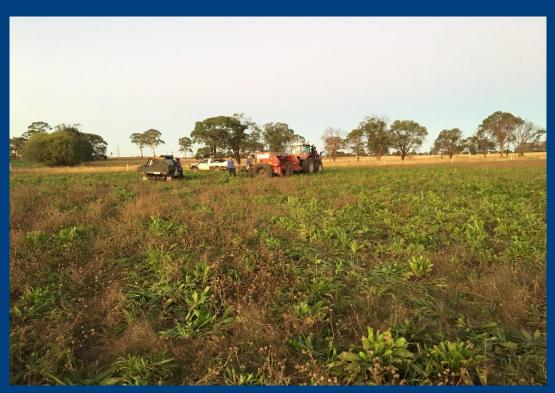


Pasture Improvement Plans





A successful plan needs good data

- Assess status of your pastures
- Post drought what has survived?
 - Pasture species perennial content
 - Weeds perennial, annuals
 - Pasture quality, legume content
 - Sustainability ground cover, litter, soil
- What do you need, what are your goals
 - Production stock requirements
 - Improve condition of pdk







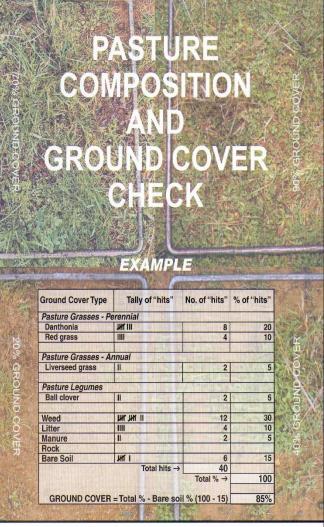
Assess for success

- Various pasture assessment methods
- Benchmarks
 - Established pasture
 - ➤ Temperate species: 8 12 plants/m²
 - ➤ Tropical species: 1 9 plants/m²
 - ➤ Native perennials: 8 15 plants/m²
 - Establishing pasture
 - > 25 grass seedlings & 15 clover seedlings/m²



Production & sustainability indicators

INDICATORS	LOW	MEDIUM	HIGH
Ground Cover	less than 40%	40 - 70%	more than 70%
Litter	less than 1 handful/0.1m²	1 – 2 handfuls/0.1m²	3 or more handfuls/0.1m²
Soil Surface	hard or capped no indent	firm small indent	soft and friable easily marked
Proportion of Green	less than 20%	20 - 60%	more than 60%
Proportion of Productive Pasture Species	less than 45%	45 - 60%	more than 60%
Legume Proportion			
Native Pastures	less than 1%	1 - 5%	more than 5%
Fertilised Native Pastures	less than 5%	5 - 10%	more than 10%
Improved Pastures	less than 10%	10 - 30%	30 - 40%
Suitability for Animal Production	lose weight	maintain weight	gain weight or reproduction











Draw up a priority list for pasture renovation

Paddock Status	Options	Priority
Degraded, substantial loss of introduced perennials (<4 plants/m²), heavy weed invasion	Annual forage crop, short-term pasture, weed control for 2-3 years before re-sowing pasture. Develop a re-sow plan.	High Select the most arable & fertile paddocks first
Partial loss of perennial grasses (4-8 plants/m²), some weed invasion, legume recovery likely	Seasonal weed control, direct drill to increase perennial/legume content. Address soil fertility. Strategic grazing management	Moderate Continue to monitor
High survival of perennial grasses ≥6-8 plants/m²), poor legume survival poormoderate legume	Re-introduce legume (sod/broadcast). Selective weed removal. Address soil fertility issues. Strategic grazing management.	Moderate Continue to monitor
survival, some weed invasion	Modified from NSW DPI Drough	nt Recovery Guide

When you need to re-sow

- Plan, plan & plan with your advisor
 - Have clear goals what is the purpose of the pasture?
 - Pre sowing weed control (treat your pasture like a crop)
 - Species selection
 - Address soil fertility issues
 - Sowing method (timing, depth)
 - Seed quality
 - Maximise your legumes get inoculation right
 - Pest & disease control
 - Post establishment weed management
 - Grazing management





Addressing Soil Fertility

- Representative sample
- Analysis from an accredited lab
- Interpretation trained advisor

Why conduct a soil test

Diagnosis of problem areas

Nutrient status - major elements

On-going monitor of fertility status





Lovegrass Paddock results



SOIL AND PLANT ANALYSIS

2/37 OWENS CR (PO BOX 374) ALSTONVILLE NSW 2477 PHONE 02 66281411 FAX 02 66285868 EMAIL : chemist@soiltec.com.au

Soil Test Report #s21-0093 (3)

Client:

L Hogan Lucerne

Account: Lucerne

211 Dangar Falls Rd Armidale NSW2352

Sample Received: 4.1.2021 SAMPLE I.D: Lovegrass Report Reply: 11.1.2021 INTENDED USE: Pasture

			RESULT	OPTIMA	L
Conductivity (dS/m)(1:5 water)		0.11	<0.15		
рН	(1:5 C		4.72	5.2-5.5	
Exchangeable	Cations	(Measured)			
Calciu		(Ca)(meq/100g)	4.04	See Percentage	
Magn	esium:	(Mg)(meq/100g)	1.96	See Percentage	
Potass	ium:	(K)(meg/100g)	0.32	0.5-1.0	
Sodiu	m:	(Na)(meg/100g)	0.02	Zero	
Alumi	inium:	(Al)(meq/100g)	0.22	Zero	
Total Cation I	exchange	Capacity (CEC):	6.56		
Exchangeable	Cations	(as a % of Total)			
Calciu		28	61.59	65-80%	
Magnesium:		29.88	15-20%		
Potassium:		4.88	2-5%		
Sodium:		0.30	<3%		
Alumi	inium:		3.35	<5%	
Phosphorus:	(mg/k	g) (Bray-1)	13.8	18-22	
	(mg/k	g) (Colwell)	20.1		
PBI	(phosp	phorus buffer Index)	45.2		
Sulphur		g) (KCl 40 S)	6.1	8-10	
		g) (water extract)	18.4	At least 10	
Organic Carbo		(Walkely & Black	() 2.5	2% or more	
Trace Element					
Coppe	r	(mg/kg) (DTPA)	0.9		100
Zinc		(mg/kg) (DTPA)	0.7		
Manga	inese	(mg/kg) (DTPA)	31.2		
Iron		(mg/kg) (DTPA)	35.2		
Boron		(mg/kg) (Hot CaC	(1) 0.6		
Calculations:					
			e notes on page 2)		
Calcium/Magn	iesium R	atio:	2.06	3-5	





