## Costs and Returns per acre from growing oat hay, 2006

### Wayne 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>Oat hay</td>
<td>2.8</td>
<td>tons</td>
<td>$67.67</td>
<td>$189.47</td>
<td>$189.47</td>
<td></td>
</tr>
<tr>
<td>Residue</td>
<td>1.00</td>
<td>AUM</td>
<td>$11.53</td>
<td>$11.53</td>
<td>$11.53</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$201.00</td>
<td>$201.00</td>
<td></td>
</tr>
</tbody>
</table>

### Operating costs
- **Land preparation**
  - Plowing 1 acre: $5.88
  - Discing w/ harrow 2 acre: $3.73 + $7.47 = $11.17
  - Planting 1 acre: $2.96
  - Seed 80 pounds: $0.17
  - Fertilization
    - Nitrogen (34-0-0) 205 pounds: $0.18 + $36.59 = $36.77
    - Phosphate (11-52-0) 48 pounds: $0.18 + $8.57 = $8.75
  - Custom application
    - 1 acre: $7.82
  - Pesticides/herbicides
    - 2-4-D 1.25 pint: $2.75
  - Irrigation (wheel line) 4 irrigations: $10.00 + $13.33 = $23.33
  - Labor 1.33 hours: $10.00 + $13.33 = $23.33
  - Water assessment 1 share: $2.00
  - Repairs/maintenance 1 acre: $2.30
  - Pumping 25 acre inch: $0.00
  - Harvesting
    - Swathing 1 acre: $4.03
    - Turning/raking 1 acre: $1.39
    - Baling 2.80 tons: $4.79 + $13.41 = $18.20
    - Hauling/stacking 2.80 tons: $3.63 + $10.16 = $13.79
  - Interest on operating capital 7.61%: $3.61

**Subtotal** $152.40 + $142.34 = $294.74

### Ownership costs (excludes cost of land)
- Farm insurance 1 acre: $2.00
- Machinery ownership costs 1 acre: $152.41
- Irrigation equipment costs 1 acre: $8.25

**Total costs** $315.06 + $305.00 = $620.06

Net returns to owner for unpaid labor, management, equity and risk
- Above operating costs $48.60 + $58.66 = $107.26
- Above total listed costs $48.60 + $58.66 - $114.06 = $31.20

### Breakeven Table - Oat Hay

<table>
<thead>
<tr>
<th>Yield (Ton/Ac)</th>
<th>Selling Price ($/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$57.67</td>
</tr>
<tr>
<td>1.30</td>
<td>-$53.27</td>
</tr>
<tr>
<td>1.80</td>
<td>-$28.64</td>
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<tr>
<td>2.30</td>
<td>-$4.02</td>
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<tr>
<td>2.80</td>
<td>$20.60</td>
</tr>
<tr>
<td>3.30</td>
<td>$45.23</td>
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<tr>
<td>3.80</td>
<td>$69.85</td>
</tr>
<tr>
<td>4.30</td>
<td>$94.47</td>
</tr>
</tbody>
</table>

**Assumptions**
1. Oat hay planted in late April and harvested in August.
2. Interest computed on land preparation and planting costs for 10 months and fertilization/herbicide/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 Verl Bagley