Value Added Marketing

- **Objective:**
  - Improve returns on sheep production investments by creating or improving value based attributes
    - Genetic
    - Management systems
    - Production attributes
    - Availability/Seasonality
    - Carcasses attributes
    - Claims that differentiate
    - Product performance
    - Demand drivers
Quality

- Adherence to specification
- Satisfaction of the customer
- The sum and accumulation of value attributes that meet or exceed expectations

- Keeping the “Value Proposition” promise
Value Added/Quality Plan

- Define expectations
- Align various industry segments
- Implementation
  - Process controls to reduce defects
  - Eliminate outliers
- Measure outcomes
- Continuous improvement

- What can not be measured can not be managed
- What is inspected gets done, not what is expected
Value Based Marketing

- Attribute discovery that provides market signals to produce specific type(s) of lamb
  - 2015 National Lamb Quality Audit (NLQA)
- Address production systems and market factors that contribute to quality inconsistencies
- Determine value on the individual not the average
  - Drive attributes that deliver on the “Value Proposition” and Eating Satisfaction
- **Risk and Reward**...more is transferred to the producer
National Lamb Quality Audit

- General Findings...Purchasers closest to the consumer
  - Lamb has an ethnic connotation and/or is considered a specialty protein
  - Strong sustainability imaged
  - Deemed very food safe
  - Imported lamb was not viewed as inferior to U.S. lamb
    - US lamb was preferred
  - Price is a key factor
  - Quality of lamb is perceived as the “unique” Eating Experience
    - Flavor, potentially, is lambs’ marbling
National Lamb Quality Audit

- Purchasers Priorities and Perceptions
  - Eating Satisfaction
  - Credence Attributes
    - Where lamb comes from
    - How the lamb is raised
    - Sustainability
  - Specifications...consistency, size/weight, packaging
  - Good for me...wholesome, healthy, and lean
  - Easy to use...convenience and preparation

- We need to get more trial at both retail and foodservice...Only a third of the population has ever eaten lamb
Market Readiness

- **Target(s)**
  - Does the industry know what it wants/needs to deliver?
  - Is there a concentrated effort to adapt the genetic tools, best management practices and process controls to ensure uniformity and consistency?
  - Does the industry understand the cost of fat?

- **Flavor**
  - Subjective
  - Influenced by multiple variables
  - Feasibility of a rapid, cost-effective method to measure that can be adapted to a production environment

- **Price**
  - Volatility has serious demand consequences
  - “Value Proposition” vs. alternative food sources
  - Premium price...requires delivering a premium product
In 2004, Mountain States Rosen associates and producer owners embarked on a new adventure:

- To offer the highest quality “All Natural” lamb products in the nation thus, they developed the first national NEVER, EVER NATURAL - lamb program
- By definition this means:
  - Animals never receive antibiotics, or growth hormones
  - Animals are 100% vegetarian grass-fed, grain-finished
- The program is based on signed certificates and commitments by our producers, feeders and transportation partners
Shepherd’s Pride

In 2014 MSR added yet another layer of transparency to the industry leading Shepherds Pride Lamb brand.

- MSR teamed up with IMI Global, one of the nations leading third party auditing firms, to offer **Where Food Comes From – Source Verified Lamb** program
  - Where Food Comes From is a **USDA Process Verified** program, guaranteeing through stringent verification, processing documentation and auditing programs the source of the lamb supply
- Differentiated product authenticity
- A “**source supply**” of lamb designed specifically for discerning customers – thus, guaranteeing premier products for consumers year-round
Shepherd’s Pride Lamb offers consumers a verified product that is backed by family ranches. WFCF allows consumers to go further in learning about their food. Meat buyers can learn about the rancher and how they care for their lambs.
We can customize and deliver the good, differentiating news about Shepherd’s Pride Lamb to educate shoppers.

57% of consumers are concerned or very concerned about safety of food. –Food Quality magazine

MSR – Focus on Safety

S: stringently cared for: from farm to table.
A: awarded the world's highest food safety rating: SQF Level 3!
F: finest quality: for your family's wellbeing.
E: ever-consistent: with exacting specifications.

MSR is the only U.S. lamb and veal processor to receive this top food safety rating

RAISED AS NATURE INTENDED IN THE U.S.A.

VISIT: MOUNTAINSTATESROSEN.COM
Shepherd’s Pride

- The transparency of a "farmers market" with the food safety of a USDA inspected facility.
- MSR is proud to offer a wide variety of packaging options including:
  - Vacuum Skin Packaging
  - Lidstock
  - Rollstock
  - Overwrap / Motherbag
  - Pre-Printed Shrink Bag
Shepherd’s Pride

- Source Verified...Traceability
- USDA Process Verified

Where Food Comes From Rollout – Social Media & In-store Promotion programs
- Developed a National “group” of third-party influencers and bloggers
- Develop relationships with marketing teams at select retail customers
- Created promotional opportunities – driving sales with store promotions tied to social media events
- Leverage: retailer, blogger and MSR followers

- Provide content, content, messaging, recipes
- Create surround sound and excitement with sweepstakes, digital ads, etc.
- Create long-term relationship and partnerships with retailers to drive sales
- Create ambassadors of MSR and our products with bloggers
Lava Lake Lamb is grass fed summer lamb raised on sustainable family ranches in the Northern Rockies.

Lava Lake Lamb comes from high mountain pastures at the prime of life – the lamb is lean, tender and has a uniquely mild but distinctive flavor – and provides an unbelievable dining experience.
Why is Lava Lake Lamb so Special?

- Taste
- Humanely Raised
- Seasonal
- Grass Fed
- Free Range
- Northern Rockies
- All Natural
- Humanely Raised
- Sustainable
Vision Image Grading

- E+V 2000 System
- Two cameras – Side and Rear View
- Line speed 800 Carcasses/Hr
- Imaging processing software
- Cost $157,000
- Set up $70,000
- $1,500 Qtly Service
- USDA Cost $160,000
AMS Grading

- USDA Grading
  - Purpose: Group like (Homogeneous) carcasses into classes that have differentiated value characteristics
  - Voluntary application
  - Paid for by the Packer
  - USDA personnel must be present and control the Grade Stamp
  - 2,000 head per day limit (250 head/hr)
AMS Grading

- USDA Grading Statistics
  - Not all lambs are graded
    - USDA Federally Inspection
      - 2,000,000 head
    - USDA graded
      - 67 percent
  - Quality Grade Consist in Plants that grade
    - Prime > 8.7%
    - Choice > 91.3%
    - Good > 0%
    - No Roll > 5% (Seasonal variance 1.5 to 15%)
- Ungraded
  - Non-Federally Inspected Hd/Ct
  - No rolls, Packer programs, Small Packers, Direct Marketed, Ethnic harvest
Differentiation

- For the most part, USDA grades for lamb carcasses have *not been used to differentiate* value in the live market
  - Prime and Choice values are similar
  - There is no significant price difference among USDA YG’s 1 through 4
  - YG 5’s are usually discounted if purchased in the meat
  - Value based grid programs have premiums for YG’s 1 thru 3; may or may not discount for YG 4’s; and, YG 5’s as well as No Rolls are discounted
Differentiation

- Retailers and Foodservice distributors do specify “Grade Labeled” product for quality
- Certain upscale Foodservice Purveyors and boutique meat shops do offer Prime lamb, usually limited to middle meats (racks and loins)
- There are a few programs that specify YG 3’s or better
  - NLQA...Supermarkets stated YG (8.7%) and Quality (33.3%) were sparingly used in purchasing decisions
- Packers absorb much of the trimmable fat differences among YG’s
  - NLQA...Interviews supported this fact; however, fat was identified an image issue with lamb
Variability

- The Lamb industry acknowledges that variability in weight, age, quality and fatness does exist; therefore, a system that accurately classifies lamb carcasses into groups with differentiated value attributes has merit.
- The issue with the “subjective” application of the USDA Grade Standards for lamb carcasses is that they are inconsistently applied, particularly for YG’s.
Technology

**Objective:** To reduce the variability in “subjective” evaluation of YG’s to lamb carcasses and improve the consistency of application of the YG Standards, more accurately predict yield of saleable meat, and improve product consistency in respective market channels.

**Goal:** Reward for value based qualitative and quantitative traits of individual carcasses rather than weight; thusly, the production system is incentivized to produce to a compositional endpoint rather than a weight endpoint. Reduce variation between plants, area and regions.
Prediction of Lamb Carcass Cutability

- Instrument Predicted LCC Yield
- Actual LCC Yield

Graph showing the relationship between instrument predicted and actual LCC yield.
Performance

• Instrument Grading Certification and Standardization
  ◦ Quality: e+v agreed with Expert 1, Expert 2 or Plant Grader at a rate of 90%
    • Cutability: ranged from 60.2 to 76.8% (Ave 67.3%)
    • e+v predictability...
    • Leg...$R^2 = 0.978$; CV 2.59%
    • Loin...$R^2 = 0.710$; CV 9.72%
    • Rack...$R^2 = 0.921$; CV 5.74%
    • Shoulder, Sq Cut...$R^2 = 0.951$; CV 4.37%
Economics

- Cost of USDA grading may be reduced but not eliminated
- Hot carcass grading will
  - Provide grade consist data a day earlier than current system because the Hot Carcass can be graded
  - Provide the ability to sort Hot Carcasses into advantageous groups
  - Improve cooler management
  - Add efficiencies to processing
- Improved cutability prediction accuracy will
  - Allow yield optimization
  - Provide opportunity to improve the utilization of different cut-styles (e.g., bone-in vs. boneless, Cap-on vs. Cap-off) for different groups of lamb carcasses
  - Ensure more uniform product in the trade and support lambs’ value proposition to consumers
Video Image Grading

Instrument Predicted LCC Yield vs. Actual LCC Yield
## Results

### Vision Image Grading

<table>
<thead>
<tr>
<th></th>
<th>Yield 1</th>
<th>Yield 2</th>
<th>Yield 3</th>
<th>Yield 4</th>
<th>Yield 5</th>
<th>Prime</th>
<th>Choice</th>
<th>NR</th>
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<tbody>
<tr>
<td>Value</td>
<td>916</td>
<td>5,090</td>
<td>8,844</td>
<td>4,695</td>
<td>953</td>
<td>440</td>
<td>20,203</td>
<td>70</td>
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<tr>
<td>%</td>
<td>4.0%</td>
<td>22.3%</td>
<td>38.7%</td>
<td>20.5%</td>
<td>4.2%</td>
<td>2.1%</td>
<td>98.6%</td>
<td>0.3%</td>
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</table>

### Vision Image Grading vs. USDA Subjective Grading

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<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>% Camera Agreed with Grader on Yield Grade</td>
<td>685</td>
<td>54%</td>
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<tr>
<td>% Camera was 1 Yield Grade Lower than the Grader</td>
<td>433</td>
<td>34%</td>
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<tr>
<td>% Camera was 2 Yield Grades Lower than the Grader</td>
<td>56</td>
<td>4%</td>
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<tr>
<td>% Camera was 1 Yield Grade Higher than the Grader</td>
<td>106</td>
<td>8%</td>
</tr>
<tr>
<td>% Camera agreed with Grade on Quality Grade</td>
<td>978</td>
<td>76%</td>
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<tr>
<td>% Camera was 1 Quality Grade Lower than the Grader</td>
<td>82</td>
<td>6%</td>
</tr>
<tr>
<td>% Camera was 1 Quality Grade Higher than the Grader</td>
<td>220</td>
<td>17%</td>
</tr>
<tr>
<td>% Camera agreed with Grader on Yield And Quality</td>
<td>486</td>
<td>38%</td>
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