**Costs and Returns per acre from establishing alfalfa with barley, 2006**

**Box Elder 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>Barley</td>
<td>92.8</td>
<td>bushels</td>
<td>$2.27</td>
<td>$210.28</td>
<td>$210.28</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>Hay</td>
<td>1.0</td>
<td>tons</td>
<td>$88.57</td>
<td>$88.57</td>
<td>$88.57</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$331.10</td>
<td>$331.10</td>
<td></td>
</tr>
</tbody>
</table>

**Operating costs**

- **Land preparation**
  - Plowing: 1 acre, $5.88
  - Land plane: 2 acre, $6.69
  - Discing w/ packer: 1 acre, $3.73
- **Planting**
  - 1 acre, $2.96
- **Seed**
  - Barley seed: 80 pounds, $0.17
  - Alfalfa seed: 12 pounds, $0.22
- **Fertilization**
  - Nitrogen (34-0-0): 150 pounds, $26.78
  - Phosphate (11-52-0): 96 pounds, $17.14
- **Custom application**
  - 1 acre, $7.82
- **Irrigation (siphon)**
  - 4 irrigations, $13.33
- **Labor**
  - 1.33 hours, $10.00
- **Water assessment**
  - 1 share, $10.00
- **Repairs/maintenance**
  - 1 acre, $2.30
- **Pumping**
  - - acre inch, $0.00
- **Harvesting**
  - Custom combine: 1 acre, $26.00
  - Haul grain (custom): 92.8 bushel, $0.06
  - Baling: 1 acre, $3.36
  - Haul/stack straw: 0.2 acre, $3.63
  - Swathing: 1 acre, $4.03
  - Turning/raking: 1 acre, $1.39
  - Baling: 1.75 tons, $8.35
  - Hauling/stacking: 1.75 tons, $6.35
- **Crop insurance (75% Yield, 100% Price)**
  - 1 acre, $5.63
- **Interest on operating capital**
  - 7.61%, $6.95

**Subtotal**

|  | $211.76 | $204.01 |

**Ownership costs (excludes cost of land)**

|  | $77.99 | $77.99 |

- **Farm insurance**
  - 1 acre, $2.00
- **Machinery ownership costs**
  - 1 acre, $67.74
- **Irrigation equipment costs**
  - 1 acre, $8.25

**Total costs**

|  | $289.76 | $282.01 |

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

- **Above operating costs**
  - $119.34
  - **Above total listed costs**
    - $41.35

**Breakeven Table - Barley**

<table>
<thead>
<tr>
<th>Yield (Bu/AC)</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>77.80</td>
<td>$8.45</td>
<td>$47.35</td>
<td>$86.25</td>
<td>$125.15</td>
<td>$164.05</td>
</tr>
<tr>
<td>82.80</td>
<td>$14.48</td>
<td>$55.88</td>
<td>$97.28</td>
<td>$138.68</td>
<td>$180.08</td>
</tr>
<tr>
<td>87.80</td>
<td>$20.51</td>
<td>$64.41</td>
<td>$108.31</td>
<td>$152.21</td>
<td>$196.11</td>
</tr>
<tr>
<td>92.80</td>
<td>$26.54</td>
<td>$72.94</td>
<td>$119.34</td>
<td>$165.74</td>
<td>$212.14</td>
</tr>
<tr>
<td>97.80</td>
<td>$32.57</td>
<td>$81.47</td>
<td>$130.37</td>
<td>$179.27</td>
<td>$228.17</td>
</tr>
<tr>
<td>102.80</td>
<td>$38.60</td>
<td>$90.00</td>
<td>$141.40</td>
<td>$192.80</td>
<td>$244.20</td>
</tr>
<tr>
<td>107.80</td>
<td>$44.63</td>
<td>$98.53</td>
<td>$152.43</td>
<td>$206.33</td>
<td>$260.23</td>
</tr>
</tbody>
</table>

**Assumptions**

2. Interest computed on land preparation and planting costs for 10 months and fertilization/pesticide/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.
Budget prepared by: E. Bruce Godfrey, Cody Bingham, Mike Pace and Lyle Holmgren