

South West Slopes Central Test Sire Evaluation

Year (2005) Drop 2nd Evaluation Report

Conducted by

**South West Slopes Stud
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

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NSW Department of Primary Industries 2007

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Foreword

South West Slopes Stud Merino Breeders - Central Test Sire Evaluation

The South West Slopes Sire Evaluation is an accredited Central Test Sire Evaluation (CTSE) site. It conforms to the requirements of the Australian Merino Sire Evaluation Association (AMSEA).

A sub committee of the South West Slopes Merino Breeders run the South West Slopes Sire Evaluation site. They are listed below.

This is the second South West Slopes Sire Evaluation and has been conducted at "Futter Park" Harden. We have encountered very challenging seasonal conditions again with this evaluation and credit must be given to John and James Brooker for their management of the situation.

The 2005 drop have been bred from Uardry blood ewes, owned by "Futter Park" Harden. The ewes had all reared at least one lamb prior to being part of the Sire Evaluation. The ewes were randomly drafted into sire groups with an average ewe fleece weight of 5.3 kg and an average fibre diameter of 20 micron.

We had a good lambing and all sires were well represented with an average of 43 progeny per sire at weaning.

Classing was conducted by George Merriman of Merryville Merino stud and Jason Southwell. The classers were asked to base selection on a Dual Purpose 7% index (see page 7 for explanation) that had performed well for growth and were structurally sound. Thank you to both George and Jason for doing such a great job.

Thanks must also go to all the entrants who travelled to help during insemination, tagging, weaning, classing, sampling and shearing. A special mention must also go to John and James Brooker for all their extra help during the course of the evaluation.

Moses and Son Wool Brokers of Temora are our major sponsor contributing both with cash and in-kind assistance, thank you to Andrew Miller for his assistance to the site during data collection activities.

I hope that everyone has achieved something out of this exercises and I'm sure that participants in sire evaluations all benefit in some way.

Rick Baldwin, Chair

Committee

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Rick Baldwin	02-6383 3802	Chair
Andrew Miller	042 743 2650	Major Sponsor, Moses & Son Wool Brokers
Ralph Diprose	02-6343 6331	
Jim Darmody	02-6385 5244	
Bill Darmody	02-6385 3570	
John & Jim Brooker	02-6386 6223	
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Oliver Wythes	02-6344 1153	
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December 2007

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The information in this site report provides a comprehensive assessment of the South West Slopes 2005 drop sire's progeny performance, both measured and visually assessed. Three graphics provide a summary of the results and six tables provide the detailed performance information for the standard sire evaluation analysis.

This report provides the results from the 2005 drop at their 1st and 2nd stage assessments - 10 and 22 months of age and 10 and 12 months wool growth respectively.

2005 Drop Sire Evaluation

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2005 Drop – 2nd Evaluations

South West Slopes Sire Evaluation 2005 drop 2nd Evaluation

1st Evaluation: Age - 10 months Wool growth - 10 months

2nd Evaluation: Age – 22 months Wool growth - 12 months

Sire and owner details

Grap h Code	Sire Identity & Sire Code #	Contact Name, Address Phone and Fax Number	Semen Available	Alive
1*	Rocklyn 01.354 5010392001010354	Ralph Diprose, “Elon”, Grenfell NSW 2810 Ph: 02-6343 6331 Fax: 02-6343 6331	Yes	Yes
2*	Tara Park – Daddy Long Legs 5037181998008025	Guy Evans, “Tara Park”, Boorowa NSW 2586 Ph: 02-6385 3288 Fax: 02-6385 3289	Yes	Yes
3	<i>Identification withheld</i>			
4^	Futter Park 03.54 5091212003030054^	John & Jim Brooker, “Futter Park”, Harden NSW 2587 Ph: 02-6386 6223 Fax: 02-6386 6259	No	
5	Rocklyn Orange 23 5010392002020023	Ralph Diprose, “Elon”, Grenfell NSW 2810 Ph: 02-6343 6331 Fax: 02-6343 6331	No	No
6	Bogo – B 0.18 5047922000000018	Malcolm Peake, Bogo, PO BOX 501, Yass NSW 2582 Ph: 02-6226 5741 Fax: 02-6227 7153	Yes	Yes
7	Uardry 9.72 5049161999000072	Chris Bowman, Uardry, Hay NSW 2711 Ph: 02-6993 5101 Fax: 02-6993 5107		
8	Bogo – B 0.203 50479220000000203	Malcolm Peake, Bogo, PO BOX 501, Yass NSW 2582 Ph: 02-6226 5741 Fax: 02-6227 7153	No	No
9	Jiliby 01.130 5040092001000130	Robert & Richard Maguire, “Jiliby”, Cooma NSW 2630 Ph: 02-6452 1745 Fax: 02-6452 1121	No	Yes
11	Willawong 0.347 5091802002000347	Tony Wallace, Willawong, Murringo NSW 2594 Ph: 02-6384 6335 Fax: 02-6384 6206	Yes	Yes
13	Egelabra 99.4000 5000321999994000	Oliver Wythes, Rockdale, Canowindra NSW 2804 Ph: 02-6344 1153 Fax: 02-6344 1989		
14	Bundilla FF4 5040812003030200	Ross & Rick Baldwin, Tubbul Road, Young NSW 2594 Ph: 02-6383 3823 Fax: 02-6383 3837		
15	Hazeldean 0.12946 5003832000012946	Jim Litchfield, Hazeldean, Cooma NSW 2630 Ph: 02-6453 5555 Fax: 02-6453 5526	Yes	No
16	<i>Identification withheld</i>			

Sire codes is an identification which provide a unique number for all sheep.
 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 (on farm number)

* Rams evaluated to provide links between other Central Test Sire Evaluation sites and years.

^ UR – Unregistered Flock

Managers Report - 2005 drop – 2nd Evaluation

1. Location

The South West Slopes Central Test Sire Evaluation 2005 drop was 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 9th of February 2005.
- 861 were inseminated between the 23rd and 24th of February 2005.
- There are 12 sires participating in the evaluation and 2 link sires. Semen quality (activity) averaged 60% (50-80% range) Ewes were in very good condition (3+ fat score) at time of insemination.
- The AI was carried out by Livestock Breeding Services, Jerilderie.
- An average of 60 ewes was allocated to each sire entered.

3. Pregnancy and Lambing

- Pregnancy scanning took place on the 24th May 2005.
- 851 ewes were scanned showing a conception rate of 76% in lamb and the potential for 112% lambing accounting for multiple births (44% twins, 46% singles).
- Ewes were drafted into their sire groups two weeks prior to lambing and lambed down in individual small paddocks.
- Lambs were tagged between the 2nd and 9th August and all sire groups were then run together as one mob.

4. Weaning and Seasonal Conditions

- The lambs were administered with a Rumen Bolus Electronic Identification and marked mid September 2005.
- Weaning was carried out at the end of October 2005.
- Seasonal conditions have been challenging to say the least. The progeny have been supplementary fed for a large part of this evaluation.

5. Assessments

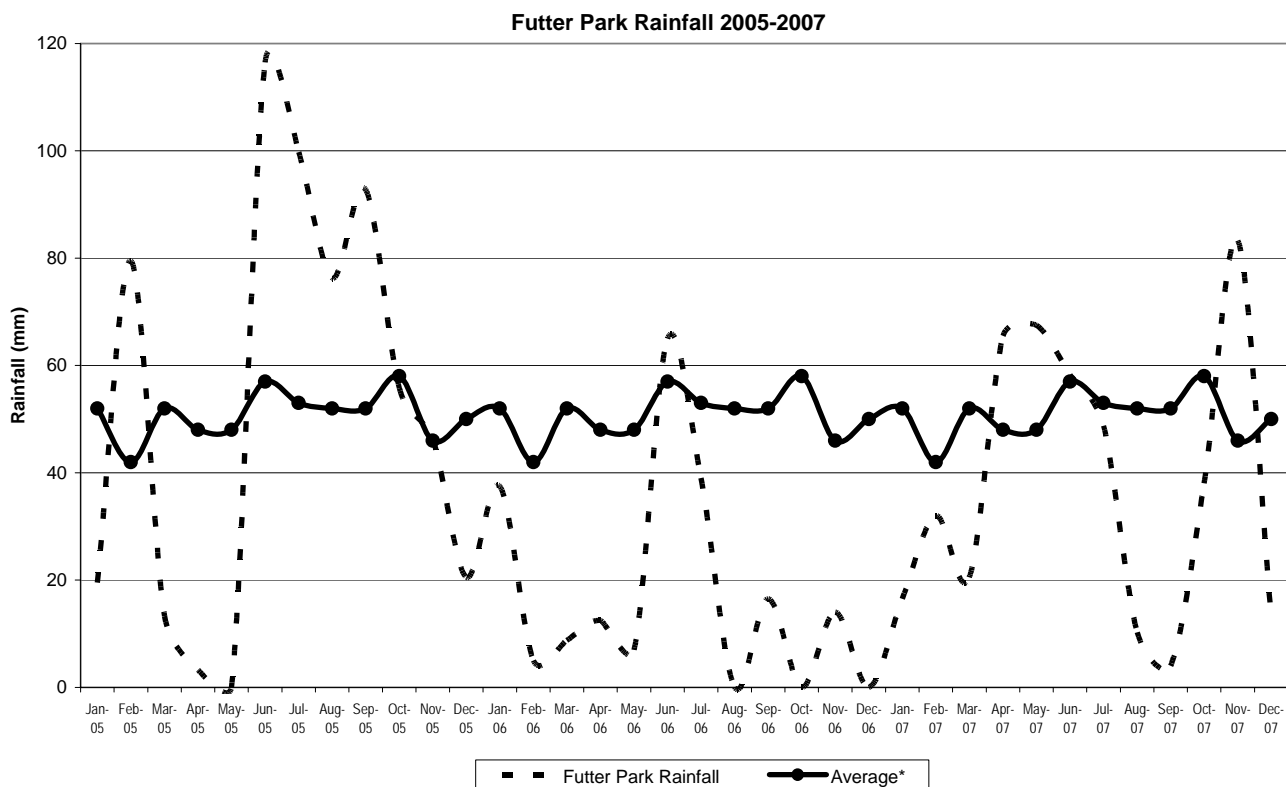
- 1st and 2nd Evaluation calendar of events (refer to page 4).
- Moses & Son Wool Brokers representative, Marty Moses and Andrew Miller assessed each fleece at shearing for additional information which included AWEX ID, bin line, colour, length and strength. This data has been used to calculate a production value per head for each sire.

Managers Report - 2005 drop – 2nd Evaluation – continued

6. **Futter Park Rainfall (mm)** in 2003, 2004, 2005, 2006 and 2007 was as follows:

Month	Year					Average*
	2003	2004	2005	2006	2007	
January	10	21.5	19.5	37.5	16.5	52
February	84	18.5	79.5	5	32	42
March	25	0	13.25	8.75	20.5	52
April	18	3.5	3.25	12.5	65.5	48
May	13.5	16.25	0	7	67.5	48
June	37	69.25	116.5	65	58.25	57
July	58.5	44.5	99.75	39	48.75	53
August	69.25	56.5	76.25	0	10.25	52
September	40.25	35.75	92.75	16.5	4	52
October	52.25	36	55.75	0	38	58
November	28.25	77.5	46.25	14	83.25	46
December	45	42.25	20.5	0	13	50
Totals	481	421.5	623.25	205.25	457.5	610

*Average rainfall for Harden – Source Rainman



Managers Report - 2005 drop – 2nd Evaluation – continued

Evaluation and Management Program

Event	Date	Age (months)	Wool (months)
Ewe Classing	9 th February 2005		
Ewe insemination	23 rd and 24 th February, 2005		
Ewe Pregnancy Scanning	24 th May 2005		
Ewes drafted in to sire groups	14 th July 2005		
Lambing	20 th to 25 th July 2005		
Lambing tagged and combined	2 nd to 9 th August 2005	2 weeks	
Marking, mulesing, 6 in 1, scabby	14 th September 2005	7 weeks	
Weaning, drench, 2 nd 6 in 1,	27 th October 2005	3	3
Weaning body weight	27 th October 2005	3	3
200 day body weight	9 th March 2006	7	7
1 st Classing & mid-side sampling	5 th April 2006	9	9
Fleece Rot Scoring	5 th April 2006	9	9
1 st Shearing	2 nd May 2006	10	10
365 day body weight	9 th August 2006	12	2
2 nd Classing & mid-side sampling	2 nd April 2007	21	11
2 nd Shearing and body weights	2 nd May 2007	22	12

Classers who carried out grading and visual trait assessment

- 1st and 2nd Stage: (i) Mr George Merriman, Merryville Merino Stud, Boorowa, NSW
(ii) Mr Jason Southwell, NSW

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

Site's Breeding Objective:

The classers were asked to base their selections on a Merino 7% Index (see page 7 – summary table explanation) that had performed well for growth, were structurally sound and included wool quality traits.

Understanding the graphs and tables of results

Summary Graphs and Table - pages 9 to 11

Summary Graph: visual and measured performance. (Figure 1) Each sire that has 20 or more progeny evaluated is located on the graph. The graph describes performance for combined measured traits and visual assessment. Measured traits are combined with Merino 7% MERINOSELECT Index. Visual trait performance is a combination of Classer's Grade performance (Tops and Culls). Sires that are above average performers for these traits are located in the top right hand quarter.

Summary Table: Indexes and Tops and Culls. (Table A) Each sire is listed for four (4) Index performance options and Classer's Grade (Tops and Culls). The Index options are based on measured traits and they vary the emphasis on fleece weight, fibre diameter, body weight, staple strength and reproduction. (see 'MERINOSELECT Index Options'- page 7 for a more detailed description of indexes used).

Fleece Weight by Fibre Diameter (Figure 2) The graph describes performance for Fleece Weight on the side axis and Fibre Diameter on the bottom axis. Sires that are above average for Fleece Weight and below average Fibre Diameter are located in the top left hand quarter.

Classers Tops by Cull Grade (Figure 3) The graph describes performance for Classer's 'Top' (Top 25%) Grade on the side axis and 'Cull' (Bottom 25%) Grade on the bottom axis. Sires that have above average Tops and below average Culls are in the top left hand quarter.

Tables – pages 12 to 17

Sire Graph Code: Allows a sire to be located on the summary graphs and some tables.

Sire Identity: Identity of the breeder and the sire's number or name.

No. of Progeny: The number of progeny a sire had at the most recent measured analysis.

Flock Breeding Values: Flock Breeding Values (FBVs) are Estimated Breeding Values (EBVs) calculated from a Sheep Genetics Australia (SGA) contemporary group site analysis. FBVs describe the relative breeding value (genetic performance) of sires. A sire's progeny will express half of their Sires FBV. FBVs do not necessarily reflect the animals observed performance, which is a combination of both genetic and environmental influences. FBVs are an estimate of the genetic component of the observed performance.

Traits:

- GFW: Greasy fleece weight (percentage)
- CFW: Clean fleece weight (percentage)
- FD: Average fibre diameter (micron)
- WT: Body weight (kilograms)
- CV: Fibre diameter coefficient of variation (percentage)
- SL: Staple length (mm) at the mid-side.
- SS: Staple strength (N/ktex) at the mid-side
- EMD: Eye Muscle Depth (mm) at the "C" site
- FAT: Fat Depth (mm) at the "C" site

Ages:

- Y = Yearling - 300 to 400 days (10-13 months of age)
- H = Hogget - 400 to 540 days (13-18 months of age)
- A = Adult - 540 days or older (18 months and older)

Sire Averages: Sire Averages are the average performance of all the progeny of a sire. No account is made for factors which can improve the accuracy.

Understanding the graphs and tables of results - continued

Classer's Grade:	Two Classers graded all progeny as either Tops, Flocks or Culls based on their visual assessment of all traits relative to the site's 'Breeding Objective' (page 4). The percentage deviation from the average of <u>Tops</u> and <u>Culls</u> is presented.
Progeny Group Classing	An assessment of evenness of progeny groups carried out with 11 months wool at the second evaluation (to occur in 2007). Classers assess the progeny for evenness to type based on visually assessed traits that are significantly above or below industry standards. 1 (very even) and 5 (very <u>uneven</u>).
Scored Traits:	The percentage of progeny given each score is reported.
<i>Fleece Colour:</i>	Greasy wool colour scored from 1 (whitest) to 5 (yellow).
<i>Wool Character:</i>	Crimp definition scored from 1 (very well defined) to 5 (undefined).
<i>Staple Weathering</i>	The deterioration of the staple due to dust, light and/or water (not including fleece rot). Scores from 1 (least) to 5 (most) reflect the depth and degree of deterioration across the fleece. A 1 score is equivalent to a coated fleece in a shed environment and a 5 score is full length staple weathering.
<i>Fleece Rot:</i>	The severity of fleece rot in a progeny group, based on a 0 to 5 score. A score of zero is given to progeny with no fleece rot, while scores of 1 and 2 are given to bands of minor fleece rot (bacterial staining but no crusting), with 3, 4 and 5 being given to bands of crusty fleece rot. For more information on scoring sheep for fleece rot, see NSW DPI Agfact A3.3.41.
<i>Face Cover:</i>	Wool cover on the face scored from 1 (bare head) to 5 (fully covered face).
<i>Feet/Legs:</i>	Conformation of feet and legs scored from 1 (sound) to 5 (most deformed).
<i>Body/Neck Development</i>	The degree of wrinkling on the neck and body scored from 1 (no wrinkle) to 5 (very heavy wrinkle).
<i>Jaw:</i>	Under- or over-shot jaw. The percentage of progeny with a significant negative expression is reported as Neg(ative).
<i>Back/Shoulder:</i>	Conformation of the back and shoulder. The percentage of progeny with a significant negative expression is reported as Neg(ative).
<i>Pigmentation:</i>	The percentage of progeny in each of the following categories is reported as Neg(ative) if recorded as a 5 score. <p>Black Lamb: recessive coloured sheep (largely pigmented wool or if extensively white, is pigmented around the eyes with more or less symmetrical pigmentation on the rest of the body). If the Black Lamb form of pigmentation is identified it is recorded as a score 5. Other expressions are recorded as score 1.</p> <p>Pigmented wool: pigmentation in random spots <u>or</u> isolated pigmentation <u>or</u> pigmented birth-coat halo-hair <u>or</u> pigmented leg hair <u>or</u> black lamb. If the quantity of 'pigmented wool' is at a level that would result in a breeding ewe being culled in a high standard commercial Merino flock it is recorded as a score 5. Other levels of pigmented wool are recorded as score 1.</p> <p>Pigmented skin: a significant degree of pigmented skin on the sheep's non-wool producing areas not including those defined by pigmented wool. If the degree of 'pigmented skin' is at a level that would result in a breeding ewe being culled in a high standard commercial Merino flock it is recorded as score 5. Other levels of pigmented skin are recorded as score 1.</p>

Understanding the graphs and tables of results - continued

MERINOSELECT Index Options

Breeding Objective index options provide the relative value of sires based on a combination of the measured traits' genetic performance. The indexes used in this report are only some of the many indexes that can be used to describe an individual breeder's objective for measured traits.

If a breeder is considering using a sire in this report it is critical to consider the performance of the breeder's flock relative to the performance standard in this report. The relative performance must be considered to establish the result that can be expected when a sire is used in a breeder's flock.

The following MERINOSELECT standard indexes – Dual Purpose 7%; Fine 10%+SS; and Merino 14%+SS – are the AMSEA base reporting indexes for sites to provide combined measured trait performance. Sites may report additional MERINOSELECT index's as they wish. This report has added the following indexes – Dual Purpose 3.5%.

Index production system and breeding Objectives

Dual Purpose 7% *Medium wool Merino self-replacing with 25% lamb production system with moderate emphasis on fleece weight and fibre diameter (7% Micron Premium) plus high emphasis on live weight and reproduction and maintain performance on other traits.*
(DP7)

Fine 10% + SS *Fine wool Merino self-replacing production system with moderate emphasis on fleece weight and fibre diameter (10% Micron Premium) plus moderate emphasis on staple strength and maintain performance on other traits.*
(F10+SS)

Merino 14% + SS *Medium wool Merino self-replacing production system with high emphasis on fibre diameter and low emphasis on fleece weight (14% Micron Premium) plus moderate emphasis on live weight and staple strength with maintain performance on other traits.*
(M14+SS)

Dual Purpose 3.5% *Medium wool Merino self-replacing with 25% lamb production system with high emphasis on fleece weight and low emphasis on (maintain) fibre diameter (3.5% Micron Premium) plus high emphasis on live weight and reproduction and maintain performance on other traits.*
(DP3.5)

Index Weightings – percentage contribution to economic gain

The percentage contribution to economic gain to a commercial Merino flock that joins rams selected using an index is shown below.

<u>Dual Purpose 7%</u>		<u>Merino 14% + SS</u>	
Clean Fleece weight:	26%	Clean Fleece weight:	8%
Fibre Diameter:	24%	Fibre Diameter:	58%
Body weight:	30%	Body weight:	3%
Staple Strength	6%	Staple Strength	31%
Worm Egg Count	0%	Worm Egg Count	0%
Number lambs weaned	14%	Number lambs weaned	0%
<u>Dual Purpose 3.5%</u>		<u>Fine 10% + SS</u>	
Clean Fleece weight:	42%	Clean Fleece weight:	42%
Fibre Diameter:	2%	Fibre Diameter:	39%
Body weight:	34%	Body weight:	0%
Staple Strength	2%	Staple Strength	19%
Worm Egg Count	0%	Worm Egg Count	0%
Number lambs weaned	22%	Number lambs weaned	0%

Understanding the graphs and tables of results - continued

Accuracy of Flock Breeding Values

Flock Breeding Values (EBVs) express the expected performance of progeny of a sire relative to another sire in the evaluation when mated to the same standard of ewes. FBVs 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 Breeding 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* Breeding Values.

Without progeny test information the correlation between the *Estimated* and *True* Breeding Value of sires from different sources would be zero (0.0%). The correlation between *Estimated* and *True* Breeding 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 that the correlation used in the above example is for a trait such as fibre diameter with a high heritability (0.5).

A heritability of 0.5 indicates that half or 50% of the measured performance is passed onto offspring. A heritability of 0.35 indicates 35% is passed on. The FBVs that are reported in this report have already accounted for heritability and therefore describe the performance that can be expected from a sire's progeny.

Link Sires

Link sires provide the 'genetic link' between CTSE sites located across Australia to allow all sires entered in these sites to have their performance reported relative to each other in *Merino Superior Sires*. *Merino Superior Sires* reports sires from across all effectively linked CTSE sites and across all years at these sites. Link sires are therefore a vital component of the Central Test Sire Evaluation. To be used as a link sire a ram must have at least 25 progeny assessed at 1st Evaluation at an accredited site. Site reports provide valuable information not reported in *Merino Superior Sires* however *Merino Superior Sires* reports the performance of a large number of sires which can provide a wider perspective of the elite rams available across many flocks in Australia and New Zealand.

Calculation of combined measured trait and combined visual trait performance

Combined measured trait performance is calculated as (MERINOSELECT 7% MP Index minus 100). Combined visual trait performance is calculated as (Classer's Grad Tops % minus Culls %) divided by 5, expressed as a deviation from (average Tops % - average Culls %)/5.

Example

Sire's Performance	7% MP Index value = 119.7
	Tops% = 25.5 (average Tops% = 25.1)
	Culls% = 17.6 (average Cull% = 16.4)
Combined Measured	= 119.7 - 100 = 19.7
Combined Visual	= [(25.5 - 17.6)/5] - [(25.1 - 16.4)/5]
	= 7.8/5 - 8.7/5
	= 1.58 - 1.74
	= -0.16

Understanding the graphs and tables of results - continued

Wool Quality, Fleece and Carcase Value (Table 6 – page 18)

Wool quality was assessed at both the 1st and 2nd evaluation shearing. An AWEX ID and bin line (e.g. AAAM) was allocated to each fleece. This information along with other objectively measured data (fleece weight, fibre diameter, yield, staple length and strength) has been used to calculate an average value per fleece and then averaged per sire group. Five year average wool prices were used to calculate the 2006 and 2007 fleece values, 2001/02 to 2005/06 and 2002/03 to 2006/07 respectively. Pieces, bellies and locks have not been included in this analysis, as progeny were shorn at random.

The average carcase values were derived from body weights collected at the 2nd evaluation shearing, using a dressing percentage of 43% and average \$2.00/kg. All progeny were included in this assessment.

Results for the SWS Sire Evaluation 2005 Drop – 2nd Assessment

Summary Graph – Figure 1
Combined Measured Traits and Visual Assessed Performance

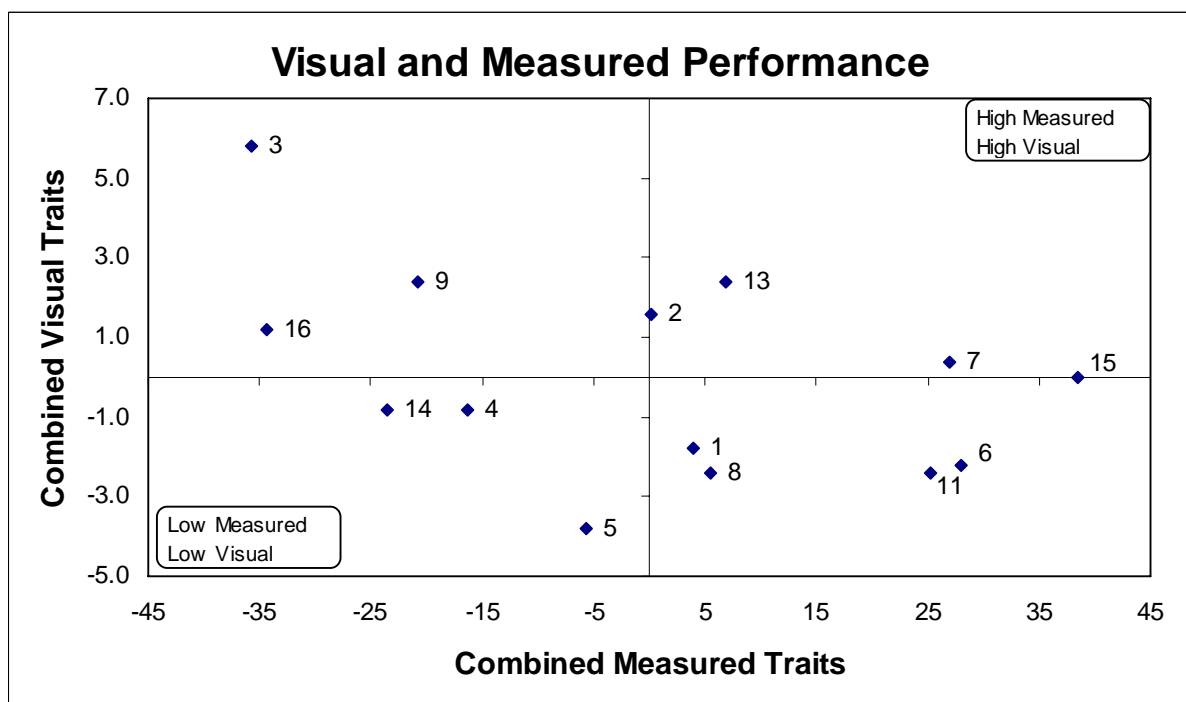
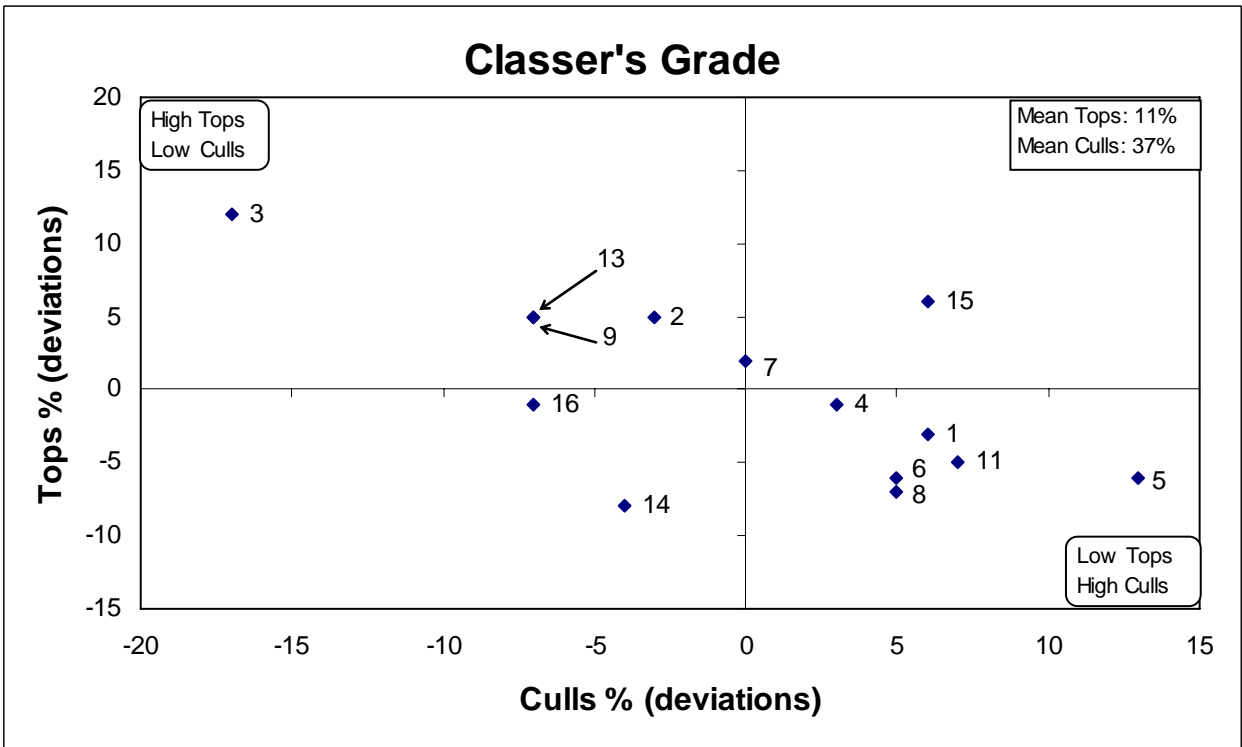
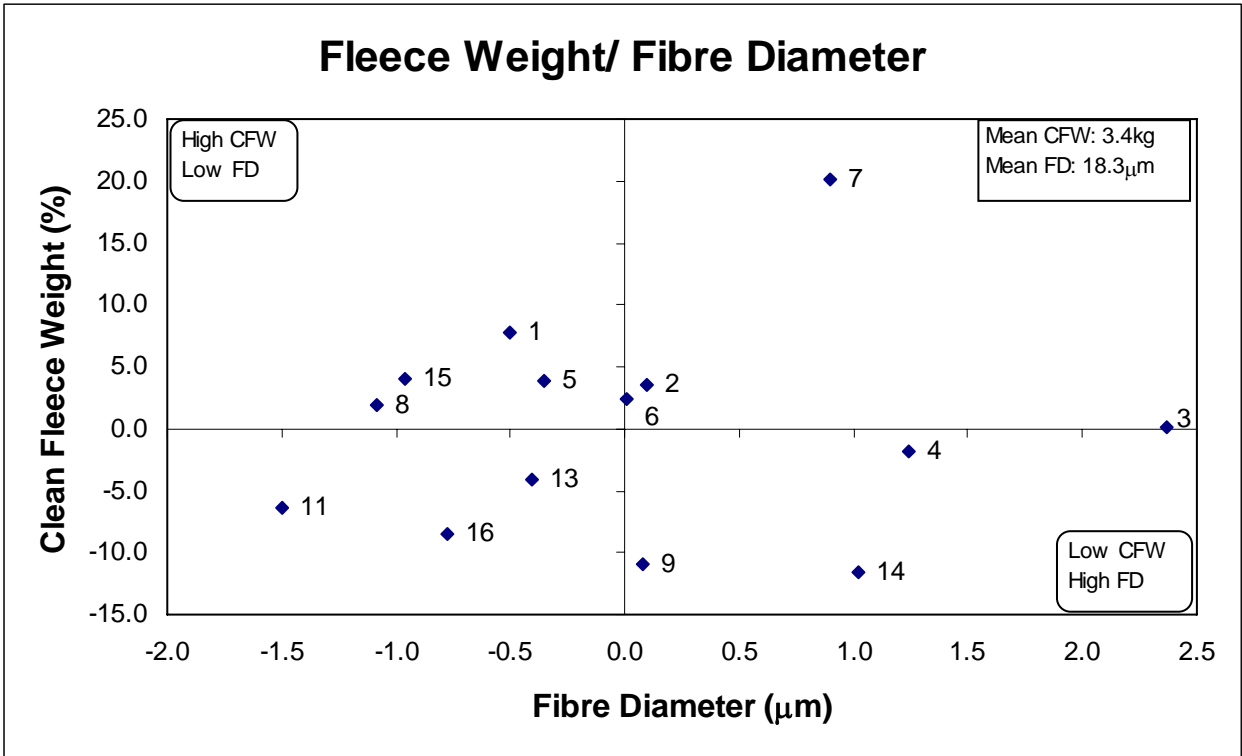


Table A – MERINOSELECT Standard Index Options and Classer's Grade

Sire graph code	Sire name	MERINOSELECT Indexes				Classer's Grade			
		<i>Dual Purpose</i> 3.5%	<i>Dual Purpose</i> 7%	<i>Merino</i> 14% + SS	<i>Fine</i> 10% + SS	Tops %	Culls %		
		(dev) Y^	(dev) A^	(dev) Y^	(dev) A^	(dev) Y^	(dev) A^	(dev) Y^	(dev) A^
1*	Rocklyn, 01-0354	103	102	94	104	-1	-3	2	6
2*	Tara Park, Daddy Long Legs	117	112	95	100	11	5	-7	-3
3	<i>Identification withheld</i>	90	81	70	64	-2	12	-16	-17
4	Futter Park, Arnie	92	89	90	84	2	-1	-6	3
5	Rocklyn, Orange 23	97	93	87	94	8	-6	0	13
6	Bogo, 0.18	118	122	128	128	10	-6	-21	5
7	Uardry, 9.72	127	123	115	127	-7	2	18	0
8	Bogo, 0.203	109	110	102	106	-9	-7	-2	5
9	Jilliby, 01.130	80	82	89	79	-1	5	-1	-7
11	Willawong, Green 347	98	109	128	125	0	-5	6	7
13	Egelabra, HEK 99400	88	94	111	107	-6	5	1	-7
14	Bundilla, FF4	90	90	90	76	-7	-8	11	-4
15	Hazeldean, Zachary	116	122	133	139	10	6	-8	6
16	<i>Identification withheld</i>	74	73	68	66	-9	-1	24	-7
Average Performance		100	100	100	100	14	11	41	37

* Link Sires: Sires evaluated by the site to provide links between years and sites so that the all site results can be combined into a single report – *Merino Superior Sires*

^ Y = Yearling (300 to 400 days); H = Hogget (400 to 540 days); A = Adult (540 days and older)



Note: A sire on the above graphs can be identified by matching the number on the graph to the corresponding Sire Graph Code and sire in the Table on the bottom of page 10.

Table 1 – Measured traits

Sire graph code	Sire name	Number of progeny	Flock Breeding Values (deviations)									
			WWT	PWT	YWT	AWT	YGFW	AGFW	YCFW	ACFW	YFD	AFD
1*	Rocklyn, 01-0354	39	-3.7	-4.4	-1.6	-2.0	-9.1	0.2	-3.5	7.8	-0.8	-0.5
2*	Tara Park, Daddy Long Legs	49	1.1	3.3	3.8	4.4	2.4	1.9	6.6	3.6	0.0	0.1
3	<i>Identification withheld</i>	47	-0.7	-0.2	1.2	3.6	-2.0	-0.1	-2.9	0.2	1.9	2.4
4	Futter Park, Arnie	64	0.0	1.4	0.1	-0.3	-1.0	-3.9	-0.7	-1.9	1.1	1.2
5	Rocklyn, Orange 23	35	-0.7	-3.2	-4.0	-3.1	8.3	2.5	6.0	3.8	-0.8	-0.4
6	Bogo, 0.18	39	-0.2	0.9	1.0	-1.6	10.6	1.3	14.4	2.4	-0.4	0.0
7	Uardry, 9.72	36	0.3	-1.9	-0.3	-0.4	15.6	15.8	14.3	20.1	0.1	0.9
8	Bogo, 0.203	49	0.5	1.2	3.3	3.2	-1.9	8.1	-5.7	2.0	-0.7	-1.1
9	Jilliby, 01.130	49	1.8	2.3	0.0	0.7	-11.8	-11.1	-10.5	-10.9	0.5	0.1
11	Willawong, Green 347	45	1.9	-1.5	-1.5	-1.4	-1.0	-2.0	-1.0	-6.4	-0.5	-1.5
13	Egelabra, HEK 99400	35	-0.7	-1.5	-3.7	-3.0	0.8	-0.5	-2.6	-4.2	0.0	-0.4
14	Bundilla, FF4	46	0.8	5.0	4.9	5.1	-11.3	-10.0	-10.8	-11.6	0.8	1.0
15	Hazeldean, Zachary	32	0.1	-0.2	-2.5	-3.5	22.1	8.7	17.3	4.0	-0.3	-1.0
16	<i>Identification withheld</i>	44	-0.5	-1.3	-0.6	-1.4	-21.4	-10.2	-20.6	-8.4	-0.6	-0.8
Average Performance		44	22.2	30.1	33.1	34.4	2.6	5.1	1.8	3.4	17.7	18.3
			kg	kg	kg	kg	kg	kg	kg	kg	m	m

Trait abbreviations

Body Weight: WWT = weaning weight; PWT = post weaning weight; YWT = yearling body weight; AWT = adult body weight

Fleece Weight: YGFW = yearling greasy fleece weight; AGFW = adult greasy fleece weight; YCFW = yearling clean fleece weight; ACFW = adult clean fleece weight

Fibre Diameter: YFD = yearling fibre diameter; AFD = adult fibre diameter.

Age Periods

Y = Yearling (300 to 400 days); H = Hogget (400 to 540 days); A = Adult (540 days and older)

Table 2 – Other measured traits and Classer's Grades

Sire graph code	Sire name	Number of progeny	Flock Breeding Values (deviations)								Classer's Grade			
			YCV	ACV	YCUR	ACUR	YSL	ASL	YSS	ASS	Tops % (dev)		Culls % (dev)	
											Y^	A^	Y^	A^
*1	Rocklyn, 01-0354	39	0.4	0.3	-9.0	-10.6	3.0	2.4	-8.4	3.2	-1	-3	2	6
*2	Tara Park, Daddy Long Legs	49	-0.3	-0.4	-2.3	-5.7	3.1	6.1	-6.5	-6.4	11	5	-7	-3
3	<i>Identification withheld</i>	47	-1.0	-1.6	1.3	-0.1	-0.1	-1.7	-0.4	6.4	-2	12	-16	-17
4	Futter Park, Arnie	64	-0.9	-0.4	-5.1	-7.8	2.3	4.3	3.3	2.7	2	-1	-6	3
5	Rocklyn, Orange 23	35	3.1	3.0	-6.4	-6.3	0.3	0.4	-7.9	-10.5	8	-6	0	13
6	Bogo, 0.18	39	-1.3	-1.4	-2.5	-1.3	7.3	9.8	5.0	2.1	10	-6	-21	5
7	Uardry, 9.72	36	-0.1	-0.4	-9.3	-13.0	0.9	2.1	1.1	7.8	-7	2	18	0
8	Bogo, 0.203	49	1.8	1.5	7.2	6.7	-2.2	0.0	-3.2	-2.1	-9	-7	-2	5
9	Jilliby, 01.130	49	1.0	0.2	8.8	13.6	-8.0	-12.0	3.6	1.7	-1	5	-1	-7
11	Willawong, Green 347	45	-1.0	-1.2	13.4	19.5	-7.5	-7.0	6.6	-1.8	0	-5	6	7
13	Egelabra, HEK 99400	35	-0.5	0.2	-2.0	0.2	0.9	-2.5	6.5	2.5	-6	5	1	-7
14	Bundilla, FF4	46	-2.5	-2.3	4.4	3.5	0.6	4.0	3.8	-0.3	-7	-8	11	-4
15	Hazeldean, Zachary	32	-0.9	-0.6	-2.0	0.4	2.7	-2.9	4.2	3.3	10	6	-8	6
16	<i>Identification withheld</i>	44	2.2	3.1	3.0	0.4	-3.2	-2.7	-7.9	-8.6	-9	-1	24	-7
Average Performance		44	20.5	18.9	100.3	100.3	65	84.2	43.6	59.2	14	11	41	37
			%	%	deg/mm	deg/mm	mm	mm	N/ktex	N/ktex				

Trait abbreviations

Body Weight: WWT = weaning weight; PWT = post weaning weight; YWT = yearling body weight; AWT = adult body weight

Fleece Weight: YGFW = yearling greasy fleece weight; AGFW = adult greasy fleece weight; YCFW = yearling clean fleece weight; ACFW = adult clean fleece weight

Fibre Diameter: YFD = yearling fibre diameter; AFD = adult fibre diameter.

Age Periods

Y = Yearling (300 to 400 days); H = Hogget (400 to 540 days); A = Adult (540 days and older)

Tables 3a – Visual Trait assessments – Wool Quality

Wool Quality Traits are reported as the sires' average (Av) score and the percentage of a sire's progeny for each score.

Sire graph code	Wool Quality																								
	Colour						Wool Character						Staple Weathering					Fleece Rot							
	Av	1	2	3	4	5	Av	1	2	3	4	5	Av	1	2	3	4	5	Av	0	1	2	3	4	5
1*	3.1	2	0	85	13	0	3	3	6	79	8	3	2.3	0	85	0	10	5	0.3	94	0	0	0	3	3
2*	3.1	0	0	90	9	1	3	0	13	78	7	2	2.3	0	83	0	16	1	0.2	96	0	0	0	2	2
3	3.1	0	0	94	5	1	2.9	3	16	70	10	1	2.2	0	91	0	6	3	0.0	100	0	0	0	0	0
4	3.1	0	2	88	10	0	3	0	10	82	6	2	2.5	1	79	0	14	6	0.0	100	0	0	0	0	0
5	3.1	0	0	87	13	0	2.9	0	11	87	2	0	2.3	0	89	0	7	4	0.2	96	0	0	0	0	4
6	3	4	0	93	1	1	3	1	9	81	6	3	2.3	0	87	0	10	3	0.0	100	0	0	0	0	0
7	3	0	2	95	3	0	2.8	3	21	71	5	0	2.3	0	86	0	12	2	0.2	97	0	0	0	0	3
8	3.2	0	0	77	23	0	3	0	6	91	0	2	2.3	0	88	0	9	4	0.1	98	0	0	2	0	0
9	3	0	1	95	4	0	2.9	0	18	75	6	1	2.1	0	93	0	7	0	0.0	100	0	0	0	0	0
11	3	2	0	97	1	0	3	0	10	81	7	2	2.2	0	92	0	8	0	0.3	93	0	0	2	0	2
13	3.2	0	0	83	15	2	2.8	5	15	75	3	2	2.2	0	90	0	7	3	0.0	100	0	0	0	0	0
14	3.2	0	0	87	10	3	3.1	0	3	86	6	5	2.5	0	78	0	16	5	0.0	100	0	0	0	0	0
15	3	2	0	91	7	0	2.7	5	18	75	2	0	2.2	0	91	0	9	0	0.2	96	0	0	0	0	4
16	3.1	0	0	89	11	0	3.1	0	9	79	8	5	2.3	1	84	0	13	3	0.1	98	0	0	0	0	0
Avg.	3.1	0.7	0.4	89	9	0.6	2.9	1.4	12	79	5	2	2.3	0.1	87	0	10	3	0.1	98	0	0	0	0	1

Note: Information on how to use the results in these tables and graphs is available on page 6.

Table 3b – Visual Trait assessments – Confirmation and Pigmentation

Conformation trait scores are reported as the sire’s average (Av) score and the percentage of a sire’s progeny for each score. Traits are reported as the number of progeny with a negative (Neg) expression for the trait.

Sire graph code	Conformation																	Pigmentation					
	Face Cover						Neck/Body Development					Feet/Legs					Jaw	Back/ Shoulder	Black Lamb	Wool	Skin		
	Av	1	2	3	4	5	Av	1	2	3	4	5	Av	1	2	3	4	5	Neg	Neg	Neg	Neg	Neg
1*	3	0	5	92	3	0	3	0	0	98	2	0	1.5	84	0	0	11	5	0	0	0	0	1
2*	3.1	0	0	96	3	1	3	0	0	96	4	0	1.2	94	0	0	4	1	2	0	0	0	2
3	3	0	0	100	0	0	3	0	0	96	3	1	1.1	98	1	0	1	0	0	0	0	0	5
4	3	2	0	97	1	0	3	0	0	98	0	2	1.2	93	0	1	3	4	0	0	0	0	2
5	3.2	0	0	89	6	6	3.1	0	0	94	6	0	1.2	94	0	0	6	0	0	0	0	0	1
6	3	0	0	97	1	1	3.1	0	0	94	6	0	1.2	93	0	0	6	1	0	0	0	0	2
7	3	0	0	100	0	0	3	0	0	98	2	0	1.4	88	0	0	9	3	0	0	0	0	1
8	3	0	0	96	4	0	3.1	0	0	95	2	2	1.2	93	0	0	5	2	0	0	0	0	2
9	3.1	0	0	95	4	1	3.2	0	0	86	10	5	1.2	95	0	0	4	1	0	0	0	0	0
11	3	0	0	98	1	1	3.2	0	0	85	14	1	1.3	91	0	0	7	2	1	0	0	0	5
13	3.1	0	0	95	3	2	3	0	0	100	0	0	1.1	95	0	2	2	2	0	0	0	0	3
14	3	0	3	95	0	3	3	0	0	100	0	0	1	99	0	0	1	0	0	0	0	0	6
15	3.1	0	0	89	7	4	3.2	0	0	88	5	7	1.1	96	0	0	0	4	0	0	0	0	1
16	3	0	0	98	3	0	3	0	0	96	3	1	1.2	95	0	0	4	1	0	0	0	0	4
Avg.	3.0	0.1	0.6	95	3	1.4	3.1	0	0	95	4	1.4	1.2	93	0.1	0.2	4	2	0.2	0	0	0	2.5

Note: Information on how to use the results in these tables and graphs is available on page 6.

Tables 4 – Sire Averages for measured traits

Sire graph code	Sire name	Number of progeny	Sire Averages (deviations)																	
			WWT	#PWT	YWT	AWT	YGFW	AGFW	YCFW	ACFW	YFD	AFD	YCV	ACV	YCUV	ACUV	YSL	ASL	YSS	ASS
1*	Rocklyn, 01-0354	39	-2.1	-2.1	-0.3	-0.9	-0.2	0.0	-0.1	0.2	-0.5	-0.3	0.0	0.2	-6.4	-5.2	2.0	1.9	-6.7	3.3
2*	Tara Park, Daddy Long Legs	49	0.5	1.7	1.3	2.0	0.0	0.0	0.1	0.1	0.0	0.0	-0.2	-0.2	-0.3	-3.5	1.2	3.4	-4.4	-4.0
3	<i>Identification withheld</i>	47	-0.4	-0.2	0.8	2.0	0.0	0.0	0.0	0.0	1.0	1.3	-0.5	-0.9	1.0	-0.7	0.0	-0.9	-0.7	4.0
4	Futter Park, Arnie	64	-0.1	0.9	-0.2	-0.2	0.0	-0.2	0.0	0.0	0.6	0.6	-0.5	-0.2	-2.1	-4.6	0.9	3.0	2.1	1.9
5	Rocklyn, Orange 23	35	-0.2	-1.8	-1.6	-1.0	0.1	0.1	0.0	0.1	-0.5	-0.2	2.0	1.7	-3.0	-3.9	0.1	0.1	-5.2	-6.4
6	Bogo, 0.18	39	-0.2	0.9	0.6	-0.9	0.2	0.0	0.2	0.1	-0.2	0.0	-0.8	-0.9	-2.0	0.0	4.3	6.2	4.0	0.8
7	Uardry, 9.72	36	0.5	-1.4	0.2	-0.3	0.2	0.5	0.1	0.5	0.1	0.4	-0.2	-0.4	-5.0	-7.6	0.4	1.4	0.8	5.8
8	Bogo, 0.203	49	0.3	0.4	1.5	1.2	0.0	0.3	-0.1	0.0	-0.4	-0.5	1.1	0.9	3.9	4.1	-1.5	-0.6	-2.0	-1.4
9	Jiliby, 01.130	49	0.9	1.4	0.0	0.4	-0.2	-0.3	-0.1	-0.2	0.3	0.1	0.7	0.1	4.1	7.6	-3.8	-7.0	2.8	1.0
11	Willawong, Green 347	45	1.2	-1.1	-0.5	-1.0	0.0	0.0	0.0	-0.1	-0.3	-0.7	-0.5	-0.7	6.7	11.2	-3.8	-4.1	4.5	-1.9
13	Egelabra, HEK 99400	35	-0.2	-0.8	-1.9	-1.2	0.0	0.0	0.0	-0.1	0.0	-0.2	-0.3	0.1	-1.3	0.0	0.6	-1.8	4.8	1.6
14	Bundilla, FF4	46	0.0	2.7	2.0	2.3	-0.1	-0.3	-0.1	-0.3	0.4	0.5	-1.3	-1.1	2.7	2.1	0.2	1.9	2.6	-2.0
15	Hazeldean, Zachary	32	0.2	0.4	-1.5	-1.3	0.4	0.3	0.2	0.1	-0.1	-0.6	-0.8	-0.4	-1.1	0.1	1.3	-1.3	2.6	2.4
16	<i>Identification withheld</i>	44	-0.3	-1.0	-0.3	-1.1	-0.3	-0.3	-0.2	-0.2	-0.4	-0.4	1.4	1.8	2.6	0.3	-1.9	-2.1	-5.2	-5.0
Average Performance		44	22.2	30.1	33.1	34.4	2.6	5.1	1.8	3.5	17.7	18.3	20.5	18.9	100.3	100.3	65.0	84.2	43.6	59.2
			kg	kg	kg	kg	kg	kg	kg	kg	um	um	%	%	deg/mm	deg/mm	mm	mm	N/ktex	N/ktex

* Link Sires: Sires evaluated by the site to provide links between years and sites so that the all site results can be combined into a single report – *Merino Superior Sires*

^ Y = Yearling (300 to 400 days); H = Hogget (400 to 540 days); A = Adult (540 days and older)

Post Weaning Weight

Table 5 – Sire’s Progeny Group Evenness

Sire code	Sire name	General comment	Evenness Score 1 = very even 5 = very uneven
1*	Rocklyn, 01.0354	Confirmation issues – hocks, pasterns, shorter in cannon bone.	3.5
2*	Tara Park, Daddy Long Legs	Some progeny showing signs of pastern problems and the odd back opening up.	2.5
3	<i>Identification withheld</i>	Well covered and grown mob; good confirmation (standing square); only issue a few smaller sheep	3.0
4	Futter Park, Arnie	Some progeny significantly smaller, below average tip structure, lighter boned sheep.	4.0
5	Rocklyn, Orange 23	Issues with back problems, short cannon bone and body length.	5.0
6	Bogo, 0.18	Open backs, slabby tips and hocks an issue in some progeny.	4.0
7	Uardry, 9.72	Tops are tops, however the culls have close hocks.	4.0
8	Bogo, 0.203	Average mob, the odd smaller sheep in the mob, average tip.	3.0
9	Jilliby, 01.130	Smaller sheep in the mob are shorter body length, some shoulder and pastern issues.	4.0
11	Willawong, Green 347	Variation in size, smaller ones shorter in cannon bone, some drier in tip.	4.5
13	Egelabra, HEK 99400	Smaller ones narrow in front legs, some neck and shoulder issues.	3.5
14	Bundilla, FF4	Some open backs and shoulder, harsher face.	3.5
15	Hazeldean, Zachary	Some shorter neck sheep; some variation in mob; reasonable wool coverage.	4.0
16	<i>Identification withheld</i>	Percentage of smaller bodied sheep in mob; dry tip; strong backs.	4.0

* Link Sires: Sires evaluated by the site to provide links between years and sites so that the all site results can be combined into a single report – *Merino Superior Sires*

Table 6 – Fleece Valuation Summary

The information in Table 6 has been generated by the Wether Trial Software using actual shearing data from the 2006 and 2007 shearings. Five year rolling average wool price has been used to calculate the 2006 and 2007 fleece values, 2001/02 to 2005/06 and 2002/03 to 2006/07 respectively.

Sire graph code	Sire Identification	GFW	FD	Sch yield	CFW	Clean price	WT	2006 Wool Value	2007 Wool Value	2007 Carcase Value	Average Total Value
1*	Rocklyn, 01-0354	5.6	18.1	69	3.9	1164	33.4	\$24.13	\$43.50	\$27.33	\$94.96
2*	Tara Park, Daddy Long Legs	5.7	18.3	66	3.7	1093	36.2	\$23.61	\$39.34	\$29.77	\$92.73
3	<i>Identification withheld</i>	5.6	19.6	65	3.6	961	36.0	\$18.59	\$33.98	\$29.43	\$82.01
4	Futter Park, Arnie	5.5	19.0	66	3.6	1016	34.0	\$20.35	\$36.12	\$27.17	\$83.64
5	Rocklyn, Orange 23	5.7	18.2	66	3.7	1101	33.3	\$25.20	\$39.86	\$27.31	\$92.37
6	Bogo, 0.18	5.6	18.3	67	3.7	1097	33.4	\$26.28	\$39.48	\$27.31	\$93.07
7	Uardry, 9.72	6.1	18.7	68	4.1	1065	33.8	\$25.55	\$42.81	\$27.68	\$96.04
8	Bogo, 0.203	5.9	17.8	61	3.6	1178	35.3	\$23.65	\$41.13	\$29.01	\$93.80
9	Jiliby, 01.130	5.2	18.4	65	3.4	1090	34.8	\$20.43	\$35.79	\$28.51	\$84.73
11	Willawong, Green 347	5.6	17.5	62	3.4	1248	33.3	\$25.42	\$41.44	\$26.83	\$93.69
13	Egelabra, HEK 99400	5.6	18.1	62	3.5	1133	33.3	\$22.57	\$38.52	\$27.20	\$88.28
14	Bundilla, FF4	5.2	18.8	64	3.3	1029	36.6	\$20.57	\$33.47	\$30.12	\$84.17
15	Hazeldean, Zachary	5.9	17.7	62	3.7	1221	33.0	\$26.20	\$43.51	\$27.05	\$96.76
16	<i>Identification withheld</i>	5.2	17.9	65	3.4	1133	33.3	\$21.72	\$37.44	\$26.33	\$85.49
Averages		5.6	18.3	65	3.6	1109	34.3	\$23.16	\$39.03	\$27.93	\$90.12

South West Slopes Merino Breeders Inc.

