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 needed to finish
- Weight limits
- What resources do I need?
  - Cost of animal, time spent, feed costs, etc.
Market Animal Selection

What are the Priorities?
- Muscle
- Condition (fat or lean)
- Balance (eye appeal)
- Volume
- Quality
- Structure
- Travel (How 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!
<table>
<thead>
<tr>
<th>Goal</th>
<th>Target</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at market</td>
<td>14 – 18 months</td>
<td>12 – 30 months</td>
</tr>
<tr>
<td>Live Weight</td>
<td>1250 – 1300 lbs</td>
<td>1000 – 1500 lbs</td>
</tr>
<tr>
<td>Carcass Weight</td>
<td>700 – 850 lbs</td>
<td>550 – 950 lbs</td>
</tr>
<tr>
<td>Fat Thickness</td>
<td>&lt;.50 inches</td>
<td>.20 - .80 inches</td>
</tr>
<tr>
<td>Ribeye</td>
<td>12.5 – 13.9 in.$^2$</td>
<td>10.0 – 17.0 in.$^2$</td>
</tr>
<tr>
<td>Quality Grade</td>
<td>Choice or higher</td>
<td>Select to Prime</td>
</tr>
<tr>
<td>Yield Grade</td>
<td>3.0 or less</td>
<td>1.0 to 4.0</td>
</tr>
</tbody>
</table>
Evaluating Muscle!

- LOIN (TOP)
- ROUND
- STIFLE
- FOREARM
- WIDTH OF BASE
Example of MUSCLE

Wide Based

Light Muscled

Muscular loin

Muscular round & stifle

Muscular forearm
Evaluating Fat!

TAILHEAD

LOIN (TOP)

RIBS

BRISKET

COD (steers)

UDDER (heifers)

FLANK

WIDTH OF BASE
Example of FAT

Less Fat

More Fat

Less Fat

More Fat
Evaluating Volume!

LENGTH OF BODY

DEPTH OF BODY

RIB SHAPE

WIDTH OF BASE
Example of **VOLUME**

Lacking Volume – flat ribbed and shallow flanked

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

LEVEL DESIGN
Example of STRUCTURE

- Hind legs too straight
- Sickle hocked (hind legs)

- Adequate leg set and flex
- Level top line
- Straight hinds & buck knees
Example of a “good one”!
Priorities

- Muscle
- Condition (fat or lean)
- Balance (eye appeal)
- Volume
- Quality
- Structure
- 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
Rear view of Feeder Steers
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.
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

<table>
<thead>
<tr>
<th>Goal</th>
<th>Target</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at market</td>
<td>155 – 165 days</td>
<td>145 – 180 days</td>
</tr>
<tr>
<td>Live Weight</td>
<td>260 – 280 lbs</td>
<td>210 – 300 lbs</td>
</tr>
<tr>
<td>Carcass weight</td>
<td>195 lbs</td>
<td>160 – 220 lbs</td>
</tr>
<tr>
<td>Backfat</td>
<td>.60 -.80 in.</td>
<td>.30 – 1.5 in.</td>
</tr>
<tr>
<td>Loin Eye Area</td>
<td>6.5 – 7.1 in.²</td>
<td>4.5 – 10.0 in.²</td>
</tr>
<tr>
<td>USDA Grade</td>
<td>U.S. # 1</td>
<td>U.S. # 1 to # 4</td>
</tr>
<tr>
<td>Percent Lean</td>
<td>54%</td>
<td>48% to 58%</td>
</tr>
</tbody>
</table>
Evaluating Muscle!

HAM

STIFLE

LOIN OR TOP

FOREARM

WIDTH OF BASE
Example of MUSCLE

Heavy Muscled

Light Muscled

Wide based
Example of MUSCLE

Heavy Muscled

Light Muscled
Evaluating Fat!

- Tailhead
- Loin Edge
- Ribs
- Flank & Elbow Pocket
- Seam of Ham
- Jowl
Example of FAT

Adequate Fat

Excess Fat
Example of FAT

Lean (not fat)

Excess fat
Evaluating Volume!

- Rib Shape
- Depth of Body
- Width of Chest
- Length of Body
Example of VOLUME

Less Volume – flat ribbed and shallow flanked

Adequate Volume – Deep ribbed and deep flanked
Evaluating Structure!

LEVEL DESIGN
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

- Muscle
- Volume
- Condition (fat or lean)
- Balance (eye appeal)
- Quality
- Structure
- 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
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.
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.
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

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<thead>
<tr>
<th>Goal</th>
<th>Target</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at market</td>
<td>6 – 8 months</td>
<td>6 – 14 months</td>
</tr>
<tr>
<td>Live Weight</td>
<td>125 – 140 lbs</td>
<td>115 – 160 lbs</td>
</tr>
<tr>
<td>Carcass Weight</td>
<td>65 – 75 lbs</td>
<td>60 – 85 lbs</td>
</tr>
<tr>
<td>12th Rib Fat</td>
<td>.20 -.30 inches</td>
<td>.10 -.50 inches</td>
</tr>
<tr>
<td>Ribeye Area</td>
<td>2.85 in.²</td>
<td>2.0 – 3.5 in.²</td>
</tr>
<tr>
<td>Quality Grade</td>
<td>Choice or higher</td>
<td>Choice – to Prime</td>
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<td>3.0 or less</td>
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</table>
Evaluating Muscle!

- RACK, LOIN (TOP)
- LEG
- STIFLE
- FOREARM
- WIDTH OF BASE
Example of MUSCLE

Light muscled

Heavy muscled

Wide based
Evaluating Fat!

RACK, LOIN (TOP)

RIBS

FLANK

BREAST

TWIST
Example of FAT

Excess fat

Adequate fat
Example of FAT

Excess fat

Adequate fat
Evaluating Volume!

- RIB SHAPE
- DEPTH OF BODY
- WIDTH OF BASE
- LENGTH OF BODY
Example of VOLUME

Plenty of Volume – Deep middle and deeper flanked

Lacks Volume – shallow middle, high flank
Evaluating Structure!

LEVEL DESIGN
Example of STRUCTURE

Level top & stands correct on feet and legs

Uneven top & stands crooked on feet and legs
Example of a “good one”!
Priorities

- Muscle
- Balance (eye appeal)
- Condition (fat or lean)
- Volume
- Quality
- Structure
- 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
Rear view of market lamb class
Final rear view of market lamb class
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.
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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