Ideal Market Animal

Scott Nash, Regional Youth Development Educator

**Goal (learning objective)**

Youth will learn that they are raising animals that will become food products for consumers.

**Supplies**

- Handouts of current industry standards (ideal animals for each species) See Handouts
- Pictures of animals that have too much fat (see pictures attached)
- Pictures of animals that are light muscled (see pictures attached)
- Picture of beef ribeye area, lamb ribeye area, and swine loin area with different levels of fat and muscle (see pictures attached)
- Paper and pencils

**Pre-lesson preparation**

- Prepare to talk to the youth about the purpose of raising meat animals - for food. Reviewing the industry standards will help youth understand why it’s important to know acceptable weights and carcass traits.
- Be prepared to use the pictures to talk to the youth about differences in fat and muscle and why it matters.
- Have members come to the meeting with information about the prior year’s animal including species, beginning weight, final weight, carcass measurements, and quality grade (if available).
- Have members come to the meeting with information about this year’s animal including species, birthdate, and beginning weight.
- Visit with county Extension personnel to determine the amount of days on feed for each species.

**Lesson directions and outline**

- Using the Industry Standards handouts, share industry-acceptable weights and carcass characteristics of market animals. Explain to the youth that carcass characteristics are defined by body type and muscling.
- Display the ribeye and loin eye pictures. Discuss any muscle and fat differences that can be identified from the pictures.

**Conducting the activity (DO)**

**Activity 1**

1. Ask for a volunteer to distribute paper and pencils to the group.
2. Provide the youth with a copy of each species’ industry standards. As needed, review the range of each trait.
3. Have the youth list the weight, carcass measurements, and quality grade of a previous project they raised.
4. Have the youth project the final weight and trait measurements of animals they are raising now.

**Activity 2**

1. Divide the youth into groups of 2-3 people.
2. Make sure the group has a copy of the industry standards for the species they are raising.
3. Give the groups a picture of the live animal with the ribeye or loin eye picture and the carcass information.
4. Have the groups review the picture and animal information to determine if the animal met industry acceptability.
5. Have the groups share their findings with the rest of the youth.
What did we learn? (REFLECT)

- Ask: Why do we raise market animals in 4-H?
- Ask: What did you learn from the pictures of the live animals and carcass information?
- Ask: What can you do to raise an animal that fits the industry standards?

Why is that important? (APPLY)

- Ask: Why does it matter if meat animals raised by youth meet industry standards?
- Ask: What can you tell a consumer about youth-raised meat animals?

Resources


Ohio State University Extension. (2000). Quality. Swine resource handbook for market and breeding projects (pages 4-3 - 4-7).

University of Idaho Extension 4-H handouts (2015).

Photo credit: Cindy A. Kinder
Ribeye and Loin Photos
Beef Industry Standards
Swine Industry Standards
Sheep Industry Standards
Industry Standards Animal Science Lesson Plan

Pictures by
Cindy A. Kinder
University of Idaho
Gooding/Camas Extension Educator
# Beef Industry Goals

<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>Dressing %</td>
<td>60% - 63%</td>
<td>56% - 66%</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>
Tag No.132
Live Wt 1104
Carcass Wt  686
Ribeye  13.2
Back Fat  .25
KPH   2.5
Quality Grade
Select
Tag No. 122
Live Wt 1421
Carcass Wt  907
Ribeye  12.0
Back Fat  .75
KPH  2.5
Quality Grade
MD  Choice
Tag No. 121
Live Wt 1258
Carcass Wt 794
Ribeye 14.0
Back Fat .4
KPH 2.5
Quality Grade
MT 40  Choice
Tag No. 68
Live Wt  1306
Carcass Wt  844
Ribeye  13.1
Back Fat  .3
KPH 2.0
Quality Grade
Sm 50 Choice -
Sheep Industry Goals for Market Lambs

<table>
<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>12\textsuperscript{th} Rib Fat</td>
<td>.20 - .30 inches</td>
<td>.10 - .50 inches</td>
</tr>
<tr>
<td>Ribeye Area</td>
<td>2.85 in.\textsuperscript{2}</td>
<td>2.0 – 3.5 in.\textsuperscript{2}</td>
</tr>
<tr>
<td>Quality Grade</td>
<td>Choice or higher</td>
<td>Choice– to Prime</td>
</tr>
<tr>
<td>Yield Grade</td>
<td>3.0 or less</td>
<td>1.0 to 5.0</td>
</tr>
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</table>
Tag No. 2727
Live Wt  137
Carcass Wt  83
Ribeye  4.1
Back Fat  .25
KPH  3.0
Quality Grade
Choice +
Tag No. 2735
Live Wt  133
Carcass Wt  83
Ribeye  3.7
Back Fat  .2
KPH  1.5
Quality Grade
Choice
Tag No. 5184
Live Wt 130
Carcass Wt 78
Ribeye 3.9
Back Fat .17
KPH 1.5
Quality Grade Choice
Tag No. 129
Live Wt 145
Carcass Wt  81
Ribeye 3.5
Back Fat .12
KPH 2.5
Quality Grade
Choice
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 U.S. # 4</td>
</tr>
<tr>
<td>Percent Lean</td>
<td>54%</td>
<td>48% to 58%</td>
</tr>
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</table>
Tag No. 1732
Live Wt 295
Carcass Wt 217
Ribeye 7.2
Back Fat .9
<table>
<thead>
<tr>
<th>Tag No. 1874</th>
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</thead>
<tbody>
<tr>
<td>Live Wt 300</td>
</tr>
<tr>
<td>Carcass Wt 220</td>
</tr>
<tr>
<td>Ribeye 8.1</td>
</tr>
<tr>
<td>Back Fat .6</td>
</tr>
</tbody>
</table>
Tag No. 1889
Live Wt 290
Carcass Wt  220
Ribeye  7.05
Back Fat 1.2
Tag No. 1628
Live Wt 310
Carcass Wt 224
Ribeye 8.75
Back Fat .9