



final report

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Bred Well Fed Well

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Executive summary:

A total number of 58 workshops have been conducted across the nation, including 8 pilot studies, with a total of 1600 attendees.

NSW and South Australia held a quarter of the workshops each and WA was close holding a further 20%. Victoria held a total of 15%, Queensland 10% and Tasmania 5%.

The majority of attendees predominately ran merinos and had self-replacing flocks (66%).

The majority (35%) of attendees generated 30% of their sheep income from wool and 25% of attendees generated 50% of their sheep income from wool.

When attendees were asked whether they used breeding values when selecting rams 62% across the nation said yes.

When attendees were asked whether they had a goal or 'ideal sheep' written down (breeding objective) 64% across the nation said no.

When attendees were asked if they routinely body condition scored/fat scored their ewes 73% across the nation said no.

Of those attendees not using breeding values at the start of the workshop 95% said they would start using breeding values to assist in ram selection.

Across the nation 27% rated the workshop an 8/10 whilst 32% rated it a 9/10 and 30% rate the workshop 10/10 for overall satisfaction.

98% of attendees found the practicals useful.

When attendees were asked if they would further like to develop their skills in body condition scoring and developing budgets for ewe flocks, 90% said yes.

When attendees were asked if they would further like to develop their skills in the area of genetics 75% said yes.

95% of attendees said they had learnt something new at the workshop and 100% of attendees would recommend this workshop to other producers.

Introduction

Bred Well Fed Well (BFWF) is a practical, one-day workshop which highlights the key production benefits of genetics, plus feed management for improved reproduction. The Bred Well Fed Well workshops are a joint collaboration between AWI and MLA.

BFWF commenced in 2011 and started as a pilot to develop and refine the workshop content written by Drs Mark Ferguson and Jason Trompf. A workbook and presentation were created for delivery.

Objectives

The project objectives were:

1. Deliver the workshop to a target of 1000 participants by Dec 2013.
2. Increase producer knowledge of the impacts of ewe nutrition on ewe and progeny performance, animal welfare and farm profit.
3. Increase awareness and knowledge of how ASBVs can be used to achieve enterprise objectives. The Bred Well Fed Well forums also aim to reduce the perceived complexity of the technology and identify opportunities for producers to begin using ASBVs;
4. Encourage at least 10% of participants to progress to participate in further training opportunities including Lifetime Ewe Management, Top Lamb Crop (NSW) and other genetic training opportunities

The objectives of the workshop were that participants will:

- Recognise that Australian Sheep Breeding values (ASBVs) are an important tool that can be used to improve their enterprise profitability;
- Have the ability to start to develop a breeding objective for their enterprise;
- Recognise the likely impacts of improving ewe nutrition on reproductive performance and flock profitability; and
- Have the ability to do a simple energy budget for their ewe flock.

Discussion

Workshops: Eight *Bred Well Fed Well* pilot workshops were held across late 2011 to early 2012, two in NSW, SA, VIC and WA. A total of 233 participants attended the workshops with an average

workshop attendance of 30. Western Australia had 18% of the total attendees, NSW had 28%, SA had 27% and VIC had 27%.

Since the pilot workshops an additional 50 workshops have been conducted with a total of 1367 attendees taking the grand total of workshops to 58 and the number of attendees to 1600 by the end of Dec 2012.

The workshops have been split up around the nation as follows; NSW has held 14 workshops, Queensland 6, 15 in South Australia, 11 in WA, 9 in Victoria and 3 in Tasmania.

Train the trainer: Mark Ferguson and Jason Trompf delivered a number of workshops across the nation during the first half of 2012 and at the end of May a train the trainer course was held in South Australia at Turretfield. A total of 15 deliverers attended the two days and participated in the workshop run at Turretfield which was open to the public. Positive feedback was received from the deliverers about the training and support and enthusiasm were displayed by deliverers for the workshop as a whole. Throughout the year 11 of those deliverers delivered at least one workshop and two of which are fully competent in delivering either section of the workshop in addition to Mark and Jason.

BFWF material: As the year progressed changes were made to the handout and PowerPoint presentation and at the end of the year a review was undertaken with feedback from deliverers and attendees to further refine the BFWF material. There were no major changes to either the handout or the Powerpoint presentation. Material was updated to include, where possible, 2012 data however where data was preliminary and subject to revision, it was not included. Notes were made in the Powerpoint presentation should deliverers be asked by participants what the values were for 2012. Percentile band tables were updated from the Sheep Genetics website as where genetic gains for PWT, YWT, YEMD and YFAT. A heritability slide was included to align with the handout which showed high, medium and low heritability. Two slides were also included to explain correlations. Aside from the presentation and handout a few notes were made for deliverers to help with the overall running of the workshop. These points included sending exercise 1 to the host to fill in prior to the workshop and to hand out percentile band tables in Exercise 2 rather than in Exercise 3.

Evaluation: Evaluation questions were also added during the year to meet the Making More from Sheep evaluation criteria such that should a state co-ordinator meet the specific points (as discussed by AWI/MLA; Appendix 2) a BFWF workshop could count towards their KPIs. (See Appendix 1 for evaluation questions). In total the new questions have been used at 13 out of the 58 workshop; 6 workshops in NSW, 2 in SA, 3 in Tasmania and 2 in Victoria. The new questions were not used at every workshop due to the following reasons: i). the workshop had a large number of attendees which influenced time spent on each question and ii). not all deliverers had access to the questions, this has now been rectified.

The before and after questions that were included to meet MMfS evaluation criteria enabled us to ascertain that there was a large increase in knowledge as a result of the workshop, as described below.

BRED WELL - genetics

When attendees were asked at the beginning of the section

'When selecting rams from your chosen stud you will select them based on:

- a) How the ram looks
- b) How the ram looks and its raw wiiil measurements
- c) How the ram looks and its Breeding Values
- d) Breeding values only
- e) Stud master or agent slects my rams
- f) Unsure

Sixty two percent said how the ram looks and its Breeding values, however when asked the same question at the end of the section 92% selected how the rams looks and its breeding values. This indicated that message from Buying new genes that when selecting rams you should use visual assessment and Breeding values had been received by attendees. In addition when asked:

Breeding values give a better estimate of an animal's merit for a trait than raw measurements because they account for variation caused by:

- a) Management/feeding
- b) Age
- c) Whether an animal is born single or twin
- d) Performance of relatives
- e) All of the above
- f) Unsure

Fifty-five percent said all of the above at the beginning of the section and at the end 92% said all of the above thus showing that attendees had a clear understanding of what Breeding values took in to account due to the information delivered from the workshop.

Exercise 3 – The Breeding objective - was very well received by all attendees as indicated vocally at workshops by attendees but also evident in the evaluation questions. Prior to the exercise 63% did not have a breeding objective. After completing the exercise 90% had a breeding objective for their enterprise, which is over a 50% increase in attendees now having a breeding objective.

Furthermore, results found that 96% of attendees had a better understanding of how to use ASBVs for ram selection and 95% that were not using ASBV's prior to the workshop would start using them to assist with ram selection.

FED WELL - nutrition

When attendees were asked at the beginning of the section:

Of the following what is the biggest economic driver of extra reproduction in the Australian sheep industry?

- a) Improve ewe nutrition for joining
- b) Improved ewe nutrition in early pregnancy
- c) Improved ewe nutrition in late pregnancy
- d) Improved ewe nutrition in lactation
- e) Unsure

Twenty-six percent said improved nutrition in late pregnancy at the beginning of the fed well section; however at the end of the section 86% said improved ewe nutrition in late pregnancy. This indicated that the message from the fed well section that improved ewe nutrition in late pregnancy increases extra reproduction was received by attendees. Some people said improved nutrition at joining and although this is important it isn't the BIGGEST economic driver of extra reproduction.

Exercise 4 – Condition Scoring - was very well received as indicated vocally at workshops by attendees but also evident in the evaluation questions. Prior to the exercise 12% of attendees scored an 8/10 on how confident they were in undertaking accurate condition scoring, at the end of the exercise 31% scored an 8/10 on how confident they were in undertaking accurate condition scoring. The table below illustrates that confidence levels did increase in accurate condition scoring after exercise 4 had been completed. However some people still were scoring on the lower confidence scale and this is probably due to i) they had never assessed body condition score before; ii) the limited time spent on teaching each individual and; iii) the large group numbers present at some workshops.

TABLE: Responses to 'Out of 10 how confident are you in undertaking accurate condition scoring of ewes

Score	% of attendees Before	%of attendees After
1/10	8	1
2/10	5	1
3/10	9	1
4/10	8	2
5/10	14	6
6/10	13	8
7/10	16	22
8/10	12	31
9/10	8	17
10/10	5	11

Furthermore, results found that 96% of attendees have an improved understanding of the importance of managing ewe nutrition.

The 6-9 month evaluation will determine whether these increases in knowledge and understanding in both bred well and fed well have been implemented into farm practice.

During the year two independent evaluations were conducted by Peter Hanrahan, Hanrahan Consulting. The first evaluated the pilot phase and concluded that the pilot workshops had been very well received by producers as practical, informative and meeting their needs as specified in the objectives. There was wide interest in the further roll-out of BFWW workshops.

The second report was an interim report submitted in December evaluating the perceived value to participants of 47 workshops delivered from May to October 2012. The final evaluation report will be submitted in June 2013 and will explore post workshop changes made by the participants. The interim report stated the workshop had performed very well over a wide range of sheep breeds, regions, venues, hosts and presenters. The average score out of 10, 1 being low satisfaction and 10 being highly satisfied, across all workshops by participants was 8.7 out of 10. The practicals were universally rated highly to either pick up new skills or reinforce old ones.

Further training: Participation at BFWW workshops resulted in an increase of people interested in LTEM. Thirty one groups have been formed across the country as a result of participants being exposed to LTEM through BFWW workshops. This is 186 producers who weren't aware or

involved in LTEM which is 10% of the total attendees of BFWW. It is envisaged that more groups will be formed however formation of groups slowed due to the approval of further funding which was finalised at the end of 2012.

Conclusion: In summary the project met all four of its objectives by delivering the workshop to a total of 1600 participants by the end of 2012; by 10% of attendees seeking further training in the LTEM project; and by increased producer knowledge in the areas of nutrition and genetics. The roll out of BFWW has been very successful and due to the success and demand of BFWW during 2012 a new proposal has been submitted for further funding to deliver 90 workshops across the three financial years 2012/2013, 2013/2014 and 2014/2015 aiming to reach a total of 1800 participants. Phase 2 will place a large emphasis on deliverers using their networks to book workshops and a participation contribution of \$50 (inc GST) per business will be introduced.

Appendix 1: Evaluation questions

Listed in the table below are the evaluation questions and state by state totals from the following workshops: 10 NSW, 8 VIC, 3 TAS, 15 SA, 6 QLD, 9 WA. There are some workshops that were held that did not have the evaluation questions/clickers in place and at 4 workshops for some reason or other the technology failed and nothing was saved.

Q1. What type of ewe do you predominantly run?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a).fine and super fine merino	17	21	9	12	24	16
b).medium merino	57	13	47	69	44	14
c).meat merino (including Dohnes and SAMM)	9	5	10	7	11	4
d). first cross	7	31	13	1	11	14
e).maternal composite	3	17	8	0	0	46
f).shedders	4	6	5	4	5	2
g). stud terminal	1	4	5	0	2	2
h). Stud maternal	3	4	4	6	2	4

Q2. Currently how of you sustain your ewe base?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). completely self replacing	65	58	63	68	68	64
b). combination of breeding own and buying in	27	23	21	28	23	28
c). buying in only	9	19	15	4	9	9

Q3. What do you most want to improve in your sheep?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). growth rate	17	18	21	7	19	25
b). weaning %	45	39	38	56	40	36
c). wool cut	8	6	13	12	20	14
d). micron	2	1	1	2	1	0
e). carcase-lean meat yield	5	7	10	0	2	9
f).Resistance to flystrike	8	2	1	0	3	2
g). resistance to worms	2	8	3	4	4	0
h). doing ability	13	19	14	19	11	14

Q4. What is your average lamb marking % for the last 3 years?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Less than 60%		0	0		1	0
b).61-70%		2	4		6	0
c).71-80%		16	4		7	2
d). 81-90%		10	6		17	5
e).91-100%		3	28		22	14
f).101-110%		9	28		26	9
g). 111-120%		23	11		7	16
h). 121-130%		21	4		8	35
i). 131-140%		12	13		3	14
j). Greater than 140%		4	2		1	5

Q5. what proportion of sheep income do	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS
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you generate from wool?						(%)
a). 0	5	7	7	6	6	4
b). 10%	5	24	13	2	6	39
c).30%	45	32	44	19	29	28
d). 50%	27	16	21	27	36	13
e). 70%	12	17	11	38	18	11
f). 90%	2	2	0	6	3	4
g). Unsure	5	2	4	1	2	2

Q6. Do you use breeding values when selecting rams?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Yes	59	56	62	66	62	81
b). No	41	44	38	34	38	19

Q7. When selecting rams from your chosen stud you select them based on	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). How the ram looks	6	12	8	3	8	2
b). How the ram looks and its raw measurements	40	16	21	27	25	9
c). How the ram looks and its breeding values	42	54	60	53	60	78
d). Breeding values only	4	4	2	2	1	0
e). Stud master or agent selects my rams	4	13	6	15	5	9
f). Unsure	4	2	3	0	2	2

Q8. Breeding values give a better estimate of an animal's merit for a trait than raw measurements because they account for variation caused by;	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Management/feeding	8	6	4	7	8	4
b). Age	9	1	0	1	1	0
c). Whether an animal was born single or twin	2	1	2	0	3	4
d). Performance of relatives	7	19	18	17	16	18
e). All of the above	31	56	74	75	57	63
f). unsure	43	19	3		16	12

Q9. When selecting a ram what is the majority of your selection based on?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Wool style – quality/colour	9	7	8	15	13	2
b). Wool measurement – micron, CV wool cut	38	28	25	34	32	19
c). Size	12	7	8	7	3	0
d). Visual carcass attributes	10	13	12	9	15	7
e). Growth and carcass measurements	20	20	33	15	20	43
f). Reproduction potential	9	22	12	17	15	28
g). Labour saving/health traits (worms, flies etc)	3	2	2	3	3	2

Q10. When selecting rams from your chosen stud you select them based on	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). How the ram looks			0	3	2	0
b). How the ram looks and its raw measurements			0	27	4	5
c). How the ram looks and its breeding values			100	53	90	91

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d). Breeding values only			0	2	4	0
e). Stud master or agent selects my rams			0	15	0	4
f). Unsure			0	0	0	0

Q11. Breeding values give a better estimate of an animal's merit for a trait than raw measurements because they account for variation caused by;	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Management/feeding		4	0	7	1	4
b). Age		2	0	1	1	0
c). Whether an animal was born single or twin		0	0	0	0	0
d). Performance of relatives		10	11	17	2	5
e). All of the above		85	89	75	96	91
f). unsure		0	0		0	0

Q12. Out of 10, rate how confident you are that the traits you are selecting are meeting you production goals	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). 1/10 – Low confidence		2	0		1	0
b). 2/10		0	0		3	2
c). 3/10		4	3		6	2
d). 4/10		4	6		6	6
e). 5/10		20	9		17	20
f). 6/10		18	18		9	20
g). 7/10		27	21		28	22
h). 8/10		16	27		18	20
i). 9/10		4	12		6	6
j). 10/10 – High confidence		6	3		6	2

Q13. Do you have a goal or 'ideal sheep' written down for your ewe flock (often called a breeding objective)?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Yes	38	22	25	46	34	37
b). No	58	76	70	54	61	53
c). unsure	5	2	5		5	10

Q14. Do you have a goal or 'ideal sheep' written down for your ewe flock (often called a breeding objective)?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Yes		98	100		89	83
b). No		0	0		7	4
c). unsure		2	0		4	13

Q15. Out of 10, rate how confident you are that the traits you are selecting are meeting you production goals	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). 1/10 – Low confidence		0	0		1	0
b). 2/10		0	0		0	0
c). 3/10		2	0		1	0
d). 4/10		0	0		5	0
e). 5/10		8	0		3	2

f). 6/10		10	0		4	6
g). 7/10		20	0		23	30
h). 8/10		36	11		32	41
i). 9/10		18	56		22	15
j). 10/10 – High confidence		6	33		10	7

Q16. Of the following, what is the biggest economic driver of extra reproduction in the Australian sheep industry?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Improved ewe nutrition for joining		60	50		57	45
b). Improved ewe nutrition in early pregnancy		0	0		4	2
c). Improved ewe nutrition in late pregnancy		19	40		22	38
d). Improved ewe nutrition in lactation		6	10		6	2
e). Unsure		15	0		11	14

Q17. The optimum timing for pregnant ewes to detect twins is?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). 61-70 days from the start of joining		4	20		7	16
b). 71-80 days from the start of joining		24	20		20	15
c). 81-90 days from the start of joining		20	20		40	27
d). 91-100 days from the start of joining		13	0		5	11
e). Unsure		38	40		28	31

Q18. Out of 10, rate how confident you are in undertaking accurate condition scoring of ewes	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). 1/10 – Low confidence		6	0		12	5
b). 2/10		4	10		6	4
c). 3/10		10	10		11	5
d). 4/10		8	10		7	9
e). 5/10		8	0		20	11
f). 6/10		8	20		13	16
g). 7/10		24	30		13	14
h). 8/10		20	20		7	13
i). 9/10		4	0		7	16
j). 10/10 – High confidence		6	0		4	7

Q19. To wean 10% more lambs on your farm, what will you do?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Keep my adults ewes for one year longer	4	10	5	5	2	2
b). Lamb at 1yr old instead of 2 yrs	10	12	12	3	7	6
c). Lamb more than once a year	2	5	2	4	2	0
d). Select/buy more fertile sheep	13	5	9	11	8	6
e). Improve breeding ewe nutrition	71	67	72	77	80	87

Q20. Do you routinely body condition score/fat score you ewes?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Yes	23	33	23	22	30	35

b). No	77	67	77	78	70	65
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Q21. To increase lamb production on your farm, what will you improve?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Conceiving more lambs	11	13	24	21	12	16
b). More lambs surviving birth	78	70	62	76	76	73
c). High lamb growth rates	11	17	14	3	11	11

Q22. Do you routinely pregnancy scan your ewes for the following?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). wet/dry	30	11	18	32	56	7
b). Dry/single/twin	45	42	30	17	72	50
c). Don't pregnancy scan regularly	22	46	52	51	75	41
d). Unsure	2	2	0			2

Q23. What are your normal lamb survival rates?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). >90	27	18	23	20	12	9
b). 80-89	32	38	25	53	30	47
c). 70-79	20	15	23	7	33	28
d). 60-69	8	13	3	7	9	3
e). 50-59	0	0	1	0	1	0
f). Unsure	14	18	25	13	14	13

Q24. What are your average mob sizes for lambing?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). <100	6	32	20	2	8	23
b). 200	22	48	41	11	34	49
c). 300	32	16	26	6	30	12
d). 400	20	4	9	18	10	11
e). >500	18	1	5	60	17	5
f). Unsure	1	0	0	2	1	0

Q25. Of the following, what is the biggest economic driver of extra reproduction in the Australian sheep industry?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Improved ewe nutrition for joining		2	10		7	8
b). Improved ewe nutrition in early pregnancy		2	0		4	4
c). Improved ewe nutrition in late pregnancy		89	80		83	88
d). Improved ewe nutrition in lactation		6	10		5	0
e). Unsure		0	0		0	0

Q26. The optimum timing for pregnant ewes to detect twins is?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). 61-70 days from the start of joining		0	0		1	4
b). 71-80 days from the start of joining		2	9		10	6
c). 81-90 days from the start of joining		96	73		88	88
d). 91-100 days from the start of joining		2	0		1	2
e). Unsure		0	18		0	0

Q27. Out of 10, rate how confident you	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS
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are in undertaking accurate condition scoring of ewes						(%)
a). 1/10 – Low confidence		0	0		2	0
b). 2/10		0	0		2	0
c). 3/10		100	0		1	0
d). 4/10		0	0		3	0
e). 5/10		0	0		8	4
f). 6/10		0	20		8	6
g). 7/10		0	30		27	12
h). 8/10		0	10		29	40
i). 9/10		0	20		11	27
j). 10/10 – High confidence		0	20		9	12

Q28. Overall how satisfied are you with this workshop	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). 1/10	1	1	0	1	0	0
b). 2/10	0	0	0	1	0	0
c). 3/10	0	0	0	1	1	0
d). 4/10	0	0	0	0	0	0
e). 5/10	2	0	1	1	0	2
f). 6/10	5	2	2	0	0	2
g). 7/10	12	6	10	4	5	4
h). 8/10	32	24	29	28	18	25
i). 9/10	29	29	31	28	39	38
j). 10/10	19	38	26	36	35	30

Q29. Out of 10, how valuable was BFWF in assisting you to better manage your enterprise?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). 1/10 – low value			0		0	0
b). 2/10			0		0	0
c). 3/10			0		2	0
d). 4/10			0		0	0
e). 5/10			0		0	0
f). 6/10			0		2	0
g). 7/10			0		6	8
h). 8/10			18		19	25
i). 9/10			64		40	32
j). 10/10 – high value			18		31	36

Q30. Did you find the practicals useful?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Yes	98	97	97	100	98	98
b). No	2	3	3	0	2	2

Q31. Has your understanding of how to	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS
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use ASBVs for ram selection improved?						(%)
a). Yes	96	98	94	98	97	95
b). No	4	2	6	2	3	5

Q32. For those not using breeding values prior to today, will you start using ASBVs to assist with ram selection?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Yes	91	98	94	92	99	97
b). No	9	2	6	8	1	3

Q33. Has your understanding of the importance of managing ewe nutrition improved?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Yes	93	95	97	99	97	100
b). No	7	5	3	1	3	0

Q34. Would you further like to develop your skills to body condition score your ewes and develop feed budgets for your ewe flock?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Yes	87	91	85	88	97	94
b). No	13	9	15	13	3	6

Q35. Would you further like to develop your skills in the area of genetics	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Yes		74	69	80	72	64
b). No		26	31	20	28	36

Q36. Would you recommend this workshop to other producers?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Yes	98	100	100	100	99	100
b). No	2	0	0	0	0	0
c). unsure	0	0	0		1	0

Q37. Did you learn something new at the workshop?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Yes	95	96	91		95	93
b). No	0	0	0		0	0
c). No because it just reinforced things I am already doing	5	4	9		4	6
d). Unsure	0	0	0		1	2

Q38. Are you likely to make any changes in your business as a result of attending BFWF?	WA (%)	VIC (%)	SA (%)	QLD (%)	NSW (%)	TAS (%)
a). Start using ASBVs		13	11		9	5
b). Write down my breeding objective		4	6		5	9
c). Calculate wool:meat ratio		0	3		1	0
d). Condition score my ewes		8	3		19	18
e). Improved breeding ewe nutrition		33	29		26	33
f). Start pregnancy scanning ewes		15	9		16	18

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g). Separate ewes to singles and twins and feed accordingly		17	20		12	7
h). Assess and monitor feed availability (quality and quantity)		6	3		0	5
i). Smaller mob sizes for twins at lambing		4	11		11	4
j). Not likely to make any changes		0	6		1	0

Appendix 2: Specific points for BFWW to count towards MMfS KPIs

As discussed by AWI and MLA:

To clarify the interaction and expectations between the 2 projects we have defined the following levels of engagement with the MMfS SC's and BFWW.

1. **General Promotion of BFWW** – All SC's are expected to promote BFWW workshops within their state and direct inquiries to Serina Hancock for possible workshops. This DOES NOT count towards KPI's and should not be a time consuming task but rather an addition to current communications.
2. **Active recruitment of participants** – SC's that actively promote the workshops and follow up people to participate in the workshops and liaise with Serina about the upcoming events in the state. This DOES count towards KPI's - Cat A at present pending development of the above mentioned M&E requirements for Cat B.
3. **Local coordination of BFWW workshops** – SC's that initiate and coordinate local workshops beyond recruitment of participants with the support of Serina. This DOES count towards KPI's (Cat A at present pending development of the above mentioned M&E requirements for Cat B) but will be more time intensive. This should not replace other MMfS activities that you may coordinate nor should it be an emphasis of your time.

For levels 2&3 above, interaction with BFWW needs to be determined with Serina (in writing) so that involvement expectations are clear. This will then be passed onto the National Coordinator and MLA/AWI. If SC's attend any BFWW workshops, they should be looking for what MMfS can offer the participants beyond the day. Utilise the opportunity to capture the enthusiasm generated, get likely candidates names to follow up with to deliver more events.

Appendix 3: Feedback

We had a large number of emails with feedback about the workshops that were either sent directly to BWWF co-ordinators or to the hosts themselves. The few listed below capture the majority of responses.

“A lot of things that I had dealt with (learnt) in the past just dropped into place. The balance and emphasis on reproduction, genetics and management was spot on. Most previous sheep industry seminars have been single issue events.

The exercise using ASBV’s was something I had been looking for a while. Had previously tried getting info from merino select website but not getting anywhere – it’s all good now”

“Very impressed with yesterday, enjoyed the day and met many people, we run 10000ewes and don’t even scan, will try and implement, well done, well run day.”

“We both thoroughly enjoyed the day and gained an enormous amount from the information and presentations. John has attended many sheep information days over the years, but he said that the workshop yesterday was without a doubt one of the best he had ever been to. Whilst I spend a lot of time with John in the sheep yards, I have never accompanied him to a sheep sale or workshop (largely due to family commitments) and I therefore gained an enormous amount from the wealth of practical and balanced information on offer.”

Appendix 4: Emails- example

Email to potential hosts

I am emailing to see if you would be interested in hosting a workshop on your stud or know of someone within your clientele at a commercial level that may be interested in hosting. We aim to run 2-3 within a week in each state so we would try and co-ordinate others in a close vicinity to your area. We recommend that the workshops be held prior to ram sales.

OR

Thank you for your interest in hosting a Bred Well Fed Well workshop. I am unsure how much information you have been given so below are some details about the workshop.

Do you have a date in mind that you would like to hold the workshop or are you open for suggestions? We recommend that the workshops be held prior to ram sales.

There are three deliverers working throughout SA, Ken Solly, Colin Trengove and Penny Schulz. Below is some information about the workshop.

The Bred Well Fed Well workshops are funded by AWI and MLA under the Making More from Sheep banner. It was developed by Mark Ferguson through the Sheep CRC and Jason Trompf.

Briefly, the workshops have two main aims 1) to introduce producers to breeding values (ASBVs), outline the benefits of using them, begin to build skills to use ASBVs to aid ram selection and 2) to inform producers of the benefits of improving the nutrition of ewes to improve their performance and in turn improve conception rates and lamb survival. It gives an important message of combining good breeding (ASBVs) and nutrition to improve reproduction rates and overall flock profitability.

There is no cost to the participants however we ask that the hosts assist with organising morning/afternoon tea and/or lunch. The workshop goes for approximately 6 hours we normally start at 9:30am for registration and finish at 4pm allowing for lunch but we would move the times around if required. We also ask the host to supply chairs and possibly tables. We are aiming to hold on farm as we have a couple of hands on practicals that are part of the workshop. One is to visually assess approximately 8 rams for specific traits and then provide ASBVs on these traits to demonstrate that both visual assessment and ASBVs need to be used together when selecting rams. The second practical involves body condition scoring some ewes so we ask that we have a range of ewes with differing body condition scores for the participants to have a go under the direction of the deliverers.

We generally like to aim for a minimum of 15 and we find that it works best with 20-35 people. If you realistically estimate 40-60 people we will have three deliverers attend and if 60 or more we will run two workshops rather than one. Please call me to discuss this further if it is an option for you.

If interested in hosting a BFWF workshop we ask that you don't run it in conjunction with field/open days or ram sales as the workshop runs for 6 hours and we need to keep participants numbers to an appropriate size to get the most out of the workshop and to be manageable for deliverers and hands on practicals.

If you have any questions please feel welcome to contact me directly. Similarly, if you are interested in hosting a Bred Well Fed Well workshop please contact me to discuss a date I have attached a general flyer for your interest.

Kind regards

Email to committed hosts

Thank you for your commitment to host a BFWF workshop. As you are probably aware flyers have been made for your workshop and sent to MLA, AWI, MMfS and Sheep CRC to advertise on their websites. In addition the flyer has been sent to your MMfS state co-ordinator and deliverers in your state. Please note that your deliverers are not

responsible for getting people to the workshop however will assist by sending out to their contacts in the area if they have any. If you can send to your contacts I think we will have adequate exposure for the workshop. In addition a media release will be sent out. If you would like to further promote the workshop we ask that you run it past us first as it is essential that all Bred Well Fed Well promotion meets the Making More from Sheep standards

We aim to have a minimum of 15 people and a maximum of 35. If you realistically anticipate more than 35 participants please let us know when we set the date. If you estimate 40-60 people we will have three deliverers attend and if 60 or more we will run two workshops rather than one

Please remember that the workshops stand alone and cannot be run in conjunction with field/open days or ram sales as the workshops runs for 6 hours and the number of attendees needs to be manageable for deliverers and practical exercises.

A box will be sent directly to you/deliverer with folders etc that are required for the day, so could you please email me a postal address. The deliverers will arrive half an hour to an hour prior to the start of the workshop.

For practical sessions we would need approximately 20 ewes with varying body condition - please ensure that you have a range from 2 to 3.5 otherwise the practical is very hard to run if no comparisons can be made. These will need to be placed in a race for the practical.

In addition if you could also organise 8 rams with varying ASBVs for PWT, PFAT, PEMD, yearling ASBVS are also fine and wool traits if applicable ie PFD, PCFW carcass measurements would also be great but not essential. The aim of the practical is to visually assess the rams and have participants identify which ram they think is the best and then demonstrate that what may have been the best ram visually may not be the best ram to produce the trait in offspring. For example at other workshops most attendees have picked the biggest ram for the best growth however in more cases than not a smaller ram has had better ASBVs for growth. IF you could provide the ASBVs for the rams that you are going to use prior to the day that would be greatly appreciated and I will forward on to the deliverers. They will contact you prior to the day and also look over them and the ewes when they arrive.

If you are having more than 40 participants attending we ask for two sets of rams to be available and penned far enough away so that each group can hold a conversation without the other group being heard.

If you could provide the following it would be greatly appreciated

Chairs

Tables x2 if possible

extension cords and power board for laptop and projector

catering - please only aim to spend a maximum of \$20 per head and this is to cover morning and afternoon tea and lunch with tea and coffee. Please check that your catering can provide an urn and it is also a good idea to have cold water available. Please get the caterers to make the invoice out to Serina Hancock, Murdoch University, 90 South St, Murdoch WA and either email to me at s.Hancock@murdoch.edu.au or post to 32 Coffs Bend, Secret Harbour WA. 6173.

If you have any other questions please do not hesitate to give me a call.

Please note these emails will change slightly for phase 2 with the addition the \$50 fee.

Appendix 5: Workshops held

Date	State	Venue	Location	Attendance	Deliverers
2011	NSW		Young	30	MF & JT
	VIC		Ararat	15	MF & JT
	WA		Katanning	25	MF & JT
23/01/2012	VIC	Toland Merino	Violet Town	47	MF, HC & JT
25/01/2012	NSW	Petali Merino	Walcha	35	MF, HC & JT
14/02/2012	WA	DAFWA Manjimup office	Manjimup	18	MF & JT
15/02/2012	WA	Kaula Dale	Kojonup	15	MF & JT
27/02/2012	WA	Lockier River Farm	Mingenew	20	MF & JT

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28/02/2012	WA	DAFWA Research Station	Wongan Hills	15	MF & JT
29/02/2012	WA	Mount Ronan	York	50	MF & JT
01/03/2012	WA	Chuckem	Highbury	30	MF & JT
07/03/2012	SA	Hillcott Grove	Kapunda	38	MF, JT & TL
08/03/2012	SA	Coolaroo	Field	25	MF, JT & TL
16/04/2012	QLD	Abbadoah	Cunnamulla	13	MF & JT
17/04/2012	QLD	Dunwold	Dirranbandi	22	MF & JT
18/04/2012	QLD	Karbullah Poll Merino	Goondiwindi	22	MF & JT
29/05/2012	SA	Turretfield	Rosedale	29	MF & JT
12/06/2012	VIC	Maryborough Regional BW/BL group	Newstead	18	JT & LK
18/06/2012	QLD	Gooma	Winton	16	HC & JT
19/06/2012	QLD	Verastan	Muttaborra	30	HC & JT
20/06/2012	QLD	Benalla	Blackall	25	HC & JT
02/07/2012	SA	Ridgway Poll Merinos	Murray Mallee	30	JT & CT
05/07/2012	SA	Aphid and Tracie Heinrich's farm	Kangaroo Island	30	JT & CT
17/07/2012	SA	Illoura	Moorlands	24	JT & CT
03/08/2012	SA	Emu Flat	Keith	9	JT & KS
08/08/2012	TAS	Kelvedon Estate	Swansea	14	TH & JT
09/08/2012	TAS	Palmerston	Cressy	48	TH & JT
10/08/2012	TAS	West Wyambie	Tomahawk	17	TH & JT
13/08/2012	NSW	Warwillah	Wanganella	19	HC & JT
14/08/2012	NSW	Bobacumbola	Adelong	75	HC & JT
15/08/2012	NSW	Felix Rams	Greenethrope	16	HC & JT
16/08/2012	NSW	Coondarra	Ardlethan	23	HC & JT
16/08/2012	SA	Cooinda	Keith	16	MF & KS
17/08/2012	NSW	Valera	Lockhart	50	HC & JT
20/08/2012	VIC	Avington Merinos	Sidonia	65	TH, JT & LK
22/08/2012	VIC	Nathalia RSL	Nathalia	19	JT
23/08/2012	WA	Glenn and Kylie Crees	Merredin	25	MF & AT
24/08/2012	WA	Derella Downs	Esperance	45	MF & LS
27/08/2012	SA	Leahcim	Snowtown	38	PS & JT
04/09/2012	NSW	Locksley	Nyngan	20	JT
04/09/2012	SA	Kelvale	Farrell Flat	16	KS & CT
05/09/2012	NSW	Kerin Polls	Yeoval	65	SM & JT
05/09/2012	SA	Yacca Downs	Lucindale	26	PS & KS
10/09/2012	SA	Majardah	Glencoe	12	JT & KS
11/09/2012	WA	Hill Padua	Three Springs	29	MF & AT
13/09/2012	WA	Thornton Park	Brookton	26	MF & AT
13/09/2012	SA	Leenala	Kybybolite	9	JT & KS
15/09/2012	NSW	SRS Classic group	Wellington	75	MF & JT
18/09/2012	VIC	Lyndoch Park	Warrock	16	SM, DM & JT
18/09/2012	SA	Lynton Arney	Strathalbyn		PS & KS
28/09/2012	NSW	SRS Monaro group	Cooma	40	MF & JT
03/10/2012	VIC	Longford	Mortlake	14	SM & KS
09/10/2012	NSW	Avonlea	Orange	25	HC & JM
09/10/2012	SA	Leahcim	Snowtown	18	JT & KS
30/10/2012	VIC		Snowy River	22	JT & LK
31/10/2012	VIC	Maristow	Bairnsdale	18	JT & LK
11/12/2012	NSW	Glenavon	Gravesend	16	HC & JM
12/12/2012	NSW	Wombian	Collarenebri	21	HC & JM

MF = Mark Ferguson: WA, BW & FW

JT = Jason Trompf: VIC, BW & FW

HC = Hamish Chandler: NSW, BW & FW

TL = Tim Leeming: VIC, FW

LK = Lyndon Kubiel: VIC, FW

CT = Colin Trengove: SA, FW

KS = Ken Solly: SA BW & FW

TH = Tom Hooke: Sheep Genetics, BW

LS = Luke Stephen: Sheep Genetics, BW

PS = Penny Schulz: SA, BW

SM = Sally Martin: NSW, BW

JM = Jim Meckiff: NSW, FW

DM = Debbie Milne: VIC, BW

SM = Steve Milne: VIC, BW

AT = Andrew Thompson: WA, FW

Other deliverers include:

PO = Paul Omodei: WA, FW

CW = Craig Wilson: NSW,

DG = Darren Gordon: VIC,

AS = Alex Stirton: QLD,

Appendix 6: Financial Statement

Confidential