

DRYLAND LUCERNE: HAY AND PRIME LAMBS

1. Data-Lambs

Summer 2010-11

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)

	Sample Budget	Your Budget
	\$/ha	\$/ha
60% AFIA Grade A1	48 bales/ha@ \$8.50 / bale	\$408
20% AFIA Grade B2	16 bales/ha@ \$6.50 / bale	\$104
20% AFIA Grade C3	16 bales/ha@ \$4.00 / bale	\$64

See http://www.afia.org.au/quality/national_grades/ for more details on hay grades used.

INCOME - GRAZING

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

14.7 hd/ha @ \$140.00 per head	\$2,058.00	
2% losses assumed		
Wool 1.50 kg wool/head @ \$2.00 /kg	\$45.00	
A. TOTAL INCOME \$/ha:	\$2,679	

VARIABLE COSTS: see following pages(s) for details

Lucerne variable costs	Depreciation of establishment cost (over 4 years)	\$52.32	
	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

SENSITIVITY TABLE:

Effect of livestock prices on gross margin per hectare

Purchase Price \$/hd	Selling Price				
	\$120/hd	\$130/hd	\$140/hd	\$150/hd	\$160/hd
85.00	142	282	421	561	701
90.00	67	207	346	486	626
95.00	-8	132	271	411	551
100.00	-83	57	196	336	476
105.00	-158	-18	121	261	401
110.00	-233	-93	46	186	326

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Northern Zone

Summer 2010-11

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total Cost \$/ha	
Operation	Month	hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha		
Spray - paraquat + diquat	Jul	0.10	17.05	1.71	2.4 L	10.45/L	25.08	26.79	
Spray - diuron	Jul	with above			1.0 L	11.40/kg	11.40	11.40	
Apply Single Super	Aug	contract			250kg	0.42/kg	105.00	125.00	
Mow, rake 3 times and bale	Nov	contract						262.20	
Cart and stack hay in shed	Nov	\$0.27	per bale @ 80 bales/ha per cut						21.36

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.