Partner Feedback on Carcass Quality
Electronic/Camera Grading
Update on the Camera

- Dixon - Official USDA Grade
- RFID readers in pens and plant linking each lamb to camera digitally
- Converted all CA fairs to EID

- Denver – Implementation in 2019
It hasn’t been easy

• Changes to our Standard Operating Procedures approved by USDA

• USDA Graders Labor Union had to approve the process on grading, sorting and shipping procedures

• Key for the Camera belongs to USDA, and only they can turn it on every morning
Data Collection

1. Side and rear view images of the carcass
   - USDA Yield Grade
   - USDA Quality Grade

2. Projected Primal Cut Weights
   - Leg, Rack, Loin, Neck, Breast, Trotter, Shoulder

3. Calculated Ovine Carcass Cutability (OCC)
   - % yield for retail cuts
Electronic Identification (EID) Readers
Feedback Loop

Producer EID + Mgt Software
EID Data Collection

• Starts with Producer and their data base
  • Livestock pens at the plant
EID Data Collection

Reader on the line matches up with chipped hooks
EID Data Collection

Chipped hooks tied to individual carcass image of the grading camera
Producer Portal App
Feedback Loop

Producer EID + Mgt Software

Data in Producer Portal

EID Read at Plant

Camera ties to EID
Welcome to Superior Farms

Home
Superior Farms has a long-standing commitment to the well-being and care of the flock.

Lot Details & Reports
We can view different Lot Number, Harvest Date, Total Lbs, Average Yield Grade.

Year-To-Date Statistics
Producer can see overall Lots Statistics.

Lot Comparison Reports
We can compare Data in Graphical/Tabular form with different Lot No. and Harvest Date.

Information & Downloads
We can Add New Post, do Like & Comments as well.

Contact Info
Our Contact details is available here.
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### Individual Carcass Data

- **Harvest Date**: 2018/11/06
- **Species**: Lamb ABF
- **Program**: ABF/Cascade Creek
- **Lot No**: 206
- **Hot Weight**: 77.3
- **Yield Grade**: 2.780000
- **Quality Grade**: Choice
- **Occ**: 51.50
- **Occ_Yield 0**: 67.34
- **Breast**: 9.7
- **Rack**: 9.3
- **Shoulder**: 19.1
- **Legs**: 25.1
- **Loins**: 8.8
- **Neck**: 1.7
- **Trotters**: 3.1

- **Lot#**: 206
### PRIMAL VS CARCASS

![Graph showing comparison between primal and carcass](image)

### PRIMAL WEIGHT COMPARISON

![Graph showing primal weight comparison](image)

### YIELD GRADE COMPARISON

![Graph showing yield grade comparison](image)

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Feedback Loop

Producer EID + Mgt Software

Download Data to Mgt Software

Data in Producer Portal

EID Read at Plant

Camera ties to EID

Download Data to Mgt Software
Data Collection

• Full transparency through Producer Portal
  • Individual lamb performance
  • Lot performance
  • Track lambs through birth to slaughter.

• Complete feedback loop
  • Packer to feeder to producer to seedstock owners
Data Collection

• Potential to improve:
  • Efficiencies
  • Genetics
  • Production methods
Feedback Loop

Producer EID + Mgt Software

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Data in Producer Portal

EID Read at Plant

Camera ties to EID

Flock 54 Parentage Genotypes
Why is Superior Farms doing this?

Primary Goal:
• Create a reasonable cost genetic test,
• Increase flock efficiency,
• Increase producer margins by reducing costs,
• Increase the number lambs in the US flock

Secondary Goal:
• Improve carcass consistency
• Improve plant yield/production efficiencies
What is it?

- Low cost genotype marker panel
- Collaboration with University of Idaho
- $15 - $20 per test
What does the panel provide?

Strong indicators – Single gene traits

- Disease resistance
- Scrapie, OPP, spider, glycogen storage, etc.
- Twinning potential
- Fleece variation
- Yellow fat
- Double muscling
- Horns
What does the panel provide?

Indicators or QTLs (multi gene traits)
- Milk quality and quantity
- Wool and staple length and quality
- Meat quality
- Myostatin

Parentage test
- Single Generation Change
- Apply Flock 54 indicators
- Identify productive brood stock
How Does It Work?

Tissue Sample

- Ear Notch
- Tail at Docking
- Blood Tubes
- Blood cards not recommended
How Does It Work?

Producer collects sample

Extract DNA

Genotype

Convert AGCT

SNP Markers
✓ Scrapie
✓ Parentage
✓ Inbreeding
✓ Twinning

Analyze

Genotype
## DNA Test Results

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<th>Sheep ID</th>
<th>Fecundity/Twinning Gene</th>
<th>High Milk Yield Gene</th>
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Feedback Loop

- Producer EID + Mgt Software
  - Download Data to Mgt Software
  - Data in Producer Portal
  - Camera ties to EID
  - EID Read at Plant
  - Flock 54 Parentage Genotypes

Superior Farms
American Lamb
How do I get started?

Available for every producer in the US!

$15 SF Producers
$19 Others

Contact Lesa Eidman for submission form and shipping information

Lesa.Eidman@SuperiorFarms.com
(530) 263-2383