Australian Wool Production Forecasting Committee

Summary

- The Australian Wool Production Forecasting Committee predicts that Australian shorn wool production in 2018/19 will be 322 mkg greasy, down by 5.7% on the Committee's estimate for 2017/18. The continuing dry conditions across most of the country resulted in a 10% increase in sheep and lamb turn-off last season compared with 2016/17. Sheep slaughter increased by 28% year-on-year and lamb slaughter increased by 5%. This high turnoff of sheep and lambs is expected to reduce the number of sheep shorn in 2018/19 by 3.2%.
- The Committee noted that deteriorating seasonal conditions in late autumn and over winter in major wool growing regions and a continued dry and warm seasonal outlook is expected to reduce the average cut per head in 2018/19 by 2.6% to 4.33 kg. As a result, wool production is expected to fall in all states except Tasmania, with the largest reductions expected in NSW (down 8.9%) and South Australia (down 6.0%). How the season progresses over the next couple of months will be very important for overall production levels this season. While most sheep producers intend to maintain ewe flock numbers, in key wool producing regions reduction in stock numbers is beginning to gain momentum due to concerns over the cost and availability of hay and other stock feed.
- The AWPFC estimates that Australian shorn wool production in 2017/18 was 341 mkg greasy. This is a 0.3% increase from 2016/17 and slightly higher than the Committee's forecast at its April meeting. The increase is largely the result of an increase in the number of sheep shorn as producers brought shearing forward into 2017/18 to capture the high wool prices at the end of the season.
- The 0.3% increase in production in 2017/18 is consistent with the AWTA test weight for the season (up 0.6%), AWEX first-hand offerings (up 2.2%) and ABS wool receivals (up 0.8%). The increase in prem shorn wool offered for sale (up 25.3%) and a national decrease in staple length compared with 2016/17 is consistent with the committee expectation of a 2.9% reduction in average cut per head during 2017/18.

FURTHER INFORMATION
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- The Committee noted that AWTA test data for 2017/18 by micron showed reductions in weight of wool tested 16.5 micron and finer (down 10%) and between 19.6 and 24.5 micron (down 11.3%) with increases in weight of wool tested between 16.6 and 19.5 micron (up 11.7%) as well as over 26.6 micron (up 11.7%). As a result, the mean fibre diameter for Australia in 2017/18 was steady at 21.0 microns, the same as in 2016/17.
- Table 1 summarises the estimates and forecasts for Australia and Table 2 shows the estimates and forecasts for each state.

Table 1: Summary of wool production estimates and forecasts for Australia

Parameter	2016/17 Final Estimate	2017/18 Final Estimate	Change y-o-y (%)	2018/19 Second Forecast	Change y-o-y (%)
Sheep Numbers Shorn (million)	74.3	76.8	+3.3%	74.3	-3.2%
Average Cut Per Head (kg)	4.58	4.45	-2.9%	4.33	-2.6%
Shorn Wool Production (mkg greasy)	340	341	+0.3%	322	-5.7%

Table 2: Summary of wool production estimates and forecasts for individual states

Shorn wool production (mkg greasy)	NSW	VIC	WA	SA	TAS	QLD	National
2016/17 Final Estimate	126.0	67.4	71.1	57.9	9.2	8.5	340
2017/18 Final Estimate	125.7	73.5	65.1	59.5	9.3	8.3	341
Change y-o-y (%)	-0.3%	8.9%	-8.5%	2.7%	1.5%	-3.0%	0.3%
2018/19 Second Forecast	114.5	71.7	63.2	55.9	9.5	7.2	322
Change y-o-y (%)	-8.9%	-2.4%	-3.0%	-6.0%	1.2%	-13.6%	-5.7%

 More detailed information on shorn wool production by state in 2017/18 can be found in Table 1 in the Appendix to this report. The Appendix also provides historical data for Australia, including the micron profile since 1991/92.

Detail on the 2017/18 Estimate and 2018/19 Forecast

Major data inputs

The AWPFC forecasts are based on detailed consideration by the state and national committees of data from various sources including:

- AWTA wool test data for the full 2017/18 season and the 2018/19 season for July;
- AWEX auction statistics for the 2017/18 season and the 2018/19 season for July;
- ABS wool receivals data for the 2017/18 season;
- ABS sheep numbers as at 30th June 2018 and ABS sheep and lamb turn-off in 2017/18;
- Information on current and expected seasonal conditions from the Bureau of Meteorology; and
- Information gathered on sheep producer intentions, including the results from the MLA/AWI Wool and Sheep Survey.

AWTA wool test data

Every month AWTA releases data on the volumes of greasy wool tested within the various diameter categories for the month and the season to date. Data for the full 2017/18 season compared with previous seasons are shown in Tables 3 (Australia) and 4 (state basis). Figure 1 shows the trends in the month-by-month comparison of wool tested for the past five seasons. Figure 2 shows the total volume of wool tested for each season from 2013/14 to 2017/18. Finally, Figure 3 provides the micron profile for each complete season between 2013/14 and 2017/18. A historical comparison of the Australian micron profile percentage share and average micron can be found in Appendix Table 3 (at the end of this report).

AWTA data on wool test volumes for 2017/18 shows:

- Volumes of wool tested for 2017/18 were 0.6% higher than in 2016/17 and 0.8% higher than the five-year average from 2012/13 and 2016/17.
- The volume of wool tested in 2017/18 was above the low recorded in 2015/16 but was not back to the level seen in 2012/13.
- There were reductions in weight of wool tested of 16.5 micron and finer (down 10%) and between 19.6 and 24.5 micron (down 11.3%) and increases in weight of wool tested between 16.6 and 19.5 micron (up 11.7%) as well as over 26.6 micron (up 11.7%).

Table 3: AWTA key test data volumes for the full financial year by micron range 2012/13 – 2017/18 (mkg greasy)

Parameter	Year	<16.6um	17um	18um	19um	20um	21um	22um	23um	24um	25-26um	26-28um	29-30um	>30.5um	TOTAL
	2012/13	9.41	25.76	49.04	64.47	61.86	44.20	26.92	15.12	8.64	17.10	23.04	14.63	9.20	369.37
	2013/14	13.55	29.78	51.46	62.86	56.56	38.37	22.02	12.06	7.61	18.44	22.48	11.03	7.35	353.57
AWTA FY	2014/15	11.62	29.01	53.94	67.53	57.91	38.56	23.65	12.62	7.01	16.00	23.85	14.20	9.59	365.48
Total mkg greasy	2015/16	13.37	29.05	49.49	60.54	55.00	36.60	20.30	9.88	6.35	15.57	22.21	12.32	9.24	339.93
,	2016/17	12.86	26.99	48.09	62.43	61.44	43.47	24.58	12.28	7.26	15.71	20.85	12.27	9.58	357.79
	2017/18	11.62	31.06	55.60	66.98	58.01	36.75	20.40	10.52	6.51	14.88	21.66	14.35	11.68	360.02
Y-O-Y change%	2017/18	-9.6%	15.1%	15.6%	7.3%	-5.6%	-15.4%	-17.0%	-14.3%	-10.3%	-5.3%	3.9%	17.0%	22.0%	0.6%
Micron Split (%)	2016/17	3.6%	7.5%	13.4%	17.4%	17.2%	12.1%	6.9%	3.4%	2.0%	4.4%	5.8%	3.4%	2.7%	
wicron Spilt (%)	2017/18	3.2%	8.6%	15.4%	18.6%	16.1%	10.2%	5.7%	2.9%	1.8%	4.1%	6.0%	4.0%	3.2%	
	Tonnes	12.16	28.12	50.40	63.57	58.55	40.24	23.49	12.39	7.37	16.56	22.48	12.89	8.99	357.23
5 year av. 2012/13 to 2016/17	% change 17/18 vs 5 yr av	-4.4%	10.5%	10.3%	5.4%	-0.9%	-8.7%	-13.2%	-15.1%	-11.8%	-10.2%	-3.7%	11.3%	29.9%	0.8%
	Micron split %	3.4%	7.9%	14.1%	17.8%	16.4%	11.3%	6.6%	3.5%	2.1%	4.6%	6.3%	3.6%	2.5%	

Note: The micron categories refer to a range of -0.4 and +0.5um around each number. For example, 18um is between 17.6 and 18.5 micron

• Wool test volumes steadily increased each month between July and November 2017, before falling in December. From July to November wool test volumes were at or above 2016/17 levels before reducing to a 5-year low in December 2017. Test volumes increased again between January to March 2018. April and May volumes were higher which may reflect producers shearing early to capture the good market conditions before falling in June.

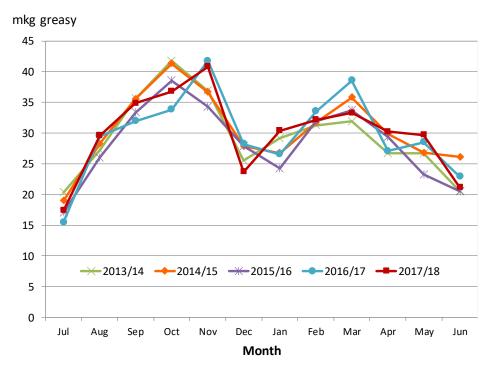


Figure 1: Comparison of monthly AWTA key test data volumes

 Based on data by Wool Statistical Area, the volumes of wool tested decreased in both Western Australia (down 8.3%) and Queensland (down 3.3%) compared with 2016/17.
 Victoria (up 8.4%), South Australia (up 3.0%), Tasmania (up 1.2%) and New South Wales (up 0.4%) each had year on year increases in the volume of wool tested.

Table 4: AWTA test data volumes by state (based on Wool Statistical Area) for the full financial year (mkg greasy)

Year	NSW	Vic	WA	SA	Tas	Qld	Australia
2012/13	129.7	89.4	74.0	49.1	11.2	16.0	369.4
2013/14	125.6	81.6	75.7	47.6	11.0	12.0	353.6
2014/15	133.7	84.8	72.3	52.8	11.7	10.2	365.5
2015/16	125.7	76.4	69.4	50.8	9.8	7.8	339.9
2016/17	129.9	78.1	76.2	53.7	10.1	9.8	357.8
2017/18	130.5	84.7	69.9	55.3	10.2	9.5	360.0
% change y-o-y	0.4%	8.4%	-8.3%	3.0%	1.2%	-3.3%	0.6%

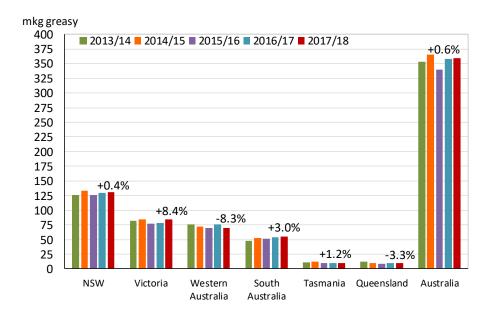


Figure 2: Volume of wool tested in the full season (AWTA key test data). The percentage change is 2017/18 compared with 2016/17.

The micron profile of the Australian clip shows two clear peaks: one peak centred at 19-micron wool (ranging from finer than 16.6micron up to 23 micron); and a second peak centred on 27-28 micron (ranging from 24 micron to 30.5 micron and broader).

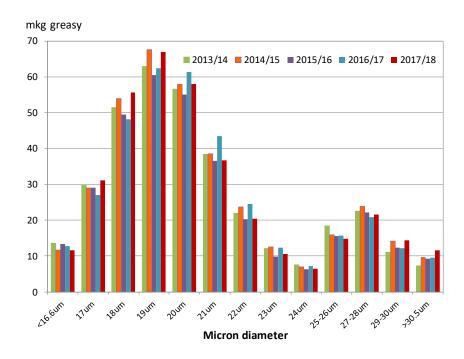


Figure 3: Australian diameter profile – full season (AWTA key test data)

 There was little to no difference in the key test data measurements in 2017/18 compared to 2016/17 apart from staple length which was lower in all states. This is consistent with both a seasonal decrease in fleece weight and an increase in prem shorn wool.

Table 5: AWTA key test data statistics for the financial year - 2016/17 and 2017/18

July - June		NSW	VIC	WA	SA	TAS	QLD	AUST
WSA	WEIGHT (mkg)	129.90	78.15	76.21	53.68	10.07	9.78	339.93
	YIELD (%)	65.5	66.0	64.1	62.9	70.4	61.8	64.4
	VM (%)	3.1	1.9	1.2	3.2	0.7	4.2	2.0
2016/17	MFD (μm)	20.6	21.9	20.1	21.2	21.7	20.1	21.0
Key Test Data	SS (Nkt)	34.8	34.0	33.6	34.8	34.5	35.5	34.0
	SL (mm)	86.2	87.6	89.0	90.2	88.9	86.6	87.3
	MID-BREAK (%)	49.0	48.7	45.3	51.1	50.9	51.5	49.7
WSA	WEIGHT (mkg)	130.46	84.71	69.89	55.32	10.19	9.45	360.02
	YIELD (%)	64.3	66.1	63.1	62.6	70.5	61.5	64.6
	VM (%)	3.1	2.2	1.7	3.1	1.0	4.2	2.5
2017/18 Key Test	MFD (μm)	20.6	22.1	19.6	21.1	21.8	19.9	21.0
Data	SS (Nkt)	35.9	34.8	32.0	34.4	35.9	36.8	34.5
	SL (mm)	85.0	86.0	85.1	87.9	88.2	84.8	85.8
	MID-BREAK (%)	52.6	49.3	51.1	50.6	45.0	52.6	50.8
WSA	WEIGHT (%)	0.4%	8.4%	-8.3%	3.0%	1.2%	-3.3%	5.9%
	YIELD (%)	-1.2%	0.1%	-1.0%	-0.3%	0.1%	-0.3%	0.2%
	VM (%)	0.0%	0.3%	0.5%	-0.1%	0.3%	0.0%	0.5%
DIFF. Key Test Data	MFD (μm)	0.0	0.2	-0.5	-0.1	0.1	-0.2	0.0
	SS (Nkt)	1.1	0.8	-1.6	-0.4	1.4	1.3	0.5
	SL (mm)	-1.2	-1.6	-3.9	-2.3	-0.7	-1.8	-1.5
ľ	MID_RDEAK (%)	2 60/	0.69/	E 00/	0.59/	E 00/	1 10/	1 10/

For 2018/19, AWTA data on test volumes was only available for July:

- Volumes of wool tested in July 2018 were 2.9% lower than in July 2017. This was 5% lower than the five-year average for July (2013/14 to 2017/18).
- Western Australia recorded a significant decrease in the volume of wool tested (down 26.8%. New South Wales and Tasmania also recorded decreases (down 3.7 and 0.5 % respectively). The volume of wool tested lifted by 9.8% in Queensland, by 7.8% in Victoria and by 3.7% in South Australia.

AWEX auction statistics

The AWEX auction statistics for the 2017/18 season show an increase in wool auction offering volumes compared with the flat year-on-year levels for the AWTA test data. Table 6 summarises the AWEX data.

- First hand bales offered (i.e. excluding reoffers) for Australia were 2.2% higher in the 2017/18 season compared to 2016/17.
- The most significant increases were seen in Tasmania (up 15.9%), Victoria (up 9.2%) and South Australia (up 7.3%). New South Wales and Queensland also recorded small increases (1.5% and 0.8% respectively). First hand bales offered in Western Australia were down by 8.9%.
- There was a 0.5% increase in the volume of first hand Merino wool offered across Australia, and a 9.5% increase in first hand Crossbred wool offered. The share of Merino wool of all first hand offered wool was 78.8%, compared with 80.2% 2016/17.

- The AWEX data also shows a 25% increase in the volume of 'prem-shorn' Merino fleece wool in 2017/18 (24.3 mkg) compared with 2016/17 (19.4 mkg)¹.
- As a percentage share of the total, 12% of Australian first-hand bales offered were prem shorn. On a state-by-state basis this ranged from 16% in South Australia to 3% in Tasmania.

Table 6: AWEX Auction Statistics 2017/18

2017/18	NSW	VIC	WA	SA	TAS	QLD	AUST
First hand bales offered (% change on 2016/17)	1.5%	9.2%	-8.9%	7.3%	15.9%	0.8%	2.2%
Merino first hand offered (% change on 2016/17)	1.2%	5.5%	-9.5%	5.5%	9.9%	0.3%	0.5%
Crossbred first hand offered (% change on 2016/17)	2.9%	17.2%	-0.6%	15.6%	28.4%	14.8%	9.5%
Merino first hand offered (% share)	77.7%	66.4%	92.8%	80.6%	64.1%	95.9%	78.8%
Crossbred first hand offered (% share)	22.3%	33.6%	7.2%	19.4%	35.9%	4.1%	21.2%
Merino First Hand 'Prem' Sho	orn Fleece						
Weight (mkg)	8.4	3.2	4.9	7.1	0.2	0.5	24.3
% share of total	11%	9%	10%	16%	3%	9%	12%
% change on 2016/17	29%	33%	11%	29%	100%	25%	25%

Note: Data on 'prem shorn' wool from AWEX is based on the assessed length of the wool being offered

Australian Bureau of Statistics (ABS) data

The ABS provides data on wool receivals, sheep flock numbers, and sheep and lamb turnoff.

Wool receivals

Table 7 shows data on wool receivals for Australia and by state of receival (note that this is not by state of production) for 2017/18 compared with previous seasons.

- Wool receivals for Australia rose by 0.8% in 2017/18, which is line with AWTA test data.
- Wool receivals in 2017/18 were 5.3% higher than the 5-year average.
- Victoria was the only state to record a year-on-year increase in wool receivals (up 8.4%).
 Queensland decreased by nearly 22% albeit from a low base, while New South Wales decreased by 3.5%

¹ Data on 'prem shorn' wool from AWEX is based on the assessed length of the wool being offered. It is defined as <65-75mm, depending on micron and excluding weaners and lambs wool.

Table 7: ABS Wool Receivals data

mkg	NSW	VIC	WA	SA	TAS	QLD	AUS
2012/13	94.9	78.0	61.9	43.2	7.5	5.6	291.0
2013/14	90.6	72.7	65.9	40.2	6.9	4.3	280.5
2014/15	93.8	79.5	58.3	43.0	6.9	3.6	285.2
2015/16	85.7	77.7	63.7	45.0	6.3	3.1	281.5
2016/17	91.8	81.5	73.2	45.2	5.4	3.6	300.7
2017/18	88.6	88.3	72.5	44.6	5.3	2.9	302.9
% change	-3.5%	8.4%	-1.0%	-1.3%	-1.7%	-21.8%	0.8%
Five year average 12/13 to 16/17	91.3	77.9	64.6	43.3	6.6	4.0	287.8
% change 2017/18 vs 5 year av	-3.0%	13.4%	12.2%	3.0%	-19.7%	-29.5%	5.3%

Flock data

The ABS publish data on Australia's sheep flock. For estimates released in 2017 and onwards, the ABS changed the basis of its Census. It now surveys all properties with an Estimated Value of Agricultural Operations (EVAO) of \$40,000 and more; previously the ABS included all properties with an EVAO of \$5,000 and more. As a result of this change, the ABS flock data for 30th June 2016 and later is not comparable with previously published data and understates the actual number of sheep and lambs. The ABS has provided data adjusted for the new EVAO for the previous four years. The Committee used this adjusted data to guide its estimates of the number of sheep shorn in each state and for Australia. To avoid any confusion, the Committee will not publish the historical flock size data in its reports, only its estimate of the number of sheep shorn.

Australian sheep and lamb turn-off statistics for the 2017/18 season to February, sourced from the ABS, are shown in Table 8. This turnoff data covers sheep slaughter, lamb slaughter and live exports and is compared with the equivalent period in 2016/17 and the five-year average 2012/13 to 2016/17.

- The ABS data shows a 28% increase in sheep slaughter and a 5% increase in lamb slaughter in 2017/18 compared to 2016/17. This is due to a combination of the dry seasonal conditions across Australia and high sheep and sheepmeat prices.
- The number of live sheep exported from Australia increased by 6% in 2017/18 compared with 2016/17 but was 3% lower than the five-year average.
- Total turnoff of sheep in 2017/18 was 10% higher than in 2016/17 and 3% above the five-year average.

Table 8: ABS Sheep turn off data for 2017/18

	Fi	nancial year		5-yr FY		
Parameter	July 2016 to June 2017	July 2017 to June 2018	% Δ	Avg	% ∆	
Sheep slaughter ('000 hd)	6,553	8,396	28%	8,392	0%	
Sheep weights (kg/hd cwt)	24.9	24.2	-3%	23.5	3%	
Mutton production (tonnes cwt)	163,365	203,581	25%	196,980	3%	
Lamb slaughter ('000 hd)	22,344	23,432	5%	22,273	5%	
Lamb weights (kg/hd cwt)	22.7	22.7	0%	22.1	3%	
Lamb production (tonnes cwt)	506,239	531,425	5%	492,118	8%	
Live exports ('000 hd)	1,881	1,994	6%	2,061	-3%	
Total Turnoff ('000 hd)	30,778	33,822	10%	32,726	3%	

Bureau of Meteorology (BoM) seasonal rainfall seasonal outlook

Seasonal conditions were generally dry across much of the main sheep growing regions of Australia in 2017/18. This contrasts with the excellent seasonal conditions seen during most of the 2016/17 season. Conditions became much drier in several major sheep growing regions through Summer and have remained dry through Autumn and Winter. The south coast region of Western Australia, most of Queensland and New South Wales and the northern regions of South Australia have been very dry.

Figure 4 shows the rainfall deciles for the April to July 2018 period. Parts of western Victoria and most of Tasmania were the only regions to receive average or above average rainfall during that time. The remainder of the country were below to very much below average.

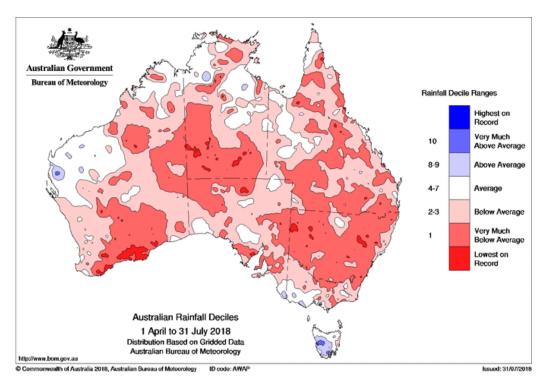


Figure 4: Australian rainfall deciles Southern Wet Season (1 April 2018 to 31 July 2018)

Figure 5 shows the rainfall deciles for the past 12 months showing how dry it has been across the country in the past year, particularly in the eastern states.

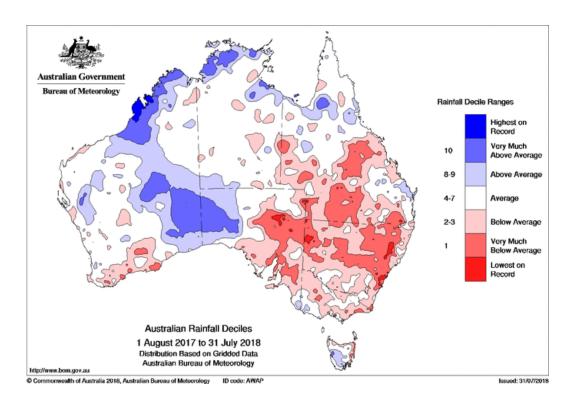
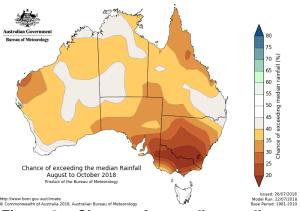


Figure 5: Australian yearly rainfall deciles (August 2017 to July 2018)

The Bureau of Meteorology's outlook for the August to October 2018 period is that rainfall is likely to be below average across much of Australia, with above average rainfall likely in Tasmania and the south west of Western Australia. The Bureau's outlook is that it is likely to be warmer across the country, particularly in the eastern states. The Bureau's outlook for the next three months is shown in Figures 6 and 7.



Autralian Generalization

Burean of Microsology

Chance of exceeding the median Max Temp
August to October 2018
Product of the Burean of Microsology

Insued 2007/2018
Base Principles

Product of the Burean of Microsology

Figure 6: Chance of exceeding median rainfall (April to June 2018)

Figure 7: Chance of exceeding median maximum temperature (April to June 2018)

In its update on 31 July, the Bureau noted that the El Niño-Southern Oscillation (ENSO) in the tropical Pacific Ocean was **neutral** (neither El Niño nor La Niña). Most international climate models suggest that the cooling in the tropical Pacific Ocean evident in mid-July was a temporary fluctuation and that the warming trend will continue. By the end of the year, six of eight models suggest El Niño thresholds will be reached.

Results from the AWI/MLA Lamb and Wool Survey

The results from the survey conducted in June 2018 shows that most growers remain keen to maintain their ewe flocks (Figure 8). However, these positive intentions continue to be hindered by the dry seasonal conditions seen in many regions of Australia. Since the previous survey in February, there has been a reduction in the percentage of producers who intend to increase ewe numbers and an increase in percentage who intend to decrease ewe numbers.

AUSTRALIA – Ewe Flock Intentions

Figure 8: Ewe flock intentions

State Committee inputs

The following provides a summary of seasonal conditions and wool production in 2017/18 and 2018/19 in each state as reported by the state committee's in August 2018.

The state committees reported that seasonal conditions in the major sheep producing areas across Australia were mostly very dry since April. This includes large areas of New South Wales, Queensland, Western Australia, and the eastern parts of Victoria. The south coast of Western Australia in particular, was being affected after the exceptional season in 2016/17. These dry conditions had a negative impact on fleece weights from Autumn shearings in these regions. Tasmania, apart from the east coast, and Western Victoria have experienced generally good seasonal conditions.

New South Wales

The season worsened across the entire state from late Autumn though early Winter. Compared to the past 5 to 6 seasons, which had drier than normal Autumns, 2018 was the worst in terms of pasture feed getting away and availability of feed crops. While some destocking began to occur between April to June in the worst affected regions, producers did continue to feed and hold onto stock they would normally have sold to shear and capture the higher wool prices. A 3.3% increase in sheep shorn was offset by a 3.5% reduction in average cut per head **reducing shorn wool production in 2017/18 by 0.3% to 125.7 mkg**.

For 2018/19, seasonal conditions have continued to deteriorate. High meat and wool prices are encouraging some producers to continue to feed their remaining stock while others are reducing numbers. In mixed grazing operations, cattle numbers have been reduced to maintain sheep flocks. In western areas of the state, producers are bringing shearing forward

and destocking due to difficulties associated with effectively feeding stock and concern over feed supplies. In southern regions feed crops may be sacrificed to gain carry over feed on the ground and spell pastures. The flow-on effect of high sheep slaughter in 2017/18 (up 40% on 2016/17) on lambs born in 2018/19 is a concern. Shorn wool production in 2018/19 is expected to decline by 8.9% to 114.4 mkg, because of a 3.7% decrease in sheep shorn numbers and a 5.4% reduction in average cut per head.

Victoria

During 2017/18, the hot summer reduced worm burdens with sheep healthy and in good condition leading into autumn. Good rainfall fell in the south of the state during Autumn and Winter, but cold temperatures reduced pasture growth. Central, eastern and northern regions of Victoria were drier with below average rainfall. This led to declining sheep weights although fleece weights were better than expected. There was some movement of shearing forward to capture high wool prices and some wether lambs kept for a second shearing prior to being sold at season's end. Sheep shorn numbers lifted by 7.4% with a 1.5% rise in average cut per head **increasing shorn wool production in 2017/18 by 8.9% to 65.1 mkg**.

For 2018/18, it is anticipated that sheep shorn numbers will be reduced by 1.0% due to higher turnoff in 2017/18 (up 17% on 2016/17) and variable lamb marking rates across the state, probably good in western regions but ordinary in Gippsland. Average cut per head is expected to decrease in late spring and early summer due to the tough Autumn. **Shorn wool production in 2018/19 is expected to decline by 2.9% to 71.7 mkg**. Lower yielding wools are beginning to appear on the show floor. No large reduction in stock numbers has occurred in Victoria to date, as producers seem prepared to feed due to high meat and wool prices.

Western Australia

Most brokers received wool in 2017/18 that they would normally receive in 2018/19 as shearing was pushed forward to capture high wool prices. Without this movement of wool forward, the fall in production for 2017/18 would have been much higher. The early shearing and poor autumn reduced fleece weights by 6.5% to 4.41 kg and together with a 2.1% reduction in sheep shorn resulted in **reduced shorn wool production in 2017/18 by 8.5% to 65.1 mkg**.

Leading in to 2018/19, approximately 10% of the state was in bad shape for the new season. The south coast of Western Australia had recorded historical 45-year low levels of rainfall. This dramatically reduced lamb marking percentages in that region and wool cuts (fleece weight) of adult sheep. While other areas of the state are not as bad, there was a trend towards early shearing to reduce stock numbers which is expected to reduce the average cut per head. More recently many wool producing regions of WA have received some good rain. **Shorn wool production in Western Australia in 2018/19 is predicted to fall by 2.9% to 63.2 mkg**.

South Australia

The second half of the 2017/18 season remained dry throughout the pastoral region with a large turn-off of sheep occurring. The season in the lower regions of the Eyre and Yorke peninsulas was quite good, the lower south east had a tight autumn while areas north of Jamestown and Clare were ordinary. High wool prices meant no wool was held on-farm or in brokers stores, as all was sold which maintained the season's production. Some early shearing of older ewes prior to the end of the season saw the sheep shorn numbers increase

by 6.0%, Despite a 3.1% reduction in fleece weights to 5 kg per head, **shorn wool production** increased by 2.7% in 2017/18 to 59.5 mkg.

For 2018/19, the state remains dry except for coastal regions and those south of Clare. Low lambing percentages across 30 to 40 percent of the state (the pastoral area, Mallee, west coast and upper north) are a concern. In these regions some producers are opting not to join in the current season. However, good lambing percentages in the lower south east of the state, which carries a lot of sheep, may maintain the state average. Some movement of sheep into the south east of South Australia from New South Wales has begun. A small reduction in fleece weights is expected (-0.6%) due to the continuing dry conditions, although fewer lambs (with lower fleece weights) are expected to be shorn which will counteract the negative seasonal impact on fleece weights. Shorn wool production in South Australia is forecast to drop by 6.0% in 2018/19 to 55.9 mkg.

<u>Tasmania</u>

During 2017/18, some early shearing occurred (prem shorn wool was up 4.0%) because of a tough Autumn in the eastern parts of the state and some producers opting to shear early to capture high wool prices at the end of the season. Some trading of these prem shorn sheep occurred. No dramatic change in terms of seasonal conditions or sheep numbers in Tasmania has occurred since April. Sheep shorn numbers decreased by 2.1% in 2017/18 but a 3.6% increase in average cut per head resulted in an **increase in shorn wool production in 2017/18 of 1.4% to 9.3 mkg**.

For 2018/19, the drier conditions on the east coast of the state are expected to have an averaging effect on wool production and quality in Tasmania. Lambing percentages are expected to be higher while fleece weights will remain stable. A lot of grain feeding occurred in early Autumn as producers focussed on maintaining the condition of their core breeding stock. Shorn wool production in Tasmania is forecast to increase by 1.2% in 2018/19 to 9.5 mkg.

Queensland

The majority of Queensland continues to be dry apart from a small pocket in the south east where sheep numbers are either holding or looking to increase, albeit from a small base. In other parts of the state producers are either partially or completely destocking. Total sheep turnoff in 2017/18 was 50% higher than 2016/17. A 3.9% increase in sheep shorn was offset by a 6.6% fall in fleece weights which resulted in a **2.9% decrease in shorn wool production in 2017/18 to 8.3 mkg**.

For 2018/19, sale of stock continued throughout most of Queensland with increasing numbers of young sheep being sold prior to shearing. The current slaughter rate and skin values are too good to hold sheep on farm for an additional month to wait for shearers and any young sheep are not as saleable off shears as they are too light. Average fleece weights are expected to increase for the season due to fewer young sheep (i.e. the lighter cutters) remaining in flocks to shear. Supplies of hay, grain and cotton seed are very low but in high demand. 'Normal' sources from southern states are not available. Seasonal forecasts over the next few months will be very important. Long-terms forecasts indicate a poor to average wet season. The current high meat values will drive a big reduction in stock numbers during October if the wet doesn't eventuate. Marking rates are expected to reduce across Queensland due to fewer breeding ewes and fewer ewe replacements coming into the system. **Shorn wool production in 208/18 is expected to decrease by 13.6% to 7.] mkg.**

Appendix

Table 1: Comparison of the estimate for 2017/18 and the second forecast for 2018/19 against the estimate for 2016/17

2016/17	NSW	VIC	WA	SA	TAS	QLD	National
Sheep Numbers Shorn (million)	27.40	15.98	15.07	11.21	2.48	2.13	74.28
Average Cut Per Head (kg)	4.60	4.22	4.72	5.16	3.72	4.02	4.58
Shorn Wool Production (mkg greasy)	126.04	67.43	71.11	57.87	9.21	8.54	340
2017/18	NSW	VIC	WA	SA	TAS	QLD	National
Sheep Numbers Shorn (million)	28.31	17.16	14.76	11.89	2.43	2.21	76.76
Average Cut Per Head (kg)	4.44	4.28	4.41	5.00	3.85	3.75	4.45
Shorn Wool Production (mkg greasy)	125.70	73.45	65.09	59.45	9.34	8.29	341
Change (%)	NSW	VIC	WA	SA	TAS	QLD	National
Sheep Numbers Shorn	3.3%	7.4%	-2.1%	6.0%	-2.1%	3.9%	3.3%
Average Cut Per Head	-3.5%	1.5%	-6.5%	-3.1%	3.6%	-6.6%	-2.9%
Shorn Wool Production	-0.3%	8.9%	-8.5%	2.7%	1.5%	-3.0%	0.3%
2018/19 Second Forecast	NSW	VIC	WA	SA	TAS	QLD	National
Sheep Numbers Shorn (million)	27.25	16.98	14.52	11.25	2.45	1.86	74.31
Average Cut Per Head (kg)	4.20	4.22	4.35	4.97	3.85	3.85	4.33
Shorn Wool Production (mkg greasy)	114.45	71.67	63.16	55.91	9.45	7.16	322
Change %	NSW	VIC	WA	SA	TAS	QLD	National
Sheep Numbers Shorn	-3.7%	-1.0%	-1.6%	-5.4%	1.0%	-15.8%	-3.2%
Average Cut Per Head	-5.4%	-1.4%	-1.4%	-0.6%	0.0%	2.7%	-2.6%
Shorn Wool Production	-8.9%	-2.4%	-3.0%	-6.0%	1.2%	-13.6%	-5.7%

Note: Totals may not add due to rounding

Historical Australian Production Figures

The tables below provide historical sheep shorn numbers, wool production, fleece weight and micron share statistics since 1991/92 for background information.

Table 2: Australian wool production statistics since 1991/92

	Sheep Numbers	Average Cut Per	Shorn Wool
Year	Shorn	Head	Production
	(million)	(kg)	(mkg greasy)
1991-92	180.9	4.43	801
1992-93	178.8	4.56	815
1993-94	172.8	4.49	775
1994-95	156.2	4.37	682
1995-96	145.6	4.50	655
1996-97	152.0	4.35	661
1997-98	150.0	4.22	633
1998-99	153.6	4.33	665
1999-00	144.2	4.30	619
2000-01	139.5	4.31	602
2001-02	118.6	4.68	555
2002-03	116.6	4.28	499
2003-04	104.7	4.53	475
2004-05	106.0	4.49	475
2005-06	106.5	4.33	461
2006-07	101.4	4.24	430
2007-08	90.2	4.43	400
2008-09	79.3	4.52	362
2009-10	76.2	4.50	343
2010-11	76.2	4.53	345
2011-12	76.4	4.48	342
2012-13	78.8	4.47	352
2013-14	78.0	4.37	341
2014-15	76.9	4.50	346
2015-16	73.4	4.43	325
2016-17	74.3	4.58	340
2017-18	76.8	4.45	341
2018-19f	74.3	4.33	322

Table 3: Australian micron profile of AWTA wool test volume statistics since 1991/92 (% share and average micron)

Year	<16.5	17	18	19	20	21	22	23	24	25/26	27/28	29/30	>30.5	Average Fibre Diameter (um)
1991/92	0.1%	0.7%	3.2%	7.9%	15.2%	21.5%	20.0%	13.4%	7.1%	5.5%	2.9%	1.6%	1.0%	22.0
1992/93	0.0%	0.3%	1.9%	5.4%	12.0%	19.9%	20.6%	15.6%	10.0%	7.9%	3.0%	1.9%	1.6%	22.4
1993/94	0.1%	0.5%	2.4%	5.9%	12.1%	18.8%	20.8%	15.7%	10.0%	7.4%	2.8%	1.9%	1.7%	22.4
1994/95	0.1%	0.6%	3.5%	8.6%	15.2%	20.9%	19.9%	13.0%	7.0%	4.7%	2.8%	2.0%	1.7%	22.0
1995/96	0.0%	0.6%	3.3%	8.2%	15.3%	20.8%	18.5%	13.2%	8.1%	6.0%	2.7%	1.8%	1.6%	22.1
1996/97	0.2%	0.8%	3.9%	9.7%	15.3%	20.1%	18.3%	13.1%	7.4%	5.3%	2.3%	1.9%	1.8%	22.0
1997/98	0.2%	1.2%	4.5%	9.8%	14.8%	19.4%	18.3%	12.8%	7.7%	5.4%	2.6%	1.8%	1.5%	21.9
1998/99	0.2%	1.1%	4.2%	8.8%	14.6%	19.6%	18.6%	14.0%	7.6%	5.1%	2.7%	2.0%	1.5%	22.0
1999/00	0.1%	1.0%	4.2%	9.3%	14.4%	19.1%	18.2%	13.6%	7.7%	5.2%	2.9%	2.4%	1.9%	22.1
2000/01	0.2%	1.3%	5.2%	11.1%	15.7%	18.5%	16.4%	11.4%	6.8%	5.1%	3.6%	2.8%	1.9%	22.0
2001/02	0.3%	2.0%	7.2%	14.4%	19.9%	18.9%	12.9%	7.7%	4.1%	3.7%	3.8%	3.1%	1.9%	21.6
2002/03	1.0%	3.9%	9.8%	15.7%	18.9%	17.6%	12.0%	6.6%	2.9%	3.4%	3.7%	2.9%	1.7%	21.2
2003/04	0.7%	3.6%	9.9%	15.8%	18.3%	16.6%	11.9%	7.5%	3.6%	3.5%	3.8%	2.9%	1.8%	21.3
2004/05	1.2%	4.2%	10.5%	16.5%	18.7%	15.9%	10.7%	6.2%	3.2%	3.6%	4.1%	3.1%	2.0%	21.2
2005/06	1.4%	4.7%	9.7%	15.1%	18.7%	17.1%	11.5%	5.9%	2.9%	3.9%	4.5%	2.9%	1.6%	21.2
2006/07	2.0%	5.9%	11.8%	15.9%	16.9%	14.0%	9.9%	6.2%	3.4%	4.3%	4.4%	3.2%	2.1%	21.2
2007/08	1.9%	5.3%	10.9%	16.8%	18.4%	14.3%	9.2%	5.5%	3.0%	4.1%	4.8%	3.6%	2.2%	21.2
2008/09	2.0%	5.7%	11.4%	16.6%	18.5%	15.0%	9.1%	4.4%	2.3%	3.8%	5.1%	3.8%	2.2%	21.2
2009/10	2.3%	6.2%	12.6%	17.1%	17.5%	13.2%	8.4%	4.6%	2.5%	4.1%	5.4%	3.9%	2.3%	21.2
2010/11	1.5%	4.8%	11.0%	16.8%	18.0%	13.5%	8.4%	5.4%	3.0%	3.9%	5.5%	5.0%	3.1%	21.5
2011/12	1.8%	5.6%	12.0%	17.1%	16.6%	12.3%	8.3%	5.3%	2.9%	4.2%	5.8%	4.7%	3.3%	21.5
2012/13	2.5%	7.0%	13.3%	17.5%	16.8%	12.0%	7.3%	4.1%	2.3%	4.6%	6.2%	4.0%	2.5%	21.2
2013/14	3.8%	8.4%	14.6%	17.8%	16.0%	10.9%	6.2%	3.4%	2.2%	5.2%	6.4%	3.1%	2.1%	20.9
2014/15	3.2%	7.9%	14.8%	18.5%	15.8%	10.5%	6.5%	3.5%	1.9%	4.4%	6.5%	3.9%	2.6%	21.0
2015/16	3.9%	8.5%	14.6%	17.8%	16.2%	10.8%	6.0%	2.9%	1.9%	4.6%	6.5%	3.6%	2.7%	21.0
2016/17	3.6%	7.5%	13.4%	17.4%	17.2%	12.1%	6.9%	3.4%	2.0%	4.4%	5.8%	3.4%	2.7%	21.0
2017/18	3.2%	8.6%	15.4%	18.6%	16.1%	10.2%	5.7%	2.9%	1.8%	4.1%	6.0%	4.0%	3.2%	21.0

Explanation of revised AWPFC data series

At the December 2005 meeting, the national Committee made the decision to collate and review the key variables (shorn wool production, cut per head, number of sheep shorn) used in the committee from the available industry sources and to create a consistent historical data series at both a state and national level. This was required as some differences existed between industry accepted figures and the AWPFC data series and to ensure a consistent methodology over time. This process resulted in changes to the parameters 'average cut per head' and the 'number of sheep shorn' for some seasons at both a state and national level.

Modus operandi for the Australian Wool Production Forecasting Committee

The Australian Wool Production Forecasting Committee draws together a range of objective data and qualitative information to produce consensus-based, authoritative forecasts four times a year for Australian wool production.

The Committee has a two-level structure, with a National Committee considering information and advice from state sub-committees. It is funded by Australian Wool Innovation Limited, which also provides an independent representative in the role of the Chairman of the National Committee.

The National and state sub-committees comprise wool producers, wool brokers, exporters, processors, private treaty merchants, AWEX, AWTA, ABARES, ABS, MLA, state departments of Agriculture and AWI.

The Committee releases its forecasts in the forms of a press release and a report providing the detailed forecasts, historical data and commentary on the key drivers of the forecasts.