## Costs and Returns per acre from growing alfalfa hay, 2006
### Millard County - Fillmore

### Receipts

<table>
<thead>
<tr>
<th>Description</th>
<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>Alfalfa hay</td>
<td>4.3</td>
<td>tons</td>
<td>$88.57</td>
<td>$380.84</td>
<td>$380.84</td>
<td>$380.84</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>
<td>$2.88</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$383.72</td>
<td>$383.72</td>
<td>$383.72</td>
</tr>
</tbody>
</table>

### Operating costs

**Fertilization**
- Phosphate (11-52-0)
  - Quantity: 192
  - Unit: pounds
  - Price/cost: $0.18
  - Value/cost: $34.27 ($34.27)
- Custom application
  - Quantity: 1
  - Unit: acre
  - Price/cost: $7.82
  - Value/cost: $7.82 ($7.82)

**Pesticides/herbicides**
- Pursuit
  - Quantity: 4
  - Unit: ounce
  - Price/cost: $4.46
  - Value/cost: $17.84 ($17.84)
- Select
  - Quantity: 6
  - Unit: ounce
  - Price/cost: $1.52
  - Value/cost: $9.09 ($9.09)
- Furadan
  - Quantity: 1
  - Unit: pint
  - Price/cost: $10.50
  - Value/cost: $10.50 ($10.50)
- Sencor
  - Quantity: 1
  - Unit: pint
  - Price/cost: $13.00
  - Value/cost: $13.00 ($13.00)
- Custom application
  - Quantity: 2
  - Unit: acre
  - Price/cost: $7.82
  - Value/cost: $15.64 ($15.64)

**Irrigation (wheel line)**
- Quantity: 7
  - Unit: irrigations
  - Price/cost: $0.00
  - Value/cost: $0.00 ($0.00)

**Labor**
- Quantity: 2.33
  - Unit: hours
  - Price/cost: $10.00
  - Value/cost: $23.33 ($23.33)

**Water assessment**
- Quantity: 1
  - Unit: share
  - Price/cost: $20.00
  - Value/cost: $20.00 ($20.00)

**Repairs/maintenance**
- Quantity: 1
  - Unit: acre
  - Price/cost: $2.30
  - Value/cost: $2.30 ($2.30)

**Pumping**
- Quantity: 22
  - Unit: acre inch
  - Price/cost: $0.00
  - Value/cost: $0.00 ($0.00)

**Harvesting**
- Swathing
  - Quantity: 4
  - Unit: acre
  - Price/cost: $4.03
  - Value/cost: $16.14 ($16.14)
- Raking
  - Quantity: 4
  - Unit: acre
  - Price/cost: $1.39
  - Value/cost: $5.57 ($5.57)
- Baling
  - Quantity: 4.30
  - Unit: tons
  - Price/cost: $4.79
  - Value/cost: $20.60 ($20.60)
- Hauling/stacking
  - Quantity: 4.30
  - Unit: tons
  - Price/cost: $3.63
  - Value/cost: $15.61 ($15.61)

**Crop insurance (75% Yield, 100% Price)**
- Quantity: 1
  - Unit: acre
  - Price/cost: $19.11
  - Value/cost: $19.11 ($19.11)

**Interest on operating capital**
- Quantity: 7.61%
- Price/cost: $5.59
- Value/cost: $5.45 ($5.45)

**Subtotal**
- Value/cost: $223.42 ($223.42)

### Ownership costs (excludes cost of land)

- Farm insurance
  - Quantity: 1
  - Unit: acre
  - Price/cost: $2.00
  - Value/cost: $2.00 ($2.00)
- Machinery ownership costs
  - Quantity: 1
  - Unit: acre
  - Price/cost: $49.63
  - Value/cost: $49.63 ($49.63)
- Irrigation equipment costs
  - Quantity: 1
  - Unit: acre
  - Price/cost: $8.25
  - Value/cost: $8.25 ($8.25)

**Total costs**
- Value/cost: $283.30 ($275.99)

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

- Above operating costs: $167.62
- Above total listed costs: $107.73

### Breakeven Table - Alfalfa

<table>
<thead>
<tr>
<th>Selling Price ($/ton)</th>
<th>$78.57</th>
<th>$83.57</th>
<th>$88.57</th>
<th>$93.57</th>
<th>$98.57</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield (Ton/Ac)</td>
<td>2.80</td>
<td>3.30</td>
<td>3.80</td>
<td>4.30</td>
<td>4.80</td>
</tr>
<tr>
<td>2.80</td>
<td>$12.08</td>
<td>$26.98</td>
<td>$40.88</td>
<td>$54.88</td>
<td>$68.88</td>
</tr>
<tr>
<td>3.30</td>
<td>$47.16</td>
<td>$63.66</td>
<td>$80.16</td>
<td>$96.66</td>
<td>$113.16</td>
</tr>
<tr>
<td>3.80</td>
<td>$82.23</td>
<td>$101.23</td>
<td>$120.23</td>
<td>$139.23</td>
<td>$158.23</td>
</tr>
<tr>
<td>4.30</td>
<td>$117.30</td>
<td>$138.80</td>
<td>$160.30</td>
<td>$181.80</td>
<td>$203.30</td>
</tr>
<tr>
<td>4.80</td>
<td>$152.38</td>
<td>$176.38</td>
<td>$200.38</td>
<td>$224.38</td>
<td>$248.38</td>
</tr>
<tr>
<td>5.30</td>
<td>$187.45</td>
<td>$213.95</td>
<td>$240.45</td>
<td>$266.95</td>
<td>$293.45</td>
</tr>
<tr>
<td>5.80</td>
<td>$222.52</td>
<td>$251.52</td>
<td>$280.52</td>
<td>$309.52</td>
<td>$338.52</td>
</tr>
</tbody>
</table>

### Assumptions

1. Alfalfa already established. Harvested in May, June, August, and late September.
2. Interest computed on fertilization/herbicide costs for 6 months and operating costs for 3 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.

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