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

**Summit County**

### Receipts

<table>
<thead>
<tr>
<th></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>Oat hay</td>
<td>1.8</td>
<td>tons</td>
<td>$67.67</td>
<td>$121.80</td>
<td>$121.80</td>
<td></td>
</tr>
<tr>
<td>Residue</td>
<td>0.50</td>
<td>AUM</td>
<td>$11.53</td>
<td>$5.77</td>
<td></td>
<td>$5.77</td>
</tr>
</tbody>
</table>

**Subtotal** $127.57

### Operating costs

- **Land preparation**
  - Plowing: 1 acre, $22.78
  - Discing w/ harrow: 2 acre, $23.12
  - Planting: 1 acre, $12.21

- **Seed**
  - Oat seed: 100 pounds, $0.17
  - Alfalfa seed: 16 pounds, $2.52

- **Fertilization**
  - Nitrogen (34-0-0): 132 pounds, $23.56
  - Phosphate (11-52-0): 48 pounds, $8.57
  - Custom application: 1 acre, $7.82

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

- **Irrigation (wheel line)**
  - 4 irrigations
  - Labor: 1.33 hours, $13.33
  - Water assessment: 1 share, $15.00
  - Repairs/maintenance: 1 acre, $2.30
  - Pumping: 30 acre inch, $0.00

- **Harvesting**
  - Swathing: 1 acre, $15.56
  - Raking/turning: 1 acre, $4.69
  - Baling: 1.80 tons, $8.62
  - Hauling/stacking: 1.80 tons, $6.53

- **Interest on operating capital**
  - 7.61%, $9.31

**Subtotal** $238.55

### Ownership costs (excludes cost of land)

- Insurance: 1 acre, $2.00
- Machinery ownership costs: 1 acre, $58.65
- Irrigation equipment costs: 1 acre, $8.25

**Total costs** $307.44

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

- Above operating costs $-110.98
- Above total listed costs $-179.88

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## Breakeven Table - Oat Hay

Net returns per acre above operating costs

<table>
<thead>
<tr>
<th>Yield (Ton/Ac)</th>
<th>$57.67</th>
<th>$62.67</th>
<th>$67.67</th>
<th>$72.67</th>
<th>$77.67</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.30</td>
<td>-$202.85</td>
<td>-$201.35</td>
<td>-$199.85</td>
<td>-$198.35</td>
<td>-$196.85</td>
</tr>
<tr>
<td>0.80</td>
<td>-$178.23</td>
<td>-$174.23</td>
<td>-$170.23</td>
<td>-$166.23</td>
<td>-$162.23</td>
</tr>
<tr>
<td>1.30</td>
<td>-$153.61</td>
<td>-$147.11</td>
<td>-$140.61</td>
<td>-$134.11</td>
<td>-$127.61</td>
</tr>
<tr>
<td>2.30</td>
<td>-$104.36</td>
<td>-$92.86</td>
<td>-$81.36</td>
<td>-$69.86</td>
<td>-$58.36</td>
</tr>
<tr>
<td>2.80</td>
<td>-$79.74</td>
<td>-$65.74</td>
<td>-$51.74</td>
<td>-$37.74</td>
<td>-$23.74</td>
</tr>
<tr>
<td>3.30</td>
<td>-$55.11</td>
<td>-$38.61</td>
<td>-$22.11</td>
<td>-$5.61</td>
<td>$10.89</td>
</tr>
</tbody>
</table>

### Assumptions

1. Oats and alfalfa planted in March and harvested in July.
2. Interest computed on land preparation and planting costs for 10 months and fertilization/herbicide/irrigation costs for 4 months.
3. Custom rates for all field operations.
4. Only owned machinery are a loader and truck.

Budget prepared by: E. Bruce Godfrey, Cody Bingham and Sterling Banks