

# MerinoLink 2016 Drop

## Overview of Professional and AMSEA Class

June 2025

### Raw Data and Index

#### Introduction

The MerinoLink site was hosted by Moses and Son, Bluechip Livestock and MerinoLink at “The Vale”, Temora. The site was one of five sites participating in the AWI-funded Merino Lifetime Productivity (MLP) Project, facilitated by the Australian Merino Sire Evaluation Association.

#### 2016 Drop Key Assessments and Dates

A total of 13 industry sires were mated to a ewe base comprising five ewe sources to produce the 2016 MerinoLink ewes. The bulk of the ewe base was sourced from a previous sire evaluation, with ewes supplemented from three stud sources, one of which also provided commercial ewes.

The ewes were born late May to early June in 2016, in extremely wet conditions, resulting in a delayed weaning in October. Extremely dry conditions were experienced at Temora for 2018 and 2019, with the ewes receiving supplementary feed of grain and hay across these two years. Grazing crops were incorporated wherever possible. From 2020 to 2022, above-average rainfall was received, and significant feed supplementation was not required.

Event	Date	Age Stage	Lactation Status	Age and Wool Growth
Birth	May 2016			
Yearling Assessment	March 2017	Y	Dry	10 months, 10 months wool
Hogget Classing Only	October 2017	H	Dry	16 months, 6 months wool
<i>First Joining</i>	<i>Dec 2017</i>		Dry	
Adult 2 Assessment	March 2018	A2	Pregnant	22 months, 12 months wool
Adult 3	March 2019	A3	6 months post lambs weaned	3 years, 12 months wool
Adult 33	October 2019	A33	Post lambs weaned	3.5 years, 7 months wool
Adult 4	October 2020	A4	Post lambs weaned	4.5 years, 12 months wool
Adult 5	October 2021	A5	Post lambs weaned	5.5 years, 12 months wool
Adult 6	October 2022	A6	Post lambs weaned	6.5 years, 12 months wool

Note that the classing results from the Yearling age stage could not be used. The site classed the ewes six months after the Yearling class at the Hogget age stage, which is reported here.

As per the MLP protocol, the 2016 drop ewes were classed annually at each assessment for seven years using two classing approaches – the AMSEA class (undertaken initially by Ben Patrick and then Jim Meckiff) and the Professional class (undertaken by Craig Wilson). The AMSEA Grade and Professional Classer Grade used the site’s nominated breeding objective to guide classing.

**Site Breeding Objective:** Selection is based on the animal performing well for growth (meeting the minimum body weight required for joining at 18 months of age) and being structurally sound, with good wool quality traits, including long, soft-handling wool and increased fleece weight.

#### Classing Methodology

##### Professional Class Process – Craig Wilson

- Drop randomly presented, no measured performance is provided, animals classed to site breeding objective.
- Classed 5 ways with reason for class recorded
  - Tops – Top 1% (Equivalent to sire selection or ET ewe)
  - Studs – Top 2–10% (Equivalent to special stud ewe selection)
  - 2nds – Top 10–70% (Equivalent to classed in ewe)
  - Sales – Bottom 10–30% (Equivalent to sale ewe line)
  - Culls – Bottom 10% (Equivalent to cull line)

## AMSEA Grade Process – Ben Patrick (Yearling – Adult 4), Jim Meckiff (Adult 5 – Adult 6)

- Drop randomly presented, no data provided, animals classed to the site breeding objective
- Classed three ways: Top 25%, Flock 50%, Cull 25%

### Glossary

Raw data is presented as lifetime performance. The ewes were shorn seven times (twice at A3 stage) and joined five times.

- **Count or N** is the number of ewes in each grade that have full lifetime records used for reporting.
- **Average CFW for ewes present at all 7 shearings** = clean fleece weight (kg)
- **Average for ewes present at all 7 assessments** **FD** = fibre diameter (um), **SL** = staple length (mm), **SS** = staple strength (N/ktex), **FAT** = fat (mm), **EMD** = eye muscle depth (mm), **WT** = pre-joining weight (animals with 5 pre-joining records (kg)
- **WR** = raw number of lambs weaned (for ewes that were joined 5 times)
- **MP+** = within flock selection index, selects for sheep for a production system that has a balance of wool and surplus Merino sheep sales with balanced improvement of fleece weight and fibre diameter. The reported value is the final index derived from all measured data.  
**Visual Scores:** **Dag**=Dag, **Bdwr**=body wrinkle, **Char**=wool character, **Col**=wool colour, **Flrot**=fleece rot, **Dust**=dust penetration, **Back**=shoulder/back, **Legs**=Legs/feet, **Face**=face cover, **Spig**=non fibre pigmentation, **Jaw**=jaw structure.
- When referring to classing group, the words “**class**” and “**grade**” have been used interchangeably.

Raw data has also been expressed as **deviations from the average, with CFW, WT, and WR presented as per cent (%) deviations from the lifetime average, and all other traits in their units of measurement (denoted as the trait name plus “D”)**.

Sire ID	Sire Name	Sire Abbreviation
505050–2013–130296	Bella Lana, 130296	BEL LANA 130296
504800–2014–145112	Boyanga, 145112	BOYANGA 145112
503543–2012–120014	Glen Donald, 120014	GLEN DON 120014
505069–2012–120012	Greendale, 120012	GREEN 120012
600815–2009–090918	Leahcim Poll, 090918	LEAHCIM 090918
503855–2010–100R56	One Oak No. 2, R56	ONE OAK R56
601090–2008–082893	Pastora Poll, 082893	PASTORA 082893
600001–2012–120020	Poll Boonoke, 120020	PBOONOKE120020
601442–2014–140632	Pooginook Poll, 140632	PGK 140632
504166–2014–140611	Roseville Park, 140611	RP 140611
609251–2014–140477	Trigger Vale Poll, 140477	TRIGGER 140477
503358–2014–140754	Wattle Dale, 140754	WATTLE 140754
502250–2013–130149	Wurrook, 130149	WURROOK 130149

### Disclaimer

This publication contains raw data that has not been adjusted for factors that may improve its accuracy. It should only be used as a general aid and is not a substitute for specific advice. To the extent permitted by law, AWI and AMSEA exclude all liability for loss or damage arising from the use of the information in this publication. © 2025 Australian Wool Innovation Limited and Australian Merino Sire Evaluation Association Incorporated. All rights reserved. **Note that no statistical analysis has been completed.**

## Overview of Results Presented

The following classer results capture the performance by grade of the 2016 drop MerinoLink ewes based on the Professional and AMSEA classing approaches.

The results for the Professional and AMSEA grade are initially packaged at the drop level and show average lifetime performance of animals based on their classer grades at each stage of classer assessment. Following the average performance tables, results show how the animals change in grades over time.

An appended report (page 16) evaluates ewe long-term productivity based on their first two AMSEA and Professional classer grades. By analysing the lifetime performance of animals designated as either 'retained (Top/Flock)' or 'removed (Cull)' during early assessments, the impact of early visual selection over the lifetime of the flock can be considered.

When comparing classer versus index selection, we recognise that some animals are allocated to lower classer grades based on a fault rather than their observed fleece or carcase performance. We also recognise that a classer is evaluating considerably more traits than the number of traits used to generate an index.

### Factors to Consider:

- Mixed ewe base will have an impact on classing
- Having classing starting at Hogget means we can't compare with an early class
- Change in classer has impacted results
- The change in shearing date means that wool length has influenced classing

### Best time to do an early Class:

- Professional – at the second assessment prior to first lamb
- AMSEA – at either the second or third assessment

### Classers are selecting for:

- Professional – selecting for CFW, WT, and FD, higher wrinkle, and at times a focus on better wool colour
- AMSEA – selecting for CFW, SL, SS, WT, no consistent visual trait trends, early selecting for more wrinkle, then better wool colour and character (but not consistently)

### Impact of ewe's reproduction status on classing:

- Professional – has not consistently impacted results
- AMSEA – has not consistently impacted results

### Change over time:

- Results confounded by classing starting at Hogget
- Professional – sitting around 50% repeatable across all classings
- AMSEA – higher than 50% repeatable between classings

<p>AMSEA Class – Hogget to Adult 2 – Three Way Grade</p> <ul style="list-style-type: none"> <li>• 74% Stay in the same grade</li> <li>• 100% Stay in the same grade, or change by one grade</li> </ul> <p>AMSEA Class – Adult 2 to Adult 3 - Three Way Grade</p> <ul style="list-style-type: none"> <li>• 60% Stay in the same grade</li> <li>• 98% Stay in the same grade, or change by one grade</li> <li>• 2% of animals change by two grades</li> </ul>	<p>Professional Class – Hogget to Adult 2 - Five Way Grade</p> <ul style="list-style-type: none"> <li>• 58% Stay in the same grade</li> <li>• 97% Stay in the same grade, or change by one grade</li> <li>• 3% of animals change by two grades</li> </ul> <p>Professional Class – Adult 2 to Adult 3 - Five Way Grade</p> <ul style="list-style-type: none"> <li>• 57% Stay in the same grade</li> <li>• 98% Stay in the same grade, or change by one grade</li> <li>• 2% of animals change by two grades</li> </ul>
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## Professional Classer Grade Results

MerinoLink 2016 Drop – Professional Class – Craig Wilson Measured LIFETIME Performance by Grade (Drop Level) – Average Lifetime CFW, FD, SL, SS, WT, EMD, WR, A6 MP+ Index - followed by Average Lifetime Scored Dag, Bdwr, Char, Col, Flrot, Dust, Legs, Back, Face, Spig, Jaw

<i>Age: 16m Wool: 6m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Hogget Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	1	4.6	18.2	93	37	85	3.7	26	3.0	110	122	0.1	0.9	3.7	118	-1.0	-0.6	56	11.0
Stud	39	4.2	17.9	92	35	74	4.4	26	4.9	106	111	-0.2	-0.1	0.9	103	-0.3	0.0	92	6.6
Seconds	133	3.8	18.0	92	34	72	4.9	27	5.2	99	100	-0.1	-0.1	0.1	100	0.2	0.1	97	0.0
Sale	83	3.6	18.4	92	33	71	4.6	26	5.8	96	95	0.3	-0.1	-0.7	99	-0.1	-0.1	109	-2.9
Cull	10	3.6	17.9	94	34	69	4.5	26	5.5	96	95	-0.2	2.5	0.1	95	-0.2	-0.6	103	-2.8
<b>Total/Ave</b>	<b>266</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>											<i>27</i>	<i>0.3</i>	<i>-1.6</i>	<i>3.6</i>	<i>23</i>	<i>-0.8</i>	<i>0.0</i>	<i>-47</i>	<i>14</i>

<i>Age: 16m Wool: 6m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Hogget Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	1	1.4	3.8	2.3	1.1	1.6	2.9	2.0	1.3	2.4	2.0	1.0
Stud	39	1.5	3.0	2.1	1.7	1.3	2.8	1.7	1.5	2.8	1.8	1.1
Seconds	133	1.5	2.8	2.3	1.8	1.3	2.9	1.6	1.5	2.7	1.8	1.1
Sale	83	1.4	2.5	2.6	2.0	1.2	3.1	1.5	1.6	2.7	1.8	1.1
Cull	10	1.5	2.5	2.6	1.9	1.3	3.0	2.0	1.5	2.6	1.8	1.3
<b>Total/Ave</b>	<b>266</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>-0.1</i>	<i>1.3</i>	<i>-0.3</i>	<i>-0.7</i>	<i>0.3</i>	<i>-0.2</i>	<i>0.0</i>	<i>-0.2</i>	<i>-0.2</i>	<i>0.2</i>	<i>-0.3</i>

<i>Age: 22m Wool: 12m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 2 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	1	4.6	18.2	93	37	85	3.7	26	3.0	110	122	0.1	0.9	3.7	118	-1.0	-0.6	56	11.0
Stud	44	4.3	17.7	90	36	74	4.5	26	5.3	111	114	-0.4	-1.7	1.9	102	-0.2	-0.3	99	12.0
Seconds	125	3.8	18.1	92	34	73	4.8	27	5.4	100	101	0.0	0.2	0.0	101	0.1	0.2	100	0.8
Sale	82	3.6	18.5	92	33	71	4.6	26	5.4	93	94	0.3	0.2	-0.7	98	-0.1	0.0	101	-6.4
Cull	14	3.2	17.6	94	32	70	5.2	26	5.3	91	86	-0.5	2.0	-1.6	97	0.4	-0.8	99	-8.2
<b>Total/Ave</b>	<b>266</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>											<i>36</i>	<i>0.6</i>	<i>-1.2</i>	<i>5.3</i>	<i>21</i>	<i>-1.5</i>	<i>0.2</i>	<i>-43</i>	<i>19</i>

<i>Age: 22m Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 2 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	1	1.4	3.8	2.3	1.1	1.6	2.9	2.0	1.3	2.4	2.0	1.0
Stud	44	1.5	3.1	2.1	1.6	1.2	2.8	1.5	1.5	2.8	1.6	1.1
Seconds	125	1.5	2.7	2.4	1.8	1.3	2.9	1.6	1.5	2.7	1.9	1.1
Sale	82	1.4	2.5	2.5	2.0	1.2	3.1	1.6	1.5	2.7	1.8	1.0
Cull	14	1.4	2.3	2.4	1.9	1.3	3.2	1.9	1.5	2.4	1.7	1.4
Total/Ave	<b>266</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>0.0</i>	<i>1.5</i>	<i>-0.1</i>	<i>-0.8</i>	<i>0.3</i>	<i>-0.4</i>	<i>0.1</i>	<i>-0.2</i>	<i>0.1</i>	<i>0.3</i>	<i>-0.4</i>

<i>Age: 2.9y Wool: 12m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 3 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top																			
Stud	42	1.5	3.2	2.3	1.7	1.3	2.8	1.6	1.6	2.8	116	-0.3	-1.1	1.8	103	-0.3	-0.5	91	12.3
Seconds	116	1.5	2.8	2.4	1.7	1.3	2.9	1.6	1.5	2.8	103	0.0	-0.7	0.5	101	0.0	0.2	101	2.5
Sale	102	1.4	2.4	2.4	2.0	1.3	3.1	1.6	1.5	2.6	91	0.1	1.3	-1.2	98	0.1	0.1	103	-7.2
Cull	6	1.4	2.5	2.1	1.5	1.4	3.0	1.7	1.5	2.4	85	-0.4	0.4	-2.3	92	0.3	-1.6	90	-12.1
Total/Ave	<b>266</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>											<i>30</i>	<i>0.1</i>	<i>-1.5</i>	<i>4.2</i>	<i>11</i>	<i>-0.6</i>	<i>1.2</i>	<i>1</i>	<i>24</i>

<i>Age: 2.9y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 3 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top												
Stud	42	1.5	3.2	2.3	1.7	1.3	2.8	1.6	1.6	2.8	1.8	1.1
Seconds	116	1.5	2.8	2.4	1.7	1.3	2.9	1.6	1.5	2.8	1.8	1.1
Sale	102	1.4	2.4	2.4	2.0	1.3	3.1	1.6	1.5	2.6	1.8	1.0
Cull	6	1.4	2.5	2.1	1.5	1.4	3.0	1.7	1.5	2.4	2.3	1.0
Total/Ave	<b>266</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>0.1</i>	<i>0.7</i>	<i>0.2</i>	<i>0.2</i>	<i>-0.1</i>	<i>-0.2</i>	<i>-0.1</i>	<i>0.1</i>	<i>0.4</i>	<i>-0.5</i>	<i>0.1</i>

<i>Age: 3.4y Wool: 7m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 32 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	5	4.1	17.1	93	35	74	4.2	25	6.6	116	109	-1.0	1.4	1.5	103	-0.5	-1.6	123	17.3
Stud	50	4.3	17.9	92	35	74	4.5	27	4.7	106	112	-0.2	-0.1	1.5	103	-0.2	0.1	89	7.0
Seconds	124	3.8	18.3	93	34	72	4.8	27	5.1	98	100	0.2	0.7	0.0	101	0.1	0.3	95	-1.0
Sale	67	3.4	18.2	90	32	70	4.7	26	6.0	93	90	0.1	-2.0	-1.5	97	0.0	-0.1	111	-6.0
Cull	16	3.6	17.5	93	34	70	4.7	26	5.9	101	96	-0.6	1.3	0.6	97	-0.1	-0.9	110	2.5
<b>Total/Ave</b>	<b>262</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>											<i>13</i>	<i>-0.3</i>	<i>0.2</i>	<i>0.8</i>	<i>6</i>	<i>-0.5</i>	<i>-0.7</i>	<i>14</i>	<i>15</i>

<i>Age: 3.4y Wool: 7m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 32 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	5	1.7	3.1	2.0	1.8	1.1	2.7	1.6	1.5	2.8	2.0	1.0
Stud	50	1.6	3.1	2.1	1.8	1.3	2.8	1.6	1.6	2.8	1.8	1.1
Seconds	124	1.4	2.7	2.5	1.8	1.3	3.0	1.6	1.5	2.7	1.8	1.0
Sale	67	1.4	2.4	2.5	1.8	1.2	3.1	1.6	1.5	2.6	1.8	1.1
Cull	16	1.5	2.6	2.3	1.8	1.4	3.0	1.8	1.9	2.7	1.4	1.6
<b>Total/Ave</b>	<b>262</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>0.2</i>	<i>0.5</i>	<i>-0.3</i>	<i>0.0</i>	<i>-0.3</i>	<i>-0.3</i>	<i>-0.3</i>	<i>-0.4</i>	<i>0.0</i>	<i>0.6</i>	<i>-0.6</i>

<i>Age: 4.5y Wool: 12m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 4 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top																			
Stud	50	4.2	17.8	91	35	74	4.6	26	4.2	106	112	-0.3	-1.4	1.1	102	-0.1	-0.2	79	6.7
Seconds	121	3.8	18.2	93	34	73	4.7	27	5.6	100	102	0.1	0.9	0.1	101	0.0	0.2	104	1.3
Sale	67	3.5	18.5	92	34	71	4.8	26	5.9	93	92	0.4	0.2	-0.3	99	0.1	-0.1	110	-6.2
Cull	28	3.4	17.4	90	32	69	4.5	26	5.1	96	91	-0.7	-2.0	-2.1	96	-0.2	-0.5	96	-2.6
<b>Total/Ave</b>	<b>266</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>											<i>21</i>	<i>0.4</i>	<i>0.6</i>	<i>3.2</i>	<i>6</i>	<i>0.1</i>	<i>0.3</i>	<i>-16</i>	<i>9</i>

<i>Age: 4.5y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 4 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top												
Stud	50	1.5	3.2	2.2	1.7	1.4	2.8	1.6	1.6	2.9	1.7	1.0
Seconds	121	1.5	2.7	2.4	1.8	1.3	3.0	1.6	1.5	2.7	1.8	1.1
Sale	67	1.4	2.4	2.5	2.0	1.2	3.1	1.7	1.5	2.6	1.8	1.1
Cull	28	1.5	2.7	2.4	1.8	1.3	3.1	1.7	1.8	2.7	2.0	1.2
Total/Ave	<b>266</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		-0.1	-0.4	0.2	0.2	-0.1	0.3	0.1	0.2	-0.2	0.3	0.2

<i>Age: 5.5y Wool: 12m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 5 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	1	4.6	18.2	93	37	85	3.7	26	3.0	110	122	0.1	0.9	3.7	118	-1.0	-0.6	56	11.0
Stud	52	4.3	18.0	92	35	75	4.5	26	4.5	107	114	-0.1	0.3	1.6	103	-0.2	-0.2	85	8.2
Seconds	106	3.8	18.1	92	34	73	4.8	27	5.5	100	100	0.0	0.6	0.3	101	0.1	0.2	103	0.9
Sale	77	3.4	18.1	91	32	71	4.9	27	5.7	93	91	0.0	-0.5	-1.4	99	0.1	0.3	107	-6.2
Cull	29	3.7	18.3	91	33	68	4.4	25	5.5	97	99	0.2	-1.1	-0.6	94	-0.3	-1.1	103	-2.1
Total/Ave	<b>265</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>		23	-0.1	2.0	4.3	24	-0.7	0.5	-47	13									

<i>Age: 5.5y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 5 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	1	1.4	3.8	2.3	1.1	1.6	2.9	2.0	1.3	2.4	2.0	1.0
Stud	52	1.5	3.1	2.2	1.7	1.3	2.8	1.6	1.6	2.8	1.7	1.0
Seconds	106	1.5	2.7	2.4	1.8	1.3	3.0	1.5	1.5	2.7	1.8	1.0
Sale	77	1.4	2.4	2.5	2.0	1.2	3.1	1.7	1.5	2.6	1.9	1.1
Cull	29	1.5	2.8	2.5	2.0	1.4	2.9	1.6	1.7	2.7	1.9	1.3
Total/Ave	<b>265</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		-0.1	1.0	-0.2	-0.9	0.2	-0.1	0.4	-0.4	-0.2	0.1	-0.3

<i>Age: 6.5y Wool: 12m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 6 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	2	4.5	18.4	96	38	73	3.8	27	6.0	120	118	0.3	3.7	3.8	102	-0.9	1.0	112	21.2
Stud	43	4.2	17.9	93	35	73	4.5	27	5.4	109	110	-0.2	1.3	1.0	101	-0.2	0.1	101	9.7
Seconds	124	3.8	18.1	92	34	73	4.8	26	5.1	98	100	0.0	-0.1	0.0	101	0.1	-0.1	96	-1.0
Sale	82	3.6	18.3	91	33	71	4.8	27	5.6	95	94	0.2	-0.5	-0.5	98	0.1	0.2	104	-4.4
Cull	13	3.6	17.3	92	33	73	4.8	26	5.8	101	95	-0.9	0.3	-0.5	101	0.1	-0.6	108	2.2
<b>Total/Ave</b>	<b>264</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>											<i>23</i>	<i>1.1</i>	<i>3.5</i>	<i>4.4</i>	<i>0</i>	<i>-0.9</i>	<i>1.5</i>	<i>4</i>	<i>19</i>

<i>Age: 6.5y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 6 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	2	1.8	3.6	1.9	1.5	1.0	3.0	1.4	1.9	2.7	1.5	1.0
Stud	43	1.5	3.1	2.3	1.6	1.3	2.8	1.6	1.5	2.8	1.6	1.0
Seconds	124	1.5	2.7	2.4	1.8	1.3	3.0	1.5	1.5	2.7	1.8	1.1
Sale	82	1.4	2.5	2.5	2.0	1.3	3.0	1.7	1.5	2.7	1.9	1.1
Cull	13	1.5	2.6	2.2	1.9	1.5	3.1	1.9	1.8	2.6	2.0	1.2
<b>Total/Ave</b>	<b>264</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>0.3</i>	<i>1.0</i>	<i>-0.4</i>	<i>-0.4</i>	<i>-0.5</i>	<i>-0.1</i>	<i>-0.5</i>	<i>0.1</i>	<i>0.1</i>	<i>-0.5</i>	<i>-0.2</i>

MerinoLink 2016 Drop – Professional Grade Change Between Grade & Next Grade – Wilson

		Adult 2					
	Grade	Top	Stud	2nd	Sale	Cull	Total
Hogget	Top	1					1
	Stud		20	15	4		39
	2nd		21	83	28	1	133
	Sale		3	26	46	8	83
	Cull			1	4	5	10
	<b>Total</b>	<b>1</b>	<b>44</b>	<b>125</b>	<b>82</b>	<b>14</b>	<b>266</b>
58% stayed the same							
		Adult 3					
	Grade	Top	Stud	2nd	Sale	Cull	Total
Adult 2	Top		1				1
	Stud		23	20	1		44
	2nd		14	72	38	1	125
	Sale		3	24	53	2	82
	Cull			1	10	3	14
	<b>Total</b>	<b>42</b>	<b>116</b>	<b>102</b>	<b>6</b>	<b>266</b>	
57% stayed the same							
		Adult 33					
	Grade	Top	Stud	2nd	Sale	Cull	Total
Adult 3	Top						0
	Stud	4	18	13	2	3	40
	2nd	1	27	67	17	4	116
	Sale		5	41	46	8	100
	Cull			3	2	1	6
	<b>Total</b>	<b>5</b>	<b>50</b>	<b>124</b>	<b>67</b>	<b>16</b>	<b>262</b>
50% stayed the same							
		Adult 4					
	Grade	Top	Stud	2nd	Sale	Cull	Total
Adult 33	Top		1	4			5
	Stud		21	22	4	3	50
	2nd		21	65	28	10	124
	Sale		2	25	31	9	67
	Cull		3	4	3	6	16
	<b>Total</b>	<b>48</b>	<b>120</b>	<b>66</b>	<b>28</b>	<b>262</b>	
47% stayed the same							
		Adult 5					
	Grade	Top	Stud	2nd	Sale	Cull	Total
Adult 4	Top						0
	Stud	1	22	21	4	1	49
	2nd		26	63	24	8	121
	Sale		3	15	37	12	67
	Cull		1	7	12	8	28
	<b>Total</b>	<b>1</b>	<b>52</b>	<b>106</b>	<b>77</b>	<b>29</b>	<b>265</b>
49% stayed the same							

		Adult 6					
	Grade	Top	Stud	2nd	Sale	Cull	Total
Adult 5	Top		1				1
	Stud	2	25	21	3	1	52
	2nd		14	61	26	4	105
	Sale		1	37	34	4	76
	Cull		2	4	19	4	29
	<b>Total</b>	<b>2</b>	<b>43</b>	<b>123</b>	<b>82</b>	<b>13</b>	<b>263</b>
47% stayed the same							

MerinoLink 2016 Drop – Professional Grade Change Between each Grade and Adult 6 Grade – Wilson

	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Hogget	Top		1				1
	Stud	1	9	17	11	1	39
	2nd	1	26	67	33	5	132
	Sale		7	34	36	5	82
	Cull			6	2	2	10
	<b>Total</b>	<b>2</b>	<b>43</b>	<b>124</b>	<b>82</b>	<b>13</b>	<b>264</b>
43% stayed the same							

	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Adult 5	Top		1				1
	Stud	2	25	21	3	1	52
	2nd		14	61	26	4	105
	Sale		1	37	34	4	76
	Cull		2	4	19	4	29
	<b>Total</b>	<b>2</b>	<b>43</b>	<b>123</b>	<b>82</b>	<b>13</b>	<b>263</b>
47% stayed the same							

	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Adult 2	Top		1				1
	Stud	2	13	18	10	1	44
	2nd		21	65	35	4	125
	Sale		7	37	31	5	80
	Cull		1	4	6	3	14
	<b>Total</b>	<b>2</b>	<b>43</b>	<b>124</b>	<b>82</b>	<b>13</b>	<b>264</b>
42% stayed the same							

	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Adult 3	Top						0
	Stud	1	15	15	8	3	42
	2nd	1	22	60	30	3	116
	Sale		6	45	43	6	100
	Cull			4	1	1	6
	<b>Total</b>	<b>2</b>	<b>43</b>	<b>124</b>	<b>82</b>	<b>13</b>	<b>264</b>
45% stayed the same							

	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Adult 33	Top	1	1	2	1		5
	Stud	1	14	21	10	3	49
	2nd		21	63	36	4	124
	Sale		4	32	30	1	67
	Cull		1	4	5	5	15
	<b>Total</b>	<b>2</b>	<b>41</b>	<b>122</b>	<b>82</b>	<b>13</b>	<b>260</b>
43% stayed the same							

	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Adult 4	Top						0
	Stud	1	14	26	8	1	50
	2nd	1	26	60	26	7	120
	Sale		1	30	36		67
	Cull		2	8	12	5	27
	<b>Total</b>	<b>2</b>	<b>43</b>	<b>124</b>	<b>82</b>	<b>13</b>	<b>264</b>
44% stayed the same							

## AMSEA Classer Grade Results

MerinoLink 2016 Drop - AMSEA Class - Ben Patrick (H - A4), Jim Meckiff (A5 - A6) LIFETIME Performance by Grade (Drop Level) - Average Lifetime CFW, FD, SL, SS, WT, EMD, WR, A6 MP+ Index - followed by Average Lifetime Scored Dag, Bdwr, Char, Col, Flrot, Dust, Legs, Back, Face, Spig, Jaw

<i>Age: 16m Wool: 10mths</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Hogget Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	48	4.2	18.1	93	35	76	4.7	27	5.2	106	111	0.0	1.1	1.5	105	0.0	0.3	97	7.3
Flock	182	3.7	18.1	92	34	72	4.7	27	5.4	97	98	0.0	0.0	-0.3	100	0.0	0.2	101	-1.5
Cull	36	3.7	18.0	90	33	69	4.6	25	5.3	97	98	-0.1	-1.6	-0.6	95	-0.2	-1.4	99	-2.0
<b>Total/Ave</b>	<b>266</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>											<i>13</i>	<i>0.2</i>	<i>2.7</i>	<i>13</i>	<i>0.2</i>	<i>0.2</i>	<i>2.7</i>	<i>2.1</i>	<i>10</i>

<i>Age: 16m Wool: 10mths</i>		Raw Data - Average Lifetime Performance - Visual Scores										
Hogget Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	48	1.5	3.0	2.2	1.7	1.3	2.8	1.7	1.5	2.7	1.7	1.1
Flock	182	1.5	2.6	2.4	1.8	1.2	3.0	1.5	1.5	2.7	1.8	1.1
Cull	36	1.5	2.7	2.5	1.9	1.3	3.0	1.8	1.5	2.7	1.8	1.2
<b>Total/Ave</b>	<b>266</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>0.0</i>	<i>0.4</i>	<i>-0.3</i>	<i>-0.2</i>	<i>0.1</i>	<i>-0.2</i>	<i>-0.1</i>	<i>0.0</i>	<i>0.0</i>	<i>-0.1</i>	<i>-0.1</i>

<i>Age: 22m Wool: 12m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 2 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	52	4.2	18.1	93	36	75	4.6	27	5.0	108	112	0.0	0.6	1.8	104	-0.1	0.1	93	8.7
Flock	189	3.7	18.2	92	34	72	4.7	27	5.5	97	98	0.1	-0.1	-0.2	99	0.0	0.1	103	-2.0
Cull	25	3.5	17.5	91	32	69	4.8	25	5.1	96	<b>93</b>	<b>-0.6</b>	<b>-0.7</b>	<b>-2.0</b>	<b>95</b>	<b>0.1</b>	<b>-1.0</b>	<b>95</b>	<b>-2.9</b>
<b>Total/Ave</b>	<b>266</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>											<i>19</i>	<i>0.6</i>	<i>1.3</i>	<i>3.8</i>	<i>9</i>	<i>-0.2</i>	<i>1.1</i>	<i>-2</i>	<i>12</i>

<i>Age: 22m Wool: 12m</i>		Raw Data - Average Lifetime Performance - Visual Scores										
Adult 2 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	52	1.6	3.1	2.2	1.6	1.3	2.8	1.5	1.6	2.7	1.8	1.1
Flock	189	1.5	2.6	2.4	1.9	1.2	3.0	1.6	1.5	2.7	1.8	1.1
Cull	25	1.4	2.6	2.4	1.9	1.4	3.1	1.9	1.6	2.6	1.7	1.1
<b>Total/Ave</b>	<b>266</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>0.1</i>	<i>0.6</i>	<i>-0.1</i>	<i>-0.3</i>	<i>-0.1</i>	<i>-0.3</i>	<i>-0.5</i>	<i>0.0</i>	<i>0.1</i>	<i>0.1</i>	<i>0.0</i>

<i>Age: 2.9y Wool: 12m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 3 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	56	4.4	17.8	90	35	72	4.3	26	5.1	110	115	-0.3	-2.0	0.9	100	-0.4	-0.7	95	11.2
Flock	145	3.8	18.3	93	34	73	4.8	27	5.4	98	100	0.2	0.8	0.7	101	0.1	0.2	101	-0.5
Cull	64	3.3	18.0	92	32	71	4.9	27	5.4	90	87	-0.1	0.1	-2.2	99	0.2	0.3	102	-8.9
<b>Total/Ave</b>	<b>265</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>											29	-0.3	-2.0	3.1	2	-0.6	-1.0	-7	20

<i>Age: 2.9y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 3 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	56	1.6	3.2	2.3	1.8	1.3	2.8	1.5	1.6	2.9	1.8	1.1
Flock	145	1.5	2.6	2.4	1.8	1.3	3.0	1.6	1.5	2.7	1.7	1.1
Cull	64	1.4	2.4	2.4	1.9	1.2	3.1	1.7	1.5	2.5	2.0	1.1
<b>Total/Ave</b>	<b>265</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		0.2	0.8	-0.1	-0.1	0.1	-0.3	-0.1	0.1	0.3	-0.2	0.0

<i>Age: 3.4y Wool: 7m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 33 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	56	4.2	18.1	93	34	75	4.6	27	5.2	105	111	0.0	1.2	0.5	105	-0.1	0.2	98	6.3
Flock	136	3.8	18.2	92	34	72	4.8	27	5.2	99	101	0.1	0.5	0.7	100	0.0	0.1	97	-0.3
Cull	74	3.4	17.9	90	32	70	4.7	26	5.7	95	91	-0.2	-1.8	-1.6	97	0.0	-0.3	107	-4.3
<b>Total/Ave</b>	<b>266</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>											20	0.2	3.0	2.1	7	-0.2	0.5	-10	11

<i>Age: 3.4y Wool: 7m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 33 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	56	1.5	3.0	2.3	1.9	1.3	2.8	1.5	1.6	2.8	1.7	1.1
Flock	136	1.5	2.7	2.4	1.8	1.3	3.0	1.5	1.5	2.7	1.8	1.1
Cull	74	1.4	2.5	2.5	1.9	1.3	3.1	1.9	1.6	2.6	1.9	1.1
<b>Total/Ave</b>	<b>266</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		0.1	0.5	-0.3	0.0	0.0	-0.3	-0.4	0.0	0.2	-0.2	-0.1

<i>Age: 4.5y Wool: 12m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 4 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	48	4.3	18.1	93	35	74	4.4	26	4.7	106	113	0.0	1.1	1.7	103	-0.3	-0.2	88	7.1
Flock	151	3.8	18.1	92	34	73	4.8	27	5.3	99	100	0.0	0.4	-0.2	101	0.1	0.3	99	-0.1
Cull	67	3.4	18.2	90	33	70	4.7	26	5.9	94	91	0.1	-1.6	-0.7	97	0.0	-0.4	111	-4.9
<b>Total/Ave</b>	<b>266</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>											22	-0.1	2.7	2.4	6	-0.3	0.2	-23	12

<i>Age: 4.5y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 4 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	48	1.6	3.1	2.2	1.7	1.4	2.8	1.4	1.6	2.8	1.8	1.0
Flock	151	1.5	2.6	2.4	1.8	1.3	2.9	1.6	1.5	2.7	1.8	1.1
Cull	67	1.4	2.5	2.5	1.9	1.2	3.1	1.7	1.6	2.7	1.8	1.1
<b>Total/Ave</b>	<b>266</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		0.2	0.6	-0.3	-0.2	0.2	-0.2	-0.3	0.0	0.1	0.0	-0.1

<i>Age: 5.5y Wool: 12m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 5 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	58	4.0	17.9	92	35	75	4.9	27	5.7	106	105	-0.2	0.6	0.8	103	0.1	0.4	106	6.6
Flock	144	3.7	18.1	92	34	72	4.7	27	5.2	97	98	0.0	-0.4	0.0	100	0.0	0.0	97	-1.8
Cull	64	3.8	18.3	92	33	70	4.5	26	5.5	97	100	0.2	0.3	-0.8	97	-0.2	-0.4	102	-1.8
<b>Total/Ave</b>	<b>266</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>											5	-0.4	0.3	1.6	6	0.3	0.7	3	8

<i>Age: 5.5y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 5 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	58	1.5	2.8	2.2	1.7	1.2	3.0	1.5	1.5	2.7	1.7	1.0
Flock	144	1.5	2.7	2.4	1.8	1.2	3.0	1.6	1.5	2.7	1.9	1.0
Cull	64	1.5	2.7	2.5	2.1	1.4	3.0	1.7	1.6	2.7	1.8	1.2
<b>Total/Ave</b>	<b>266</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		0.1	0.1	-0.3	-0.4	-0.1	0.0	-0.2	-0.1	0.0	0.0	-0.2

<i>Age: 6.5y Wool: 12m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 6 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
<b>Top</b>	58	3.9	18.0	91	34	74	4.7	27	5.5	103	104	-0.1	-0.5	0.3	103	0.0	0.1	102	3.9
<b>Flock</b>	145	3.8	18.1	92	34	72	4.7	26	5.4	99	99	0.0	-0.1	0.4	100	0.0	0.0	101	-0.4
<b>Cull</b>	62	3.7	18.1	93	33	71	4.7	26	5.1	96	98	0.0	0.9	-1.0	99	0.0	-0.1	96	-2.9
<b>Total/Ave</b>	<b>265</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>26</b>	<b>5.3</b>	<b>99</b>
<i>Diff Top to Bottom</i>											<i>6</i>	<i>-0.1</i>	<i>-1.4</i>	<i>1.3</i>	<i>4</i>	<i>0.1</i>	<i>0.2</i>	<i>6</i>	<i>7</i>

<i>Age: 6.5y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 6 Grade	Count	Dag	Bdwr	Char	Col	Flot	Dust	Legs	Back	Face	Spig	Jaw
<b>Top</b>	58	1.5	2.8	2.2	1.6	1.2	2.9	1.4	1.5	2.7	1.7	1.0
<b>Flock</b>	145	1.4	2.7	2.4	1.8	1.3	3.0	1.6	1.5	2.7	1.7	1.1
<b>Cull</b>	62	1.5	2.6	2.4	2.1	1.4	3.0	1.8	1.5	2.6	2.1	1.1
<b>Total/Ave</b>	<b>265</b>	<b>1.5</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>	<b>1.3</b>	<b>3.0</b>	<b>1.6</b>	<b>1.5</b>	<b>2.7</b>	<b>1.8</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		0.0	0.2	-0.2	-0.5	-0.2	-0.1	-0.4	0.0	0.1	-0.4	-0.1

**MerinoLink 2016 Drop – AMSEA Grade Change Over Time – Patrick (H– A4), Meckiff (A5 – A6)**

**AMSEA Grade Change Between Each Grade & Adult 6 – Patrick (H – A4), Meckiff (A5 – A6)**

		Adult 2			
		Top	Flock	Cull	Total
<b>Hogget</b>	<b>Grade</b>				
	<b>Top</b>	29	19		<b>48</b>
	<b>Flock</b>	22	152	8	<b>182</b>
	<b>Cull</b>	1	18	17	<b>36</b>
	<b>Total</b>	<b>52</b>	<b>189</b>	<b>25</b>	<b>266</b>
74% stayed the same					

		Adult 6			
		Top	Flock	Cull	Total
<b>Hogget</b>	<b>Grade</b>				
	<b>Top</b>	13	22	13	<b>48</b>
	<b>Flock</b>	41	102	38	<b>181</b>
	<b>Cull</b>	4	21	11	<b>36</b>
	<b>Total</b>	<b>58</b>	<b>145</b>	<b>62</b>	<b>265</b>
48% stayed the same					

		Adult 3			
		Top	Flock	Cull	Total
<b>Adult 2</b>	<b>Grade</b>				
	<b>Top</b>	30	19	3	<b>52</b>
	<b>Flock</b>	23	116	49	<b>188</b>
	<b>Cull</b>	3	10	12	<b>25</b>
	<b>Total</b>	<b>56</b>	<b>145</b>	<b>64</b>	<b>265</b>
60% stayed the same					

		Adult 6			
		Top	Flock	Cull	Total
<b>Adult 2</b>	<b>Grade</b>				
	<b>Top</b>	18	23	11	<b>52</b>
	<b>Flock</b>	36	110	42	<b>188</b>
	<b>Cull</b>	4	12	9	<b>25</b>
	<b>Total</b>	<b>58</b>	<b>145</b>	<b>62</b>	<b>265</b>
52% stayed the same					

		Adult 33			
		Top	Flock	Cull	Total
<b>Adult 3</b>	<b>Grade</b>				
	<b>Top</b>	25	25	6	<b>56</b>
	<b>Flock</b>	27	84	34	<b>145</b>
	<b>Cull</b>	4	27	33	<b>64</b>
	<b>Total</b>	<b>56</b>	<b>136</b>	<b>73</b>	<b>265</b>
54% stayed the same					

		Adult 6			
		Top	Flock	Cull	Total
<b>Adult 3</b>	<b>Grade</b>				
	<b>Top</b>	16	25	15	<b>56</b>
	<b>Flock</b>	30	87	27	<b>144</b>
	<b>Cull</b>	12	33	19	<b>64</b>
	<b>Total</b>	<b>58</b>	<b>145</b>	<b>61</b>	<b>264</b>
46% stayed the same					

		Adult 4			
		Top	Flock	Cull	Total
<b>Adult 33</b>	<b>Grade</b>				
	<b>Top</b>	22	31	3	<b>56</b>
	<b>Flock</b>	23	85	28	<b>136</b>
	<b>Cull</b>	3	35	36	<b>74</b>
	<b>Total</b>	<b>48</b>	<b>151</b>	<b>67</b>	<b>266</b>
54% stayed the same					

		Adult 6			
		Top	Flock	Cull	Total
<b>Adult 33</b>	<b>Grade</b>				
	<b>Top</b>	19	25	12	<b>56</b>
	<b>Flock</b>	30	77	28	<b>135</b>
	<b>Cull</b>	9	43	22	<b>74</b>
	<b>Total</b>	<b>58</b>	<b>145</b>	<b>62</b>	<b>265</b>
45% stayed the same					

		Adult 5			
		Top	Flock	Cull	Total
<b>Adult 4</b>	<b>Grade</b>				
	<b>Top</b>	14	27	7	<b>48</b>
	<b>Flock</b>	37	82	32	<b>151</b>
	<b>Cull</b>	7	35	25	<b>67</b>
	<b>Total</b>	<b>58</b>	<b>144</b>	<b>64</b>	<b>266</b>
45% stayed the same					

		Adult 6			
		Top	Flock	Cull	Total
<b>Adult 4</b>	<b>Grade</b>				
	<b>Top</b>	18	19	11	<b>48</b>
	<b>Flock</b>	31	86	33	<b>150</b>
	<b>Cull</b>	9	40	18	<b>67</b>
	<b>Total</b>	<b>58</b>	<b>145</b>	<b>62</b>	<b>265</b>
46% stayed the same					

		Adult 6			
		Top	Flock	Cull	Total
<b>Adult 5</b>	<b>Grade</b>				
	<b>Top</b>	22	28	8	<b>58</b>
	<b>Flock</b>	31	85	28	<b>144</b>
	<b>Cull</b>	5	32	26	<b>63</b>
	<b>Total</b>	<b>58</b>	<b>145</b>	<b>62</b>	<b>265</b>
50% stayed the same					

		Adult 6			
		Top	Flock	Cull	Total
<b>Adult 5</b>	<b>Grade</b>				
	<b>Top</b>	22	28	8	<b>58</b>
	<b>Flock</b>	31	85	28	<b>144</b>
	<b>Cull</b>	5	32	26	<b>63</b>
	<b>Total</b>	<b>58</b>	<b>145</b>	<b>62</b>	<b>265</b>
50% stayed the same					

## Appendix – Exploring Consolidated AMSEA and Professional Class Grades

This appendix evaluates the long-term productivity of ewes based on their first two AMSEA and Professional classer grades. By analysing the lifetime performance of animals designated as either 'retained' or 'removed' during early assessments, this work illustrates the impact of visual selection on flock performance over the lifetime of that flock.

### MerinoLink 2016 Drop – AMSEA Grade – Ben Patrick Measured LIFETIME Performance by Grade (Drop Level) – Average Lifetime CFW, FD, SL, SS, WT, EMD, WR, A6 MP+ Index - followed by Ave LT Scored Dag, Bdwr, Char, Col, Flrot, Dust, Back, Legs, Face, Spig, Jaw

#### AMSEA Class – Hogget

Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+
Top/Flock	230	3.8	18.1	92	34	73	4.7	27	5.4	99
Cull	36	3.7	18.0	90	33	69	4.6	25	5.3	97
<b>Total</b>	<b>266</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>27</b>	<b>5.3</b>	<b>99</b>

Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top/Flock	230	1.46	2.71	2.37	1.82	1.27	2.95	1.52	1.57	2.71	1.80	1.06
Cull	36	1.51	2.67	2.52	1.87	1.29	3.03	1.55	1.83	2.70	1.81	1.17
<b>Total/Ave</b>	<b>266</b>	<b>1.47</b>	<b>2.70</b>	<b>2.39</b>	<b>1.82</b>	<b>1.27</b>	<b>2.96</b>	<b>1.53</b>	<b>1.60</b>	<b>2.71</b>	<b>1.80</b>	<b>1.08</b>

#### AMSEA Class – Adult 2

Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+
Top/Flock	241	3.8	18.2	92	34	72	4.7	27	5.4	99
Cull	25	3.5	17.5	91	32	69	4.8	25	5.1	96
<b>Total</b>	<b>266</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>27</b>	<b>5.3</b>	<b>99</b>

Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top/Flock	241	1.47	2.72	2.39	1.81	1.26	2.94	1.52	1.57	2.72	1.81	1.07
Cull	25	1.45	2.57	2.35	1.94	1.41	3.15	1.60	1.94	2.64	1.68	1.09
<b>Total/Ave</b>	<b>266</b>	<b>1.47</b>	<b>2.70</b>	<b>2.39</b>	<b>1.82</b>	<b>1.27</b>	<b>2.96</b>	<b>1.53</b>	<b>1.60</b>	<b>2.71</b>	<b>1.80</b>	<b>1.08</b>

**MerinoLink 2016 Drop – Professional Class – Craig Wilson Measured LIFETIME Performance by Grade (Drop Level)  
 – Average Lifetime CFW, FD, SL, SS, WT, EMD, WR, A6 MP+ Index - followed by Ave LT Scored Dag, Bdwr, Char, Col, Flrot, Dust, Back, Legs, Face, Spig, Jaw**

Prof Class – Hogget

Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+
Top Stud Second	173	3.9	18.0	92	34	73	4.8	27	5.1	100
Sale	83	3.6	18.4	92	33	71	4.6	26	5.8	96
Cull	10	3.6	17.9	94	34	69	4.5	26	5.5	96
<b>Total</b>	<b>266</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>27</b>	<b>5.3</b>	<b>99</b>

Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top Stud Second	173	1.50	2.81	2.29	1.76	1.29	2.90	1.51	1.61	2.75	1.80	1.07
Sale	83	1.40	2.49	2.57	1.95	1.24	3.07	1.57	1.55	2.65	1.80	1.06
Cull	10	1.54	2.49	2.56	1.89	1.27	3.03	1.53	1.97	2.59	1.80	1.34
<b>Total/Ave</b>	<b>266</b>	<b>1.47</b>	<b>2.70</b>	<b>2.39</b>	<b>1.82</b>	<b>1.27</b>	<b>2.96</b>	<b>1.53</b>	<b>1.60</b>	<b>2.71</b>	<b>1.80</b>	<b>1.08</b>

Prof Class – Adult 2

Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+
Top Stud Second	170	3.9	18.0	92	34	73	4.7	27	5.3	103
Sale	82	3.6	18.5	92	33	71	4.6	26	5.4	93
Cull	14	3.2	17.6	94	32	70	5.2	26	5.3	91
<b>Total</b>	<b>266</b>	<b>3.8</b>	<b>18.1</b>	<b>92</b>	<b>34</b>	<b>72</b>	<b>4.7</b>	<b>27</b>	<b>5.3</b>	<b>99</b>

Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top Stud Second	170	1.50	2.83	2.31	1.75	1.28	2.89	1.52	1.57	2.76	1.81	1.07
Sale	82	1.41	2.50	2.53	1.96	1.24	3.07	1.54	1.62	2.66	1.80	1.03
Cull	14	1.43	2.33	2.43	1.92	1.32	3.21	1.50	1.94	2.37	1.71	1.39
<b>Total/Ave</b>	<b>266</b>	<b>1.47</b>	<b>2.70</b>	<b>2.39</b>	<b>1.82</b>	<b>1.27</b>	<b>2.96</b>	<b>1.53</b>	<b>1.60</b>	<b>2.71</b>	<b>1.80</b>	<b>1.08</b>