

Compare the Pair: Multi vs Conventional Pastures



Australian Government Department of Agriculture, Water and the Environment







Aim: monitor 2 pastures in 1 paddock





Angaston Ben Zander

Marananga Matt Neldner



1. Angaston (3.5 ha)

- 2012: Phalaris/perennial rye/cocksfoot/clover (Regenerated)
- 2017: sown with ryegrass (3ha)
- Barley grass and silver grass creeping in
- 2023: Multi (3 ha) sown 26 May
 - Victory oats: 75kg/ha
 - Ryegrass blend: 18kg/ha (3 varieties)
 - Balansa clover: 7kg/ha



Compare the pair: Regenerated vs Multi



Regen 2150 FOO

Multi 400 FOO **^**



Regen 2400 FOO

Multi 2200 FOO

Multi 2200 FOO

65% Ryegrass 25% Balansa 5% Oats 5% Barley grass



Regen 2400 FOO

50% Phalaris 30% Ryegrass 20% Grasses (mostly BG)



Balansa flourishing

Some barley grass



Regen 4520 FOO



Angaston – feed quality

	13/9/23		11/10/23	
	Protein %	Energy MJ/kg DM	Protein %	Energy MJ/kg DM
Multi				
Regen				



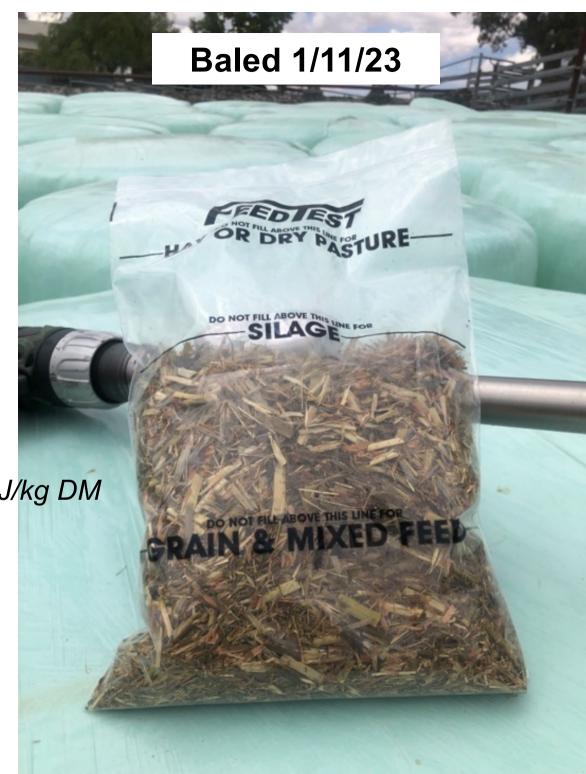
Angaston – feed quality

	13/9/23		11/10/23	
	Protein %	Energy MJ/kg DM	Protein %	Energy MJ/kg DM
Multi	27.9		18.9	
Regen	21.9		12.7	



Angaston – feed quality

	13/9/23		11/10/23	
	Protein %	Energy MJ/kg DM	Protein %	Energy MJ/kg DM
Multi		12.3		11.2
Regen		11.9		9.5



Silage Quality (Multi)

Protein: 14.2%

Energy: 10.3 MJ/kg DM



Angaston – production & costs

Multi

- Silage 8.6t/ha
- 5.0t DM/ha (58% DM)
- + 2 grazing's
- Value of multiple ryegrass varieties
- 2023 seed cost: \$230/ha (oats/ryegrass/balansa)
 - aiming to produce high quality and quantity fodder
 - clean paddock up
 - quality regrowth
 - vs biosecurity risk if buying in fodder
- 2024: do similar <u>or</u> rely on self seeded balansa before grass selective



2. Marananga (5 ha)

- June 2021: 2 separate pastures sown Ryegrass & Multi
- Ryegrass (2.6 ha)
 - Ryegrass blend: 20kg/ha (5 varieties)
 - Vetch: 35kg/ha
- Multi (2.4 ha)
 - Ryegrass blend: 20kg/ha (5 varieties)
 - Clover blend: 8kg/ha (4 varieties)
 - Tillage radish: 5kg/ha
 - Plantain: 5kg/ha
 - Chicory: 5kg/ha
- 2022: both pastures regenerated



Compare the pair: Ryegrass vs Multi



Multi 2090 FOO

Ryegrass 2470 FOO

13/9/23



Multi 2880 FOO



Ryegrass 2780 FOO

13/9/23



Multi 2880 FOO 50% Ryegrass 25% Clover 10% Chicory 5% Plantain 5% Dock



Ryegrass 2780 FOO 95% Ryegrass 5% Barley grass

5/10/23



Multi 3840 FOO



Ryegrass 3420 FOO



Ungrazed

Grazed

25/10/23





Multi 1870 FOO

Ryegrass 2350 FOO



Marananga – feed quality

	13/9/23		11/10/23	
	Protein %	Energy MJ/kg DM	Protein %	Energy MJ/kg DM
Multi				
Ryegrass				



Marananga – feed quality

	13/9/23		11/10/23	
	Protein %	Energy MJ/kg DM	Protein %	Energy MJ/kg DM
Multi	26.0		14.5	
Ryegrass	20.4		9.9	



Marananga – feed quality

	13/9/23		11/10/23	
	Protein %	Energy MJ/kg DM	Protein %	Energy MJ/kg DM
Multi		12.1		10.2
Ryegrass		12.2		10.2



Marananga – Multi vs Ryegrass

- 4 grazing's in 2023 (preferentially grazed Multi)
- Value of different species since 2021 sowing
 - 2022: Tillage radish
 - 2023: Chicory and clover
- 2021 seed cost:
 - Ryegrass: \$80/ha (ryegrass/vetch)
 - Multi: \$383/ha (ryegrass/clover/tillage radish/plantain/chicory)
- 2024: Spray Ryegrass section out, plant to Multis



Some final take homes

- Different species (and varieties) respond at different times
- Multis produced higher protein
- Seed costs high?????.....but
 - Focus on growing the most DM/ha with energy/protein levels to suit your stock needs
- Thanks to the landholders and the SA Drought Hub



Matt's chicory – Dec 2023