## Costs and Returns per acre from establishing alfalfa in 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>1.25</td>
<td>tons</td>
<td>$88.57</td>
<td>$110.71</td>
<td>$110.71</td>
<td>$110.71</td>
</tr>
<tr>
<td>Residue</td>
<td>-</td>
<td>AUM</td>
<td>$11.53</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$110.71</td>
<td>$110.71</td>
<td>$110.71</td>
</tr>
</tbody>
</table>

### Operating costs

#### Land preparation
- Discing: 1 acre, $3.73
- Roller harrow: 1 acre, $3.64
- Planting: 1 acre, $2.96

#### Seed
- Alfalfa seed: 18 pounds, $2.52

#### Fertilization
- Nitrogen (34-0-0): 200 pounds, $0.18
- Phosphate (11-52-0): 1 acre, $7.82

#### Pesticides/herbicides
- 2-4-D: 1 pint, $2.75
- Custom application: 1 acre, $7.82

#### Irrigation (wheel line)
- Labor: 1.33 hours, $10.00
- Water assessment: 1 share, $20.00
- Repairs/maintenance: 1 acre, $2.30
- Pumping: 46 acre inch, $0.00

#### Harvesting
- Swathing: 1 acre, $4.03
- Raking: 1 acre, $1.39
- Baling: 1.25 tons, $4.79
- Hauling/stacking: 1.25 tons, $3.63

#### Crop insurance (75% Yield, 100% Price)
- 1 acre, $5.63

#### Interest on operating capital
- 7.61%, 1 acre, $5.04

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<th>Base Value</th>
<th>Your Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subtotal</strong></td>
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<td></td>
<td></td>
<td>$161.47</td>
<td>$158.84</td>
<td>$158.84</td>
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</tbody>
</table>

### Ownership costs (excludes cost of land)
- Farm insurance: 1 acre, $2.00
- Machinery ownership costs: 1 acre, $58.96
- Irrigation equipment costs: 1 acre, $8.25

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</tr>
</thead>
<tbody>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$69.21</td>
<td>$69.21</td>
<td>$69.21</td>
</tr>
</tbody>
</table>

### Total costs

- $230.68

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

- Above operating costs: -$50.76, -$48.13
- Above total listed costs: -$119.97, -$117.34

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### Breakeven Table - Alfalfa

Net returns per acre above operating costs

<table>
<thead>
<tr>
<th>Yield (Ton/Ac)</th>
<th>Selling Price ($/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$78.57</td>
</tr>
<tr>
<td>-0.25</td>
<td>-$168.48</td>
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<tr>
<td>0.25</td>
<td>-$133.41</td>
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<tr>
<td>0.75</td>
<td>-$98.33</td>
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<tr>
<td>1.25</td>
<td>-$63.26</td>
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<tr>
<td>1.75</td>
<td>-$28.19</td>
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<tr>
<td>2.25</td>
<td>$6.89</td>
</tr>
<tr>
<td>2.75</td>
<td>$41.96</td>
</tr>
</tbody>
</table>

### Assumptions
1. Alfalfa planted in late April and harvested in August.
2. Interest computed on land preparation and planting costs for 10 months and fertilization/herbicide/irrigation 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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Budget prepared by: E. Bruce Godfrey, Cody Bingham and Craig Poulson