MONARO FARMING SYSTEMS

Monaro Farming Systems

2015 Annual General Meeting

2nd September 2015

Reports and Meeting Papers

Table of Contents

AGENDA		3
CHAIRMANS REPORT – Oliver Cay		4
FINANCIAL REPORT – Jono Forrest		6
CURRENT PROJECT REPORTS		
MFS Project 08–1 -	Grass Gro Project – “Seasonal Outlooks” Doug Alcock	10
MFS Project 10-6 -	Genetic Comparison Evaluation Trials (Wether trial)	12
MFS Project 10-7 -	Soil Club – Soil Fertility / Nutrient Management	15
MFS Project 11-10 -	MFS Agricultural Traineeships Initiative	17
MFS Project 12 - 11	Action on Ground - Soil Carbon Project	18
MFS Project 14 – 12	Establishing Persistent and Productive New Legumes	24
MFS Project 14 – 13	Benchmarking	30
MFS PROJECT Proposals – 2014 / 15		**32**
Productive Projects in Partnership		
Firming up the Future of Farming Systems Groups		
Measuring Merinos Matters		
Probing for Preparedness		
Developing Better Directors for Next Generation Agriculture		
2015 MFS Member Survey – Feedback		**34**
MFS EVENTS SUMMARY		**37**
MFS Supporters & Sponsors Pages		**38**

Agenda

Speakers

Doug Alcock - GrazProphet

Sandy McEachern - Holmes & Sackett

7.00am – 9.00am	MFS Board Directors Meeting
9.00am – 10.00am	Spring Seasonal Outlook - GrazProphet
10.00am – 10.15am	Morning Tea
10.15am – 11.15am	Sandy McEachern – Benefits of Benchmarking
11.15am – 12.00pm	MFS AGM
12.00pm – 1.00pm	Lunch & MFS Worm Club Focus Group Meeting

Chairman's Report 2014 - 2015 – Oliver Cay

2014-15 has been a year of consolidation in productive agriculture for MFS and other industry bodies after two years of a fast changing landscape. Whilst MFS is likely to always rely heavily on soft funding and be at the whim of funding trends, I am confident it will maintain relevant service to members because members are driving the ideas.

It was very pleasing that 42 members undertook the recent MFS survey and some of the highlights are:

- A greater understanding of member location. Nancy and Lachie Ingram have constructed a map representing the geographic locations of members which will help with external bodies understanding of where we are.
- The average percentage land area being allocated to each enterprise has shifted from wool to meat production since our last survey, but wool is still the largest enterprise with half the allocation of members land. Cattle and sheep meat production evenly occupy the bulk of the other half with specialty cropping making up less than 5%.
- Questioning around MFS projects showed relatively even support for all. Soils club was the standout again and there was increased interest in high quality pasture finishing. Benchmarking the farm system and wool genetics had strong support as well as the seasonal outlooks.
- Two new areas to explore are "Worms Club", slash animal health issues (87% of respondents thought it worth a closer look) and assisted transition of farm ownership or management.
- For MFS to continue it needs to provide value for members. 64% of respondents indicated they had made a practice change in their business due to MFS and the value put on these changes were estimated from $1,000-$200,000 per member.

Denham Williams steps down from the board this year and is replaced by Georgie Hood. Denham has been extremely energetic in her three years and will be missed by the board. She has sat on the Selection Committee and has been the go to person for getting jobs done. Members should be very grateful for Denham's time and effort.

The board welcomes Georgie Hood and Richie Taylor. Both have a wealth of experience in agriculture and will challenge ideas and delivery methods to improve MFS. Richie is coming onto the board as Chairman which will lift the professionalism and industry understanding of MFS leadership.

Thank you to the members and board for trusting me with the Chairman's role for the past few years. I am stepping down but not out as I will fill the 'outgoing chair' position for the next year. It has been a great opportunity for me to learn from industry leaders that I would not normally work with in my daily life. A special thank you to Mike Stephens, Phil Graham, David Mitchell, Richard Simpson and Doug Alcock who have all played major roles in shaping the direction of MFS during this time.

Thank you also to the sponsors and partners of MFS who have continued to support and nurture ideas. MFS is in a strong position due to its ability to evolve, relevance to industry and partners. I look forward to observing this continuation from the side line.

Oliver Cay

Oli Cay on behalf of all the woolgrowers who donated sheep to the 2015 wether trial, presents a cheque for $4,000 to Rhonda Howie, Director of Monaro Early Intervention Service.

Financial Report – Jono Forrest

MFS Standard Profit & Loss – For the Year Ended 30 June 2015

2014		2015	Notes
	Income		
59,907	**Government Grants**	63,544	**1**
85,467	**LLS Support**	60,018	**2**
17,236	**Membership**	19,975	
6,660	**Other Industry Grants**	37,656	**3**
12,000	**Sponsorship**	7,000	**4**
500	**Training Income**	1,000	**5**
-	**Wool sales**	11,569	**6**
3,445	**Bank Intrest**	2,723	
5,500	**Reimbursed Expenses**	29,789	**7**
190,715	**Total Income**	233,275	
	Expense		
1,977	**Advertising**	1,052	
1,034	**Board Meetings**	1,083	
5,005	**Catering**	5,421	
250	**Charitable Donation**	5,000	**8**
69,503	**Contract Work**	131,013	**9**
-	**Depreciation (20%)**	586	
2,846	**Materials / Capital Items**	4,005	**10**
	Office Operating Costs		
869	**Internet**	873	**11**
110	**Phone**	inc in Internet	**12**
760	**Postage**	520	
292	**Stationery**	445	
304	**Other**	-	
2,335	**Total Office Operating Costs**	1,838	
312	**Office rent**	-	
9,936	**Subscriptions**	1,144	**13**
454	**Sundry**	609	
2,858	**Training**	2,214	**14**
4,091	**Travel, Accommodation & Meals**	9,284	**15**
37,991	**Wages**	50,382	
1,857	**Insurance**	1,912	**16**
140,414	**Total Expense**	215,540	
$ 50,301	**Net Income**	**$ 17,734**	

MFS Balance Sheet – As At 30 June 2015

2014		2015
	ASSETS	
	Current Assets	
	Bank accounts	
38,051	**Action on Ground Project**	25,858
29,032	**Monaro Farming Systems Inc**	17,918
12,347	**NAB Business Cash Maximiser**	52,641
85,004	**NAB TERM DEPOSIT**	87,434
164,434	**Total Current Assets**	183,851
	Fixed Assets	
1,376	**Computer**	1,376
1,555	**Electronic Equipment**	1,555
0	**Less: Accumulated depreciation**	- 586
2,930	**Total Fixed Assets**	2,344
167,365	**TOTAL ASSETS**	**186,195**
	LIABILITIES	
	Current Liabilities	
432	**GST Payable**	1,527
432	**Total Current Liabilities**	1,527
432	**TOTAL LIABILITIES**	1,527
$ 166,933	**NET ASSETS**	**$ 184,667**
	EQUITY	
116,632	**Opening Balance Equity**	**166,933**
50,301	**Net Income**	17,734
$ 166,933	**TOTAL EQUITY**	**$ 184,667**

Please note: *The Total Equity amount for June 2014 has increased from $165,343 (as reported in the 2014 AGM Reports) to $166,933 due to interest payments reconciled after June 2014 but accrued in the June 2014 financial year.*

Financial Report Notes

Note 1: MFS Soil Carbon Project (Action on Ground) funding installments

Note 2: LLS & MFS Partnership Agreement (1st July 2013 to 30th Sept 2014)

- $30,000 paid 10th October 2014
- $30,018 paid 27th May 2015

Note 3: $18,226 MLA Legume project,
$2,000 AWI for traineeship program
$3,310 MLA Lean Meat Yield Eating Quality Project
$5,000 LLS contribution for Labour Efficiency Field Day
$3,229 MMfS (Making More From Sheep) Labour Efficiency Field Day
$4070 MLA Fertiliser Project
$1,821 NSW DPI reimbursement for fleece test costs, 2012 Wether Trial

Note 4: Rabo $2,000, Commonwealth Bank $1000, Cooma Rural $2,000 (14/15 and 15/16), Gallagher $1,000, GLW $1000

Note 5: AWI $1,000 for 2015 traineeship Coolringdon shearing school

Note 6: Wool sales from 2015 wether trial even up shearing

Note 7: $15,525 Rowan Wright for purchase of 2012 trial wethers
Reimbursement for soil tests from members
$4,500 from HLN & TFS for soil club data base enhancements
$3,010 Incitec rebate on soil tests

Note 8: Donations to Monaro Education Foundation and Monaro Early Intervention Service from wether trial proceeds

Note 9: $7,500 CSIRO soils club database enhancements
$17,214 H&S Benchmarking
$1,770 MFS website
$15,441 Incitec soil testing
$8,541 Graz Prophet - Seasonal outlooks
$6,797 Graz Prophet - MLA Legume project
$20,630 Graz Prophet – MFS Soil Carbon Project (AoG)
$36,771 NSW DPI - MFS Soil Carbon Project (AoG)
$4,000 NSW DPI - MLA Legume Project (cone seeder)

Note 10: Includes trial seed, fertiliser, fencing equipment, ear tags / vaccine for wether trial, printing of publications, annual website hosting etc.

Note 11: Internet costs $29 per month

Note 12: Phone costs $50 per month

Note 13 Mecardo 1 month subscription for all members, website annual subscriptions

Note 14 $680 Soil Carbon Field Day May 2015 (paid for members to attend), remainder for Project Officer training allocation

Note 15 Travel costs associated with various MFS projects for project officer & consultants to attend meetings on MFS behalf

Note 16 MFS Board Directors Liability Insurance

Total bank balance's on the 26th of August 2015 = $11,772 (main operating account), $52,708 (cash maximiser account), $87,434 (term deposit) and $18,031 (Action on Ground Soil Carbon Project account).

Out of a total of $169,945 we have approx. $24,919 already committed to specific projects leaving a balance of approx. $145,026 in the operating budget to continue delivering seasonal outlooks, benchmarking, wether trial and soils club activities and new initiatives.

Photo courtesy of Angus Hobson

Project Reports

MFS Project **08-1 - Grass Gro – Seasonal Outlooks**

Project Leader: Oliver Cay

Project Manager: Nancy Spoljaric

Project Collaborators: Doug Alcock (Graz Prophet Consulting)

Project Funders: SE LLS, MFS

GrassGro® modeling – Seasonal Outlooks

For the previous year, MFS has been able to continue its contractual arrangement with Doug Alcock of GrazProphet to present "seasonal outlooks" based on Grassgro® generated farm systems for actual Monaro properties (Bungarby, Cooma, Nimmitabel) at critical decision making times of the year.

These have included forecasts for the Autumn, Spring and early Summer periods with three month projections and recommendations. Doug delivers two (2) of these in a newsletter format and one (1) as a face-to-face open forum.

Low numbers of producers are proactively managing "seasonal risk" by a lack of understanding and interpretation of soil moisture information and seasonal forecasting models such as Grassgro in farm decision making.
In the grazing Industry there can be low confidence levels in producers understanding trigger points & making anticipatory, tactical decisions to manage seasonal risk. Consequently, decisions to adjust stock numbers in response to seasonal conditions are sometimes made much later than the optimum time, which jeopardises profitability, pastures, and groundcover.

MFS has applied through the LLS Landscapes & Industry Fund for financial support to continue this contract.

We have also applied for financial support to ***purchase a number of soil moisture probes*** to be installed on the three main soil types of the Monaro (basalt, granite and shale). This will enable another level of information to be built into the seasonal outlook projections.

Grassgro® seasonal outlooks combined with soil moisture information can help producers to assess pasture growth potentials, soil water holding capacities, different wilting points of certain pasture species and translate this to the amount of feed availability for the next three months & the likely impacts on stock performance & condition score, weight gains, lambing/calving and weaning success rates as well as the probability of needing supplementary feeding etc.

Additional benefits of soil moisture probe data include;

1. Assessing the effectiveness of rainfall in regards to yield potentials;
2. Enabling a better understanding of the different water use efficiencies of crop and pasture systems;
3. Educating producers to understand soil and water interactions at critical crop & pasture growth stages.

Examples of the March 15 GrassGro® generated graphics….

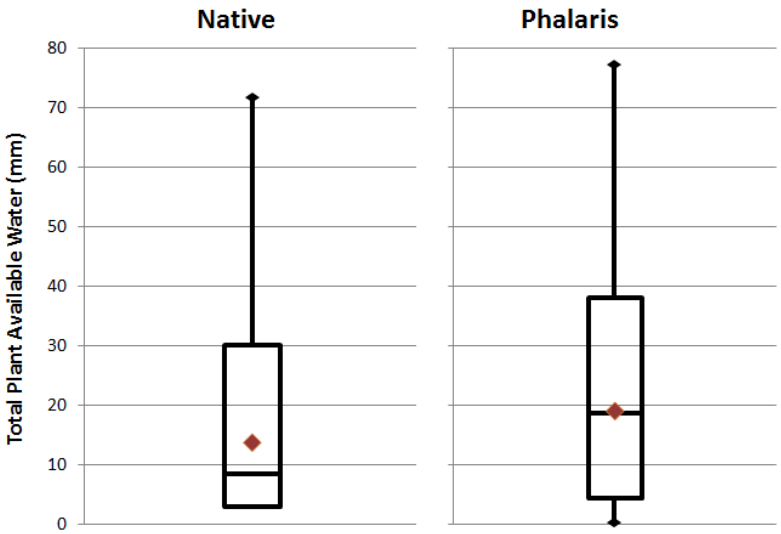


Figure 4. Plant available water (mm) on 24th February 2015 relative to historical values for that day.

Commentary…. The plant available soil water is only around the median despite the exceptional rainfall throughout the summer. This is largely due to the consistently high green leaf area, leading to high rates of transpiration, rapidly removing water from the soil. The Phalaris has higher absolute levels of soil moisture due to the cessation of growth and senescence of green leaf with the onset of summer dormancy thus allowing a greater accumulation of soil water during January….

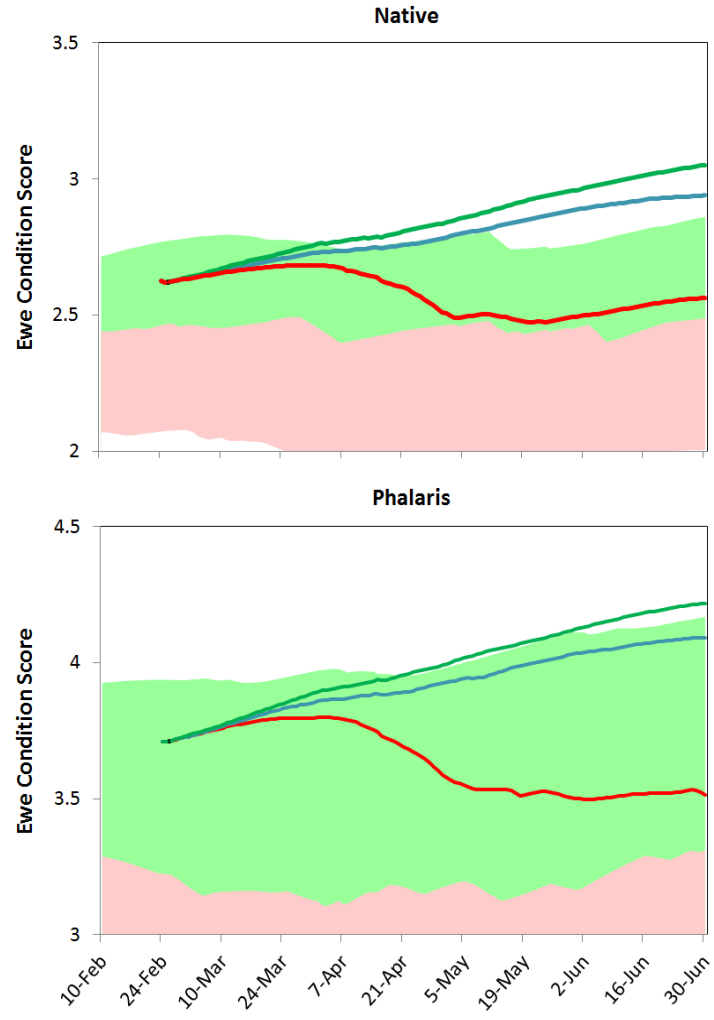


Figure 10 Projected ewe conditions score relative to historical variation. Green shading is the area between the historical median and 90th percentile while light red shading is the area between the historical median and 10th percentile.

Ewes in excellent joining condition

With ewe condition score already well above the median for the time of year and the prospect of further gains in condition over the coming weeks, it can be expected that ewes will join in April in body condition approaching the 90th percentile (Figure 10) Since joining success is most strongly related to the Condition score of ewes at joining this bodes well for a good joining this year.

GrassGro assumes an extra 14 lambs conceived per 100 ewes for each increase of 1 condition score at joining. This is in line with the average of flocks monitored in the Lifetime Wool project data but merino flocks vary considerably from almost no condition score response to more than 36 extra lambs per CS. Simulation shows that ewes running on improved pasture might achieve scanning rates as high as 140% meaning around 45% of the mob conceiving twins and needing more targeted management and nutrition in late pregnancy.

"What you said in that last GrassGro report about the soil moisture being on a knife edge and needing rain in early March if growth was to continue was spot on, growth just stopped in March and the weaners fell in a hole when the feed quality dropped" **Henry Bridgewater, Sherwood**

MFS Project 10-6 **Genetic Comparison Evaluation Trials (Wether Trials)**

Project Leader: Alan McGufficke

Project Manager: Nancy Spoljaric

Project Funder: MFS with support from Gordon Litchfield Wool, Gallagher, Allflex, Jurox, Bayer

Project Collaborators: Tablelands Farming Systems**,** Mick Schofield, Ann Hudson, Phil Graham (NSW DPI) and Matthew Lieschke (SE LLS)

Following on from the success of the 2012 - 2014 MFS genetic comparison trial, a second trial was organised with the even-up shearing occurring in May 2015. The trial convener is Mick Schofield who leases country at "Caringo" from Ann Hudson. "Caringo" is predominantly basalt country, located approximately 40kms south-west of Cooma on the Maffra Road.

For this trial, a total of 29 teams of 15 wethers are entered in the trial. The teams include ten (10) from the Yass, Bookham, Gunning and Crookwell regions and eighteen (18) teams originating from the Nimmitabel, Bombala, Dalgety, Cooma, Bungarby, Berridale and Jerangle regions. One (1) team is entered from Alectown, near Parkes in NSW.

Thank you to Allflex for donating both the flock tags and the electronic tags and to Bayer and Jurox for donating animal health products for the even-up shearing (lice and worm control).

MFS has donated $4,000 from the Wool proceeds from the even-up shearing, **on behalf of all the team participants** to the local charity MEIS (Monaro Early Intervention Service). MEIS provides family centered early childhood intervention services for young children 0 – 6 years who have a disability or developmental delay.

Why enter a wether trial?

Tom McGuiness, "Bigga Pastoral", Crookwell, "because we believe as wool producers it is one of the most powerful tools you can use to measure your flock productivity and profitability. By benchmarking your sheep genetic characteristics against other flocks it allows you to focus your efforts in improving the areas were you have the most to gain." Tom's farm business is currently going through a period of genetic change and he is keen to measure this against the very best flocks in the region. He mentions he "did not go in the trial to win but rather to see how we can improve."

Dave Ward, "Spring Ponds", another participant in the trial entered "to see how our sheep performed comparatively to other commercial flocks in our district under the same management conditions." He also wanted a measurement of "how profitable our sheep are and to show if we are on the right track with our genetics."

Gordon Litchfield, GLW Cooma "are very pleased to be associated with the MFS Wether trial as it "gives Wool Growers a fantastic opportunity to not only benchmark their own flock and business, but to also meet other Growers and share information to help improve their bottom line.

Final Results for the 2012 – 2014 Trial

This trial demonstrated a difference of $50/ha in median profit as well as a difference of $71,000 in whole farm profit between the top and the bottom performing bloodlines.

Teams from commercial properties

No deaths		Deaths factored in	
Ave/dse	**Team no**	**Ave /dse**	**Team no**
78.11	21	77.95	7
77.95	7	76.47	15
76.47	15	75.03	26
75.94	19	73.81	20
75.03	26	73.62	16
73.81	20	72.66	14
73.62	16	71.17	21
73.15	13	70.88	19
72.66	14	70.17	6
71.76	6	69.90	13
71.66	17	69.55	25
70.32	4	68.48	17
69.55	25	67.20	4
66.36	27	64.89	27
60.81	24	58.10	24

Teams from properties that sell rams

No deaths		Deaths factored in	
Ave/dse	**Team no**	**Ave /dse**	**Team no**
83.51	11	83.51	11
78.95	12	78.95	12
78.19	29	78.19	29
73.61	2	73.61	2
72.59	1	72.59	1
71.65	18	71.65	18
70.18	22	70.18	22
69.44	28	69.44	28
59.20	10	57.89	10

Table 1 R2 Values for the traits listed for three data sets (the higher the R2 value the stronger the relationship)

	MFS	**Bookham**	**Combined**
CFW v FD	0.17	0.31	0.52
CFW v BWT	0.01	0.18	0.47
FD v BWT	0.09	0.07	0.25
FD v $/DSE	0.35	0.14	0.12
CFW v $/DSE	0.07	0.15	0.05

In summary there is a strong ability to breed sheep in any direction you want but care needs to be taking in setting that direction because not all result in the same farm profit.

Presentation of the Final Results - 2012-2014 Wether Trial – Phil Graham, Dec 2014

Drafting teams for the 2015 Trial

"Coolringdon" select their final team to be entered in the trial following drafting by Nancy Spoljaric (MFS).

Charlie Hood selects his final team for TPC following drafting by Nancy Spoljaric (MFS).

MFS Project 10-7 - Soil Club – whole farm soil fertility management

Project Leader: Angus Hobson

Project Manager: Nancy Spoljaric

Project Funder: SE LLS / MFS

Project Collaborators: Richard Simpson (CSIRO), Luke Pope (SE LLS), TFS, HLN

Background

Soil health remains a major environmental and production threat for the Monaro grazing industry, accentuated by the intrinsic variability in soil type and fertility not just across the Monaro but within and between paddocks. This variability can be poorly understood by land managers.

The MFS soil club, initiated in 2010, has resulted in a data base of over 1000 Monaro soil tests (2010 to 2014), involving 66 farm businesses, and 893 paddocks have been tested. This has enabled a district analysis summary (done by Dr Richard Simpson, CSIRO) which demonstrates the following trends;

- **Basalt soils**, 76% are deficient in sulphur (S) while over 80% are adequate for Phosphorus (P), no Potassium (K) issues.
- **Granite soils**, 65% are deficient for P and 78% are deficient for S, 43% are below optimum for K.
- **Shale soils**, 75% are deficient in P and 87% are deficient in S, 36% are below optimum for K.

Producers have been encouraged to map their own paddocks over several years, and therefore can make informed decisions on not just the rates of fertiliser but the type of fertiliser needed. This has resulted in some producers reducing fertiliser usage for some paddocks while increasing applications in deficient areas and adjusting stocking rates accordingly.

The MFS Soils Club has been one of the “highest priorities” for MFS members and a project that has achieved the most practice change and delivered the greatest “value for money” out of all MFS projects.

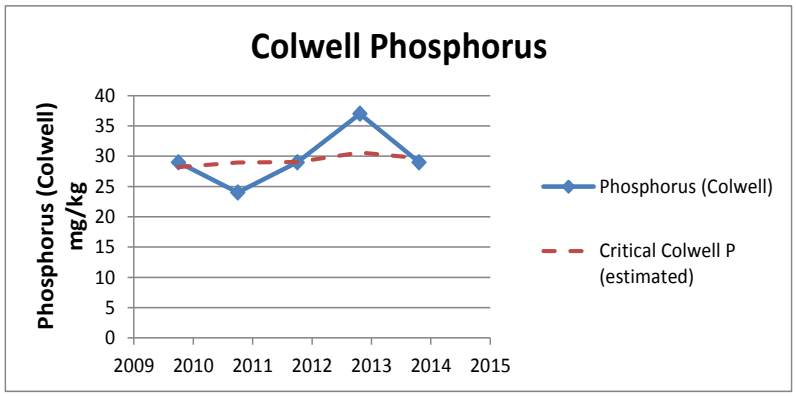
Some of the **practice change and dollar value** of these changes are as follows;

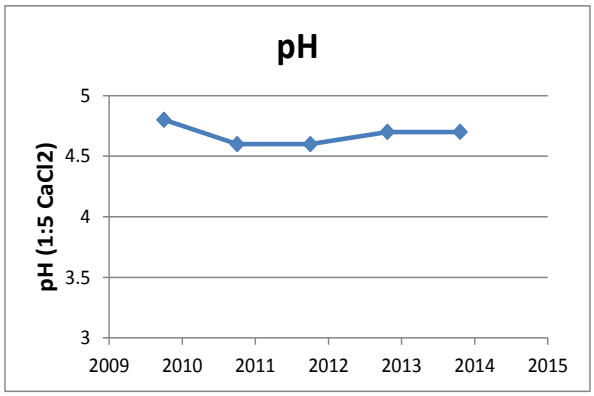
- ❖ Annual planned soil testing and targeted fertiliser applications.
- ❖ Strategic use of fertiliser, increase use of lime (increased stocking rate of 2% due to this).
- ❖ Using information to target fertilser use.
- ❖ Prioritising fertiliser application on soil tests.
- ❖ Fine-tuned fertiliser management from soils club (benefit including seasonal updates & benchmarking - approx. $200,000)
- ❖ Annual soil testing benefit - approx. $ 15000
- ❖ Increased and strategic fertiliser use - Estimated $40,000 value.
- ❖ Strategic soil sampling for improved fertiliser application.
- ❖ More targeted fertiliser application $5,000 pa benefit.
- ❖ Targeted P applications.
- ❖ Increased fertiliser use, increased stocking rate.

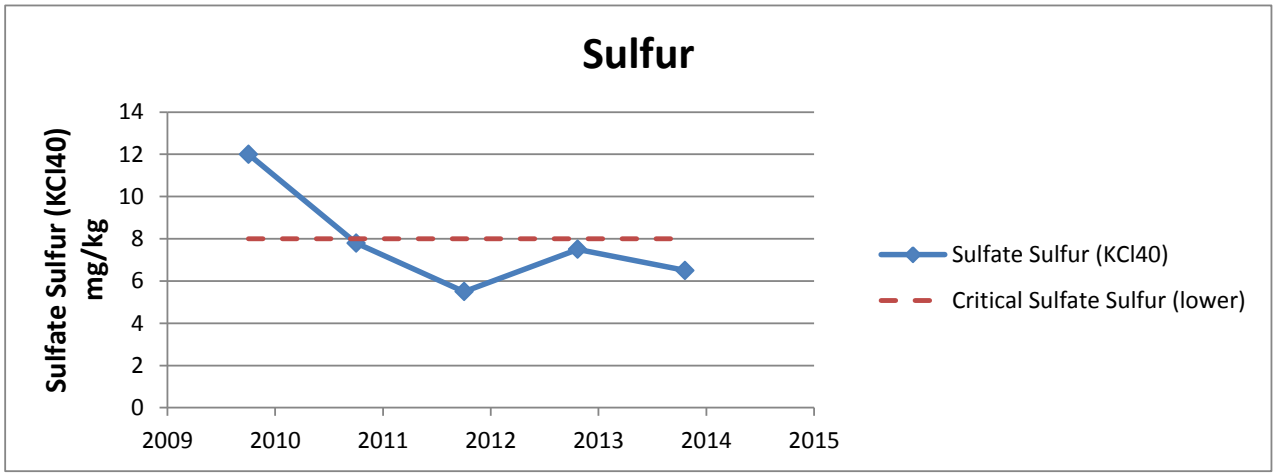
2015 will be the sixth year of an annual bulk soil testing program. MFS is anticipating (with support from SE LLS) to once again offer a number of “free” soil tests per farm business and hopes this will be an incentive to encourage other producers on the Monaro to “join the club”.

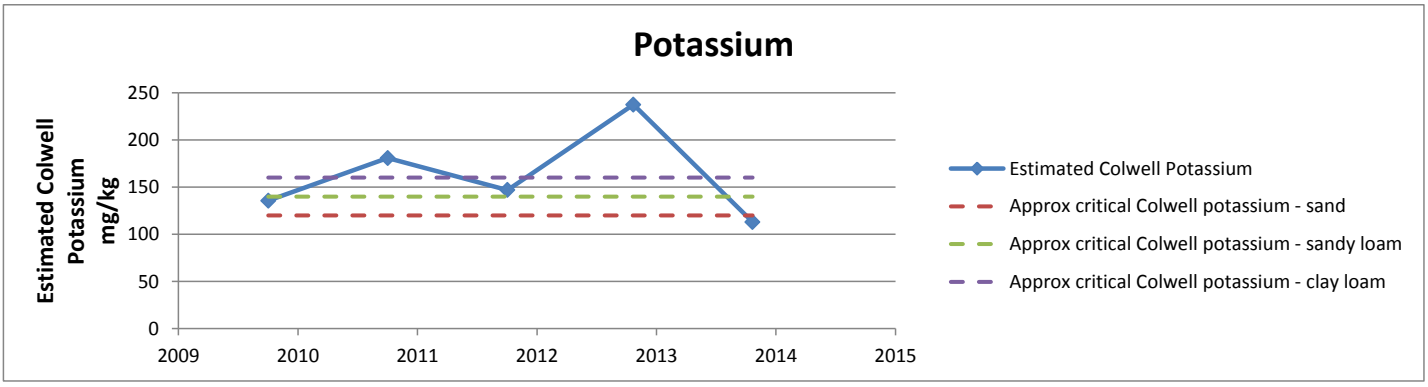
The **new direction** for 2015 will be addressing the glaring Sulphur issue for Monaro soils, canvassing suitable products and soil fertility mapping options, costs and benefits.

Examples of the individual soil test data base reports that Soil Club participants can request. This producer has been involved since the beginning and can now make accurate fertilizer decisions for this paddock based on a five year trend line.









MFS Project 11-10 **MFS Agricultural Traineeships Initiative (on-going)**

Project Leaders: Craig and Susan Mitchell

Project Collaborators: MEGT, ATEL, MFS Host Producers, Nancy Spoljaric

Project Funder: MFS, RB Sellars, AWI, NSW Farmers (Cooma Branch), Future Farmers Network

Continued support from MFS host producers enabled MFS to run the traineeship program for 2015. The advertising program this year trimmed its focus back to the Monaro and Denham Williams, Karen McGufficke and Henry Bridgewater conducted interviews for a shortlist of 5 (five) applicants.

Kelsey, a local girl from Bunyan, near Cooma started her traineeship with MFS in February 2015. She was the successful candidate of approximately 17 applicants. Kelsey completed her Year 12 last year at Monaro High and was attracted to the traineeship to try and build on her practical skills in Agriculture. She is currently working on several properties including Coolringdon, Gaerloch, Finchley, Tintagel PC, Idaho, Woodstock, Slap-up and Bellevue with very positive feedback.

Kelsey appreciates the many different ways of doing things she has been shown and has helped with crutching, drenching, mustering cattle, drafting and rouseabouting. She hopes to perhaps get work in the pastoral industry further North next year and then return to the Monaro to continue working in the rural community.

Craig Mitchell, the main initiator of this program back in 2012, reflecting on what was the driver for him comments “It is about training productive farmers for the future of agriculture on the Monaro. We need to “train the trainee” to be the most productive and efficient worker that he or she can be”.

MFS would like to **thank the following; RB Sellars** who have supported the program for the 4th year running by providing Kelsey with work clothing worth over $350; **AWI** have provided financial support ($1000) for Kelsey to attend the shearing school at Coolringdon in May and donated a wool vest ; **NSW Farmers (Cooma Branch)** have donated $500 towards the program for 2015 and **Future Farmers Network** have come on board in August 2015 with a bronze sponsorship to help support the program as well as provide access to a travel bursary to help cover some of Kelseys travel costs.

awi Australian Wool Innovation Limited

nsw FARMERS

RB SELLARS
OUTBACK TO OCEAN

Future Farmers Network

MFS Project 12-11	**Monaro farm management strategies and their effects on soil carbon**
Project Leaders:	MFS
Project Manager	Nancy Spoljaric
Project Collaborators:	NSW DPI (Susan Orgill and team, Doug Alcock (Graz Prophet consulting), Luke Pope (SE LLS), Sydney University (Lachlan Ingram), MFS members
Project Funder:	Dept. of Agriculture – Carbon Farming Futures - Action on the Ground Program

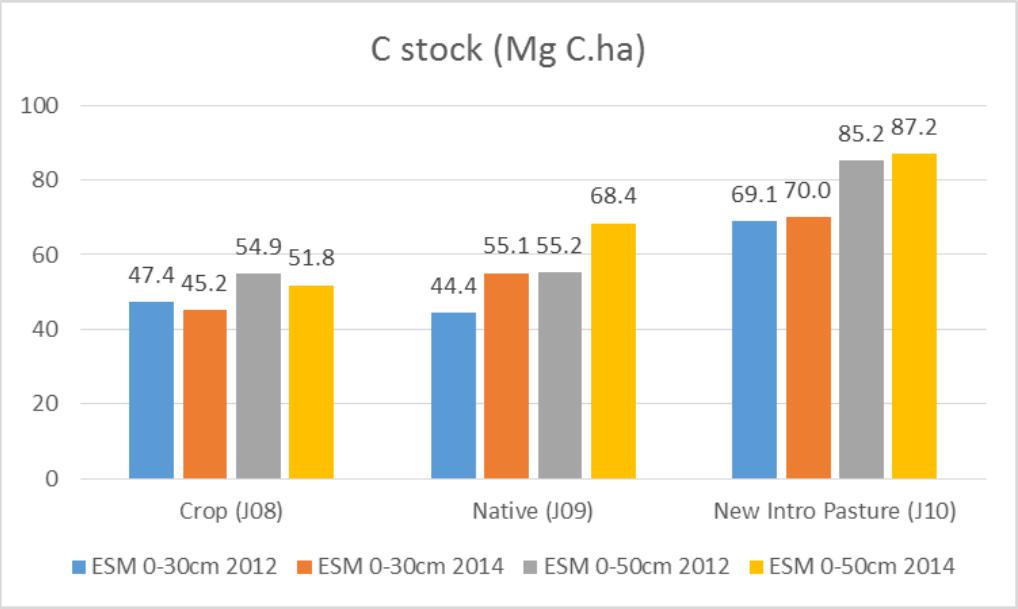
Background

In 2012 MFS was successful in its bid to receive funding ($251,000) from the Australian Government *Action on the Ground* program to examine soil carbon fluctuations under several different land management practices in the region. Technical specialists identified 19 trial sites on 7 participating properties for the project. The soil carbon project has run for three years and is now completed.

The following systems were compared in terms of soil carbon levels and potential changes, nutrient profiles, grazing practices and gross margins;

- **Pine** plantation versus **improved pasture** versus **cropping** – Delegate Station
- **Cropping** versus **native** pasture – Maffra, Delegate Station & Corrowong
- **High fertiliser** native pasture versus **low fertiliser** native pasture – Idaho, Bungarby
- **Limed** improved pasture versus un-limed – Springvale, Mila
- **Aspect**, west versus east facing slope — Quinburra, Craigie
- **Pasture Age**, 40yr old versus 5yr old phalaris pasture – South Bukalong, Bombala

Example of one of the comparisons on Delegate Station
C stock (Mg C.ha 0.30 and 0.50 m) in 2012 and 2014;
Crop (J08), Native Pasture (J09) and New Introduced Pasture (J10) on low grade metamorphic derived soil.



Results Table Summary

Difference in C stocks (Mg C ha) for each site between 2012 and 2014 for the 0 – 0.30 and 0 – 0.50 m soil layers

Management	0 - 0.30 m 2012	0 - 0.30 m 2014	0 - 0.50 m 2012	0 - 0.50 m 2014
Crop (R01)	46.39	50.12	71.72	77.09
Native pasture (R02)	59.98	64.94	80.80	87.10
Low P (Mc18)	61.38	77.10	75.87	101.45
High P (Mc19)	78.82	73.48	108.65	101.11
Unlimed (H04)	45.87	52.29	58.85	67.43
Lime (H05)	47.30	47.43	60.04	63.61
West Aspect (H06)	46.97	49.38	55.69	58.09
East Aspect (H07)	42.37	48.09	52.29	69.96
Crop (J08)	47.65	45.36	55.69	52.43
Native (J09)	45.15	55.91	56.76	70.34
New Intro Pasture (J10)	68.96	69.91	84.76	86.73
Crop (M12)	40.21	53.19	54.92	67.26
Native pasture (M13)	39.94	46.80	54.88	62.45
New Intro Pasture (M14)	36.66	42.79	47.64	54.69
Old Intro Pasture (G16)	46.66	44.99	66.27	61.29
New Intro Pasture (G17)	50.80	40.79	65.91	54.62
Pine (03)	66.83	93.87	85.06	125.14
Crop (J11)	42.37	46.53	53.82	57.72
Old Intro Pasture (J15)	44.93	43.63	59.33	55.80

Soil cores taken on "Maffra" new cropping site

Soil cores taken on "Corrowong" new cropping site

Key Soil Carbon messages for the Monaro

- ✓ Seasonal conditions and soil type have a greater effect on carbon than management.
- ✓ Parent material has an effect on fertility and biomass production and on clay content which can influence the amount of C stored in soils.
- ✓ Providing necessary nutrients and pH for best pasture production will potentially increase soil carbon.
- ✓ Cropping in a good season may not decrease soil carbon stocks on certain soil types. Opportunities may exist for Monaro landholders to diversity their enterprises when the conditions are right without depleting their soil carbon.
- ✓ A rapid increase of soil carbon can easily be followed by a rapid decrease.
- ✓ In good years, cropping may maintain or increase soil C stocks relative to perennial pastures.
- ✓ Aspect did not significantly influence soil carbon stocks, therefore demonstrating no justification for managing these slopes differently for carbon capture purposes.
- ✓ If pH is limiting plant production then applying lime may increase soil carbon over the long term.
- ✓ Increasing biomass production by addressing soil fertility may increase Soil C stocks.
    - ➢ Increasing S to critical levels increased carbon but P had no effect
    - ➢ N increased carbon
- ✓ A perennial pasture system is still understood to be the best agricultural system for building and maintaining soil carbon.
- ✓ New pastures rapidly accumulate Soil C (5-10yrs) and then this rate of increase slows over next 30yrs.

Key Soil Carbon messages for the Monaro – economic comparisons & emissions

- ✓ Modelling of a range of the project sites demonstrates remarkable consistency in the enterprise emissions produced when considered on a DSE basis.
- ✓ For low fertility native pasture systems running the self -replacing merino enterprise typical of the Monaro we might expect emissions of around 195 kg CO2-e/DSE.
- ✓ Introduced pastures at moderate fertility levels achieved a DSE emissions intensity of around 180 kg CO2-e/DSE while when optimally fertilised this can be reduced by a further 5 kg CO2-e/DSE.
- ✓ To claim reduced net emissions (carbon sequestration), management that improves pasture production and increases carrying capacity of a native pasture by 2 DSE/ha will first need to offset an increase in methane emissions of around 400 kg CO2-e/ha or 110 kg of carbon.
- ✓ In rough terms if only 20% of any extra biomass produced is retained in the soil then the first 6-700kg of extra above ground biomass production would be needed to offset the extra livestock emissions even before accounting for any changes in other emissions sources such as N2O which might also be expected.
- ✓ In economic terms the returns to increasing soil fertility are clear but only when the extra pasture produced is utilized (This means increasing stocking rates and with that livestock emissions).

- ✓ The modeling of potential fertility changes at Site 8 ("Quinburra", improved pasture) show over $2000/ha extra profit accumulated over a 10 year period resulting from applications of higher rates of fertiliser.
- ✓ If the fertiliser was applied solely for the purposes of sequestering soil carbon, at $14/tonne CO2-e, 40 tonnes of extra soil carbon would be needed to net the same extra returns.
- ✓ To achieve this, additional above ground pasture growth of more than 20 tonnes/ha/year would be required ie. more than trebling pasture production.
- ✓ Calculations such as these make it clear that on farm decisions to increase pasture productivity will be made principally to increase livestock production and any value coming from carbon sequestration will be relatively minor within the current quantum of its market value.

Sites modelled

- **"Maffra", Rolfe -** new crop and old native pasture ①
- **"Sth Bukalong", Garnock -** Old improved pasture vs New Improved Pasture ②
- **"Delegate Station", Jeffreys -** Old improved Pasture ③
- **"Quinburra", Horton -** North and East aspect (improved pasture) ④

Table 1 Average annual enteric methane emissions and emissions intensity (EI)of wool and meat production. Emissions are allocated according to relative economic value of each product to the enterprise.

		Low Fert Native (basalt) ①	Fertilised Native (basalt)①	Fertilised Phalaris (basalt)①	New Crop (basalt)①
Enteric CH_4	kg/ha	35.4	45	64.4	47.1
CO_2 –eq	kg/ha	885	1125	1610	1117
Wool EI	kg CO2-e/kg	37.8	37.3	36.1	36.7
Meat EI	kg CO2-e/kg	13.0	13.0	11.6	12.3
DSE EI	kg CO2-e/DSE	197	194	179	186

		Old Imp Pasture②	New Imp Pasture②	Old Improved Pasture③	Nth Aspect④	East Aspect④
Enteric CH4	kg/ha	70.1	74.5	96.9	111.4	137.1
CO2 –eq	kg/ha	1752	1863	2421	2785	3428
Wool EI	kg CO2-e/kg	34.4	34.4	35.4	33.8	34.7
Meat EI	kg CO2-e/kg	11.4	11.4	11.3	11	11.2
DSE EI	kg CO2-e/DSE	181	181	178	171	176

Enteric CH_4 = annual methane released via digestion per grazing sheep
CO_2 – eq = equivalent economic contribution to the enterprise
Wool EI = Emissions intensity of clean wool production
Meat EI = Emissions intensity of meat production on a carcass weight basis
DSE EI = annual emissions per livestock unit

A **Final Report** has been prepared as well as an **e-publication** which will be available to all MFS members and the wider community in September 2015 following final acceptance from the Department of Agriculture.

Thank you to all the site hosts who contributed their land and time to this project…

MFS Project 14-12 **Establishing persistent and productive new legumes**
MLA Participatory Research Legume Project

Project Leaders: MFS

Project Manager Nancy Spoljaric

Project Collaborators: Doug Alcock (Graz Prophet consulting), Luke Pope (SE LLS), Belinda Hackney (NSW DPI), MFS members

Project Funder: Meat and Livestock Australia – Participatory R & D

Project Objectives

A long-standing issue highlighted by producers of MFS has been the challenge to get legumes to establish and persist for the long-term in pasture systems. Specifically a challenge is getting species to perform in the critical feed accumulation periods of early winter, late spring and early summer.

Low legume content pastures is estimated to affect >50% of Monaro farms. Newly established sub clover may only persist at high density for 3 or so years on these soils. The widespread lack of legume N limits productivity and restricts responses to phosphorus fertiliser applications. This results in poor water-use efficiency.

The Monaro has a unique environment for southern Australia in that it has a summer dominant rainfall with very cold winters. This has led to Monaro Farming System members questioning the suitability of sub clover to the farm system. MFS recognises legumes drive the system and so are keen to explore other options to fix nitrogen and the opportunity to work with researchers such as Belinda Hackney.

Questions to answer
"Are some alternative legume species better (in terms of establishment, persistence, & production) than traditional legumes commonly sown on the Monaro?"
"Can alternative legumes be successfully sown into existing pasture swards (perennial grasses), and increase pasture and animal production?"
Do a range of new legume species establish and persist better when existing perennial grasses are set back with herbicides?

From left, Biserrula, French serradella and gland legumes picked from the trial site

Progress to date (August 2015)

Site 1 – "Gaerloch", Counteginny (Acid, granite soil, 700mm high annual rainfall)

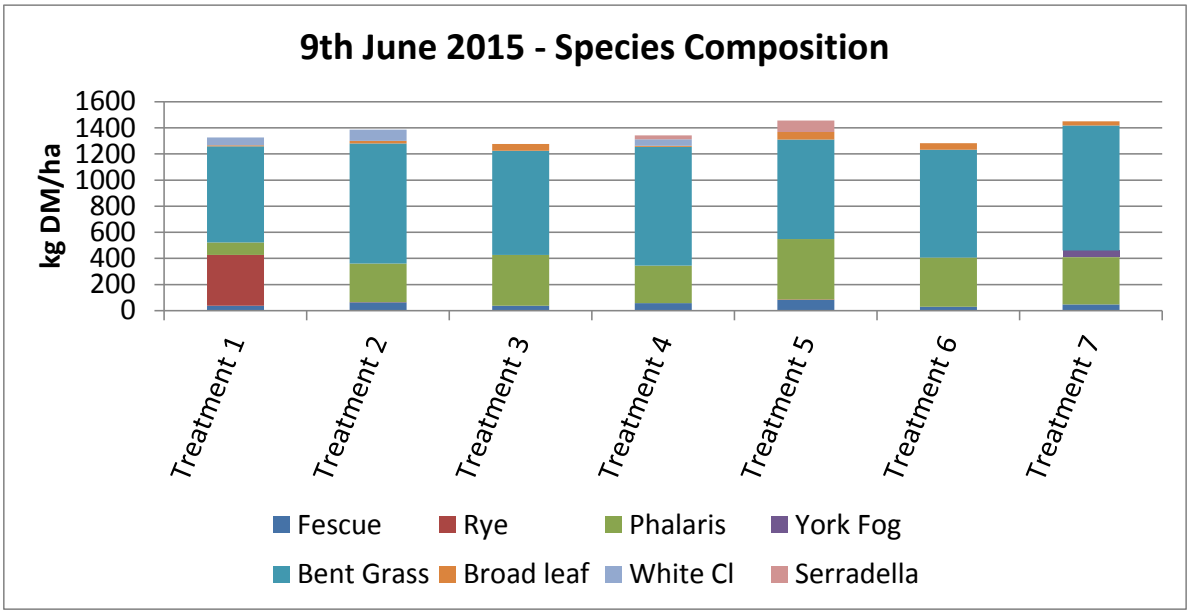
Site sown on 10th April 2014

Paddock Preparation
Cultivated and summer fallowed. Sprayed with 3L Glyphosate 450 and 100mL Fastac Duo on 7 April 2014

Species Sown (randomized, replicated plot design)

Treatment 1
0.5kg Phalaris, 0.5kg Fescue, 3kg Perennial Ryegrass, 6kg Sub Clover, 0.5kg White Clover
Treatment 2
2kg Phalaris, 4kg Fescue, 9kg Sub Clover, 1kg White Clover
Treatment 3
2kg Phalaris, 4kg Fescue, 5kg Lucerne
Treatment 4
2kg Phalaris, 4kg Fescue, 6kg Sub Clover, 0.5kg white Clover, 3kg French Serradella, 1kg Gland Clover, 1kg Biserrula, 0.5kg Balansa, 1kg Lucerne
Treatment 5
2kg Phalaris, 4kg Fescue, 7kg French Serradella, 3kg Gland Clover
Treatment 6
2kg Phalaris, 4kg Fescue, 7kg Biserrula
Treatment 7
2kg Phalaris, 4kg Fescue, 3kg Gland Clover, 3kg Balansa

Latest Results



Comments from Belinda Hackney (technical advisor) & Doug Alcock (state coordinator & trial assessor)

- There has been a significant germination of *French serradella* (June 2015) and given it is still at an early growth stage it would be good to let it establish a bit more before grazing;
- Bent grass continues to be a problem at "Gaerloch" but the *Serradella* has managed to re-establish, the Dry Matter wt doesn't look much but the population actually looks good;

Summer biomass reading (Jan 2015)

- Bent grass has certainly returned to the site with a vengeance and is perhaps exacerbated by having had no grazing in such a wet season. Having said that the population of perennial grasses especially Phalaris is quite good and with grazing and fertiliser may well overcome some of the bent grass in time;
- The two legumes still presenting as a significant green component in the pasture are white clover and *Serradella*. All other legumes including Lucerne are largely non-existent;
- It does seem pretty certain however that the Lucernes are a failure at the "Gaerloch" site as they were indeed almost nonexistent at both sampling times, this is not surprising given the low pH and the level of spring competition;
- Looking back at the initial botanal in November 2014 , balansa and biserrula made up 18% and 14% of the green biomass respectively so they did have some success;
- It is very apparent that weeds have had a major impact on establishment and performance. We need to be careful not to write off the other species as results are (in my opinion) more a reflection of site preparation rather than species performance. (Belinda Hackney);
- Really for species like vulpia, bent grass and sorrel, you need a minimum of two years preparation and preferably three to get to a stage where you would consider sowing a new pasture;
- I think the main conclusion I would draw from "Gaerloch" is the fundamental principle of absolute weed control is paramount to establishment of new pastures (Belinda Hackney).

What next for this site?

- Assess re-establishment success in Yrs 2 & 3
- Feed quality testing of best treatments

Photo of ***French Seradella*** germination in second year (June 2015)

Site 2 – "Sth Bukalong", Bombala (medium rainfall 575mm, pasture renovation, old cocksfoot base)

Trial 1 was sown on 2nd September 2014

Trial 2 was sown on the 6th March and the second sowing on the 30th April 2015 (6-8 weeks later)

Paddock preparations

Trial 1 - 1 L/ha glyphosate and 1 L/ha gramoxone as well as a nil spray (August 2014).

Trial 2 - Slashed in Dec 2014 and sprayed with 1L/ha glyphosate on the 15th and 28th Jan 2015 and plots sprayed again with glyphosate immediately prior to sowing.

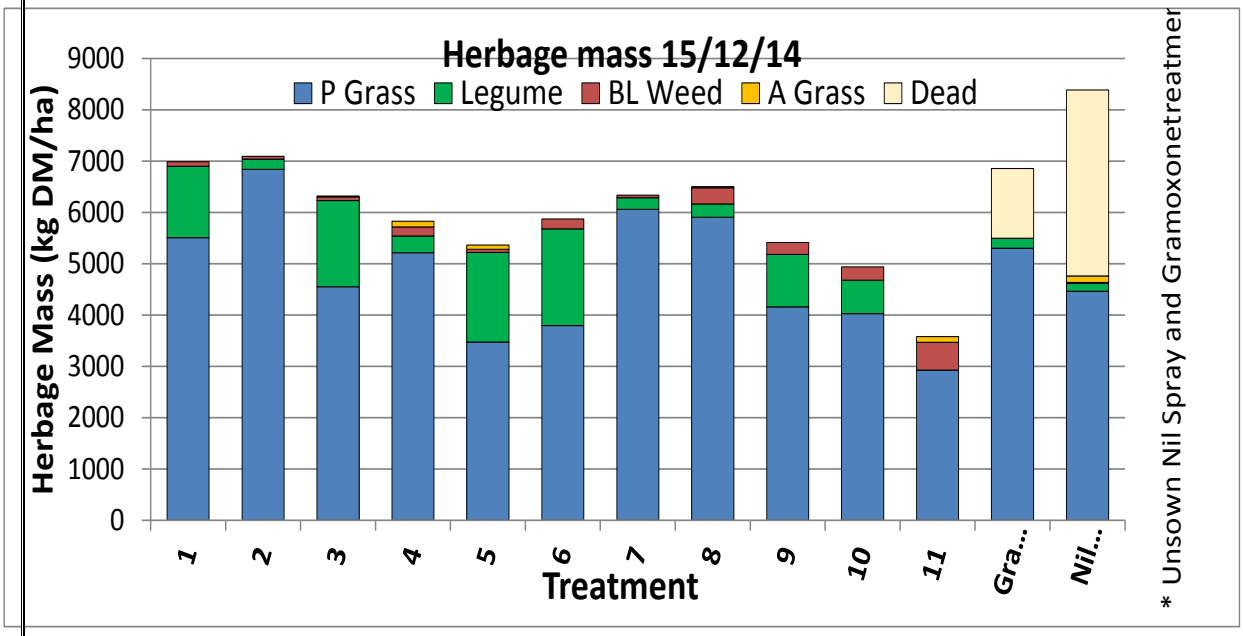
Species Sown

Trial 1 - The legumes included *balansa, gland, biserrula, French seradella*, white & sub clovers mixed with various rates of phalaris, fescue, ryegrass and lucernes.
(11 pasture mixes, 3 spray treatments -This trial is also comparing legume performance with three different herbicide pre-sowing preparations ie. 1L / ha Glyphosate 450, 1L/Ha Gramoxone 250 & No Herbicide)

Trial 2 – The legumes included *French serradella*, b*iserrula*, gland clover, bladder clover, GT stamina lucerne, sub clover all at 10 kg/ha**.**
(6 mixes, 1 spray treatment)

*** Plus Alosca inoculant (S, BS, C)+ Fertiliser – 125kg DAP**

Results & Comments - Trial 1



The initial establishment of legumes was quite good (Dec 2014) in Rep 1 (glyphosate treated plot) with the majority of the legume in the chart made up of ***seradella, biserrula*, gland and Lucerne**. However subsequent re-establishment of legumes at the Sth Bukalong site was very poor (assessment June 2015).

The only legume measurable on any of the glyphosate treated plots at the June 2015 assessment was a small persistence of Aurora Lucerne.

For this reason the second trial site was prepared to give additional data for some of the legumes trialed in Trial Site 1 and to reallocate the resources from the "assessment budget" due to the failure of legumes to establish in the "gramoxone" and "nil spray" prepared plots.

The reason no legumes were able to establish in these sites was due to the dominance of the established cocksfoot pasture base and the pasture height and density which was not conducive to light, air and moisture infiltration. The "gramoxone" spray did not significantly set-back the pasture growth to allow the legumes to establish and the legumes sown in the "nil-spray" plots were never able to compete successfully for nutrients. Grazing intensity was not hard enough to also set back the existing cocksfoot.

Results & Comments - Trial 2

Germination from the March 2015 sowing was non-existent and from the April 2015 sowing was very little.

The reasons for this are unclear but could be due to any of the following;

- sowing was into pretty heavy trash which may have affected germination;
- a large number of slugs were found in the drilled area;
- poor soil moisture for the March 2015 sowing;
- competition from weeds.

What next?

Due to the reasons given above, MFS in collaboration with MLA, Belinda Hackney (technical advisor) and Doug Alcock (State coordinator) have decided to **abandon this trial site and re-sow again** on a site which has had a "two year" clean-up history.

Revised Plan
Compare eight legume varieties at 3 sowing dates;

- -spring (scarified seed)
- -summer (in-pod/un scarified)
- -mid autumn sow (scarified seed)

Biserrula (Casbah)
French serradella (Margurita)
Bladder clover (Bartolo)
Arrowleaf (Cefalu)
Gland clover (Prima)
Yellow serradella (Avila)
Sub clover (Seaton Park - autumn sowing only)
Lucerne (Aurora or similar, spring and autumn only)

Pasture walk – Dec 2014, Sth Bukalong

Initial establishment of seradella, prima gland and aurora lucerne at Sth Bukalong (Dec 2014 following Spring sowing in Sept 2014)

New Projects

MFS Project 14-13 MFS & Tablelands Benchmarking Group

Very few producers have a real understanding of the main **profit drivers** in a farm business and have limited concept of where their business is positioned in relation to the Industry or district benchmarks.

Few producers are able to identify the strengths and weaknesses of their business to be able to focus on measurable improvement. The key performance indicators (KPI's) for farm performance on the Monaro are not well established. Consequently, KPI's from other areas in South Eastern Australia are used, which may be leading to poor decision making on farm.

The MFS / Tablelands benchmarking group is now into its second year. Twenty-one (21) farm businesses (including 5 from Tablelands Farming Systems) are participating and have provided data for the 13/14 and 14/15 financial years. Sandy McEachern from Holmes & Sackett (leading benchmarking firm in Eastern Australia) has analysed the data and run three group sessions.

The MFS benchmarking / comparative analysis project enables businesses to identify their strengths and weaknesses to make more astute business decisions, which ultimately lead to more profitable businesses.

The initial cost per farm business has been $580 + GST to receive their individual farm business Report and Ag Insights from Holmes & Sackett. The follow-on group sessions run to date have been funded via support from SE LLS and MFS has recently applied again for financial support from SE LLS to continue this program.

Some **comments** from current group members include….

"Producers looking to boost their productivity should start by analyzing their current business situation."

"You have to understand where you are now before you can move in any other direction."

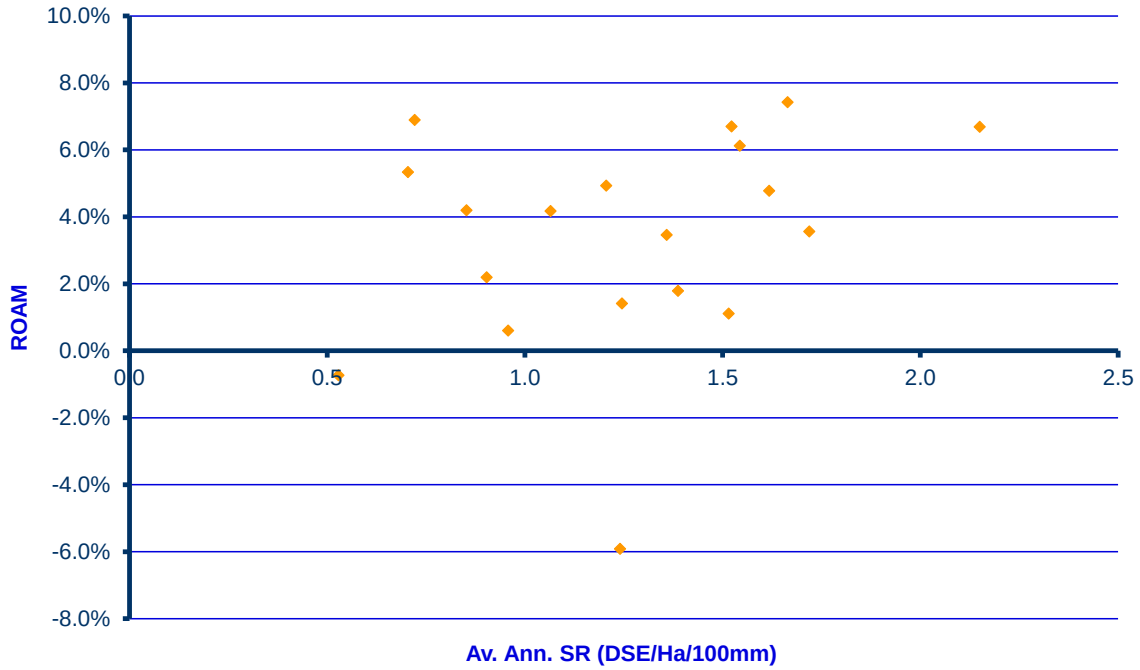
"Once you've done the analysis you have to interpret the figures – you need to understand what the numbers are telling you."

"The benchmarking group is a great motivator for keeping a business focus on our farming enterprise, it healthily challenges our assumptions within our enterprise, and Sandy facilitates fantastic peer discussion while adding his own industry insights."

*Sandy runs the third group session in the Murdoch shearing shed, Bibbenluke***.**

Example below of how benchmarking has already identified key farm business issues for the Monaro;

Graph 1: Return on assets managed (ROAM) vs stocking rate (DSE/Ha/100mm rainfall) – This graph shows that producers are reaching high profitability at 1.5-1.7 DSE/ha/100 mm rainfall which contrasts with the Holmes & Sacket database elsewhere which indicates producers need to be at over 2 DSE/ha/100 mm. Therefore this data suggests **optimum stocking rate on Monaro in terms of DSE/ha/100 mm appears lower** than many other places in southern Australia.



Whole farm profit

	Top 5	Average
GM / ha	$350	$247
Total overhead expenses	$155	$149
Nett farm profit	$195	$98

Beef herds

	Top 5	Average
GM / ha	$239	$192
Overhead expenses/ha	$106	$128
Nett profit / ha	$133	$64

Wool flocks

	Top 5	Average
GM / ha	$262	$236
Overhead expenses/ha	$100	$141
Nett profit / ha	$162	$95
GM / DSE ($/DSE)	$43	$33
Nett profit ($/DSE)	$26	$13

Dual purpose

	Top 5	Average
GM / ha	$424	$259
Overhead expenses/ha	$177	$194
Nett profit / ha	$247	$66
GM / DSE ($/DSE)	$53	$32
Nett profit ($/DSE)	$31	$6

Prime lamb

	Average
GM / ha	$390
Overhead expenses/ha	$197
Nett profit / ha	$192
GM / DSE ($/DSE)	$45
Nett profit ($/DSE)	$22

MFS Funding Submissions submitted throughout 2014 / 2015

Productive Projects in Partnership – SE LLS Community, Industry & Landscapes Fund
Submitted July 2015 (awaiting notification) - $150,000 (over 3 years) – Proposal 1

This project, if successful, would provide financial support to enable the following MFS projects to continue and expand; 1.Seasonal outlooks and Monaro soil moisture probe networking, 2. Soil Club activities, 3. Benchmarking / comparative analysis work.

Firming up the Future of Farming Systems Groups – SE LLS Community, Industry & Landscapes Fund
Submitted July 2015 (awaiting notification) - $105,000 (over 3 years) – Proposal 2

This project, if successful would financially support the MFS project coordinators position. One of the challenges facing not just MFS but all farming systems groups is the reliance on "soft" funding to continue to employ a paid coordinators position. Without this coordinator the MFS group could not operate due to the time and skill constraints of a volunteer Board and the amount of administrative duties required to successfully & professionally manage an incorporated organization.

Measuring Merinos Matters – Foundation for Rural & Regional Renewal (FRRR) - $8,350

Submitted August 2014 (unsuccessful), revised and re-submitted Aug 2015

MFS has currently got a project submitted as part of the FRRR, ANZ Seeds of Renewal program for $8,350 to go towards reporting results for the 2015 MFS Genetic Evaluation Trial. If successful this funding will be used to have the wether trial data professionally evaluated and presented in a package which will include;

- ✓ a presentation style, open forum,
- ✓ a video educational product to be distributed to local High Schools & other farming systems groups,
- ✓ a website package including past and present MFS wether trial results,
- ✓ a published booklet which can be distributed to wool growers both locally and regionally.

Probing for Preparedness – Australian Wool Innovation (AWI) - $131,220

Submitted in collaboration with TFS, NSW DPI, SE LLS February 2015 (unsuccessful)

This proposal aimed to lift overall farm business productivity by installing a system of soil moisture probes at strategic locations across the Monaro to link in with already established seasonal outlook (based on GrassGro® modelling) format presentations. This would help deliver targeted and tactical information to producers at critical decision points in the season and lift confidence levels for producers when making seasonal based decisions.
The project funding sought would have been principally used to help purchase and install 10 soil moisture probes, five in each region. This project was supported by soil moisture and production information from grazing demonstration sites at Crookwell (South East Local Land Services) and Bookham (Agriculture NSW).

Developing Better Directors for next generation Agriculture - FRRR - $24,000

Submitted in collaboration with TFS March 2015 (unsuccessful)

Like many community organisations that rely on a volunteer Board for leadership and direction, one of the biggest challenges facing MFS and TFS is securing ongoing commitment from volunteer Board members who possess the necessary skills and capacity to drive these farmer-initiated and not-for-profit organisations into the future.

The relevance of these groups has grown in recent years and they are relied on to provide direction and leadership not only for farmers and rural industries at the local level but also at a regional and state level.

This requires people to fill these positions who have specific skills in corporate governance, strategic planning and leadership.

In small rural communities, the people that fill these positions are often farmers who are exceptionally good at what they do in the agricultural field but have limited experience in corporate governance at the Board level.

This proposal sought support to enable four Board members (two from each organisation) to participate and graduate in the Australian Institute of Company Directors (AICD) diploma course to give skills and professional development pathways to the selected Board directors.

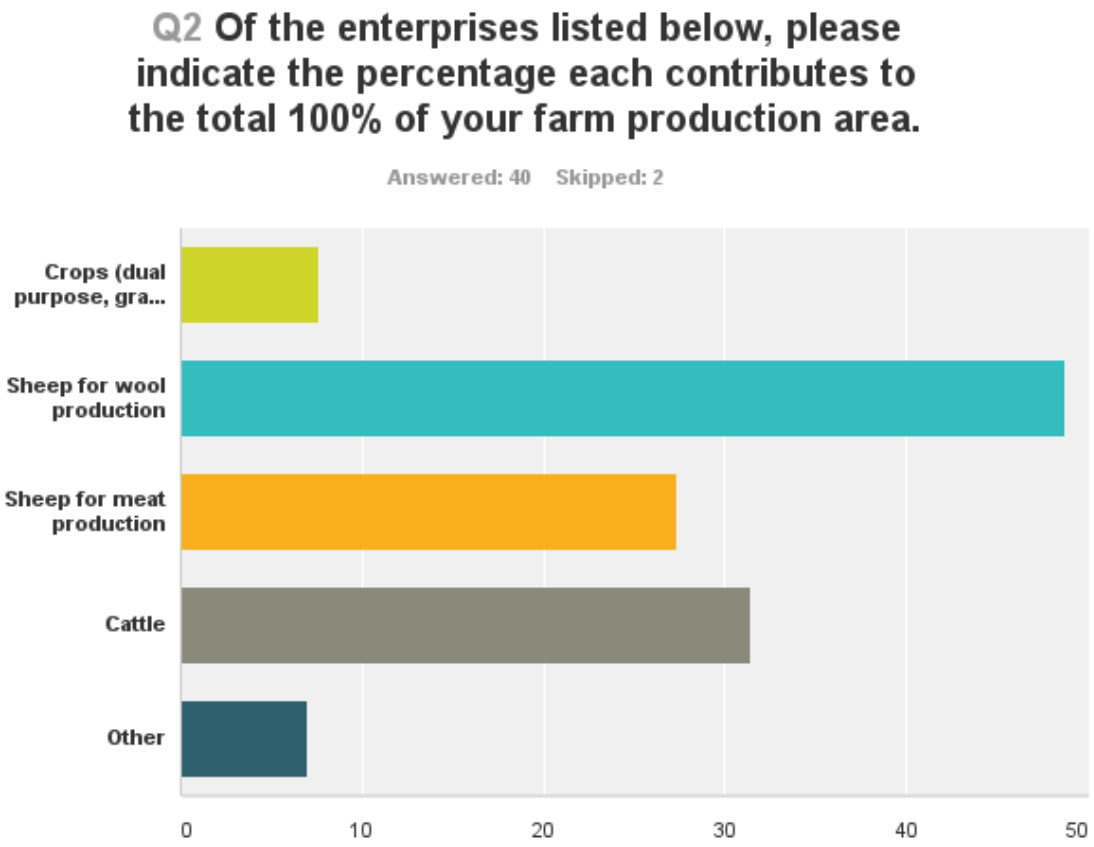
"Alright. But it better be good."

MFS Member Survey 2015 – MFS Group Profile & Feedback

Respondents – 46 (includes 4 partial responses via email)

Land Details

- Total hectares under management – 123, 811
- Hectares under native pasture – 67,354
- Hectares under improved pasture – 51,967
- Hectares under crop – 3643
- Other (bush) - 1990



Stock Numbers

- Merino adult ewes – 160,135
- Merino adult wethers – 60,821
- Merino lambs – 85,412
- Crossbred ewes – 33,611
- 2nd X lambs – 38,070
- 1st X lambs – 28,120
- Adult cows – 15,497
- Heifers / steers – 8,414

Would you like to crop more of your land if you could enter into some sort of share-farming agreement?

YES 13%

NO 87%

Do you feel worm management and/or drench resistance is becoming an increasing challenge to your business?

YES 70%

NO 30%

[Note: 87% respondent's agreed MFS should focus on this issue by initiating a confidential data-base of worm testing and product information specifically for the Monaro]

Have you implemented actual practice change as a result of being a member of MFS through any projects?

YES 65%

NO 35%

Highest Priority Projects in order (not a lot of difference between them)

1. Soils Club
2. Benchmarking
3. Seasonal Updates
4. Wether Trials
5. Traineeship
6. Other (Field Days)

MFS Projects ranked in order of "value for money"

1. Subsidised soil tests (Soil Club)
2. Access to workshops & seminars
3. Networking opportunities with peers
4. Newsletter / website

Value for $$ that members get from MFS membership

Very High	35%
High	33%
Moderate	30%
Limited	2%
Poor	0%

Ideas for focus areas for MFS

- Wool-fertility trade-offs to maximise sheep enterprise profitability
- Weed management (African LG), native pasture utilisation, stock handling skills
- Pasture legumes, dual-purpose crops
- Different grazing systems/animal health issues
- Agroforestry and harmonious relationships with agriculture, use of fertilizer and management to economically increase winter pasture production
- Use of drones and field day on them
- Use of farming Apps and connecting your farm
- Rotational grazing field day, list of resources to study at home
- Yes sheep handlers- which work or rust behind the shed
- Worm club and animal health
- Grazing Comparison ie. Beef v Fat lambs v Wool/Surplus Sheep enterprises.
- Keep it simple - do a few things well - caution info overload
- Role of finishing pastures for finishing lambs
- MFS to tap into industry bodies AWI MLA about career opportunities for the next generation
- Lamb weight gain Shorn v Unshorn
- Soil Moisture probes, no unreliable crystal ball gazing from BOM, hard actual data about how much RAW and make decisions about stocking rate & carrying capacity to BUY or SELL
- Looking at pasture performance in grazing enterprises, perhaps looking at Giberilic Acid; Awaken; Liquid Nitrogens v. Urea and cost effectiveness of use. Localised plant performance grazing trials etc. Gross margin of fattening pastures both annual and long term i.e. Lucerne v. Wheat Brasica v Short term Rye V. Medium Term Grasses
- Variety and sowing time modeling for southern Monaro
- Progress the Seasonal Outlook tool to measure the balance of stocking rate with feed supply
- Standard Deviation differences in rainfall across the Monaro and Southern Tablelands and the impact this has on land values
- I think MFS has enough on its plate it is better to finish things with $$$ results and allow time for implementation then to be jumping from here to there. The focus needs to be on main profit drivers and things that help such as current projects including moisture probes to tie in with seasonal outlook tools and fertilser and pasture

MFS Events Summary 2014 / 15

- **1st December 2014** – MFS Soils Club and Wether Trial Results Presentation
- **18th December 2014** – MLA Legume Project – pasture walk, South Bukalong
- **2nd February 2015** - MFS Trainee Kelsey commenced employment
- **12th February 2015** – 2nd Benchmarking session – "Collingwood", Gunning
- **6th May 2015** – 2015 Genetic Evaluation Trial – "Caringo", even-up shearing
- **7th May 2015** – MLA Pasture Update – Nimmitabel
    - *Can we increase soil carbon on the Monaro?*
      MFS Soil Carbon Project presentation, Susan Orgill, NSW DPI
    - MFS Legume Project Update – Doug Alcock, GrazProphet
- **27th May 2015** – 3rd Benchmarking session – Murdoch Shearing Shed, Bibbenluke
- **2nd September 2015** - MFS AGM
    - Benefits of Benchmarking – Sandy McEachern, Holmes & Sackett
    - Spring Seasonal Outlook – Doug Alcock, GrazProphet Consulting
- **Late Nov 2015** – MFS Soils Club Annual presentation and Xmas Lunch
    - Developing Fertiliser Strategies on farm – a role for simple farm mapping – presenter tbc
    - S Fertilisers – putting the S back into Soils – presenter tbc

MFS Supporters – THANKYOU

GOLD Sponsor 2014/15
Incitec Pivot Fertlilsers

Sponsorship Package
Rabo Bank
AWI
NSW Farmers (Cooma Branch)
RB Sellars

Bronze Sponsors
National Australia Bank
Gallagher
Commonwealth Bank
Cooma Rural
Telstra Country Wide
LambPro
Future Farmers Network
Gordon Litchfield Wool (Wether Trial)

MFS Partners
South East Local Land Services
NSW DPI
Meridian Agriculture
Sydney University
Boyce Chartered Accountants
Tablelands Farming Systems
Holbrook Landcare Network

Project Funders
South East Local Land Services
Carbon Farming Futures – Dept. of Agriculture
CSIRO
Meat & Livestock Australia
Making More from Sheep (MMfS)

Special Mentions…

South East LLS for their on-going financial assistance and support.

Boyce for continuing to provide meeting rooms on numerous occasions & financial advice (Jono Forrest).

Lachy Ingram University of Sydney who continually supports MFS Projects.

No Fuss Tax & Book Keeping (Bombala) for help and advice with QuickBooks on a regular basis.

Meridian Agriculture for Mikes continued efforts to support the organization above his Board duties.

MFS Board who give countless volunteer hours to lead the group and initiate and drive new ideas.

Out-going Chairman Oli Cay who has chaired the Board since Sept. 2010. Oli has worked constantly behind the scenes to lead MFS including attending numerous meetings, preparing & giving presentations and lobbying local and State organisations for MFS support. He has always made time to attend all field days and be "on call" to support the Project Officer position. Thank you Oli.

Denham Williams retiring Board member (2015) who has worked tirelessly and actively over the last three years to lead MFS sponsorship as well as help with many other MFS projects.

Alan McGufficke who has continued to manage the 2015 MFS wether trial.

Craig Mitchell who has continued to support and lead the MFS traineeship program.


CSIRO


GALLAGHER


awi
Australian Wool
Innovation Limited


PROUD PARTNERS OF
THE UNIVERSITY OF
SYDNEY


mla
MEAT & LIVESTOCK AUSTRALIA


Rabobank


MERIDIAN
Agriculture


BOYCE
CHARTERED ACCOUNTANTS
Knowledge. Insight. Experience.


NSW
GOVERNMENT
Local Land
Services
South East


Telstra


NSW
GOVERNMENT
Department of
Primary Industries

TFS Tablelands Farming Systems

Next Generation Agriculture

20 Years

GORDON LITCHFIELD WOOL PTY LTD

1994 - 2014

NSW FARMERS

CRT Your Local Bloke

Cooma Rural

61 Commissioner Street Cooma NSW 2630

Ph 02 64525566 Fax 02 64521536

www.crtcountrystores.com.au

Holbrook Landcare Network

agribusiness nab

RB SELLARS

OUTBACK TO OCEAN

Incitec Pivot Fertilisers

Future Farmers Network

CommonwealthBank

Regional and Agribusiness Banking

LAMBPRO

LINKING GENES AND MARKETS