Integrated Farm Management Conference 2017

Progression in Practice

Andrew Ferguson, Farm Manager
Leckford Estate, the Waitrose Farm
LEAF Demonstration Farm
Leckford’s history

Leckford Estate was purchased in 1929 by John Spedan Lewis (1885-1963)
The John Lewis Partnership

Spedan founded the John Lewis Partnership in the same year.
The Partnership acquired Waitrose in 1937
Leckford - a 4,000 acre estate

- River Test runs through the middle of estate
- Mostly Grade 3 shallow chalk soils
- 30-130 metres a.s.l.
- 750mm rainfall per year

- £16 million p.a. turnover
- ca. 150 Partners
- 93 houses
- water supplier
Partner Holiday Centres

The Abbas

The Lodges & Campsite
Leisure Activities

- Fishing on the River Test and several lakes
- 2 x 9-hole golf courses
Retail Activities

Farm Shop, Café and Plant Nursery
Food Processing

Processing Dairy

Oilseed Processing Unit

Mushroom Farm
Farming

Combinable (600 ha) and silage (250 ha) crops

Vineyards 7 ha

Dairy herd 550 cows + 450 YS & beef

Orchards 12 ha
IFM at Leckford

Integrated Farm Management

- Community Engagement
- Organisation & Planning
- Soil Management & Fertility
- Landscape & Nature Conservation
- Crop Health & Protection
- Water Management
- Energy Efficiency
- Animal Husbandry
- Pollution Control & By-Product Management
Integrated Farm Management

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IFM at Leckford

www.leckfordestate.co.uk
Organisational Structure

- Property
- Farming
- Retail & Leisure
- Food Processing

The Waitrose farm
leckford Estate
Strategic Priorities

1. Deliver sustainable levels of profit and cash-flow
2. Develop a commercial strategy that maximises value creation
3. Develop the Waitrose Farm as part of the Waitrose brand
4. Build foundations for growth by modernising the operating model
5. Develop Partner experience and ‘one team’ ethos
6. Locate and integrate new business development opportunities
Formal – ‘Leckford Operating Procedures’

Informal - Web Community

www.leckfordestate.co.uk
The Waitrose farm
Leckford Estate

Estate Communications
– external web-based

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IFM at Leckford

www.leckfordestate.co.uk
Community Engagement – media
Training Waitrose retail Partners in top fruit production

‘Team-day’ hands-on work experience for Waitrose HQ Partners
Community Engagement – outdoor classroom

Sparsholt College students learning about the pros and cons of different cultivation techniques

Sparsholt College students learning about designing buildings around the animal’s needs
Community Engagement
– Open Farm Sunday

www.leckfordestate.co.uk
The Waitrose farm
Leckford Estate

Community Engagement – farm events and off-farm talks
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www.leckfordestate.co.uk
Forage protein crops for the Leckford dairy herd

Legumes:
- White clover
- Red clover
- Sainfoin
- Lucerne

Non-legumes:
- Brassicas
As part of a 5-year multiple stake-holder Waitrose Farming Partnership research project, IBERS and Bangor University modelling of on-farm data gave the following **benefits from optimized forage protein systems**:  

<table>
<thead>
<tr>
<th></th>
<th>Total emissions</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per kg product (LW or litres)</td>
<td>Lamb</td>
<td>Beef</td>
<td>Milk</td>
</tr>
<tr>
<td></td>
<td>Up to 27%</td>
<td>Up to 15%</td>
<td>Up to 7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>At farm level (per hectare)</td>
<td>Up to 24%</td>
<td>Up to 14%</td>
<td>Up to 7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Net financial impact</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per kg product (LW or litres)</td>
<td>Up to +20%</td>
<td>Up to +29%</td>
<td>Up to +10%</td>
</tr>
<tr>
<td></td>
<td>At farm level (per hectare)</td>
<td>Up to +£163</td>
<td>Up to +£143</td>
<td>Up to +£178</td>
</tr>
</tbody>
</table>
Integrated Farm Management

- Community Engagement
- Organisation & Planning
- Soil Management & Fertility
- Crop Health & Protection
- Landscape & Nature Conservation
- Water Management
- Energy Efficiency
- Animal Husbandry
- Emissions Control & Product Management

www.leckfordestate.co.uk
The Waitrose farm
Leckford Estate

Smart technology in
the Leckford dairy

- Electronic cow ID
- Auto shed gate
- Activity meter for heat detection
- Automatic footbath
- Feeding management software linked to diet feeder wagon

www.leckfordestate.co.uk
IFM at Leckford
## Using the diversity of enterprises to reduce overall wastage

<table>
<thead>
<tr>
<th>Source</th>
<th>By-product</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mushroom Farm</td>
<td>Spent Mushroom Compost</td>
<td>Gardening compost for sale</td>
</tr>
<tr>
<td>Oilseed Processing Unit</td>
<td>Seed extract</td>
<td>High protein feed for dairy cows</td>
</tr>
<tr>
<td>Oilseed Processing Unit</td>
<td>Waste oil</td>
<td>Heating oil for workshops</td>
</tr>
<tr>
<td>Offices</td>
<td>Paper</td>
<td>Animal bedding (shredded paper)</td>
</tr>
<tr>
<td>Orchards</td>
<td>Unmarketable fruit</td>
<td>Cattle feed</td>
</tr>
<tr>
<td>Orchards</td>
<td>Tree prunings</td>
<td>Dried woodchip for sale as BBQs chips</td>
</tr>
<tr>
<td>Residential property</td>
<td>Old sinks, chimney pots, etc.</td>
<td>Planters for sale in Nursery</td>
</tr>
</tbody>
</table>
Landscape and Nature Conservation and Enhancement

- Woodland habitats
- Riparian habitats (SSSIs)
- Nature reserves
- Grounds and gardens
- Farm land
  - Wildflower margins
  - In-crop habitats
  - Cultivated margins
  - Unharvested headlands
  - Ground-nesting bird plots
  - Nectar flower plots
  - Wild bird seed mixtures
  - Over-wintered stubbles
  - Hedgerows
  - Chalk grassland and water meadows
  - Beetle banks
Habitat assessments at Leckford

‘On-the-ground’ species surveys and drone assessment of, for example, ground cover by shrubs and trees.

<table>
<thead>
<tr>
<th>No</th>
<th>Field</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>West Shrub</td>
<td>1249.61 m²</td>
</tr>
<tr>
<td>2</td>
<td>West Trees</td>
<td>26028.25 m²</td>
</tr>
<tr>
<td>3</td>
<td>East Trees 2</td>
<td>24974.45 m²</td>
</tr>
<tr>
<td>4</td>
<td>East Trees 1</td>
<td>23326.03 m²</td>
</tr>
<tr>
<td>5</td>
<td>Mid Trees 2</td>
<td>17904.30 m²</td>
</tr>
<tr>
<td>6</td>
<td>Mid Trees 1</td>
<td>20552.92 m²</td>
</tr>
</tbody>
</table>
Thank you for your attention!