

Pingelly 2016 Drop

Overview of Professional and AMSEA Class

June 2025

Raw Data and Index

Introduction

The Pingelly site was hosted by Murdoch University at the University of Western Australia's property "Ridgefield" at Pingelly. The site committee was founded via the Federation of Performance Sheep Breeders. The site was one of five participating in the AWI-funded Merino Lifetime Productivity (MLP) Project, which was facilitated by the Australian Merino Sire Evaluation Association.

2016 Drop Key Assessments and Dates

The Pingelly 2016 drop ewes are the daughters of 15 industry sires that were joined to a ewe base made up of large-framed, plain-bodied, highly fertile animals with a moderate wool cut. The ewe base had a focus on genetic fat, growth and muscling while trying to maintain wool cut and micron. The 'Ridgefield' flock was stocked at 10DSE/ha, averaged 5kg of 19µm wool, and produced weaning percentages of 100–115%. Ewes for the project were selected from four age groups from the 'Ridgefield' commercial and Maternal Efficiency Flocks.

Event	Date	Age Stage	Lactation Status	Age and Wool Growth
Birth	June 2016			
Post Weaning Assessment	March 2017	P	Dry	9 months, 9 months wool
Adult 2 Assessment	March 2018	A2	Dry	22 months, 12 months wool
<i>First Joining</i>	<i>January 2018</i>			
Adult 22 Assessment	December 2018	A22	Post weaning	2 years, 8 months wool
Adult 3 Assessment	December 2019	A3	Post weaning	3 years, 12 months wool
Adult 4 Assessment	December 2020	A4	Post weaning	4 years, 12 months wool
Adult 5 Assessment	December 2021	A5	Post weaning	5 years, 12 months wool
Adult 6 Assessment	December 2022	A6	Post weaning	6 years, 12 months wool

As per the MLP protocol, the 2016 drop ewes are classed annually at each assessment for seven years using two classing approaches – the AMSEA class (undertaken initially by Preston Clark and later by Mitch Crosby) and the Professional class (undertaken by Nathan King). The AMSEA Grade and Professional Classer Grade use the site's nominated breeding objective to guide classing:

Pingelly Site Breeding Objective: Sheep that are to be easy care based on, and because of, good conformation and constitution. Medium to large frame. Bright white, stylish wool free from colour and water faults. Wool cut is sufficient to balance wool production with body size to ensure both add real value to the bottom line.

Classing Methodology

Professional Class Process – Nathan King

- 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 – Preston Clark (Post Weaning, Adult, Adult 22), Mitch Crosby (Adult 3 – 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 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 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
600571–2013–130641	Billandri Poll, 130641	BILL 130641
609039–2012–120708	Boolading Blues Poll, 120708	BOOLAD 120708
600827–2013–130597	Claypans Poll, 130597	CLAYPANS 130597
503506–2009–090137	East Mundalla, 090137 (Jonty)	EA MUND 090137
600443–2014–145096	Ejanding Poll, 145096	EJANDING 145096
500048–2012–120715	Haddon Rig, 2.715	HAD RIG 2.715
500383–2011–000043	Hazeldean, 11.43	HAZELDEAN 11.43
609154–2013–130387	Ingle Poll, 130387	INGLE 130387
600815–2009–090918	Leahcim Poll, 090918	LEAHCIM 090918
609040–2010–100081	Merinotech WA Poll, 100081	MERT WA 100081
504637–2014–140377	Moojepin, 140377	MOOJEPIN 140377
503855–2010–100R56	One Oak No. 2, R56	ONE OAK R56
601271–2011–110330	Rhamily Poll, 110330 (Benny)	RHAMILY 110330
601236–2011–110004	West Plains Poll, 110004 (Mercenary)	WEST PL 110004
601343–2014–140141	Wyambah Poll, 140141	WYAMBEH 140141

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 Pingelly ewes based on the Professional and AMSEA classing approaches.

The results for the Professional and AMSEA grade are 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.

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.

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.

Factors to Consider:

- Change in classer has impacted results
- Query whether the change in shearing date means that wool length has influenced the AMSEA classing?

Best Time to do an early Class:

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

Classers are selecting for:

- Professional – selecting for CFW, FD, SS (at times), WT, better wool colour and character
- AMSEA – selecting for CFW, FD, SS (at times), WT, some EMD, better wool colour and character

Impact of ewe's reproduction status on classing:

- Professional – impacted classing
- AMSEA – impacted classing

Change over time:

- Professional – approx 50% or a little under for repeatability between classings
- AMSEA – approx 50% and over of animals stay in the same grade between classings

<p>AMSEA Class – Post Weaning to Adult 2 – Three Way Grade</p> <ul style="list-style-type: none">• 55% Stay in the same grade• 98% Stay in the same or change by one grade• 2% of animals change by two grades	<p>Professional Class – Post Weaning to Adult 2 – Five Way Grade</p> <ul style="list-style-type: none">• 44% Stay in the same grade• 89% Stay in the same or change by one grade• 11% of animals change by two grades
<p>AMSEA Class – Adult 2 to Adult 3 – Three Way Grade</p> <ul style="list-style-type: none">• 54% Stay in the same grade• 98% Stay in the same or change by one grade• 2% of animals change by two grades	<p>Professional Class – Adult 2 to Adult 3 – Five Way Grade</p> <ul style="list-style-type: none">• 47% Stay in the same grade• 90% Stay in the same or change by one grade• 10% of animals change by two grades

Professional Classer Grade Results

Pingelly 2016 Drop – Professional Class – Nathan King 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: 9.5m Wool: 9.5m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Post Weaning Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	6	3.5	18.3	102	35	69	4.2	25	5.8	103	107	-0.6	3.3	1.0	107	0.9	0.1	95	2.8
Stud	45	3.5	18.7	100	34	68	3.4	26	6.3	104	106	-0.2	1.4	0.5	104	0.2	0.3	103	3.4
Seconds	135	3.2	18.7	99	34	66	3.6	26	6.1	100	98	-0.1	-0.1	0.1	101	0.3	0.3	100	0.1
Sale	88	3.3	19.2	98	33	63	3.5	25	5.9	98	99	0.3	-0.8	-0.5	98	0.2	-0.2	97	-2.4
Cull	24	3.3	19.0	99	34	59	3.2	24	6.3	102	101	0.1	0.5	0.0	91	0.0	-1.3	102	1.3
Total/Ave	298	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100
<i>Diff Top to Bottom</i>											6	-0.7	2.8	1.0	16	0.9	1.4	-7	1

<i>Age: 9.5m Wool: 9.5m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Post Weaning Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	6	1.9	1.6	2.1	2.0	1.1	2.3	1.9	2.3	2.0	1.3	1.0
Stud	45	1.9	1.6	2.6	2.4	1.1	2.5	2.0	2.4	2.1	1.5	1.0
Seconds	135	1.9	1.5	2.8	2.5	1.1	2.6	2.0	2.2	1.9	1.5	1.0
Sale	88	1.9	1.6	2.9	2.6	1.2	2.7	2.0	2.2	2.0	1.6	1.0
Cull	24	2.0	1.5	2.8	2.6	1.3	2.6	2.1	2.4	2.3	1.5	1.0
Total/Ave	298	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
<i>Diff Top to Bottom</i>		-0.1	0.1	-0.7	-0.5	-0.2	-0.3	-0.2	-0.1	-0.3	-0.1	0.0

<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	11	3.9	18.8	97	34	71	3.2	25	5.4	105	119	-0.1	-1.5	0.1	110	0.0	-0.3	88	5.1
Stud	44	3.3	18.5	99	33	68	3.6	26	5.8	103	101	-0.3	0.6	-0.4	105	0.4	0.5	96	2.6
Seconds	130	3.3	18.9	99	34	65	3.6	26	6.3	100	100	0.1	0.6	0.6	101	0.3	0.2	103	0.0
Sale	63	3.2	19.0	99	33	63	3.4	25	6.1	97	97	0.1	0.1	-0.6	98	0.2	-0.2	100	-3.5
Cull	45	3.2	19.0	97	33	61	3.3	25	6.1	100	98	0.2	-1.4	-0.5	94	0.0	-0.8	100	-0.6
Total/Ave	293	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100
<i>Diff Top to Bottom</i>											21	-0.3	-0.1	0.6	16	0.0	0.5	-13	6

<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	11	1.7	1.7	2.3	2.1	1.1	2.3	1.9	2.7	2.0	1.5	1.0
Stud	44	2.0	1.5	2.7	2.4	1.1	2.5	1.9	2.3	2.0	1.5	1.0
Seconds	130	1.9	1.5	2.8	2.5	1.1	2.6	2.0	2.3	2.0	1.5	1.0
Sale	63	1.9	1.6	2.9	2.6	1.2	2.6	2.0	2.3	1.9	1.7	1.0
Cull	45	2.0	1.6	2.9	2.7	1.2	2.7	2.1	2.2	2.1	1.5	1.0
Total/Ave	293	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
<i>Diff Top to Bottom</i>		<i>-0.3</i>	<i>0.0</i>	<i>-0.6</i>	<i>-0.6</i>	<i>-0.1</i>	<i>-0.4</i>	<i>-0.2</i>	<i>0.4</i>	<i>-0.1</i>	<i>-0.1</i>	<i>0.0</i>

<i>A: 2.5y Wool: 7.5m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 22 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	13	3.9	18.5	97	34	69	3.3	25	5.5	109	118	-0.3	-2.0	-0.3	106	0.1	-0.5	89	8.8
Stud	31	3.4	18.3	102	34	67	3.6	26	6.0	103	103	-0.6	3.1	-0.3	103	0.3	0.5	98	2.8
Seconds	130	3.3	18.8	99	34	66	3.5	26	6.2	100	99	-0.1	0.1	0.3	102	0.3	0.2	102	-0.2
Sale	79	3.2	19.1	98	34	63	3.5	25	6.2	98	97	0.2	-0.3	0.0	98	0.3	-0.1	101	-2.5
Cull	43	3.3	19.2	97	33	62	3.4	25	6.2	101	99	0.4	-1.4	-0.5	96	0.2	-0.6	101	0.6
Total/Ave	296	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100
<i>Diff Top to Bottom</i>											<i>20</i>	<i>-0.7</i>	<i>-0.6</i>	<i>0.2</i>	<i>11</i>	<i>0.1</i>	<i>0.1</i>	<i>-12</i>	<i>8</i>

<i>A: 2.5y Wool: 7.5m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 22 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	13	1.8	1.7	2.4	2.1	1.1	2.3	1.9	2.6	2.1	1.2	1.0
Stud	31	2.0	1.6	2.6	2.4	1.1	2.5	2.0	2.2	2.1	1.6	1.0
Seconds	130	1.9	1.5	2.8	2.5	1.1	2.5	2.0	2.3	2.0	1.6	1.0
Sale	79	1.9	1.6	2.9	2.6	1.2	2.7	2.0	2.2	1.9	1.5	1.0
Cull	43	2.0	1.6	2.9	2.7	1.3	2.7	2.2	2.3	2.1	1.6	1.0
Total/Ave	296	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
<i>Diff Top to Bottom</i>		<i>-0.2</i>	<i>0.1</i>	<i>-0.6</i>	<i>-0.6</i>	<i>-0.1</i>	<i>-0.4</i>	<i>-0.3</i>	<i>0.3</i>	<i>0.1</i>	<i>-0.4</i>	<i>0.0</i>

<i>A: 3.5y 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	12	3.5	18.2	97	33	72	3.7	26	5.1	101	105	-0.6	-1.3	-0.6	111	0.4	0.7	83	0.8
Stud	28	3.7	18.7	101	34	68	3.6	26	5.8	107	114	-0.1	2.4	0.6	105	0.4	0.5	94	6.5
Seconds	148	3.4	18.9	100	34	65	3.5	25	6.1	102	102	0.1	1.2	0.7	101	0.3	0.1	100	1.3
Sale	74	3.2	18.9	97	33	62	3.4	25	6.1	97	96	0.0	-1.7	-0.7	96	0.1	-0.4	100	-3.1
Cull	35	2.9	18.9	96	32	63	3.5	25	6.7	95	89	0.0	-3.1	-1.5	98	0.3	-0.1	110	-5.1
Total/Ave	297	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100
<i>Diff Top to Bottom</i>											16	-0.7	1.8	0.9	13	0.1	0.8	-27	6

<i>A: 3.5y 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	12	1.8	1.5	2.3	2.2	1.2	2.4	1.9	2.3	1.9	1.3	1.0
Stud	28	2.1	1.5	2.5	2.2	1.1	2.4	1.9	2.4	2.1	1.6	1.0
Seconds	148	1.9	1.6	2.7	2.5	1.1	2.6	2.0	2.3	2.0	1.5	1.0
Sale	74	1.9	1.6	2.9	2.6	1.2	2.7	2.0	2.2	2.0	1.6	1.0
Cull	35	1.9	1.5	3.1	2.9	1.3	2.8	2.1	2.3	1.9	1.6	1.0
Total/Ave	297	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
<i>Diff Top to Bottom</i>		-0.1	0.0	-0.8	-0.7	0.0	-0.4	-0.2	0.0	0.0	-0.3	0.0

<i>A: 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	9	4.0	19.0	98	32	73	3.7	25	5.0	105	120	0.2	-0.3	-1.9	112	0.4	-0.3	82	4.2
Stud	27	3.6	18.5	100	34	67	3.7	26	5.9	104	109	-0.4	1.7	-0.3	104	0.4	0.5	96	3.8
Seconds	150	3.3	18.7	98	34	65	3.5	25	6.0	102	101	-0.1	-0.5	0.5	101	0.2	0.1	98	1.6
Sale	69	3.2	19.0	100	33	64	3.5	25	6.6	96	96	0.1	0.9	-0.9	98	0.3	-0.1	107	-3.8
Cull	43	3.1	19.2	98	34	61	3.5	25	6.2	98	93	0.4	-0.7	0.3	95	0.3	-0.4	102	-2.7
Total/Ave	298	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100
<i>Diff Top to Bottom</i>											27	-0.2	0.3	-2.2	18	0.1	0.1	-20	7

<i>A: 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	9	1.7	1.6	2.4	2.2	1.1	2.3	1.9	2.5	2.1	1.4	1.0
Stud	27	1.9	1.6	2.4	2.2	1.1	2.5	1.9	2.5	2.1	1.4	1.0
Seconds	150	2.0	1.6	2.8	2.5	1.1	2.6	2.0	2.2	2.0	1.5	1.0
Sale	69	1.9	1.6	2.9	2.7	1.2	2.7	2.1	2.3	1.9	1.6	1.0
Cull	43	1.9	1.5	2.9	2.7	1.2	2.7	2.2	2.3	2.0	1.7	1.0
Total/Ave	298	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
<i>Diff Top to Bottom</i>		<i>-0.2</i>	<i>0.1</i>	<i>-0.6</i>	<i>-0.5</i>	<i>-0.1</i>	<i>-0.4</i>	<i>-0.3</i>	<i>0.2</i>	<i>0.1</i>	<i>-0.3</i>	<i>0.0</i>

<i>A: 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	7	3.6	18.8	101	35	72	4.3	27	4.6	99	108	1.0	1.0	1.0	1.0	1.0	1.5	75	-1.2
Stud	23	3.5	18.3	100	35	68	4.0	26	4.8	104	106	0.7	0.7	0.7	0.7	0.7	0.7	79	3.3
Seconds	165	3.3	18.8	99	34	65	3.5	26	6.3	101	101	0.3	0.3	0.3	0.3	0.3	0.2	103	1.0
Sale	51	3.2	18.8	99	33	64	3.3	25	6.2	99	98	0.1	0.1	0.1	0.1	0.1	-0.2	102	-0.9
Cull	50	3.1	19.3	97	33	62	3.3	25	6.2	96	94	0.1	0.1	0.1	0.1	0.1	-0.8	102	-3.8
Total/Ave	296	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100
<i>Diff Top to Bottom</i>		<i>14</i>	<i>-0.5</i>	<i>4.0</i>	<i>1.5</i>	<i>16</i>	<i>0.9</i>	<i>2.4</i>	<i>-27</i>	<i>3</i>									

<i>A: 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	7	1.8	1.5	2.5	2.2	1.1	2.5	2.0	2.2	2.0	1.7	1.0
Stud	23	1.9	1.5	2.4	2.3	1.2	2.5	1.9	2.1	2.0	1.3	1.0
Seconds	165	1.9	1.5	2.8	2.5	1.1	2.6	2.0	2.3	2.0	1.5	1.0
Sale	51	2.1	1.7	2.9	2.6	1.2	2.6	2.1	2.3	2.0	1.7	1.0
Cull	50	1.9	1.5	3.0	2.8	1.2	2.7	2.1	2.3	2.0	1.7	1.0
Total/Ave	296	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
<i>Diff Top to Bottom</i>		<i>-0.2</i>	<i>-0.1</i>	<i>-0.5</i>	<i>-0.5</i>	<i>-0.1</i>	<i>-0.2</i>	<i>-0.1</i>	<i>-0.1</i>	<i>0.0</i>	<i>0.1</i>	<i>0.0</i>

<i>A: 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	10	3.9	18.6	95	32	73	3.5	26	4.6	102	118	-0.3	-4.2	-1.5	112	0.2	0.5	75	1.2
Stud	25	3.6	18.7	100	34	69	4.0	26	5.2	103	108	-0.2	0.9	0.3	107	0.8	0.9	84	2.4
Seconds	153	3.3	18.8	98	34	65	3.5	25	6.2	102	101	0.0	-0.3	0.4	101	0.2	0.0	102	1.8
Sale	67	3.3	18.9	98	33	63	3.3	25	6.1	99	99	0.1	-0.3	-0.9	97	0.1	-0.3	99	-1.7
Cull	44	3.0	19.0	100	34	61	3.7	25	6.6	95	90	0.1	1.8	0.0	95	0.4	-0.2	109	-5.2
Total/Ave	299	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100
<i>Diff Top to Bottom</i>											28	-0.4	-6.0	-1.5	18	-0.2	0.7	-33	6

<i>A: 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	10	1.7	1.5	2.5	2.2	1.1	2.5	1.8	2.5	2.1	1.6	1.0
Stud	25	1.9	1.7	2.6	2.3	1.2	2.5	1.9	2.0	2.0	1.4	1.0
Seconds	153	2.0	1.5	2.8	2.4	1.1	2.6	2.0	2.3	2.0	1.5	1.0
Sale	67	1.9	1.6	3.0	2.6	1.2	2.6	2.0	2.4	2.0	1.6	1.0
Cull	44	1.9	1.5	2.8	2.7	1.2	2.7	2.3	2.2	1.9	1.8	1.0
Total/Ave	299	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
<i>Diff Top to Bottom</i>		-0.2	0.0	-0.3	-0.5	-0.1	-0.3	-0.5	0.3	0.2	-0.2	0.0

Pingelly 2016 Drop – Professional Grade Change Between Grades & Next Grade – Nathan King

	Grade	Adult 2					
		Top	Stud	2nd	Sale	Cull	Total
Post Weaning	Top	3	1	1	1		6
	Stud	3	16	21	2	2	44
	2nd	4	20	71	26	9	130
	Sale	1	6	31	27	23	88
	Cull			6	7	11	24
	Total		11	43	130	63	45
45% stayed the same							
	Grade	Adult 22					
		Top	Stud	2nd	Sale	Cull	Total
Adult 2	Top	9	2				11
	Stud	1	7	31	2	2	43
	2nd	2	16	72	31	7	128
	Sale		4	16	30	13	63
	Cull	1	1	9	15	19	45
	Total		13	30	128	78	41
52% stayed the same							
	Grade	Adult 3					
		Top	Stud	2nd	Sale	Cull	Total
Adult 22	Top	6	5	2			13
	Stud	2	9	19			30
	2nd	3	13	79	25	8	128
	Sale	1		31	37	10	79
	Cull		1	14	11	17	43
	Total		12	28	145	73	35
51% stayed the same							
	Grade	Adult 4					
		Top	Stud	2nd	Sale	Cull	Total
Adult 3	Top	4	4	4			12
	Stud	3	9	14		2	28
	2nd	2	11	93	34	7	147
	Sale		2	33	23	15	73
	Cull			4	12	19	35
	Total		9	26	148	69	43
50% stayed the same							
	Grade	Adult 5					
		Top	Stud	2nd	Sale	Cull	Total
Adult 4	Top	1	4	4			9
	Stud	2	6	18	1		27
	2nd	3	12	103	21	7	146
	Sale		1	31	20	17	69
	Cull	1		7	9	26	43
	Total		7	23	163	51	50
53% stayed the same							

	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Adult 5	Top	3	1	2	1		7
	Stud	2	12	6	2	1	23
	2nd	5	9	109	28	13	164
	Sale		2	24	16	9	51
	Cull		1	10	18	21	50
	Total		10	25	151	65	44
55% stayed the same							

Pingelly 2016 Drop – Professional Grade Change Between each Grade and Adult 6 Grade – Nathan King

	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Post Weaning	Top		2	4			6
	Stud	3	6	25	8	3	45
	2nd	6	9	76	27	17	135
	Sale	1	6	37	26	18	88
	Cull		2	10	6	6	24
	Total	10	25	152	67	44	298
38% stayed the same							
	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Adult 2	Top	4	3	4			11
	Stud	2	5	31	4	1	43
	2nd	3	11	74	24	18	130
	Sale		2	29	23	9	63
	Cull		3	13	14	15	45
	Total	9	24	151	65	43	292
41% stayed the same							
	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Adult 22	Top	4	3	5	1		13
	Stud	3	6	15	3	4	31
	2nd	2	8	82	25	12	129
	Sale		5	35	26	13	79
	Cull		2	14	12	15	43
	Total	9	24	151	67	44	295
45% stayed the same							
	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Adult 3	Top	3	4	5			12
	Stud	3	4	16	2	3	28
	2nd	3	16	86	29	13	147
	Sale	1	1	34	23	15	74
	Cull			9	13	13	35
	Total	10	25	150	67	44	296
44% stayed the same							
	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Adult 4	Top	4	2	3			9
	Stud	3	7	15	1	1	27
	2nd	3	14	98	24	10	149
	Sale		1	26	27	15	69
	Cull		1	9	15	18	43
	Total	10	25	151	67	44	297
52% stayed the same							

	Grade	Adult 6					
		Top	Stud	2nd	Sale	Cull	Total
Adult 5	Top	3	1	2	1		7
	Stud	2	12	6	2	1	23
	2nd	5	9	109	28	13	164
	Sale		2	24	16	9	51
	Cull		1	10	18	21	50
	Total	10	25	151	65	44	298
55% stayed the same							

AMSEA Classer Grade Results

Pingelly 2016 Drop – AMSEA Grade – Preston Clark/Mitch Crosby 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: 9.5m W: 9.5m</i>		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Post Weaning Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	48	3.4	18.8	99	35	66	3.7	26	6.0	103	105	-0.1	0.5	1.0	101	0.2	0.2	98	2.6
Flock	188	3.3	18.8	99	34	65	3.5	25	6.2	100	99	0.0	0.4	0.2	100	0.0	0.0	102	0.0
Cull	63	3.2	19.0	97	32	64	3.5	25	5.9	98	98	0.1	-1.6	-1.4	99	0.0	-0.2	97	-1.9
Total/Ave	299	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100
<i>Diff Top to Bottom</i>											6	-0.2	2.1	2.4	2	0.2	0.4	1	4

<i>Age: 9.5m W: 9.5m</i>		Raw Data – Average Lifetime Performance – Visual Scores										
Post Weaning Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	48	2.0	1.6	2.6	2.3	1.1	2.5	2.0	2.2	2.1	1.6	1.0
Flock	188	1.9	1.6	2.8	2.5	1.1	2.6	2.0	2.3	2.0	1.5	1.0
Cull	63	1.9	1.5	2.9	2.7	1.3	2.7	2.0	2.2	2.0	1.6	1.0
Total/Ave	299	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
<i>Diff Top to Bottom</i>		0.1	0.1	-0.3	-0.4	-0.2	-0.3	-0.1	0.0	0.1	-0.1	0.0

<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	25	3.7	18.5	96	34	66	3.3	25	6.1	107	112	-0.3	-3.0	0.5	102	-0.2	-0.5	100	6.4
Flock	217	3.3	18.8	99	34	65	3.6	25	6.1	100	100	0.0	0.1	-0.2	100	0.1	0.1	100	0.1
Cull	49	3.1	19.3	101	34	63	3.3	25	6.2	95	94	0.4	2.0	0.3	97	-0.2	-0.4	102	-5.7
Total/Ave	291	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100
<i>Diff Top to Bottom</i>											18	-0.7	-5.0	0.1	5	0.0	-0.2	-2	12

<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	25	1.9	1.8	2.5	2.3	1.1	2.3	1.9	2.5	2.2	1.4	1.0
Flock	217	2.0	1.5	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
Cull	49	1.8	1.5	3.1	2.7	1.2	2.8	2.0	2.3	1.9	1.7	1.0
Total/Ave	291	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
<i>Diff Top to Bottom</i>		0.1	0.3	-0.6	-0.4	0.0	-0.5	-0.1	0.2	0.3	-0.3	0.0

A: 2.5y Wool: 7m		Raw Data - Average LT Performance									Raw Data - Deviation from Average LT Performance								
Adult 22 Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+	CFW%	FDD	SLD	SSD	WT%	FATD	EMDD	WR%	MP+D
Top	79	3.5	18.7	100	34	67	3.5	26	5.8	103	106	-0.1	1.5	0.1	103	0.0	0.3	94	2.8
Flock	173	3.2	18.8	99	34	65	3.5	25	6.4	99	97	0.0	0.0	-0.1	100	0.0	0.0	104	-1.0
Cull	44	3.2	19.2	96	34	62	3.5	25	6.0	99	98	0.4	-2.5	0.2	96	0.0	-0.6	98	-1.1
Total/Ave	296	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100
Diff Top to Bottom											8	-0.5	3.9	-0.1	7	0.0	0.8	-4	4

A: 2.5y Wool: 7m		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 22 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	79	2.0	1.6	2.6	2.4	1.1	2.5	1.9	2.4	2.1	1.5	1.0
Flock	173	1.9	1.5	2.8	2.5	1.2	2.6	2.0	2.2	2.0	1.6	1.0
Cull	44	1.9	1.6	3.0	2.7	1.3	2.8	2.1	2.3	2.0	1.5	1.0
Total/Ave	296	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
Diff Top to Bottom		0.0	0.0	-0.4	-0.4	-0.2	-0.3	-0.2	0.0	0.1	0.1	0.0

A: 3.5y Wool: 12m		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	48	3.6	18.8	100	33	68	3.4	26	5.8	104	109	0.0	1.7	-0.7	105	-0.1	0.2	94	3.5
Flock	183	3.3	18.8	98	34	65	3.5	25	6.1	101	101	0.0	-0.2	0.2	101	0.0	0.1	100	0.7
Cull	68	3.0	19.0	98	34	61	3.6	25	6.4	96	91	0.1	-0.6	0.0	94	0.1	-0.3	105	-4.4
Total/Ave	299	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100
Diff Top to Bottom											18	-0.2	2.3	-0.8	11	-0.2	0.5	-11	8

A: 3.5y Wool: 12m		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 3 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	48	2.0	1.6	2.5	2.3	1.2	2.5	1.9	2.4	2.1	1.4	1.0
Flock	183	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
Cull	68	1.9	1.5	3.0	2.6	1.2	2.7	2.2	2.2	1.9	1.7	1.0
Total/Ave	299	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
Diff Top to Bottom		0.1	0.1	-0.5	-0.3	0.0	-0.2	-0.3	0.2	0.2	-0.2	0.0

A: 4.5y Wool: 12m		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	41	3.7	18.6	98	34	66	3.4	25	5.5	110	113	-0.3	-0.9	0.4	103	-0.1	-0.5	91	9.3		
Flock	212	3.3	18.9	99	34	65	3.5	26	6.2	100	100	0.0	0.4	0.1	100	0.0	0.1	101	0.1		
Cull	45	2.9	19.1	98	33	63	3.7	25	6.5	92	87	0.2	-0.8	-0.6	97	0.2	-0.2	106	-8.6		
Total/Ave	298	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100		
Diff Top to Bottom											26	-0.5	-0.1	1.0	5	-0.3	-0.3	-16	18		

A: 4.5y Wool: 12m		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 4 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	41	2.0	1.7	2.5	2.3	1.1	2.4	1.9	2.3	2.1	1.4	1.0
Flock	212	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.6	1.0
Cull	45	1.9	1.5	3.1	2.7	1.2	2.7	2.2	2.3	1.9	1.6	1.0
Total/Ave	298	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
Diff Top to Bottom		0.2	0.2	-0.6	-0.4	-0.1	-0.3	-0.3	0.0	0.3	-0.3	0.0

A: 5.5y Wool: 12m		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	42	3.5	18.7	100	34	69	3.7	26	5.6	105	106	-0.1	1.1	0.6	107	0.2	0.5	92	4.3		
Flock	182	3.3	18.8	98	34	65	3.5	25	6.1	100	100	-0.1	-0.5	-0.2	100	0.0	0.1	100	0.1		
Cull	75	3.2	19.1	99	34	63	3.5	25	6.4	98	96	0.2	0.5	0.2	97	0.0	-0.5	104	-2.7		
Total/Ave	299	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100		
Diff Top to Bottom											11	-0.3	0.6	0.4	11	0.2	1.0	-12	7		

A: 5.5y Wool: 12m		Raw Data – Average Lifetime Performance – Visual Scores										
Adult 5 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	42	1.8	1.5	2.5	2.3	1.1	2.4	1.9	2.3	2.1	1.5	1.0
Flock	182	2.0	1.5	2.8	2.5	1.1	2.6	2.0	2.3	2.0	1.5	1.0
Cull	75	1.9	1.6	2.9	2.7	1.2	2.7	2.2	2.3	1.9	1.7	1.0
Total/Ave	299	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
Diff Top to Bottom		-0.1	-0.1	-0.4	-0.4	-0.2	-0.2	-0.3	0.0	0.1	-0.2	0.0

A: 6.5y Wool: 12m	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	35	3.7	19.1	99	34	68	3.6	26	5.3	104	112	0.3	0.1	0.4	105	0.1	0.2	87	3.8	
Flock	198	3.3	18.7	98	34	65	3.6	26	6.1	100	99	-0.1	-0.8	0.3	100	0.0	0.2	101	-0.2	
Cull	65	3.2	19.0	101	33	62	3.3	25	6.4	99	96	0.1	2.2	-0.9	96	-0.2	-0.6	105	-1.1	
Total/Ave	298	3.3	18.8	99	34	65	3.5	25	6.1	100	3.3	18.8	99	34	65	3.5	25	6.1	100	
Diff Top to Bottom											15	0.1	-2.1	1.3	8	0.4	0.8	-18	5	

A: 6.5y Wool: 12m	Raw Data – Average Lifetime Performance – Visual Scores											
Adult 6 Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Legs	Back	Face	Spig	Jaw
Top	35	2.0	1.6	2.6	2.4	1.1	2.5	1.9	2.2	2.1	1.7	1.0
Flock	198	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
Cull	65	1.9	1.6	2.9	2.7	1.2	2.7	2.2	2.3	2.0	1.8	1.0
Total/Ave	298	1.9	1.6	2.8	2.5	1.2	2.6	2.0	2.3	2.0	1.5	1.0
Diff Top to Bottom		0.1	0.0	-0.2	-0.3	0.0	-0.2	-0.3	-0.1	0.1	-0.1	0.0

**Pingelly 2016 Drop – AMSEA Grade Change
Over Time – Preston Clark Post Weaning,
Hogget, Adult /Mitch Crosby Adult 22 to Adult 6**

	Grade	Adult			
		Top	Flock	Cull	Total
Post Weaning	Top	6	33	4	43
	Flock	16	142	28	186
	Cull	3	42	17	62
	Total	25	217	49	291
55% stayed the same					

**AMSEA Grade Change Between Each Grade &
Adult 6 – Preston Clark Post Weaning, Hogget,
Adult /Mitch Crosby Adult 22 to Adult 6**

	Grade	Adult 6			
		Top	Flock	Cull	Total
Post Weaning	Top	6	30	12	48
	Flock	24	127	36	187
	Cull	5	41	17	63
	Total	35	198	65	298
50% stayed the same					

	Grade	Adult 22			
		Top	Flock	Cull	Total
Adult 2	Top	15	9	1	25
	Flock	57	132	27	216
	Cull	6	27	15	48
	Total	78	168	43	289
54% stayed the same					

	Grade	Adult 6			
		Top	Flock	Cull	Total
Adult 2	Top	5	17	3	25
	Flock	26	148	43	217
	Cull	4	27	17	48
	Total	35	192	63	290
57% stayed the same					

	Grade	Adult 3			
		Top	Flock	Cull	Total
Adult 22	Top	23	50	6	79
	Flock	22	112	39	173
	Cull	3	18	23	44
	Total	48	180	68	296
53% stayed the same					

	Grade	Adult 6			
		Top	Flock	Cull	Total
Adult 22	Top	16	51	12	79
	Flock	14	124	34	172
	Cull	4	21	19	44
	Total	34	196	65	295
47% stayed the same					

	Grade	Adult 4			
		Top	Flock	Cull	Total
Adult 3	Top	13	34	1	48
	Flock	26	139	17	182
	Cull	2	39	27	68
	Total	41	212	45	298
47% stayed the same					

	Grade	Adult 6			
		Top	Flock	Cull	Total
Adult 3	Top	12	32	4	48
	Flock	17	126	40	183
	Cull	6	40	21	67
	Total	35	198	65	298
45% stayed the same					

	Grade	Adult 5			
		Top	Flock	Cull	Total
Adult 4	Top	13	23	5	41
	Flock	28	142	42	212
	Cull	1	16	28	45
	Total	42	181	75	298
61% stayed the same					

	Grade	Adult 6			
		Top	Flock	Cull	Total
Adult 4	Top	11	26	4	41
	Flock	21	147	44	212
	Cull	3	24	17	44
	Total	35	197	65	297
59% stayed the same					

	Grade	Adult 6			
		Top	Flock	Cull	Total
Adult 5	Top	9	28	5	42
	Flock	22	132	28	182
	Cull	4	38	32	74
	Total	35	198	65	298
58% stayed the same					

	Grade	Adult 6			
		Top	Flock	Cull	Total
Adult 5	Top	9	28	5	42
	Flock	22	132	28	182
	Cull	4	38	32	74
	Total	35	198	65	298
58% 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.

Pingelly 2016 Drop – AMSEA Grade – Preston Clark 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 – Post Weaning

Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+
Top/Flock	236	3.3	18.8	99	34	65	3.5	25	6.2	101
Cull	63	3.2	19.0	97	32	64	3.5	25	5.9	98
Total	299	3.3	18.8	99	34	65	3.5	25	6.1	100

Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top/Flock	235	1.94	1.57	2.76	2.47	1.13	2.55	2.30	2.00	2.00	1.53	1.00
Cull	63	1.95	1.52	2.91	2.70	1.28	2.73	2.22	2.05	1.96	1.63	1.02
Tot/Ave	298	1.95	1.56	2.79	2.52	1.16	2.59	2.28	2.01	1.99	1.55	1.01

AMSEA Class – Adult 2

Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+
Top/Flock	242	3.3	18.8	98	34	65	3.5	25	6.1	101
Cull	49	3.1	19.3	101	34	63	3.3	25	6.2	95
Total	291	3.3	18.8	99	34	65	3.5	25	6.1	100

Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top/Flock	241	1.95	1.58	2.75	2.48	1.16	2.55	2.29	2.00	2.01	1.52	1.01
Cull	49	1.85	1.46	3.06	2.71	1.17	2.79	2.30	2.03	1.88	1.71	1.01
Tot/Ave	290	1.95	1.56	2.79	2.52	1.16	2.59	2.28	2.01	1.99	1.55	1.01

Pingelly 2016 Drop – Professional Class – Nathan King 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 – Post Weaning

Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+
Top Stud Second	186	3.3	18.7	99	34	66	3.6	26	6.2	101
Sale	88	3.3	19.2	98	33	63	3.5	25	5.9	98
Cull	24	3.3	19.0	99	34	59	3.2	24	6.3	102
Total	298	3.3	18.8	99	34	65	3.5	25	6.1	100

Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top Stud Second	186	1.95	1.56	2.75	2.46	1.13	2.54	2.29	1.99	1.97	1.53	1.01
Sale	88	1.94	1.59	2.90	2.62	1.19	2.68	2.23	2.02	1.97	1.61	1.01
Cull	24	1.97	1.48	2.80	2.57	1.27	2.64	2.36	2.10	2.30	1.46	1.00
Tot/Ave	298	1.95	1.56	2.79	2.52	1.16	2.59	2.28	2.01	1.99	1.55	1.01

Prof Class – Adult 2

Grade	Count	CFW	FD	SL	SS	WT	FAT	EMD	WR	MP+
Top Stud Second	185	3.3	18.8	99	34	66	3.6	26	6.1	101
Sale	63	3.2	19.0	99	33	63	3.4	25	6.1	97
Cull	45	3.2	19.0	97	33	61	3.3	25	6.1	100
Total	293	3.3	18.8	99	34	65	3.5	25	6.1	100

Grade	Count	Dag	Bdwr	Char	Col	Flrot	Dust	Back	Legs	Face	Spig	Jaw
Top Stud Second	184	1.94	1.53	2.73	2.45	1.13	2.54	2.30	1.99	1.99	1.51	1.01
Sale	63	1.89	1.59	2.90	2.60	1.23	2.65	2.28	2.02	1.90	1.68	1.01
Cull	45	2.04	1.63	2.92	2.71	1.23	2.70	2.25	2.07	2.12	1.53	1.00
Tot/Ave	292	1.95	1.56	2.79	2.52	1.16	2.59	2.28	2.01	1.99	1.55	1.01