Costs and Returns per acre from establishing alfalfa in oat hay, 2006

PlSiute County

Receipts

<table>
<thead>
<tr>
<th>Quantity per acre</th>
<th>Unit</th>
<th>Price/cost per unit</th>
<th>Value/cost per acre</th>
<th>Base Value</th>
<th>Your Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oat hay</td>
<td>2.0</td>
<td>tons</td>
<td>$67.67</td>
<td>$135.33</td>
<td>$135.33</td>
</tr>
<tr>
<td>Residue</td>
<td>0.25</td>
<td>AUM</td>
<td>$11.53</td>
<td>$2.88</td>
<td>$2.88</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td><strong>$138.22</strong></td>
<td><strong>$138.22</strong></td>
<td></td>
</tr>
</tbody>
</table>

Operating costs

- Land preparation
  - Plowing
    - 1 acre: $5.88
  - Roller harrow
    - 2 acre: $3.64
- Planting
  - 1 acre: $2.96
- Seed
  - Alfalfa seed
    - 16 pounds: $2.52
- Fertilization
  - Nitrogen (34-0-0)
    - 147 pounds: $0.18
  - Custom application
    - 1 acre: $7.82
- Irrigation (wheel line)
  - Labor
    - 1.33 hours: $10.00
  - Water assessment
    - 1 share: $10.00
- Repairs/maintenance
  - 1 acre: $2.30
  - Pumping
    - 25 acre inch: $0.00
- Harvesting
  - Swathing
    - 1 acre: $15.56
  - Raking/turning
    - 1 acre: $4.69
  - Baling
    - 2.00 tons: $4.79
  - Hauling/stacking
    - 2.00 tons: $3.63
- Interest on operating capital
  - 7.61%

**Subtotal**: $158.32

Ownership costs (excludes cost of land)

- Insurance
  - 1 acre: $2.00
- Machinery ownership costs
  - 1 acre: $100.17
- Irrigation equipment costs
  - 1 acre: $8.25

**Total costs**: $268.74

Net returns to owner for unpaid labor, management, equity and risk

- Above operating costs: $-20.11
- Above total listed costs: $-130.52

Breakeven Table - Oat Hay

<table>
<thead>
<tr>
<th>Yield (Ton/Ac)</th>
<th>Selling Price ($/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$57.67</td>
</tr>
<tr>
<td>0.50</td>
<td>-$113.98</td>
</tr>
<tr>
<td>1.00</td>
<td>-$89.35</td>
</tr>
<tr>
<td>1.50</td>
<td>-$64.73</td>
</tr>
<tr>
<td>2.00</td>
<td>-$40.11</td>
</tr>
<tr>
<td>2.50</td>
<td>-$15.48</td>
</tr>
<tr>
<td>3.00</td>
<td>$9.14</td>
</tr>
<tr>
<td>3.50</td>
<td>$33.76</td>
</tr>
</tbody>
</table>

Assumptions

1. Oats and alfalfa planted in May and harvested in August.
2. Interest computed on land preparation and planting costs for 10 months and fertilization/herbicide/irrigation costs for 4 months.
3. Machinery operating costs include: fuel, oil, repairs and labor.
4. Machinery ownership costs are allocated based on equipment used for each crop.
5. Machinery ownership costs include depreciation, interest, insurance, and housing.
6. Custom rates on all harvest operations.

Budget prepared by: E. Bruce Godfrey, Cody Bingham and Verl Bagley