**Utah State University Extension Economics**

**Costs and Returns per acre from growing corn for silage, 2006**

**Beaver 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>Corn silage</td>
<td>22.3</td>
<td>tons</td>
<td>$30.80</td>
<td>$686.84</td>
<td>$686.84</td>
<td>$686.84</td>
</tr>
<tr>
<td>Residue</td>
<td>-</td>
<td>AUM</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

**Subtotal**

$686.84

**Operating costs**

- **Land preparation**
  - Plowing: 1 acre, $5.88
  - Discing: 1 acre, $3.73
  - Roller harrow: 2 acres, $5.28

- **Planting**
  - 1 acre, $5.28

- **Seed**
  - 0.5 bags, $90.00

- **Cultivation**
  - 1 acre, $2.94

- **Fertilization**
  - Nitrogen: - pounds, $0.18
  - Phosphate: - pounds, $0.18
  - Custom application: - acre, $7.82

- **Pesticides/herbicides**
  - Alachlor: - Quart, $3.50
  - Phorate: 6.75 pounds, $2.40
  - 2-4-D: 2.50 pints, $2.75
  - Custom application: 1 acre, $7.82

- **Irrigation (center pivot)**
  - Labor: 1.67 hours, $10.00
  - Water assessment: 1 share, $10.00

- **Repairs/maintenance**
  - 1 acre, $2.30

- **Harvesting**
  - Chopping: 1 acre, $6.79
  - Packing and pushing: 1 acre, $5.73
  - Trucking: 2.2 loads/acre, $16.04

- **Crop insurance (75% Yield, 100% Price)**
  - 1 acre, 7.61%, $5.04

- **Interest on operating capital**
  - 1 acre, 7.61%, $5.04

**Subtotal**

$199.63

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

- Farm insurance: 1 acre, $2.00
- Machinery ownership costs: 1 acre, $106.32
- Irrigation equipment costs: 1 acre, $8.25

**Total costs**

$316.20

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

- Above operating costs: $487.21
- Above total listed costs: $370.84

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**Breakeven Table - Corn Silage**

<table>
<thead>
<tr>
<th>Yield (Ton/Ac)</th>
<th>$28.30</th>
<th>$29.55</th>
<th>$30.80</th>
<th>$32.05</th>
<th>$33.30</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.30</td>
<td>$346.56</td>
<td>$370.69</td>
<td>$394.81</td>
<td>$418.94</td>
<td>$443.06</td>
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<tr>
<td>20.30</td>
<td>$374.86</td>
<td>$400.24</td>
<td>$425.61</td>
<td>$450.99</td>
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<tr>
<td>21.30</td>
<td>$403.16</td>
<td>$429.79</td>
<td>$456.41</td>
<td>$483.04</td>
<td>$509.66</td>
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<tr>
<td>22.30</td>
<td>$431.46</td>
<td>$459.34</td>
<td>$487.21</td>
<td>$515.09</td>
<td>$542.96</td>
</tr>
<tr>
<td>23.30</td>
<td>$459.76</td>
<td>$488.89</td>
<td>$518.01</td>
<td>$547.14</td>
<td>$576.26</td>
</tr>
<tr>
<td>24.30</td>
<td>$488.06</td>
<td>$518.44</td>
<td>$548.81</td>
<td>$579.19</td>
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</tr>
<tr>
<td>25.30</td>
<td>$516.36</td>
<td>$547.99</td>
<td>$579.61</td>
<td>$611.24</td>
<td>$642.86</td>
</tr>
</tbody>
</table>

**Assumptions**

1. Corn planted in late March and harvested in September.
2. Interest computed on land preparation and planting costs for 6 months and cultivation, fertilization, herbicide and 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.

**Budget prepared by:** E. Bruce Godfrey, Cody Bingham and Mark Nelson