## Costs and Returns per acre from establishing alfalfa after barley, 2006

### Davis County

#### Receipts

<table>
<thead>
<tr>
<th>Crop</th>
<th>Quantity per acre</th>
<th>Unit</th>
<th>Price/cost per unit</th>
<th>Value/cost per acre</th>
<th>Base Value per acre</th>
<th>Your Value per acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barley</td>
<td>98.2</td>
<td>bushels</td>
<td>$2.27</td>
<td>$222.52</td>
<td>$222.52</td>
<td></td>
</tr>
<tr>
<td>Straw</td>
<td>0.75</td>
<td>tons</td>
<td>$43.00</td>
<td>$32.25</td>
<td>$32.25</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$254.77</td>
<td></td>
<td>$254.77</td>
</tr>
</tbody>
</table>

#### Operating costs

**Land preparation**
- Plowing: 1 acre, $5.88
- Roller harrow: 1 acre, $3.64
- Land plane: 1 acre, $3.34
- Discing: 1 acre, $3.73
- Planting: 1 acre, $2.96

**Seed**
- Barley seed: 100 pounds, $0.17, $17.00
- Alfalfa seed: 12 pounds, $2.52, $30.24

**Fertilization**
- Nitrogen (46-0-0): 263 pounds, $0.20, $52.60
- Phosphate (11-52-0): 96 pounds, $0.20, $19.20

**Pesticides/herbicides**
- 2-4-D: 1 pint, $2.75, $0.00
- Puma: 0.67 pint, $25.00, $16.75
- Custom application: 1 acre, $7.82, $7.82

**Irrigation (siphon)**
- Labor: 1.33 hours, $10.00, $13.33
- Water assessment: 1 share, $10.00, $10.00
- Repairs/maintenance: 1 acre, $2.30, $2.30
- Pumping: 34 acre inch, $0.00, $0.00

**Harvesting**
- Custom combine: 1 acre, $35.00, $35.00
- Haul grain (custom): 98.2 bushels, $0.08, $7.86
- Baling: 0.75 tons, $4.79, $3.59
- Haul/stack straw: 0.75 tons, $3.63, $2.72

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

**Interest on operating capital**
- 7.61%, $9.18, $9.18

**Subtotal**
- $260.60, $260.60

**Ownership costs (excludes cost of land)**
- Farm insurance: 1 acre, $2.00, $2.00
- Machinery ownership costs: 1 acre, $88.85, $88.85
- Irrigation equipment costs: 1 acre, $8.25, $8.25

**Total costs**
- $359.70, $359.70

Net returns to owner for unpaid labor, management, equity and risk
- Above operating costs: $-5.83, $-5.83
- Above total listed costs: $-104.93, $-104.93

#### Breakeven Table - Barley

Net returns per acre above operating costs

<table>
<thead>
<tr>
<th>Yield (Bu/Ac)</th>
<th>Selling Price ($/Bu)</th>
<th>$1.27</th>
<th>$1.77</th>
<th>$2.27</th>
<th>$2.77</th>
<th>$3.27</th>
</tr>
</thead>
<tbody>
<tr>
<td>83.20</td>
<td>-$121.82</td>
<td>-$80.22</td>
<td>-$38.62</td>
<td>$2.98</td>
<td>$44.58</td>
<td></td>
</tr>
<tr>
<td>88.20</td>
<td>-$115.89</td>
<td>-$71.79</td>
<td>-$27.69</td>
<td>$16.41</td>
<td>$60.51</td>
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</tr>
<tr>
<td>93.20</td>
<td>-$109.96</td>
<td>-$63.36</td>
<td>-$16.76</td>
<td>$29.84</td>
<td>$76.44</td>
<td></td>
</tr>
<tr>
<td>98.20</td>
<td>-$104.03</td>
<td>-$54.93</td>
<td>-$8.53</td>
<td>$43.27</td>
<td>$92.37</td>
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</tr>
<tr>
<td>103.20</td>
<td>-$98.10</td>
<td>-$46.50</td>
<td>$5.10</td>
<td>$56.70</td>
<td>$108.30</td>
<td></td>
</tr>
<tr>
<td>108.20</td>
<td>-$92.17</td>
<td>-$38.07</td>
<td>$16.03</td>
<td>$70.13</td>
<td>$124.23</td>
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</tr>
<tr>
<td>113.20</td>
<td>-$86.24</td>
<td>-$29.64</td>
<td>$26.96</td>
<td>$83.56</td>
<td>$140.16</td>
<td></td>
</tr>
</tbody>
</table>

**Assumptions**
1. Grain 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 6 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.