

South West Slopes Central Test Sire Evaluation

2003 Drop 1st Evaluation
Results Update – November 2004

Conducted by

**South West Slopes
Merino Breeders
Inc.**



under the auspices of

The Australian Merino Sire Evaluation Association



with support from

Moses & Son Wool Brokers



NSW Department of Primary Industries
(Formerly NSW Agriculture)

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2003 Drop – 1st Evaluation + Meat Trait Scanning Results

The information in this results update includes data collected at shearing in May 2004 and additional meat trait data collected in October 2004. The 2003 drop sire's progeny performance on measured traits are reported. Visual assessments can be viewed in the 1st Evaluation Report and will be conducted again at the 2nd Evaluation in May 2005. Two tables provide the detailed performance information for the standard sire evaluation analysis and the additional meat traits.

South West Slopes Central Test Sire Evaluation 2003 drop 1st Evaluation

1st Evaluation: Age: 10 months Wool growth: 10 months
 Meat Trait Scanning: Age: 15 months Wool growth: 5 months (wool was not assessed)

Sire and owner details

Graph Code	Sire Identity & Sire Code #	Contact Name, Address Phone and Fax Number
1	<i>Sire identification withheld at owners request.</i>	
2	Bundilla BB3 5040811999990517	Ross, Rick & Susie Baldwin, Tubbul Road, Young NSW 2594 Ph: 026383 3823 Fax: 02-6383 3837
3	<i>Sire identification withheld at owners request.</i>	
4	Rocklyn 01.0354 5010392001010354	Ralph Diprose, "Elon", Grenfell NSW 2810 Ph: 026343 6331 Fax: 02-6343 6331
5	Royalla 132 5038882000000132	Winston & Sue McDonald, "Glenroy", Wallendbeen 2588 Ph: 02-6943 2536 Fax: 02-6943 2634
6	Wantana Tyson 5038012000000002	Jim & Bill Darmody, "Wantana", Boorowa NSW 2586 Ph: 02-6385 5244 Fax: 02-6385 5244
7	Futter Park 01.61 UR 01.61^	John & Jim Brooker, "Futter Park", Harden NSW 2587 Ph: 02-6386 6223 Fax: 02-6386 6259
8	Winya 02 5036272002020002	Allan Dawson, Mandurama Road, Canowindra NSW 2804 Ph: 02-6344 1653 Fax: 02-6344 1653
9	<i>Sire identification withheld at owners request.</i>	
11	Jilliby 0.60 5040092000000060	Robert & Richard Maguire, "Jilliby", Cooma NSW 2630 Ph: 02-6452 1745 Fax: 02-6452 1121
12	<i>Sire identification withheld at owners request.</i>	
13	Linden 42 5090531999990042	Peter Holding, "Linden", Harden NSW 2587 Ph: 02-6386 2020 Fax: 02-6386 3415
14*	Nerstane 990043 5032981999990043	John McLaren, "Nerstane", Woolbrook NSW 2354 Ph: 02-6777 5881 Fax: 02-6777 5922
15*	Roseville Park 8.794 5041661998980794	Graham Coddington, "Glenwood", Dubbo NSW 2830 Ph: 02.6887 7230, Fax: 02.6887 7234
16	Wantana A14672 5038012001014672	Jim & Bill Darmody, "Wantana", Boorowa NSW 2586 Ph: 02-6385 5244 Fax: 02-6385 5244

Sire codes are an international system, which provide a unique number for all sheep when processing across flock data.

A sire code has 16 digits - 2 for the breed of the flock: eg Merino (50) & Poll Merino (60)
 - 4 for flock code: AASMB Registered flock code or unregistered code
 - 4 for year of drop
 - 6 for tag number used in breeder's records

* Rams evaluated to provide links between other Central Test Sire Evaluation Sites and Years.

^ UR – Unregistered Flock

South West Slopes Central Test Sire Evaluation Site's Breeding Objective: Classers were asked to base selection on a 6% index that had performed well for growth and were structurally sound.

Classers who carried out grading and visual trait assessment:

- 1st Stage: (i) Steven Phillips, Yarrawonga Merino Stud, Harden, NSW
(ii) Craig Wilson, Craig Wilson Livestock, Wagga Wagga, NSW

Site Managers: John and James Brooker, "Futter Park", Harden.

Further information on this report contact: Sally Martin (02) 6382 1077 or 042 740 1538.

Report Authors: Sally Martin, Livestock Officer (Sheep & Wool), NSW DPI, Young
Johanne Taylor and Allan Casey, Advanced Breeding Services, Orange
November 2004

Background - 2003 drop – 1st Evaluation + Meat Scanning Results

1. Location

The South West Slopes Central Test Sire Evaluation 2003 drop is being conducted at Futter Park, and managed by John and James Brooker. Futter Park is situated 20km south west of Harden, New South Wales.

2. Selection and Joining

- 900 ewes were randomly drafted into sire teams and prepared for Artificial Insemination (AI) on the 10th of February 2003.
- 881 were inseminated between the 24th and 25th of February.
- There are 13 sires participating in the evaluation with 2 link sires. Semen quality (activity) averaged 60% (45-90% range) Ewes were in very good condition (3+ fat score) at insemination.
- The AI was carried out by Livestock Breeding Services. Moses and Son Wool Brokers (our major sponsor) had representatives helping out on both AI days along with committee members.
- An average of 60 ewes were allocated for AI to each sire entered.

3. Pregnancy and Lambing

- Pregnancy scanning took place on the 7th May 2003.
- 877 ewes were scanned showing an excellent conception rate of 83% in lamb and the potential for 116% lambing accounting for multiple births (35% twins, 48% singles).
- Ewes were drafted into their sire groups and lambed down in individual small paddocks.
- Lambing occurred during some of the worst July weather we have seen. Lambing in 15 separate mobs meant many sire groups did not have well protected paddocks and many lambs were lost, however overall lambing management was good and a reasonable survival rate obtained.

4. Weaning and Seasonal Conditions

- The lambs were weaned on to reasonable pasture and by the end of December had moved onto an oat crop stubble.
- By early February hand feeding was required and this has continued for 6 months. The cost of feeding the weaners to the end of July was \$10.60 per head.

Background - 2003 drop – 1st Evaluation + Meat Scanning Results – continued

5. Assessments

- The 2003 drop were classed on the 14th of April 2004. The sheep were also fleece rot scored, mid-side sampled and measured for staple length at this time.
- Sire group samples were compiled for an additional guidance test (strength, POB, VM%, staple length).
- The first evaluation shearing was conducted on the 6th May 2004 when un-skirted fleece weight and shorn body weight was measured.
- Moses & Son Wool Brokers representative, Andrew Miller assessed each fleece for additional information which included AWEX ID, bin line, colour (H1) and strength (W1) and has been used to allocate a production value per head.
- Meat trait scanning by an accredited LambPlan scanner was conducted on 26th October 2004. Body weight, fat depth, eye muscle depth and flight speed were measured.

Rainfall (mm) in 2003 and 2004 was as follows:

Month	Year		Average*
	2003	2004	
January	10	21.5	52
February	84	18.5	42
March	25	0	52
April	18	3.5	48
May	13.5	16.25	48
June	37	69.25	57
July	58.5	44.5	53
August	69.25	56.5	52
September	40.25	35.75	52
October	52.25	36	58
November	28.25		46
December	45		50
Totals	481	301.75	610

*Average rainfall for Harden – Source Rainmain

Evaluation and Management Program

Event	Date	Age (months)	Wool (months)
Ewe Classing	10 th February 2003		
Ewe insemination	24 th and 25 th February, 2003		
Ewe Pregnancy Scanning	7 th May 2003		
Lambing	22 nd to 25 th July 2003		
Lambing tagged and combined	5 th August 2003		
Marking, mulesing, 6 in 1, scabby	12 th September		
Weaning, drench, 2 nd 6 in 1	29 th October 2003	3	3
Drench, start hand feeding	24 th February 2004	7	7
Classing & mid-side sampling	14 th April 2004	9	9
Fleece Rot Scoring	14 th April 2004	9	9
Shearing	6 th May 2004	10	10
Drench	6 th July 2004	11.5	11.5
Crutching	25 th October 2004	15	5
LambPlan Scanning	26 th October 2004	15	5

Table 1. **RAMPOWER Standard Index Options**

Table 1. RAMPOWER Standard index options

Sire Graph Code	Sire Identity	RAMPOWER Standard Index Options			
		3% MP	6% MP	12%MP	6% MP +lean growth
1	Sire identification withheld.	98	95	92	82
2	Bundilla 9.517	92	92	94	91
3	Sire identification withheld.	97	87	75	87
4	Rocklyn 1.354	127	122	116	122
5	Royalla 132	99	97	96	102
6	Wantana 0.02	101	109	114	108
7	Futter Park 1.61	106	103	98	109
8	Winya 2.02	104	104	104	106
9	Sire identification withheld.	94	95	98	93
11	Jiliby 0.60	101	101	98	102
12	Sire identification withheld.	88	94	101	98
13	Linden 9.042	82	90	100	88
14*	Nerstane 990043	113	111	108	115
15*	Roseville Park 8.794	83	84	89	79
16	Wantana A14672	115	117	115	117
Average Performance		100	100	100	100

Index Options

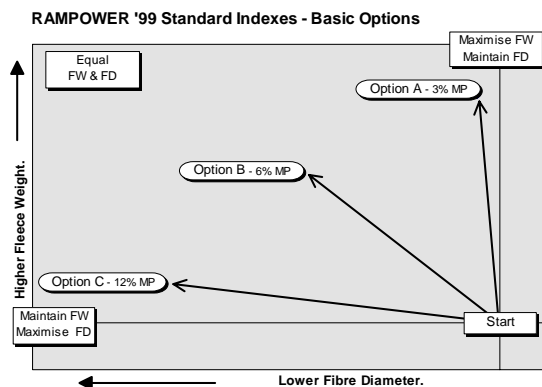
Breeding Objective index options provide the relative value of sires based on a combination of the measured traits - CFW, FD, FDCV & BWT. It should be noted that these are only some of the many indexes which can be used to describe an individual breeder's objective for measured traits. If a breeder is considering the use of a sire, the relative performance of the breeders flock must be considered to establish the result that can be expected when the sire is used.

The RAMPOWER standard indexes - A, B and C (3%, 6% & 12% Micron Premium) - have been endorsed by Central Test Sire Evaluation as the base indexes for sites to provide combined measured trait performance.

Option A (3% MP): Maintain FD while maximising the increase in CFW, maintaining BWT and improving FDCV at 1/5th the value of FD which is in line with spinning performance.

Option B (6%MP): A moderate level of downward pressure on FD, while maintaining a high level of increase in CFW, maintaining BWT and improving CV% at 1/5th the value of FD.

Option C (12%MP): A high level of downward pressure on FD, while obtaining a small increase in CFW, maintaining BWT and improving CV% at 1/5th of FD.



Tables 2 - Measured assessments – 2003 drop – 1st Evaluation + Meat Traits

Table 2. Major measured traits

Sire Graph Code	Sire Identity	Number of Progeny	Estimated Progeny Values (deviations)							
			GFW% 10mth	CFW% 10mth	FD μ m 10mth	FDCV% 10mth	BWT% 10mth	BWT% 15mth	YFAT 15mth	YEMD 15mth
1	Identification withheld.	35	1.2	1.6	0.3	0.3	-7.2	-8.4	0.01	0.25
2	Bundilla 9.517	33	-1.2	-1.1	0.1	-0.1	0.9	-0.8	-0.11	0.43
3	Identification withheld.	40	3.1	1.8	0.8	1.1	-1.6	-0.6	0.06	0.31
4	Rocklyn 1.354	38	3.8	5.7	0.2	-0.9	-2.3	-0.6	0.18	1.01
5	Royalla 132	17	-0.8	-1.0	0.1	0.4	1.2	2.2	0.13	0.04
6	Wantana 0.02	33	-0.2	-1.5	-0.7	-0.1	0.2	0.7	-0.05	-0.14
7	Futter Park 1.61	22	0.9	0.8	0.2	0.1	0.8	3.1	0.19	-0.10
8	Winya 2.02	31	-0.3	0.9	0.0	-0.2	3.5	2.1	-0.06	-0.34
9	Identification withheld.	36	-3.0	-1.7	0.0	-0.1	-1.5	-1.6	-0.18	-0.56
11	Jiliby 0.60	37	2.4	-0.3	-0.3	1.1	-2.9	-0.1	0.11	-0.04
12	Identification withheld.	41	-5.4	-4.3	-0.2	-0.4	3.1	2.9	-0.05	0.13
13	Linden 9.042	42	-3.8	-4.5	-0.3	-0.8	2.3	0.5	0.05	0.15
14*	Nerstane 990043	29	4.4	3.7	0.2	-0.8	4.3	3.5	-0.16	-0.53
15*	Roseville Park 8.794	42	-3.6	-2.5	0.1	0.0	-0.4	-3.3	-0.29	-0.88
16	Wantana A14672	33	2.4	2.4	-0.5	0.5	-0.4	0.3	0.16	0.27
Average Performance		34	3.3kg	2.4kg	18.1 μ m	21.30%	25.8kg	44.0 kg	3.0 mm	21 mm

* Sires evaluated to provide links between years and sites

Estimated Progeny Values

Estimated Progeny Values (EPV) express the expected performance of progeny of a sire relative to another sire in the evaluation when mated to an equal allocation of ewes. EPV are the units used to describe the performance of the major measured traits (see information on accuracy below). They are expressed as deviations (dev) from the average of sires in the evaluation. Fibre Diameter, Yearling Fat and Eye Muscle Depth EPV's are presented as deviations from the average and expressed in the same units as they were measured. Greasy and Clean Fleece Weights and Body Weights are percentages - 100% equals average and, for example, 10.0 is 10% above average performance of the group.

Traits:	<u>GFW %:</u>	Greasy Fleece Weight (percentage)
	<u>CFW %:</u>	Clean Fleece Weight (percentage)
	<u>FD μm:</u>	Average Fibre Diameter (micron)
	<u>BWT %:</u>	Body Weight (percentage)
	<u>FDCV %:</u>	Fibre Diameter Coefficient of Variation (percentage)
	<u>YFAT:</u>	Yearling Fat Depth (mm)
	<u>YEMD:</u>	Yearling Eye Muscle Depth (mm)

Accuracy of Estimated Progeny Value

Estimated Progeny Values (EPV) express the expected performance of progeny of a sire relative to another sire in the evaluation when mated to the same standard of ewes. Estimated Progeny Values improve the accuracy of sire results because they account for the association between traits, adjustment for birth effects and the number of progeny a sire has in the analysis.

True Progeny Values would be achieved if the number of progeny evaluated for each sire was infinite. Because the number of progeny in the evaluation is not infinite, performance shown in this report is described as *Estimated Progeny Values*.

Without progeny test information the correlation between the *Estimated* and *True Progeny Value* of sires from different sources would be zero (0.0%). The correlation between *Estimated* and *True Progeny Value* improves rapidly from 0.0% with no progeny to 77% with 10 progeny. The rate of improvement in correlation slows from 86% with 20 progeny, to 90% with 30 progeny and 92% with 40 progeny. With an infinite population the correlation is 100%. Note - the correlation used in the above example is for a trait such as fibre diameter with a high heritability (0.5).

South West Slopes Merino Breeders Inc.

