AHDB Monitor Farm Labour & Machinery Reviews

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Perth

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Angus Monitor Farm

Data Collection and Methodology

• General information including Arable Cropping, Yields
• Non-Arable enterprises – separated out by % time spent by labour and machinery
• Detailed Labour information – average cost per hour calculated inc. NI/Pension, Housing etc
• Machines & Implements inventory – hours, age, value, fuel, repairs, insurance, depreciation (straight line)
  • Create machine cost in £ per hour (based on annual hours)
  • Create implement cost in £ per hectare (based on annual hectares covered)

• Individual Operations to each block recorded

<table>
<thead>
<tr>
<th>Crop / Block</th>
<th>Operation</th>
<th>Operation (Standard)</th>
<th>No. of passes</th>
<th>Machine</th>
<th>Implement</th>
<th>Area (ha) covered</th>
<th>Machine Cost (£ per hour)</th>
<th>Labour Cost (£ per hour)</th>
<th>Rate of operation (ha per hour)</th>
<th>Implement Cost (£ per ha)</th>
<th>Total Operation Cost (£ per ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>W WHEAT PLOUGHED</td>
<td>Plough</td>
<td>Establishm ent</td>
<td>1</td>
<td>Case Magnum 230</td>
<td>Kverneland Plough 6 Furrow</td>
<td>78.12</td>
<td>£22.26</td>
<td>£9.09</td>
<td>0.80</td>
<td>£6.22</td>
<td>£45.40</td>
</tr>
</tbody>
</table>

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Farm Facts

- 403 ha (995 ac) – Mill of Inverarity + Drowndubbs 369 ha, rented 34 ha
- Balrownie imperfectly drained Brown Forest Soil
- Cropping – WW, OSR, Barley, Potatoes (let); silage and turnips

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Benchmarking: Results

Labour

- Family Team of 4 for cattle, sheep and hens plus crops – 0.8 ALU
Benchmarking: Results

Labour - Comparison

[Charts showing labour comparison for different categories with various data points and labels indicating different percentiles and means.]
Benchmarking: Results

Machinery

Litres of Gas Oil per cropped ha (lts)

Horsepower per Cropped Ha

Cropped ha per m of sprayer boom (ha)

Drilled ha per m of drill (ha)

Combined ha per m of combine cutter bar (ha)
Benchmarking: Results

Comparison of horsepower per cropped ha

![Bar charts showing comparison of horsepower per cropped ha](chart.png)
Benchmarking: Results

Machinery – Operations cost comparison

![Chart showing cost comparison for different crops and operations categories.](chart.png)
## Benchmarking: Results

### Analysis of Operation Costs

*Table 1: Headline Operation Costs for Mill of Inverarity Farm, compared to Scottish Monitor Farm Average*

<table>
<thead>
<tr>
<th>Operation</th>
<th>Machine</th>
<th>Implement</th>
<th>Mill of Inverarity Cost £/ha</th>
<th>Moray £/ha</th>
<th>Lothians £/ha</th>
<th>Scottish M Farm Average Cost £/ha</th>
<th>Monitor Farm Average Cost £/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drill</td>
<td>JD 6150 R</td>
<td>Lemken 1-pass drill</td>
<td>59</td>
<td>28</td>
<td>17</td>
<td>34.7</td>
<td>31.7</td>
</tr>
<tr>
<td>Ploughing</td>
<td>JD 6150 R</td>
<td>KV 5 furrow</td>
<td>57</td>
<td>47.1</td>
<td>48.9</td>
<td>51</td>
<td>57.2</td>
</tr>
<tr>
<td>Press</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>21</td>
<td>21</td>
<td>-</td>
</tr>
<tr>
<td>Cultivating</td>
<td>Included in 1-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>23.4</td>
<td>23.4</td>
<td>29.5</td>
</tr>
<tr>
<td></td>
<td>pass</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rolling</td>
<td>JD 6150 R</td>
<td>6m Cambridge Rollers</td>
<td>21</td>
<td>6.7</td>
<td>7</td>
<td>11.6</td>
<td>9.1</td>
</tr>
<tr>
<td>Spraying</td>
<td>JD 6830</td>
<td>Berthoud sprayer</td>
<td>10</td>
<td>6.8</td>
<td>3</td>
<td>6.6</td>
<td>6.1</td>
</tr>
<tr>
<td>Fertilising [soil]</td>
<td>JD 6150 R</td>
<td>Kuhn Spreader</td>
<td>5</td>
<td>3.4</td>
<td>11</td>
<td>6.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Combingining</td>
<td>Claas Tucano 460</td>
<td>-</td>
<td>58</td>
<td>91.4</td>
<td>97</td>
<td>82</td>
<td>66.3</td>
</tr>
<tr>
<td>Carting grain to store</td>
<td>JD 6830/ Hire Tractor</td>
<td>Heron Grain Trailer/ Fraser Grain Trailer</td>
<td>46</td>
<td>22</td>
<td>52.5</td>
<td>40.2</td>
<td>31.2</td>
</tr>
</tbody>
</table>
Benchmarking: Summary

Overall

• Efficient, well run unit, cost in the lowest 25%
• Ha per ALU are the highest in the group at 426 ha and labour cost per arable hectare is also low at £50 per ha
• Most operations costs per ha are higher than average – a smaller area to cover than most farms in the Group
• Combining costs are lower than average – the only Scottish farm to be below the mean
BENCHMARKING: DISCUSSION

RECOMMENDATIONS
Thank you.

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