Electronic ID to Enhance Lamb Productivity & Value-Based Marketing

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Objective

• Demonstrate to the US sheep industry how EID technology can be used to collect more information, share information across multiple sectors of the industry, and improve industry-wide profitability through value based marketing
Methods

• Implement an EID System with 4 MSLC Ranchers
  – David Arieux, Iowa
  – Brad Boner, Wyoming
  – David Fisher, Texas*
  – Paul Wipf, Montana
Project Management

• Mountain States
  – Initiate Project Guideline
  – Order Supplies and Provide EID Training to Rancher
  – Organize and Assist Data Collection

• Texas A&M
  – Consult and Assist Texas Producer
  – Analyze Data and Generate Reports

• Colorado State
  – Carcass Data Collection

• Iowa State
  – Consult and Assist Iowa Producer
Methods

• EID Tag 2016 Lamb Crop
• Collect Individual Lamb Production Data
  – Birth Records
  – Weaning
  – Feedlot Gain
  – Carcass Data
    • Cutability and VIG
Methods

• Provide Lamb Performance Reporting
  – Breed, Sire, Dam, etc
• Survey Ranchers
• Develop Case Studies
Progress Report

• David Ariuex - Iowa

  – Flock Management
    • Lambed during the Winter of 2016
    • Tagged at Birth
    • Feedlot Finished On-Farm
    • Polypay Ewe Flock
    • Terminal Sires
      – Hamphire & Suffolk
      – NSIP and non-NSIP

  – Data Collection Complete
Progress Report

• Brad Boner
  – Flock Management
    • Range Lambing during Summer of 2016
    • Lambs Tagged at Marking/Docking
    • Western White-face Ewe Flock
  – Lambs are Currently in Feedlot
  – Lamb Harvest - Winter of 2017
Progress Report

• David Fisher
  – Flock Management
    • Fall/Winter Lambing of 2015
    • Lambs Tagged at Marking/Docking
    • Lambs Fed at Denis Feedlot
      – 2 Loads
    • Rambouillet Base Ewe Flock
    • Sires
      – Rambouillet, MerinoX, Suffolk
    • PedigreeScan
  – Data Collection Complete
Progress Report

• Paul Wipf
  – Flock Management
    • Lambed during the Winter of 2016
    • Tagged at Birth
    • Feedlot Finished On-Farm
    • Multi-Breed Ewe Flock
    • Terminal Sires
# David Fisher Datasheet

## Production Economics

<table>
<thead>
<tr>
<th>Rams</th>
<th>Wean (lb)</th>
<th>Feedlot (lb)</th>
<th>Days on Feed</th>
<th>Sales: $/ewe</th>
<th>Cost: $/ewe</th>
<th>Return: $/ewe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal</td>
<td>115</td>
<td>139</td>
<td>54</td>
<td>$208</td>
<td>$112</td>
<td>$96</td>
</tr>
<tr>
<td>MerinoX</td>
<td>104</td>
<td>123</td>
<td>59</td>
<td>$185</td>
<td>$107</td>
<td>$78</td>
</tr>
<tr>
<td>Ramb - S</td>
<td>96</td>
<td>127</td>
<td>66</td>
<td>$190</td>
<td>$117</td>
<td>$73</td>
</tr>
<tr>
<td>Ramb - F</td>
<td>106</td>
<td>132</td>
<td>67</td>
<td>$197</td>
<td>$113</td>
<td>$84</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ewes</th>
<th>Wean (lb)</th>
<th>Litter (lb)</th>
<th>Feedlot (lb)</th>
<th>Litter (lb)</th>
<th>Sales: $/ewe</th>
<th>Cost: $/ewe</th>
<th>Return: $/ewe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>110</td>
<td>110</td>
<td>135</td>
<td>135</td>
<td>$203</td>
<td>$113</td>
<td>$90</td>
</tr>
<tr>
<td>Twin</td>
<td>85</td>
<td>170</td>
<td>128</td>
<td>256</td>
<td>$384</td>
<td>$162</td>
<td>$222</td>
</tr>
</tbody>
</table>
Preliminary Data

Comparison of lamb weight in Wean and Post-Wean stages for Hampshire, Suffolk, and Polypay breeds.

- **Wean Stage**:
  - Hampshire: 63
  - Suffolk: 72
  - Polypay: 61

- **Post-Wean Stage**:
  - Hampshire: 128
  - Suffolk: 125
  - Polypay: 111

Legend:
- Blue: Hampshire
- Red: Suffolk
- Green: Polypay
Preliminary Data

<table>
<thead>
<tr>
<th>HCW</th>
<th>Hampshire</th>
<th>Suffolk</th>
<th>Polypay</th>
</tr>
</thead>
<tbody>
<tr>
<td>68</td>
<td>72</td>
<td></td>
<td>61</td>
</tr>
</tbody>
</table>

- Hampshire: 68
- Suffolk: 72
- Polypay: 61
Preliminary Data

LEA

Hampshire
Suffolk
Polypay

2.73
3.05
2.49
Preliminary Data

FT

- Hampshire: 0.13
- Suffolk: 0.17
- Polypay: 0.14
Preliminary Data

Yield Grade

- Hampshire: 1.96
- Suffolk: 2.22
- Polypay: 1.86
Preliminary Data

Yield Grade

Male: 1.66
Female: 2.35

Male
Female
Summary

• Technology Provides Real Economical Data
  – Lots of Data
• Data Management Plan is Essential
• Need Automated System for Data Capture
  – At Each Step
• Final Report in 2018