

## IDENTIFICATION

INSTRUCTOR: Ingrid Tusa  
 UNIT TOPIC: Evaluate Market Classes and Grades of Livestock  
 LESSON TITLE: Evaluating Live Cattle  
 CLASS: AGSC 336 DATE BEST TAUGHT Any Time (Fall)  
 TEKS: §119.63.c2A

## OBJECTIVES (TSWBAT---The student will be able to...)

- Explain the importance of cattle selection given oral questions with no errors.
- Differentiate among the factors of importance for breeding and market cattle live evaluation given a quiz graded for completion.
- Evaluate a class of four market steers and a class of four breeding heifers given a quiz with 75% accuracy.

## TEACHING MATERIALS AND RESOURCES (What do you need to bring?)

- Laptop Computer
- Data Projector
- Projector Screen
- Power Point "Cattle Evaluation"
- POST IT NOTE adhesive pad
- Permanent Markers

## TEACHING PROCEDURES---Preparation, Presentation, Application, Evaluation *Preparation (Interest Approach/Motivator) 10 Minutes*

Key Points	Methods
<p><b>Link and Motivation</b></p> <ul style="list-style-type: none"> <li>• Q: "How many of you have wondered why certain beef tastes different from other beef? Have you ever gone to the grocery store and couldn't decide which cut of beef to buy? Have you ever wondered why a ribeye is more tender than a sirloin or brisket?"</li> <li>• Relate ribeye to the importance of livestock selection – why correctness of finish and muscling play a key factor in the food we eat.</li> <li>• Correctness of finish and muscling determine how much meat or tenderness a cut of meat may have. To understand why we choose the cuts of meat we do and why it is important to consider correctness of finish and muscling, we must understand how to determine these factors when evaluating live cattle.</li> </ul> <p>Each student group will collectively determine what they know about cattle evaluation, what they think they know about cattle evaluation, and what they don't know yet. Afterwards, they will post their adhesive paper on the wall for the other groups to view and discuss.</p> <p><b>Overview</b>            Today we will...</p> <ul style="list-style-type: none"> <li>• Explain the important of cattle selection.</li> <li>• Differentiate among the factors of importance for breeding and market cattle live evaluation.</li> <li>• Evaluate a market class and breeding class of cattle and determine a proper placing of the class.</li> </ul>	<p>Power Point Slide #1</p> <p>Teacher Led Discussion</p> <p><i>Descartes Moment:</i>            Power Point Slide: #2 and #3: Arrange students into groups of 3. Provide one sheet of POST-IT NOTE adhesive pads and markers to each group.</p> <p>Power Point Slide #4            [Review Objectives]</p>

***Presentation (The Meat!)***

***20 Minutes***

Key Points	Methods
<p>We will start today by discussing the importance of cattle selection. Does anyone know why live cattle evaluation is important?</p>	<p>On the Power Point Slide #5, begin by asking the class a discussion question, "Why is live cattle evaluation important?" <i>[Allow students to offer discussion]</i></p>
<p>It is important to evaluate live cattle because they are being raised as market and breeding animals. Market animals are produced for meat and breeding animals produce offspring for the future.</p>	<p>Power Point Slide #6</p>
<p>It is important that we use specific parameters when evaluating live cattle. These parameters consist of correctness of finish and muscling in market cattle, as well as volume, rib, muscling, and size in breeding cattle.</p>	<p>Power Point Slide #7</p>
<p><u>Market Cattle:</u> Muscling is a very important factor in evaluating market cattle. Predictors of muscling in market cattle are width, shape and bulge over the loin, shape and bulge in the stifle area, and shape over the forearm, as well as thickness of quarter and a wide stance.</p>	<p>Power Point Slides #8-10</p>
<p>The next important factor in evaluating market cattle is correctness of finish. Animals fatten from top to bottom and front to rear. Areas that are predictors of fat in market cattle are the tailhead, flank, loin, ribs, brisket and cod.</p>	
<p>Additional factors of important in market cattle evaluation are growth, structural soundness and balance.</p>	
<p><u>Breeding Cattle:</u> Volume and rib are very important things to consider in evaluating breeding cattle. Predictors of volume and rib are depth of body through their lower rib and flank, spring and curvature of rib, and volume of rib.</p>	<p>Power Point Slides #11-13</p>
<p>Another important factor in evaluating breeding cattle is muscling. Areas of muscling are the same as in market cattle. One difference is that in breeding females, it is optimal for their muscling pattern to be smoother to offer a more feminine look.</p>	
<p>Additional factors of importance in breeding cattle evaluation are growth, structural soundness and balance.</p>	

**Application (What will they do with what you taught?) 15 Minutes**

Key Points	Methods
<p>Each student will list the factors of importance for breeding and market cattle live evaluation. Afterwards, the teacher will discuss the factors and allow the student to self-check their answers.</p>	<p><i>Show What You Know Moment:</i> Power Point Slide #14: Ask students to take out a sheet of paper and ask them to answer the two questions on the slide.</p>
<p>Next, show an example of a market steer class (Power Point Slide #15). Once the students decide upon a placing of the four animals, show the official placing and why (Power Point Slides #16 and #17)</p>	<p>Provide Example Class: Power Point Slides #15, #16, and #17</p>
<p>Afterwards, students will evaluate a class of four market steers and a class of four breeding heifers. Students will determine a proper placing for the four animals (first, second, third and fourth) based upon the visual appraisal of the cattle.</p>	<p>Each student will determine a placing for a class of market steers and a class of breeding heifers.</p> <p>Their placing of each class should be written down and turned in to the teacher when completed. Show Power Point Slide #19 for 3 minutes and Power Point Slide #20 for 3 minutes.</p>
<p>Following student's evaluation of the two classes, announce the proper placing of the classes and discuss why.</p>	<p>Power Point Slides #21 and #22</p>

**Evaluation/Summary (How do you know they learned it?) 5 Minutes**

Key Points	Methods
<p>Let's revisit your first Post-It Notes regarding what you know about cattle evaluation, what you think they know about cattle evaluation, and what you didn't know yet. Now, are all of your questions answered?</p>	<p>Oral Questions</p>
<ul style="list-style-type: none"><li>• Why is cattle selection important?</li><li>• What factors are important in cattle selection?</li></ul>	<p>Oral Questions and Power Point Slide #23</p>
<p>Now, let's take a look at that ribeye again. Now, do you see what makes this a good ribeye? Correctness of finish and muscle make this popular piece of meat a popular choice!</p>	<p>Power Point Slide #24</p>
<p>Tomorrow, we will continue our livestock evaluation discussion and begin talking about market and breeding swine evaluation.</p>	<p>Summary – Lead in for tomorrow</p>

**REFERENCES:**

- <http://mtsu32.mtsu.edu:11152/Livestock%20Evaluation/Livestock%20Evaluation%20Course%20Introduction.pdf#search='livestock%20evaluation'>
- <http://www.ca.uky.edu/agripedia/agmania/livestock/>
- Personal Interviews with Beef Cattle Producers
- Personal Knowledge and Experience with Livestock Evaluation

## *A Tender, Juicy Ribeye....*



# *Cattle Evaluation*

AGSC 336 – Advanced Animal Science  
Presented by Mrs. Tusa

- What do you know about cattle evaluation?
- What do you think you know about cattle evaluation?
- What don't you know yet?

## *Objectives*

- Explain the importance of cattle selection.
- Differentiate among the factors of importance for breeding and market cattle live evaluation.
- Evaluate a market cattle class and breeding cattle class and determine a proper placing for each class.

## *Why is live cattle evaluation important?*



## *Why is live cattle evaluation important?*

- Market Animals – Meat
- Breeding Animals – Produce Offspring



Source: <http://www.farmstockwell.com/forums/threads/460792422>

## Parameters to Consider

- Market Cattle
  - Correctness of finish (Fat)
  - Muscling
- Breeding Cattle
  - Volume and Rib
  - Muscling
  - Size and Scale

## Market Cattle

### ■ Muscling

#### ■ Predictors of Muscle

- Shape over the forearm, loin, and in the stifle



- Thickness of Quarter and Wide Stance

## Market Cattle

### ■ Correctness of Finish

- Fatten from top to bottom and front to rear
- Predictors of Fat: Tailhead, Flank, Shape over the Loin, Cover over Ribs, Brisket, Cod



## Market Cattle

### ■ Additional Factors of Importance:

- Growth
- Structural Soundness
  - Desirable set to front shoulder and rear legs
  - Legs should have "give" when animal walks
- Balance
  - Level topped and level hiped

## Breeding Cattle

### ■ Volume and Rib

- Depth of Body, Spring and Curvature of Rib



## Breeding Cattle

### ■ Muscling

- Same areas of Market Cattle (wide stance, thickness through quarter, shape over loin)
- Want a smoother muscling pattern in females





