Deviation - In.) |
| 5 | 0 - 0.39 |
| 4 | .4 - 0.79 |
| 3 | .8 - 1.19 |
| 2 | 1.2 - 1.59 |
| 1 | 1.6 - 1.99 |
| 0 | ≥2.0 |

| Swine % Muscle | |
|---|---|
| Points | (Deviation) |
| 10 | 0.0 - 0.4 |
| 9 | 0.5 - 0.9 |
| 8 | 1.0 - 1.4 |
| 7 | 1.5 - 1.9 |
| 6 | 2.0 - 2.4 |
| 5 | 2.5 - 2.9 |
| 4 | 3.0 - 3.4 |
| 3 | 3.5 - 3.9 |
| 2 | 4.0 - 4.4 |
| 1 | 4.5 - 4.9 |
| 0 | ≥5.0 |

| % BCTRC (Lamb) | |
|---|---|
| Points | (Deviation) |
| 15 | 0.0 - 0.4 |
| 14 | 0.5 - 0.9 |
| 13 | 1.0 - 1.4 |
| 12 | 1.5 - 1.9 |
| 11 | 2.0 - 2.4 |
| 10 | 2.5 - 2.9 |
| 9 | 3.0 - 3.4 |
| 8 | 3.5 - 3.9 |
| 7 | 4.0 - 4.4 |
| 6 | 4.5 - 4.9 |
| 5 | 5.0 - 5.4 |
| 4 | 5.5 - 5.9 |
| 3 | 6.0 - 6.4 |
| 2 | 6.5 - 6.9 |
| 1 | 7.0 - 7.4 |
| 0 | ≥7.5 |

# Scoring Placings

Official Placing and Cuts: 1 2 3 4

^ ^ ^

2 6 4

| Example Placing | Calculation | Score |
|---|---|---|
| 1 2 3 4 | - 0 | 50 |
| 2 1 3 4 (Top Switch) | - 2 | 48 |
| 1 2 4 3 (Bottom Switch) | - 4 | 46 |
| 1 3 2 4 (Middle Switch) | - 6 | 44 |
| 2 1 4 3 (Double Switch) | - 6 | 44 |
| 3 1 2 4 (Minor Bust) | 3 over 1 = - 8<br>3 over 2 = - 6<br>3 over 4 = - 0<br>1 over 2 = - 0<br>1 over 4 = - 0<br>2 over 4 = - 0<br>-14 | 36 |
| 4 3 2 1 (Complete Bust) | 4 over 3 = - 4<br>4 over 2 = -10<br>4 over 1 = -12<br>3 over 2 = - 6<br>3 over 1 = - 8<br>2 over 1 = - 2<br>-42 | 8 |

# Summary

A capable judge selects livestock based on the most of the best. For example, the Hereford cow shown in Figure 116 displays many traits desired in a modern beef female. Note the frame, structural soundness, femininity, long-smooth muscle pattern and desirable type of udder.

This Livestock Judging Guide will assist you in becoming a capable livestock judge. Through careful observation and knowledge of good livestock characteristics, you will be able to identify and select livestock that exhibit the important traits necessary for economic success in livestock production.

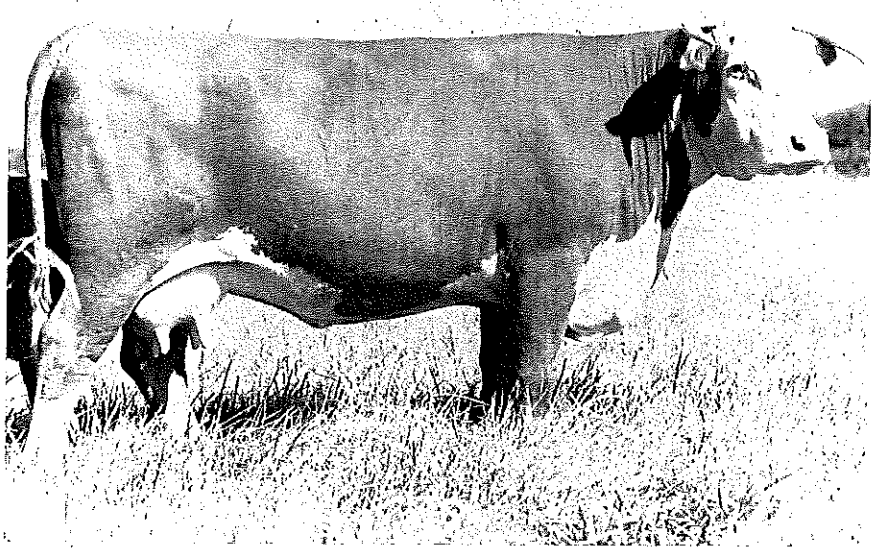

**Figure 116. A modern Hereford cow exhibiting many important traits for economic success.**

# Acknowledgments

I want to express my sincere thank you to the University of Nebraska-Lincoln Departments of Animal Science, 4-H and Youth Development and Communications and Information Technology for their excellent assistance and support in the preparation and publication of this Livestock Judging Guide.

I would like to recognize Dave Williams, Professor Emeritus-Department of Animal Science, for his encouragement and support in writing and for his advice on the approach to use. Appreciation is extended to R.B. Warren, Professor Emeritus-Department of Animal Science, for his assistance and support with livestock used at the Livestock Judging Pavilion for photographs taken and for his advice. I would like to thank Doyle Wolverton, Extension 4-H Livestock Specialist and Larry Hannon, past Garden County Extension Agent, for their assistance and support in reviewing this Livestock Judging Guide.

| Figure | Courtesy Of: |
|---|---|
| 4 | American Hereford Association |
| 5 | American Angus Association |
| 6 | American Simmental Association |
| 7 | Vic Gentry-Whitman, Nebraska |
| 11 | Vic Gentry-Whitman, Nebraska |
| 13 | American Angus Association |
| 28 | United States Department of Agriculture |
| 29 | United States Department of Agriculture |
| 30 | United States Department of Agriculture |
| 31 | United States Department of Agriculture |
| 33A | American Landrace Association |
| 33B | Hampshire Swine Registry |
| 34A | Chester White Swine Record Association |
| 34B | United Duroc Swine Registry |
| 35 | American Yorkshire Club, Inc. |
| 37A | American Yorkshire Club, Inc. |
| 37B | Hampshire Swine Registry |

| Figure | Courtesy Of: |
|---|---|
| 38 | United Duroc Swine Registry |
| 39 | National Spotted Swine Record, Inc. |
| 59 | Poland China Record Association |
| 71 | Greg Deakin, Publisher-Editor of the Suffolk Banner |
| 71A | Sheep Breeder and Sheepman Magazine |
| 72 | Sheep Breeder and Sheepman Magazine |
| 73 | Sheep Breeder and Sheepman Magazine |
| 73A | Sheep Breeder and Sheepman Magazine |
| 95 | United States Department of Agriculture |
| 101 | National Pork Producers Council |
| 102 | National Pork Producers Council |
| 103 | United States Department of Agriculture |
| 107A | United States Department of Agriculture |
| 116 | American Hereford Association |