Costs and Returns per acre from establishing alfalfa in 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>$189.47</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>$11.53</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$201.00</strong></td>
<td><strong>$201.00</strong></td>
<td><strong>$201.00</strong></td>
</tr>
</tbody>
</table>

**Operating costs**

**Land preparation**
- Plowing: 1 acre, $5.88
- Discing w/ harrow: 2 acre, $7.47

**Planting**
- Oat seed: 80 pounds, $0.17
- Alfalfa seed: 16 pounds, $2.52

**Seed**
- Nitrogen (34-0-0): 205 pounds, $11.53
- Phosphate (11-52-0): 48 pounds, $8.57

**Fertilization**
- Custom application: 1 acre, $7.82

**Pesticides/Herbicides**
- none
- Custom application: 4 pounds, $0.00

**Irrigation (Wheel Line)**
- 1.33 hours, $10.00

**Labor**
- 1 share, $10.00

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

**Pumping**
- 25 acre inch, $0.00

**Harvesting**
- Swathing: 2 acre, $4.03
- Turning/raking: 2 acre, $2.78
- Baling: 2.80 tons, $13.41
- Hauling/Stacking: 2.80 tons, $10.16

**Interest on operating capital**
- 7.61%, $7.45

**Subtotal**
- **$190.72**
- **$184.02**

**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**
- **$353.39**
- **$346.68**

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

- Above operating costs: $10.28
- Above total listed costs: -$152.39

**Breakeven Table - Oat Hay**

<table>
<thead>
<tr>
<th>Yield (Ton/acre)</th>
<th>$57.67</th>
<th>$62.67</th>
<th>$67.67</th>
<th>$72.67</th>
<th>$77.67</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.30</td>
<td>-$91.59</td>
<td>-$85.09</td>
<td>-$78.59</td>
<td>-$72.09</td>
<td>-$65.59</td>
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<tr>
<td>2.30</td>
<td>-$42.35</td>
<td>-$30.85</td>
<td>-$19.35</td>
<td>-$7.85</td>
<td>-$3.65</td>
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<tr>
<td>3.30</td>
<td>-$6.90</td>
<td>$23.40</td>
<td>$39.90</td>
<td>$56.40</td>
<td>$72.90</td>
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<tr>
<td>3.80</td>
<td>$31.52</td>
<td>$50.52</td>
<td>$69.52</td>
<td>$88.52</td>
<td>$107.52</td>
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<tr>
<td>4.30</td>
<td>$56.15</td>
<td>$77.65</td>
<td>$99.15</td>
<td>$120.65</td>
<td>$142.15</td>
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</tbody>
</table>

**Assumptions**
1. Oat hay and alfalfa planted in late April and harvested in July and September.
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.

Budget prepared by: E. Bruce Godfrey, Cody Bingham and Verl Bagley
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