

Pasture Principles package

A practical guide to pasture management



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BIGG Perfect Pastures
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Pasture Principles package

- Developed by Macquarie Franklin
 - Delivered under licence in SA
- Pasture Principles package involves
 - Two day workshop on the theory of pasture management
 - Six on-farm, group based coaching sessions to build implementation skill and capability
 - Supported by an excellent manual and a range of practical tools
- Excellent supported learning package
- Measure, Manage, Monitor

Pasture Principles groups

- Minimum of 8 businesses
- \$2,275 + GST per business
 - MLA co-investment may allow the producer contribution to be reduced to \$1,850 + GST per business (up to 3 people)
- First three coaching sessions delivered on the same property
- Life Time Ewe graduates comment that the Pasture Principles package is the perfect 'next step'

Core Principles

- Setting rest periods and rotation length in accordance with optimal leaf stage
- Understanding animal requirements at different points in the production cycle
- Optimising tiller development and persistence
- Targeting 1,000 kilograms of pasture harvest per hectare per 100mm of annual rainfall

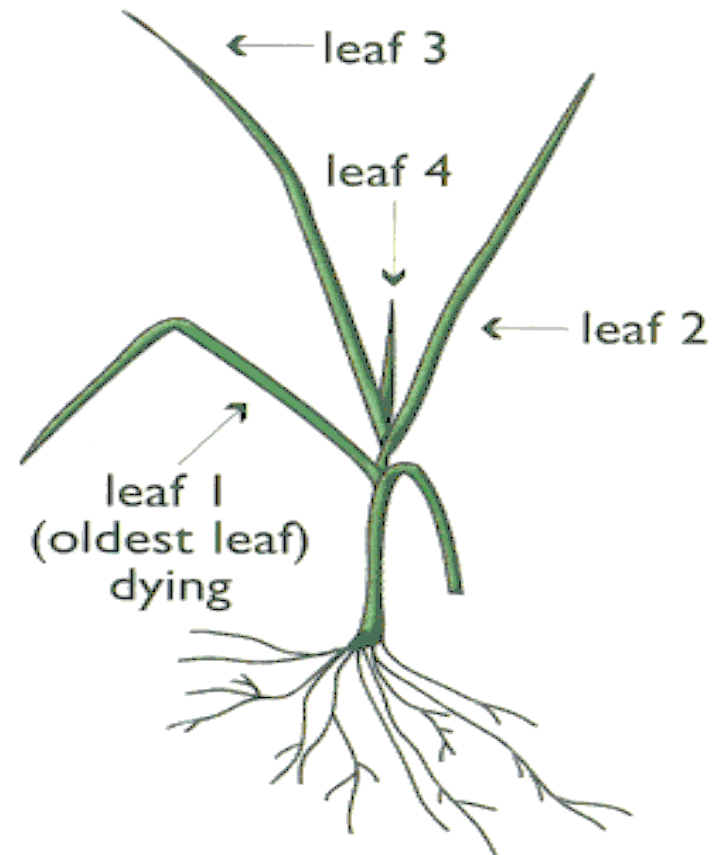
Grazing by leaf stage

- Fits with the theme of 'Perfect Pastures'
 1. Optimises dry matter production (*farmer*)
 2. Optimises nutritional content and pasture availability (*animal*)
 3. Optimises pasture regrowth and persistence (*pasture*)
 4. Optimises root growth and builds soil health (*soil*)

More about the best management of the species that you have to work with than the selection of specific species

Grazing Management Principles

- Grazing by leaf stage optimises
 - Total dry matter production
 - Nutritional content
 - Pasture re-growth
 - Soil health
- Each grass has its ideal leaf stage for grazing
 - Ryegrass (2.5 to 3 leaf)
 - Cocksfoot (3 to 4 leaf)
 - Phalaris (3 to 4 leaf)



Total Dry Matter Production

- Ryegrass pasture
- Leaf Emergence Rate of 10 days

Leaf Stage	Pasture Growth Rate (kg/DM/ha/day)	# days	Dry matter produced (kg/DM/Ha)	%
1 leaf	10	10	100	16.67%
2 leaf	20	10	200	33.33%
3 leaf	30	<u>10</u>	<u>300</u>	50.00%
		30	600	

Total Dry Matter Production

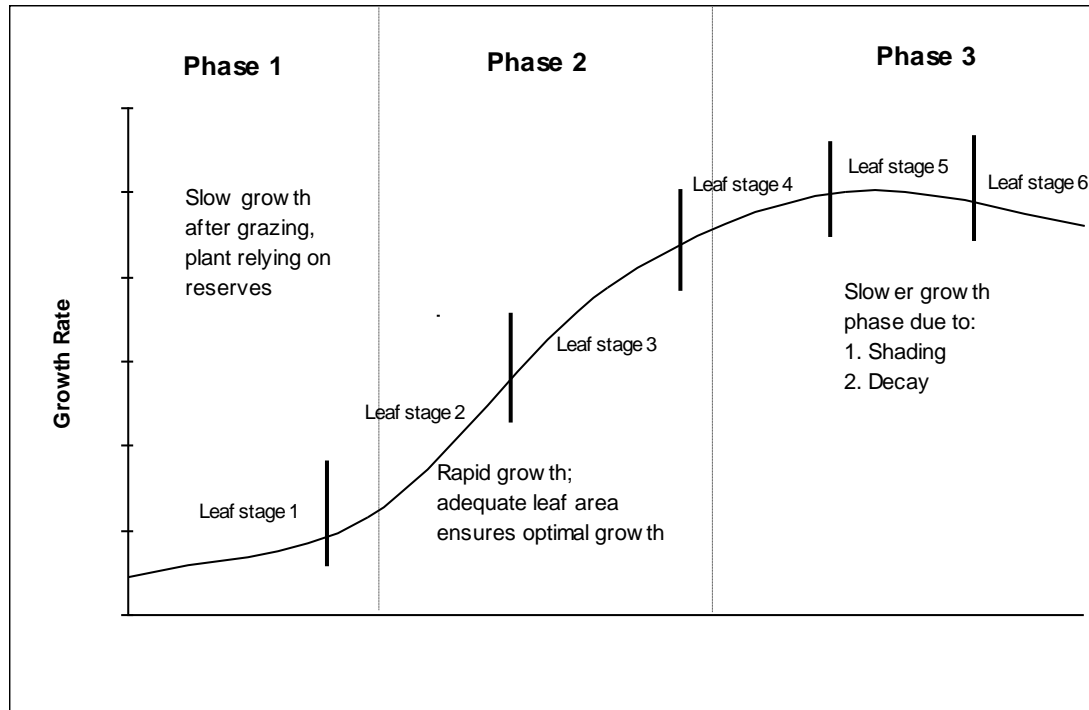
- 100 hectares in Autumn with available soil moisture for 60 days
- 10 day leaf emergence rate
- 20 day rest period (2 leaf) versus 30 day rest period (3 leaf)
 - 3 cycles versus 2 cycles
 - Pasture production of 1,200 kg/ha versus 1,700 kg/ha
 - 500 extra kilograms of pasture production per hectare
 - 50,000kg or 50 tonnes of extra pasture
 - \$3,000 at \$0.06/kg
 - \$7,500 if replacing the need for supplementation at \$0.15/kg
 - \$15,000 of gross revenue if converting to LWG @ \$3.00/kg

***“No more powerful force exists
for growing grass than rotation
length!”***

Nutritional content of ryegrass at different leaf stages

Leaf stage	NSC/DIP	% RDN	Ca:P	K/(Ca+Mg)	Energy (kg)
1	1:1	35	1:1	8	1.3
2	1:1	25	1.5:1	-	2.5
3	2:1	24	2:1	2.5	3.0
Optimal	2.1	19	2:1	2.2	-

Pasture Regrowth & Persistence



Soil health



Summary of grazing by leaf stage

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Questions and contact details

- Very happy to take questions
- Contact details
 - Simon Vogt
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- Pasture Principles workshop in Mt Compass on 29th & 30th March

Grazing Management Principles

