

Turning Pasture Into Product

Peter Ball

Industry Development and Extension Leader



TIAR New Town

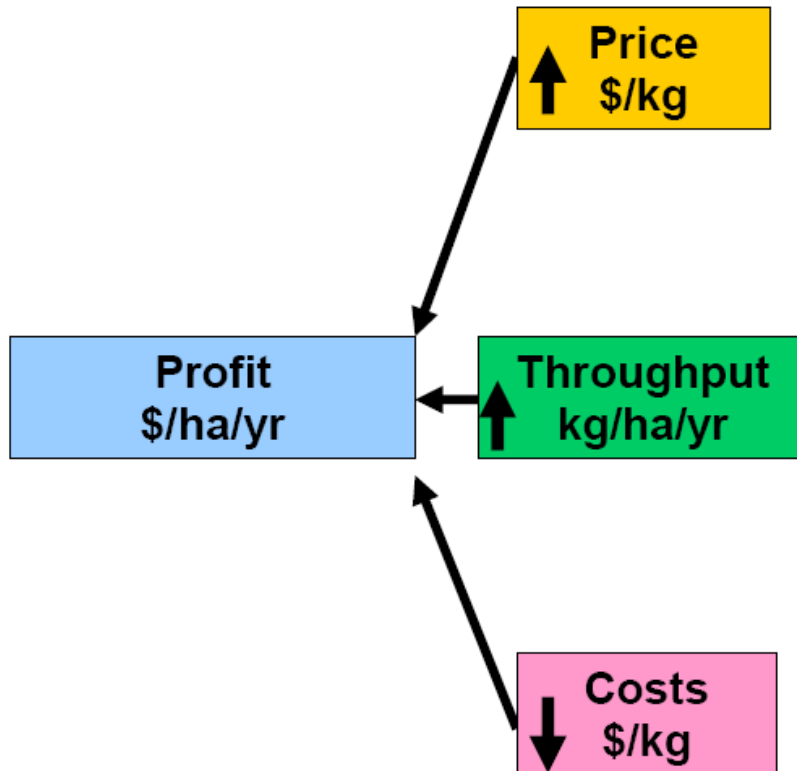
So where are we now?



No matter how you look at it...

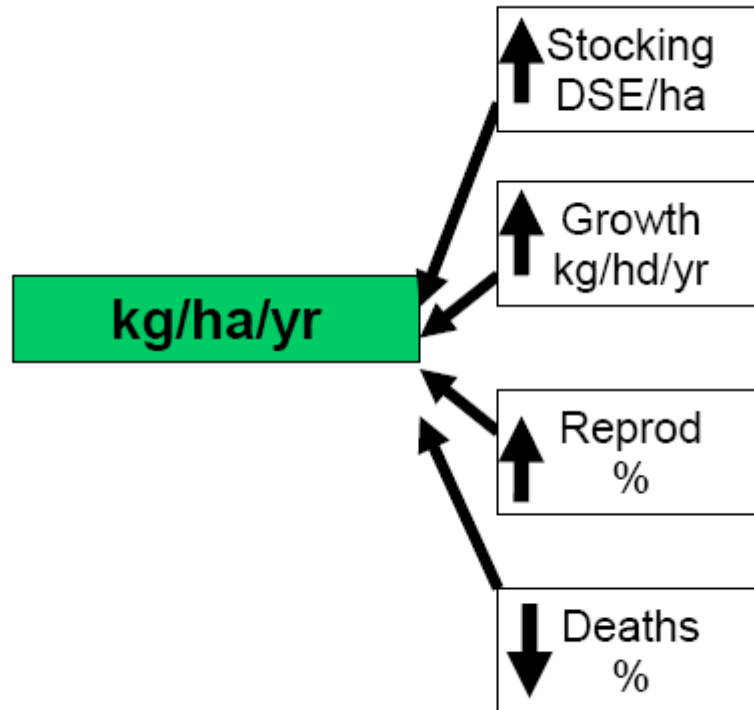
Profit starts and finishes with feed.
So we're in the paddock for a moment

Kilos of product sold makes profit



Kg of Lamb per ha
per year !

Pasture drives Kg per ha per year



= Pasture and
Feed Supply!

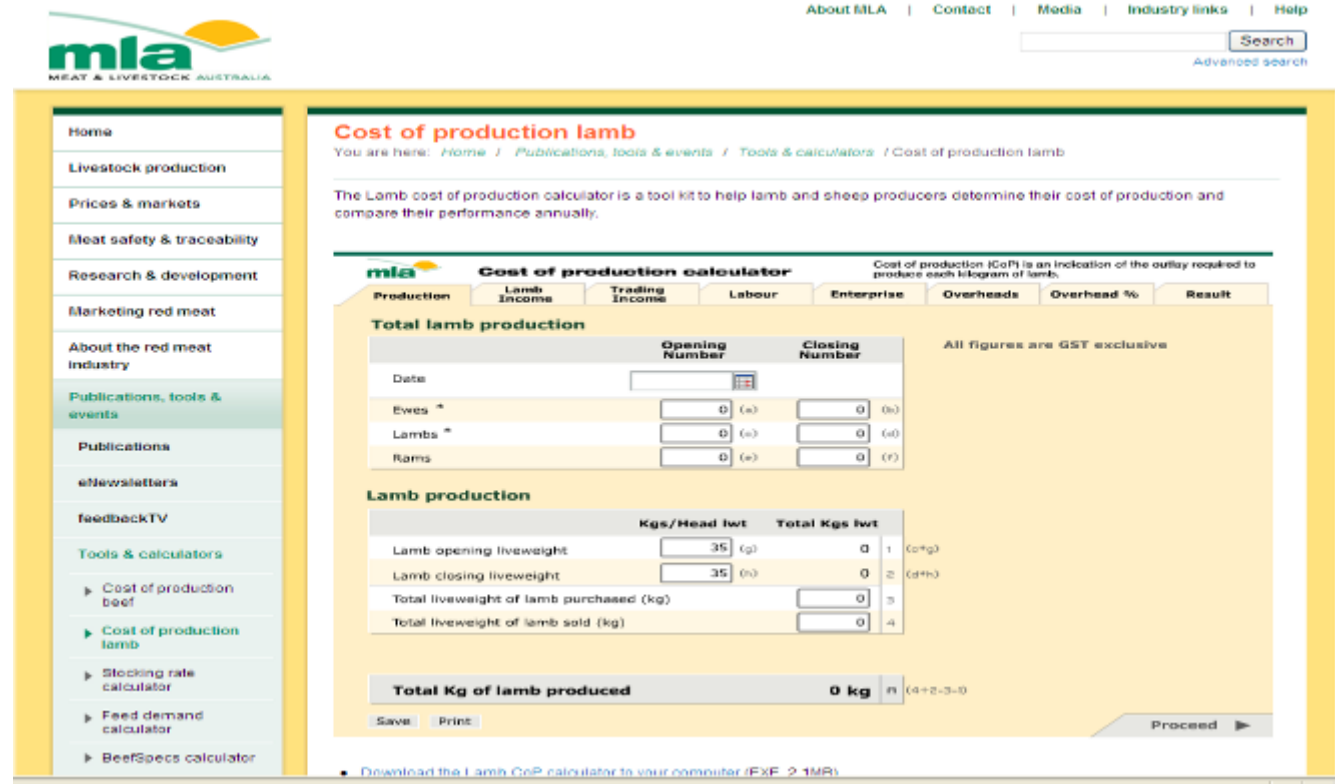
The End

1. Know what you produce (kg/ha) and at what cost
2. Map feed supply and demand
3. Make the most of what you've got
4. Plan to meet the targets
5. Be like Dave Beckham, bend those curves
6. Know your limits
7. Measure performance
8. Plan to improve

To Start

Know what you produce now. Calculate it. Don't guess it.

- Know your Cost of Production.



The screenshot shows the MIA (Meat & Livestock Australia) website's 'Cost of production lamb' calculator. The page includes a navigation menu on the left, a search bar at the top right, and a main content area with a calculator interface. The calculator is titled 'Cost of production lamb' and provides a tool for producers to determine their cost of production and compare performance annually. It features a table for 'Total lamb production' with columns for 'Opening Number' and 'Closing Number' for Ewes, Lambs, and Rams. Below this is a 'Lamb production' table with columns for 'Kgs/Head lwt' and 'Total Kgs lwt' for various stages: Lamb opening liveweight, Lamb closing liveweight, Total liveweight of lamb purchased (kg), and Total liveweight of lamb sold (kg). The final result shows 'Total Kg of lamb produced' as 0 kg. The page also includes a 'Save' and 'Print' button, and a 'Proceed' button.

Home | Livestock production | Prices & markets | Meat safety & traceability | Research & development | Marketing red meat | About the red meat industry | Publications, tools & events | Publications | eNewsletters | feedbackTV | Tools & calculators | Cost of production beef | Cost of production lamb | Stocking rate calculator | Feed demand calculator | BeefSpecs calculator

Cost of production lamb
You are here: Home / Publications, tools & events / Tools & calculators / Cost of production lamb

The Lamb cost of production calculator is a tool kit to help lamb and sheep producers determine their cost of production and compare their performance annually.

Cost of production (CoP) is an indication of the outlay required to produce each kilogram of lamb.

Production	Lamb Income	Trading Income	Labour	Enterprise	Overheads	Overhead %	Result
Total lamb production							
Date	Opening Number		Closing Number		All figures are GST exclusive		
Ewes *	0 (e)	0 (e)					
Lambs **	0 (e)	0 (e)					
Rams	0 (e)	0 (e)					
Lamb production							
Lamb opening liveweight	35 (g)	0	1	Co*(g)			
Lamb closing liveweight	35 (h)	0	2	Co**(h)			
Total liveweight of lamb purchased (kg)	0	3					
Total liveweight of lamb sold (kg)	0	4					
Total Kg of lamb produced							0 kg (i) (4+2-3=0)

Save | Print | Proceed

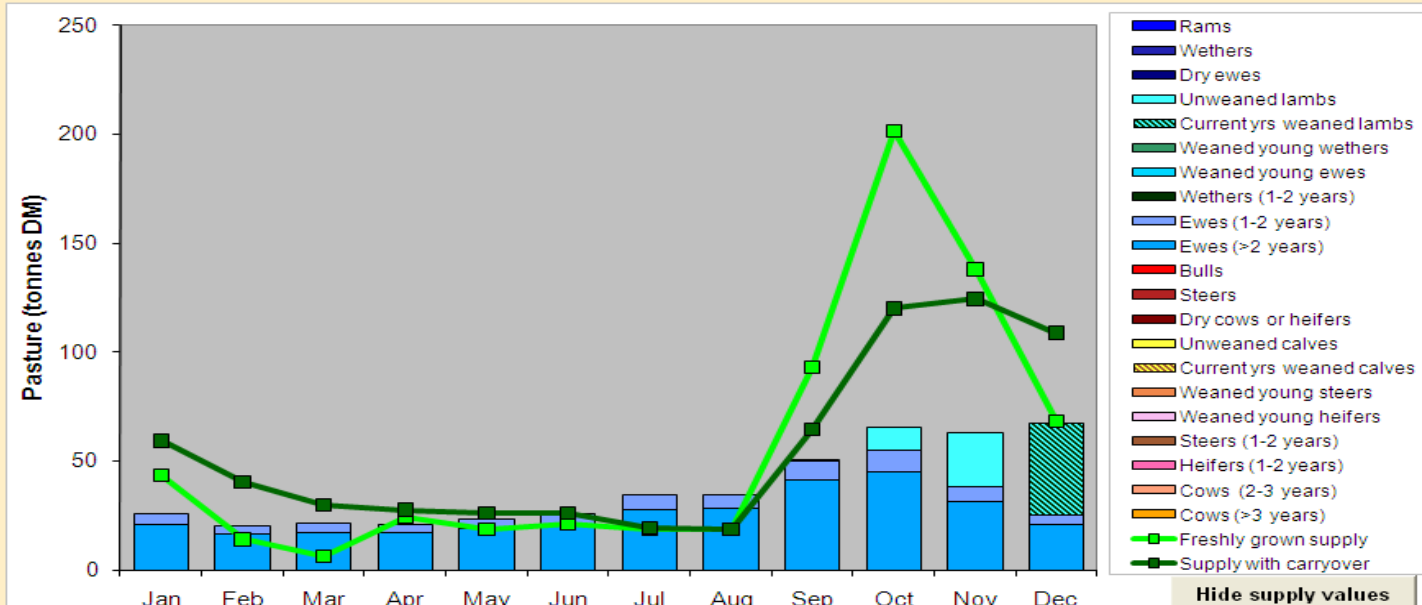
Download the Lamb CoP calculator to your computer (EXE > 1MB)

- Don't guess. Don't brag. Don't worry. Just improve.

Map Feed Supply and Demand



Feed demand



Key Performance Indicators

Pasture deficit, using freshly grown supply	63 tonnes/year
Pasture deficit, using supply with carryover	31 tonnes/year
Liveweight produced, cattle	0 tonnes
Liveweight produced per ha allocated to cattle	0 kg/ha/year
Liveweight produced, sheep	37 tonnes
Liveweight produced per ha allocated to sheep	372 kg/ha/year
Pasture demand as a % of pasture grown	68%

Go back

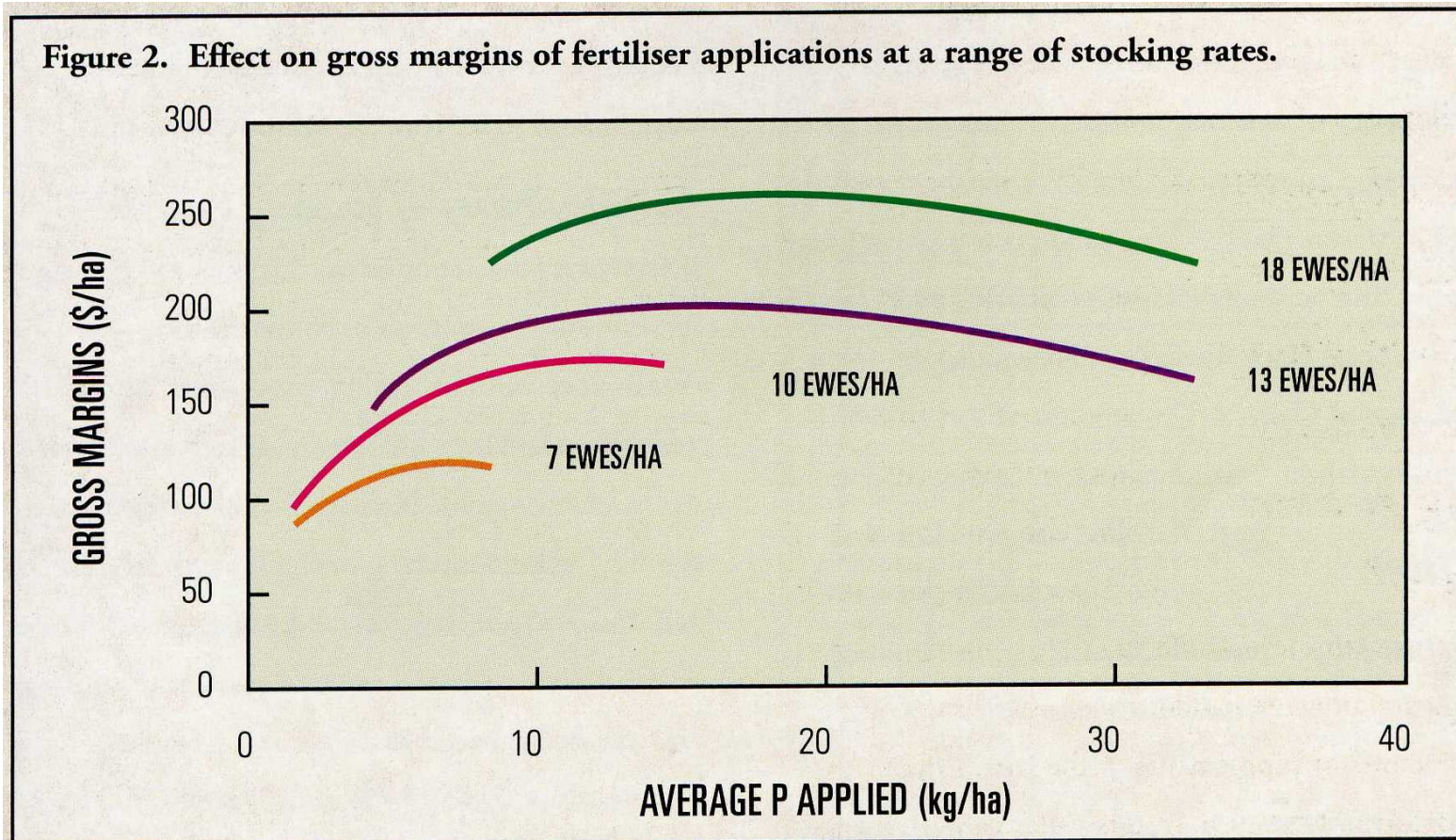
Proceed

Print report

Make a match

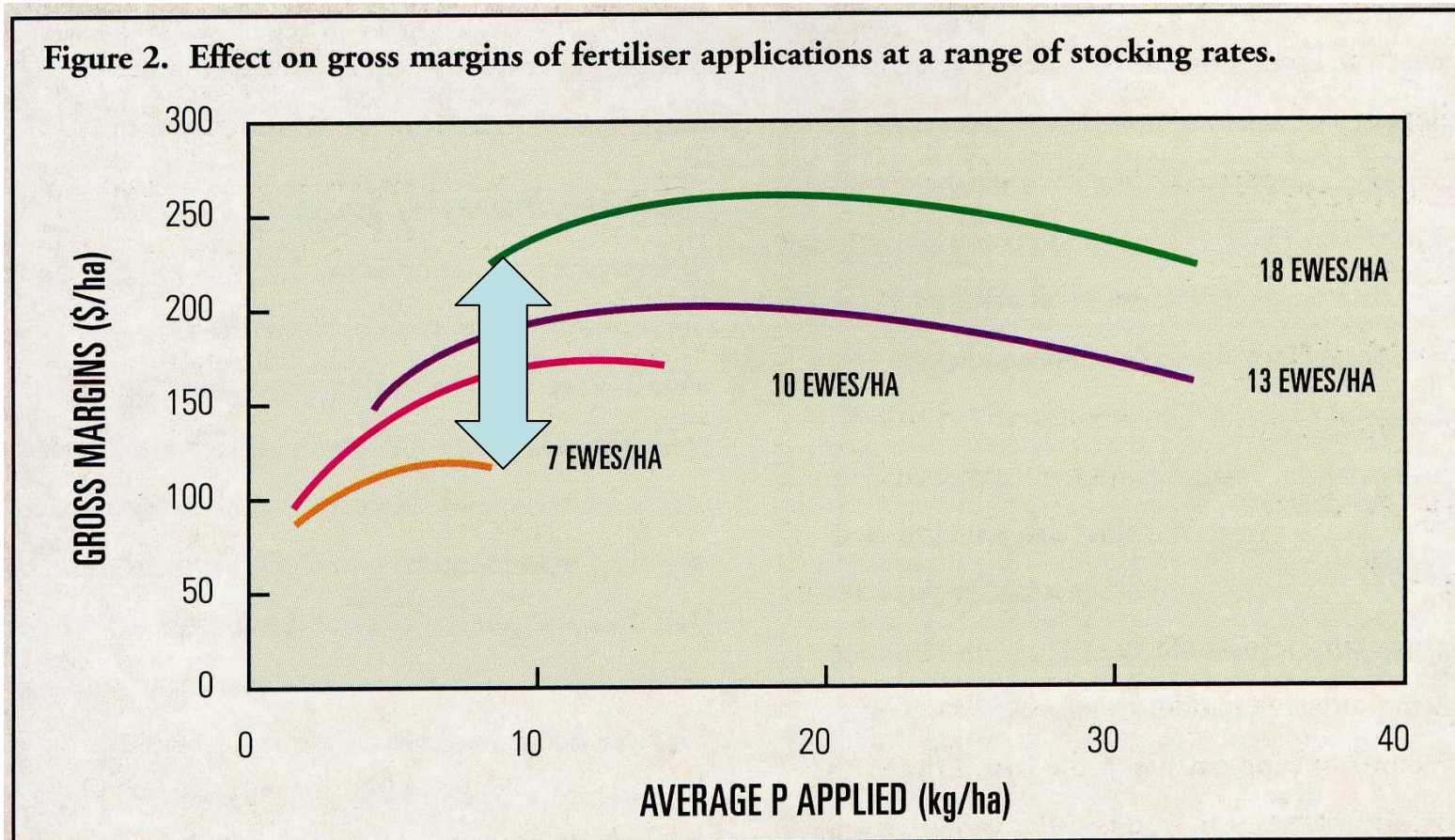
Utilisation is important

- Make the most of what you've got



Utilisation is important

- Make the most of what you've got





WINNALEAH

Towards 2000





Perennial ryegrass + intensive rotational grazing + nitrogen + irrigation

N kg/ha	Live weight gain kg/ha/year	N Advantage kg/ha/year
0	962	
270	1672	710
390 + irrigation	1981	1019

Beef Benchmark Results

	2007 Beef Average	2008 Beef Average	2007 Beef Top Quartile	2008 Beef Top Quartile
Profit per Hectare	\$ 16	-\$ 27	\$ 171	\$ 163
Cost of Production	\$ 1.43	\$ 1.65	\$ 1.02	\$ 1.15
Production per Ha	253 kgs	219 kgs	384 kgs	404 kgs

The power of the ewe



Delivering pasture harvest
power (total live-weight gain).

From:
Stocking Rate
Lambing %
Gain per day

Target some Leverage



Making More From Sheep

MODULE 8

Turn Pasture into Product

- Conceive
- Lamb
- Milk
- Wean / Grow

Table 8.1 Minimum pasture supply benchmarks to maintain satisfactory production levels in sheep

(Source: PROGRAZE® manual)

Sheep Class		Pasture targets (kg green DM/ha) to meet animal demand at three levels of pasture digestibility (%)		
		75%	68%	60%
Dry sheep		400	600	1200
Pregnant ewes	Mid	500	700	1700
	Last month	700	1200	Not suitable
Lactating ewes	Single	1000	1700	Not suitable
	Twins	1500	Not suitable	Not suitable
Growing stock (% of potential growth)	30% (75g/day) *	400	700	1700
	50% (125g/day)*	600	1000	Not suitable
	70% (175g/day)*	800	1700	Not suitable
	90% (225g/day)*	1600	Not suitable	Not suitable

* Predicted growth rates in brackets are based on a weaned 4-month old crossbred lamb of approximately 32kg from a ewe with a standard reference weight of 55kg.

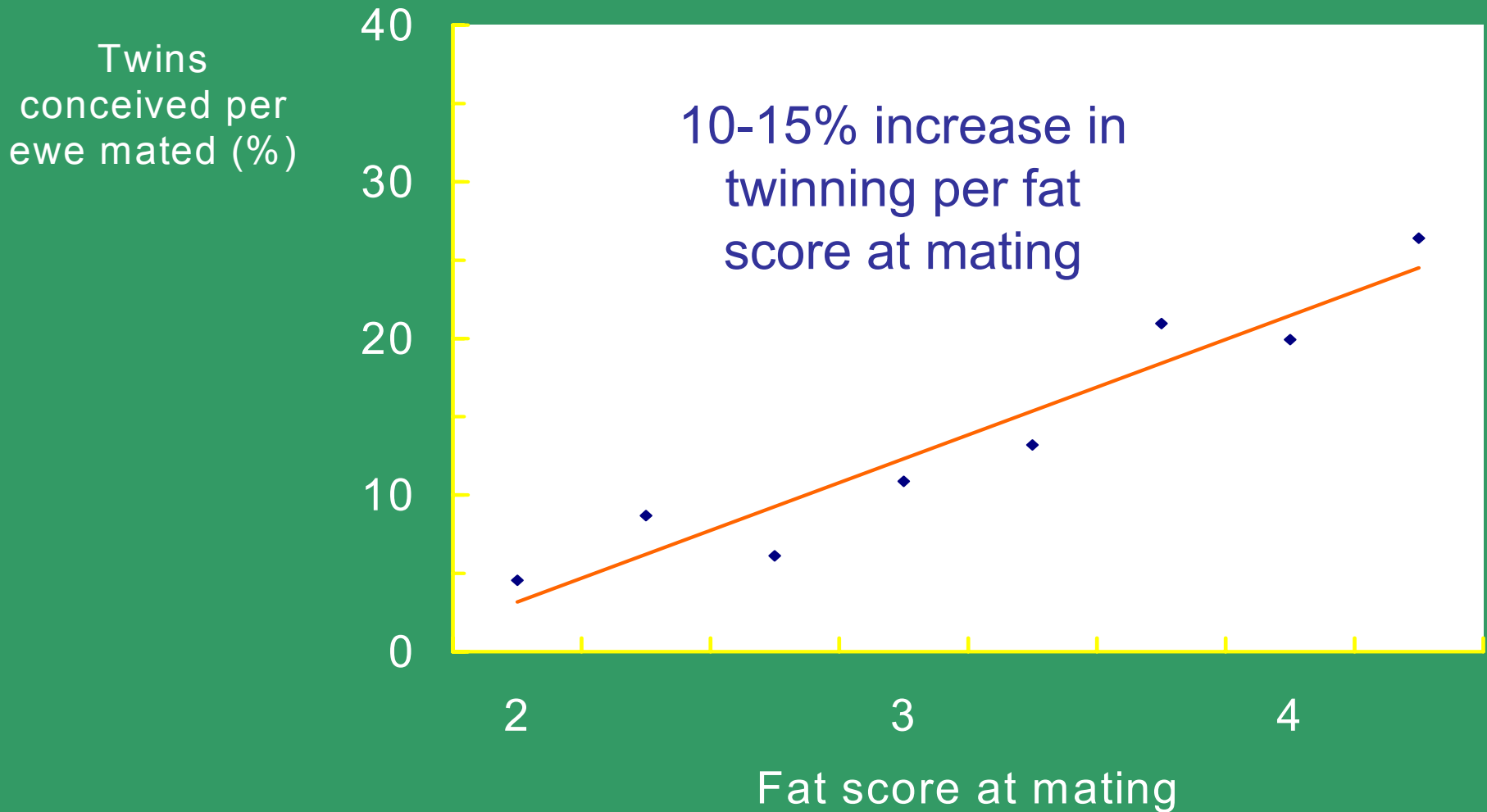
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Leverage Lambing %



Meeting the Targets

- How do you measure up.



•It's worth a critical look

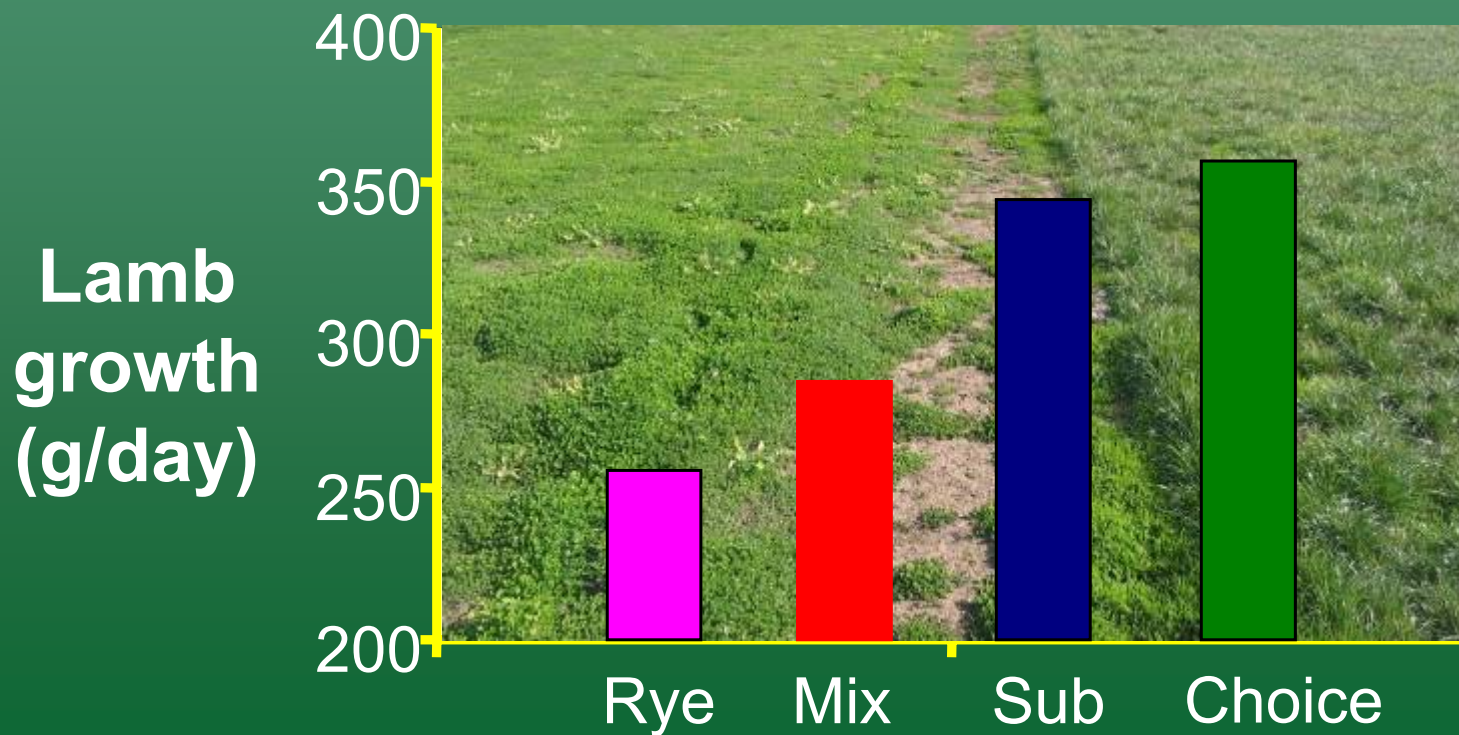
How do you measure up?



Fuel injection



✓ Love the Legumes



- Grazing management
 - Solar Harvest
 - Feed planning
 - Set up quality, prioritise
- Species to extend the season
- Fat on the back
- Lambing %
- Trade

Managing leaf stage

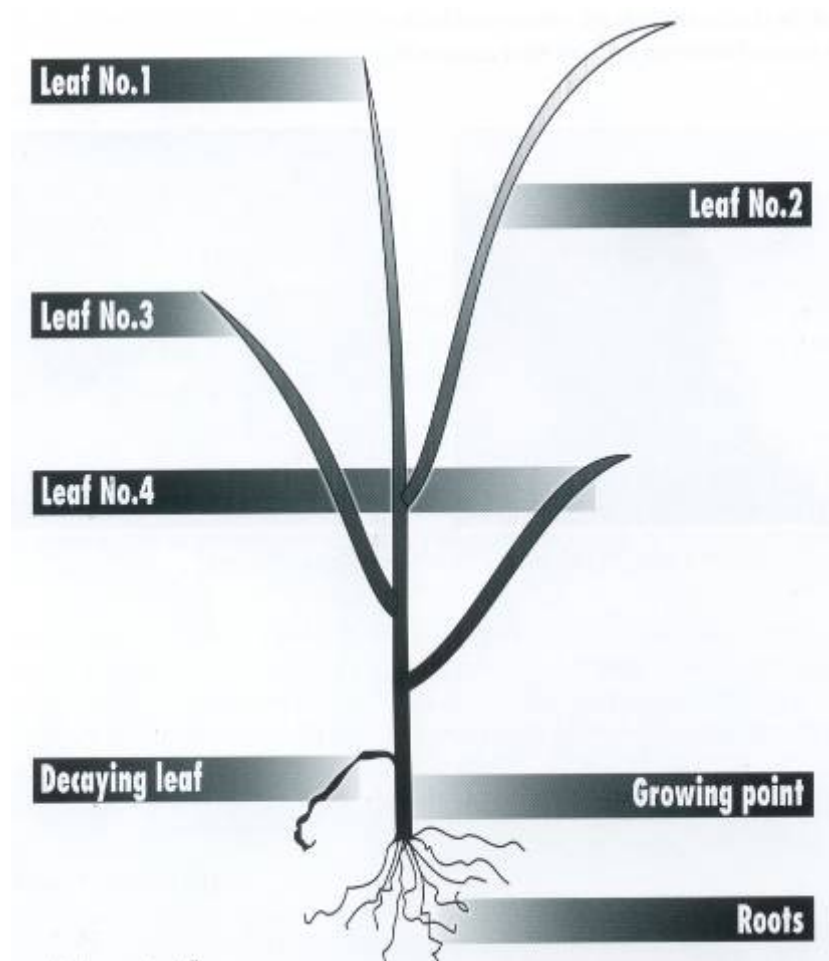


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Rotational grazing

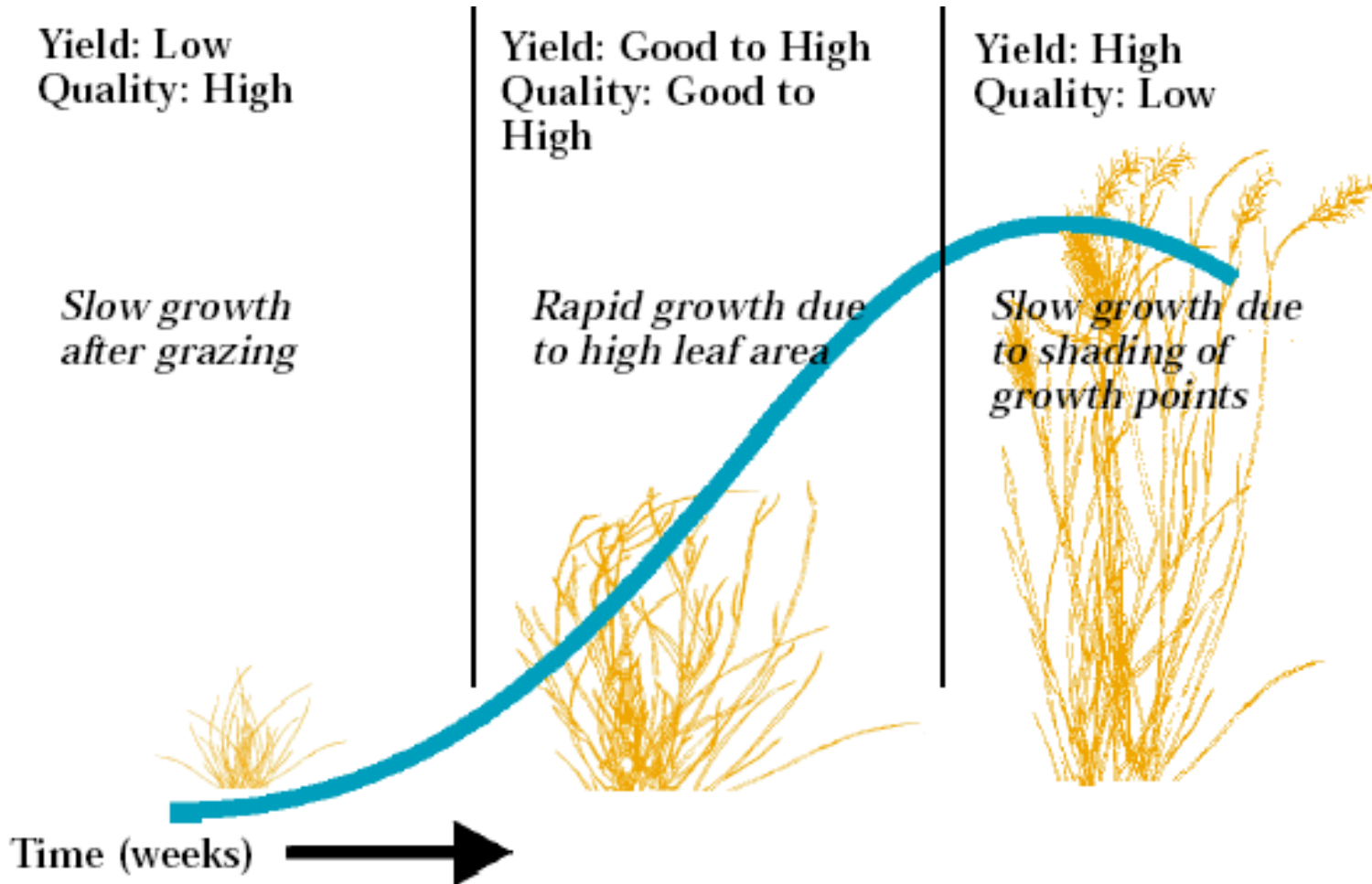
- Rest pastures via a rotation
Autumn: 30 - 40 days
Winter: 40 - 50 days
- Improves growth & persistence of perennial & annual grasses
- Leaf stage - decide when plants ready to graze



Leaves per tiller

Phalaris	4
Cocksfoot	4
Ryegrass	3
Fescue	3
Natives	3

Pasture growth curve



Control the graze



- Rotate with purpose and plan
- Stop with good reason
- Understand the compromise
- Prioritise

High Utilisation

Winnaleah 2005-06

Season	Beef Production kg/ha liveweight		
	Set stocked	4 paddock rotation	Intensive rotation
TOTAL	1218	1317	1419
Winter	255	326	348

Total increase = 16%
Winter increase 36%

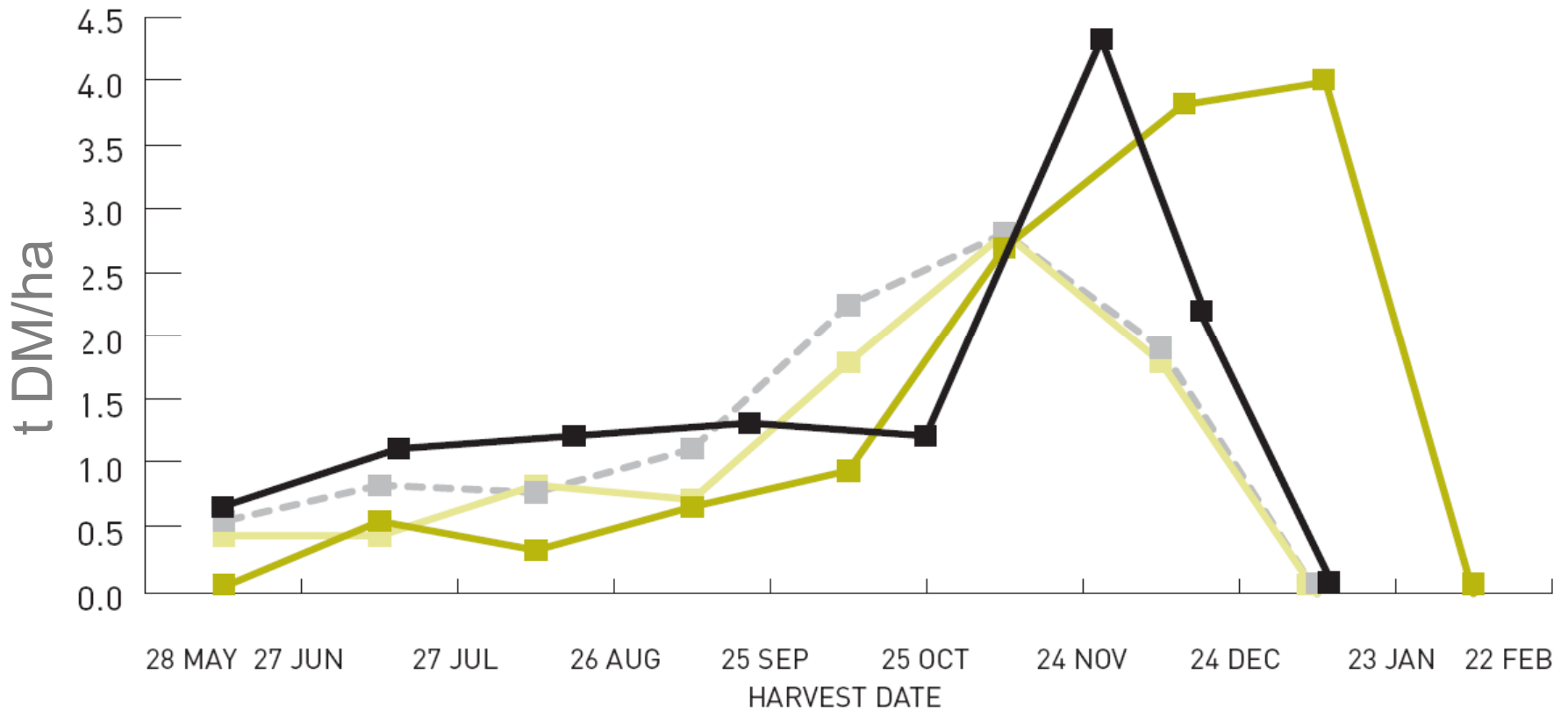
Extend the season



Arrotas Arrowleaf Clover

HERBAGE PRODUCTION DATA

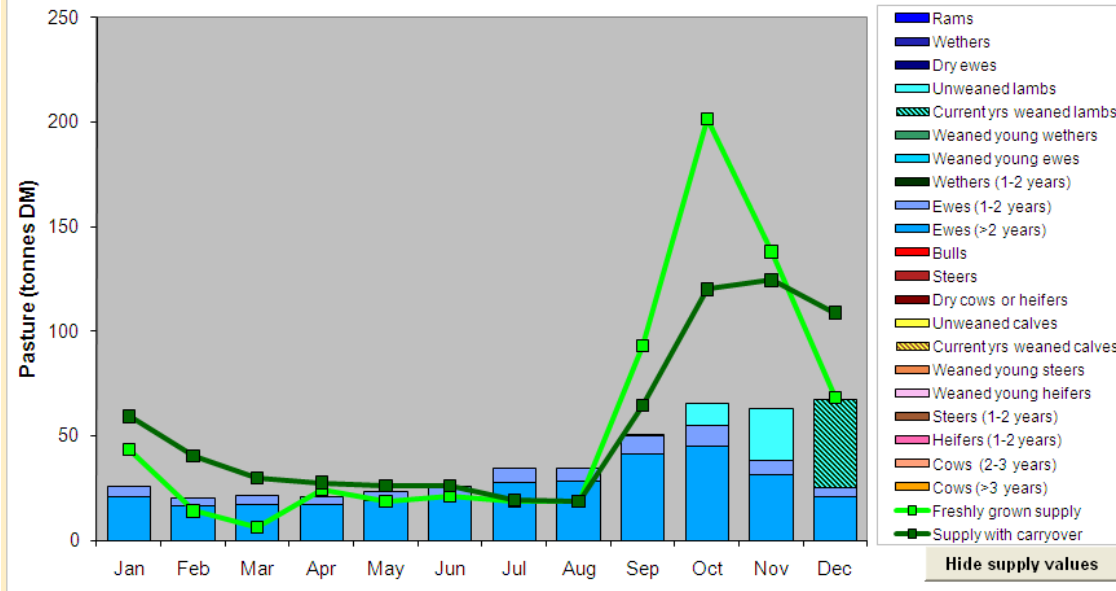
Seasonal herbage production of 4 annual clovers at Streatham Victoria (average three years).



■ Arrotas ■ Sub Clover ■ Balansa

Explore the Impact

Feed demand



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Go back

Proceed

Print report

Winter Wheat Trial



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Filling a gap

- Up to 350 kg LWG/ha in 46 days indicates potential
- Did not affect grain yield where irrigation was available
- 500 kg/DM/ha reduced animal performance
- Monitor below 800 kg/ha
- 30 to 35 head/ha appropriate

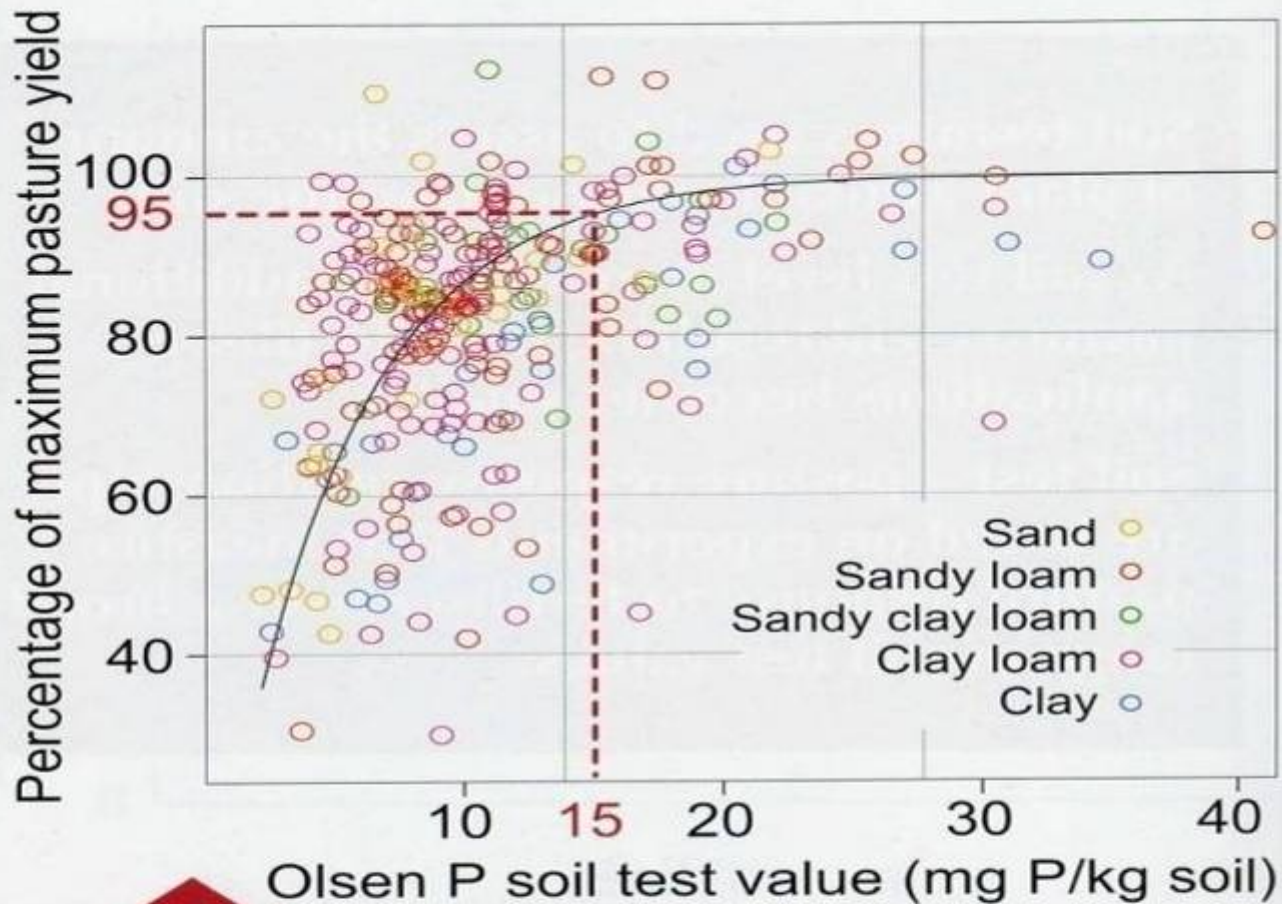


The bottom line: 350 kg of lamb + 6.8 T of grain
= \$1870 gross

Know your Limits



- Nutrient Supply
 - Legume
 - Nitrogen
-
- But don't be limited.



Better Fertiliser Decisions

www.asris.csiro.au

Figure 3.

The relationship between percentage of maximum pasture yield and Olsen P soil test value from nationally collated experiments. The critical Olsen P soil test value at 95% of pasture production is indicated by the dashed line.



Make the most of legume

- Control the grass
- Check the nodules





Reduce the waste ...

- On worms (wormboss)
- On insect pests

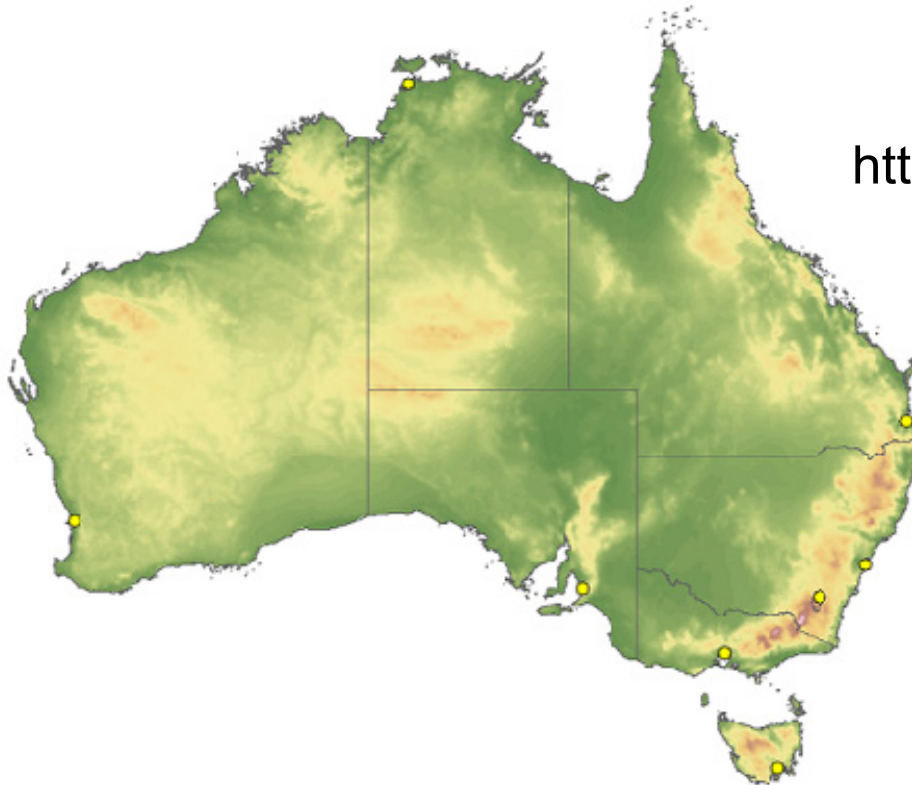
- On animals that don't need it.

Pick the right pasture



A collaboration between AWI, GRDC, MLA, RIRDC and Dairy Australia

[Home](#) | [Help](#)



<http://www.pasturepicker.com.au/>

New South Wales / ACT • Northern Territory • Queensland • South Australia • Tasmania • Victoria • Western Australia

Species for Profit

A Guide for Tasmanian Pastures and Field Crops



• **australian wool**
innovation
• limited



8x5 wool
Profit Program



Tasmania

New Options Soon

- Talish Clover
- Grazing Lucerne



- Delivering quality feed, on resilient plants

- The value of a guess can be measured in the depth of disappointment in being wrong
- Measure the gain
- Monitor the score
- Assess the feed

Choose to Manage

Perennial ryegrass + intensive rotational grazing + nitrogen + irrigation

N kg/ha	Live-weight gain kg/ha/year	N Advantage kg/ha/year	Gross profit Advantage \$/ha
0	962		
270	1672	710	542
390 + irrigation	1981	1019	389

Plan to Improve



Planning can't all be done in the paddock

But it has a huge effect on what happens in the paddock.

- Feed Budgets
- Rainfall to pasture outlook tool.

- **MLA Feed demand calculator**
- **MLA Cost of production Calculator**
- **The MLA pasture ruler**
- **Species for Profit**
- **Pasture Picker**
- **Better Fertiliser Decisions**
- **MLA Rainfall to Pasture Growth Outlook Tool**
- **Scales**
- **makingmorefromsheep.com.au**

Take-away Box

- **Calculate kilos per ha**
- **Map the demand against supply**
- **Check the targets (use the ruler)**
- **Test the soil (understand the limits)**
- **Assess the clover (check some nodules)**
- **Measure weight gain or CS**
- **Plan the grazing, allocate the Kgs (take some rest)**
- **Set-up some quality (where will they grow at 350..)**
- **AND EAT IT.**

The Beginning not The End



The Bottom Line.



- Easy to grow
- Easy to waste
- Easy to blame the weather

- Worth eating. Worth planning to get it right.