NSW DEPARTMENT OF
PRIMARY INDUSTRIES

Establishing pastures - Readers' Note

This document is part of a larger publication. The remaining parts and full version of the publication can be found at:

http://www.dpi.nsw.gov.au/agriculture/livestock/dairy-cattle/feed/publications/establishing-pastures

Updated versions of this document can also be found at the above web address.

Pasture budgets

Pastures usually produce an inexpensive source of high-quality feed. The cost of developing a pasture is shown in the following tables. Figures are accurate as at 1996. For later dates, please be sure to use current figures for every item. These budgets are for a typical perennial ryegrass – white clover pasture.

Ground preparation (costs per hectare)

Cultivation		
Chisel plough × 1	1.5 h @ $8/h	$12.00
Disc harrow × 2	3.5 h @ $8/h	$28.00
		$40.00
Herbicide treatment		
Glyphosate	2.5 L @ $12/L	$30.00
Boom spray	0.4 h @ $8/h	$3.20
		$33.20
Knockdown herbicide application		
Glyphosate	1.0 L @ $12/L	$12.00
Boom spray	0.4 h @ $7/h	$2.80
		$14.80

Ryegrass–clover pasture (costs per hectare)

Establishment		
Cultivation		$40.00
Seed	12 kg perennial ryegrass + 6 kg clover	$94.00
Fertiliser	125 kg DAP @ $500/t	$62.50
Sowing	1.5 h @ $8/h	$12.00
		$208.50
Topdressing		
Fertiliser	180 kg N as urea @ $1.08/kg	$194.40
	15 kg P @ $2.70/kg	$40.50
	120 kg K @ $0.80/kg	$96.00
Broad-casting	0.25 h @ $8/h × 7 treatments	$14.00
		$344.90
Irrigation		
Average twice per grazing × 0.33 ML per irrigation @ $30/ML		$20.00
Total cost in first year		$573.40

In the first year the pasture will yield 20 t/ha DM (dry matter) at a cost of $573.40/ha or $28.67/t DM, or 2.867¢/kg. This figure emphasises the cost-effectiveness of pasture production.

Pasture consumed per hectare

This will vary from 3 to 15 t/ha DM depending on pasture management.

Pasture consumed (t/ha DM)	Cost ($/t)
3	191
6	96
9	64
12	48
15	38

How does pasture consumed affect the cost of producing 1 litre of milk?

Pasture consumed (t/ha DM)	Cost to produce 1 L milk (¢)
3	14.8
6	8.9
9	7.0
12	6.0
15	5.4

Growing high yielding pastures and achieving high pasture consumption are essential.

Yield and cost (at 100% use) of pasture species

Pasture type	Expected yield (t/ha DM)	Cost ($)
Oats	10	45
Annual clover	12	35
Annual ryegrass	12	40
Lucerne	18	35
Kikuyu	20	40
Maize	22	60
Forage sorghum	20	30

The average cost of pasture eaten on the 12 dairy farms in the following graph was $48 per tonne of dry matter eaten. The range was $10.67 to $92.79.

Litres of milk per hectare of pasture on 12 mid and lower Hunter dairy farms (1992–94)