

# DRYLAND LUCERNE: Weaner cattle or trade steers

## 1. Data-Cattle

Summer 2010-11

### Steers purchase weight and price

\$2.00 per kg live @ 320 kg = \$640.00 per head

### Steers finished weight and price

\$2.10 per kg live @ 400 kg = \$840.00 per head

Dry matter 4000  
Steers/ha\* 2.90

\* Stocking rate assumed could be 2 grazings at 1.45 steers/ha

## 2. GROSS MARGIN BUDGET:

### INCOME - GRAZING

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

2.87 hd/ha\*\* @ 0.90 kg/day x \$2.10/kg liveweight

\*\* 1% mortality rate assumed

i.e. 400 kg/hd @ \$840/hd

### A. TOTAL INCOME \$/ha:

| Sample Budget | Your Budget |
|---------------|-------------|
| \$/ha         | \$/ha       |

|            |  |
|------------|--|
| \$2,411.64 |  |
|------------|--|

|                |  |
|----------------|--|
| <b>\$2,412</b> |  |
|----------------|--|

### VARIABLE COSTS:

see following pages(s) for details

|                        |  |                      |            |  |
|------------------------|--|----------------------|------------|--|
| Lucerne variable costs | Depreciation of establishment cost (over 4 years)..... |                      | \$52.32    |  |
|                        | Fertiliser.....  |                      | \$125.00   |  |
|                        | Herbicide.....   |                      | \$38.19    |  |
|                        | Insecticide.....                                       |                      | \$0.00     |  |
| Cattle Variable costs  | Purchase store steers, 320kg @ \$2.00/kg=\$640/hd..... |                      | \$1,856.00 |  |
|                        | Drench, vaccine <sup>#</sup> , bloat capsules.....     | \$20.00 /hd          | \$58.00    |  |
|                        | Supplement*.....                                       |                      |            |  |
|                        | Commission.....  | 5.0% of cattle sales | \$120.58   |  |
|                        | Industry Levies.....                                   | \$5.00 /hd           | \$14.50    |  |
|                        | Yard Dues.....   | \$4.00 /hd           | \$11.60    |  |
|                        | Freight.....   | \$20.00 /hd          | \$58.00    |  |

<sup>#</sup> A second 5-in-1 booster may be required for pulpy kidney protection.

Bloat capsules may need to be administered at least 7 days before grazing risky pasture, refer to NSW DPI Primefact 416, "Bloat"

\* Supplementary grass pasture or roughage hay may be required during periods of lush lucerne growth.

### B. TOTAL VARIABLE COSTS \$/ha:

|                   |  |
|-------------------|--|
| <b>\$2,334.18</b> |  |
|-------------------|--|

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

|                |  |
|----------------|--|
| <b>\$77.46</b> |  |
|----------------|--|

### D. GROSS MARGIN (A-B) \$/head:

|                |  |
|----------------|--|
| <b>\$26.71</b> |  |
|----------------|--|

## SENSITIVITY TABLE:

### Effect of livestock prices on gross margin per hectare

| Purchase Price \$/kg | Selling Price |            |            |            |            |
|----------------------|---------------|------------|------------|------------|------------|
|                      | \$1.90 /kg    | \$2.00 /kg | \$2.10 /kg | \$2.20 /kg | \$2.30 /kg |
| 1.70                 | 138           | 247        | 356        | 465        | 574        |
| 1.80                 | 45            | 154        | 263        | 372        | 481        |
| 1.90                 | -48           | 61         | 170        | 279        | 388        |
| <b>2.00</b>          | -141          | -32        | <b>77</b>  | 187        | 296        |
| 2.10                 | -234          | -124       | -15        | 94         | 203        |
| 2.20                 | -326          | -217       | -108       | 1          | 110        |
| 2.30                 | -419          | -310       | -201       | -92        | 17         |

# DRYLAND LUCERNE: Weaner cattle or trade steers

Northern Zone

Summer 2010-11

| CALENDAR OF OPERATIONS:   |       | Machinery  |                 |                | Inputs  |            |                | Total Cost<br>\$/ha |
|---------------------------|-------|------------|-----------------|----------------|---------|------------|----------------|---------------------|
| Operation                 | Month | hrs/ha     | Cost<br>\$/hour | Total<br>\$/ha | Rate/ha | Cost<br>\$ | Total<br>\$/ha |                     |
| Spray - paraquat + diquat | Jul   | 0.10       | 17.05           | 1.71           | 2.4 L   | 10.45/L    | 25.08          | <b>26.79</b>        |
| Spray - diuron            | Jul   | with above |                 |                | 1.0 L   | 11.40/kg   | 11.40          | <b>11.40</b>        |
| Apply Single Super        | Aug   | contract   |                 | 20.00          | 250kg   | 0.42/kg    | 105.00         | <b>125.00</b>       |

**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"

**Fertilisers:** Nutrient requirements should be assessed with soil tests, strip trials and paddock history records.

**Establishment:** This budget assumes a stand life of 4 years, so depreciation of establishment cost is the cost of establishment divided by four.

**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.  
Ideally stock would be rotated through paddocks to utilise forage produced and manage lucerne satisfactorily.  
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, requirements for supplementary feeds such as straw. 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.