DRYLAND LUCERNE: HAY AND PRIME LAMBS

1. Data-Lambs

| Lambs purchase weight and price | 30 kg | $100.00 per head |
| Lambs finished weight and price | 45 kg | $140.00 per head |
| Dry matter | 2000 kg/ha |
| Wether lambs/ha | 15.0 |

If lambs gain 250g/head/day, they would need to be grazed for 60 days to gain 15 kg/head.

2. GROSS MARGIN BUDGET:

**INCOME - HAY**

Assumes most bales are prime hay quality.

- 1 cut per season @ 2.00 t/ha per cut
- Total Yield = 2.00 tonnes per hectare
- 40 bales per tonne (25 kg bales)

<table>
<thead>
<tr>
<th>AFIA Grade</th>
<th>Bales/ha</th>
<th>Price/bale</th>
<th>Total Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>12</td>
<td>$8.50</td>
<td>$102.00</td>
</tr>
<tr>
<td>B2</td>
<td>8</td>
<td>$6.50</td>
<td>$52.00</td>
</tr>
<tr>
<td>C3</td>
<td>8</td>
<td>$4.00</td>
<td>$32.00</td>
</tr>
</tbody>
</table>


**INCOME - GRAZING**

Grazing (will vary substantially depending on stock type, seasonal conditions, crop growth & grazing period)

- 14.7 hd/ha @ $140.00 per head
- 2% losses assumed

Wool

- 1.50 kg wool/head @ $2.00/kg

**A. TOTAL INCOME $/ha:**

$2,679

**VARIABLE COSTS:**

see following pages(s) for details

- Depreciation of establishment cost (over 4 years)........................................ $52.32
- Lucerne variable costs
  - Fertiliser.......................................................... $387.20
  - Herbicide......................................................... $38.19
  - Insecticide....................................................... $0.00
  - Mow, rake & bale (contract).................................. $262.20
  - Twine @ $0.113/bale............................................. $9.04
  - Cart and stack 100% of hay ($10.68/t)........................ $21.36

Sheep Variable costs

- Purchase store lambs @ $100/hd........................................ $1,500.00
- Drench & vaccine $0.30/head............................................. $4.50
- Shearing................................................................. $3.00/head $45.00
- Commission 5.0% of stock sales.................................. $102.90
- Industry Levies...................................................... $1.50$/hd $22.05
- Yard Dues............................................................... $1.00$/hd $14.70
- Freight................................................................. $1.50$/hd $22.05

**B. TOTAL VARIABLE COSTS $/ha:**

$2,481.50

**C. GROSS MARGIN (A-B) $/ha:**

$197.50

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>85.00</td>
<td>142</td>
<td>282</td>
<td>421</td>
<td>561</td>
<td>701</td>
</tr>
<tr>
<td>90.00</td>
<td>67</td>
<td>207</td>
<td>346</td>
<td>486</td>
<td>626</td>
</tr>
<tr>
<td>95.00</td>
<td>-8</td>
<td>132</td>
<td>271</td>
<td>411</td>
<td>551</td>
</tr>
<tr>
<td><strong>100.00</strong></td>
<td><strong>-83</strong></td>
<td><strong>57</strong></td>
<td><strong>196</strong></td>
<td><strong>336</strong></td>
<td><strong>476</strong></td>
</tr>
<tr>
<td>105.00</td>
<td>-158</td>
<td>-18</td>
<td>121</td>
<td>261</td>
<td>401</td>
</tr>
<tr>
<td>110.00</td>
<td>-233</td>
<td>-93</td>
<td>46</td>
<td>186</td>
<td>326</td>
</tr>
</tbody>
</table>

This budget should be used as a GUIDE ONLY and should be changed by the grower to take account of movements in crop and input prices, changes in seasonal conditions and individual farm characteristics. Estimated prices are GST-exclusive.
CALENDAR OF OPERATIONS:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Month</th>
<th>hrs/ha</th>
<th>$/hour</th>
<th>$/ha</th>
<th>Rate/ha</th>
<th>$</th>
<th>$/ha</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spray - paraquat + diquat</td>
<td>Jul</td>
<td>0.10</td>
<td>17.05</td>
<td>1.71</td>
<td>2.4 L</td>
<td>10.45/L</td>
<td>25.08</td>
<td><strong>26.79</strong></td>
</tr>
<tr>
<td>Spray - diuron</td>
<td>Jul</td>
<td>with above</td>
<td>1.0 L</td>
<td>11.40/kg</td>
<td>11.40</td>
<td>11.40</td>
<td><strong>11.40</strong></td>
<td></td>
</tr>
<tr>
<td>Apply Single Super</td>
<td>Aug</td>
<td>contract</td>
<td>20.00</td>
<td>250kg</td>
<td>0.42/kg</td>
<td>105.00</td>
<td><strong>125.00</strong></td>
<td></td>
</tr>
<tr>
<td>Mow, rake 3 times and bale</td>
<td>Nov</td>
<td>contract</td>
<td>262.20</td>
<td></td>
<td></td>
<td></td>
<td><strong>262.20</strong></td>
<td></td>
</tr>
<tr>
<td>Cart and stack hay in shed</td>
<td>Nov</td>
<td>$0.27 per bale</td>
<td>@ 80 bales/ha per cut</td>
<td></td>
<td></td>
<td></td>
<td><strong>21.36</strong></td>
<td></td>
</tr>
</tbody>
</table>

AGRONOMIC NOTES:

- To reduce the likelihood of herbicide resistance, rotate herbicide groups and weed management techniques.
- For more information, refer to the I&I NSW Management Guide "Weed Control in Pastures and Lucerne 2010"
- Establishment: This budget assumes a stand life of 4 years, so depreciation of establishment cost is the cost of establishment divided by four.
- Fertilisers: Nutrient requirements should be assessed with soil tests, strip trials and paddock history records.

GRAZING MANAGEMENT: AGNOTE DPI-198 "Grazing management of lucerne": Lucerne needs a period of spelling or recovery alternated with a period of grazing. Rotational grazing and spelling are the keys to lucerne management. The rest period allows the plant to renew root reserves. Continuous stocking can cause rapid decline in plant numbers. The heavier the stocking rate, the more rapid plant death, as constant removal of new shoots depletes root reserves, especially if growing conditions are unfavourable. When grazing, aim to preserve basal buds and preferably some leaf. This allows rapid regrowth. As a general rule, remove stock when lucerne is 5 cm high. Avoid any grazing of lucerne crown growth points.

For more detailed information see AGNOTE DPI-198 "Grazing management of lucerne" http://www.agric.nsw.gov.au/reader/past-management/dpi198.htm and Agfact P2.2.25 "Lucerne for Pasture and fodder" Profitability: Profitability can vary greatly due to a number of factors including the margin between purchase price and sale price per head, the total dry matter available and therefore potential stocking rate, meeting target weight gains and therefore target sale categories and prices, or mortality rates. Please refer to the sensitivity table for an example and factor in the seasonal and market risks in your planning activities.

Use of a particular brand name does NOT imply recommendation of that brand by I&I NSW.

Always read chemical labels and follow directions, as it is your legal responsibility to do so.

LABOUR REQUIREMENTS:

- Labour to apply fertiliser, spray or for livestock management is not costed.

MACHINERY ASSUMPTIONS:

- Tractor: PTO power: 57kW (76 HP)
- Machinery costs refer to variable costs of: fuel, oil, filters, tyres, batteries and repairs.
- Mow, Rake, Bale costs: If you use your own machinery for mowing, raking and baling then substitute this cost in your own budget.

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