From the ground up…The basics of livestock judging

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Iowa State University Livestock Judging

Livestock Judging???

- Livestock judging is the evaluation of an animal's characteristics and making a comparison to other animals and the ideal standard of that particular class
- After evaluating each animal individually, a ranking is assigned to that class

Livestock Judging???

- A typical contest class consists of four animals, these animals shall be numbered 1 through 4
- Animals that are loose in a pen will have numbers on the animal
- Animals in a stanchion or haltered will be number from left to right when viewing them from behind

Why Livestock Judging???

- Enhances decision making capabilities and provides the opportunity to defend those decisions through oral reasons
- Oral reasons provide the framework for public speaking skills
- Builds character, integrity, and honesty
- Network with other individuals and producers who share similar interests

Why Livestock Judging???

- “Judging instills confidence in those people who may be timid and humbles those who tend to be conceited.”

-Harlan Ritchie

Livestock Judging???

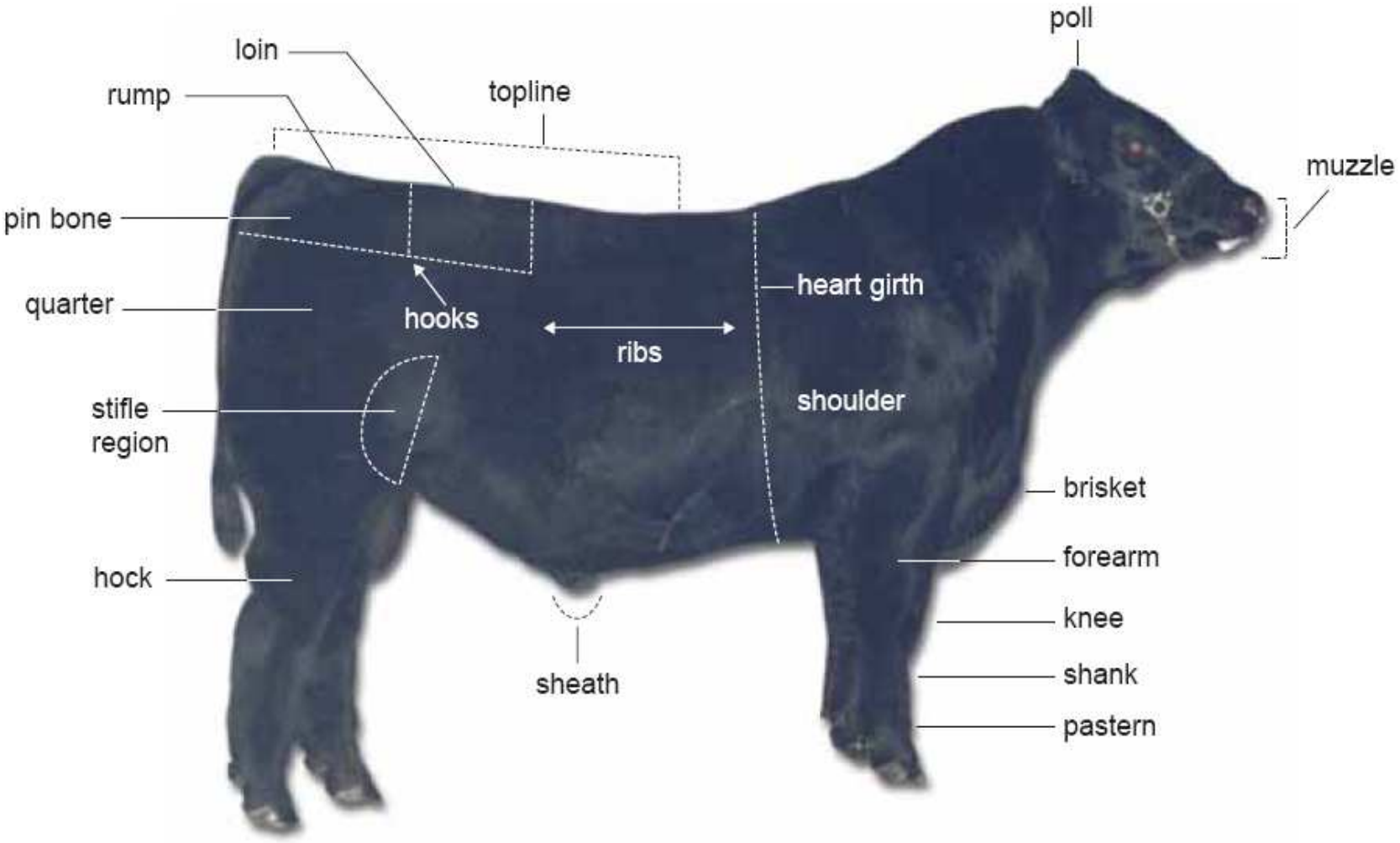
- A livestock judge should always remember that each class is officiated in a subjective manner, however to be the most effective one should judge objectively

How to…Judge Livestock

- The majority of livestock judging competitions will consists of classes from the following: breeding and market cattle, breeding and market sheep, breeding and market hogs.
- To be successful a judge must understand the anatomy of each particular animal and being able to apply that to the animals intended function

Cattle

- Market
- Breeding
  - Bulls
  - Heifers


poll
loin
rump
topline
muzzle
pin bone
quarter
hooks
heart girth
ribs
stifle
region
shoulder
brisket
forearm
hock
knee
sheath
shank
pastern

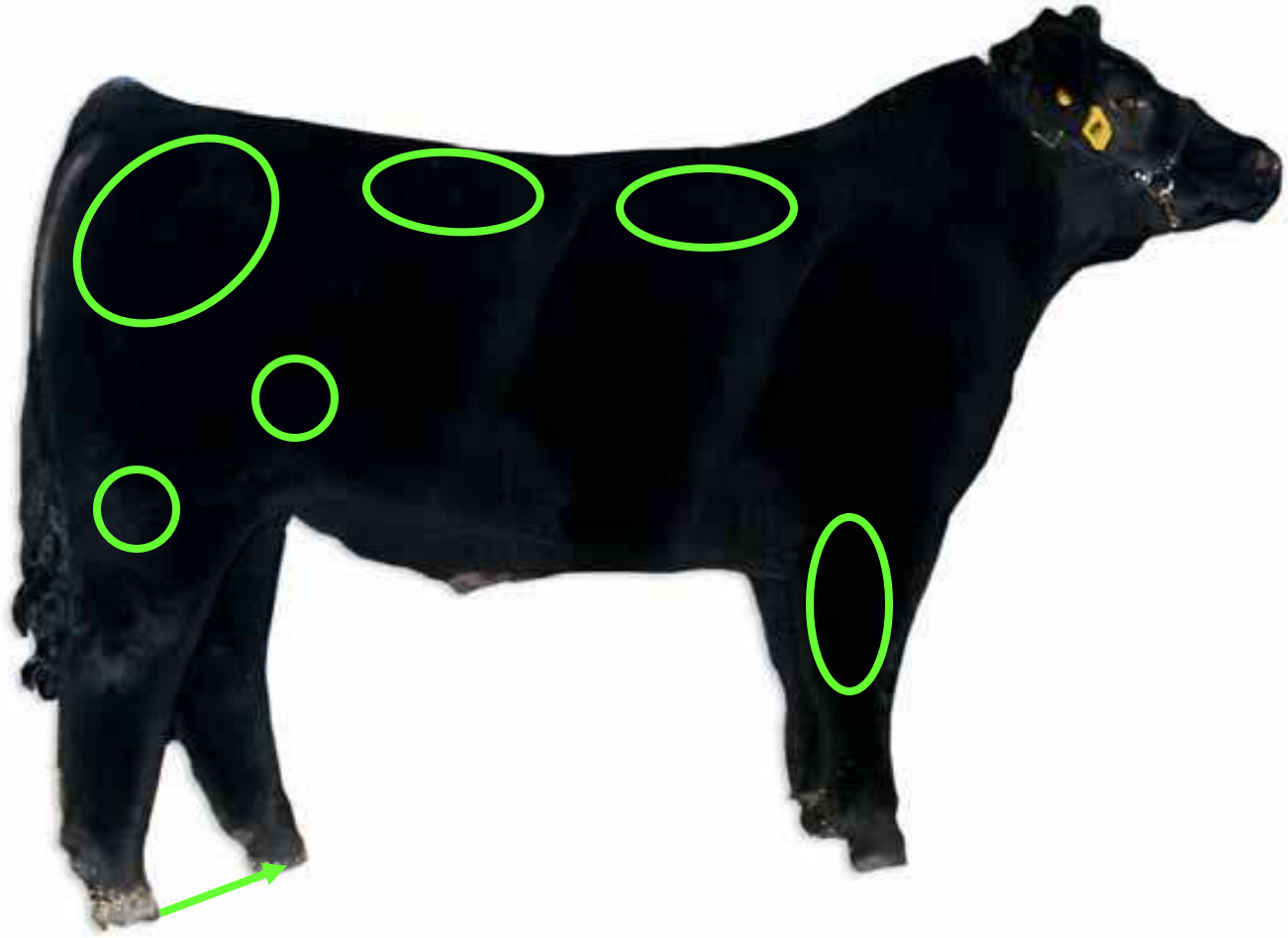
Market Cattle

- Priorities
  - Muscle
  - Correctness of Finish
  - Structure and Movement
  - Rib and Feeding Ability
  - Balance and Eye Appeal

Market Cattle

- Muscle Indicators
  - Forearm
  - Rib
  - Loin
  - Hip
  - Stifle
  - Quarter
  - Base Width

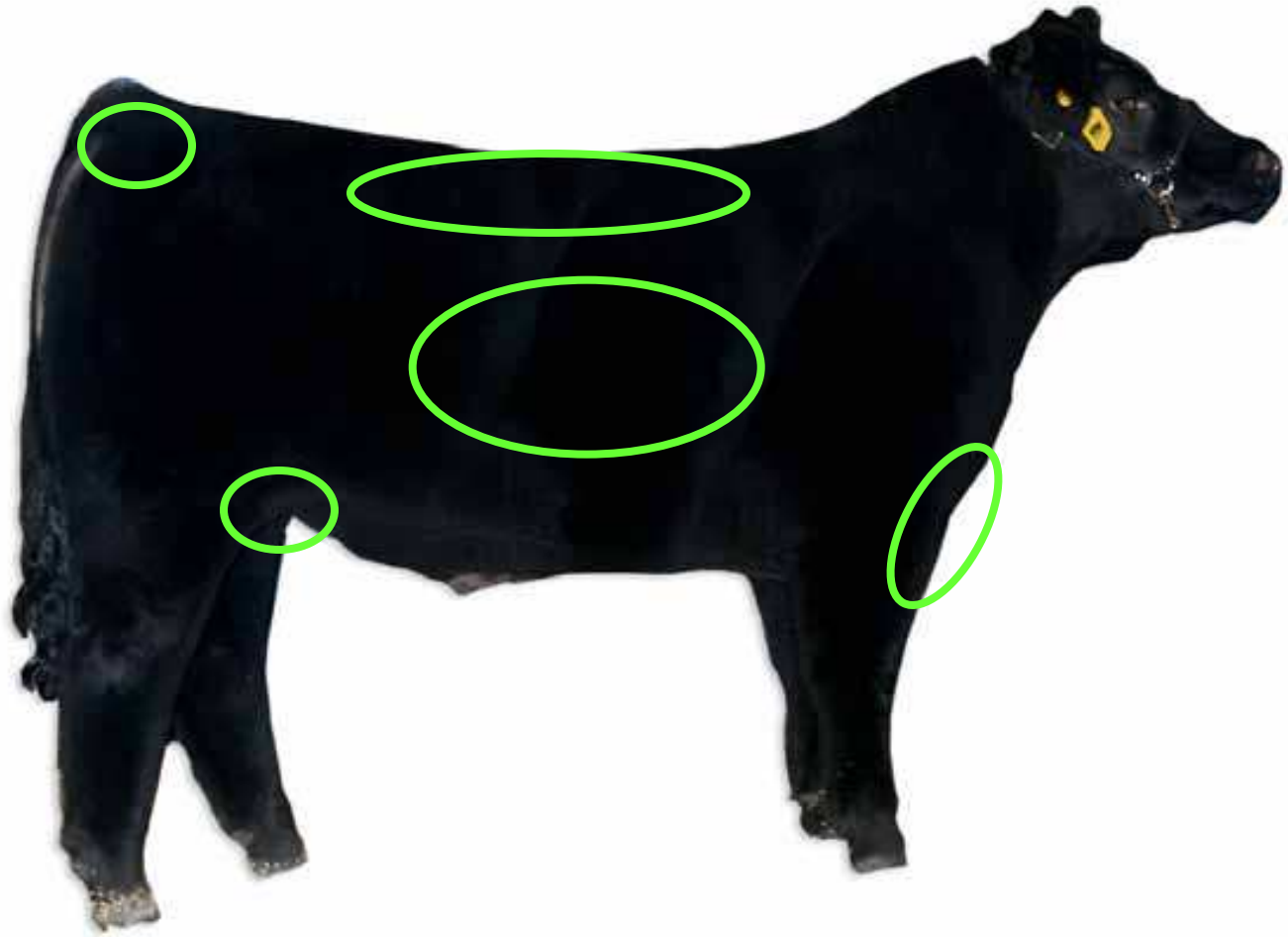
Market Cattle



Market Cattle

- Finish Indicators
  - Brisket
  - Down Top
  - Over Ribs
  - Around Tailhead
  - Drop to flank
  - Cod fat

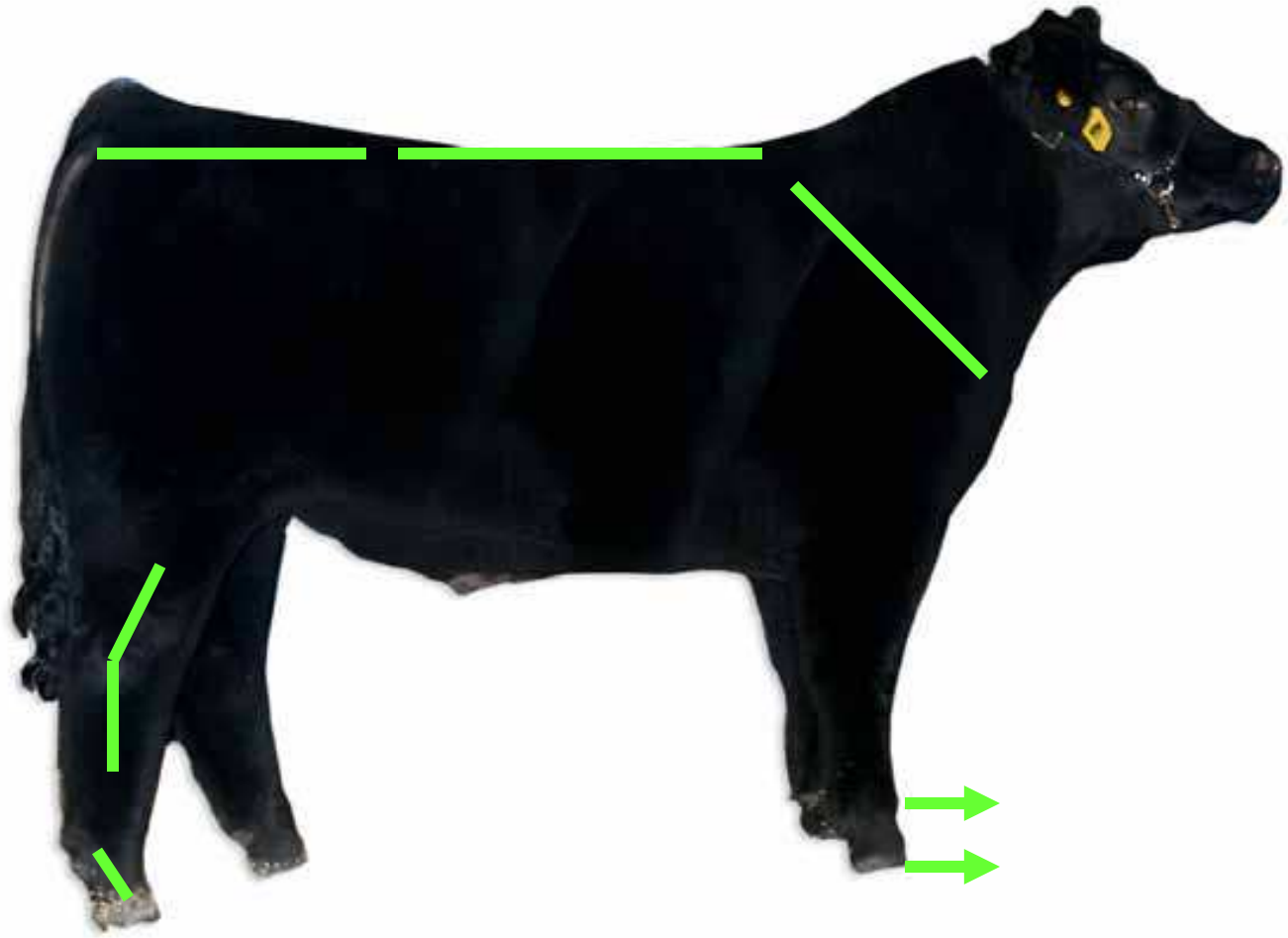
Market Cattle



Market Cattle

- Evaluating Structure
  - Front foot alignment
  - Shoulder angle
  - Strength of topline
  - Levelness and length of hip
  - Set to hock
  - Set to pastern
  - Heaviness of structure

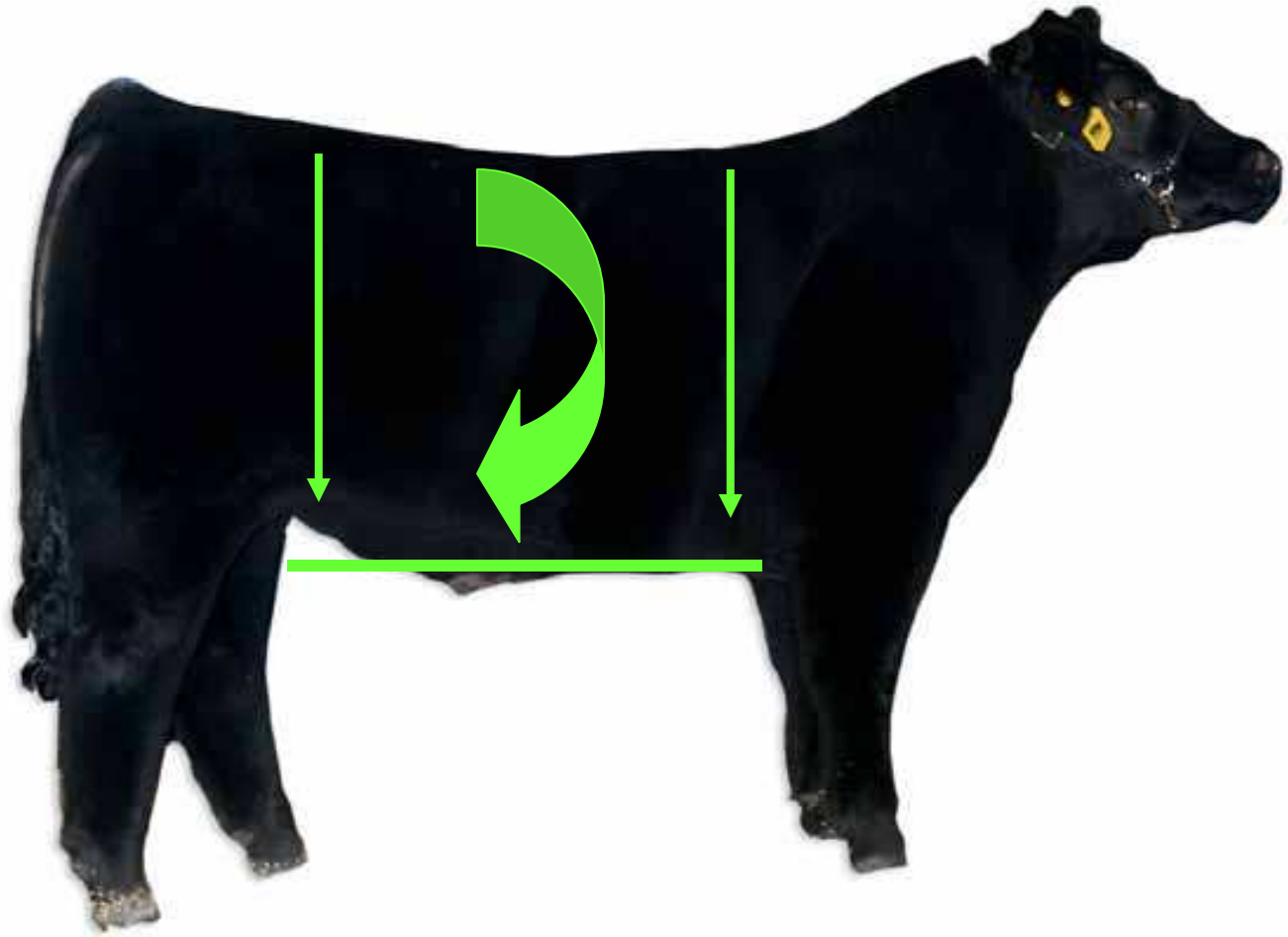
Market Cattle



Market Cattle

- Evaluating Rib/Feeding Ability
  - Steers should possess dimension to their skeleton in terms of chest width and center body shape to ensure efficiency in a feedlot setting and the ability to deposit finish
    - Width of chest
    - Depth of body
    - Rib Shape
    - Uniformity of body depth

Market Cattle



Market Cattle

- Evaluating Balance and Eye Appeal
  - The proportionalism of the animal
  - How well the animal's parts fit together
    - Length of neck
    - Levelness of topline and hip
    - Smooth pattern
    - General attractiveness

Market Cattle

Breeding Cattle

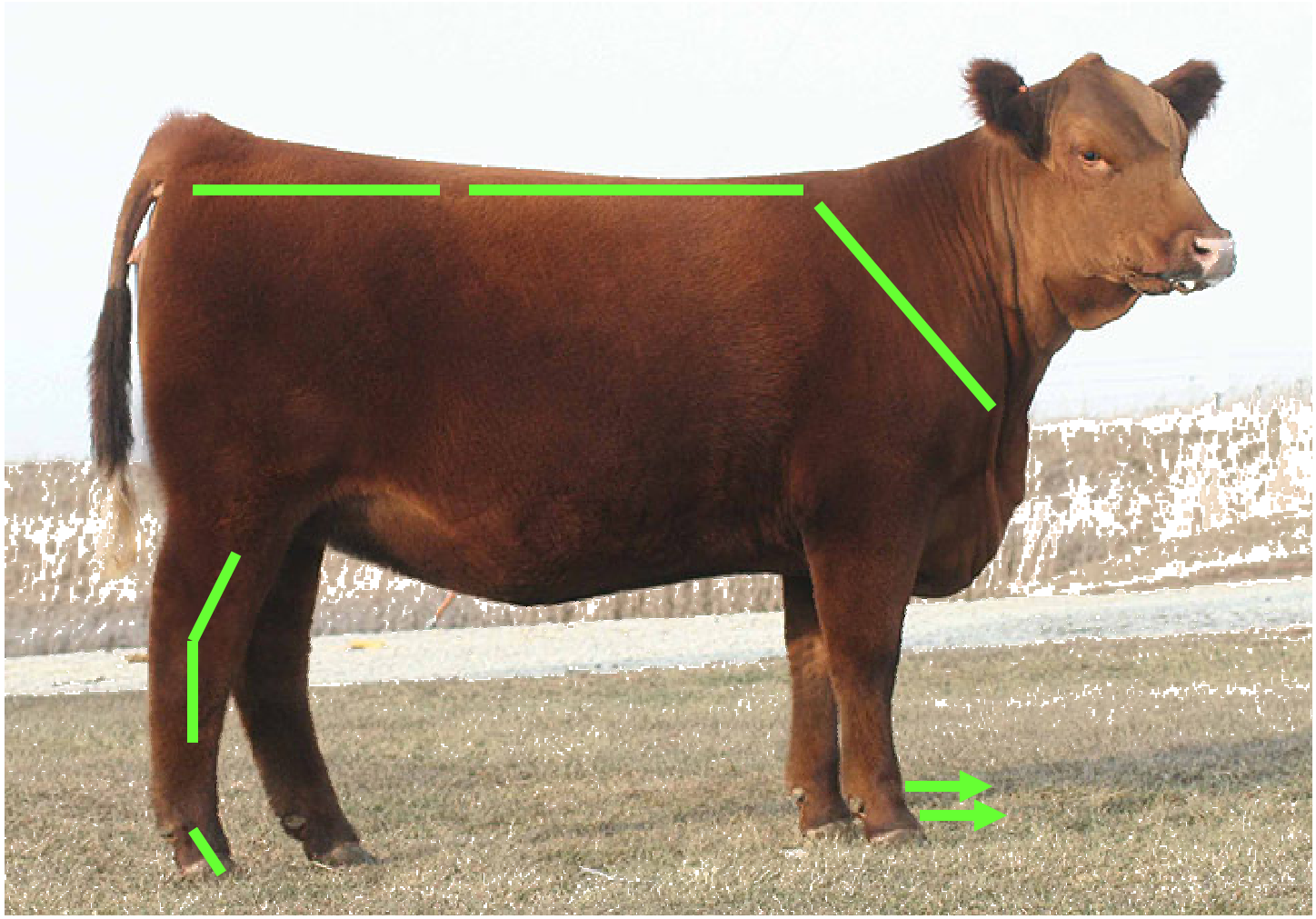
Breeding Cattle

- Priorities
  - Functionality
  - Growth Performance
  - Balance and Eye Appeal
  - Muscle
  - Femininity/Masculinity

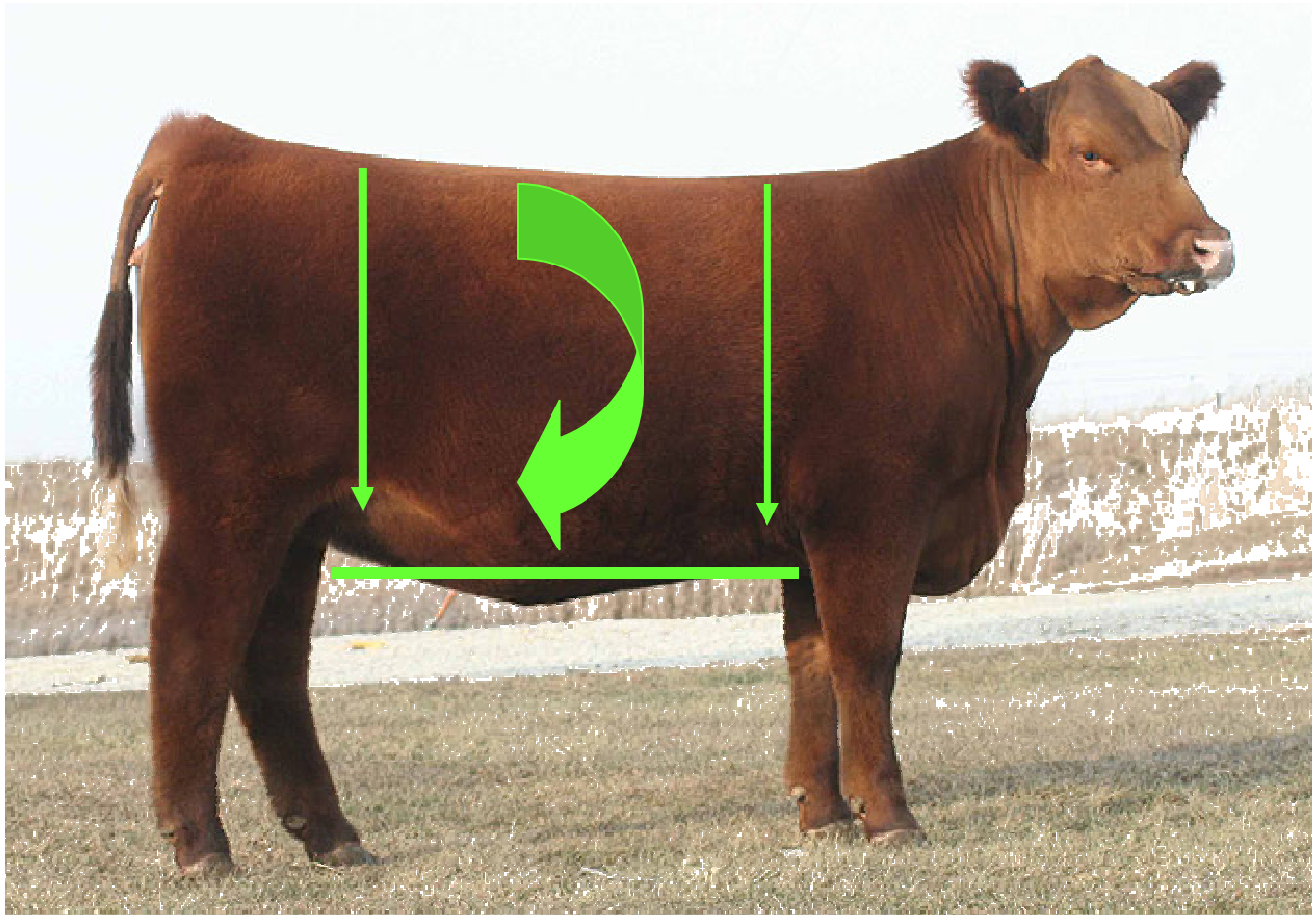
Breeding Cattle

- Defining Functionality
  - Structural Correctness
  - Optimal Rib Shape Design
    - Depth of rib
    - Spring and shape of rib

Breeding Cattle



Breeding Cattle



Breeding Cattle

- Defining Growth Performance
  - As a livestock judge it is imperative to understand the marketing venue widely utilized by cattle producers…cattle are sold on per pound basis
  - It is important to select cattle that have the ability to gain weight while possessing an optimal frame size to limit mature weight and maintenance costs

Breeding Cattle

- Defining Growth Performance
  - Length of face
  - Length of cannon
  - Length of body
  - Weight of animal

Breeding Cattle

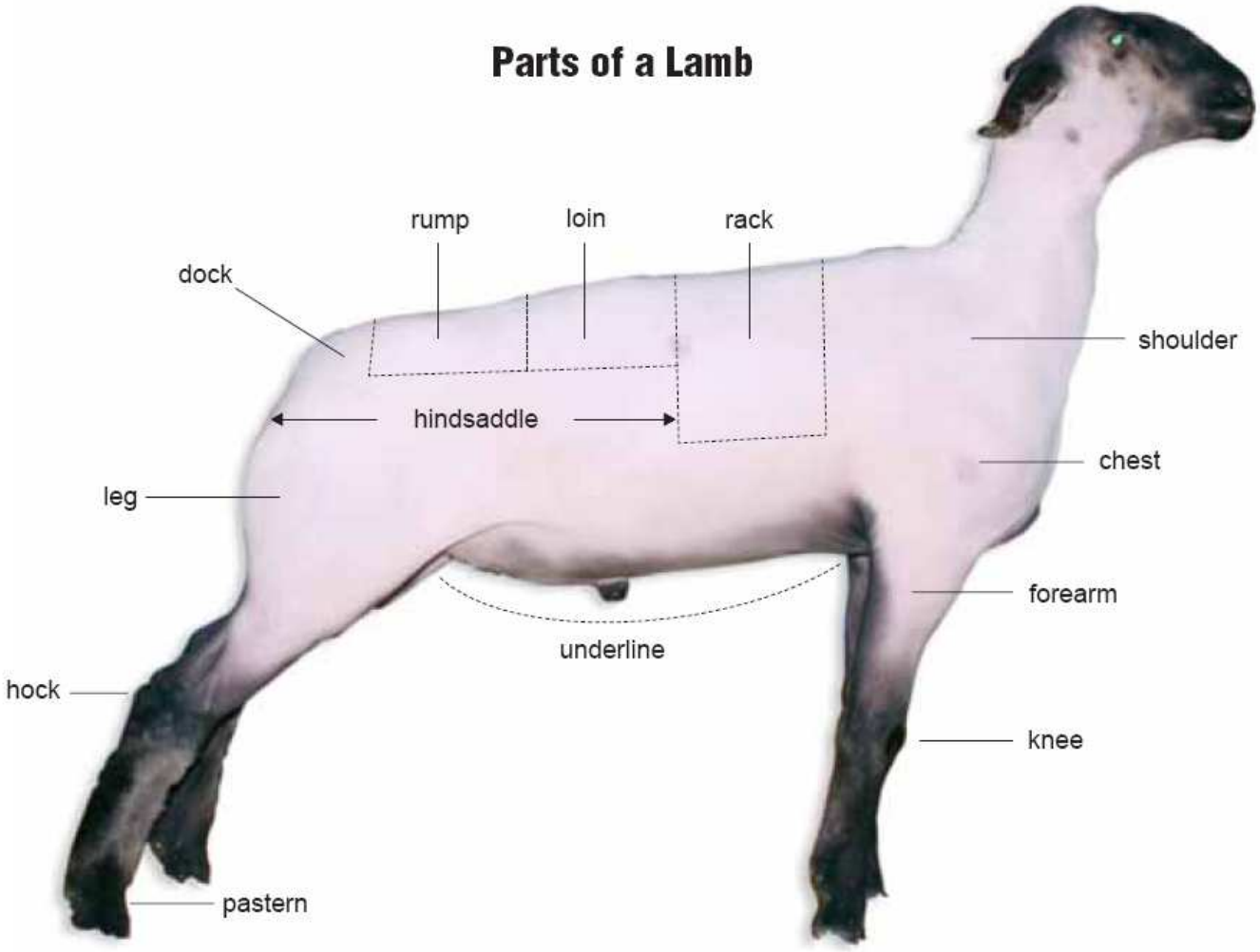
- Defining Balance and Eye Appeal
  - Similar as in market steers
  - “Proportional”
  - Emphasis in heifers on attractiveness and and refinement through the head, neck, and shoulders

Breeding Cattle

- Defining Muscle
  - Muscle is of importance in breeding cattle but less of a priority relative to market animals
  - In heifers, it is important to select for cattle that are not excessive in their degree of muscling

Sheep

- Market
- Breeding
  - Rams
  - Ewes


Parts of a Lamb
rump
loin
rack
dock
shoulder
hindsaddle
chest
leg
forearm
underline
hock
knee
pastern

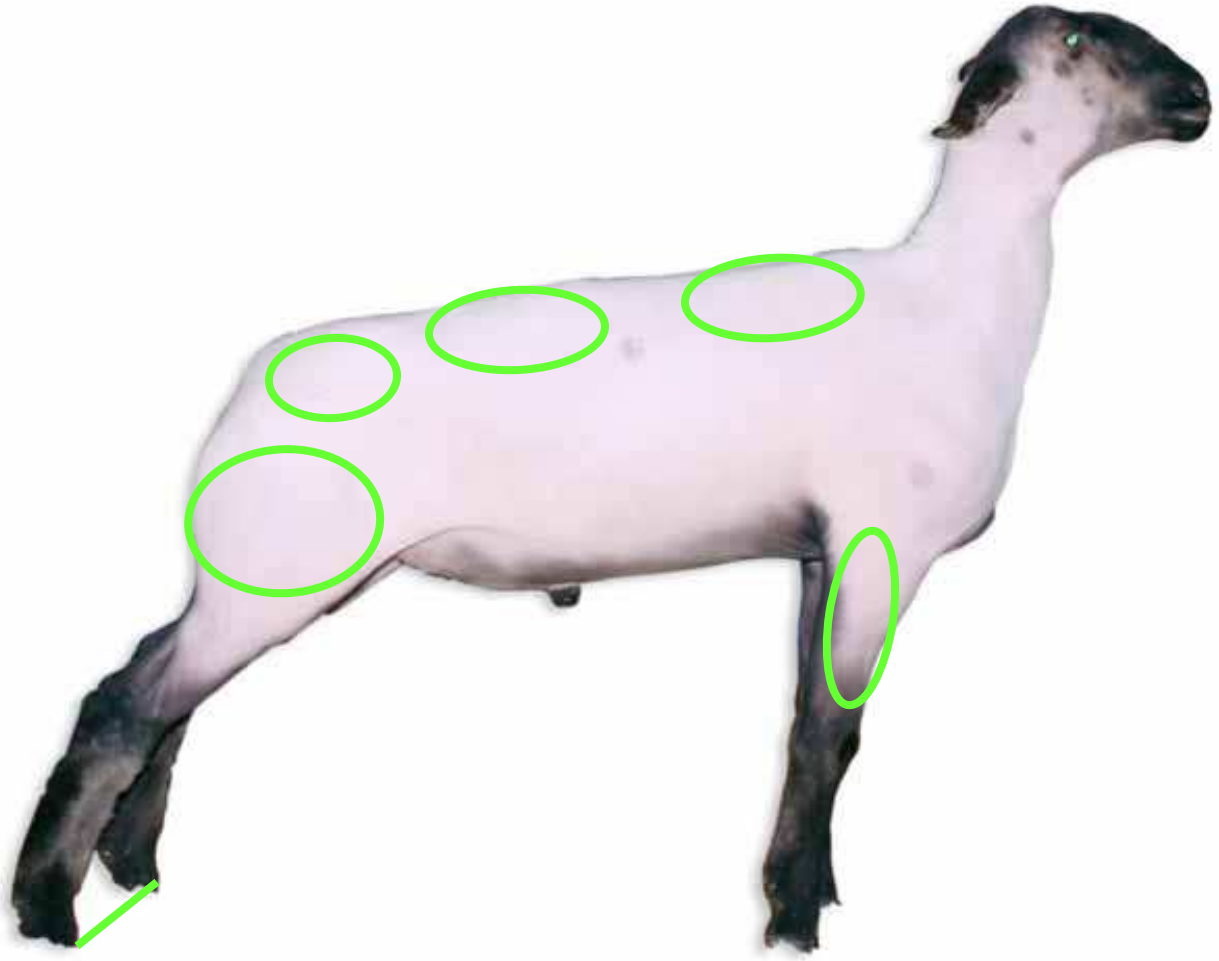
Market Lambs

- Priorities
  - Muscle
  - Correctness of finish
  - Growth/Weight
  - Skeletal Correctness
  - Balance and Eye Appeal

Market Lambs

- Muscle Indicators
  - Forearm
  - Rack
  - Loin
  - Hip
  - Leg
  - Base Width

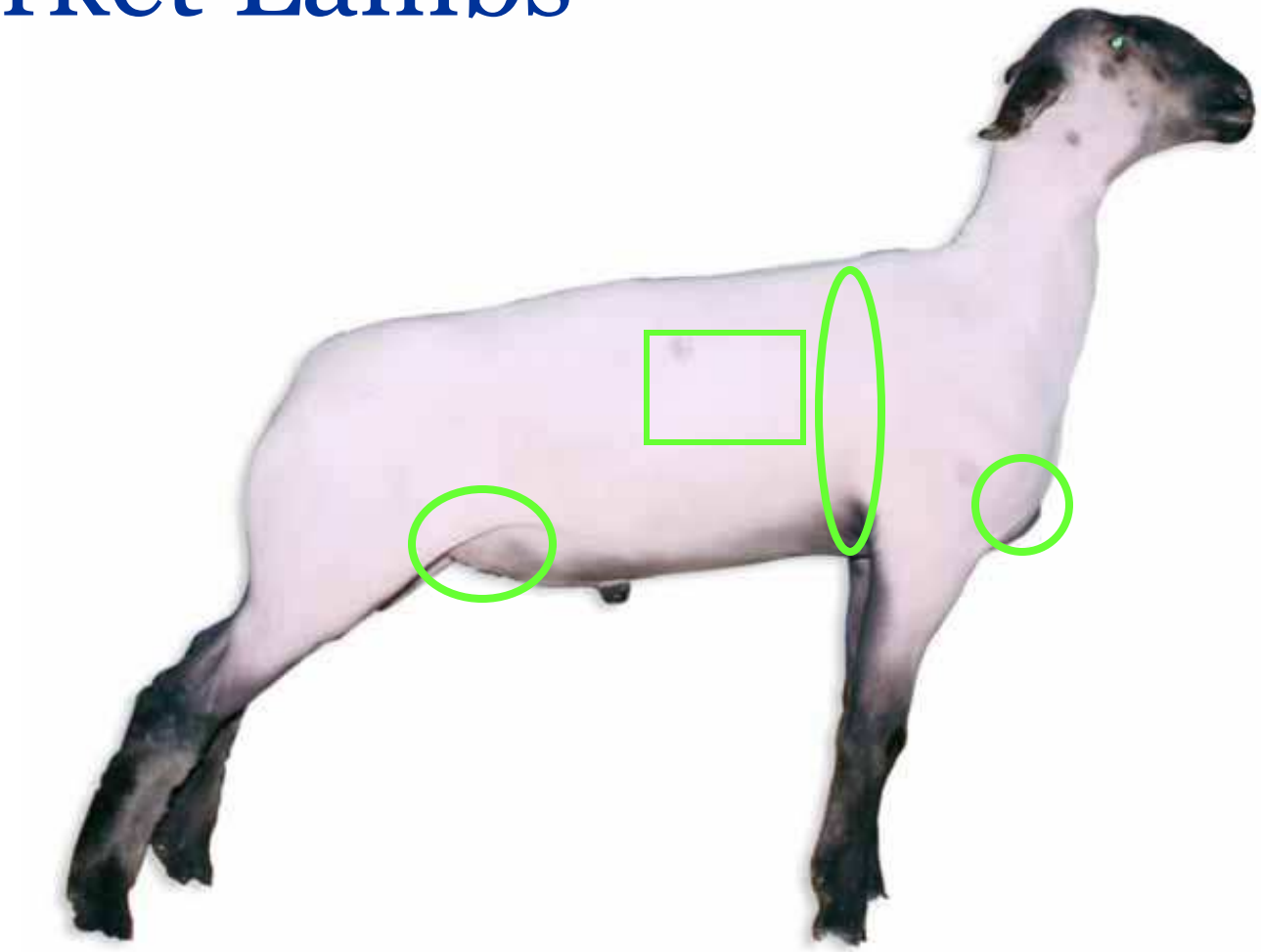
Market Lambs



Market Lambs

- Finish Indicators
  - Breast/Chest Plate
  - Forerib
  - Over Ribs
  - Flank
  - Twist

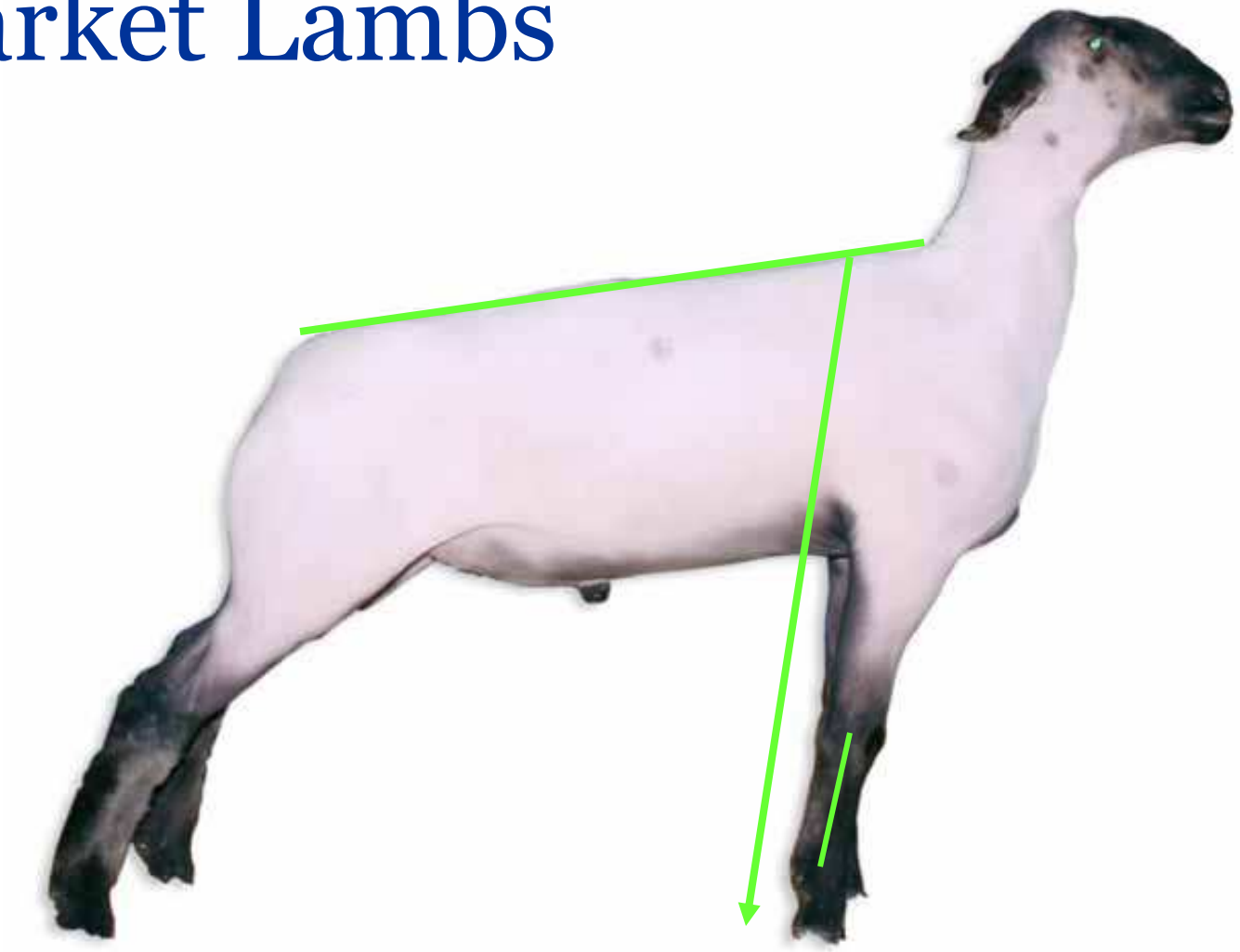
Market Lambs



Market Lambs

- Growth Indicators
  - Length of cannon bone
  - Height at top of shoulders
  - Length of body
  - Weight

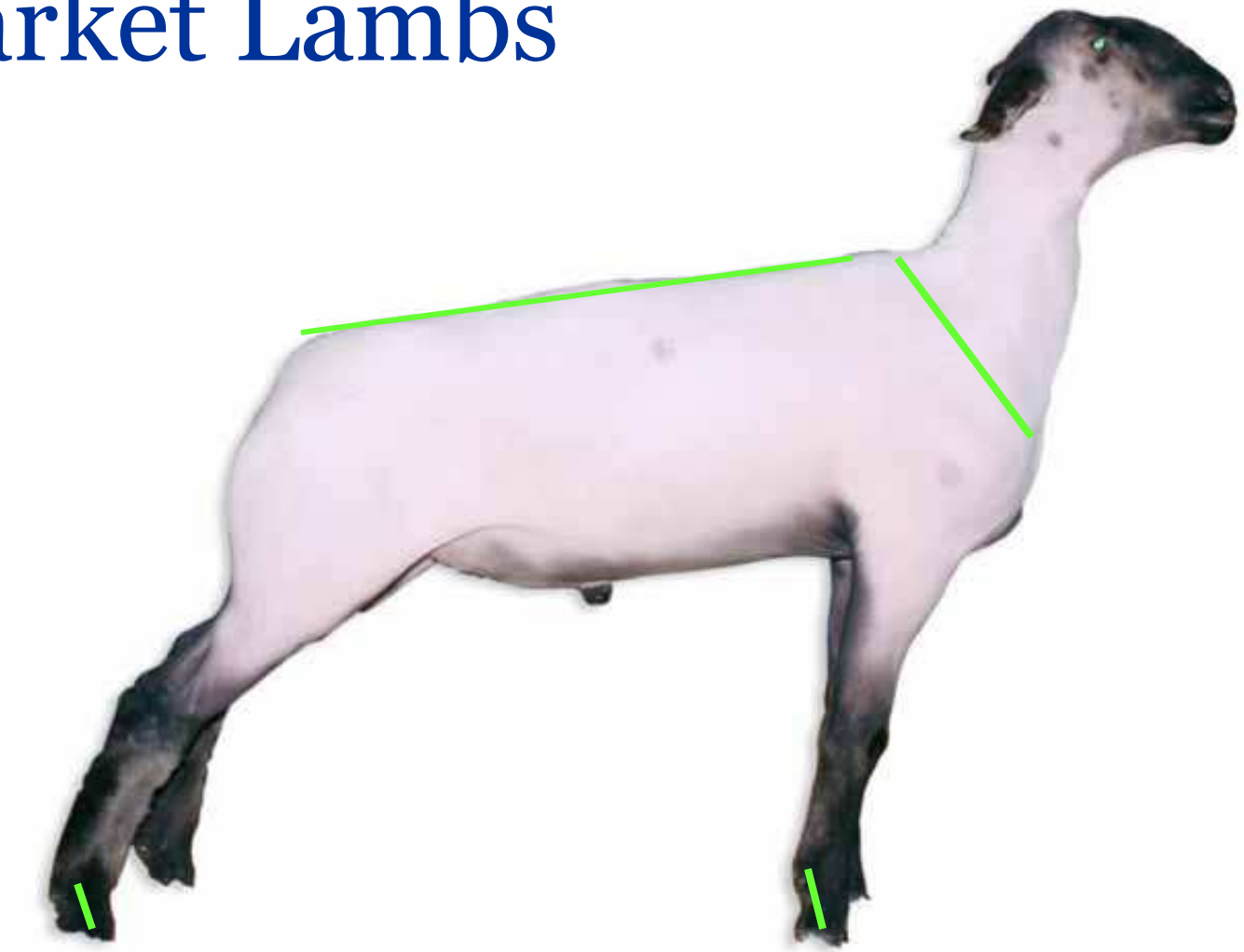
Market Lambs



Market Lambs

- Skeletal Correctness
  - Proper angle to shoulder and knee
  - Appropriate set to pastern
  - Levelness of top and dock set
  - Square set from hock to ground from behind
  - Heaviness of structure

Market Lambs



Market Lambs

- Balance and Eye Appeal
  - Similar to other species
  - “Proportionalism”
  - Trim chested
  - Length and smoothness of front end
  - Level topline and square hip
  - Attractive rib design

Breeding Sheep

- Priorities
  - Growth and Performance
  - Functionality
  - Balance and Eye Appeal
  - Muscle

Breeding Sheep

- Growth and Performance
  - A extremely important factor
  - Ability to offer future growth
  - Length of cannon bone and face
  - Length of body

Breeding Sheep

- Functionality
  - Similar to breeding cattle
  - Rib
  - Structural correctness
    - Pasterns
    - Length of stride

Breeding Sheep

- Balance and Eye Appeal
  - “Proportionalism”
  - Length and smoothness of front end
  - Cleanliness thru shoulder and chest
  - Levelness of topline and hip

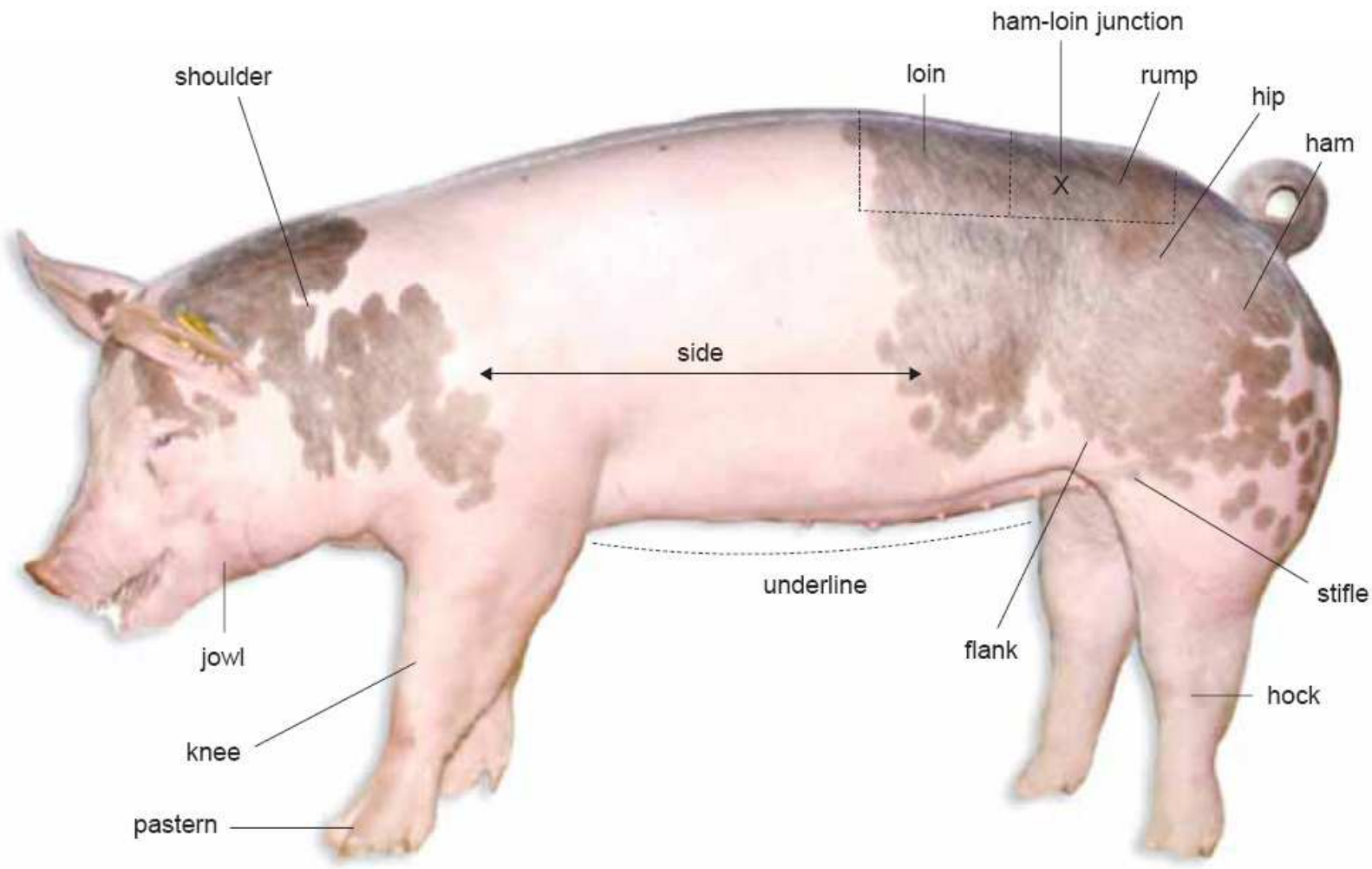
Breeding Sheep

- Muscle
  - Indicators will be similar to market lamb evaluation
  - Excessive musculature should be avoided

Swine

- Market Hogs
- Breeding
  - Gilts
  - Boars

Parts of a Swine



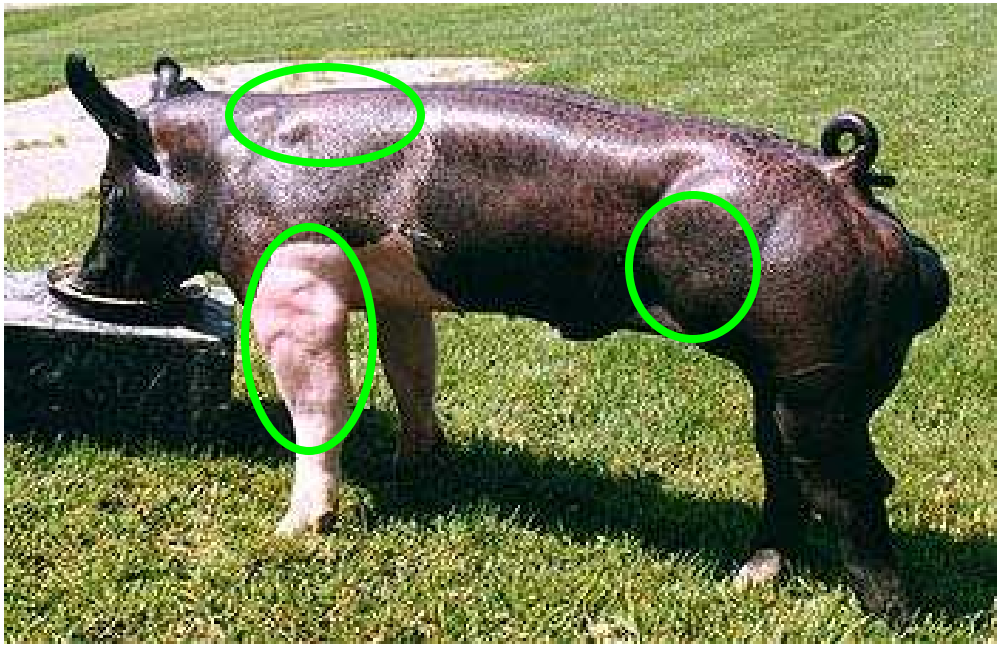
Market Hogs

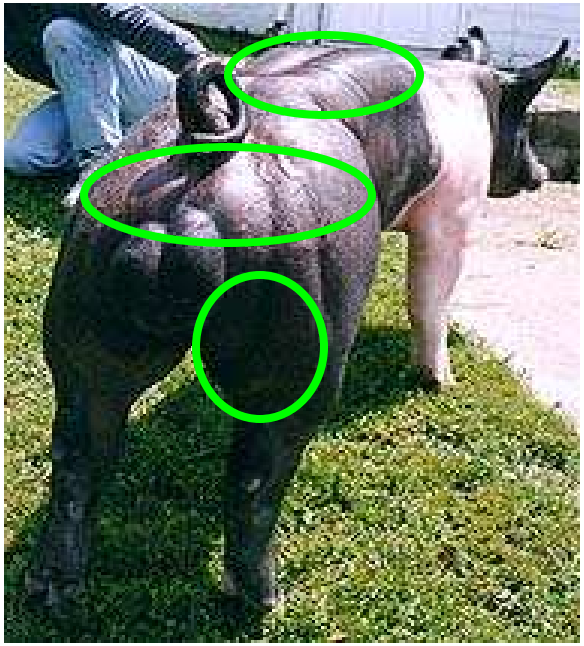
- Priorities
  - Muscle Content
  - Lean Growth
  - Skeletal Width and Dimension
  - Structural Correctness
  - Balance and Eye Appeal

Market Hogs

- Muscle Content
  - Forearm
  - Blades
  - Loin- LMA of 6.5 sq. in.
  - Ham-Loin Junction
  - Hip
  - Stifle
  - Ham

Market Hogs

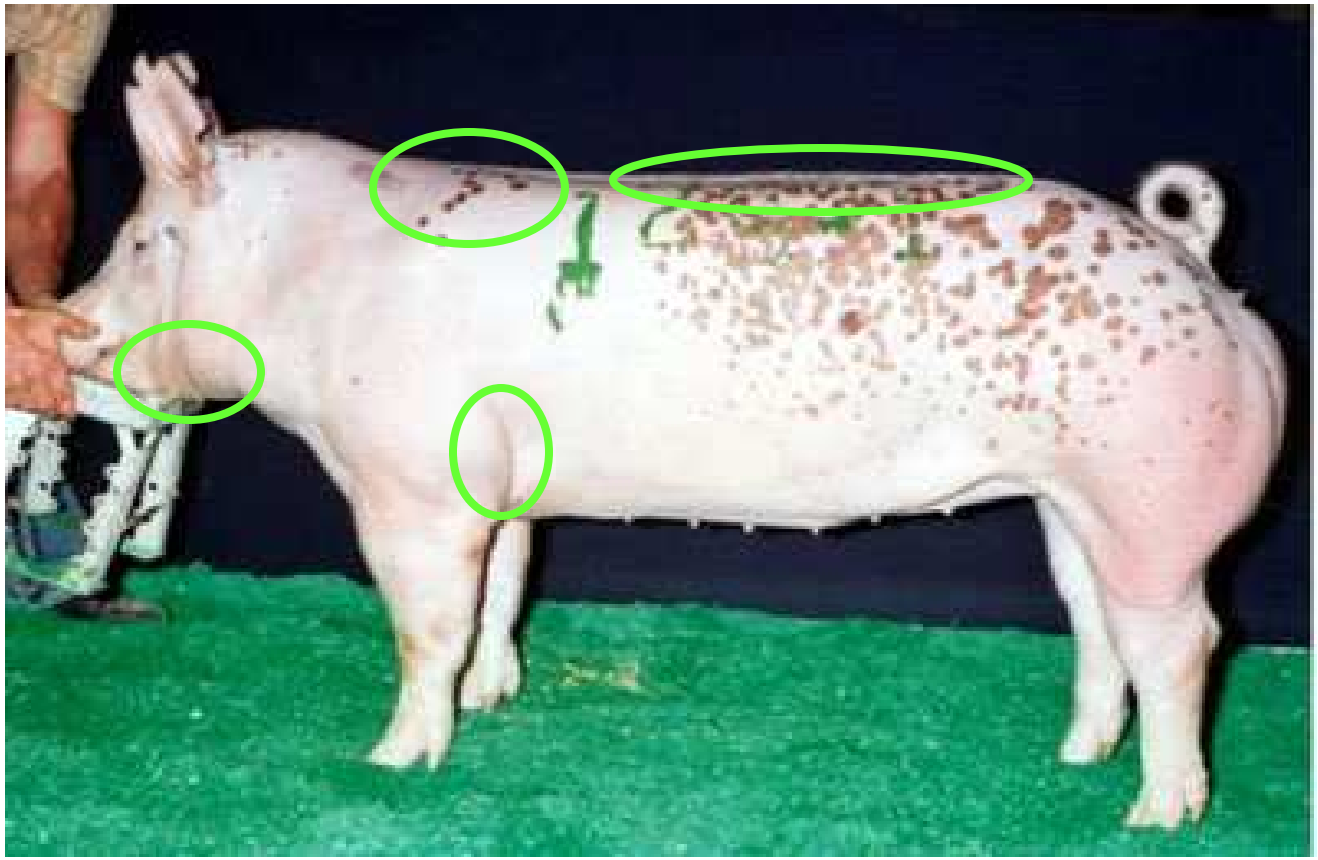




Market Hogs

- Leanness- absence of fat deposition
  - Jowl
  - Over blades
  - Elbow pocket
  - Loin Edge
  - Seam of Ham
  - Lower one-third of body

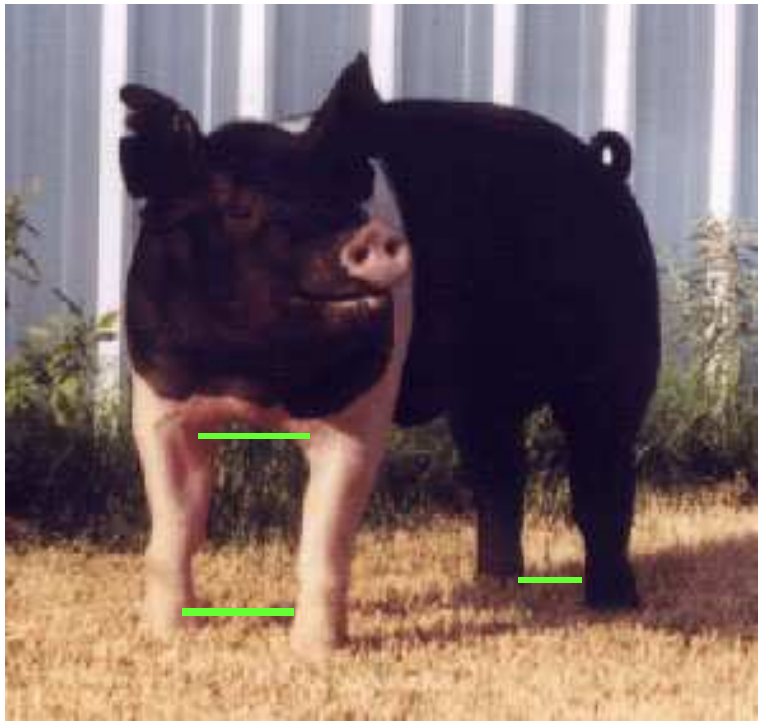
Market Hogs

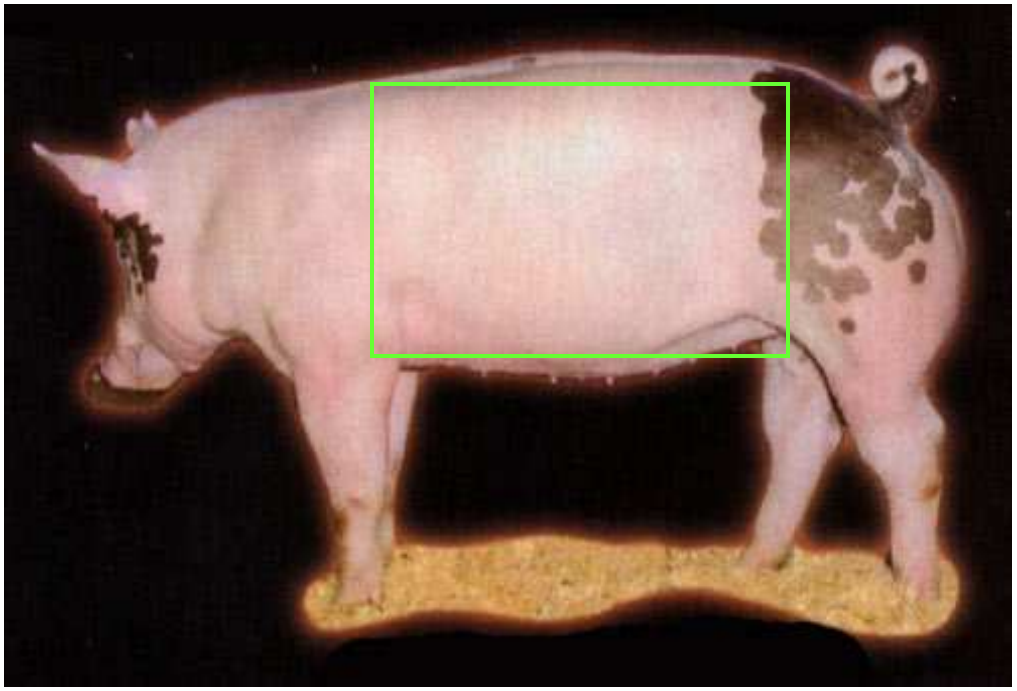


Market Hogs

- Skeletal Width and Dimension
  - Width of Chest
  - Square Rib Design
  - Depth of Flank
  - Natural Base Width at the Ground
  - Ability to convert feed to gain

Market Hogs

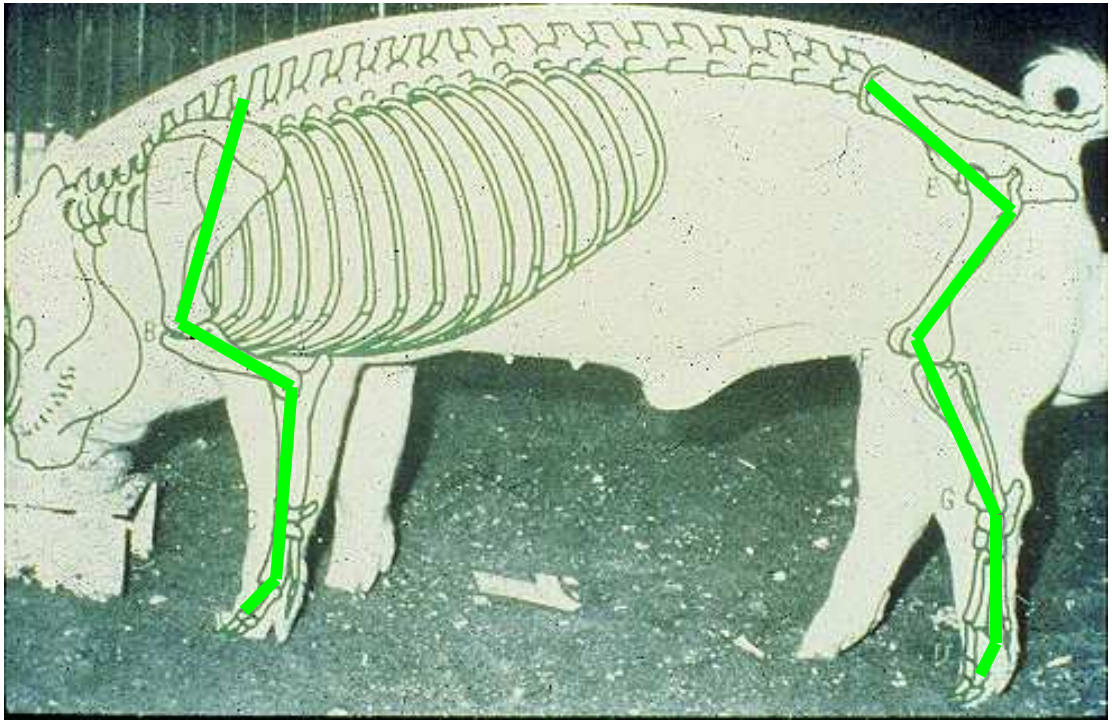




Market Hogs

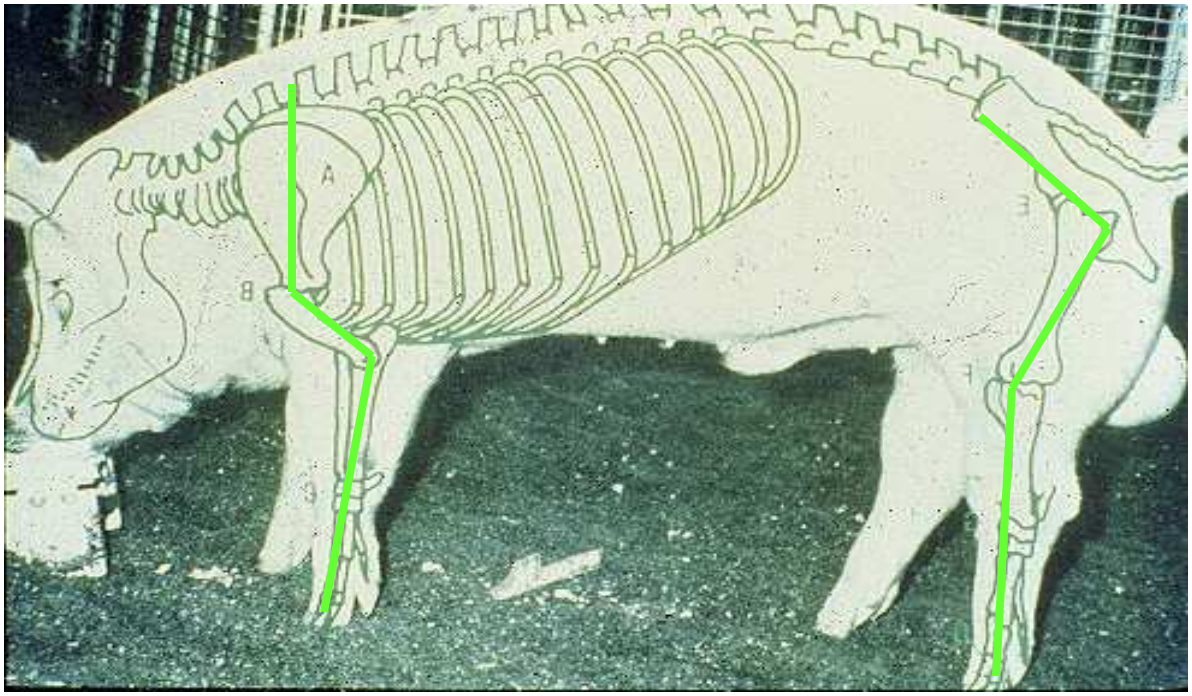
- Structural Correctness
  - Proper angle to scapula
  - Backward set and relaxed knee design
  - Correct angle to pastern
  - Looseness of hip and hock
  - Heaviness of Structure
  - Even and Wide Foot Design

Market Hogs



Desirable Skeletal Design

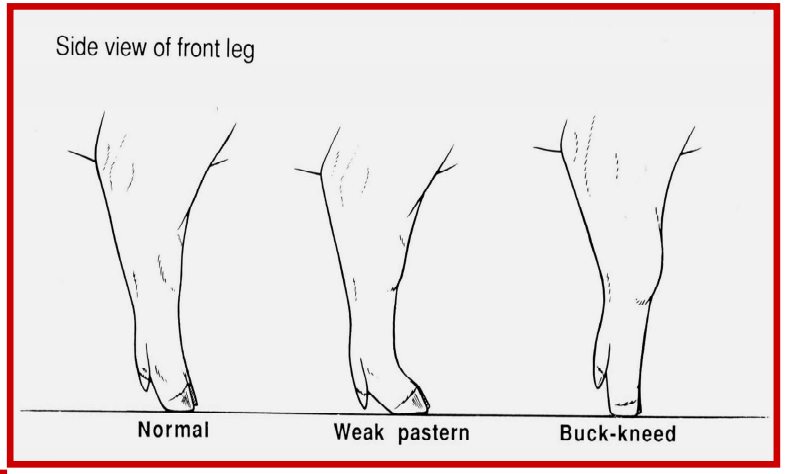
Market Hogs

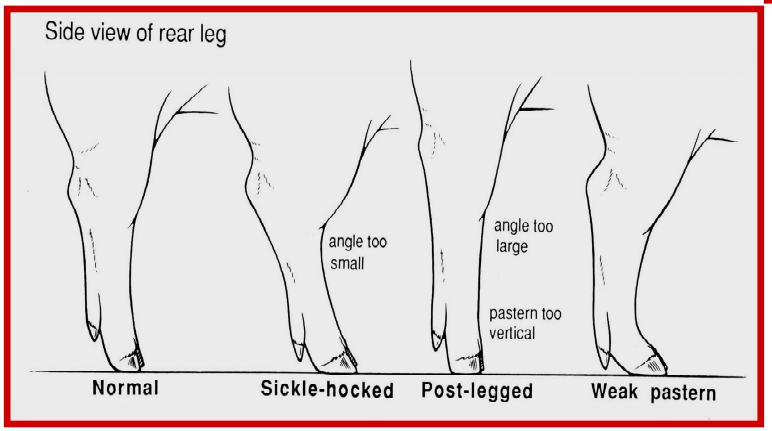


Undesirable Skeletal Design

Market Hogs

Front Leg Structure





Rear Leg Structure

Market Hogs

- Balance and Eye Appeal
  - Proportional Skeleton
  - Attractive & High Quality Look
    - Levelness of Topline and Hip
    - Strength Behind Blades and to Loin
    - Quality to Hair and Skin Coat

Breeding Gilts

- Priorities
  - Functionality
    - Structural Soundness
    - Internal Dimension and Condition
  - Growth Performance
  - Muscle
  - Maternal Characteristics

Breeding Gilts

- Structural Correctness
  - Looseness of skeleton and mobility
  - Same visual indicators as market hogs
  - Of utmost importance to ensure sow longevity

Breeding Gilts

- Internal Dimension and Volume
  - Width of Skeleton
  - Depth and Shape of Rib
  - Natural Base Width at the ground
- Condition
  - Important for females to not be too heavy conditioned, however, an adequate degree is needed for sound reproductive intervals

Breeding Gilts

- Growth Performance
  - Females must possess the growth potential and genetics to farrow litters that are fast-growing and efficient
  - Gilts should be extended and not be too early maturing

Breeding Gilts

- Muscle
  - Indicators will be similar to market hog evaluation
  - Excessive musculature should be avoided

Breeding Gilts

- Maternal Characteristics
  - Vulva
    - Estrus Detection
    - Upturned/Tipped
    - Infantile
  - Underline
    - Pin/Blunt Teats
    - Size and spacing issues
    - Count