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

### Rich 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>Oats</td>
<td>76.5</td>
<td>bushels</td>
<td>$2.13</td>
<td>$163.20</td>
<td>$163.20</td>
<td>$163.20</td>
</tr>
<tr>
<td>Straw</td>
<td>0.70</td>
<td>tons</td>
<td>$43.00</td>
<td>$30.10</td>
<td>$30.10</td>
<td>$30.10</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$193.30</td>
<td>$193.30</td>
<td>$193.30</td>
</tr>
</tbody>
</table>

### Operating costs

#### Land preparation
- **Plowing**
  - 1 acre: $22.78
- **Danish harrow**
  - 2 acre: $14.33
- **Planting**
  - 1 acre: $12.21

#### Seed
- **Oat seed**
  - 70 pounds: $0.20
- **Alfalfa seed**
  - 15 pounds: $2.52

#### Fertilization
- **Nitrogen (34-0-0)**
  - 132 pounds: $0.18
- **Phosphate (11-52-0)**
  - 48 pounds: $0.18
- **Custom application**
  - 1 acre: $7.82

#### Pesticides/herbicides
- **2-4-D**
  - - pint: $2.75
- **Puma**
  - - pint: $25.00
- **Custom application**
  - - 1 acre: $7.82

#### Irrigation (wheel line)
- **Labor**
  - 0.67 hours: $10.00
- **Water assessment**
  - 1 share: $10.00
- **Repairs/maintenance**
  - 1 acre: $2.30
- **Pumping**
  - 29 acre inch: $0.00

#### Harvesting
- **Custom combine**
  - 1 acre: $26.00
- **Haul grain (custom)**
  - 76.5 bushel: $0.06
- **Baling**
  - 0.70 tons: $4.79
- **Haul/stack straw**
  - 0.70 tons: $3.63

#### Ownership costs (excludes cost of land)
- **Farm insurance**
  - 1 acre: $2.00
- **Machinery ownership costs**
  - 1 acre: $82.77
- **Irrigation equipment costs**
  - 1 acre: $8.25

#### Total costs
- **Subtotal**
  - $216.36

### Ownership costs (excludes cost of land)
- **Farm insurance**
  - 1 acre: $2.00
- **Machinery ownership costs**
  - 1 acre: $82.77
- **Irrigation equipment costs**
  - 1 acre: $8.25

#### Total costs
- **Subtotal**
  - $309.39

### Net returns to owner for unpaid labor, management, equity and risk
- **Above operating costs**
  - $-23.06
- **Above total listed costs**
  - $-116.09

### Breakeven Table - Oats

<table>
<thead>
<tr>
<th>Selling Price ($/Bu)</th>
<th>$1.13</th>
<th>$1.63</th>
<th>$2.13</th>
<th>$2.63</th>
<th>$3.13</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Yield</strong> (Bu/Ac)</td>
<td>61.50</td>
<td>66.50</td>
<td>71.50</td>
<td>76.50</td>
<td>81.50</td>
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<tr>
<td>- $115.66</td>
<td>- $84.91</td>
<td>- $54.16</td>
<td>- $23.41</td>
<td>$7.34</td>
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<tr>
<td>- $110.30</td>
<td>- $77.05</td>
<td>- $43.80</td>
<td>- $10.55</td>
<td>$22.70</td>
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<tr>
<td>- $104.93</td>
<td>- $69.18</td>
<td>- $33.43</td>
<td>- $2.32</td>
<td>$38.07</td>
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<tr>
<td>- $99.56</td>
<td>- $61.31</td>
<td>- $23.06</td>
<td>$15.19</td>
<td>$53.44</td>
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<tr>
<td>- $94.20</td>
<td>- $53.45</td>
<td>- $12.70</td>
<td>$28.05</td>
<td>$68.80</td>
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<tr>
<td>- $88.83</td>
<td>- $45.58</td>
<td>- $2.33</td>
<td>$40.92</td>
<td>$84.17</td>
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<tr>
<td>- $83.46</td>
<td>- $37.71</td>
<td>$8.04</td>
<td>$53.79</td>
<td>$99.54</td>
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</tr>
</tbody>
</table>

### Assumptions
1. Grain and alfalfa planted in late April and harvested in early August.
2. Interest computed on land preparation and planting costs for 6 months and fertilization/herbicides/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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