

30 March 2015

Farmer brown  
'New Farm'  
Holbrook NSW 2644

Dear Farmer brown,

Following the recent inspection of your property, please find an agronomy plan for your property for 2015-2016, based on recent soil test results. This plan is based on achieving the following goals:

1. Maintaining the current enterprise mix of a core merino flock on the native pastures, combined with XB sheep for the more fertile creek flats. In addition, consider cattle trading in August (based on the seasonal outlook) to utilize the spring flush in good seasons;
2. Increase the productivity & summer finishing capacity of the property by sowing lucerne on the more fertile soils & topdressing the flood prone flats with high quality summer perennials, such as chicory;
3. Consider utilizing the current shed storage for lucerne hay storage;
4. Maintaining the current practice of 40-50 ha of grazing triticale/year for winter grazing. This also is very effective as a cleaning phase for weed control prior to pasture establishment in run-out pastures;
5. Oversow thinning phalaris/clover pastures with additional perennial grasses;
6. Increase the carrying capacity of the 600 acres of native perennial pastures on the property through strategic use of fertilizer to address nutrient deficiencies. This needs to be aligned with an increase in the merino flock to utilize the additional feed grown i.e. 150 additional merinos in the first year of fertilizer application, increasing to 300 additional merinos after 3-4 years of consistent fertilizer use (at 125 kg Single Super/ha);
7. Continue to establish 40 ha of introduced perennial pasture/year to increase the carrying capacity of the property;
8. Address soil nutritional deficiencies based on annual soil testing in monitor paddocks;
9. Employ rotational grazing in established phalaris/sub clover pastures after lambing (August-October) to encourage perennial grass/sub clover & disadvantage annual species.

Please do not hesitate to contact me if you have any queries.

Regards,

Roger Garnsey B. Rur. Sc. (Hons.), M. Ag. Sc.

Agronomy Plan for Farmer brown 2015-2016

Time of year	Paddock name	Area (ha)	Action required	Cost* (\$/ha)	Total cost (\$)
<b>2015</b>					
March	All paddocks, except native pastures (3, 5, 13, 24)	640	Topdress with <b>125 kg Single Superphosphate/ha</b> to correct low Phosphorus & Sulphur levels in the soil, based on recent soil test results ( <b>80 t Superphosphate in total</b> ). For Paddock 4 only: topdress with <b>300 kg Single Superphosphate/ha</b> , based on recent soil test results.	65	41600
	Paddock 45	18	Topdress with <b>1.5 t F70 lime/ha</b> to correct high soil acidity levels in the soil, based on soil tests.	120	2160
	Flood prone flats	50	Topdress with <b>125 kg Single Superphosphate/ha + 2 kg Puna chicory (Gaucho &amp; anti-ant theft treated)/ha</b> to correct low Phosphorus & Sulphur levels in the soil & introduce a summer active perennial species to the pasture sward. Harrow ASAP after topdressing to improve seed:soil contact & germination.	100	5000
April	Paddock 13	20	Establish Endeavour triticale for grazing + grain as follows:	30	600
			1. Apply final knockdown herbicide (to be advised, based on weeds present);	120	2400
			2. Topdress with <b>250 kg Single Superphosphate/ha</b> to correct low Phosphorus prior to sowing;	100	2000
			3. 7 days later, direct drill <b>125 kg Endeavour triticale (own seed)/ha + 100 kg DAP/ha</b> ;	20	400
4. ASAP after sowing & before crop emergence, apply <b>40 g Logran/ha + 250 mL Dual Gold/ha + 40 mL Talstar 250EC/ha</b> for residual weed/insect control. Do not graze for 8 weeks post spray.					
May/June	Paddocks 3, 5	40	Establish perennial pasture as follows:	30	1200
			1. Apply final knockdown herbicide (to be advised, based on weeds present);	250	1000
			2. 7 days later, direct drill drought hardy, perennial pasture mix with <b>125 kg Croplift 15/ha</b> ;	20	800
3. ASAP after sowing & before pasture emergence, apply <b>200 mL Dual Gold/ha + 40 mL Talstar 250EC/ha + 100 mL Astound duo/ha</b> for residual weed/insect control.					
June/July	Paddock 45	18	Winter clean thinning perennial pasture in preparation for oversowing in autumn 2016 by grazing heavily with sheep to 'bowling green' height before applying <b>1.0 L Simazone 600/ha + 400 mL Gramoxone/ha + 500 mL Agritone 750/ha + 100 mL Le mat/ha</b> for selective control of annual weeds.	35	630
July/August	Various	40	Selectively control saffron thistle rosettes (before stem elongation) by applying <b>1.0 L Agritine 750/ha + 70 mL Lontrel/ha + 250 mL LI700/100 L</b> to areas of known growth. Sub clovers will be retarded but not severely damaged.	20	800
	Paddock 24	10	Establish lucerne for hay/grazing as follows:	20	200
			1. Apply knockdown & residual herbicide e.g. Glyphosate + Trifluralin	100	1000
			2. Harrow ASAP after application, then 3-4 days later, conventionally sow <b>8 kg Stamina GT6 lucerne (Superstrike coated)/ha + 100 kg Single Superphosphate + 0.05% Moly/ha</b> ;	80	800
3. ASAP after sowing & before lucerne emergence, apply <b>40 mL Talstar 250EC/ha + 100 mL Fastac duo/ha</b> for residual insect control.	20	200			
Paddock 20	10	Selectively control annual grass & broadleaf weeds in established lucerne. Agronomist to inspect & advise herbicide rates based on weeds present.	70	700	
August-October	Phalaris/clover paddocks	-	Rotationally graze with 80-100 DSE/ha for 2-3 weeks to encourage perennial grass/clover & disadvantage annual species. Rest for 6-10 weeks after grazing. Set stock after October to encourage phal/clover seed set.	-	-
October	Paddocks 13, 33, 34, 41	50	In preparation triticale establishment in autumn 2016, apply herbicide sprayfallow to prevent weed seed as <b>2.5 L Roundup CT/ha + 10 g Brushoff/ha + 250 mL LI700/100 L + 100 mL Le mat/ha</b> .	40	2000
	Shed paddocks Upper flats paddocks 11, 12, 23, 19	72	In preparation for lucerne establishment in August 2017, these paddocks should be sown to triticale for grazing in autumn 2016. In preparation, apply herbicide sprayfallow to prevent weed seed as <b>2.5 L Roundup CT/ha + 10 g Brushoff/ha + 250 mL LI700/100 L + 100 mL Le mat/ha</b> .	40	2880
November	Various	40	For late saffron thistle control, apply <b>700 mL Gramoxone/ha + 150 mL Active 1000/100 L</b> pre-flowering.	8	360
<b>TOTAL 2015</b>					<b>66730</b>

Agronomy Plan for Farmer brown 2015-2016 (Continued)

Time of year	Paddock name	Area (ha)	Action required	Cost* (\$/ha)	Total cost (\$)
<b>2016</b>					
January/February	Native pasture paddocks	240	Topdress with <b>200 kg Single Superphosphate + 0.025% Moly/ha</b> to correct low Phosphorus, Sulphur & Molybdenum levels in the soil. Match increased feed supply in these paddocks to increase merino numbers.	125	30 000
	All paddocks, except cropping paddocks	580	Topdress with <b>125 kg Single Superphosphate/ha</b> to correct low Phosphorus & Sulphur levels in the soil.	65	37 700
March	Paddocks 13, 33, 34, 41 Shed paddocks Upper flats of other selected paddocks (Paddocks 11, 121, 23, 19)	122	Establish grazing triticale for grazing + grain as follows:		
			1. Apply herbicide knockdown after autumn break e.g. 1.5 L Glyphosate CT/ha + 250 mL LI700/100 L;	30	3660
			2. 1 day later, direct drill 125 kg Endeavour triticale/ha + 125 kg MAP/ha;	100	12200
			3. ASAP after sowing & before crop emergence, apply 40 g Logran/ha + 250 mL Dual Gold/ha + 40 mL Talstar 250EC/ha for residual weed/insect control;	20	2440
4. Shed paddocks to be sown to lucerne in August 2017					
May	Paddock 45	18	Oversow thinning phalaris/clover pasture as follows:		
			1. Graze heavily to 'bowling green' height before applying 2 L Sprayseed/ha + 100 mL Le mat/ha for knockdown control of annual weeds;	50	900
			2. 1 hour later, direct drill 4 kg Australian phalaris/ha + 100 kg Croplift 13/ha.	160	2880
July/August	Various	40	Selectively control saffron thistle rosettes (before stem elongation) by applying <b>1.0 L Agritine 750/ha + 70 mL Lontrel/ha + 250 mL LI700/100 L</b> to areas of known growth. Sub clovers will be retarded but not severely damaged.	20	800
	Paddock 20 Paddock 24	10 10	Selectively control annual grass & broadleaf weeds in established lucerne. Agronomist to inspect & advise herbicide rates based on weeds present.	70	1400
August-October	Phalaris/clover paddocks	-	Rotationally graze with 80-100 DSE/ha for 2-3 weeks to encourage perennial grass/clover & disadvantage annual species. Rest for 6-10 weeks after grazing. Set stock after October to encourage phalaris/sub clover seed set.	-	-
November	Various	40	For late saffron thistle control, apply 700 mL Gramoxone/ha + 150 mL Active 1000/100 L at early flowering.	8	360
<b>TOTAL 2016</b>					<b>92340</b>

\*all costings include GST. No provision for contract spraying or sowing (owner to complete)