

New England

2015 Drop

Yearling Assessment

Including Hogget Carcase Scanning and Worm Egg Counts

Within-Site Results

Conducted by

New England Sire Evaluation Association

under the auspices of

The Australian Merino Sire Evaluation Association



February 2017

Disclaimer

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The Australian Merino Sire Evaluation Association has approved the format used in this report. Australian Sheep Breeding Values reported here are based on analyses conducted by Sheep Genetics.

Foreword

The New England Merino 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 New England Merino Sire Evaluation Association run the New England Merino Sire Evaluation (NEMSE) site. The committee members are listed in the table below.

As a result of meetings in late 1989, a group was formed to conduct Merino Sire Evaluation in the New England district of NSW. In December 1992, the New England Merino Sire Evaluation Association was formed.

The first programs of insemination were conducted at 'Mirani' near Walcha, in April 1990 and 1991. In 1992 and 1993 'Gostwyck Station' made available 800 fine wool ewes for the progeny tests, followed by 'Birralee' in 1994 and 1995 and 'Deeargee' in 1996. CSIRO Chiswick hosted the Sire Evaluation program from 1997 to 2003. The University of New England 'Kirby' property hosted the evaluation from 2004 to 2011. In 2012/13 NEMSE moved back to a commercial grazing property 'Coningdale'. In 2014 the site moved back to 'Birralee' Kentucky. The 2015 joining was also carried out at Birralee and the 2016 AI program was carried out at 'Warrane' Armidale, where 14 sires were joined for a 2 stage assessment. It is hoped future evaluations can continue on commercial properties demonstrating genetic potential and benchmarking local and interstate sires under the same environmental conditions.

The program has operated with assistance from CSIRO Livestock Industries, NSW Department Primary Industries, University of New South Wales and the University of New England.

Each year, following the tagging of lambs at around two weeks of age, the ewes and their lambs are moved from their sire lambing plots and boxed as one group. The full drop of each sires progeny (ewe and wether) lambs are measured and visually assessed

The committee would like to especially thank the following: Jim Meckiff for the coordination of the site activities and trait assessment, committee members who assisted with the site activities, Luke Stephen for trait assessment, Practical Systems-Stockbook for the data management and Andrew Swan for conducting the Flock Breeding Value analysis.

Current Members of the Site Committee

Name	Phone	Position on committee
Duncan Lance	02 67751325	Chairperson
Jock McLaren	02 6777 5881	Site representative
Hugh Nivison	02 6777 1360	Vice Chairperson
Jen Smith	02 6776 1381	Secretary
Katrina Blomfield	02 6777 9189	Treasurer
Jim Meckiff	0427 138 596	Trait Assessor
Andrew Swan	02 6773 3209	Data Analysis
Jock Menzies	02 6778 1115	Host 2012-2013
Luke Stephen	02 6770 1843	Classer/Trait Assessor
Martin Oppenheimer	02 6777 2124	
Jock Nivison	02 6777 2525	
Will Taylor	02 6778 7355	Host 2014 - 2015

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2015 Drop Yearling Assessment

The information in this site evaluation report provides a comprehensive assessment of the 2015 drop, including the Yearling assessment of the sire's progeny performance, in measured and visually assessed traits.

The yearling fleece and visual assessment was made at 10 months of age with 10 months of wool growth. The yearling shearing was carried out at 11 months of age with 11 months of wool growth.

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Sire and Owner Details

Breeder's flock, Sire name Sire ID #, Breed †	Owner Details
Airlie, 120331 502225-2012-120331, Merino	Murray Power Iona, 1642 Brackendale Rd, Walcha NSW 2354 P: (02) 6777 3936, E: mmp@activ8.net.au
Alfoxton, Ambassador 95-391 (Historical) 504294-1995-950391, Merino	Chris Clonan Alfoxton, Wattle Drive, Armidale NSW 2350 P: (02) 6775 3245, F: (02) 6775 3266, E: alfoxton@bigpond.com
Bocoble Poll, 110229 601064-2011-110229, Poll Merino	Malcolm Cox 466 Moolarben Rd, Mudgee NSW 2850 P: (02) 6373 4680, F: (02) 6373 4642
Bogo, 111424 (Link) 504792-2011-111424, Merino	Malcolm Peake Ravenswood, Boambolo Road, Yass NSW 2582 P: (02) 6227 1223, F: (02) 6227 1271, E: info@bogomerinos.com.au
Cressbrook, 130434 502302-2013-130434, Merino	Lach Fulloon Cressbrook, 437 Enmore Rd, Armidale NSW 2350 P: (02) 6775 1217, F: (02) 6775 1341, E: cressbrk@bigpond.com
Hazeldean, 004059 500383-2012-004059, Merino	Jim Litchfield Hazeldean Pty Ltd, Cooma NSW 2630 P: (02) 6453 5555, F: (02) 6453 5526, E: admin@hazeldean.com.au
Karori, 110386 (Link) 504773-2011-110386, Merino	Rob & Katrina Blomfield Karori, Walcha NSW 2354 P: (04) 6777 9189, E: katrina@karori.com.au
Miramoonna, 130058 503471-2013-130058, Merino	Kim Barnet Miramoonna, Walcha NSW 2354 P: (02) 6777 2885, F: (02) 6777 2833, E: barnet@miramoonna.com
Mumblebone, 130389 (Link) 500063-2013-130389, Merino	Chad Taylor Marapana, 456 Wuuluman Road, Wellington NSW 2820 P: (02) 6845 3620, F: (02) 6845 3608, E: chad@mumblebone.com.au
Nerstane, 130021 503298-2013-130021, Merino	John, Hamish and Jock McLaren Nerstane, Woolbrook NSW 2354 P: (02) 6777 5881, F: (02) 6777 5922, E: jock@nerstane.com.au
Petali Poll, 130326 601279-2013-130326, Poll Merino	Martin and Cheryl Oppenheimer Petali, Walcha NSW 2354 P: (02) 6777 2124, E: petali@northnet.com.au
Roseville Park, 3253 (Historical) 504166-1987-003253, Merino	Matthew and Cherie Coddington Glenwood, 39R Dilladerry Rd MS3, Dubbo NSW 2830 P: (02) 6887 7286, E: rpmerinos@bigpond.com
Stockman Poll, 090853 (Link) 601050-2009-090853, Poll Merino	Kip Gray Melton Vale, 85 Lake Highway, Melton Mowbray TAS 7030 P: (03) 6259 1162, F: (03) 6259 3061, E: kgray@stockmanstud.com.au
Yalgoo, 130261 501552-2013-130261, Merino	Jock Nivison Yalgoo, PO Box 141, Walcha NSW 2354 P: (02) 6777 2088, E: yalgoopartnership@bigpond.com

(Historical) Historical Sires evaluated under AMSEA's R&D project to validate the system of linkage in MERINOSELECT that has operated over the past 15-20 years. These sires were generally widely used 15-20 years ago and were selected for the R&D program based on their high ASBV accuracies. They demonstrate the progress the industry has made over that period.

(Link) Sire evaluated to provide links between years and sites so that the all site results can be combined into a single report, e.g., *Merino Superior Sires*.

(Unreg) Sire bred in an unregistered flock.

Sire ID provides a unique number for all sheep. A sire ID has 16 digits.

- 2 for the breed of the flock, e.g., Merino (50), Poll Merino (60), Dohne (51), SAMM (48), Afrino (AF)

- 4 for flock code, AASMB Registered flock code or unregistered code.

- 4 for year of drop.

- 6 for tag number used in the breeder's records.

† Breed of flock in which the sire was born

Manager's Report

The property "Birralee" Kentucky, managed by Will, Ross and Rob Taylor hosted the New England Merino Sire Evaluation during 2014 & 2015. Birralee is located between Walcha and Uralla in the Northern Tablelands of NSW.

We greatly appreciate the contributions from committee members and industry service providers associated with running the trial. We anticipate finding significant opportunities for our breeding program as a result of participating in the NEMSE trial.

Birralee consists of 4000 acres of mixed grazing enterprises; superfine merino sheep and beef cattle. Pastures are a mix of improved perennial and fertilised native pastures. The commercial flock is of Merryville bloodline and ewes from the 2011 drop have been selected for the AI program.

Seasonal conditions during 2016 have been difficult for livestock management – a dry summer and autumn saw supplementary feeding begin in autumn and continue through winter. Excellent rainfall saw pasture jump away in late winter and spring allowing the 2015 drop to develop well off shears.

A field day was held in late July where both the 2014 and 2015 drops were on display. Thank you to the field day sponsors for supporting the event and sheep breeders who attended and inspected the progeny drafts on the day.

1. Location, Climate and Soil

- 20 km North of Walcha, average rainfall 770mm. Soil type is granite with well fertilised improved and native pastures.

2. Selection and mating

- 700 ewes - 2011 drop were selected from a mob of 2000 and joined to 14 sires by AI. Ewe bloodline is Merryville. Average adult fibre diameter 16.5 micron.
- AI was carried out by Allstock with 50 ewes to each sire. Ewes were presented in CS 2.7 at AI with semen quality generally classified as good.

3. Pregnancy and lambing

- Ewes were managed as one contemporary group.
- Ewe nutritional requirements were met during pregnancy and supplemented as required with grain.
- Pregnancy scanning indicated a sufficient number of AI pregnancies.
- Lambing commenced under good seasonal conditions in early September 2015. Lambs were drop tagged and boxed into a single management group.

4. Weaning and seasonal conditions

- The lambs were weaned onto improved pasture on 1st December 2014.
- Animal health and welfare: Internal parasite challenges monitored using WEC - and treated as required. Clik is applied to the breech at weaning.

5. Visual Assessments

- 1st Stage Yearling assessments were conducted by Mr Luke Stephen, NSW DPI.
- Off shears assessment conducted by Jim Meckiff.

6. Rainfall

- Mean Annual Rainfall, Salisbury Court, Uralla.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean	100.5	82.6	57.2	40.1	44.1	55.2	54	51.4	52.1	70	79.6	88.6	769.4
2015	91	38.6	18	78	42.8	59.4	45.4	45.4	18.6	31.2	51.2	141	660.6
2016	89.6	2	34.4	26.8	51.8	126.8	44.4	124.8	105	82	31.7	*	719.3

Assessment and Management Program

Activity		Date/s	Age	Wool
Selection of ewes		17 March 2015		
AI mating		8 April 2015		
Pregnancy scanning		12 June 2015		
Separated into sire lambing groups		28 August 2015		
Lambing: start – finish		2-10 September 2015		
Lambing mobs boxed to 1 management group		18 September 2015	14 days	
Tagging/pigment scores		14 October 2015	38 days	
Weaning		9 December 2015	94 days	
Crutching	P	9 February 2016	5 months	5 months
Mid side fleece sampling	Y	4 July 2016	10 months	10 months
Classer's Visual Grade	Y	5 July 2016	10 months	10 months
Pre shearing scoring	Y	5 July 2016	10 months	10 months
Shearing	Y	5 August 2016	11 months	11 months
Post shearing scoring	Y	16 August 2016	11 months	Off shears
Body weighing	W	9 December 2015	3 months	3 months
	P	24 May 2016	9 months	9 months
	Y	8 September 2016	12 months	1 months
	H	15 December 2016	15 months	4 months
Worm egg count sampling	H	22 December 2016	15 months	
Fat and eye muscle scanning	H	15 December 2016	15 months	
Vaccination		Marking, weaning and shearing annually.		
Drench		As required based on worm egg counts.		
Supplementary feeding: start - finish		March 2016 – August 2016 with Barley		
Field day or public display of sheep		New England Merino Sire Evaluation Field Day 22 July 2016.		

Visual trait assessment and site Breeding Objective

Visual trait assessment

Lamb Marking Traits - Mr Jim Meckiff

Yearling Assessment Trait Scores and Classer's Grade - Mr Luke Stephen.

Off Shears Traits - Mr Jim Meckiff.

Site Breeding Objective used to assess the Classer's Grades

The Breeding Objective used by the classer when selecting the Classer's Tops, Flock and Cull Grades is described below. The Breeding Objective for both measured and visually assessed traits was developed in consultation between the site committee and the classer prior to the grading.

In general: The Breeding Objective is to breed a commercially viable and productive superfine wool sheep suitable for climatic and pastoral conditions of the New England Tablelands. Sheep should not require high management inputs but be highly productive (fleece weight) relative to a fine wool type (14 - 17 micron at first assessment). The expectation would be that the Classer's Grades would have a ratio of 25% Top, 50% Flock, and 25% Cull. However the sheep performance relative to the following standards will determine the final proportion allocated to each grade.

Sire Codes and Pedigrees

Sire code	Breeders flock, Sire number	Sheep Genetics ID	Sire of Sire
1	Airlie, 120331	502225-2012-120331	502251-2010-100064
2 (Hist)	Alfoxtton, Ambassador 95-391 (Hist)	504294-1995-950391	504172-1990-900129 (Eden Park, Senator 0129)
3	Bocoble Poll, 110229	601064-2011-110229	601064-2008-080133
4	Bogo, 111424	504792-2011-111424	Unknown
5	Cressbrook, 130434	502302-2013-130434	502302-2011-110503 (Cressbrook, 110503)
6	Hazeldean, 004059	500383-2012-004059	503298-2008-080121 (Nerstane, 080121)
7	Karori, 110386	504773-2011-110386	504773-2008-080897
8	Miramoonna, 130058	503471-2013-130058	601387-2010-100028
9	Mumblebone, 130389	500063-2013-130389	601365-2009-090399
10	Nerstane, 130021	503298-2013-130021	503298-2008-080121 (Nerstane, 080121)
11	Petali Poll, 130326	601279-2013-130326	509605-2011-110074
12 (Hist)	Roseville Park, 3253 (Hist)	504166-1987-003253	Unknown
13	Stockman Poll, 090853	601050-2009-090853	601050-2002-020603 (Stockman Poll, Jim)
14	Yalgoo, 130261	501552-2013-130261	501552-2011-011349 (Yalgoo, 011349)

Index Options

A breeding index combines multiple measured traits into a single value that reflects a certain emphasis on these traits. It is important that you use an index that best matches the breeding objective and production system of the flock you are selecting for.

It is recommended that the performance of individual measured and visually assessed traits is used in conjunction with an index as selection indexes assist in making balanced selection decisions.

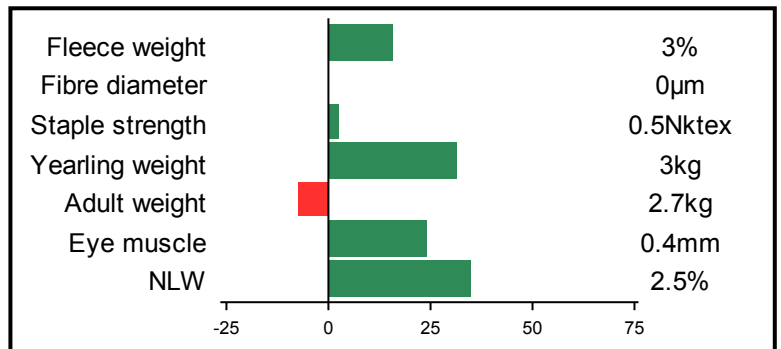
Site Reports present 4 indexes, DP+; MP+; FP+ and WP+. The first 3 of these indexes are the same as MERINOSELECT indexes of that name but account for the fact that direct reproduction records have not been captured by AMSEA sire evaluation. The WP+ index is unique to AMSEA.

Provided is the percentage contribution that each trait makes to economic gain in a commercial flock that uses an index for sire selection. Additionally, included for each index are the likely within-flock responses from using an index for 10 years. These responses are based on a ram breeding flock with a standard breeding program, no introduction of outside genetics and uses 35% of their selection emphasis on traits that are not in the index (such as visually assessed performance).

Dual Purpose Plus (DP+)

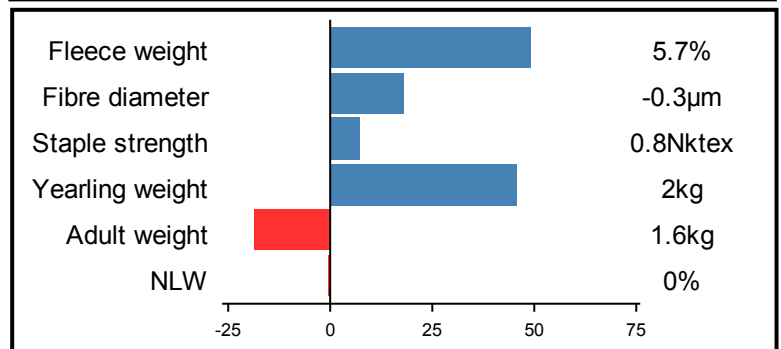
Based on a meat focused production system where surplus progeny are sold as lambs and a portion of ewes are joined to terminal sires. Large increase in body weight and carcass traits. Moderate increase in fleece weight. Maintain fibre diameter and staple strength. Moderate increase in reproduction.

Percentage Contribution to Economic Gain **Trait Gain**



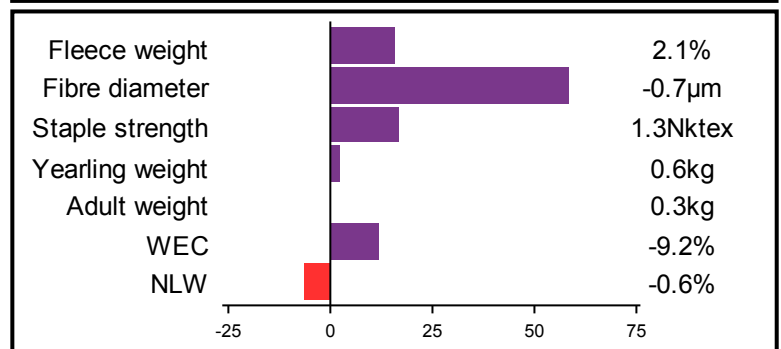
Merino Production Plus (MP+)

Based on a balanced wool and meat production system where surplus progeny are sold as hoggets. Balanced emphasis on increasing fleece weight and reduction in fibre diameter. Moderate increase in body weight, with little change in reproduction.



Fibre Production Plus (FP+)

Based on a wool production system where wethers are retained, operating in an environment where worms cause economic losses. Large reduction in fibre diameter. Moderate increase in staple strength. Small reduction in WEC (if measured in the breeding program). Small increase in fleece weight. Little change in body weight and reproduction.



Wool Production Plus (WP+)

Based on the MP+ production system with a greater emphasis on increasing fleece weight, while maintaining fibre diameter and a moderate emphasis on increasing body weight.

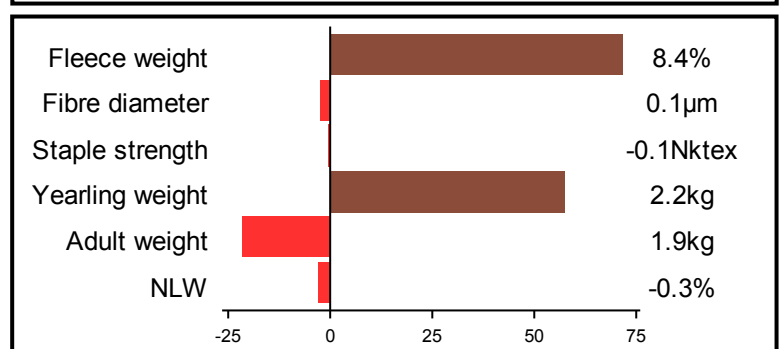


Table 1. AMSEA Index Values and Classer's Visual Grade

The highest performing sires for each trait (trait leaders) are highlighted by shading. Each sire is listed for Classer's Visual Grade and the same three indexes at all site evaluations.

The index values reported are based on measured traits FBV performance with varying emphasis on fleece weight, fibre diameter, body weight, staple strength and worm egg count. See 'Index Options' (page 23) for more information on the indexes presented in the table below.

AMSEA Indexes are the same as MERINOSELECT Indexes apart from NLW (Number of Lambs Weaned) being given a zero FBV value in AMSEA calculations.

- **Dual Purpose Plus (DP+):** Based on a meat focused production system where surplus progeny are sold as lambs and a portion of ewes are joined to terminal sires.
- **Merino Production Plus (MP+):** Based on a balanced wool and meat production system where surplus progeny are sold as hoggets.
- **Fibre Production Plus (FP+):** Based on a wool focussed production system where wethers are retained, operating in an environment where worms cause economic losses.

Sire Code	Breeder's flock, Sire name	Number of progeny	AMSEA Index Values				Classer's Visual Grade ¹	
			Dual Purpose Plus	Merino Production Plus	Fibre Production Plus	Wool Production Plus	Tops % Y^	Culls % Y
1	Airlie, 120331	46	92	102	108	101	-3	-5
2 (Hist)	Alfoxtton, Ambassador 95-391 (Hist)	42	83	81	80	77	0	1
3	Bocoble Poll, 110229	39	75	69	80	64	-9	17
4	Bogo, 111424	36	121	112	105	111	-7	7
5	Cressbrook, 130434	54	115	98	96	96	2	-5
6	Hazeldean, 004059	40	100	122	115	127	-13	12
7	Karori, 110386	43	96	90	103	85	9	-2
8	Miramoonna, 130058	35	98	98	99	102	5	11
9	Mumblebone, 130389	41	115	105	106	113	7	-21
10	Nerstane, 130021	34	101	109	105	111	15	-15
11	Petali Poll, 130326	56	112	109	107	110	7	-10
12 (Hist)	Roseville Park, 3253 (Hist)	56	78	96	87	105	-20	31
13	Stockman Poll, 090853	41	101	105	101	104	-8	-3
14	Yalgoo, 130261	42	114	103	108	94	15	-17
Average performance		43	100	100	100	100	21	38

[^] W = Weaning (42 to 120 days); P = Post Weaning (210 to 300 days); Y = Yearling (300 to 400 days); H = Hogget (400 to 540 days); A = Adult (540 days and older)

¹ Classer's Visual Grade is expressed as the percentage deviation of average Tops% and Culls%.

(Hist) Historical Sires evaluated under AMSEA's R&D project to validate the system of linkage in MERINOSELECT that has operated over the past 15-20 years. These sires were generally widely used 15-20 years ago and were selected for the R&D program based on their high ASBV accuracies.

Combined measured traits and visual trait performance

Figure 1a. Combined measured traits (DP+ index) and combined visually assessed traits for the site objective. Combined visually assessed traits including relevant measured traits, e.g., Fleece Weight and Body Weight.

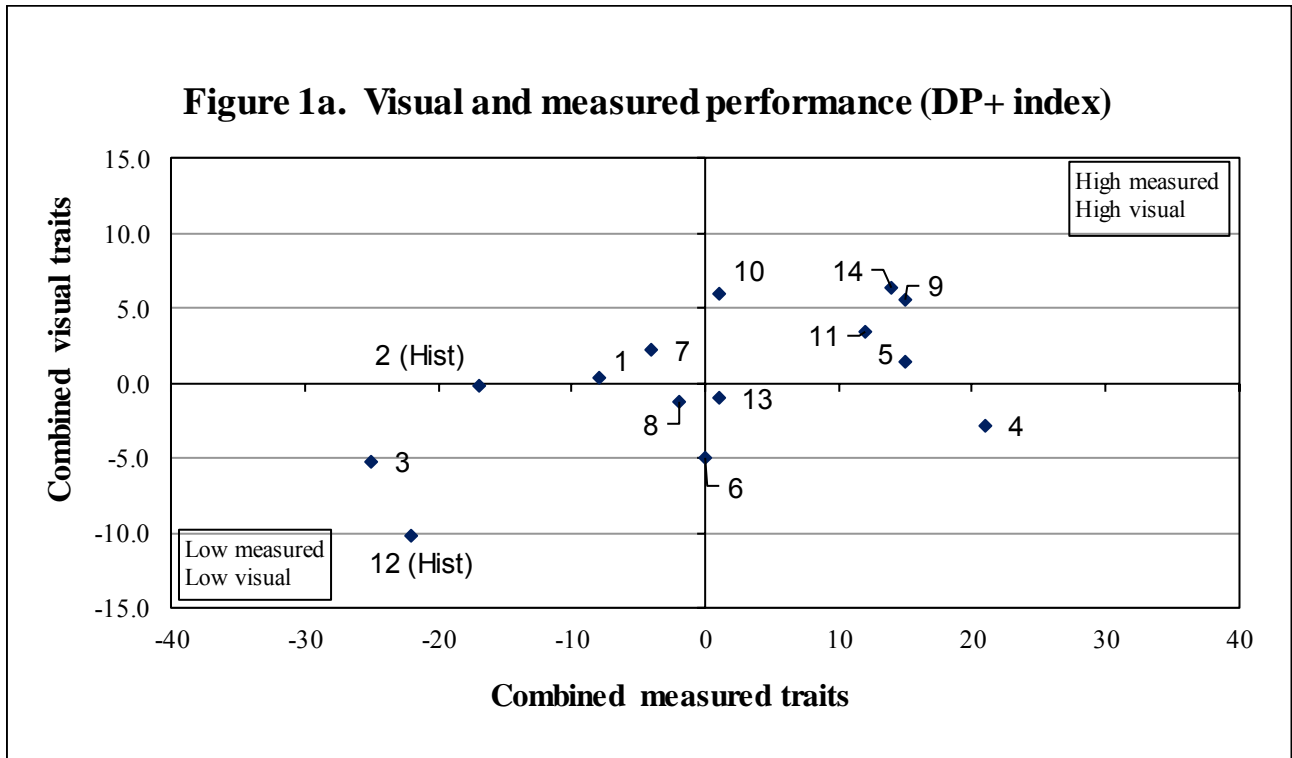


Figure 1b. Combined measured traits (MP+ index) and combined visually assessed traits for the site objective. Combined visually assessed traits including relevant measured traits, e.g., Fleece Weight and Body Weight.

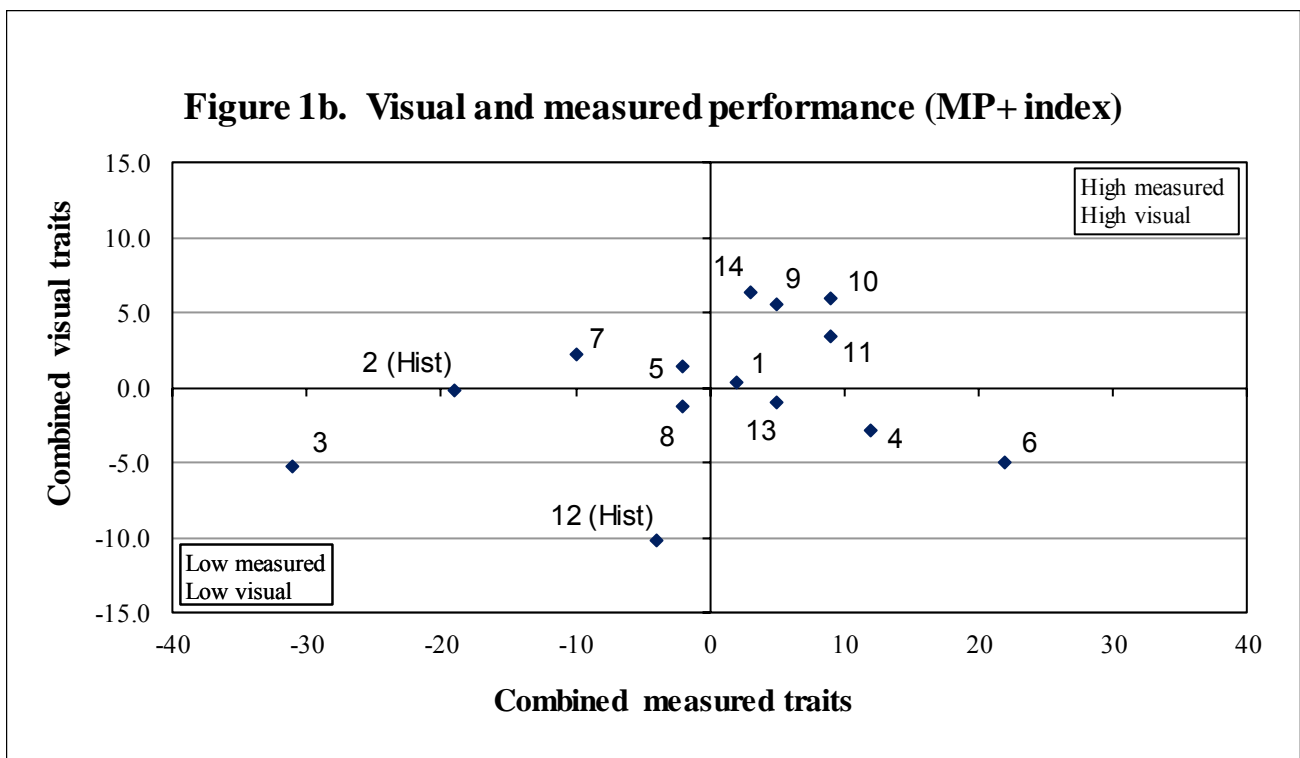


Figure 1c. Combined measured traits (FP+ index) and combined visually assessed traits for the site objective.

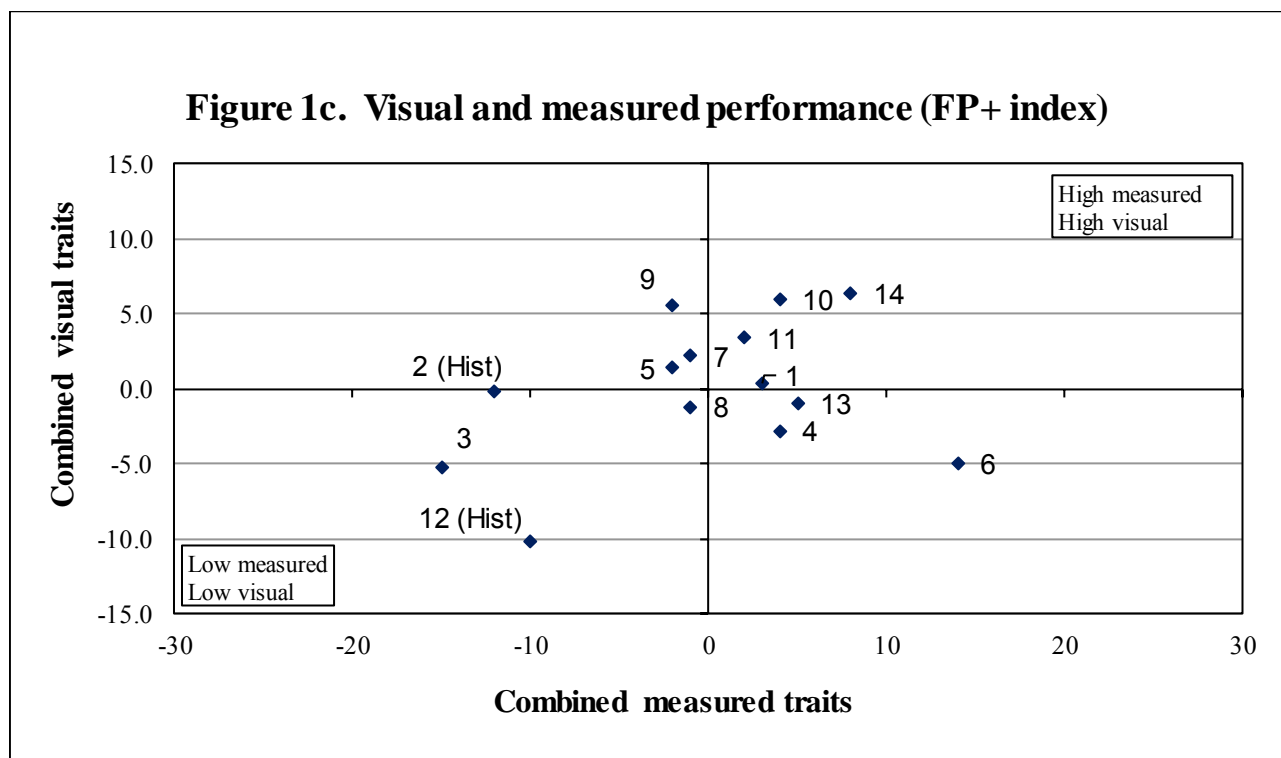


Figure 1d. Combined measured traits (WP+ index) and combined visually assessed traits for the site objective.

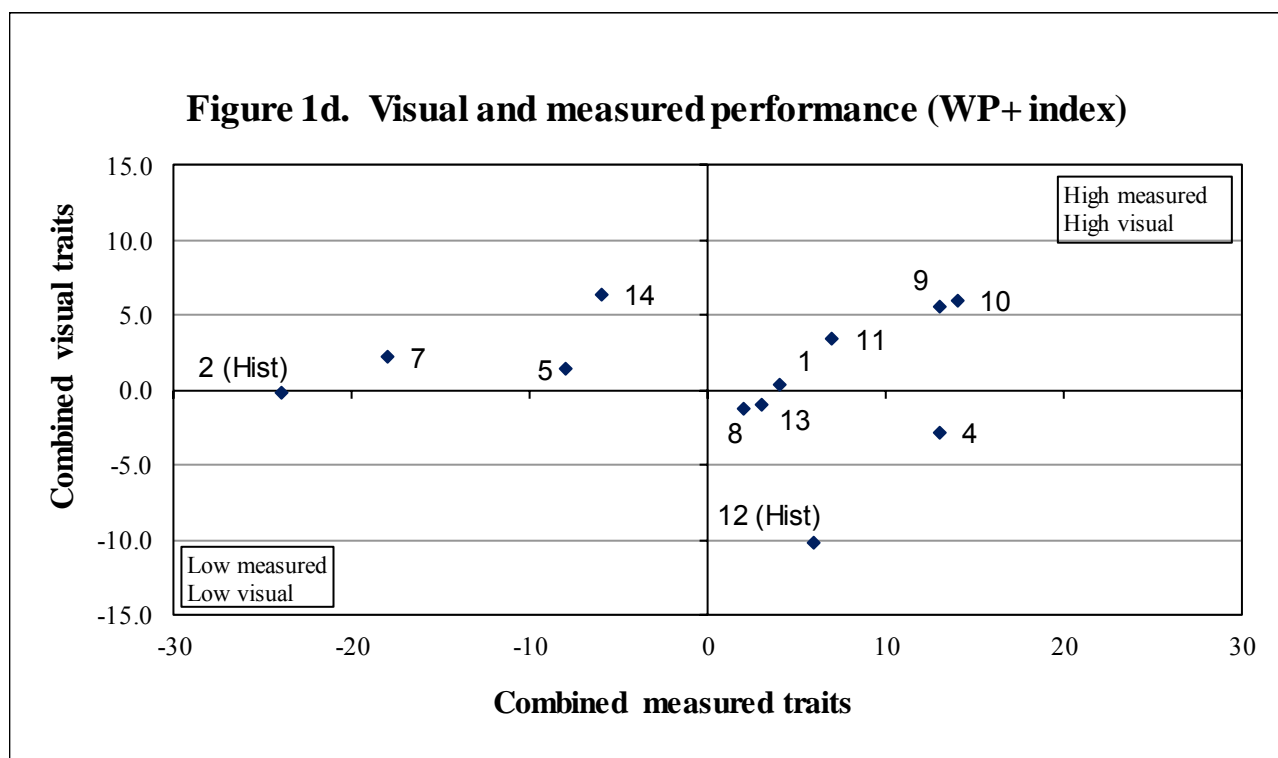


Figure 2. Fleece weight by fibre diameter (FBVs)

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.

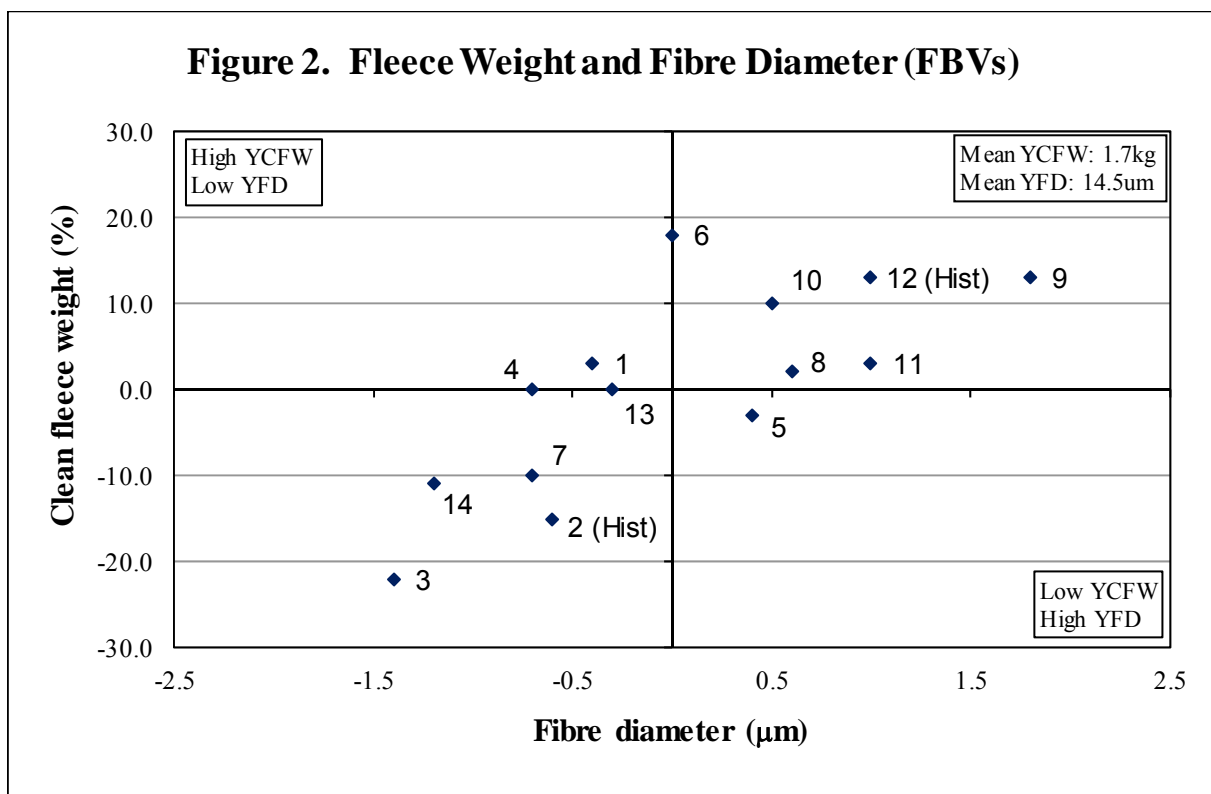


Figure 3. Classer's Visual Grade - Tops by Cull

The graph describes performance for Classer's Visual Tops Grade on the side axis and Culls Grade on the bottom axis. Sires that have above average Tops and below average Culls are in the top left hand quarter.

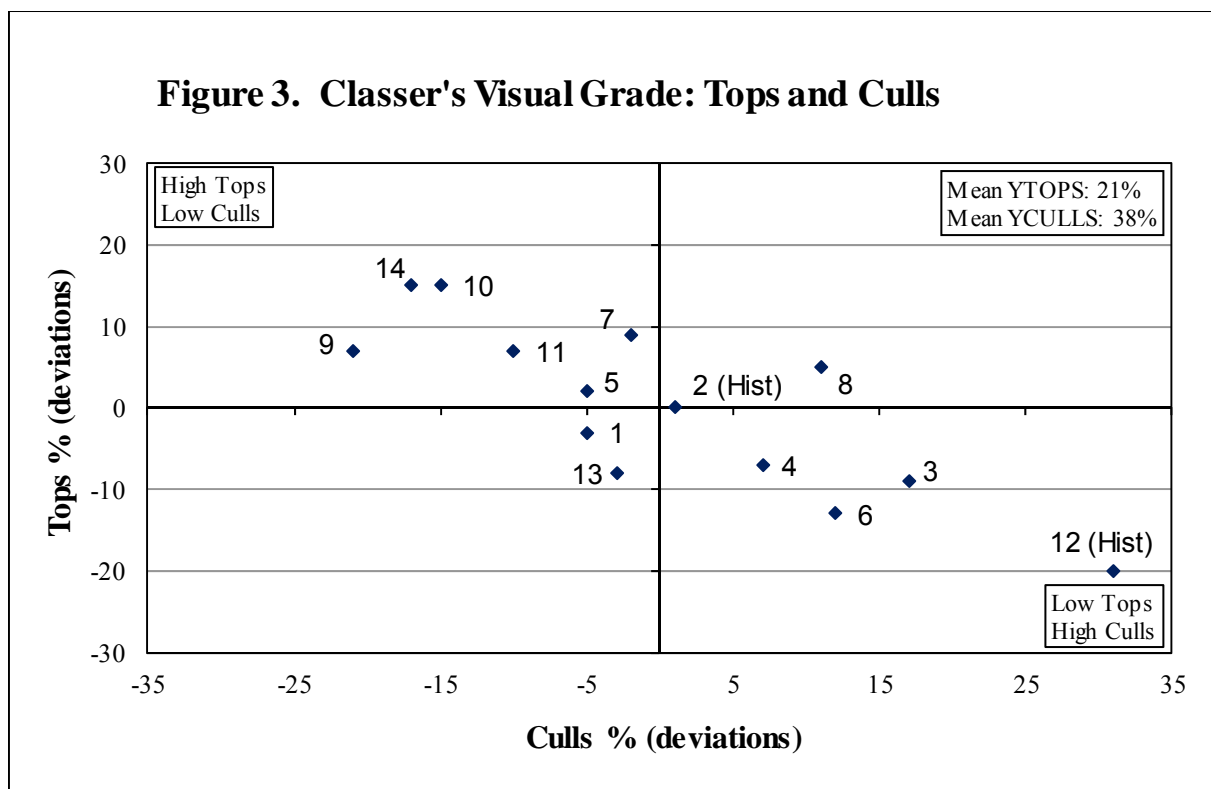


Figure 4. Fleece weight by body weight (FBVs)

The graph describes performance for fleece weight on the side axis and body weight on the bottom axis. Sires that are above average for fleece weight and above average for body weight are located in the top right hand quarter.

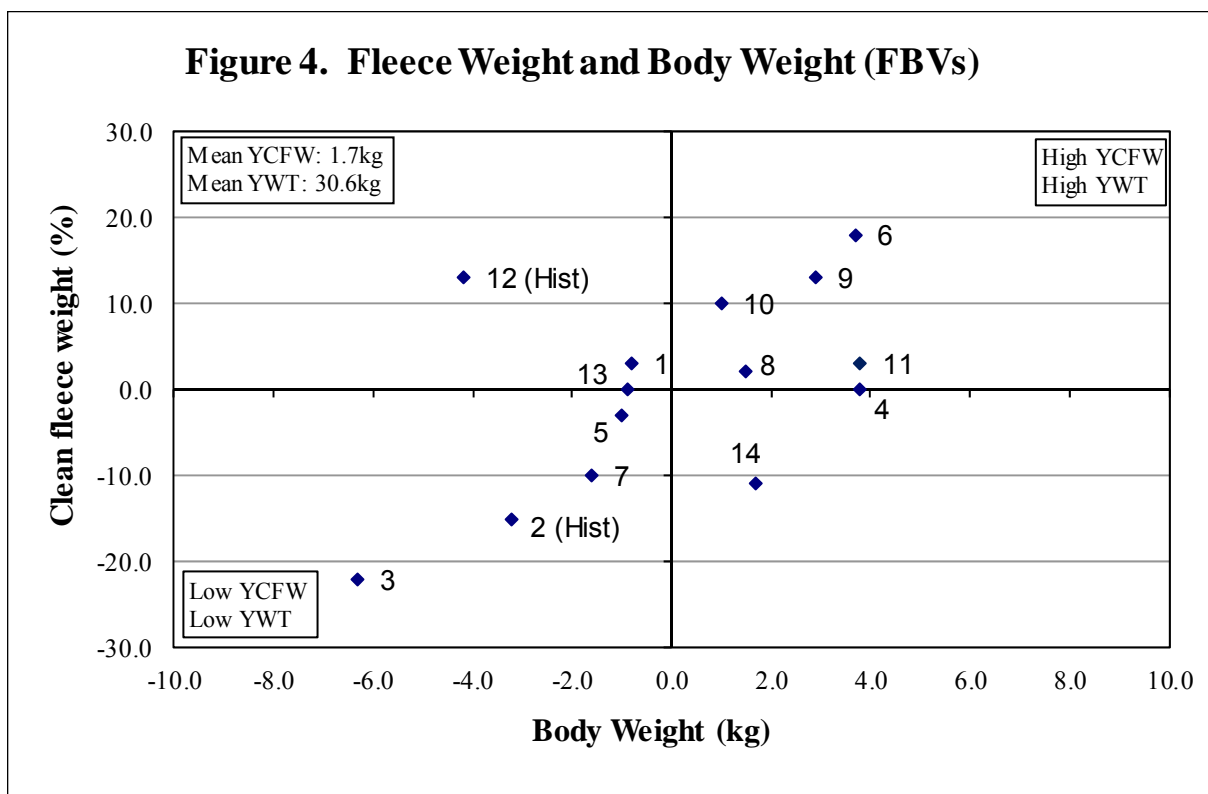


Figure 5. Fleece weight by fat (FBVs)

The graph describes performance for fleece weight on the side axis and fat depth on the bottom axis. Sires that are above average for fleece weight and above average for fat are located in the top right hand quarter.

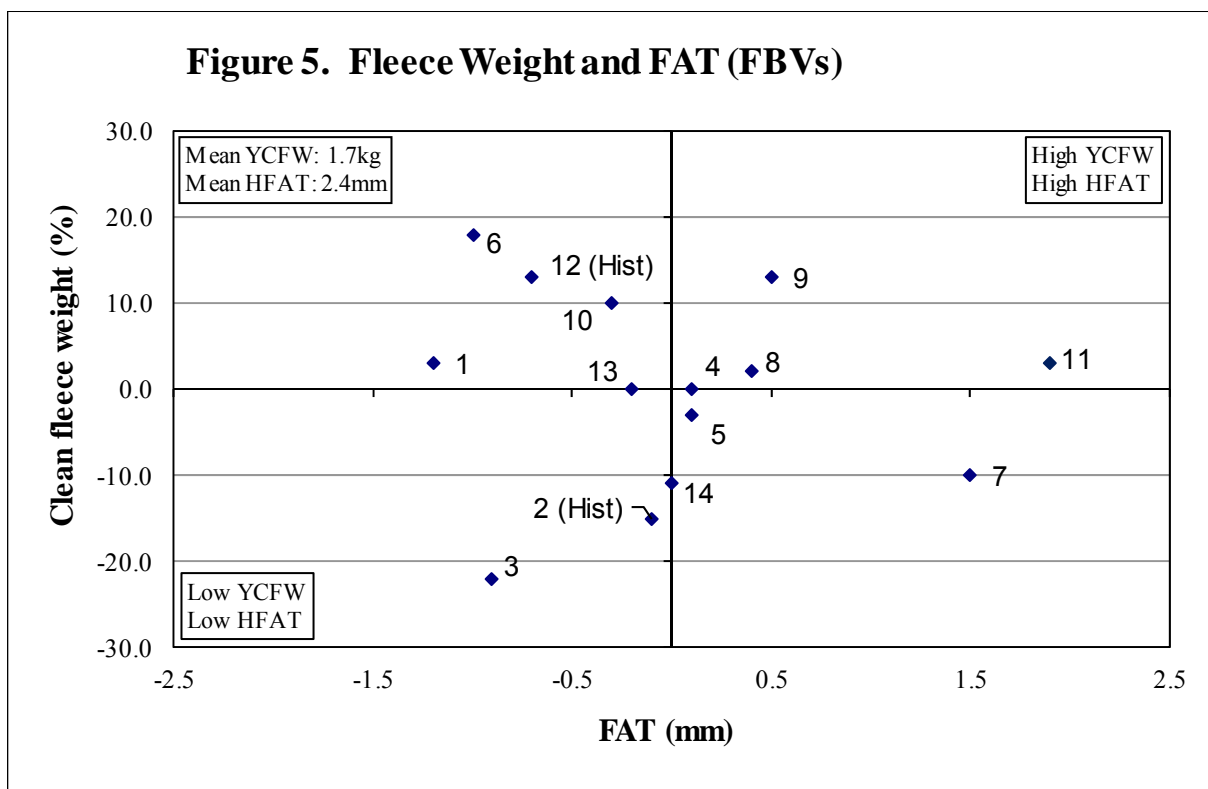


Figure 6. Fleece weight by eye muscle depth (FBVs)

The graph describes performance for fleece weight on the side axis and eye muscle depth on the bottom axis. Sires that are above average for fleece weight and above average for eye muscle depth are located in the top right hand quarter.

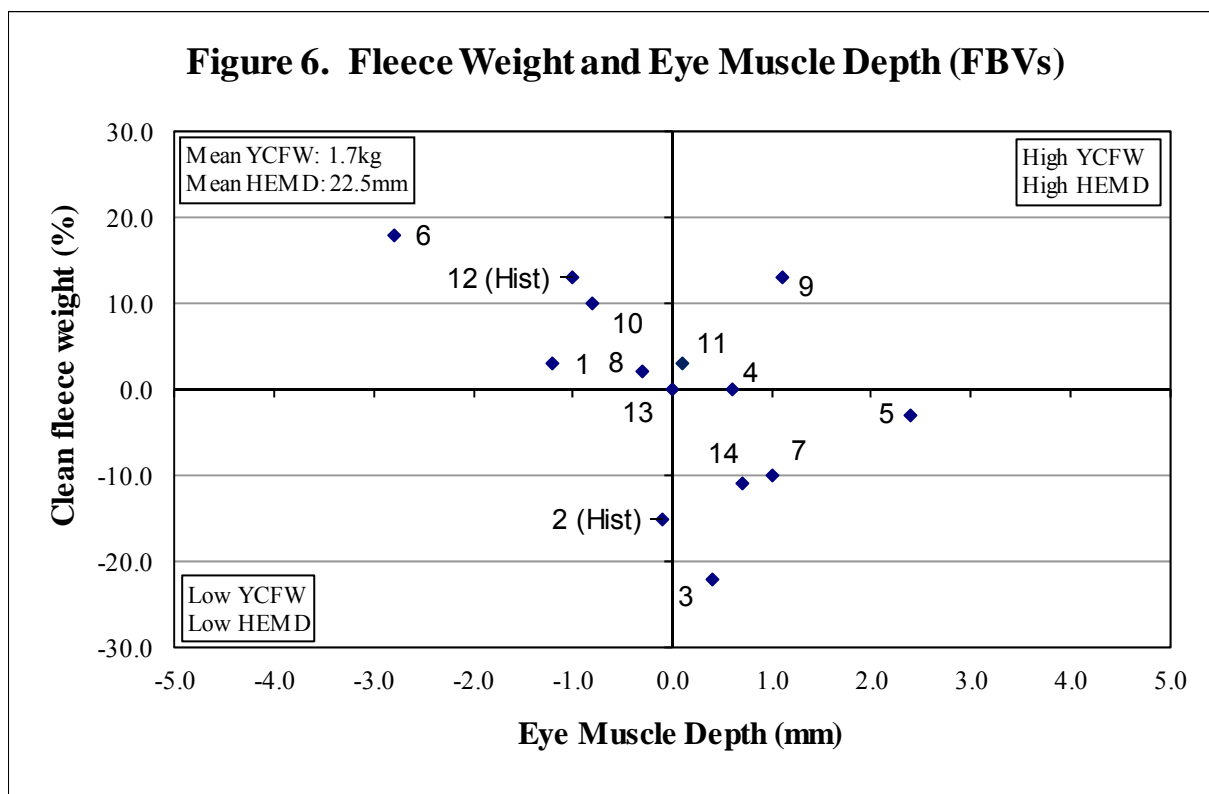


Figure 7. Body weight by eye muscle depth (FBVs)

The graph describes performance for body weight on the side axis and eye muscle depth on the bottom axis. Sires that are above average for body weight and above average for eye muscle depth are located in the top right hand quarter.

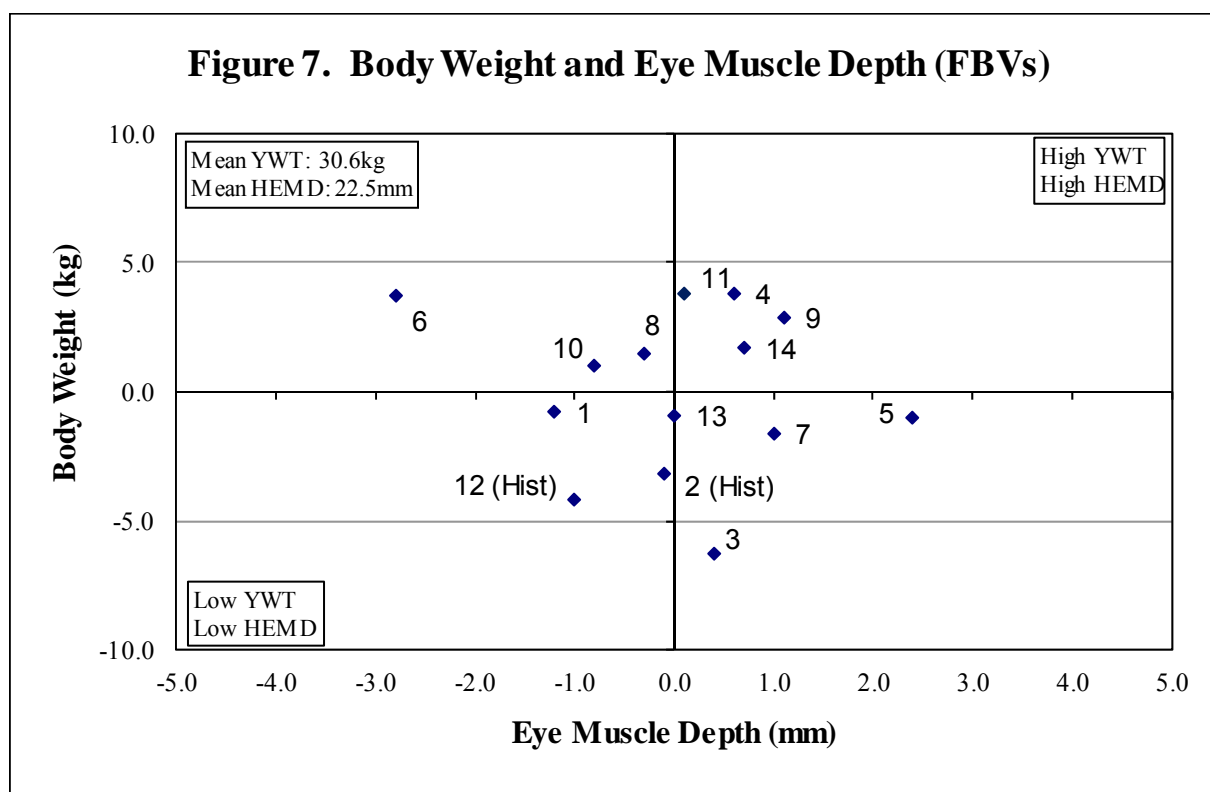
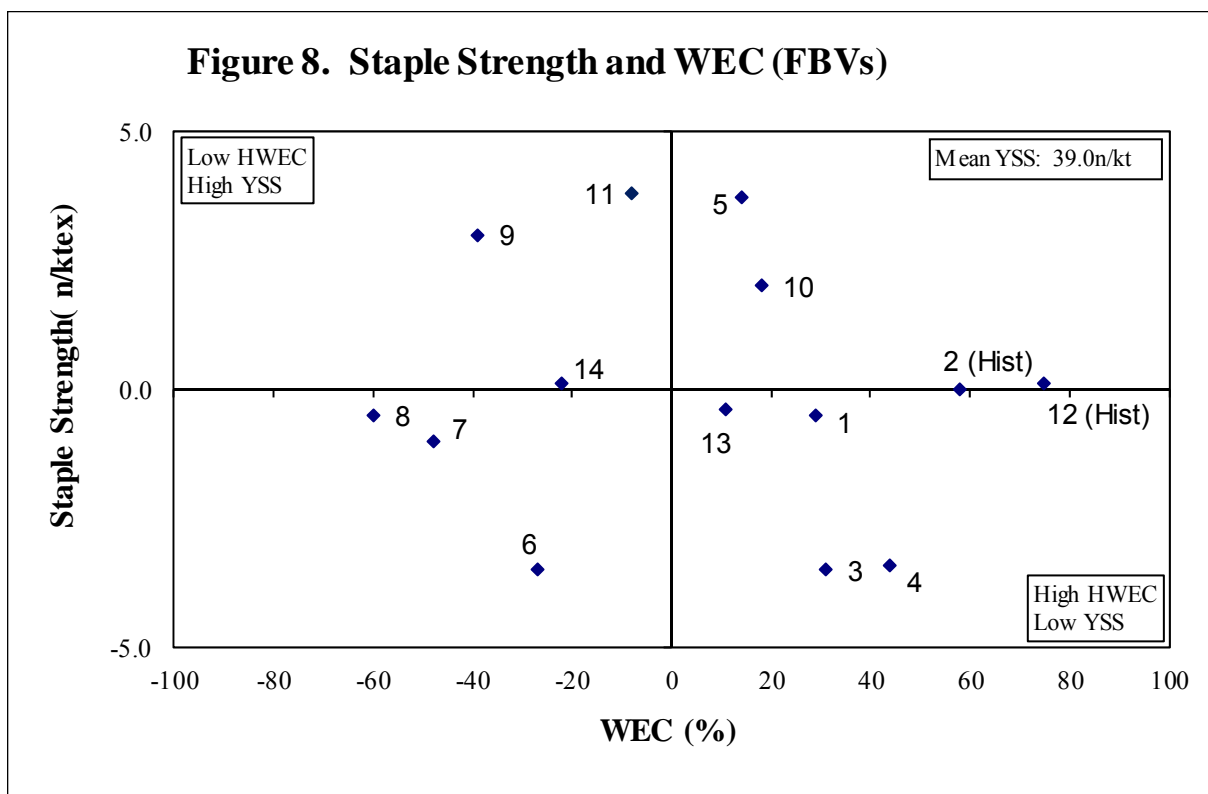


Figure 8. Summary Graphs – SS and WEC

Figure 8. Staple strength by worm egg count (FBVs)

The graph describes performance for staple strength on the side axis and worm egg count on the bottom axis. Sires that are above average for staple strength and above average for worm egg count are located in the top left hand quarter.



Understanding the Results

Measured trait performance and Classer's Visual Grade – Tables 2 and 3

Breeders flock, Sire number:	Identity of the breeder's flock and the sire's number or name.
Number of progeny:	The number of progeny a sire had at the most recent measured analysis. Average number of progeny is included in Table 1.
Flock Breeding Values:	<p>Flock Breeding Values (FBVs) are Estimated Breeding Values (EBVs) calculated by Sheep Genetics for the sires evaluated in this report. Only data from this site evaluation is used in the calculation of these FBVs. FBVs describe the relative breeding value (genetic performance) of the sires (in this case based on the performance of their progeny). A sire's progeny will express half of their sire's FBV. FBVs do not necessarily reflect the sire's observed performance, which is a combination of both genetic and environmental influences. FBVs are an estimate of the genetic component of the sheep's performance.</p> <p>The highest performing sires for each trait (trait leaders) are highlighted by shading. Trait leaders for fibre curvature are not identified as the optimum varies for breeders and is often in the middle of the measured range.</p>
Traits: Abbreviation, trait and the (units reported)	<p>GFW: Greasy fleece weight (percentage). CFW: Clean fleece weight (percentage). FD: Average fibre diameter (micron). WT: Body weight (kilograms). FDCV: 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. CURV: Fibre curvature (degrees). WEC: Worm egg count (% deviation in worm burden of sire's progeny).</p>
Age at assessment:	<p>W = Weaning - 42 to 120 days (6 weeks to 4 months of age). E = Early Post Weaning - 120 to 210 days (4 to 7 months of age). P = Post Weaning - 210 to 300 days (7 to 10 months of age). Y = Yearling - 300 to 400 days (10 to 13 months of age). H = Hogget - 400 to 540 days (13 to 18 months of age). A = Adult - 540 days or older (18 months and older).</p>
Classer's Visual Grade:	<p>A Classer grades all progeny as either Tops, Flocks or Culls based on their visual assessment of all traits relative to the site's Breeding Objective. The percentage deviation from the average of Tops and Culls is presented in this report. Average percentage of Tops and Culls for the entire drop is included in Table 1.</p>

Page 7 provides more detail on Classer's Visual Grade and the site's Breeding Objective.

Table 2. Major Measured Traits and Classer's Visual Grade

Breeders flock, Sire name	Number of progeny	Flock Breeding Values (deviations)							Classer's Visual Grade ¹	
		GFW	CFW	FD	WT				Tops	Culls
		% Y [^]	% Y	µm Y	W	P	Y	H	% Y	% Y
Airlie, 120331	46	3	3	-0.4	-0.2	-0.7	-0.8	-1.6	-3	-5
Alfoxtton, Ambassador 95-391 (Hist)	42	-14	-15	-0.6	-1.4	-2.7	-3.2	-3.5	0	1
Bocoble Poll, 110229	39	-19	-22	-1.4	-3.0	-4.8	-6.3	-6.5	-9	17
Bogo, 111424	36	0	0	-0.7	1.8	2.6	3.8	4.4	-7	7
Cressbrook, 130434	54	-3	-3	0.4	-0.2	-0.2	-1.0	-0.7	2	-5
Hazeldean, 004059	40	17	18	0.0	2.4	3.0	3.7	3.2	-13	12
Karori, 110386	43	-9	-10	-0.7	-1.6	-1.7	-1.6	-1.4	9	-2
Miramoonna, 130058	35	1	2	0.6	0.3	0.8	1.5	1.8	5	11
Mumblebone, 130389	41	11	13	1.8	1.3	2.5	2.9	2.3	7	-21
Nerstane, 130021	34	9	10	0.5	1.4	1.3	1.0	0.2	15	-15
Petali Poll, 130326	56	2	3	1.0	1.3	2.8	3.8	4.5	7	-10
Roseville Park, 3253 (Hist)	56	13	13	1.0	-1.2	-2.7	-4.2	-4.2	-20	31
Stockman Poll, 090853	41	-1	0	-0.3	-1.3	-1.0	-0.9	0.3	-8	-3
Yalgoo, 130261	42	-10	-11	-1.2	0.6	0.9	1.7	1.5	15	-17

[^] W = Weaning (42 to 120 days); P = Post Weaning (210 to 300 days); Y = Yearling (300 to 400 days); H = Hogget (400 to 540 days); A = Adult (540 days and older)

¹ Classer's Visual Grade is expressed as the percentage deviation of average Tops% and Culls%.

(Hist) Historical Sires evaluated under AMSEA's R&D project to validate the system of linkage in MERINOSELECT that has operated over the past 15-20 years. These sires were generally widely used 15-20 years ago and were selected for the R&D program based on their high ASBV accuracies.

Table 3. Other Measured Traits

Breeders flock, Sire name	Number of progeny	Flock Breeding Values (deviations)						
		FDCV	SL	SS	CURV	FAT	EMD	WEC
		% Y [^]	mm Y	N/ktex Y	deg/mm Y	mm Y	mm Y	% H
Airlie, 120331	46	-0.5	-2.4	-0.5	1.8	-1.2	-1.2	29
Alfoxton, Ambassador 95-391 (Hist)	42	2.1	-9.4	0.0	11.3	-0.1	-0.1	58
Bocoble Poll, 110229	39	2.4	-9.1	-3.5	11.2	-0.9	0.4	31
Bogo, 111424	36	1.0	-2.6	-3.4	3.8	0.1	0.6	44
Cressbrook, 130434	54	-0.7	-1.5	3.7	-3.2	0.1	2.4	14
Hazeldean, 004059	40	0.9	2.9	-3.5	-6.1	-1.0	-2.8	-27
Karori, 110386	43	-1.7	0.5	-1.0	8.9	1.5	1.0	-48
Miramoon, 130058	35	-0.4	5.9	-0.5	-3.4	0.4	-0.3	-60
Mumblebone, 130389	41	-2.4	12.8	3.0	-13.7	0.5	1.1	-39
Nerstane, 130021	34	-0.3	1.4	2.0	-1.9	-0.3	-0.8	18
Petali Poll, 130326	56	-2.6	4.0	3.8	-3.5	1.9	0.1	-8
Roseville Park, 3253 (Hist)	56	2.6	-2.0	0.1	-6.6	-0.7	-1.0	75
Stockman Poll, 090853	41	0.9	1.2	-0.4	-8.4	-0.2	0.0	11
Yalgoo, 130261	42	-1.3	-1.8	0.1	9.9	0.0	0.7	-22

[^] W = Weaning (42 to 120 days); P = Post Weaning (210 to 300 days); Y = Yearling (300 to 400 days); H = Hogget (400 to 540 days); A = Adult (540 days and older).

(Hist) Historical Sires evaluated under AMSEA's R&D project to validate the system of linkage in MERINOSELECT that has operated over the past 15-20 years. These sires were generally widely used 15-20 years ago and were selected for the R&D program based on their high ASBV accuracies.

Understanding the results

Scored trait performance – Tables 4a, 4b, 4c, 4d

The following description of trait scores is a summary of the detailed word and diagrammatical description of these scores in Version 2 (2013) of the Visual Sheep Scores booklet that is available free from AWI or at www.merinosuperiorsires.com.au

A deviation from the average trait score for all progeny is reported as well as the percentage of the sire's progeny recorded for each trait.

■ Fleece rot:	The severity of fleece rot from 1 (no fleece rot), 2 and 3 (bands of bacterial staining but no crusting), and 4 and 5 (bands of crusty fleece rot).
■ Wool colour:	Greasy wool colour scored from 1 (whitest) to 5 (yellow).
■ Wool character:	Definition and variation of crimp between and along the staple scored from 1 (well defined and regular) to 5 (undefined and large variation).
■ Dust penetration:	Degree of dust penetration from 1 (only tip <6%) to 5 (71 to 100% of staple).
■ Staple weathering:	The deterioration due to light and water from 1 (least, <6% of staple) to 5 (most, 71 to 100%) reflect the depth and degree of deterioration.
■ Staple structure:	The size and diameter of each staple from 1 (<6mm) to 5 (>30 mm).
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■ Fibre pigmentation:	The percentage of dark fibres on any part of the sheep from 1 (0 pigmented fibres at any site) to 5 (71 to 100% pigmented fibres at one or more sites). This trait does not include random spot or recessive black.
■ Non-fibre pigmentation:	The percentage of pigmentation on the areas not shorn from 1 (0 pigmentation at any site) to 5 (71 to 100% pigmented area on one or more bare skin sites, and/or 71 to 100% of the total hoof area).
■ Recessive black: (Black)	Recessive black (black) is identified by relatively symmetrical markings on both sides of the face. There are two scores 1 (no recessive markings) and 5 (recessive markings). This trait does not include random spot or fibre pigmentation.
■ Random spot: (Spot)	Random spot (spot) is identified by rounded wool or hair spot/s, not symmetrical. There are two scores 1 (no spot/s) and 5 (spot/s). If both sides of the face or body are spotted the sheep should be scored as a recessive black.
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■ Face cover:	Wool cover on the face scored from 1 (open face) to 5 (fully covered face).
■ Feet/Legs:	Conformation of feet and legs scored from 1 (very straight) to 5 (very angulated).
■ Body wrinkle:	The degree of body wrinkle from 1 (no wrinkle) to 5 (extensive wrinkle).
■ Jaw:	The alignment of the lower jaw and its teeth relative to the top jaw from 1 (very well aligned) to 5 (heavily undershot or overshot).
■ Back/Shoulder:	Conformation of the back and shoulder from 1 (very square) to 5 (very dipped or high).
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■ Breech cover	Size of natural bare area around the breech from 1 (large) to 5 (no bare).
■ Crutch cover	Size of natural bare area in the pubic and groin from 1 (large) to 5 (no bare).
■ Breech wrinkle	Degree of wrinkle at the tail set and hind legs from 1 (nil) to 5 (extensive).
■ Dag	Degree of dag adhering to the breech and legs from 1 (nil) to 5 (extensive).
■ Urine	Degree of urine stained wool in the breech area, including the hind legs from 1 (nil) to 5 (extensive).

Table 4a. Visual trait assessments – Wool Quality

Visually assessed traits reported were scored at their latest assessment with the exception of pigmentation which was scored at marking (Spot updated on an ongoing basis) and breech traits recorded at marking time (or later in unmulesed flocks with the exception of Dag and Urine).

Traits are reported as a deviation (Dev) from the average trait score for all progeny. The percentage of a sire’s progeny assessed for each score is also reported. No adjustments are made to the data to improve the accuracy of the results as is the case with sire means or breeding values.

For the majority of breeder’s objectives a negative deviation would be considered favourable and the larger the deviation the better.

Breeders flock, Sire name	Wool Quality																							
	Fleece Rot						Wool Colour						Wool Character						Dust Penetration					
	Dev	1	2	3	4	5	Dev	1	2	3	4	5	Dev	1	2	3	4	5	Dev	1	2	3	4	5
Airlie, 120331	-0.2	50	15	11	11	13	0.2	20	33	41	6	0	-0.1	11	61	26	2	0	0.0	0	43	52	5	0
Alfoxtton, Ambassador 95-391 (Hist)	0.1	40	17	5	31	7	-0.3	33	45	19	3	0	-0.3	36	36	24	4	0	-0.1	2	48	48	2	0
Bocoble Poll, 110229	0.6	38	5	8	13	36	0.1	28	26	36	10	0	-0.1	23	38	36	3	0	0.1	3	33	59	5	0
Bogo, 111424	-0.1	44	22	9	11	14	0.3	19	25	47	9	0	0.1	3	61	33	3	0	0.0	6	33	61	0	0
Cressbrook, 130434	-0.1	46	17	12	10	15	-0.1	35	31	29	5	0	0.0	5	58	37	0	0	-0.1	4	44	50	2	0
Hazeldean, 004059	0.3	38	15	9	18	20	0.4	16	28	38	18	0	0.2	8	42	42	8	0	0.1	3	38	52	5	2
Karori, 110386	-0.2	48	14	19	5	14	-0.1	33	26	36	5	0	-0.5	38	45	17	0	0	0.0	0	50	40	10	0
Miramoonna, 130058	0.2	40	9	11	29	11	-0.2	34	31	31	4	0	0.1	5	66	20	9	0	0.0	6	37	51	6	0
Mumblebone, 130389	-0.3	49	17	12	15	7	-0.2	34	32	32	2	0	0.2	3	46	51	0	0	0.2	5	20	68	7	0
Nerstane, 130021	-0.5	59	12	9	18	2	-0.3	44	29	21	6	0	-0.1	21	47	29	3	0	-0.1	3	44	53	0	0
Petali Poll, 130326	-0.2	50	16	10	12	12	-0.2	30	41	23	6	0	0.0	7	57	36	0	0	-0.2	1	54	43	2	0
Roseville Park, 3253 (Hist)	0.8	16	20	16	21	27	0.7	9	23	43	21	4	0.7	2	21	59	18	0	0.1	0	38	57	5	0
Stockman Poll, 090853	0.1	41	17	7	20	15	0.0	24	34	37	5	0	0.2	7	44	49	0	0	0.2	0	29	63	8	0
Yalgoo, 130261	-0.6	58	23	5	12	2	-0.3	44	26	23	7	0	-0.5	40	42	18	0	0	0.0	0	49	47	4	0
Average performance	2.4	44	16	10	16	14	2.2	29	31	33	7	0	2.3	15	48	34	3	0	2.6	3	40	53	4	0

(Hist) Historical Sires evaluated under AMSEA’s R&D project to validate the system of linkage in MERINOSELECT that has operated over the past 15-20 years. These sires were generally widely used 15-20 years ago and were selected for the R&D program based on their high ASBV accuracies.

Table 4b. Visual trait assessments – Wool Quality and Pigmentation

Traits are reported as a deviation (Dev) from the average trait score for all progeny. The percentage of a sire’s progeny assessed for each score is also reported. No adjustments are made to the data to improve the accuracy of the results as is the case with sire means or breeding values.

For the majority of breeder’s objectives a negative deviation for wool quality traits would be considered favourable and the larger the deviation the better. Trait leaders for staple structure are not identified as the optimum varies for breeders and is often in the middle of the scored range.

Four pigmentation traits are reported. Fibre pigmentation and Non-fibre pigmentation are scored 1 to 5, however Recessive black and Random spot are scored 1 (no pigmentation of this type) or 5 (when the trait is expressed). Only the percentage scored 5 are reported for Recessive black and Random spot.

Breeders flock, Sire name	Wool Quality												Pigmentation - <i>Marking</i>													
	Staple Weathering						Staple Structure						Fibre pigmentation					Non-fibre pigmentation					Black	Spot		
	Dev	1	2	3	4	5	Dev	1	2	3	4	5	Dev	1	2	3	4	5	Dev	1	2	3	4	5	5	5
Airlie, 120331	0.0	0	43	28	22	7	-0.1	11	87	2	0	0	0.0	92	0	6	2	0	0.2	6	50	35	8	1	0	0
Alfoxtan, Ambassador 95-391 (Hist)	-0.2	3	40	40	12	5	0.0	16	67	17	0	0	-0.1	100	0	0	0	0	-0.5	39	41	20	0	0	0	0
Bocoble Poll, 110229	0.3	3	36	23	10	28	0.1	5	74	21	0	0	0.0	96	0	2	2	0	-0.1	24	41	26	7	2	0	0
Bogo, 111424	0.0	0	33	47	14	6	0.0	6	83	11	0	0	-0.1	100	0	0	0	0	0.1	19	38	27	14	2	0	0
Cressbrook, 130434	-0.1	2	38	42	6	12	0.0	4	88	8	0	0	-0.1	97	1	0	2	0	0.1	16	43	26	12	3	0	0
Hazeldean, 004059	0.2	0	32	40	10	18	0.1	8	80	10	2	0	-0.1	100	0	0	0	0	-0.6	51	33	11	3	2	0	0
Karori, 110386	0.0	0	38	43	9	10	-0.3	26	71	3	0	0	0.0	90	3	7	0	0	0.0	21	33	40	4	2	0	0
Miramoonna, 130058	-0.2	0	49	34	8	9	0.1	6	80	11	3	0	0.0	94	0	6	0	0	0.0	12	47	38	3	0	0	0
Mumblebone, 130389	-0.2	0	44	39	12	5	0.2	0	83	17	0	0	0.0	95	0	5	0	0	0.1	14	33	50	3	0	0	0
Nerstane, 130021	-0.1	0	32	53	12	3	0.0	11	74	15	0	0	0.2	82	3	12	3	0	0.0	18	32	47	3	0	0	0
Petali Poll, 130326	0.0	0	32	50	9	9	0.0	7	84	7	2	0	0.0	95	0	5	0	0	0.2	7	42	45	6	0	0	0
Roseville Park, 3253 (Hist)	0.4	1	20	36	27	16	0.1	3	86	11	0	0	0.1	90	0	8	0	2	0.3	0	46	46	7	1	0	0
Stockman Poll, 090853	0.2	0	32	44	4	20	-0.1	10	85	5	0	0	-0.1	98	0	2	0	0	-0.1	18	49	31	2	0	0	0
Yalgoo, 130261	-0.4	3	56	30	9	2	-0.1	16	77	7	0	0	0.3	79	2	17	0	2	0.4	0	29	69	2	0	0	0
Average performance	2.9	1	38	39	12	10	2.0	9	80	10	1	0	1.1	93	1	5	1	0	2.3	17	40	37	5	1		

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Table 4c. Visual trait assessments – Conformation

Traits are reported as a deviation (Dev) from the average trait score for all progeny. The percentage of a sire’s progeny assessed for each score is also reported. No adjustments are made to the data to improve the accuracy of the results as is the case with sire means or breeding values.

For the majority of breeder’s objectives a negative deviation would be considered favourable and the larger the deviation the better. Trait leaders for face cover are not identified as the optimum varies for breeders and is often in the middle of the scored range.

Breeders flock, Sire name	Conformation																													
	Jaw					Legs and Feet					Shoulder and Back					Face Cover					Body Wrinkle									
	Dev	1	2	3	4	5	Dev	1	2	3	4	5	Dev	1	2	3	4	5	Dev	1	2	3	4	5	Dev	1	2	3	4	5
Airlie, 120331	0.1	89	0	11	0	0	0.0	52	33	15	0	0	0.1	77	18	5	0	0	0.1	2	26	61	11	0	0.2	0	4	64	27	5
Alfoxtan, Ambassador 95-391 (Hist)	0.1	90	0	10	0	0	0.1	52	32	8	8	0	0.2	72	12	16	0	0	0.3	2	19	60	17	2	0.5	0	4	44	32	20
Bocoble Poll, 110229	0.1	90	0	8	2	0	0.4	52	4	33	11	0	0.2	70	19	11	0	0	0.4	0	15	59	23	3	0.0	0	11	63	22	4
Bogo, 111424	-0.1	100	0	0	0	0	0.2	47	32	16	5	0	-0.1	84	16	0	0	0	0.1	3	25	61	11	0	-0.3	0	37	47	11	5
Cressbrook, 130434	0.0	92	0	8	0	0	-0.1	63	27	7	3	0	0.0	83	13	4	0	0	-0.1	0	42	56	2	0	0.1	0	23	40	23	14
Hazeldean, 004059	-0.1	98	0	2	0	0	0.1	57	19	24	0	0	0.3	62	24	14	0	0	-0.1	0	48	48	2	2	0.5	0	4	38	48	10
Karori, 110386	-0.1	98	0	2	0	0	-0.3	81	5	14	0	0	-0.2	100	0	0	0	0	-0.3	0	62	36	2	0	-0.3	0	29	62	9	0
Miramoonna, 130058	-0.1	100	0	0	0	0	-0.1	68	11	21	0	0	-0.2	100	0	0	0	0	0.1	0	26	69	2	3	-0.6	0	42	58	0	0
Mumblebone, 130389	0.0	93	0	7	0	0	-0.2	65	30	5	0	0	-0.1	95	0	5	0	0	-0.2	0	54	46	0	0	-0.7	0	60	40	0	0
Nerstane, 130021	-0.1	97	0	3	0	0	-0.3	81	7	12	0	0	-0.1	88	12	0	0	0	0.0	0	41	50	9	0	0.2	0	19	38	38	5
Petali Poll, 130326	0.0	93	0	7	0	0	0.0	69	10	15	6	0	-0.1	87	10	3	0	0	-0.4	2	64	34	0	0	-0.2	0	21	64	13	2
Roseville Park, 3253 (Hist)	0.0	93	0	7	0	0	0.2	56	17	20	5	2	0.1	76	17	7	0	0	0.3	0	29	43	25	3	0.5	0	3	39	46	12
Stockman Poll, 090853	0.0	93	0	7	0	0	0.1	57	26	13	4	0	-0.1	87	13	0	0	0	0.0	0	39	56	5	0	-0.1	0	26	52	17	5
Yalgoo, 130261	0.0	91	2	7	0	0	-0.2	65	30	5	0	0	0.0	80	15	5	0	0	-0.2	0	51	44	5	0	0.3	0	5	50	45	0
Average performance	1.1	94	0	6	0	0	1.6	62	20	15	3	0	1.2	83	12	5	0	0	2.7	0	39	52	8	1	3.1	0	21	50	24	5

(Hist) Historical Sires evaluated under AMSEA’s R&D project to validate the system of linkage in MERINOSELECT that has operated over the past 15-20 years. These sires were generally widely used 15-20 years ago and were selected for the R&D program based on their high ASBV accuracies.

Table 4d. Visual trait assessments – Breech

Traits are reported as a deviation (Dev) from the average trait score for all progeny. The percentage of a sire’s progeny assessed for each score is also reported. No adjustments are made to the data to improve the accuracy of the results as is the case with sire means or breeding values.

For the majority of breeder’s objectives a negative deviation would be considered favourable and the larger the deviation the better.

Breeders flock, Sire name	Breech Visual Traits																													
	Breech Cover						Crutch Cover					Breech Wrinkle					Urine					Dag								
	Yearling											Yearling										Yearling								
	Dev	1	2	3	4	5	Dev	1	2	3	4	5	Dev	1	2	3	4	5	Dev	1	2	3	4	5	Dev	1	2	3	4	5
Airlie, 120331	0.2	0	0	5	10	85							0.0	0	10	55	30	5							0.2	38	38	12	12	0
Alfoxton, Ambassador 95-391 (Hist)	0.0	0	0	0	36	64							0.1	0	14	43	36	7							0.0	58	15	19	8	0
Bocoble Poll, 110229	0.2	0	0	0	15	85							0.1	0	7	54	31	8							0.2	41	33	19	3	4
Bogo, 111424	0.0	0	0	0	39	61							-0.3	0	28	50	22	0							-0.1	68	5	16	11	0
Cressbrook, 130434	-0.3	0	0	0	65	35							0.0	0	23	38	31	8							-0.6	86	14	0	0	0
Hazeldean, 004059	-0.1	0	0	6	33	61							0.5	0	6	44	22	28							0.4	36	27	23	14	0
Karori, 110386	0.1	0	0	0	32	68							0.0	0	9	64	23	4							-0.1	45	40	15	0	0
Miramoonna, 130058	-0.1	0	0	0	47	53							-0.3	0	20	67	13	0							0.7	37	16	16	26	5
Mumblebone, 130389	-0.1	0	0	0	52	48							-0.3	0	29	48	23	0							-0.5	80	15	0	5	0
Nerstane, 130021	-0.1	0	0	7	40	53							0.0	0	20	40	33	7							-0.2	56	31	13	0	0
Petali Poll, 130326	-0.1	0	0	0	44	56							-0.2	0	22	50	28	0							0.2	38	36	15	8	3
Roseville Park, 3253 (Hist)	0.3	0	0	0	12	88							0.7	0	0	25	50	25							0.2	46	24	20	7	3
Stockman Poll, 090853	0.0	0	0	5	32	63							0.0	0	16	47	32	5							-0.3	61	30	5	4	0
Yalgoo, 130261	0.0	0	0	0	43	57							-0.3	0	18	65	17	0							0.0	45	40	5	10	0
Average performance	4.6	0	0	1	36	63							3.3	0	16	49	28	7							1.8	53	26	13	8	0

(Hist) Historical Sires evaluated under AMSEA’s R&D project to validate the system of linkage in MERINOSELECT that has operated over the past 15-20 years. These sires were generally widely used 15-20 years ago and were selected for the R&D program based on their high ASBV accuracies.

Table 5. Sire Means for Measured Traits

Sire means are the average performance of all the progeny of a sire adjusted for all available information on sex, birth type, rear type, age of dam, age of measurement and management group, in order to improve the accuracy.

No account is made for trait heritability and genetic correlations between traits that can improve the breeding value accuracy, as is the case in Tables 1, 2 and 3.

The highest performing sires for each trait (trait leaders) are highlighted by shading. Trait leaders for fibre curvature are not identified as the optimum varies for breeders and is often in the middle of the measured range.

The **Progeny group average** listed at the bottom of the table is the actual mean of the progeny group.

Breeders flock, Sire name	Number of progeny	Sire means for measured traits (deviations from the site mean)												
		GFW	CFW	FD	FDCV	Curv	SL	SS	WT				FAT	EMD
		kg	kg	µm	%	deg/mm	mm	N/ktex	kg				mm	mm
	Y [^]	Y	Y	Y	Y	Y	Y	Y	W	P	Y	H	H	H
Airlie, 120331	46	0.1	0.1	-0.2	-0.6	1.7	-1.9	-1.6	0.1	-0.3	0.0	-1.1	-0.2	-0.7
Alfoxtton, Ambassador 95-391 (Hist)	42	-0.3	-0.2	-0.2	1.9	8.5	-5.3	2.5	-0.5	-1.9	-1.6	-2.0	0.0	-0.1
Bocoble Poll, 110229	39	-0.3	-0.3	-0.7	2.1	8.5	-4.5	-0.6	-1.5	-2.8	-3.6	-2.8	-0.2	0.5
Bogo, 111424	36	0.0	0.0	-0.5	0.8	2.3	-1.7	-1.9	0.9	1.4	2.1	3.3	0.0	0.4
Cressbrook, 130434	54	-0.1	0.0	0.2	-0.4	-3.2	-1.8	3.2	0.0	0.3	-0.8	-1.6	0.0	1.6
Hazeldean, 004059	40	0.3	0.2	0.0	0.4	-4.0	1.2	-3.4	1.5	1.3	1.9	1.9	-0.1	-1.9
Karori, 110386	43	-0.1	-0.1	-0.4	-1.3	6.9	1.5	-2.2	-1.0	-0.7	-1.4	-1.4	0.3	0.5
Miramoonna, 130058	35	0.0	0.0	0.4	-0.3	-2.3	4.6	-1.1	-0.2	0.2	0.7	1.2	0.1	-0.4
Mumblebone, 130389	41	0.2	0.2	1.0	-1.9	-10.1	7.8	0.2	0.5	1.8	2.1	0.4	0.1	0.7
Nerstane, 130021	34	0.2	0.2	0.3	-0.4	-0.7	0.6	1.3	1.3	0.9	0.6	-0.7	0.0	-0.5
Petali Poll, 130326	56	0.0	0.0	0.5	-1.9	-3.4	1.5	1.3	0.3	1.7	1.8	2.6	0.4	-0.2
Roseville Park, 3253 (Hist)	56	0.2	0.1	0.6	1.8	-4.0	-2.4	1.4	-0.4	-1.3	-2.0	-2.0	-0.1	-0.5
Stockman Poll, 090853	41	-0.1	-0.1	-0.2	0.7	-7.5	0.2	1.0	-1.4	-0.9	-0.5	1.6	0.0	0.0
Yalgoo, 130261	42	-0.2	-0.1	-0.7	-0.9	7.3	0.1	-0.2	0.5	0.4	0.7	0.7	-0.1	0.5
Progeny group average	56	2.2	1.7	14.5	21.1	101.8	67.8	39.0	18.9	24.8	30.6	42.7	2.4	22.5
		kg	kg	µm	%	deg/mm	mm	N/ktex	kg				mm	mm

[^] W = Weaning (42 to 120 days); P = Post Weaning (210 to 300 days); Y = Yearling (300 to 400 days); H = Hogget (400 to 540 days); A = Adult (540 days and older)

(Hist) Historical Sires evaluated under AMSEA’s R&D project to validate the system of linkage in MERINOSELECT that has operated over the past 15-20 years. These sires were generally widely used 15-20 years ago and were selected for the R&D program based on their high ASBV accuracies.

Understanding the results

New England

2015 Drop

Yearling Assessment

Including Hogget Carcase Scanning and Worm Egg Counts

