Sharpen Your Livestock Evaluation

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Sharpen Your Livestock Evaluation

- The purpose of this Powerpoint is to help adults and youth understand livestock selection priorities for selecting a market animal project as well as evaluate market ready steers, hogs and lambs. There is a class of livestock with placings and oral reasons for each species.

Market Animal Selection

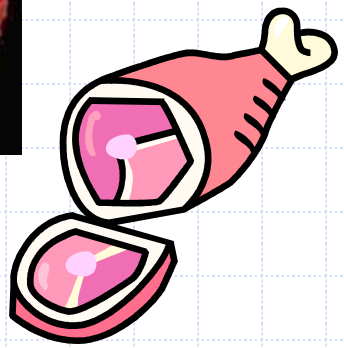
- Need to have a plan
  - Age of animal
  - Sex of animal (hogs and lambs)
  - Amount of days before show (fair dates)
  - Weight limits
  - What resources do I need?
    - Cost of animal, time spent, feed costs, etc.

Market Animal Selection

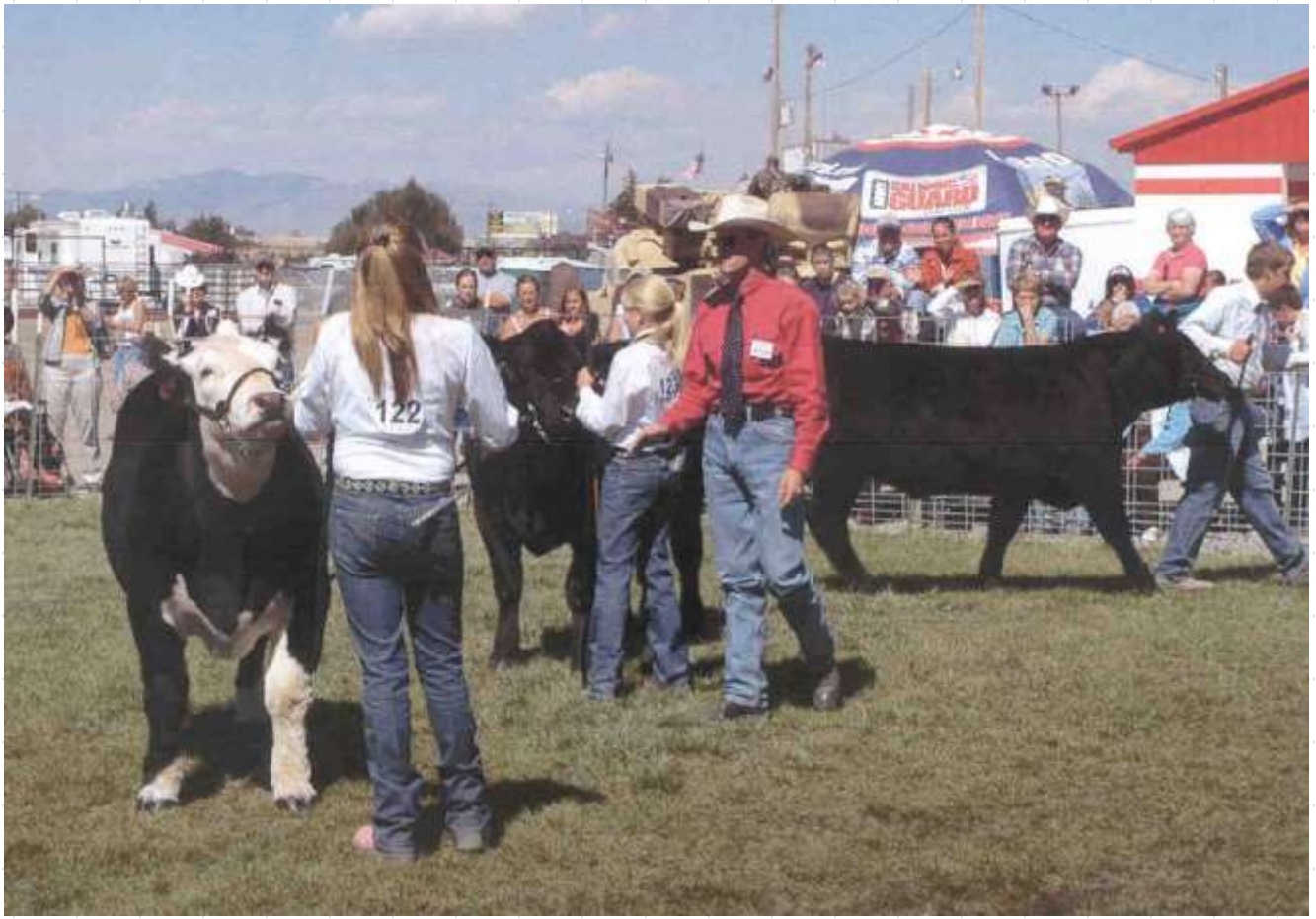
- What are the Priorities?
  - Structure
  - Muscle
  - Condition (fat or lean)
  - Balance (eye appeal)
  - Volume
  - Quality
  - Travel (how the animal walks)

What traits are important?

- Muscle
  - Selling meat is the purpose of raising market animals!
- Fat
  - Want a lean product (but not too lean)!
- Volume/capacity
  - Feed efficiency
  - Production capabilities
  - Structural design
  - Economic
  - Aesthetic, "Looks Good"



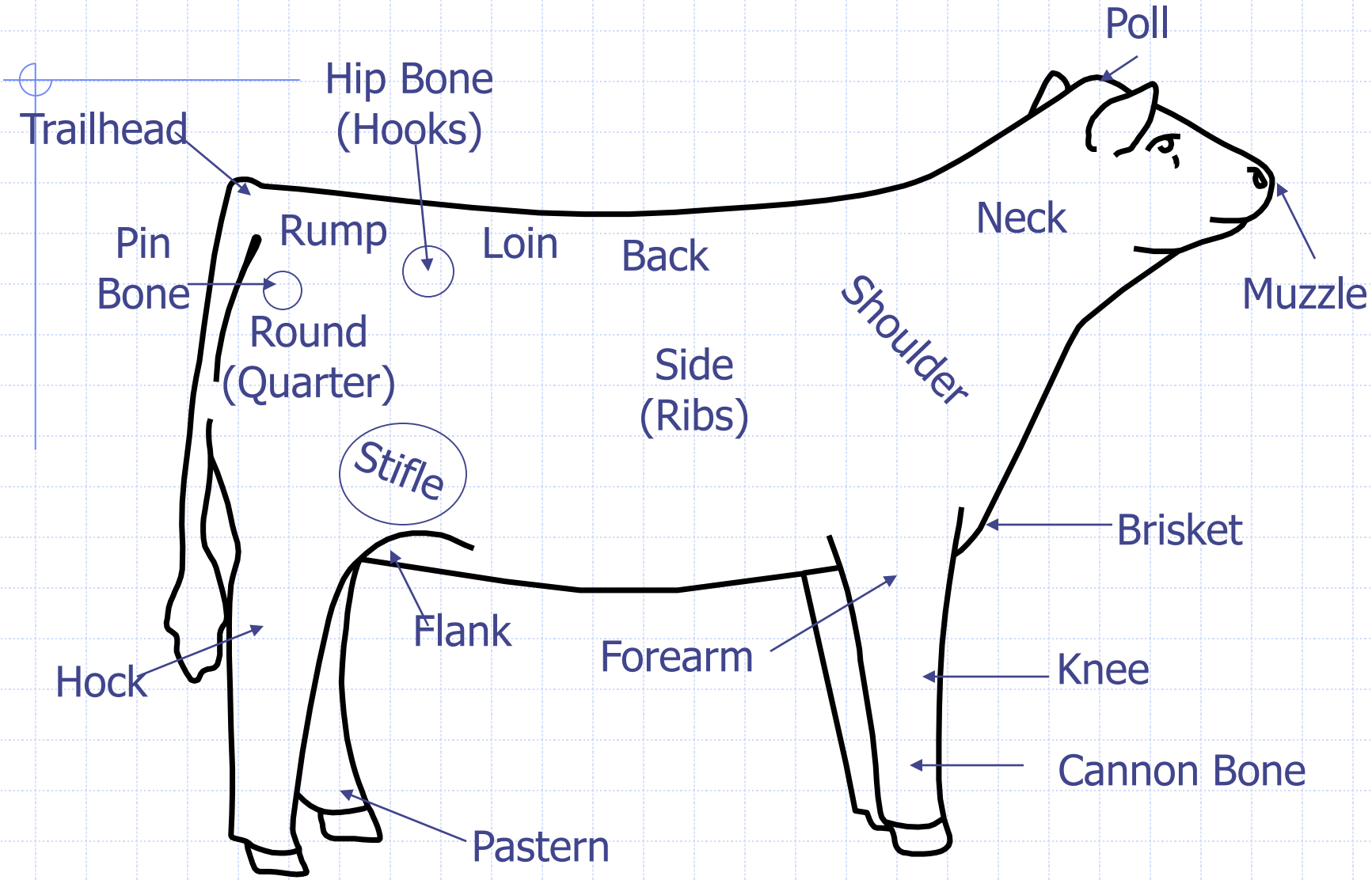
Evaluating Beef!



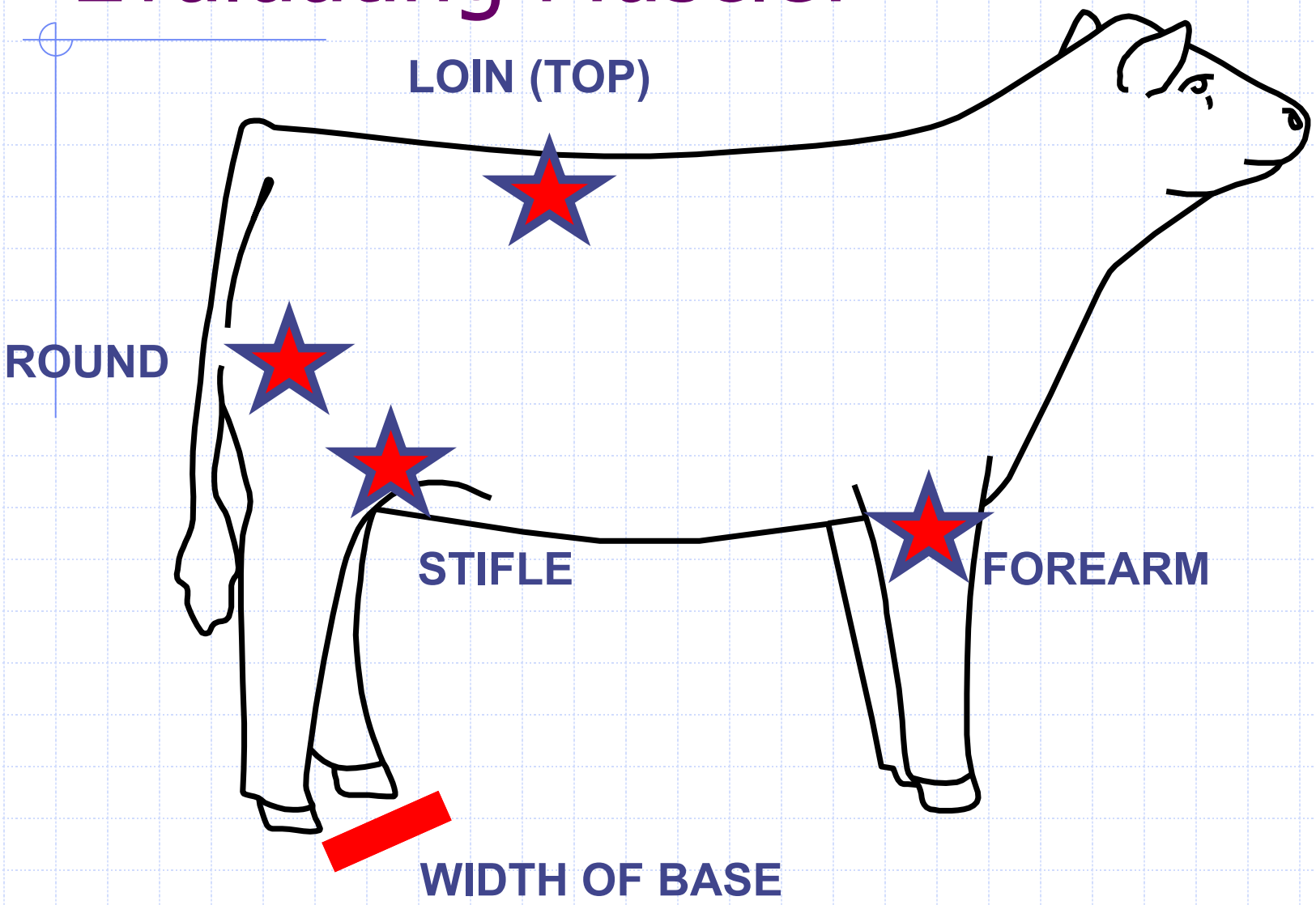
Beef Industry Goals

Goal	Target	Range
Age at market	14 – 18 months	12 – 30 months
Live Weight	1250 – 1300 lbs	1000 – 1500 lbs
Carcass Weight	700 – 850 lbs	550 – 950 lbs
Fat Thickness	<.50 inches	.20 - .80 inches
Ribeye	12.5 – 13.9 $in.^2$	10.0 – 17.0 $in.^2$
Quality Grade	Choice or higher	Select to Prime
Yield Grade	3.0 or less	1.0 to 4.0

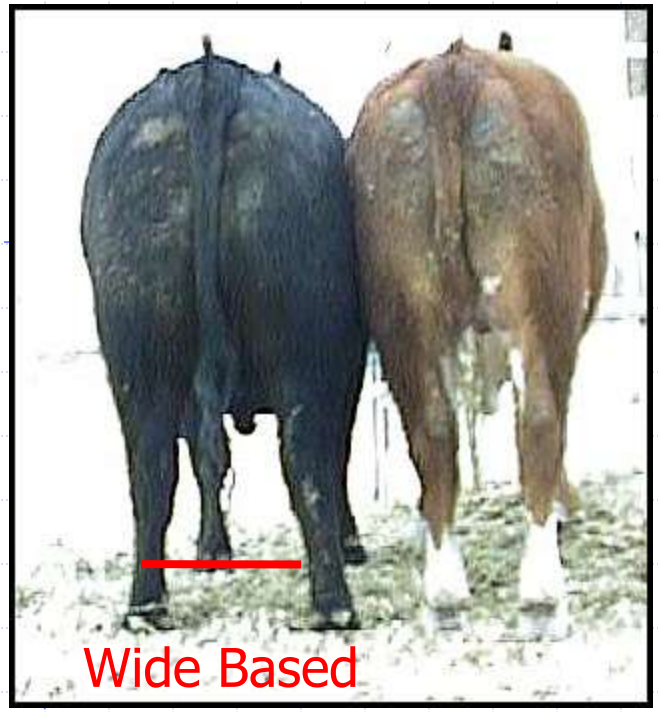
Parts of a Steer



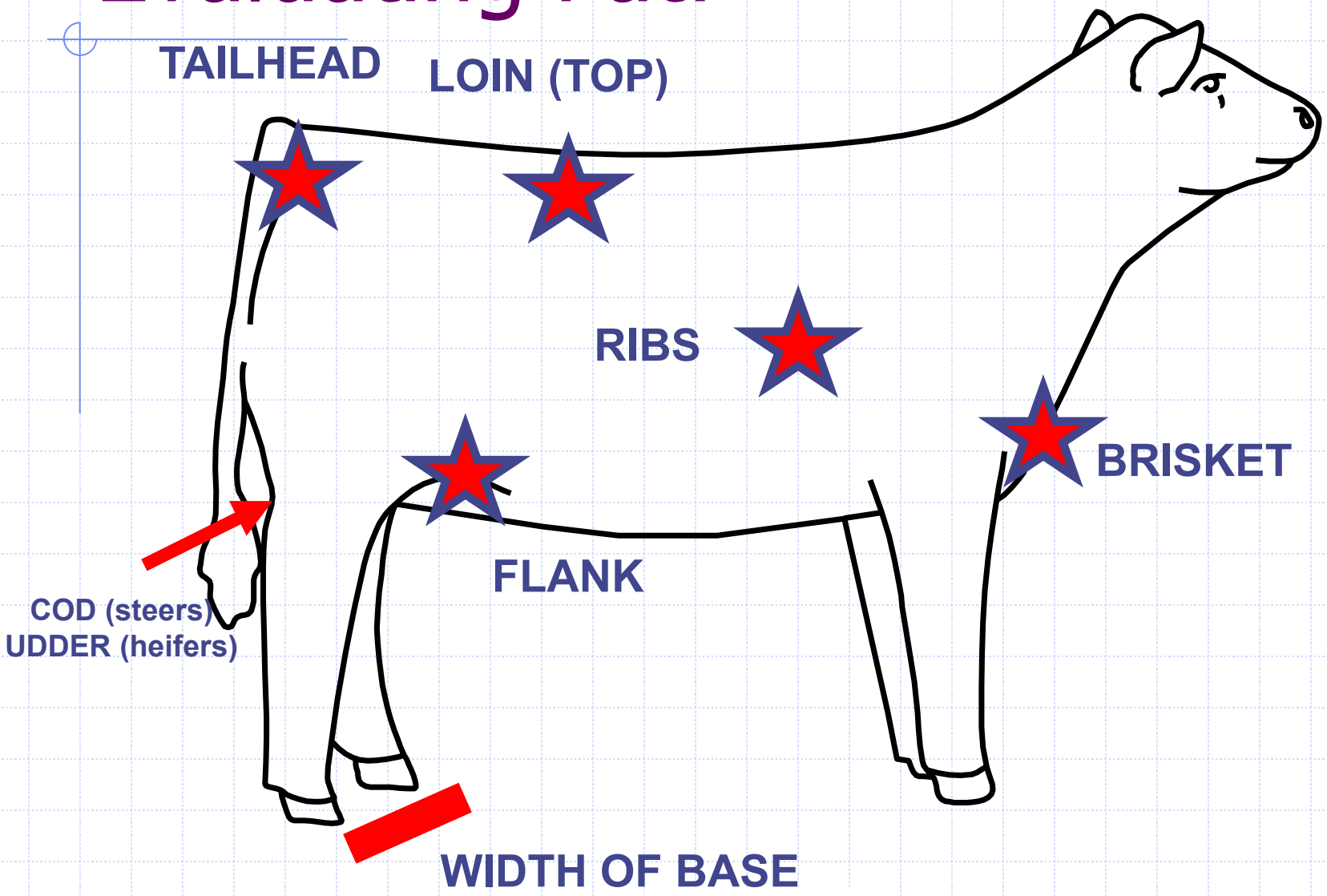
Evaluating Muscle!



Example of MUSCLE



Evaluating Fat!



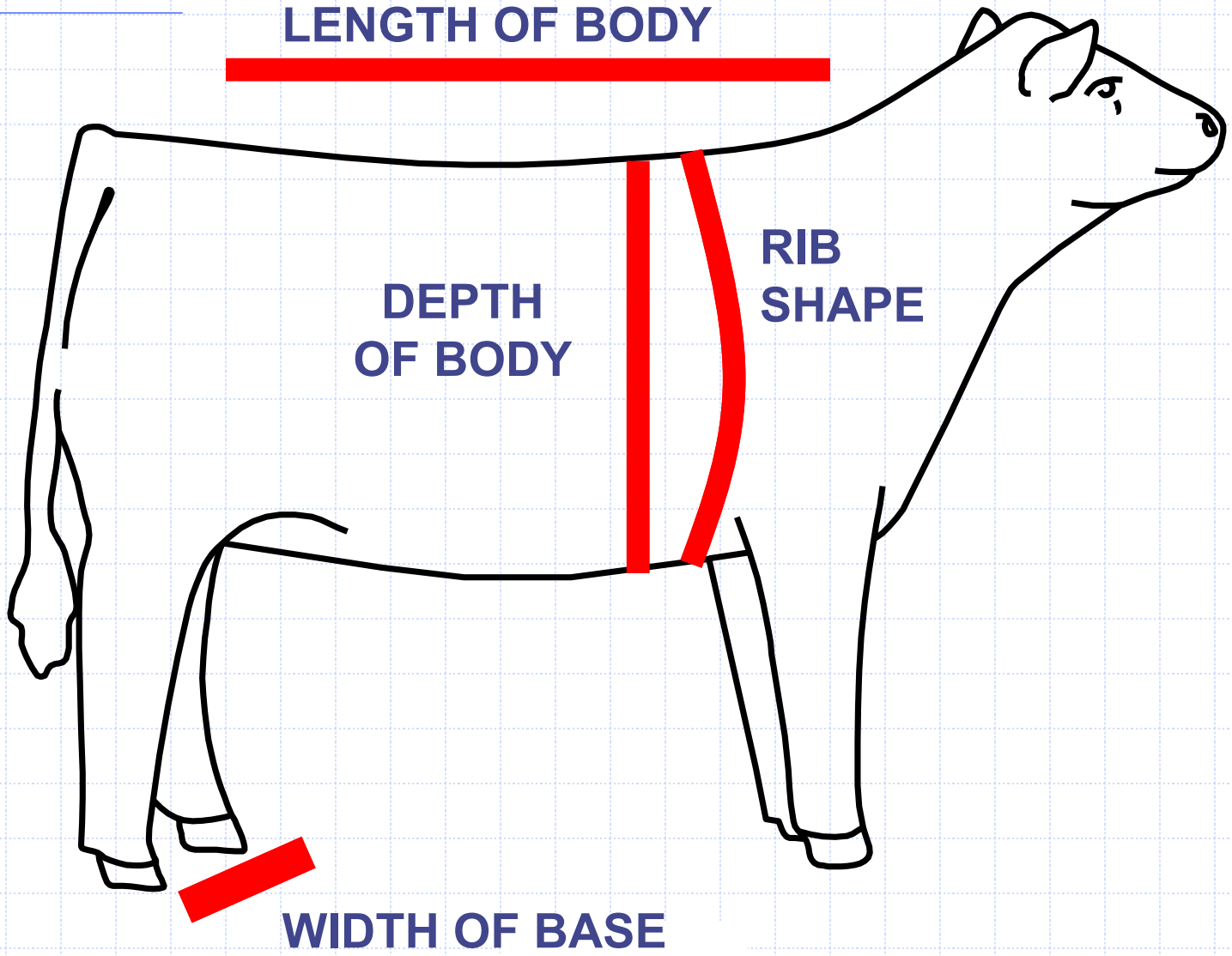
Example of FAT

Less Fat

More Fat

Less Fat

Evaluating Volume!

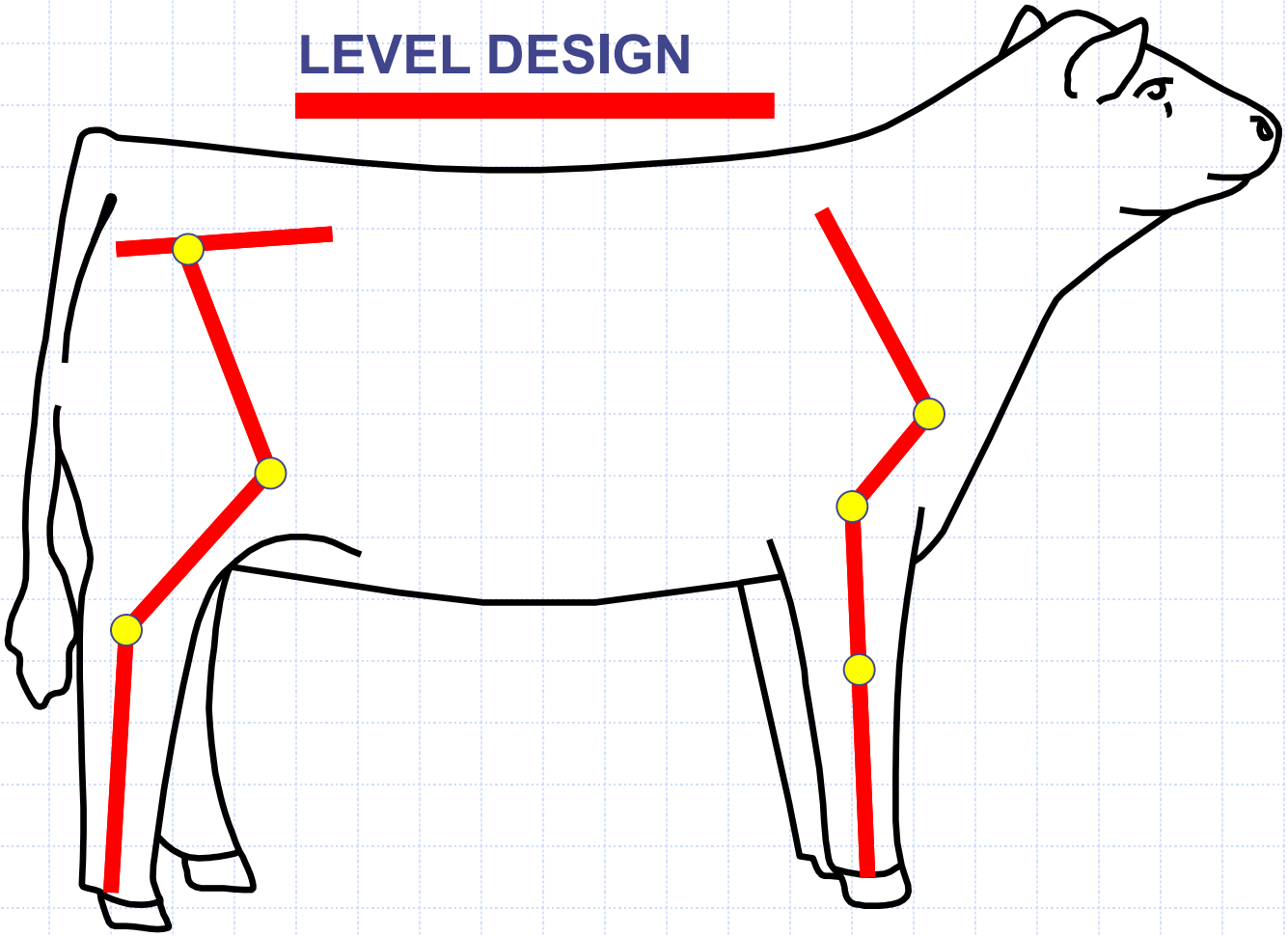


Example of VOLUME

Lacking Volume – flat ribbed and shallow flanked

Plenty of Volume – Deep, bold rib shape and deep flanked

Evaluating Structure!



Example of STRUCTURE

Example of a “good one”!

Priorities

- Structure
- Muscle
- Condition (fat or lean)
- Balance (eye appeal)
- Volume
- Quality
- Travel (how the animal walks)

Judging Cattle

- Determine the priorities for a class of feeder steers.
- Place the following class of feeder steers from best to worst based on the established priorities.

Side profile of Feeder Steers

1

2

3

4

Rear view of Feeder Steers

1

2

3

4

Final rear view of Feeder Steers

Final side profile of Feeder Steers

Judging Cattle

- Mark Your Cards!
- Group Discussion

Judging Cattle

- **Placing**
  1-3-2-4
- **Cuts**
  2-3-6
- **Questions?**

Crossbred Feeder Steers

- I placed the crossbred feeder steers 1-3-2-4 and very easily started with a stout, correctly made calf that dominates from both a balance and structure standpoint. And it's my preference to use the little black calf to beat 3 in the initial pair. He is the longest fronted, thinnest necked, and the flattest shouldered. Plus he's the most open in his fore rib and gets progressively deeper from his fore flank back. As a bonus the level hipped steer is the soundest structured, he has the most slope and angle to his shoulder, and the most correct set to his hock. I realize the big black steer is more expressively muscled and has the most shape to his quarter. But in comparison to the class winner, he's straight in his front and stiff in his hock, he simply gives up the overall structural correctness needed to win.
- Despite this, muscle and balance is enough to place him over 2 in the middle pair. He is the biggest topped and the thickest ended. He is set the widest at his pins and is the deepest quartered and widest stifled. As a bonus he is longer fronted, longer bodied and leveler hipped.

(Cont.) Crossbred Feeder Steers
Placing 1-3-2-4
Cuts 2-3-6

- The dark red calf definitely has a more ideal set to his hock and has the appearance of being freer moving. But of the initial three, he is the lightest muscled. Even so in the bottom pair, muscle is enough to sort him over 4. He has more shape and dimension down his top and comes squarer and leveler to his pins. He has more shape right behind his shoulders and he is more impressive when viewed from behind.
- Of course the Hereford influenced calf is thinner necked and longer bodied. But in all reality he is the lightest muscled and the narrowest made. He is the flattest ribbed and the narrowest topped. Collectively the narrow ended steer is the lowest quality of the four. Thank You.

Evaluating Pigs!

Carcass Characteristics of a Symbol III Barrow*

(as determined at the 2005 Market Hog Conference)

- Hot carcass wt of 205 lbs.
- LEA of 6.5 (7.1) sq. in.
- Belly thickness of 1.0 inches
- 10th rib backfat of 0.7 (0.6) inch
- Fat-Free Lean Index is 53.0 (54.7) Quality Characteristics

  * All numbers in parentheses represent gilt numbers

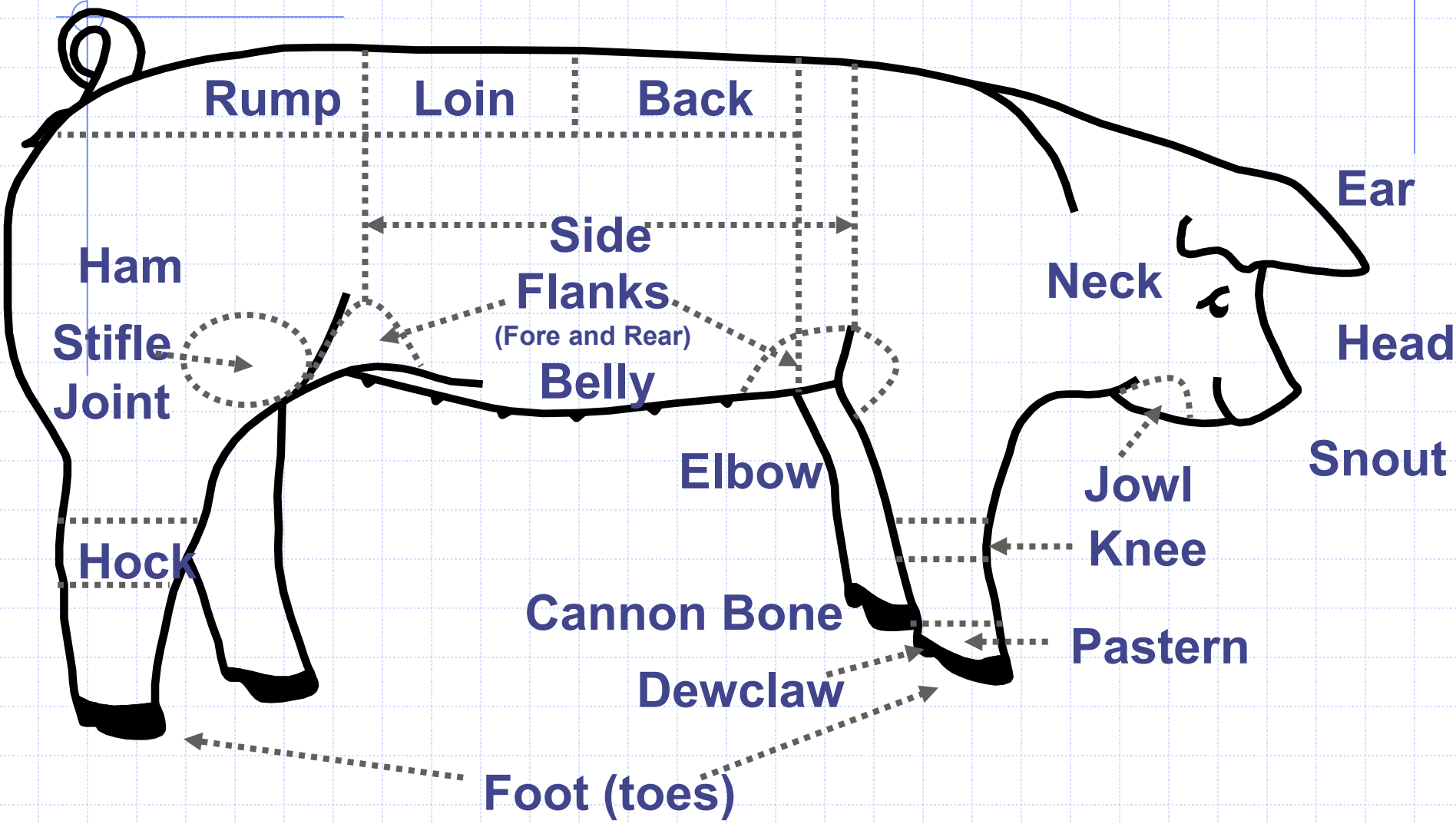
Industry Concerns

- Keith Broce – Bryan Foods
  - Ideal Weight – 270#
  - No less than .60 inches of backfat at 10th rib
  - Minimum of 54% lean
  - Loin eye area of at least 7.0 sq. inches
  - Hogs that can walk off the truck
- Janice Glover – Seaboard Farms
  - Ideal Weight – 280#
  - Ideal Backfat - .80 inches
  - County fair hogs are too lean and create additional USDA testing

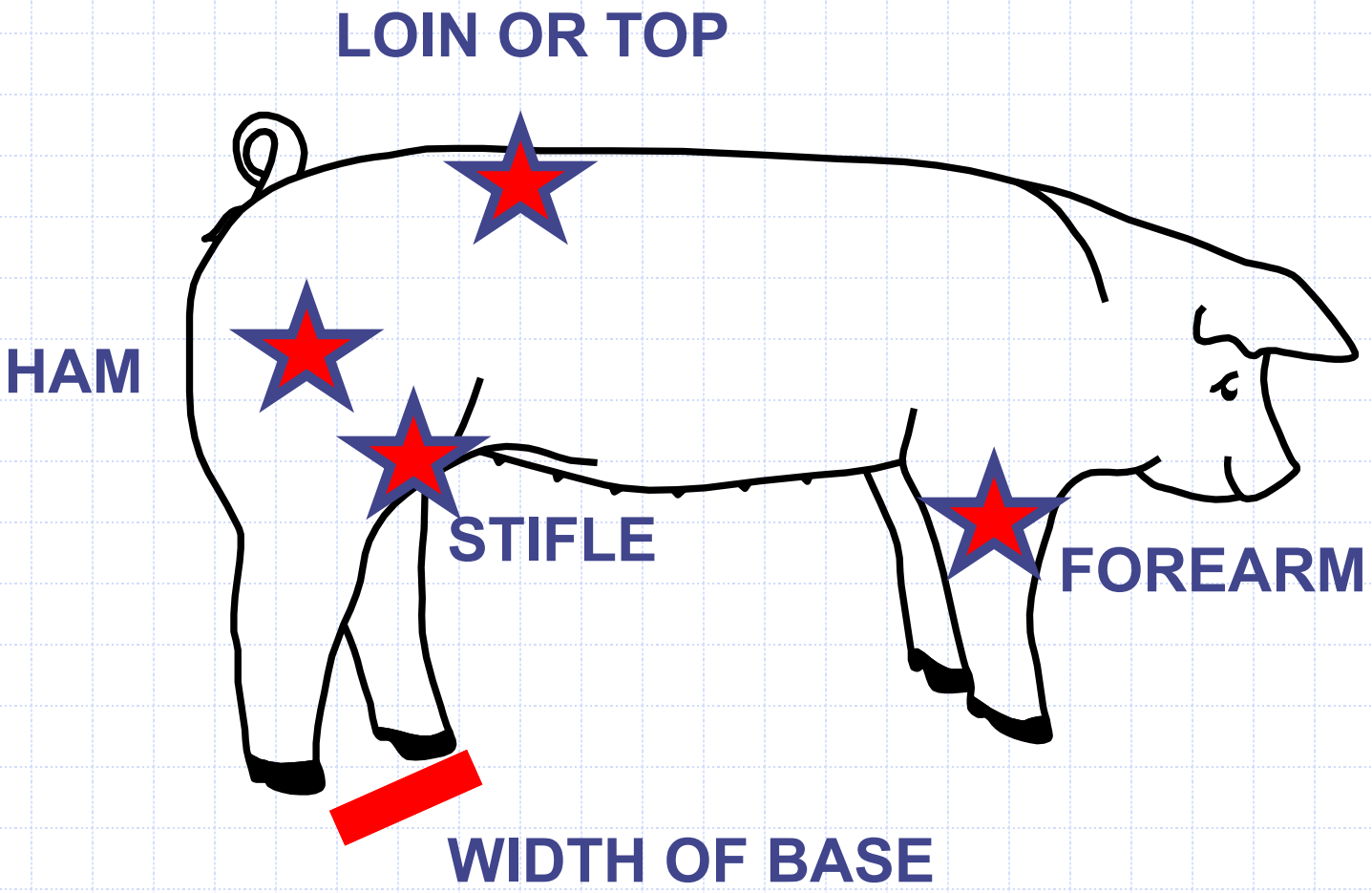
Swine Industry Goals

Goal	Target	Range
Age at market	155 – 165 days	145 – 180 days
Live Weight	260 – 280 lbs	210 – 300 lbs
Carcass weight	195 lbs	160 – 220 lbs
Backfat	.60 - .80 in.	.30 – 1.5 in.
Loin Eye Area	6.5 – 7.1 $in.^2$	4.5 – 10.0 $in.^2$
USDA Grade	U.S. # 1	U.S. # 1 to # 4
Percent Lean	54%	48% to 58%

Body Parts of a Hog



Evaluating Muscle!



Example of MUSCLE

Heavy Muscled

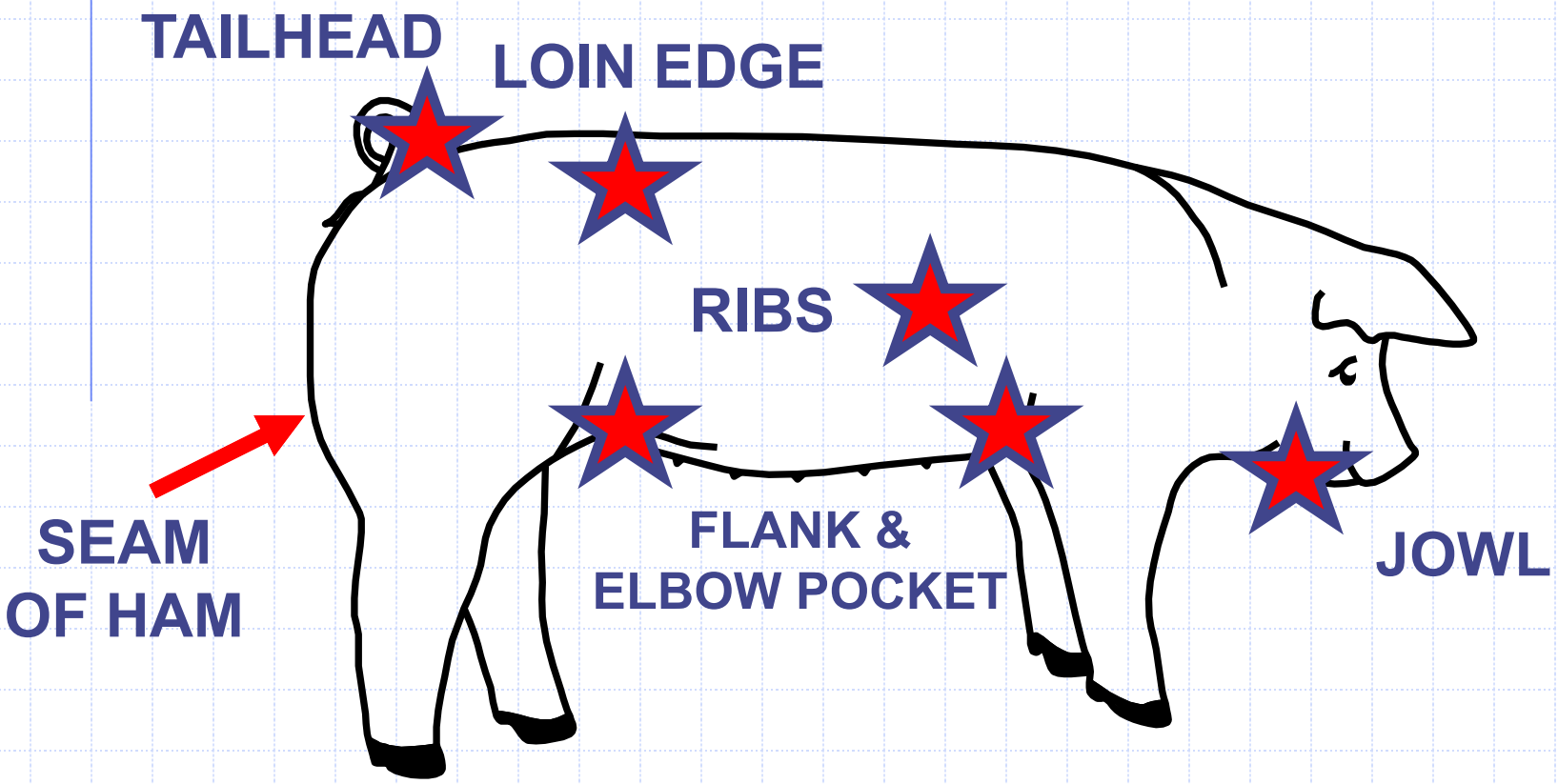
Light Muscled

Example of MUSCLE

Heavy Muscled

Light Muscled

Evaluating Fat!

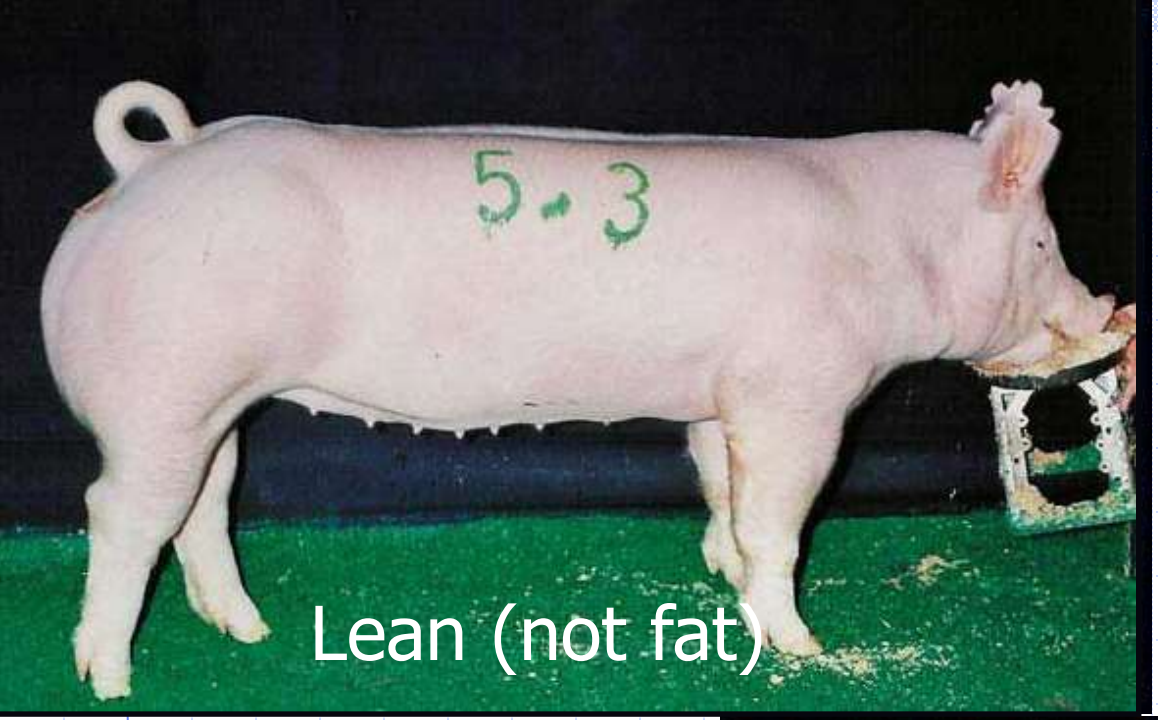


Example of FAT

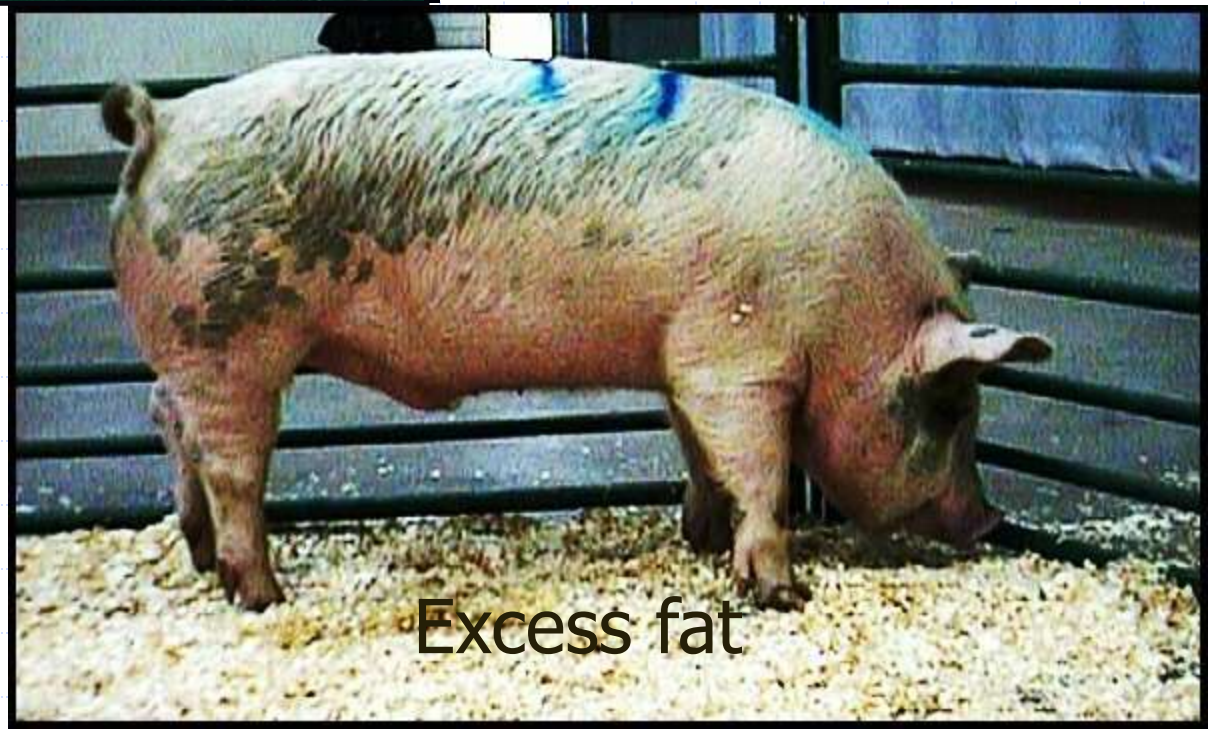
Adequate Fat

Excess Fat

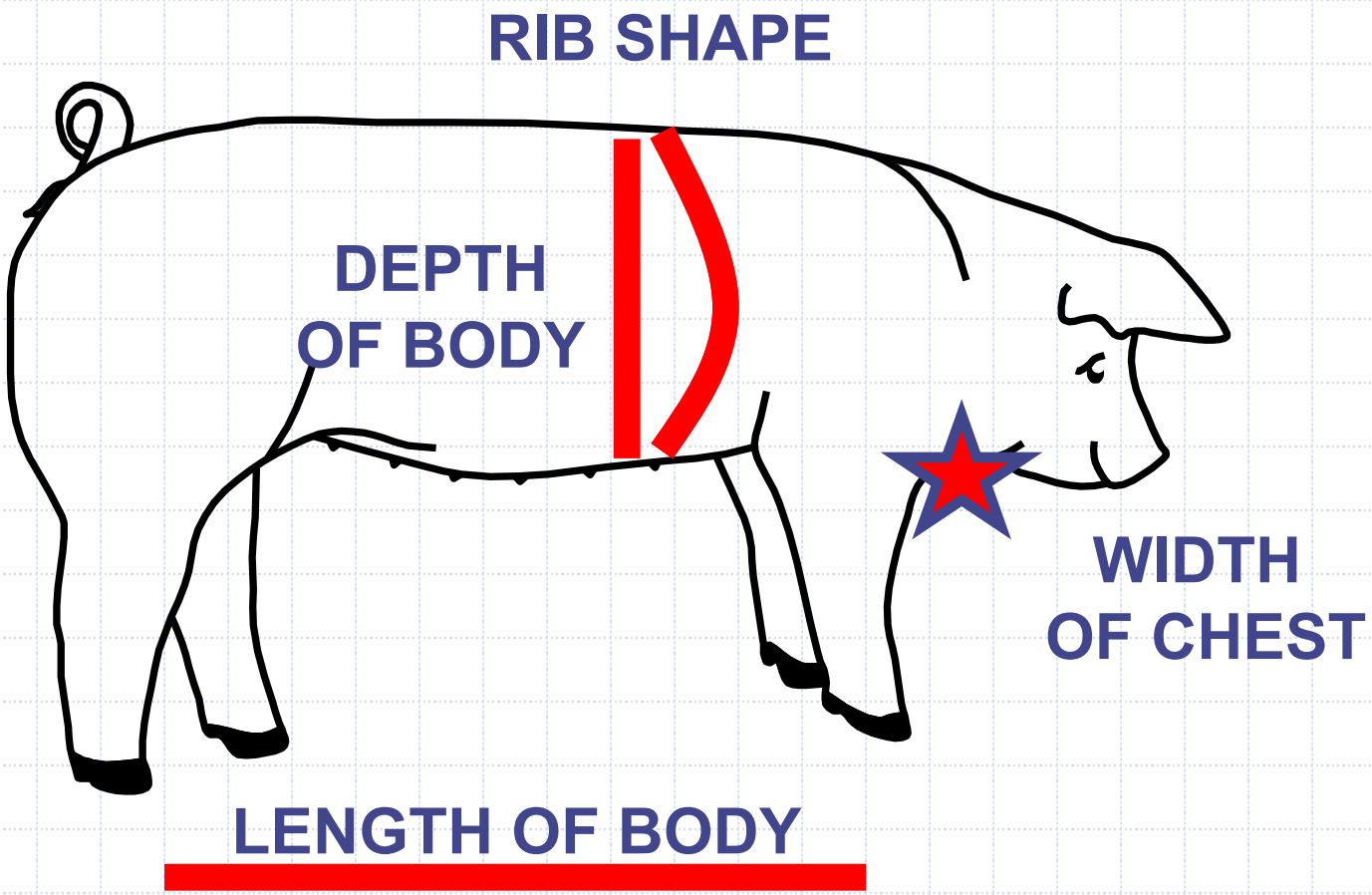
Example of FAT



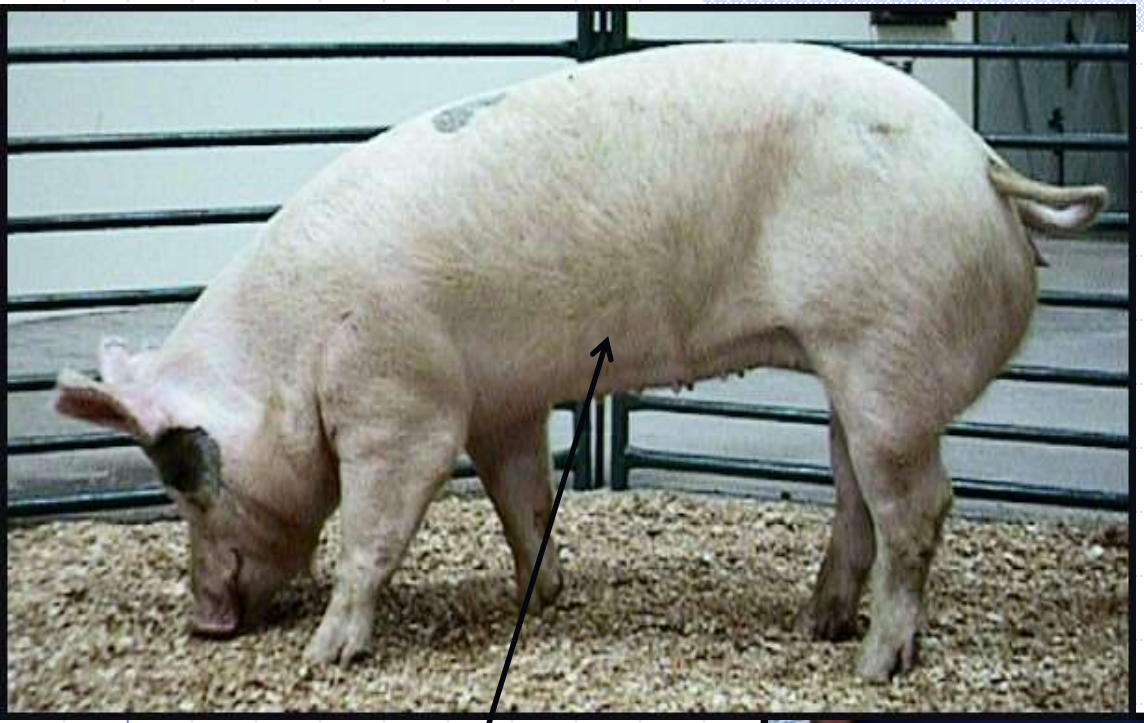
Lean (not fat)


Excess fat

Evaluating Volume!

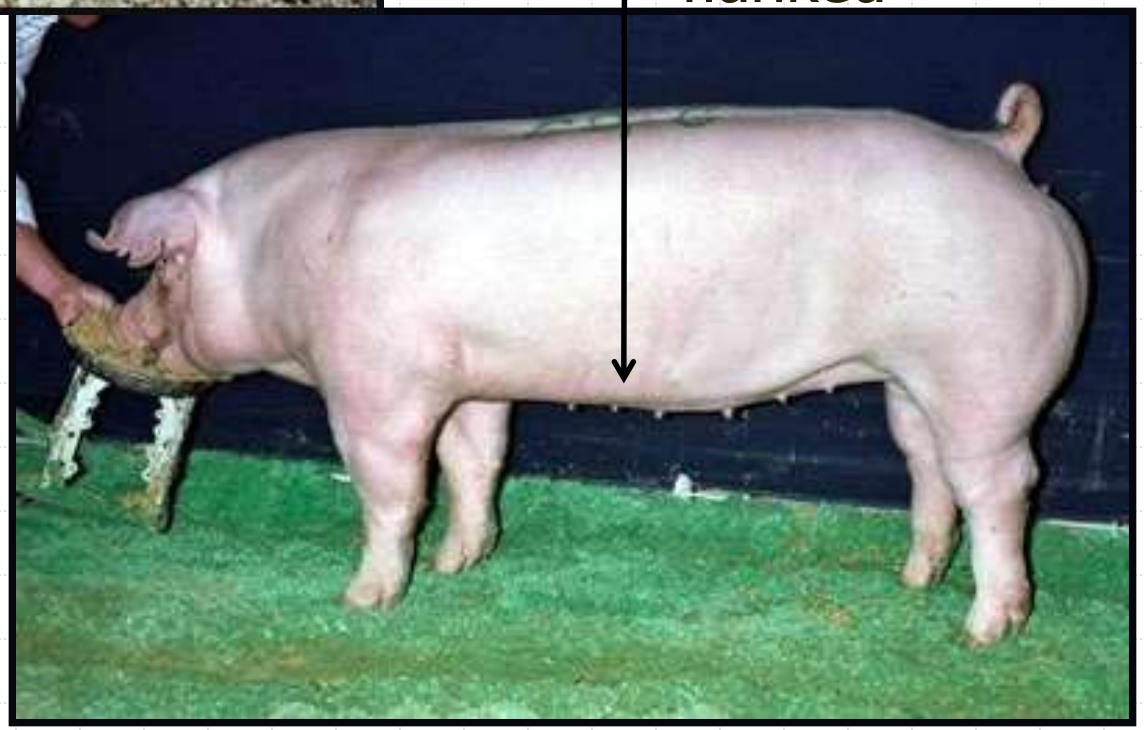


Example of VOLUME

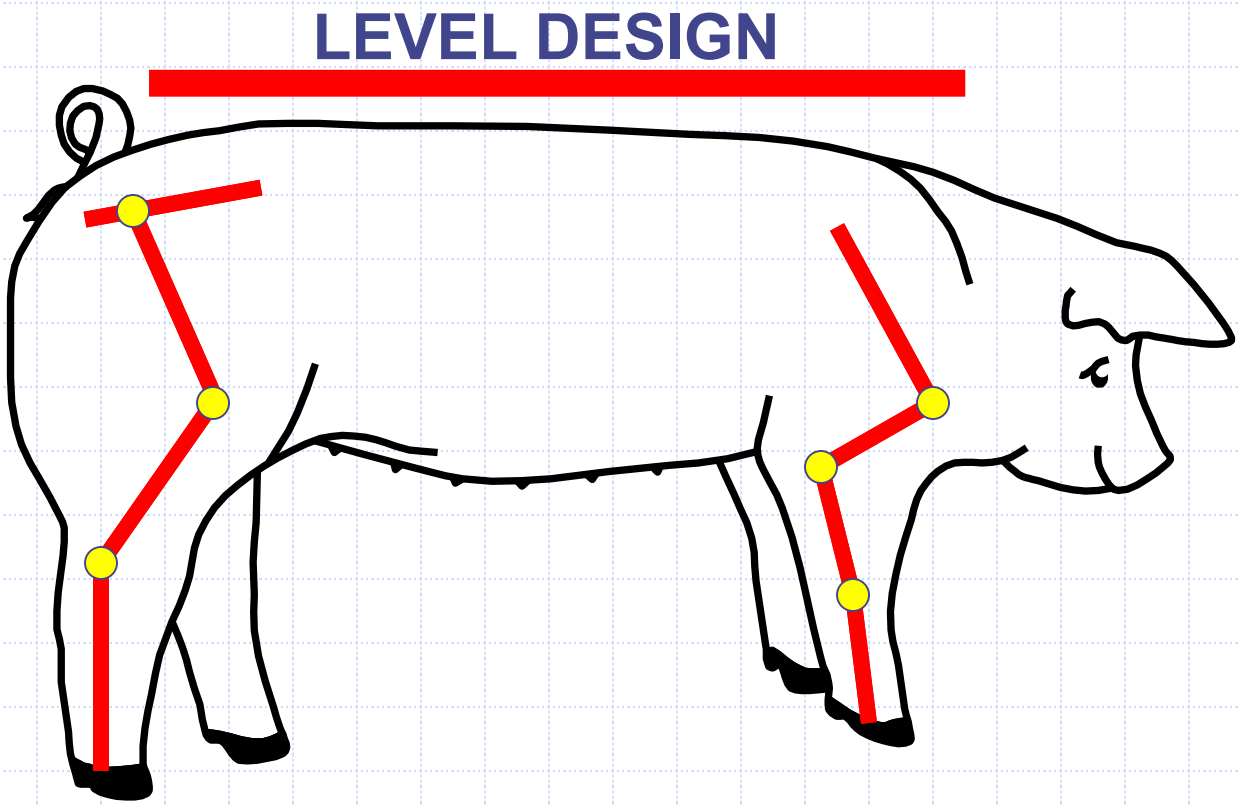


Less Volume – flat ribbed and shallow flanked

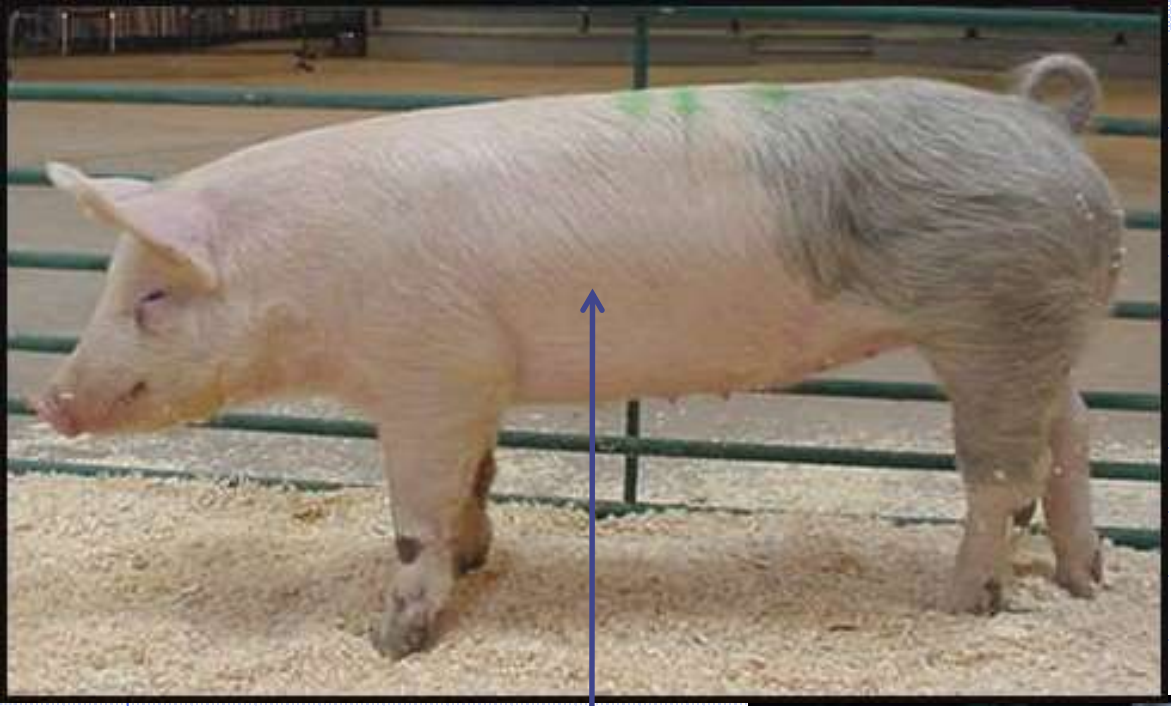
Adequate Volume – Deep ribbed and deep flanked



Evaluating Structure!

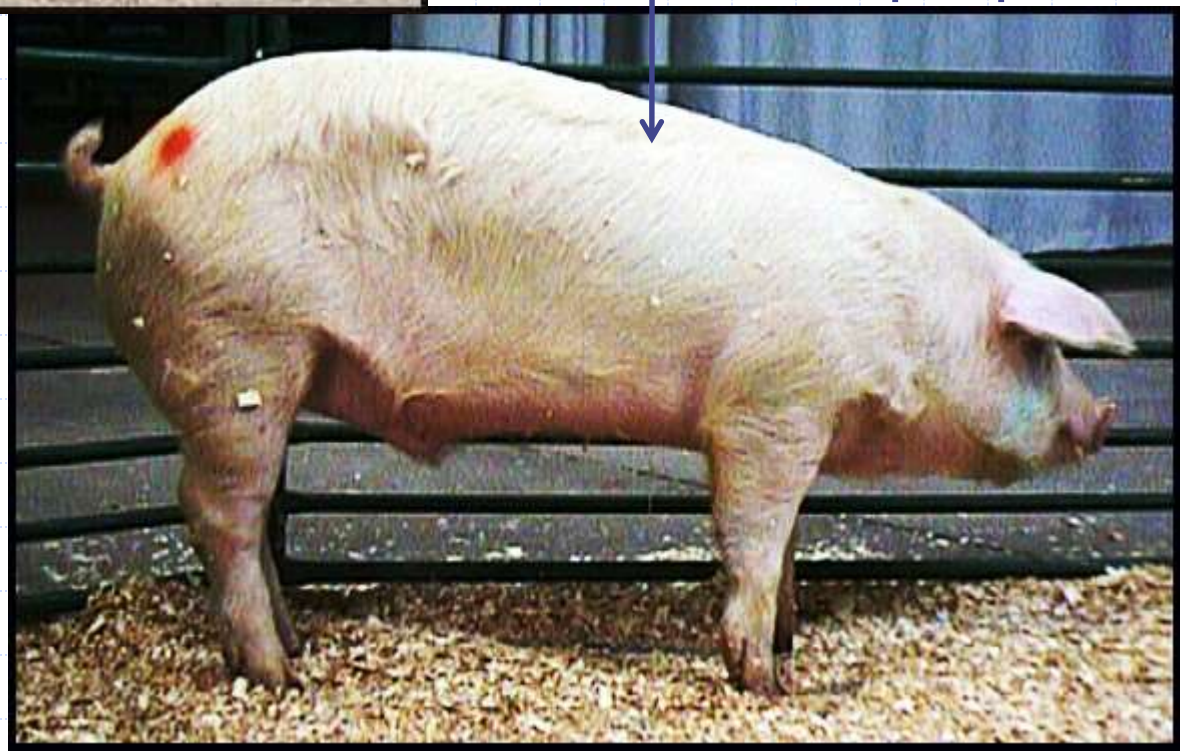


Example of STRUCTURE



Correct – level topped, proper set to feet and legs

Not correct – straight fronts, arched top, steep hip



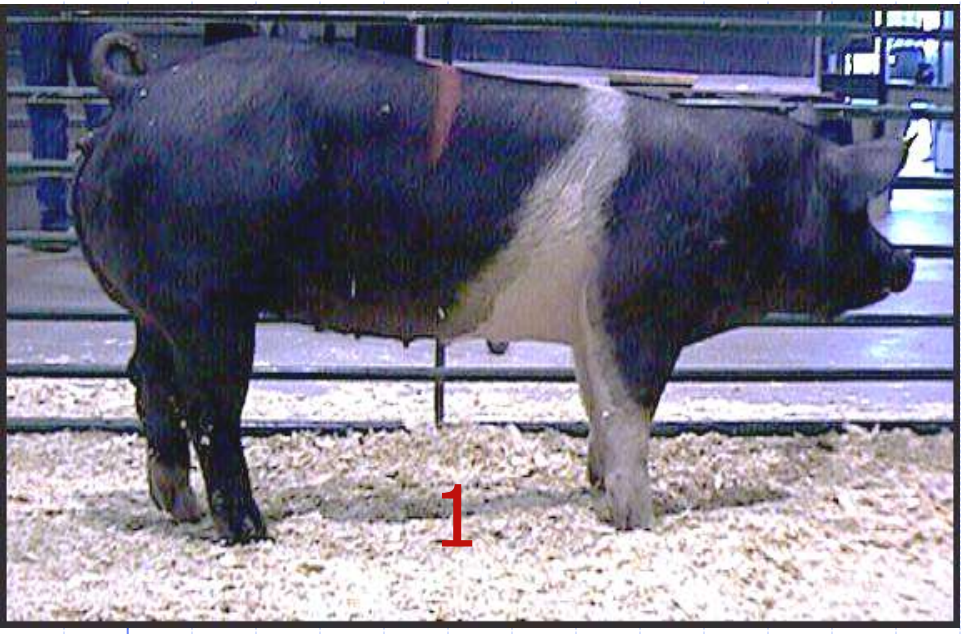
Example of a “good one”!

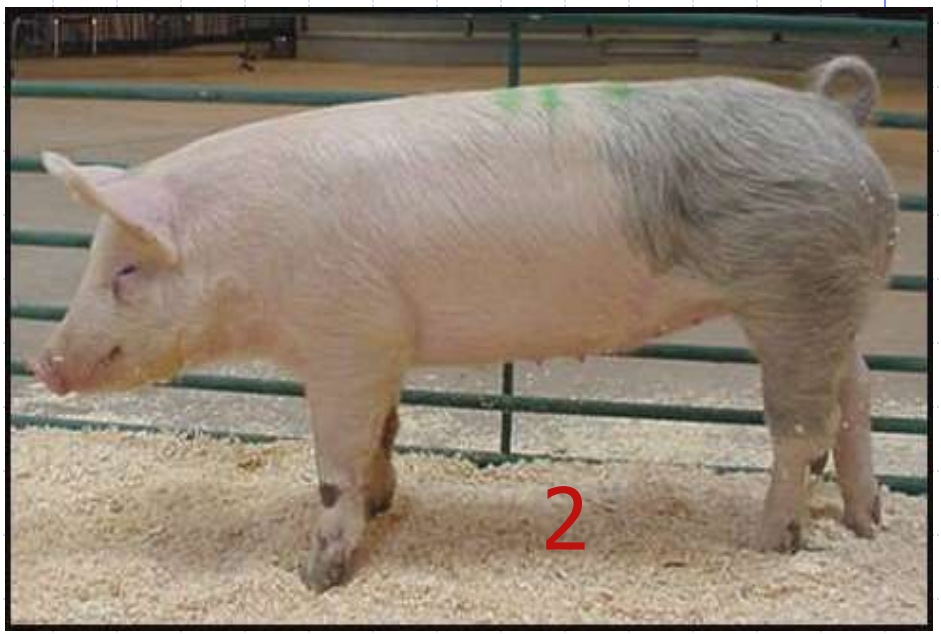
Priorities

- Structure
- Muscle
- Volume
- Condition (fat or lean)
- Balance (eye appeal)
- Quality
- Travel (how the animal walks)

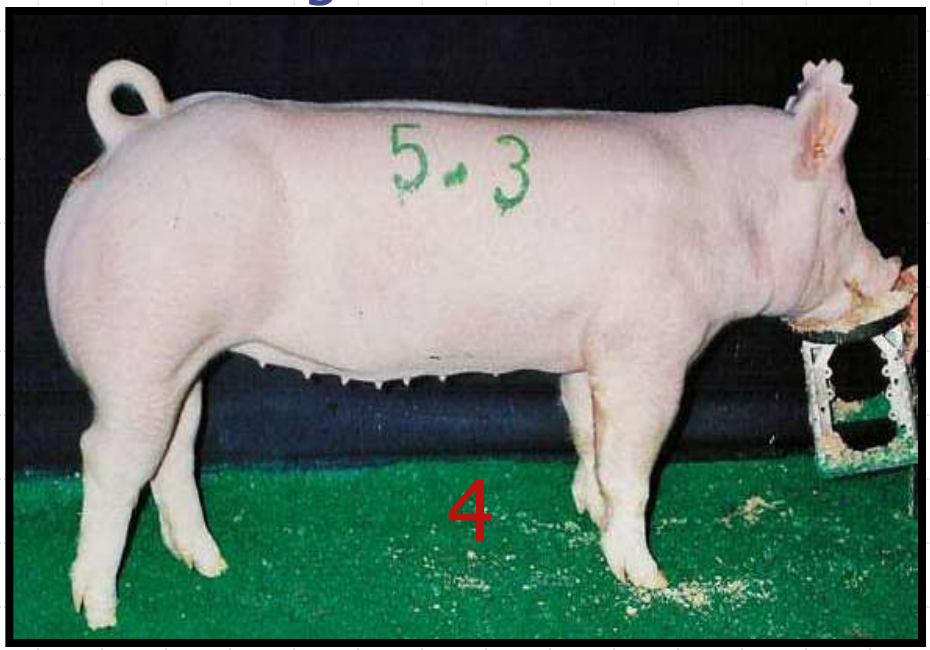
Market Hogs

- Determine the priorities for a class of market hogs.
- Place the following class of hogs from best to worst based on the established priorities.

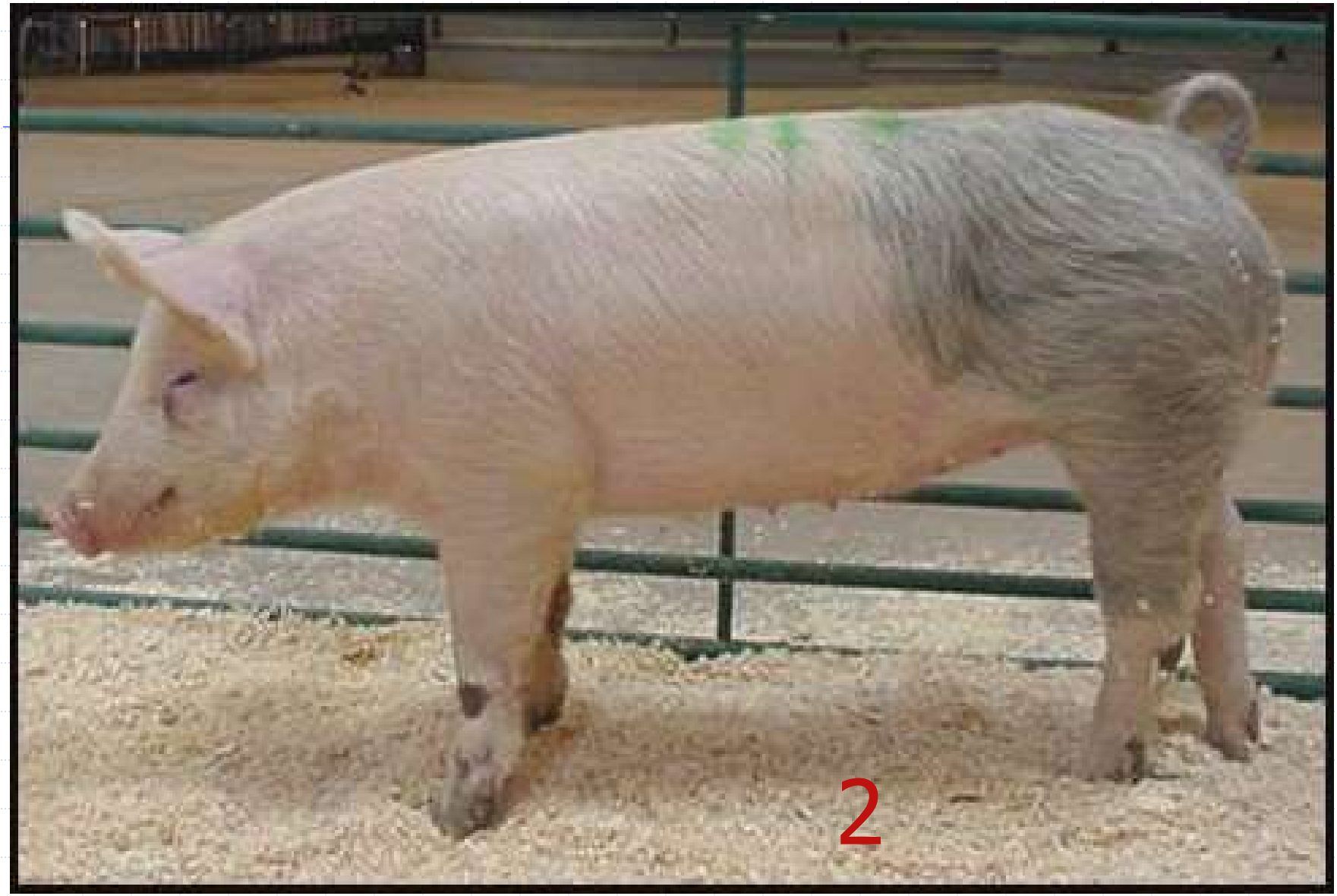




Side profile of market hog class



1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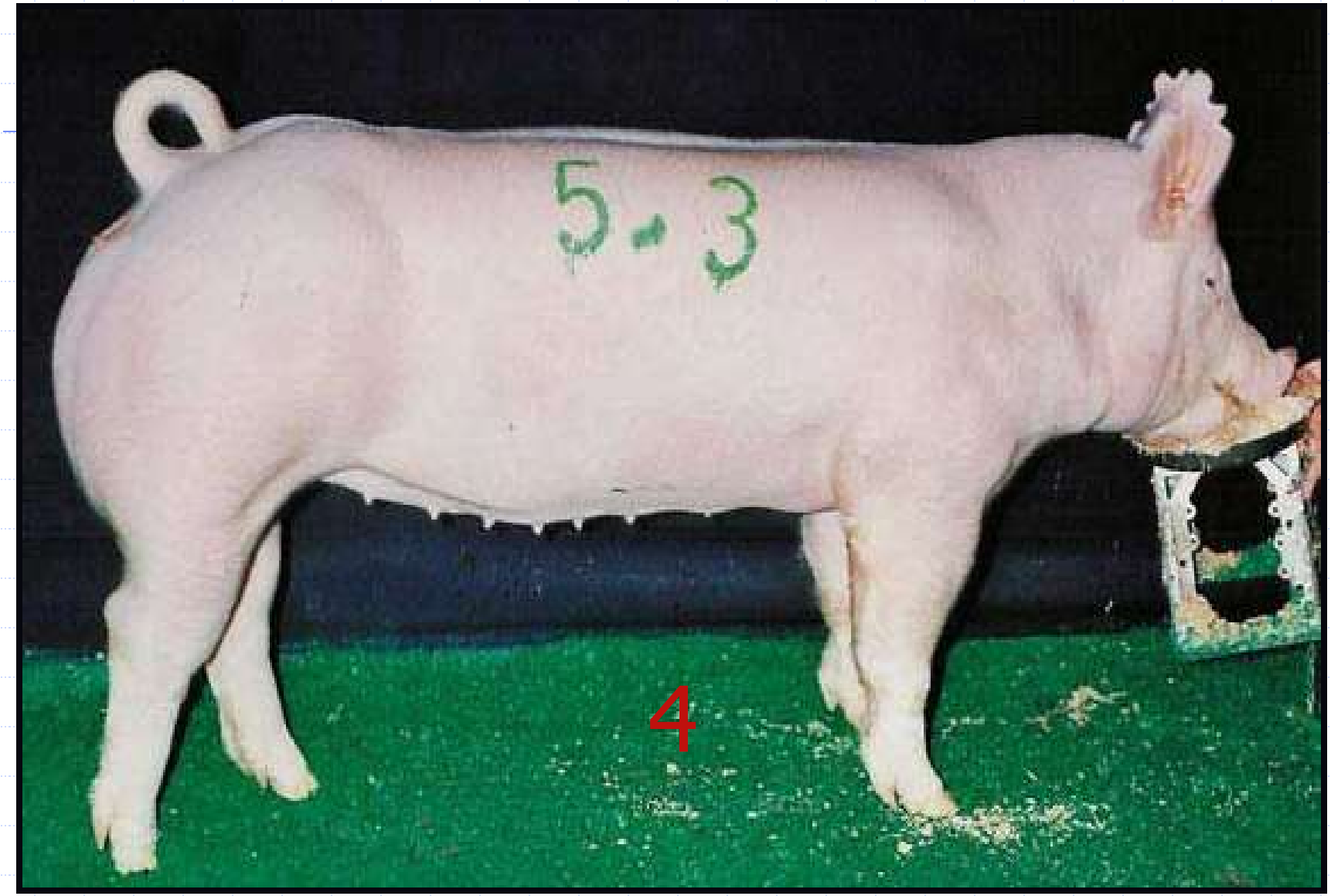
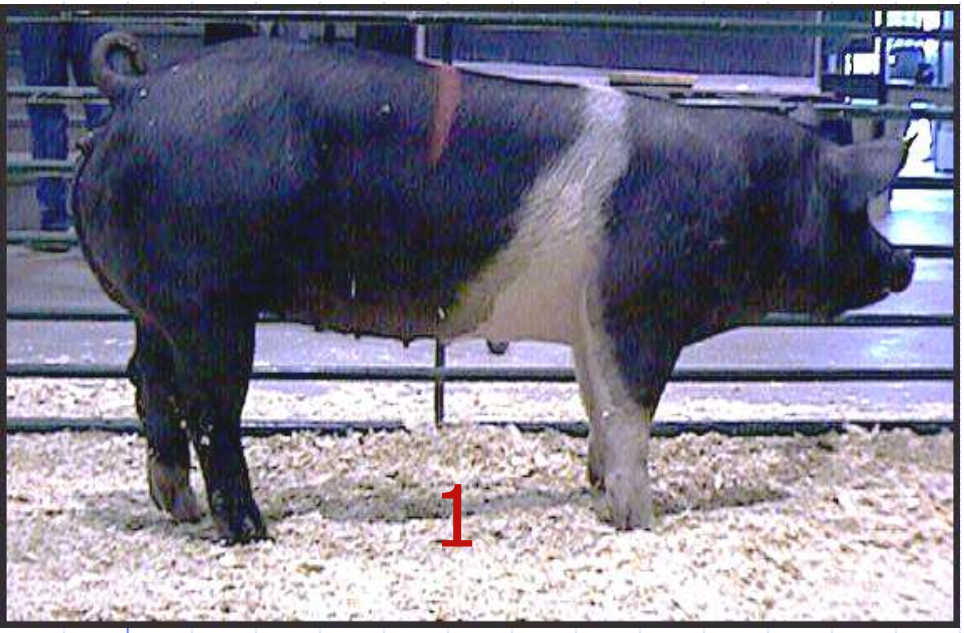
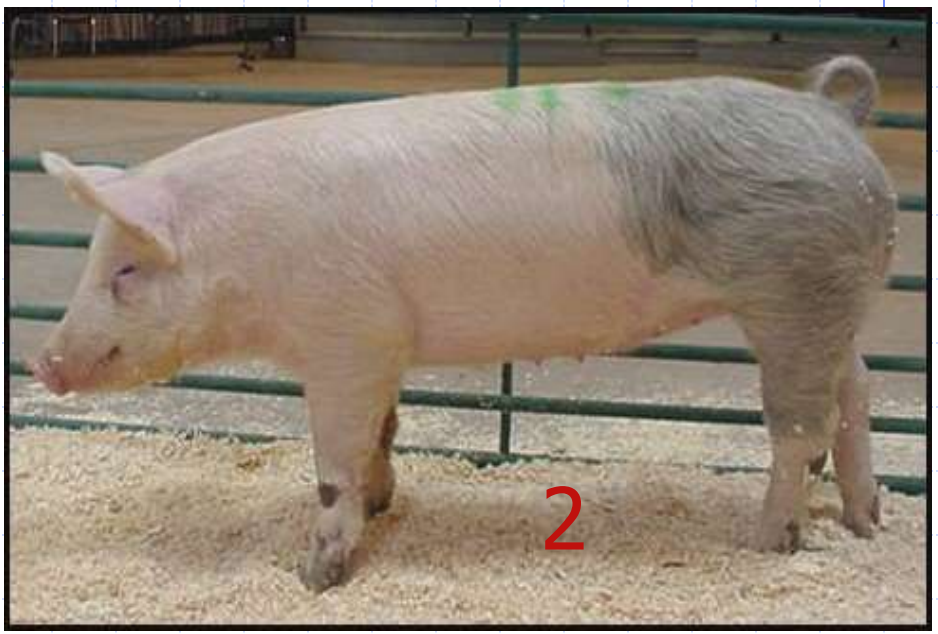
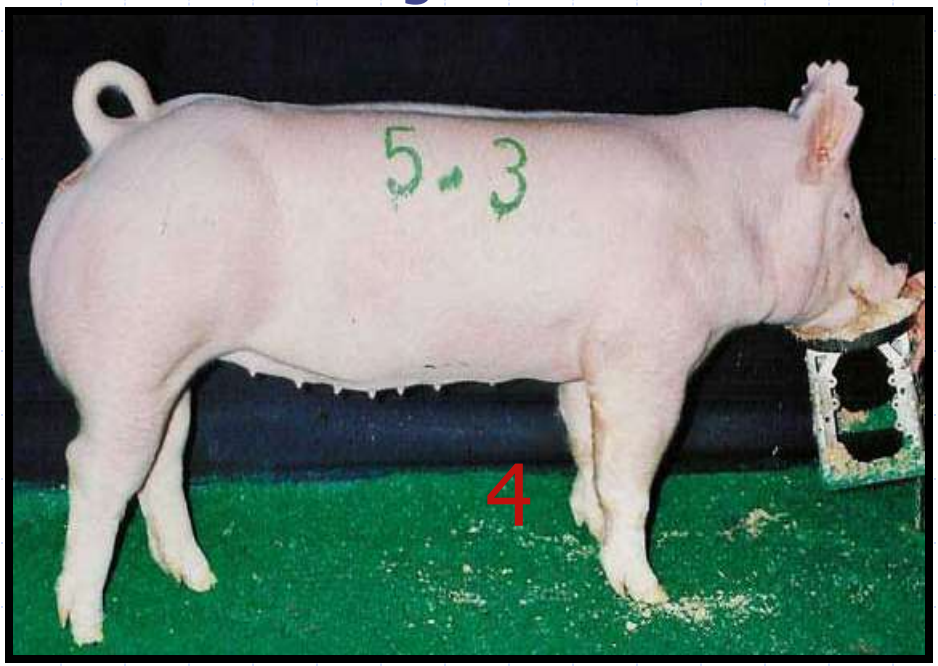
3


5.3
4





Final side profile of market hog class



Judging Hogs

- Mark Your Cards!
- Group Discussion

Judging Hogs

- **Placing**
  4-2-1-3
- **Cuts**
  2-3-7
- **Questions?**

Crossbred Market Hogs

- I placed the crossbred market hogs, 4-2-1-3 and easily started with a stout, powerfully made gilt that dominates the class from a design and muscle standpoint. It's my preference to use the predominantly white gilt over 2 in the initial decision. She's built functionally the widest from the ground up, she's the widest chested, biggest bladed and the boldest shouldered. She is the most pulled apart underneath and has the most correct shape to her rib. Plus she's the tallest fronted and the most nearly level down her top. As a bonus, she works the most product from blade to hip and has the most bulge and flare to her ham. I would expect her to excel the class with the most cut out value. I realize the blue rumped gilt is more extended ahead of her blade. Unfortunately, in comparison to the class winner, she is low in her front and narrow and disappointing from behind.

(Cont.) Crossbred Market Hogs Placing 4-2-1-3 Cuts 2-3-7

- Despite this, it's the big difference in design and structure that sort the litter 2 gilt over 1 in the middle pair. She's taller fronted and more extended ahead of her blade and she comes squarer and leveler out of her hip. As a bonus she appears more athletically driven off both ends of her skeleton because she is set farther back at her blade and knee and has a more correct set to her hock. She's leaner wherever analyzed and should kill with a higher percent of fat free lean. There is no doubt that the hamp appearing gilt is bigger and pounds heavier. But of the initial three, she's the poorest designed and the tightest structured. She is short and low in her front and round and off in her hip.

(Cont.) Crossbred Market Hogs Placing 4-2-1-3 Cuts 2-3-7

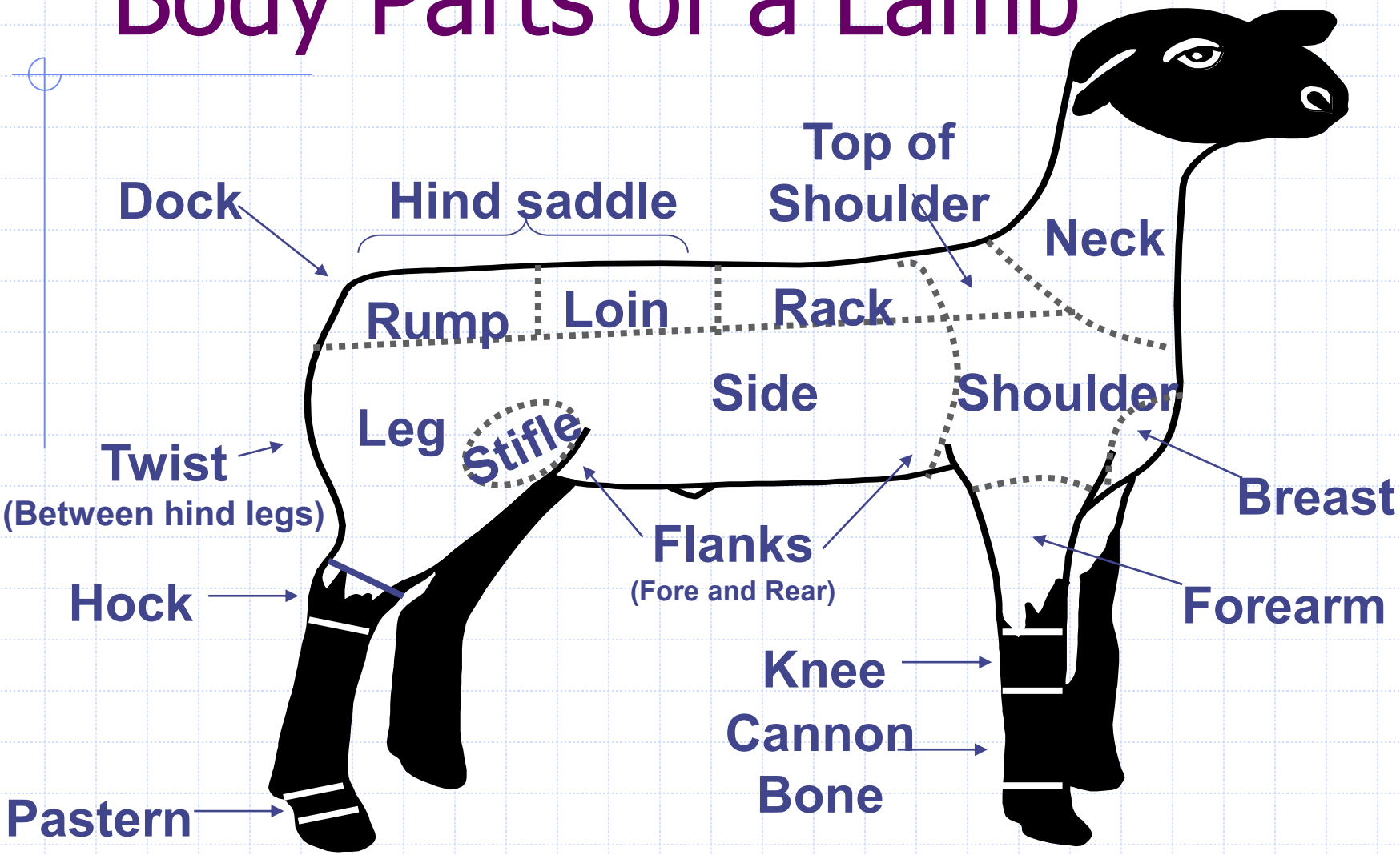
- Regardless, its muscle sorts the bottom pair. The belted gilt is bigger topped and thicker ended. She takes a more muscular turn to her loin edge and is more impressive when viewed from behind. Plus she has a more correct shape to her rib. She should hang a heavier muscled, more shapely carcass.
- The speckled topped, lone barrow is deepest bodied and softest flanked. But in all reality he is the poorest designed and the lightest muscled. The heavy conditioned barrow is plain and shapeless down his top, and he's the most disappointing from behind. Collectively the flat ribbed barrow should end with the least carcass value. Thank you.

Evaluating Lambs!

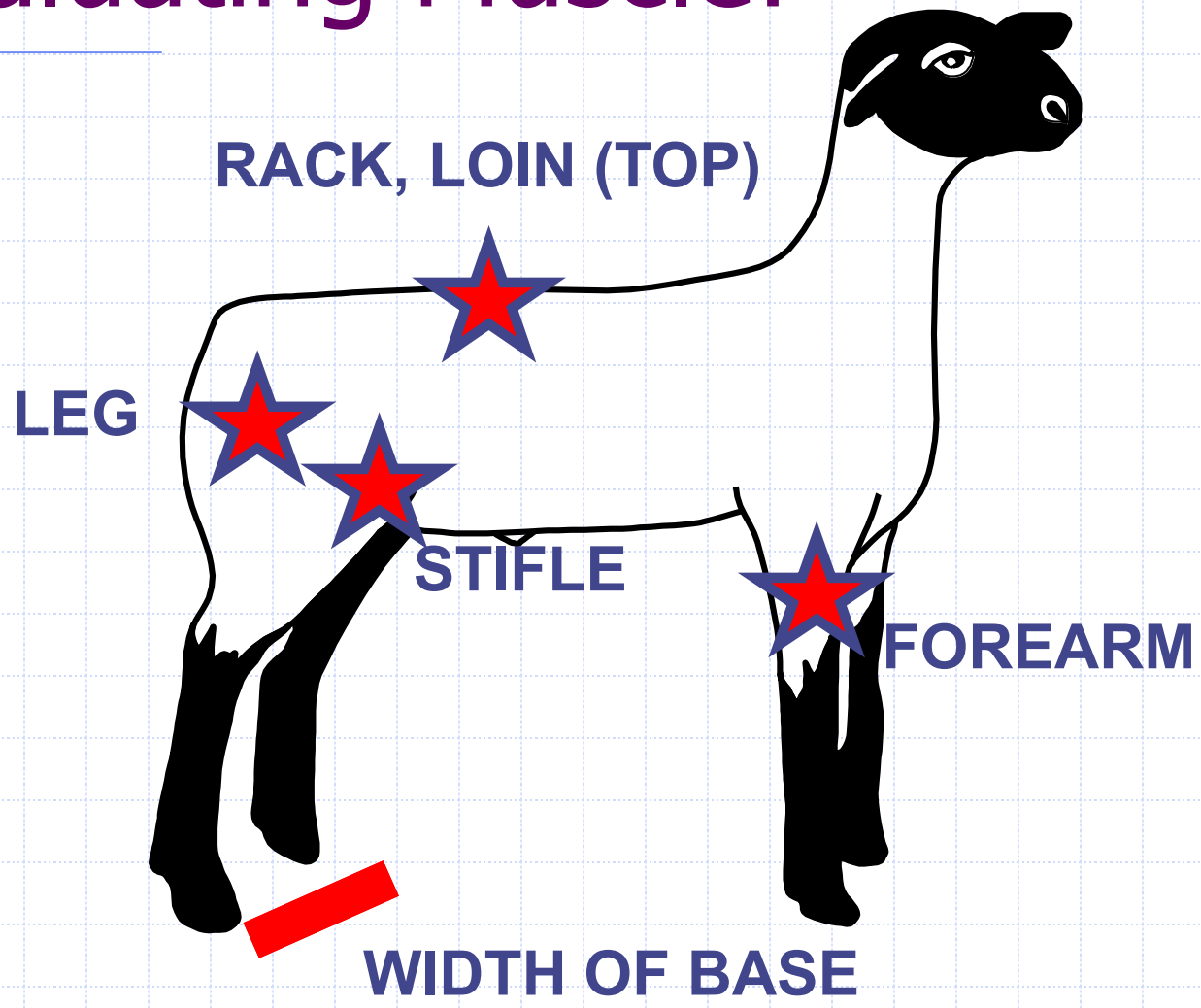
Sheep Industry Goals for Market Lambs

Goal	Target	Range
Age at market	6 – 8 months	6 – 14 months
Live Weight	125 – 140 lbs	115 – 160 lbs
Carcass Weight	65 – 75 lbs	60 – 85 lbs
12^{th} Rib Fat	.20 -.30 inches	.10 - .50 inches
Ribeye Area	2.85 $in.^2$	2.0 – 3.5 $in.^2$
Quality Grade	Choice or higher	Choice– to Prime
Yield Grade	3.0 or less	1.0 to 5.0

Body Parts of a Lamb



Evaluating Muscle!



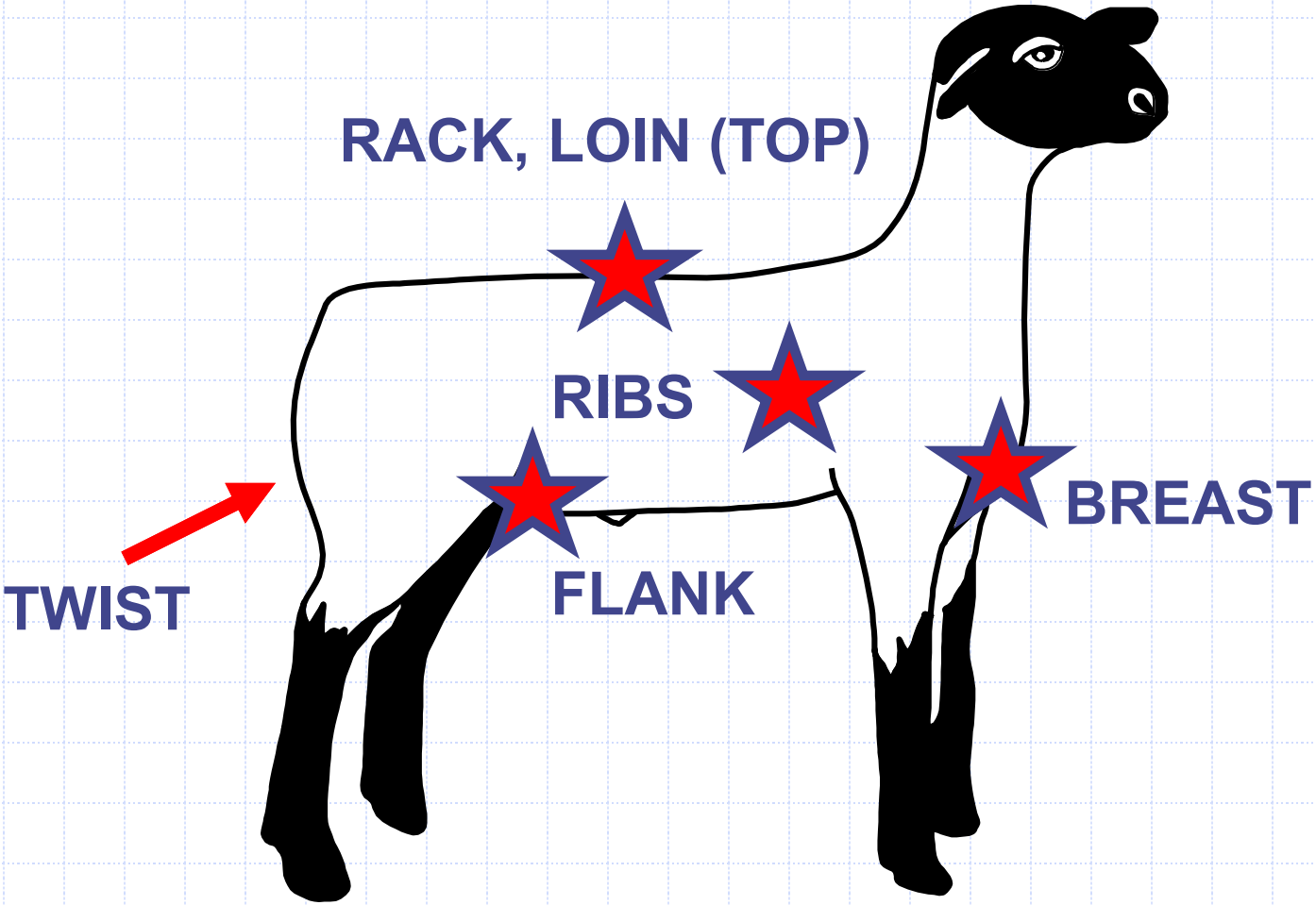
Example of MUSCLE

Heavy muscled

Wide based

Light muscled

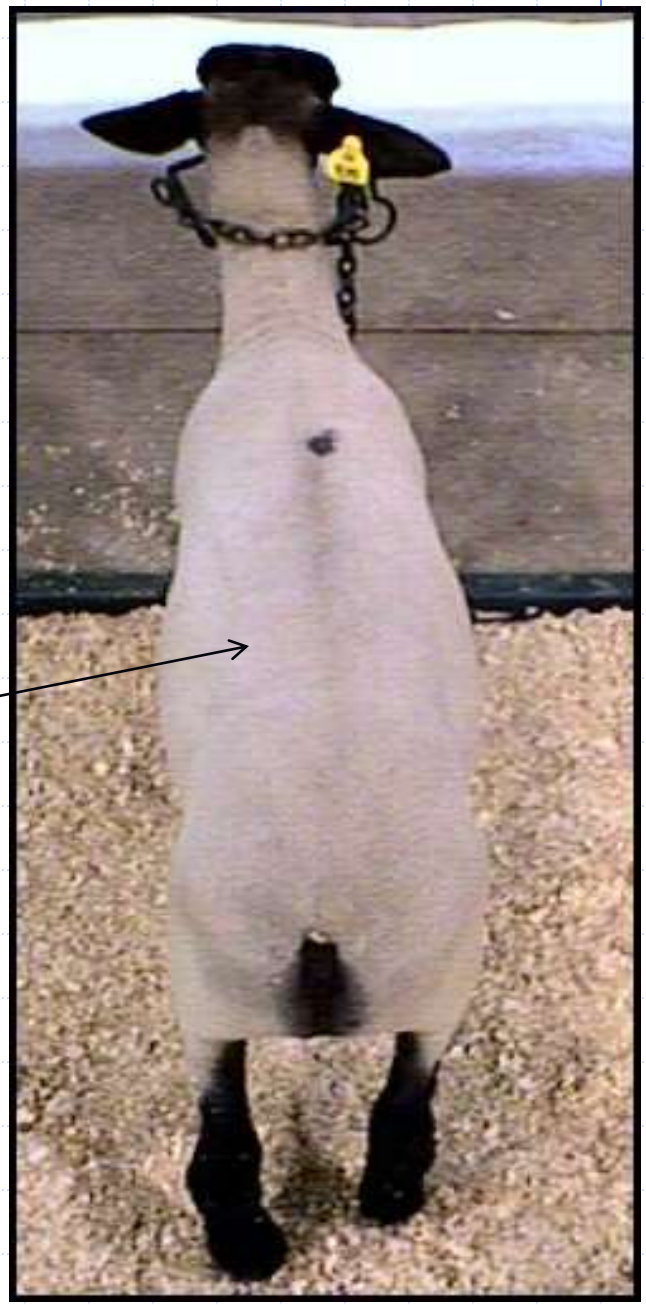
Evaluating Fat!



Example of FAT

Excess fat

Adequate fat

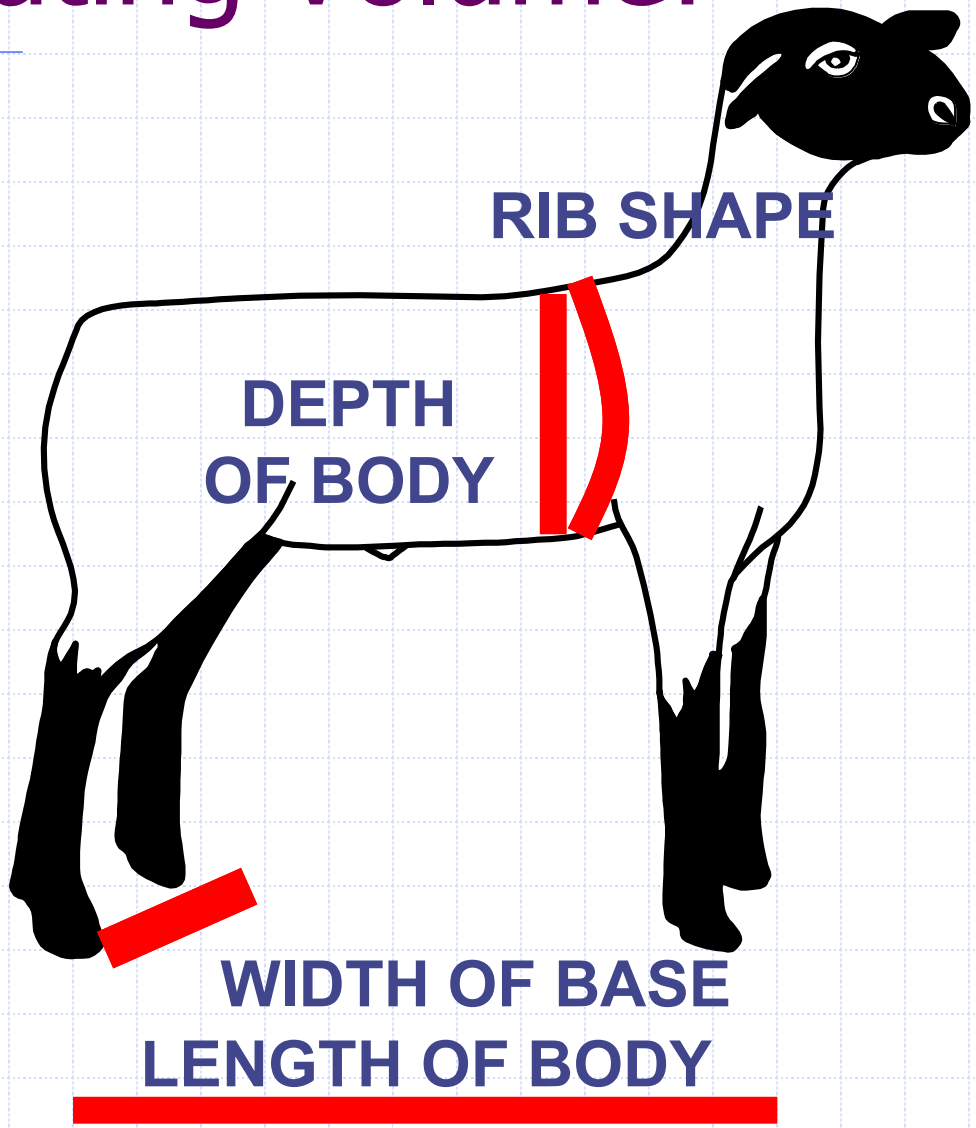


Example of FAT

Adequate fat

Excess fat

Evaluating Volume!

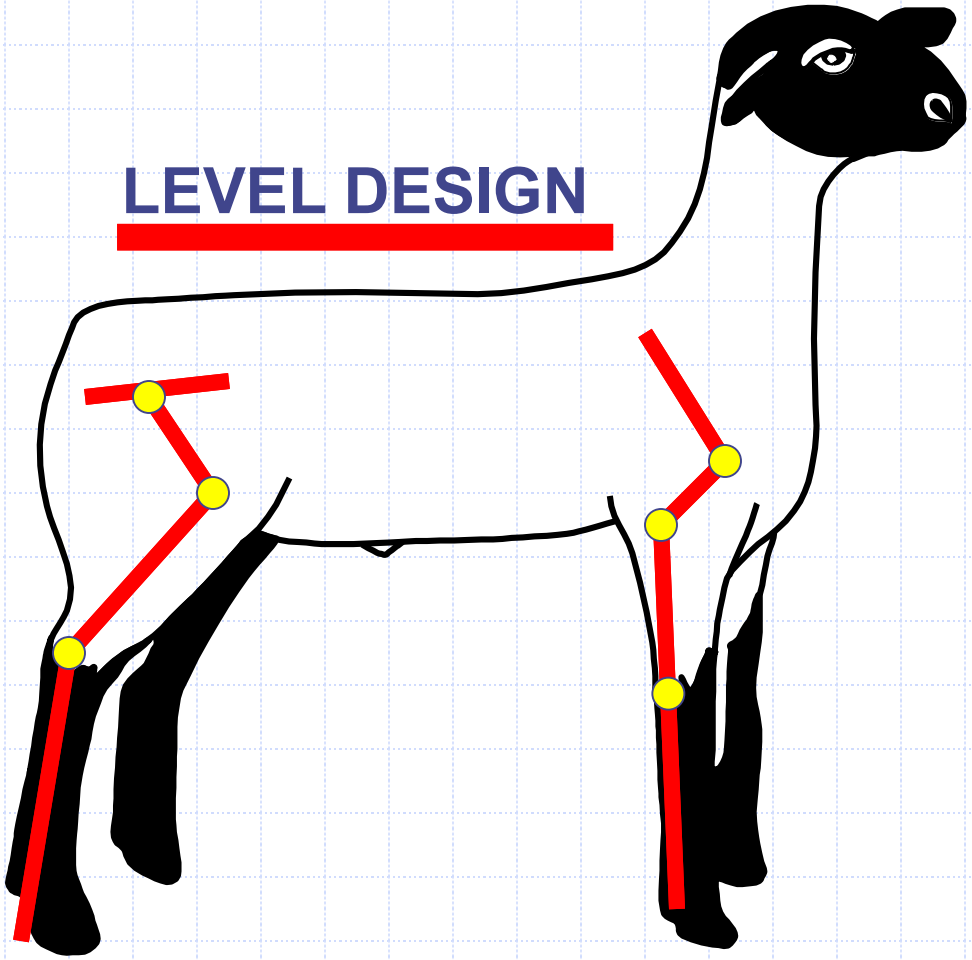


Example of VOLUME

Plenty of Volume – Deep middle and deeper flanked

Lacks Volume – shallow middle, high flank

Evaluating Structure!



Example of STRUCTURE

Uneven top & stands crooked on feet and legs

Level top & stands correct on feet and legs

Example of a “good one”!

Priorities

- Structure
- Muscle
- Balance (eye appeal)
- Condition (fat or lean)
- Volume
- Quality
- Travel (how the animal walks)

Market Lambs

- Determine the priorities for a class of market lambs.
- Place the following class of lambs from best to worst based on the established priorities.

Side profile of market lamb class

1

2

3

4

Rear view of market lamb class

1

2

3

4

1

2

3

4

1

2

Final rear view of market lamb class

3

4

Final side profile of market lamb class

Judging Sheep

- Mark Your Cards!
- Group Discussion

Judging Sheep

- **Placing**
  1-3-4-2
- **Cuts**
  3-2-7
- **Questions?**

Crossbred Market Lambs

- I placed the crossbred market lambs 1-3-4-2 and easily started with a tight hided, wedge made ewe that dominates the class from a muscle and balance standpoint. The brown hided ewe is the most correct through her front one third because she is the tallest fronted, thinnest necked and flattest shouldered. Plus she has the most shape to her rack and width to her loin. As a bonus she is the biggest hipped and the thickest ended. She should end with the most rack, loin, and leg. I realize the shoulder scarred wether is bigger footed and stouter featured, but in comparison to the class winner he is deep in his breast, short bodied and he's off in his hip.
- However it's his glaring advantage in muscle that places him over 4 in the middle pair. He is bigger topped and thicker ended. He is fresher and flatter over his loin and comes squarer and fuller to his dock. As a bonus he is more impressive when viewed from behind because he has more shape to his lower leg. He should hang a heavier muscled carcass with a higher percent of hind saddle.

(Cont.) Crossbred Market Lambs
Placing 1-3-4-2
Cuts 3-3-7

- There is no doubt that the blue hided wether is trimmer appearing and has more shape to his rack. But of the initial three, he is rough over his loin edges, is narrow and off in his hip, and hocks in and toes out when viewed from behind. Despite this, muscle and balance place him over 2 in the bottom pair. He has more shape and dimension down his top, rolls a larger loin eye, and comes squarer to his dock. He should hang a heavier muscled, more shapely carcass.
- I realize the scar nosed wether is longer bodied and he's the trimmest of any. But unfortunately he is too stale and wrung out. He is narrow and off in his hip and disappointing when viewed from behind. Collectively the bad legged wether should end the bluest carcass and the most cooler shrink. Thank you.

Sharpen Your Livestock Evaluation

- This presentation can also be used as a tool with all livestock judging enthusiasts. Use the pictures and animals as you see fit. The oral reasons examples are collegiate level. This presentation can be adapted to meet the needs of any audience.

Livestock Evaluation

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