# Costs and Returns per acre from growing first year alfalfa hay, 2006

## Uintah County

<table>
<thead>
<tr>
<th>Receipts</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>2.0</td>
<td>tons</td>
<td>$88.57</td>
<td>$177.13</td>
<td>$177.13</td>
<td>$177.13</td>
</tr>
<tr>
<td>Residue</td>
<td>0.50</td>
<td>AUM</td>
<td>$11.53</td>
<td>$5.77</td>
<td>$5.77</td>
<td>$5.77</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$182.90</td>
<td>$182.90</td>
<td>$182.90</td>
</tr>
</tbody>
</table>

## Operating costs

- **Land preparation**
  - Plowing
    - 1 acre: $5.88
  - Discing
    - 1 acre: $3.73
  - Field cultivation
    - 1 acre: $3.64
  - Plant (drill)
    - 1 acre: $2.96
  - Seed
    - 16 pounds: $2.52

- **Fertilization**
  - Phosphate (11-52-0)
    - 385 pounds: $0.18
  - Potassium (0-0-60)
    - 333 pounds: $0.15

- **Pesticides/herbicides**
  - Sencor
    - - pint: $13.00
  - Custom application
    - per acre: $7.82

- **Irrigation (center pivot)**
  - Labor
    - 2.67 hours: $10.00
  - Water assessment
    - 1 share: $10.00
  - Repairs/maintenance
    - 1 acre: $2.30
  - Pumping
    - 30 acre inch: $0.00

- **Harvesting**
  - Swathing
    - 2 acre: $4.03
  - Turning
    - 2 acre: $1.39
  - Baling
    - 2.00 tons: $4.79
  - Hauling/stacking
    - 2.00 tons: $3.63

- **Crop insurance (75% Yield, 100% Price)**
  - 1 acre: $7.63

- **Interest on operating capital**
  - 7.61%: $6.73

- **Subtotal**
  - $262.06

## Ownership costs (excludes cost of land)

- Insurance
  - 1 acre: $2.00
- Machinery ownership costs
  - 1 acre: $140.96
- Irrigation equipment costs
  - 1 acre: $8.25

- **Total costs**
  - $413.27

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

- Above operating costs: $-79.16
- Above total listed costs: $-230.37

## Breakeven Table - Alfalfa

<table>
<thead>
<tr>
<th>Breakeven Table - Alfalfa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net returns per acre above operating costs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Yield (Ton/Ac)</th>
<th>Selling Price ($/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$78.57</td>
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<tr>
<td>0.50</td>
<td>$-204.38</td>
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<tr>
<td>1.00</td>
<td>$-169.30</td>
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<tr>
<td>1.50</td>
<td>$-134.23</td>
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<tr>
<td>2.00</td>
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<tr>
<td>2.50</td>
<td>$-64.08</td>
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<tr>
<td>3.00</td>
<td>$-29.01</td>
</tr>
<tr>
<td>3.50</td>
<td>$ 6.06</td>
</tr>
</tbody>
</table>

## Assumptions

1. Alfalfa planted in May, harvested in July and September.
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.

Budget prepared by: E. Bruce Godfrey, Cody Bingham and Boyd Kitchen