University of Idaho Extension
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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 Stantarfds 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 reaised.

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

American Meat Science Association. (2013). Beef grading. *Meat evaluation handbook* (27-35).

American Meat Science Association. (2013). Lamb and mutton grading. *Meat evaluation handbook* (pages 124-125).

Kinder, C.A., Glaze, B.J., Church, J.A., Jensen, S., Williams, S., Nash, S. 2008. Beef Quality Assuance Program Manual. University of Idaho Extension. PNW 593.

Ohio State University Extension. (2011). Beef Carcass Evaluation. *Beef resource handbook* (pages 8-2 - 8-6).

Ohio State University Extension. (2008). Meat Goats. *Goat resource handbook* (page 118).

Ohio State University Extension. (2011). Carcass Evaluation and Meats. *Sheep resource handbook for market and breeding projects* (pages 73-78).

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

Goal	Target	Range
Age at market	14 – 18 months	12 – 30 months
Live Weight	1250 – 1300 lbs	1000 – 1500 lbs
Dressing %	60% - 63%	56% - 66%
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
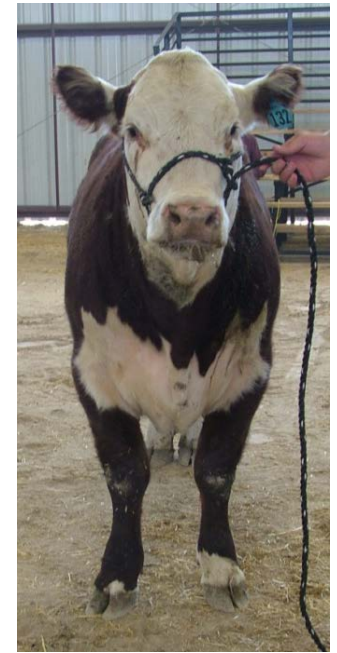
Tag No.132
Live Wt 1104
Carcass Wt 686
Ribeye 13.2
Back Fat .25
KPH 2.5
Quality Grade
Select

Tag No. 122
Live Wt 1421
Carcass Wt 907
Ribeye 12.0
Back Fat .75
KPH 2.5
Quality Grade
MD Choice
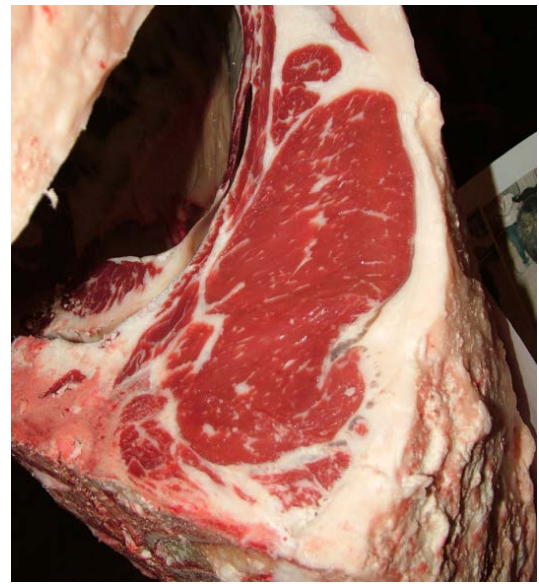
Tag No. 121
Live Wt 1258
Carcass Wt 794
Ribeye 14.0
Back Fat .4
KPH 2.5
Quality Grade
MT 40   Choice

Tag No. 68
Live Wt 1306
Carcass Wt 844
Ribeye 13.1
Back Fat .3
KPH 2.0
Quality Grade
Sm 50 Choice -

132

122

121

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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
12th 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

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
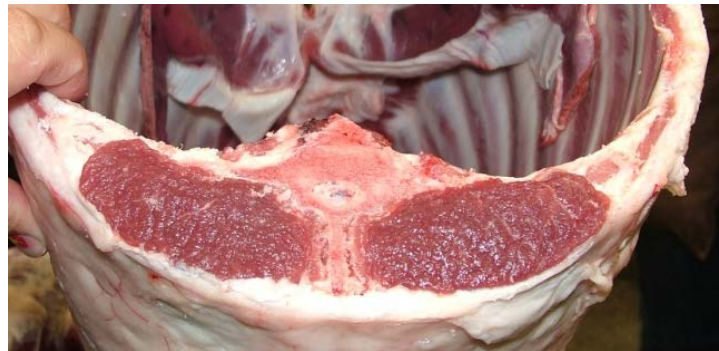
Tag No. 129
Live Wt 145
Carcass Wt 81
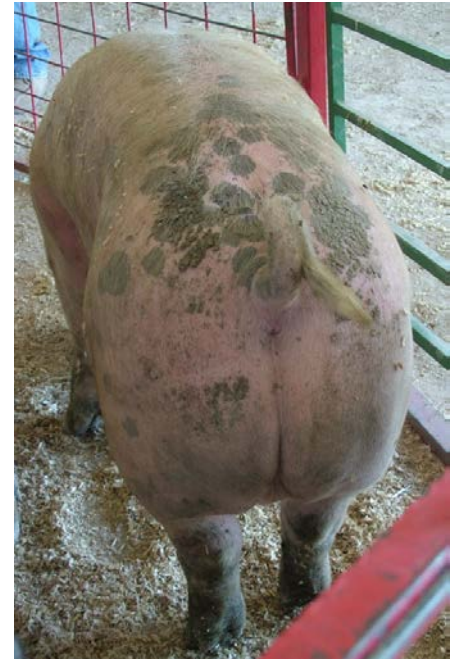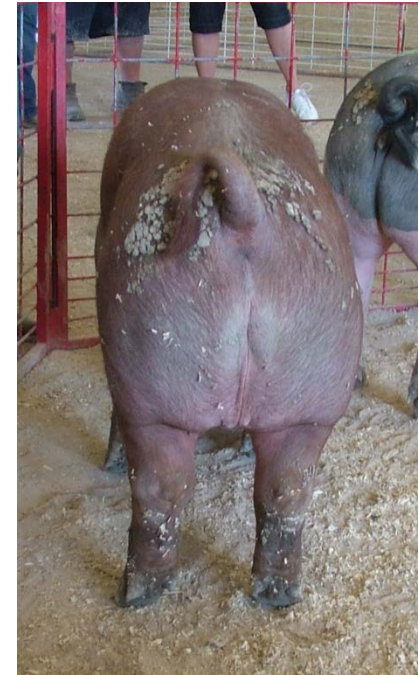Ribeye 3.5
Back Fat .12
KPH 2.5
Quality Grade
Choice

2727

2735

5184

129

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 U.S. # 4
Percent Lean	54%	48% to 58%

Tag No. 1732
Live Wt 295
Carcass Wt 217
Ribeye 7.2
Back Fat .9

Tag No. 1874
Live Wt 300
Carcass Wt 220
Ribeye 8.1
Back Fat .6

Tag No. 1889
Live Wt 290
Carcass Wt 220
Ribeye 7.05
Back Fat 1.2
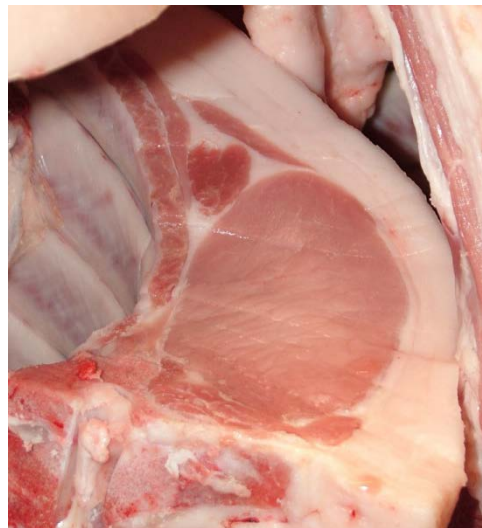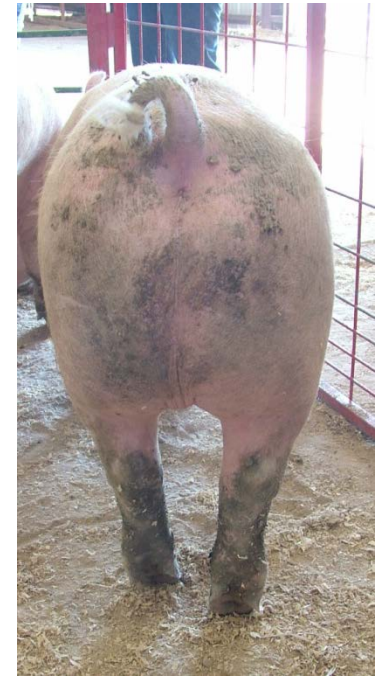
Tag No. 1628
Live Wt 310
Carcass Wt 224
Ribeye 8.75
Back Fat .9

1732

1874

1889

1628