

# New England 2017 Drop

## Overview of Professional and AMSEA Class

### December 2025

### Raw Data and Index

#### Introduction

The New England site was hosted by CSIRO at “Chiswick” Uralla in conjunction with the New England Merino Sire Evaluation Association. The site was one of five sites participating in the AWI funded Merino Lifetime Productivity (MLP) Project, which was facilitated by the Australian Merino Sire Evaluation Association.

#### 2017 Drop - Key Assessments and Dates

The New England 2017 drop ewes are the daughters of 15 industry sires that were joined to a ewe base made up of a typical commercial superfine/fine wool type based on local performance recorded studs (most recently Cressbrook and Alfoxton sires, previously T13 and Westvale). The Breech Strike Genetics flock made up one-third of the ewe base, and was composed of genetics from many sources, although for the last five years prior to involvement in the MLP project, the flock has been essentially a superfine/fine wool flock (bulk 70's quality count, adult ewe mean fibre diameter approximately 17µm).

Event	Date	Age Stage	Lactation Status	Age and Wool Growth
Birth	September 2017			
Yearling Assessment	August 2018	Y	Dry	11 months, 11 months wool
<i>First Joining</i>	<i>April 2019</i>			
Adult 2 Assessment	July 2019	A2	Early pregnant	22 months, 11 months wool
Adult 3 Assessment	July 2020	A3	Early pregnant	3 years, 12 months wool
Adult 4 Assessment	July 2021	A4	Early pregnant	4 years, 12 months wool
Adult 5 Assessment	July 2022	A5	Early pregnant	5 years, 12 months wool
Adult 6 Assessment	July 2023	A6	Early pregnant	6 years, 12 months wool
Adult 7 Assessment	July 2024	A7	Dry	7 years, 12 months wool

As per MLP protocol, the 2017 drop ewes are classed annually at each assessment for seven years using two classing approaches – the AMSEA class (undertaken by Angus Carter), and the Professional class (undertaken by Andrew Calvert, with Angus Carter stepping in for the Adult 3 class because of COVID travel restrictions). The AMSEA Grade and Professional Classer Grade used the site’s nominated breeding objective to guide classing.

**New England Site Breeding Objective:** To breed and select sheep that have productive fleeces for the superfine type (14 -17.5µm) and are structurally sound and capable of performing under the New England’s climatic, pastoral and environmental conditions. Sheep should be well grown, have sound conformation, and wool of excellent white colour, well defined character and be free of fleece rot.

#### Classing Methodology

##### Professional Class Process – Andrew Calvert (with Angus Carter at Adult 3)

- 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 – Angus Carter

- 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 and joined five times.

- **Count or N** is the number of ewes in each grade that have full lifetime records used for reporting.
- **Average for ewes present at all 7 assessments** **CFW** = Clean Fleece Weight, **FD** = fibre diameter (um), **SL** = staple length (mm), **SS** = staple strength (N/ktex), **FAT** = fat depth (mm), **EMD** = eye muscle depth (mm), **WT** = pre-joining weight (animals with 5 prejoining records (kg)
- **WR** = raw number of lambs weaned (for ewes that were joined 5 times)
- **FP+** = within flock selection index, selects for sheep that have superior wool quality, by improving fibre diameter, CV and staple strength. The value reported is the final index produced from all data measured. **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 value reported is the final index produced from all data measured.
- **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 word “**class**” and “**grade**” have been used interchangeably.

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

Sire ID	Sire name
609228-2014-140257	Connemara Poll, 140257
504560-2013-MVB123	Conrayn, MVB123
502302-2014-140055	Cressbrook, 140055
500032-2001-010036	Egelabra, HEK 1.36
504455-2015-150017	Grindon, 150017
504773-2014-140188	Karori, 140188
503471-2014-140012	Miramoonna, 140012
500732-2012-120021	Mirani, 120021
601502-2015-150073	Moorundie Poll, NE73
503298-2015-150073	Nerstane, 150073
601279-2015-150697	Petali Poll, 150697
500013-2015-150282	Trefusis, 150282
609251-2014-140477	Trigger Vale Poll, 140477
601236-2011-110004	West Plains Poll, 110004 (Mercenary)
501552-2015-150313	Yalgoo, 150313

## Disclaimer

This publication contains raw data which 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 2017 drop New England 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 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 (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 the classer versus index selection we recognise that some animals are allocated to lower classer grades based on a fault and not because of 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:

- Even ewe base
- Professional class was undertaken at A2 by an alternative classer – has this impacted results?
- Ewes classed at the very early stages of pregnancy, which differs to other sites
- Final classing was 6 months post-weaning, and ewes were not pregnant
- Classing most aligned with the MP index

### Best Time to do an early Class:

- Professional – at the second assessment
- AMSEA – at the second assessment

### Classers are selecting for:

- Professional – selecting for CFW, SL, SS, WT, EMD, over time better wool colour, character and good feet/legs
- AMSEA – selecting for CFW, SL, WT, some emphasis on EMD, early selection no dominant visual trait selection with increasing emphasis on wool colour and character over time

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

- Professional and AMSEA – did not impact classing

### Change over time:

- Professional – approx 50% repeatability between classings
- AMSEA – approx 60% and over of animals stay in the same grade between classings

AMSEA Class – Yearling to Adult 2 <ul style="list-style-type: none"><li>• 61% 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>	Professional Class – Yearling to Adult 2 <ul style="list-style-type: none"><li>• 53% Stay in the same grade</li><li>• 94% Stay in the same grade, or change by one grade</li><li>• 6% of animals change by two grades</li></ul>
AMSEA Class – Adult 2 to Adult 3 <ul style="list-style-type: none"><li>• 60% Stay in the same grade</li><li>• 99% Stay in the same grade, or change by one grade</li><li>• 1% of animals change by two grades</li></ul>	Professional Class – Adult 2 to Adult 3 <ul style="list-style-type: none"><li>• 49% Stay in the same grade</li><li>• 90% Stay in the same grade, or change by one grade</li><li>• 10% of animals change by two grades</li></ul>

## Professional Classer Grade Results

New England 2017 Drop – Professional Class – Andrew Calvert (Angus Carter for Adult 3) Measured LIFETIME Performance by Grade (Drop Level) –Average Lifetime CFW, FD, SL, SS, WT, EMD, WR, A7 FP+ & MP+ Index - followed by Average Lifetime Scored Dag, Bdwr, Char, Col, Flrot, Dust, Back, Legs, Face, Spig, Jaw

<i>Age: 11m Wool: 11m</i>		Raw Data – Average LT Performance										Raw Data – Deviation from Average LT Performance									
Yearling Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	FP+	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	FP+D	MP+D
Top	4	3.8	17.9	97	40	58	1.6	24	6.0	94	106	121	1.3	6.3	4.4	111	-0.1	0.2	101	-6.7	6.3
Stud	30	3.4	16.7	95	37	54	1.5	24	6.3	103	109	107	0.0	4.2	1.8	103	-0.1	0.1	106	2.8	9.4
Seconds	358	3.2	16.7	91	36	53	1.7	24	6.1	101	101	101	0.0	0.4	0.2	101	0.0	0.2	103	0.2	1.1
Sale	145	3.1	16.6	89	35	51	1.6	23	5.7	101	98	97	-0.1	-1.5	-0.6	98	0.0	-0.1	97	0.1	-2.2
Cull	42	3.0	16.6	88	34	48	1.5	22	5.1	97	91	95	-0.1	-2.1	-1.3	92	-0.2	-1.0	86	-3.4	-9.5
<b>Total/Ave</b>	<b>579</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>
<i>Diff Top to Bottom</i>												26	1.4	8.4	5.7	19	0.1	1.2	15	-3	16

<i>Age: 11m Wool: 11m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Yearling Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top	4	1.5	2.9	2.6	2.8	1.5	2.3	1.6	1.6	3.0	2.0	1.0
Stud	30	1.4	2.8	2.5	2.5	1.3	2.4	1.3	1.7	3.0	2.5	1.1
Seconds	358	1.4	2.7	2.5	2.7	1.4	2.4	1.3	1.7	2.9	2.2	1.0
Sale	145	1.4	2.6	2.6	2.8	1.4	2.4	1.4	1.8	2.9	2.1	1.1
Cull	42	1.4	2.7	2.4	2.9	1.4	2.5	1.5	1.9	3.0	2.1	1.1
<b>Total/Ave</b>	<b>579</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		0.0	0.2	0.1	-0.1	0.1	-0.2	0.1	-0.2	0.0	-0.1	-0.1

<i>Age: 22m Wool: 11m</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	FP+	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	FP+D	MP+D	
Top	5	3.7	17.0	90	36	54	1.7	24	7.0	101	107	115	0.4	-0.2	0.7	104	0.1	0.3	118	0.9	6.5	
Stud	56	3.5	16.9	92	38	55	1.6	24	5.8	102	105	111	0.2	1.4	1.9	105	0.0	0.3	98	1.6	4.9	
Seconds	337	3.2	16.6	91	36	52	1.6	23	6.1	103	102	101	-0.1	0.0	0.0	101	0.0	-0.1	102	2.1	2.2	
Sale	135	3.0	16.9	91	35	52	1.7	24	5.7	96	95	96	0.2	0.4	-0.6	99	0.1	0.4	96	-4.5	-4.9	
Cull	45	2.9	16.6	87	35	49	1.5	23	5.6	96	91	90	-0.1	-3.3	-0.8	93	-0.1	-0.8	94	-4.9	-8.8	
<b>Total/Ave</b>	<b>578</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	
<i>Diff Top to Bottom</i>												25	0.4	3.1	1.5	11	0.2	1.1	24	6	15	

<i>Age: 22m Wool: 11m</i>		Raw Data – Average Lifetime Performance – Visual Scores											
Adult 2 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw	
Top	5	1.3	3.1	2.5	2.6	1.3	2.2	1.4	1.4	3.0	2.0	1.1	
Stud	56	1.4	2.9	2.5	2.6	1.4	2.3	1.4	1.6	3.0	2.3	1.0	
Seconds	337	1.4	2.7	2.5	2.7	1.4	2.4	1.4	1.7	2.9	2.1	1.1	
Sale	135	1.4	2.5	2.6	2.9	1.4	2.5	1.3	1.8	2.9	2.2	1.1	
Cull	45	1.4	2.7	2.6	2.9	1.5	2.5	1.4	2.0	3.0	2.2	1.0	
<b>Total/Ave</b>	<b>578</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>	
<i>Diff Top to Bottom</i>		0.0	0.4	-0.1	-0.3	-0.2	-0.3	0.0	-0.5	0.0	-0.2	0.0	

<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	FP+	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	FP+D	MP+D	
Top	5	4.0	17.2	98	38	64	1.8	24	5.6	106	120	127	0.5	7.0	2.6	122	0.2	0.8	95	5.0	20.4	
Stud	68	3.5	16.5	93	36	54	1.6	23	5.9	106	107	111	-0.1	2.8	0.5	104	0.0	0.0	100	5.4	7.4	
Seconds	386	3.2	16.9	92	36	52	1.6	24	6.0	100	101	102	0.2	1.2	-0.1	100	0.0	0.1	101	-0.3	1.1	
Sale	89	2.8	16.1	85	36	50	1.6	23	5.8	99	93	89	-0.6	-5.4	0.4	96	0.0	-0.3	98	-1.3	-7.4	
Cull	31	2.6	15.9	84	34	49	1.5	23	5.5	95	88	83	-0.8	-6.6	-1.7	93	-0.1	-0.2	93	-5.4	-12.4	
<b>Total/Ave</b>	<b>579</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	
<i>Diff Top to Bottom</i>												44	1.3	13.6	4.3	29	0.3	1.0	1	10	33	

<i>Age: 2.9y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 3 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top	5	1.5	2.9	2.2	2.7	1.5	2.3	1.2	1.6	3.0	3.0	1.1
Stud	68	1.4	2.9	2.4	2.6	1.4	2.4	1.4	1.8	3.0	2.4	1.0
Seconds	386	1.4	2.7	2.6	2.8	1.4	2.4	1.4	1.7	2.9	2.2	1.1
Sale	89	1.4	2.6	2.5	2.7	1.4	2.4	1.3	1.8	2.9	2.0	1.1
Cull	31	1.2	2.5	2.3	3.0	1.4	2.4	1.3	1.9	2.9	2.0	1.1
<b>Total/Ave</b>	<b>579</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>0.3</i>	<i>0.5</i>	<i>-0.1</i>	<i>-0.4</i>	<i>0.1</i>	<i>-0.1</i>	<i>-0.1</i>	<i>-0.3</i>	<i>0.0</i>	<i>1.0</i>	<i>0.0</i>

<i>Age: 3.9y 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	FP+	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	FP+D	MP+D
Top	7	3.9	16.6	92	33	57	1.6	24	6.6	110	116	124	0.0	1.5	-2.9	109	-0.1	0.1	111	9.2	15.8
Stud	65	3.4	16.5	92	37	54	1.6	23	5.4	102	102	106	-0.2	1.5	1.6	103	0.0	0.0	92	1.8	2.1
Seconds	300	3.2	16.6	91	36	52	1.7	24	6.0	101	101	100	-0.1	0.4	0.3	100	0.0	0.1	102	0.8	0.9
Sale	149	3.1	16.8	89	35	51	1.6	23	6.0	98	97	97	0.1	-1.1	-0.9	98	0.0	-0.1	101	-2.2	-3.1
Cull	58	3.1	16.9	89	35	51	1.5	23	5.8	99	99	97	0.2	-1.1	-0.6	97	-0.1	-0.5	98	-1.9	-1.2
<b>Total/Ave</b>	<b>579</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>
<i>Diff Top to Bottom</i>		<i>27</i>	<i>-0.2</i>	<i>2.5</i>	<i>-2.3</i>	<i>12</i>	<i>0.0</i>	<i>0.6</i>	<i>13</i>	<i>11</i>	<i>17</i>										

<i>Age: 3.9y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 4 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top	7	1.5	3.0	2.3	2.7	1.4	2.3	1.8	1.4	3.0	1.9	1.0
Stud	65	1.4	2.8	2.5	2.6	1.4	2.4	1.4	1.6	3.0	2.0	1.0
Seconds	300	1.4	2.7	2.5	2.7	1.4	2.4	1.3	1.7	2.9	2.2	1.1
Sale	149	1.4	2.7	2.6	2.9	1.4	2.4	1.4	1.9	3.0	2.2	1.1
Cull	58	1.4	2.6	2.6	2.9	1.4	2.4	1.4	2.1	2.9	2.1	1.0
<b>Total/Ave</b>	<b>579</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>0.1</i>	<i>0.4</i>	<i>-0.3</i>	<i>-0.2</i>	<i>0.1</i>	<i>-0.1</i>	<i>0.4</i>	<i>-0.6</i>	<i>0.1</i>	<i>-0.3</i>	<i>0.0</i>

<i>Age: 4.9y 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	FP+	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	FP+D	MP+D
Top	4	3.9	17.0	94	33	57	1.6	24	7.0	105	111	122	0.4	3.3	-2.8	109	0.0	0.6	118	4.4	11.0
Stud	75	3.5	16.7	92	36	55	1.7	24	5.5	103	104	110	0.1	1.3	0.8	106	0.1	0.3	93	2.7	3.5
Seconds	326	3.2	16.7	91	36	52	1.6	23	6.1	101	100	99	0.0	0.1	0.3	100	0.0	0.0	103	0.3	0.5
Sale	117	3.1	16.6	90	34	51	1.6	23	5.9	99	97	97	0.0	-0.8	-1.5	98	0.0	-0.2	99	-1.9	-2.7
Cull	57	3.0	16.5	89	36	50	1.5	23	5.6	99	98	96	-0.2	-1.2	0.4	97	-0.1	-0.2	95	-1.6	-2.4
<b>Total/Ave</b>	<b>579</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>
<i>Diff Top to Bottom</i>												27	0.5	4.5	-3.1	12	0.1	0.8	23	6	13

<i>Age: 4.9y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 5 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top	4	1.7	3.2	2.1	2.6	1.3	2.3	2.0	1.5	3.0	2.5	1.1
Stud	75	1.4	2.8	2.4	2.7	1.4	2.4	1.3	1.6	2.9	2.2	1.0
Seconds	326	1.4	2.7	2.5	2.7	1.4	2.4	1.3	1.7	2.9	2.1	1.1
Sale	117	1.4	2.6	2.6	2.9	1.4	2.4	1.3	1.9	3.0	2.1	1.0
Cull	57	1.4	2.7	2.5	2.8	1.4	2.4	1.5	2.1	3.0	2.2	1.1
<b>Total/Ave</b>	<b>579</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		0.2	0.5	-0.4	-0.2	-0.2	-0.1	0.5	-0.6	0.1	0.3	0.0

<i>Age: 5.9y 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	FP+	MP+	CFW%	FDD	SLD	SSD	WT%	FATDD	EMDD	WR%	FP+D	MP+D
Top	6	3.6	16.7	89	33	58	1.9	25	5.8	97	99	114	0.0	-1.9	-2.7	112	0.3	1.2	99	-3.1	-1.0
Stud	91	3.3	16.5	91	37	53	1.6	24	5.9	104	103	105	-0.2	0.1	1.5	102	-0.1	0.1	100	3.4	2.9
Seconds	300	3.1	16.7	90	36	52	1.6	23	5.9	101	100	99	0.0	-0.3	0.0	99	0.0	0.0	100	0.2	0.0
Sale	127	3.1	16.8	92	35	52	1.7	24	6.1	99	99	99	0.1	1.1	-1.0	100	0.0	0.2	102	-1.6	-1.5
Cull	55	3.1	16.8	90	36	51	1.6	23	5.7	98	99	98	0.2	-0.6	0.0	99	0.0	-0.5	96	-2.7	-1.3
<b>Total/Ave</b>	<b>579</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>
<i>Diff Top to Bottom</i>												15	-0.1	-1.3	-2.8	13	0.3	1.7	3	0	0

<i>Age: 5.9y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 6 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top	6	1.4	2.8	2.3	2.4	1.3	2.2	1.5	1.5	3.0	1.8	1.0
Stud	91	1.4	2.8	2.4	2.6	1.4	2.4	1.4	1.6	3.0	2.3	1.1
Seconds	300	1.4	2.7	2.5	2.7	1.4	2.4	1.4	1.7	2.9	2.1	1.1
Sale	127	1.4	2.6	2.6	2.9	1.4	2.4	1.3	1.9	2.9	2.1	1.0
Cull	55	1.4	2.7	2.7	3.0	1.4	2.4	1.3	1.9	3.0	2.4	1.0
<b>Total/Ave</b>	<b>579</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>0.0</i>	<i>0.1</i>	<i>-0.4</i>	<i>-0.6</i>	<i>-0.2</i>	<i>-0.2</i>	<i>0.2</i>	<i>-0.4</i>	<i>0.1</i>	<i>-0.6</i>	<i>0.0</i>

<i>Age: 6.9y Wool: 12m</i>		Raw Data – Average LT Performance										Raw Data – Deviation from Average LT Performance									
Adult 7 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	FP+	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	FP+D	MP+D
Top	6	3.4	16.7	92	35	57	1.7	24	6.2	103	104	108	0.0	1.0	-0.7	109	0.0	0.3	104	2.8	4.4
Stud	48	3.4	16.6	91	36	55	1.6	24	6.0	103	103	107	-0.1	0.7	0.0	105	0.0	0.1	101	2.3	3.1
Seconds	332	3.1	16.6	90	36	52	1.6	23	6.0	102	101	99	-0.1	-0.5	0.3	99	0.0	-0.1	101	1.4	0.6
Sale	151	3.2	17.0	91	35	52	1.7	24	5.8	97	98	101	0.3	0.9	-0.3	100	0.1	0.2	98	-3.4	-1.6
Cull	37	3.2	16.6	91	34	51	1.6	24	5.5	97	97	100	-0.1	0.1	-2.1	98	-0.1	0.1	94	-3.4	-3.4
<b>Total/Ave</b>	<b>574</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>
<i>Diff Top to Bottom</i>												<i>8</i>	<i>0.1</i>	<i>0.8</i>	<i>1.4</i>	<i>10</i>	<i>0.1</i>	<i>0.2</i>	<i>11</i>	<i>6</i>	<i>8</i>

<i>Age: 6.9y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 7 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top	6	1.4	2.8	2.1	2.6	1.3	2.4	1.3	1.5	2.9	2.2	1.1
Stud	48	1.4	2.7	2.3	2.6	1.4	2.4	1.5	1.6	2.9	1.9	1.1
Seconds	332	1.4	2.7	2.5	2.7	1.4	2.4	1.4	1.7	2.9	2.2	1.1
Sale	151	1.3	2.6	2.7	2.9	1.4	2.4	1.3	1.8	3.0	2.2	1.0
Cull	37	1.3	2.7	2.7	3.0	1.5	2.5	1.4	1.9	3.0	2.2	1.1
<b>Total/Ave</b>	<b>574</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>0.0</i>	<i>0.1</i>	<i>-0.5</i>	<i>-0.3</i>	<i>-0.2</i>	<i>-0.1</i>	<i>-0.1</i>	<i>-0.3</i>	<i>-0.1</i>	<i>0.0</i>	<i>0.0</i>

New England 2017 Drop – Professional Grade Change Between Grades & Next Grade – Calvert  
(Carter A3)

	Grade	Adult 2					
		Top	Stud	2nd	Sale	Cull	Total
Yearling	Top		3		1		4
	Stud		6	23	1		30
	2nd	5	42	235	65	11	358
	Sale		5	65	54	20	144
	Cull			14	14	14	42
	<b>Total</b>		<b>5</b>	<b>56</b>	<b>337</b>	<b>135</b>	<b>45</b>
53% stayed the same							
	Grade	Adult 3					
		Top	Stud	2nd	Sale	Cull	Total
Adult 2	Top		1	3	1		5
	Stud	1	14	36	5		56
	2nd	4	42	235	46	10	337
	Sale		10	90	24	11	135
	Cull		1	21	13	10	45
	<b>Total</b>		<b>5</b>	<b>68</b>	<b>385</b>	<b>89</b>	<b>31</b>
49% stayed the same							
	Grade	Adult 4					
		Top	Stud	2nd	Sale	Cull	Total
Adult 3	Top	1		2	2		5
	Stud	4	15	39	6	4	68
	2nd	2	44	202	98	39	385
	Sale		6	44	31	8	89
	Cull			12	12	7	31
	<b>Total</b>		<b>7</b>	<b>65</b>	<b>299</b>	<b>149</b>	<b>58</b>
44% stayed the same							
	Grade	Adult 5					
		Top	Stud	2nd	Sale	Cull	Total
Adult 4	Top	1	4	2			7
	Stud	1	19	32	8	5	65
	2nd	2	39	205	35	18	299
	Sale		8	65	57	19	149
	Cull		5	21	17	15	58
	<b>Total</b>		<b>4</b>	<b>75</b>	<b>325</b>	<b>117</b>	<b>57</b>
51% stayed the same							
	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Adult 5	Top	2		2			4
	Stud	4	28	35	8		75
	2nd		50	202	54	19	325
	Sale		10	44	45	18	117
	Cull		3	16	20	18	57
	<b>Total</b>		<b>6</b>	<b>91</b>	<b>299</b>	<b>127</b>	<b>55</b>
51% stayed the same							

	Grade	Adult 7					
		Top	Stud	2nd	Sale	Cull	Total
Adult 6	Top	1	5				6
	Stud	3	18	63	4	2	90
	2nd	1	23	207	59	6	296
	Sale	1	2	54	63	6	126
	Cull			7	25	23	55
	<b>Total</b>		<b>6</b>	<b>48</b>	<b>331</b>	<b>151</b>	<b>37</b>
54% stayed the same							

**New England 2017 Drop – Professional Grade Change Between each Grade and Adult 7 Grade – Calvert  
(Carter A3)**

	Grade	Adult 7					
		Top	Stud	2nd	Sale	Cull	Total
Yearling	Top		1	2	1		4
	Stud	1	2	20	6	1	30
	2nd	3	38	203	88	22	354
	Sale	2	7	82	42	10	143
	Cull			24	14	4	42
	<b>Total</b>	<b>6</b>	<b>48</b>	<b>331</b>	<b>151</b>	<b>37</b>	<b>573</b>
<b>44% stayed the same</b>							
	Grade	Adult 7					
		Top	Stud	2nd	Sale	Cull	Total
Adult 2	Top		2	1	1	1	5
	Stud	3	7	35	9	2	56
	2nd	1	32	204	74	22	333
	Sale	2	6	69	51	6	134
	Cull		1	22	16	6	45
	<b>Total</b>	<b>6</b>	<b>48</b>	<b>331</b>	<b>151</b>	<b>37</b>	<b>573</b>
<b>47% stayed the same</b>							
	Grade	Adult 7					
		Top	Stud	2nd	Sale	Cull	Total
Adult 3	Top		1	3	1		5
	Stud	1	10	39	15	3	68
	2nd	3	33	221	104	23	384
	Sale	2	3	58	16	8	87
	Cull		1	10	15	3	29
	<b>Total</b>	<b>6</b>	<b>48</b>	<b>331</b>	<b>151</b>	<b>37</b>	<b>573</b>
<b>44% stayed the same</b>							
	Grade	Adult 7					
		Top	Stud	2nd	Sale	Cull	Total
Adult 4	Top	1	2	2	2		7
	Stud	3	14	34	11	3	65
	2nd	2	22	187	71	14	296
	Sale		4	83	47	14	148
	Cull		6	25	20	6	57
	<b>Total</b>	<b>6</b>	<b>48</b>	<b>331</b>	<b>151</b>	<b>37</b>	<b>573</b>
<b>45% stayed the same</b>							
	Grade	Adult 7					
		Top	Stud	2nd	Sale	Cull	Total
Adult 5	Top	1	2	1			4
	Stud	4	15	42	11	3	75
	2nd	1	21	217	70	11	320
	Sale		7	47	52	11	117
	Cull		3	24	18	12	57
	<b>Total</b>	<b>6</b>	<b>48</b>	<b>331</b>	<b>151</b>	<b>37</b>	<b>573</b>
<b>52% stayed the same</b>							

	Grade	Adult 7					
		Top	Stud	2nd	Sale	Cull	Total
Adult 6	Top	1	5				6
	Stud	3	18	63	4	2	90
	2nd	1	23	207	59	6	296
	Sale	1	2	54	63	6	126
	Cull			7	25	23	55
	<b>Total</b>	<b>6</b>	<b>48</b>	<b>331</b>	<b>151</b>	<b>37</b>	<b>573</b>
<b>54% stayed the same</b>							

## AMSEA Classer Grade Results

New England 2017 Drop – AMSEA Grade – Angus Carter Measured LIFETIME Performance by Grade (Drop Level) –Average Lifetime CFW, FD, SL, SS, WT, EMD, WR, A7 FP+ & MP+ Index - followed by Average Lifetime Scored Dag, Bdwr, Char, Col, Flrot, Dust, Back, Legs, Face, Spig, Jaw

<i>Age: 11m Wool: 11m</i>		Raw Data – Average LT Performance											Raw Data – Deviation from Average LT Performance									
Yearling	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	FP+	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	FP+D	MP+D	
<b>Top</b>	98	3.4	16.8	94	35	55	1.7	24	6.2	100	106	107	0.1	3.4	-0.8	103	2.4	0.5	104	-1	6	
<b>Flock</b>	344	3.2	16.7	91	36	53	1.7	24	6.0	101	101	100	0.0	0.5	0.3	102	0.4	0.1	102	1	1	
<b>Cull</b>	137	3.0	16.5	87	36	50	1.5	23	5.5	99	94	95	-0.2	-3.7	-0.1	92	-2.6	-0.5	93	-1	-6	
<b>Total/Ave</b>	<b>579</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	
<i>Diff Top to Bottom</i>												<i>13</i>	<i>0.3</i>	<i>7.1</i>	<i>-0.7</i>	<i>11</i>	<i>4.5</i>	<i>1.0</i>	<i>11</i>	<i>1</i>	<i>12</i>	

<i>Age: 11m Wool: 11m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Yearling	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
<b>Top</b>	98	1.4	2.7	2.4	2.6	1.3	2.4	1.4	1.6	3.0	2.5	1.0
<b>Flock</b>	344	1.4	2.7	2.6	2.8	1.4	2.4	1.3	1.8	2.9	2.1	1.0
<b>Cull</b>	137	1.4	2.7	2.5	2.8	1.4	2.4	1.4	1.8	3.0	2.1	1.1
<b>Total/Ave</b>	<b>579</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>0.0</i>	<i>0.1</i>	<i>-0.1</i>	<i>-0.2</i>	<i>-0.1</i>	<i>-0.1</i>	<i>-0.1</i>	<i>-0.2</i>	<i>0.0</i>	<i>0.4</i>	<i>-0.1</i>

<i>Age: 22m Wool: 11m</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	FP+	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	FP+D	MP+D	
<b>Top</b>	107	3.5	17.0	95	36	55	1.7	24	6.1	102	108	110	0.3	4.5	0.2	103	2.4	0.5	102	2	8	
<b>Flock</b>	349	3.2	16.7	91	36	52	1.6	23	5.9	101	100	100	0.0	0.0	0.1	101	0.0	0.0	100	0	0	
<b>Cull</b>	122	2.9	16.4	86	35	50	1.5	23	5.8	97	93	91	-0.3	-4.1	-0.4	95	-2.1	-0.4	98	-3	-7	
<b>Total/Ave</b>	<b>578</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	
<i>Diff Top to Bottom</i>												<i>19</i>	<i>0.6</i>	<i>8.6</i>	<i>0.6</i>	<i>8</i>	<i>4.5</i>	<i>0.9</i>	<i>5</i>	<i>5</i>	<i>15</i>	

<i>Age: 22m Wool: 11m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 2 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
<b>Top</b>	107	1.4	2.8	2.5	2.7	1.4	2.4	1.4	1.7	3.0	2.3	1.1
<b>Flock</b>	349	1.4	2.7	2.5	2.7	1.4	2.4	1.4	1.8	2.9	2.2	1.0
<b>Cull</b>	122	1.4	2.6	2.5	2.9	1.4	2.4	1.3	1.8	3.0	2.0	1.1
<b>Total/Ave</b>	<b>578</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>0.0</i>	<i>0.2</i>	<i>0.0</i>	<i>-0.2</i>	<i>0.0</i>	<i>-0.1</i>	<i>0.0</i>	<i>-0.1</i>	<i>0.0</i>	<i>0.3</i>	<i>0.0</i>

<b>Age: 2.9y Wool: 12m</b>		<b>Raw Data – Average LT Performance</b>										<b>Raw Data – Deviation from Average LT Performance</b>									
<b>Adult 3 Grade</b>	<b>Count</b>	<b>CFW</b>	<b>FD</b>	<b>SL</b>	<b>SS</b>	<b>WT</b>	<b>FAT</b>	<b>EMD</b>	<b>WR</b>	<b>FP+</b>	<b>MP+</b>	<b>CFW%</b>	<b>FDD</b>	<b>SLD</b>	<b>SSD</b>	<b>WT%</b>	<b>FATD</b>	<b>EMDD</b>	<b>WR%</b>	<b>FP+D</b>	<b>MP+D</b>
<b>Top</b>	120	3.5	16.6	94	36	54	1.6	23	5.8	105	107	110	-0.1	3.0	0.3	98	1.9	0.0	98	5	7
<b>Flock</b>	359	3.2	16.9	91	36	52	1.7	24	6.0	100	101	100	0.2	0.6	0.0	102	0.1	0.1	102	-1	1
<b>Cull</b>	100	2.7	16.0	85	35	50	1.6	23	5.6	98	90	86	-0.7	-6.0	-0.4	96	-2.6	-0.3	95	-3	-10
<b>Total/Ave</b>	<b>579</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>
<b>Diff Top to Bottom</b>												<b>24</b>	<b>0.6</b>	<b>9.0</b>	<b>0.6</b>	<b>2</b>	<b>4.8</b>	<b>0.3</b>	<b>3</b>	<b>8</b>	<b>17</b>

<b>Age: 2.9y Wool: 12m</b>		<b>Raw Data – Average Lifetime Performance – Visual Scores</b>										
<b>Adult 3 Grade</b>	<b>Count</b>	<b>Dag</b>	<b>Bdwr</b>	<b>Char</b>	<b>Col</b>	<b>Flot</b>	<b>Dust</b>	<b>Back</b>	<b>Legs</b>	<b>Face</b>	<b>Spig</b>	<b>Jaw</b>
<b>Top</b>	120	1.4	2.9	2.4	2.7	1.4	2.4	1.4	1.7	3.0	2.4	1.0
<b>Flock</b>	359	1.4	2.7	2.6	2.8	1.4	2.4	1.4	1.7	2.9	2.2	1.1
<b>Cull</b>	100	1.3	2.6	2.4	2.8	1.4	2.4	1.3	1.8	2.9	1.9	1.1
<b>Total/Ave</b>	<b>579</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>
<b>Diff Top to Bottom</b>		<b>0.0</b>	<b>0.3</b>	<b>0.0</b>	<b>-0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.2</b>	<b>-0.1</b>	<b>0.0</b>	<b>0.5</b>	<b>0.0</b>

<b>Age: 3.9y Wool: 12m</b>		<b>Raw Data – Average LT Performance</b>										<b>Raw Data – Deviation from Average LT Performance</b>									
<b>Adult 4 Grade</b>	<b>Count</b>	<b>CFW</b>	<b>FD</b>	<b>SL</b>	<b>SS</b>	<b>WT</b>	<b>FAT</b>	<b>EMD</b>	<b>WR</b>	<b>FP+</b>	<b>MP+</b>	<b>CFW%</b>	<b>FDD</b>	<b>SLD</b>	<b>SSD</b>	<b>WT%</b>	<b>FATD</b>	<b>EMDD</b>	<b>WR%</b>	<b>FP+D</b>	<b>MP+D</b>
<b>Top</b>	84	3.3	16.7	92	36	55	1.8	24	6.0	101	102	104	0.0	1.5	0.7	109	2.6	0.6	101	1	2
<b>Flock</b>	381	3.2	16.7	91	36	52	1.6	24	5.9	101	100	101	0.1	0.6	0.1	100	0.1	0.1	99	0	0
<b>Cull</b>	114	2.9	16.5	87	35	50	1.5	23	6.0	99	97	92	-0.2	-3.2	-0.7	92	-2.2	-0.6	102	-1	-3
<b>Total/Ave</b>	<b>579</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>
<b>Diff Top to Bottom</b>												<b>12</b>	<b>0.3</b>	<b>4.7</b>	<b>1.5</b>	<b>17</b>	<b>4.2</b>	<b>1.3</b>	<b>0</b>	<b>2</b>	<b>5</b>

<b>Age: 3.9y Wool: 12m</b>		<b>Raw Data – Average Lifetime Performance – Visual Scores</b>										
<b>Adult 4 Grade</b>	<b>Count</b>	<b>Dag</b>	<b>Bdwr</b>	<b>Char</b>	<b>Col</b>	<b>Flot</b>	<b>Dust</b>	<b>Back</b>	<b>Legs</b>	<b>Face</b>	<b>Spig</b>	<b>Jaw</b>
<b>Top</b>	84	1.4	2.8	2.4	2.6	1.4	2.3	1.3	1.6	2.9	2.0	1.0
<b>Flock</b>	381	1.4	2.7	2.6	2.7	1.4	2.4	1.4	1.7	2.9	2.2	1.1
<b>Cull</b>	114	1.4	2.6	2.4	2.9	1.4	2.4	1.4	1.9	3.0	2.1	1.1
<b>Total/Ave</b>	<b>579</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>
<b>Diff Top to Bottom</b>		<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>-0.2</b>	<b>-0.1</b>	<b>-0.1</b>	<b>0.0</b>	<b>-0.3</b>	<b>0.0</b>	<b>-0.1</b>	<b>0.0</b>

<i>Age: 4.9y 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	FP+	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	FP+D	MP+D
<b>Top</b>	98	3.4	16.9	93	37	55	1.6	24	5.8	103	104	109	0.2	2.9	0.9	100	2.4	0.1	97	2	4
<b>Flock</b>	374	3.2	16.6	91	36	52	1.6	24	6.0	101	100	99	0.0	0.0	-0.2	101	-0.1	0.1	102	0	0
<b>Cull</b>	107	3.0	16.6	88	35	50	1.6	23	5.8	97	95	95	-0.1	-2.6	-0.2	96	-1.8	-0.3	97	-4	-5
<b>Total/Ave</b>	<b>579</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>
<i>Diff Top to Bottom</i>												14	0.3	5.5	1.2	4	1.0	0.4	0	6	9

<i>Age: 4.9y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 5 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
<b>Top</b>	98	1.4	2.8	2.3	2.6	1.4	2.4	1.4	1.6	2.9	2.4	1.1
<b>Flock</b>	374	1.4	2.7	2.5	2.8	1.4	2.4	1.3	1.8	2.9	2.1	1.1
<b>Cull</b>	107	1.4	2.7	2.6	2.9	1.4	2.4	1.3	1.9	3.0	2.1	1.0
<b>Total/Ave</b>	<b>579</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		0.0	0.1	-0.3	-0.3	-0.1	0.0	0.1	-0.3	0.0	0.3	0.0

<i>Age: 5.9y 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	FP+	MP+	CFW%	FDD	SLD	SSD	WT%	FATDD	EMDD	WR%	FP+D	MP+D
<b>Top</b>	108	3.3	16.4	92	36	53	1.6	23	6.1	106	105	105	-0.3	1.5	-0.1	100	0.9	-0.1	103	5	5
<b>Flock</b>	289	3.1	16.7	90	36	52	1.6	23	5.9	101	100	99	0.0	-0.4	0.3	99	-0.2	0.0	99	0	0
<b>Cull</b>	182	3.1	16.9	90	35	52	1.6	23	5.9	97	98	99	0.2	-0.2	-0.4	101	-0.1	0.0	100	-3	-2
<b>Total/Ave</b>	<b>579</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>
<i>Diff Top to Bottom</i>												6	-0.5	1.7	0.3	-1	0.6	-0.2	3	9	7

<i>Age: 5.9y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 6 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
<b>Top</b>	108	1.4	2.7	2.3	2.6	1.4	2.4	1.4	1.6	2.9	2.3	1.1
<b>Flock</b>	289	1.4	2.6	2.5	2.7	1.4	2.4	1.3	1.7	2.9	2.1	1.1
<b>Cull</b>	182	1.4	2.7	2.7	2.9	1.4	2.4	1.4	1.8	3.0	2.2	1.0
<b>Total/Ave</b>	<b>579</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		0.0	0.0	-0.4	-0.3	-0.1	-0.1	0.0	-0.2	0.0	0.1	0.0

<i>Age: 6.9y Wool: 12m</i>		Raw Data – Average LT Performance										Raw Data – Deviation from Average LT Performance									
Adult 7 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	FP+	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	FP+D	MP+D
<b>Top</b>	106	3.3	16.5	91	37	53	1.62	24	5.9	104	103	103	-0.2	0.2	0.8	100	0.7	0.0	100	4	3
<b>Flock</b>	310	3.1	16.6	90	36	52	1.61	23	6.0	101	100	98	0.0	-0.5	0.2	99	-0.3	-0.1	102	0	0
<b>Cull</b>	163	3.2	16.9	91	35	52	1.66	24	5.8	97	99	102	0.2	0.8	-1.0	102	0.1	0.2	97	-3	-2
<b>Total/Ave</b>	<b>579</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.62</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>
<i>Diff Top to Bottom</i>												<i>1</i>	<i>-0.4</i>	<i>-0.7</i>	<i>1.8</i>	<i>-3</i>	<i>0.0</i>	<i>-0.1</i>	<i>3</i>	<i>7</i>	<i>4</i>

<i>Age: 6.9y Wool: 12m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 7 Grade	Count	Dag	Bdwr	Char	Col	Flot	Dust	Back	Legs	Face	Spig	Jaw
<b>Top</b>	106	1.4	2.8	2.3	2.6	1.4	2.4	1.4	1.6	2.9	2.3	1.0
<b>Flock</b>	310	1.4	2.7	2.5	2.7	1.4	2.4	1.4	1.8	2.9	2.1	1.1
<b>Cull</b>	163	1.4	2.7	2.7	3.0	1.4	2.4	1.3	1.8	3.0	2.2	1.1
<b>Total/Ave</b>	<b>579</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>1.4</b>	<b>2.4</b>	<b>1.4</b>	<b>1.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.1</b>
<i>Diff Top to Bottom</i>		<i>0.1</i>	<i>0.1</i>	<i>-0.4</i>	<i>-0.4</i>	<i>-0.1</i>	<i>-0.1</i>	<i>0.1</i>	<i>-0.2</i>	<i>0.0</i>	<i>0.1</i>	<i>0.0</i>

**New England 2017 Drop – AMSEA Grade Change Over Time – Angus Carter**

		Adult 2			
		Top	Flock	Cull	Total
Yearling	Grade				
	Top	44	53	1	98
	Flock	53	238	52	343
	Cull	10	58	69	137
	Total	107	349	122	578
61% stayed the same					

		Adult 3			
		Top	Flock	Cull	Total
Adult 2	Grade				
	Top	49	58		107
	Flock	62	242	45	349
	Cull	8	59	55	122
	Total	119	359	100	578
60% stayed the same					

		Adult 4			
		Top	Flock	Cull	Total
Adult 3	Grade				
	Top	30	80	9	119
	Flock	45	255	59	359
	Cull	9	45	46	100
	Total	84	380	114	578
57% stayed the same					

		Adult 5			
		Top	Flock	Cull	Total
Adult 4	Grade				
	Top	27	55	2	84
	Flock	64	257	59	380
	Cull	6	62	46	114
	Total	97	374	107	578
57% stayed the same					

		Adult 6			
		Top	Flock	Cull	Total
Adult 5	Grade				
	Top	45	40	12	97
	Flock	57	217	100	374
	Cull	6	31	70	107
	Total	108	288	182	578
57% stayed the same					

		Adult 7			
		Top	Flock	Cull	Total
Adult 6	Grade				
	Top	46	54	8	108
	Flock	54	188	46	288
	Cull	6	67	109	182
	Total	106	309	163	578
59% stayed the same					

**AMSEA Grade Change Between Each Grade & Adult 7 – Angus Carter**

		Adult 7			
		Top	Flock	Cull	Total
Yearling	Grade				
	Top	23	48	27	98
	Flock	63	190	90	343
	Cull	20	71	46	137
	Total	106	309	163	578
45% stayed the same					

		Adult 7			
		Top	Flock	Cull	Total
Adult 2	Grade				
	Top	18	54	35	107
	Flock	73	194	82	349
	Cull	15	61	46	122
	Total	106	309	163	578
45% stayed the same					

		Adult 7			
		Top	Flock	Cull	Total
Adult 3	Grade				
	Top	31	56	32	119
	Flock	61	196	102	359
	Cull	14	57	29	100
	Total	106	309	163	578
44% stayed the same					

		Adult 7			
		Top	Flock	Cull	Total
Adult 4	Grade				
	Top	27	42	15	84
	Flock	70	206	104	380
	Cull	9	61	44	114
	Total	106	309	163	578
48% stayed the same					

		Adult 7			
		Top	Flock	Cull	Total
Adult 5	Grade				
	Top	37	49	11	97
	Flock	62	224	88	374
	Cull	7	36	64	107
	Total	106	309	163	578
56% stayed the same					

		Adult 7			
		Top	Flock	Cull	Total
Adult 6	Grade				
	Top	46	54	8	108
	Flock	54	188	46	288
	Cull	6	67	109	182
	Total	106	309	163	578
59% 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.

### New England 2017 Drop – AMSEA Grade – Angus Carter 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 – Yearling

Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	FP+	MP+
Top/Flock	442	3.2	16.7	92	36	53	1.7	24	6.0	101	102
Cull	137	3.0	16.5	87	36	50	1.5	23	5.5	99	94
<b>Total</b>	<b>579</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>

Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top/Flock	442	1.38	2.69	2.53	2.74	1.38	2.40	1.33	1.73	2.94	2.19	1.04
Cull	137	1.45	2.68	2.52	2.80	1.45	2.44	1.43	1.83	2.98	2.08	1.10
<b>Total/Ave</b>	<b>579</b>	<b>1.39</b>	<b>2.69</b>	<b>2.52</b>	<b>2.76</b>	<b>1.40</b>	<b>2.41</b>	<b>1.36</b>	<b>1.76</b>	<b>2.95</b>	<b>2.17</b>	<b>1.05</b>

#### AMSEA Class – Adult 2

Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	FP+	MP+
Top/Flock	456	3.3	16.8	92	36	53	1.6	24	6.0	101	102
Cull	122	2.9	16.4	86	35	50	1.5	23	5.8	97	93
<b>Total</b>	<b>578</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>

Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top/Flock	456	1.40	2.71	2.53	2.72	1.40	2.40	1.36	1.74	2.94	2.21	1.05
Cull	122	1.38	2.59	2.49	2.90	1.39	2.45	1.35	1.83	2.98	2.00	1.08
<b>Total/Ave</b>	<b>578</b>	<b>1.39</b>	<b>2.69</b>	<b>2.52</b>	<b>2.76</b>	<b>1.40</b>	<b>2.41</b>	<b>1.36</b>	<b>1.76</b>	<b>2.95</b>	<b>2.17</b>	<b>1.05</b>

**New England 2017 Drop – Professional Class – Andrew Calvert 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 – Yearling

Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	FP+	MP+
Top Stud Second	392	3.2	16.7	91	36	53	1.7	24	6.1	101	102
Sale	145	3.1	16.6	89	35	51	1.6	23	5.7	101	98
Cull	42	3.0	16.6	88	34	48	1.5	22	5.1	97	91
<b>Total</b>	<b>579</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>

Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top Stud Second	392	1.38	2.71	2.52	2.71	1.38	2.40	1.34	1.74	2.94	2.22	1.04
Sale	145	1.42	2.64	2.55	2.84	1.43	2.43	1.38	1.76	2.94	2.06	1.06
Cull	42	1.45	2.67	2.44	2.93	1.41	2.48	1.48	1.89	3.02	2.08	1.13
<b>Total/Ave</b>	<b>579</b>	<b>1.39</b>	<b>2.69</b>	<b>2.52</b>	<b>2.76</b>	<b>1.40</b>	<b>2.41</b>	<b>1.36</b>	<b>1.76</b>	<b>2.95</b>	<b>2.17</b>	<b>1.05</b>

Prof Class – Adult 2

Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	FP+	MP+
Top Stud Second	398	3.3	16.6	91	36	53	1.6	23	6.0	103	103
Sale	135	3.0	16.9	91	35	52	1.7	24	5.7	96	95
Cull	45	2.9	16.6	87	35	49	1.5	23	5.6	96	91
<b>Total</b>	<b>578</b>	<b>3.2</b>	<b>16.7</b>	<b>91</b>	<b>36</b>	<b>52</b>	<b>1.6</b>	<b>23</b>	<b>5.9</b>	<b>100</b>	<b>100</b>

Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top Stud Second	398	1.40	2.73	2.50	2.70	1.39	2.38	1.37	1.73	2.94	2.16	1.05
Sale	135	1.39	2.54	2.56	2.88	1.38	2.46	1.30	1.77	2.94	2.17	1.07
Cull	45	1.38	2.69	2.65	2.94	1.45	2.50	1.41	1.97	3.04	2.23	1.02
<b>Total/Ave</b>	<b>578</b>	<b>1.39</b>	<b>2.69</b>	<b>2.52</b>	<b>2.76</b>	<b>1.40</b>	<b>2.41</b>	<b>1.36</b>	<b>1.76</b>	<b>2.95</b>	<b>2.17</b>	<b>1.05</b>