Type of Operation

- Economic vs. Lifestyle Goals?

Examples:
  - Add sheep to existing enterprise (feed and facilities)
  - Want to produce a few freezer lambs
  - Want a 4-H or FFA project for children
  - Want to manage weeds on small acreage
Finished our Mar./Apr. lambing, 282 ewes, 764 lambs alive and tagged, 2.66/lambs per ewe, 11% artificially raised. All in 19 days with a team of 5 on shifts.
Targeted Grazing Business

Mr. and Mrs. Riley Wilson- Wooly Weed Eaters

• Temporary Electro-net Fence
• Sole Owner Operators (77 yr wise)

Cash Flow

• 1100 Yearling Ewes
• $0.16/day- Producers Pay
• $5.00/head month- Landowners Pay
Targeted Grazing Opportunities

Cash Flow:

\[ 1,100 \text{ hd} \times \$0.16 \times 148 \text{ days} = \$26,048 \]
\[ 1,100 \text{ hd} \times \$5.00/\text{hd/mo} \times 5 \text{ mo} = \$27,500 \]

\$53,548
<table>
<thead>
<tr>
<th>Category</th>
<th>Wyoming</th>
<th>Utah</th>
<th>Idaho</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography</td>
<td>97,818 sq. mi².</td>
<td>84,899 sq. mi².</td>
<td>83,642 sq. mi².</td>
<td>9,797,000 sq. mi².</td>
</tr>
<tr>
<td>Sheep Inventory (rank)</td>
<td>367,702 (4&lt;sup&gt;th&lt;/sup&gt;, U.S.)</td>
<td>300,749 (5&lt;sup&gt;th&lt;/sup&gt;, U.S.)</td>
<td>248,289 (6&lt;sup&gt;th&lt;/sup&gt;, U.S.)</td>
<td>5,391,252</td>
</tr>
</tbody>
</table>

<sup>1</sup>Sheep Operations 859 1,898 1,447 101,387

1 to 99 hd (%) 70% 88% 93% 93%

100 to 299 hd (%) 11% 5% 3% 4.6%

300 to 999 hd (%) 8% 3% 1% 1.4%

1000 to 10,000 hd (%) 11% 4% 3% 0.01%

41% of all sheep produced in U.S. come from flocks >1000 hd
54% of all sheep produced in U.S. come from flocks 300 to >5000 hd

<sup>1</sup>USDA-NASS, 2012; <sup>2</sup>USDA-NASS, 2017
~ 40% of lamb crop comes from the Mountain West region
Water intake affected by:
  • Type of feed consumed
  • Environmental Temperature
    • 24 to 66 °F (Thermonuneutral Range)
  • Stage of Production
  • Rain, Dew, Snowfall

Water Requirement Equation (NRC 2007)
  • Maintenance 107-146 mL (g)/kg BW$^{0.75}$
  • Pregnancy 215-290 (g)/kg BW$^{0.75}$
  • Lactation 359 mL (g)/kg BW$^{0.75}$

Rule of thumb=1.0 to 1.5 gallons of water (8 to 12 pounds) for every 4 lb. DM consumed

<table>
<thead>
<tr>
<th>Sheep Type</th>
<th>Consumption gallons per head per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeder Lambs (50 to 100 lb., .25 lb./day)</td>
<td>.74 to 1.80</td>
</tr>
<tr>
<td>Ewe Maintenance (154 to 200 lb.)</td>
<td>.87 to 1.1</td>
</tr>
<tr>
<td>Ewe Gestation (154 to 200 lb.)</td>
<td>1.5 to 1.85</td>
</tr>
<tr>
<td>Ewe Lactation (154 to 200 lb.)</td>
<td>2.27 to 2.77</td>
</tr>
</tbody>
</table>

Adapted by W. Stewart from equations from NRC, 2007
## How Much Hay and Pasture?

**Figure 1.** How much a 150 pound ewe producing twins will consume at different stages of production

<table>
<thead>
<tr>
<th>Stage of Production (number of weeks)</th>
<th>% of Body Weight sheep will consume DM Basis</th>
<th>Pounds of Hay per day (as fed + 15% wastage)</th>
<th>Cost of Hay per ewe per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance (13 weeks)</td>
<td>1.7 %</td>
<td>3.1 lbs</td>
<td>$0.31</td>
</tr>
<tr>
<td>Early Pregnancy (15 weeks)</td>
<td>2.0 %</td>
<td>3.8 lbs</td>
<td>$0.38</td>
</tr>
<tr>
<td>Late Pregnancy (6 weeks)</td>
<td>2.4 %</td>
<td>4.6 lbs</td>
<td>$0.46</td>
</tr>
<tr>
<td>Lactation (14 weeks)</td>
<td>3.0 %</td>
<td>5.75 lbs</td>
<td>$0.57</td>
</tr>
</tbody>
</table>

$180/ ton = $0.10/ pound of hay
5 lb dry matter of pasture – 10 lb as fed on pasture
5 sheep per 1 AUM
22.50/AUM ÷ 5 sheep = $4.50/month
Relative Cost per/ewe

- Grazed forages are generally 1/3 of the cost of harvested feed.
- Grazing Feed Costs @ $23 AUM = $4.60/month
- Hay Feed Costs @ $150/ton = $11.25/month

Scenario:
What if you extend your grazing season 30 days?
That’s $6.65 saved per head!
For 1000 ewe flock $6,650 in savings!
Fencing Options
Priority and quality should be given to perimeter fence to keep sheep in and predators out.
Advantages of Temporary Fence
- Portable for available grazing
- Electric fence is successful at deterring predators
- Black and white braid on fence highly visible for sheep and predators

Specs and Costs:
- $125
- 164 ft by 35” tall
- PVC Post every 12.5 ft
https://www.premier1supplies.com/p/electronet-9-35-12-electric-netting
# Sheep Breeding Considerations

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at Puberty</td>
<td>4-14 months</td>
<td>Avg. 7 months</td>
</tr>
<tr>
<td>Length of Estrous Cycle</td>
<td>13-19 days</td>
<td>Avg. 17 days</td>
</tr>
<tr>
<td>Duration of Estrus “Heat”</td>
<td>18 – 48 hours</td>
<td>Avg. 30 hours</td>
</tr>
<tr>
<td>Ovulation</td>
<td>Near the end of estrus (24-30 hours)</td>
<td></td>
</tr>
<tr>
<td>Gestation</td>
<td>143 – 152 days</td>
<td>Avg. 147 days</td>
</tr>
</tbody>
</table>