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

### Sevier County

#### Receipts

<table>
<thead>
<tr>
<th>Item</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>89.0</td>
<td>bushels</td>
<td>$2.27</td>
<td>$201.67</td>
<td>$201.67</td>
<td></td>
</tr>
<tr>
<td>Straw</td>
<td>0.80</td>
<td>tons</td>
<td>$43.00</td>
<td>$34.40</td>
<td>$34.40</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$236.07</td>
<td>$236.07</td>
</tr>
</tbody>
</table>

#### Operating costs

- **Land preparation**
  - Plowing: 1 acre, $5.88
  - Roller harrow: 2 acres, $3.64
  - Discing: 1 acre, $3.73
  - Land plane: 1 acre, $3.34
  - Planting: 1 acre, $2.96

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

- **Fertilization**
  - Nitrogen (34-0-0): 221 pounds, $0.18
  - Custom application: 1 acre, $7.82

- **Pesticides/herbicides**
  - 2-4-D: 1.25 pint, $2.75
  - Puma: 0.67 pint, $25.00
  - Custom application: 1 acre, $7.82

- **Irrigation** (wheel line)
  - 4 irrigations

- **Labor**
  - Custom combine: 1 acre, $26.00
  - Haul grain (custom): 89.0 bushel, $0.06
  - Baling: 0.80 tons, $4.79
  - Haul/stack straw: 0.80 tons, $3.63

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

- **Interest on operating capital**
  - 7.61%, $9.14

| **Subtotal** | $239.27 | $239.76 |

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

- Insurance: 1 acre, $2.00
- Machinery ownership costs: 1 acre, $90.10
- Irrigation equipment costs: 1 acre, $8.25

| **Total costs** | $339.62 | $340.12 |

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

- Above operating costs: $-3.20
- Above total listed costs: $-103.55

### Breakeven Table - Barley

<table>
<thead>
<tr>
<th>Yield (Bu/Ac)</th>
<th>Selling Price ($/Bu)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$1.27</td>
</tr>
<tr>
<td>74.00</td>
<td>-$110.29</td>
</tr>
<tr>
<td>79.00</td>
<td>-$104.26</td>
</tr>
<tr>
<td>84.00</td>
<td>-$98.23</td>
</tr>
<tr>
<td>89.00</td>
<td>-$92.20</td>
</tr>
<tr>
<td>94.00</td>
<td>-$86.17</td>
</tr>
<tr>
<td>99.00</td>
<td>-$80.14</td>
</tr>
<tr>
<td>104.00</td>
<td>-$74.11</td>
</tr>
</tbody>
</table>

### Assumptions

1. Grain and alfalfa planted in April and harvested in August.
2. Interest computed on land preparation and planting costs for 10 months and fertilization/herbicides/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.
2. Interest computed on land preparation and planting costs for 10 months and fertilization/herbicides/irrigation costs for 6 months.