April 2020

Australian Wool Production Forecast Report

Australian Wool Production Forecasting Committee

Summary

- The Australian Wool Production Forecasting Committee forecasts that Australian shorn wool production in 2019/20 will reach 281 mkg greasy. This is a 6.3% decline from the levels in 2018/19 and higher than the Committee's forecast at its December 2019 meeting. Low sheep numbers and the enduring impact of drought through much of the 2019/20 season, despite widespread rain through south eastern Australia and along the eastern seaboard in the first quarter of 2020, continue to negatively impact on production. Most wool producing regions in Western Australia remain dry with low on-farm water supplies.

- The number of sheep shorn is forecast to decline by 5.4% to 68.4 million. Sheep shorn numbers are expected to remain at 2018/19 levels in South Australia (11.8 million) and Tasmania (2.4 million), but decline in all other states with Queensland down 13.6% (1.9 million), New South Wales down 9.7% (22.4 million), Victoria down 6.6% (15.6 million) and Western Australia down 2.1% (14.3 million).

- Average wool cut per head is forecast to decline by 0.5% nationally to 4.11 kg greasy for the 2019/20 season.

- Accompanying the reduction in greasy wool production there have been significant changes in key test parameters. Average fibre diameter (20.6 microns) and average yield (62.7%) are both at their lowest level since 2001/02. Average vegetable matter is also at a near historical low level (1.7%). Staple strength is 32.3 N/ktex and staple length 86.1 mm.

- Queensland is forecast to have the greatest decline in shorn wool production in 2019/20 with a 12.3% reduction from 2018/19 to 7.1 mkg greasy. South Australia will decline by 9.0% to 49.4 mkg greasy with smaller declines in New South Wales (92.4 mkg greasy, down 6.8%), Tasmania (8.4 mkg greasy, down 6.7%), Victoria (63.3 mkg greasy, down 5.4%) and Western Australia (60.0 mkg greasy, down 3.5%).

FURTHER INFORMATION
Mr Russell Pattinson, National Committee Chairman
Tel: +61 0419 872 684

- AWTA volumes of greasy wool tested to the end of March 2020 were 5.5% lower than at the same time in 2018/19. Volumes in each state declined on a year-on-year basis. The greatest decline occurred in Queensland (down 15.3%), followed by Tasmania (down 8.5%), South Australia (down 6.8%), New South Wales (down 5.7%), Victoria (down 5.4%) and Western Australia (down 2.6%).
- Decreases in the weight of wool tested by AWTA occurred in all micron categories except for 19 microns (up 0.4%) and 20 microns (up 1.2 %). Significant decreases occurred in the 23 microns (down 21.4%), 22 microns (down 20.6%) and 16.6 microns and finer (down 16.2%) categories.
- AWEX first-hand offered bales were 17.9% lower during July to March compared with the same time period in 2018/19.
- ABS wool receivals data for Australia fell by 13.9% between July and December 2019.
- ABS sheep turn-off data during July 2019 and February 2020 showed a 7% decrease in sheep slaughter, a 5% decrease in lamb slaughter and an 8% decrease in live export. Total turn-off was 6% lower compared with the same time last season.
- The BOM outlook for April to June 2020 is for above average median rainfall across much of Australia with below average maximum temperatures.
- The AWPFC's first forecast of shorn wool production for the 2020/21 season is for production to be 276 mkg greasy, a 1.7% decline on the 2019/20 forecast. Low sheep numbers will continue to limit any increase in shorn wool production despite the favourable seasonal outlook across many wool producing regions of the country.
- 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	2018/19 Final Estimate	2019/20 Fourth Forecast	*Change y-o-y (%)*	2020/21 First Forecast	*Change y-o-y (%)*
Sheep Numbers Shorn (million)	72.5	68.4	*-5.4%*	65.6	*-4.1%*
Average Cut Per Head (kg)	4.13	4.11	*-0.5%*	4.21	*2.4%*
Shorn Wool Production (mkg greasy)	300	281	*-6.3%*	276	*-1.7%*

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

Shorn wool production (mkg greasy)	NSW	VIC	WA	SA	TAS	QLD	National
2017/18 Final Estimate	125.7	73.5	65.1	59.5	9.3	8.3	341
2018/19 Final Estimate	99.1	66.9	62.2	54.3	9.0	8.1	300
Change Y-O-Y (%)	*-21.2%*	*-9.0%*	*-4.5%*	*-8.7%*	*-3.2%*	*-2.4%*	*-12.1%*
2019/20 Fourth Forecast	*92.4*	*63.3*	*60.0*	*49.4*	*8.4*	*7.1*	*281*
Change Y-O-Y (%)	*-6.8%*	*-5.4%*	*-3.5%*	*-9.0%*	*-6.7%*	*-12.3%*	*-6.3%*

- More detailed information on the shorn wool production by state in 2019/20 can be found in Table A1 in the Appendix to this report.
- The Appendix also provides historical data for Australia, including sheep numbers shorn, average cut per head and shorn wool production (Table A2) as well as the micron profile (Table A3) since 1991/92.

Detail on the 2019/20 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 2019/20 season to the end of March 2020;
- AWEX auction statistics for the 2019/20 season to the end of week 42 (17 April 2020);
- ABS wool receivals data for the 2019/20 season to December 2019;
- ABS sheep and lamb turn-off for 2018/19 to the end of February 2020;
- Information on current and expected seasonal conditions from the Bureau of Meteorology; and
- Survey information gathered on sheep producer and wool grower intentions.

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 2019/20 season to the end of March compared with the same time period (July to March) in previous seasons are compared in this report.

The month-by-month comparison of wool tested for the current and past four seasons (Figure 1) shows the current season tracking below the previous four seasons in August, September, October and March. Wool test volumes in November and January were on par with 2018/19 while those in December were above 2018/19 and 2017/18.

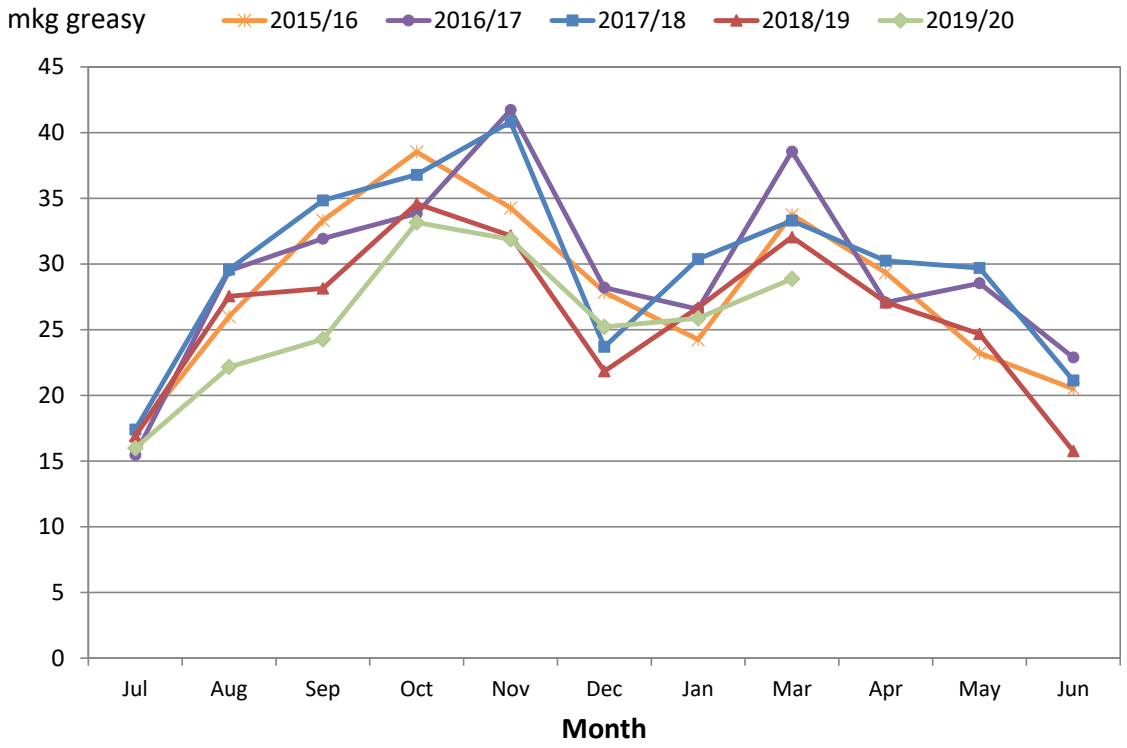

Figure 1: Comparison of monthly AWTA key test data volumes for the 2019/20 season July 2019 to end March 2020 with previous seasons

AWTA national wool test volumes data for the 2019/20 season to the end of March (Table 3) shows:

- Volumes of wool tested for the season to date (end March 2020) were 5.5% lower than at the same time in 2018/19 and were also 12.9% less than the five-year average for the season to date from 2014/15 to 2018/19.
- The total volume of wool tested for the season to date was the lowest in the past five seasons.
- For the 2019/20 season to the end of March, there have been decreases in the weight of wool tested in all micron categories except for 19 microns (up 0.4%) and 20 microns (up 1.2%). Significant decreases occurred in the 23 microns (down 21.4%), 22 microns (down 20.6%), 16.6 microns and finer (down 16.2%) and 25 - 25 microns (down 11.7%). All other micron categories decreased by between 2.8% (18 microns) to 9.9% (17 microns).

Table 3: AWTA key test data volumes for the financial year to March by micron range 2014/15 – 2019/20 (mkg greasy)

Parameter	Year	<16.6um	17um	18um	19um	20um	21um	22um	23um	24um	25-26um	26-28um	29-30um	>30.5um	TOTAL
AWTA FY Total mkg greasy	2014/15	8.60	21.80	41.08	51.63	44.61	30.21	18.13	9.68	5.46	13.00	19.56	11.52	7.47	282.74
	2015/16	10.30	21.99	38.41	48.04	43.42	28.42	15.21	7.54	5.07	12.67	18.27	10.24	7.31	266.88
	2016/17	10.34	20.15	36.45	48.95	48.77	34.41	18.77	9.06	5.63	12.68	16.95	9.90	7.23	279.30
	2017/18	8.15	22.63	41.74	51.46	45.78	29.78	16.63	8.22	5.14	11.62	17.35	11.65	8.99	279.12
	2018/19	14.58	27.84	45.36	47.93	33.73	17.44	9.82	6.22	4.91	13.26	14.83	7.50	6.98	250.40
	2019/20	12.22	25.09	44.09	48.12	34.13	16.52	7.80	4.88	4.47	11.71	14.02	6.85	6.74	236.65
Y-O-Y change%	2019/20	-16.2%	-9.9%	-2.8%	0.4%	1.2%	-5.3%	-20.6%	-21.4%	-8.9%	-11.7%	-5.5%	-8.7%	-3.4%	-5.5%
Micron Split (%)	2018/19	5.8%	11.1%	18.1%	19.1%	13.5%	7.0%	3.9%	2.5%	2.0%	5.3%	5.9%	3.0%	2.8%	
	2019/20	5.2%	10.6%	18.6%	20.3%	14.4%	7.0%	3.3%	2.1%	1.9%	5.0%	5.9%	2.9%	2.8%	
5 year av. 2014/15 to 2018/19	Tonnes	10.39	22.88	40.61	49.60	43.26	28.05	15.71	8.14	5.24	12.65	17.39	10.16	7.60	271.69
	% change 19/20 vs 5 yr av	17.6%	9.7%	8.6%	-3.0%	-21.1%	-41.1%	-50.3%	-40.0%	-14.7%	-7.4%	-19.4%	-32.6%	-11.2%	-12.9%
	Micron split %	3.8%	8.4%	14.9%	18.3%	15.9%	10.3%	5.8%	3.0%	1.9%	4.7%	6.4%	3.7%	2.8%	

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 microns

- The micron profile of the Australian wool clip shows two distinct peaks; one centred around 19 micron wool (finer than 16.6 microns up to 23 microns); and a second centred around 27 - 28 microns (from 24 microns to 30.5 microns and broader) (Figure 2). A historical comparison of the Australian wool clip's micron profile percentage share and average micron can be found in Appendix Table A3 (at the end of this report).

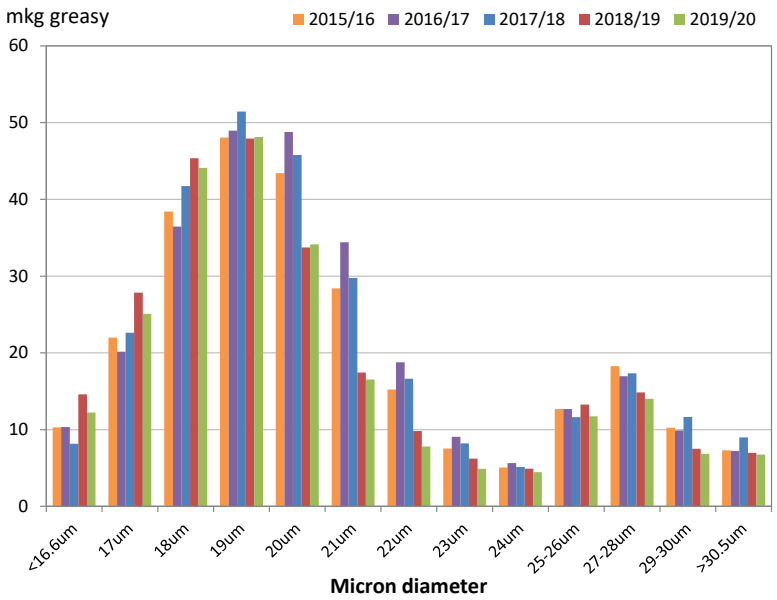

Figure 2: Australian fibre diameter profile – 2019/20 season to end March compared with the same time period for the 2015/16 to 2018/19 seasons

- Based on data by Wool Statistical Area (WSA), the volumes of wool tested in each state for the 2019/20 season to the end of March have declined on a year-on-year basis (Figure 3).

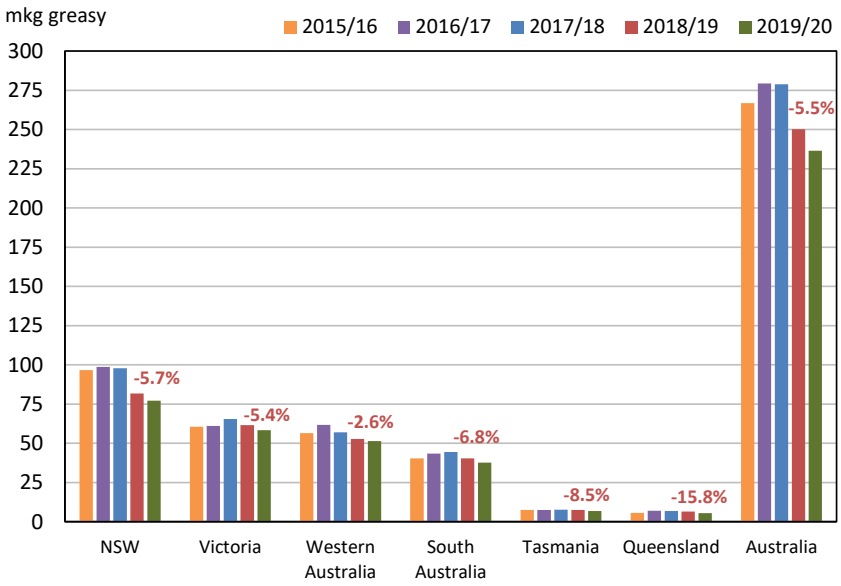

Figure 3: Volume of wool tested in the 2019/20 season to end March (AWTA key test data) *The percentage change is the 2019/20 season to end March compared with the same period in the 2018/19 season*

- Queensland had the largest decline in the volume of wool tested from July to end of March (down 15.8%), followed by Tasmania (down 8.5%), South Australia (down 6.8%), New South Wales (down 5.7%), Victoria (down 5.4%) and Western Australia (down 2.6%) (Table 4).
- A proportion of the decrease in the weight of wool tested in Tasmania is due to wool being tested and stored in Victoria.

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

Year	NSW	Vic	WA	SA	Tas	Qld	Australia
2014/15	102.0	66.9	56.3	41.8	8.5	7.2	282.7
2015/16	96.6	60.5	56.4	40.3	7.4	5.6	266.9
2016/17	98.7	61.0	61.7	43.5	7.4	7.0	279.3
2017/18	97.8	65.4	57.0	44.4	7.6	6.8	278.9
2018/19	81.7	61.6	52.7	40.4	7.4	6.4	250.3
2019/20	77.1	58.3	51.3	37.6	6.8	5.4	236.5
% change y-o-y	-5.7%	-5.4%	-2.6%	-6.8%	-8.5%	-15.8%	-5.5%

- A graphical representation of the AWTA Key Test Data changes in fibre diameter (MFD), vegetable matter (VM), staple length (SL), yield (YIELD), staple strength (SS) and hauteur (TEAM 3 H) between 1 July to 31 October from the 2000/01 season to the 2019/20 season is shown in Figure 4.
- On each graph the red dot represents the mean value of each characteristic for the 2019/20 season to the end of March while the blue dot represents the mean for the corresponding time period in the 2018/19 season.
- The values above the gauge on the left-hand side of each graph show the mean and standard deviation respectively for that characteristic from 2000/01 to 2019/20.
- Each coloured segment on the gauges represents one standard deviation with the mean at 12 o-clock (centre). For MFD, VM, SL, YIELD and SS, the mean and standard deviation are based on data from the 2000/01 season onwards. For TEAM 3 the mean and standard deviation are based on data from the 2006/07 season onwards.
- The red line on each gauge is the mean for the 2019/20 season, while the blue line is the mean for the 2018/19 season.
- On a national basis, compared with the 2018/19 season to the end of March, fibre diameter was unchanged at 20.6 µm, staple length was up 1.8 mm to 86.1 mm and staple strength was down 0.5 to 32.3 N/ktex (Figure 4a). Vegetable matter was down 0.4% to 1.7%, yield was down 1% to 62.7% and predicted hauteur was up 1.1 mm to 69.9 mm (Figure 4b).
- Fibre diameter and yield are at their lowest levels since the 2000/01 season.

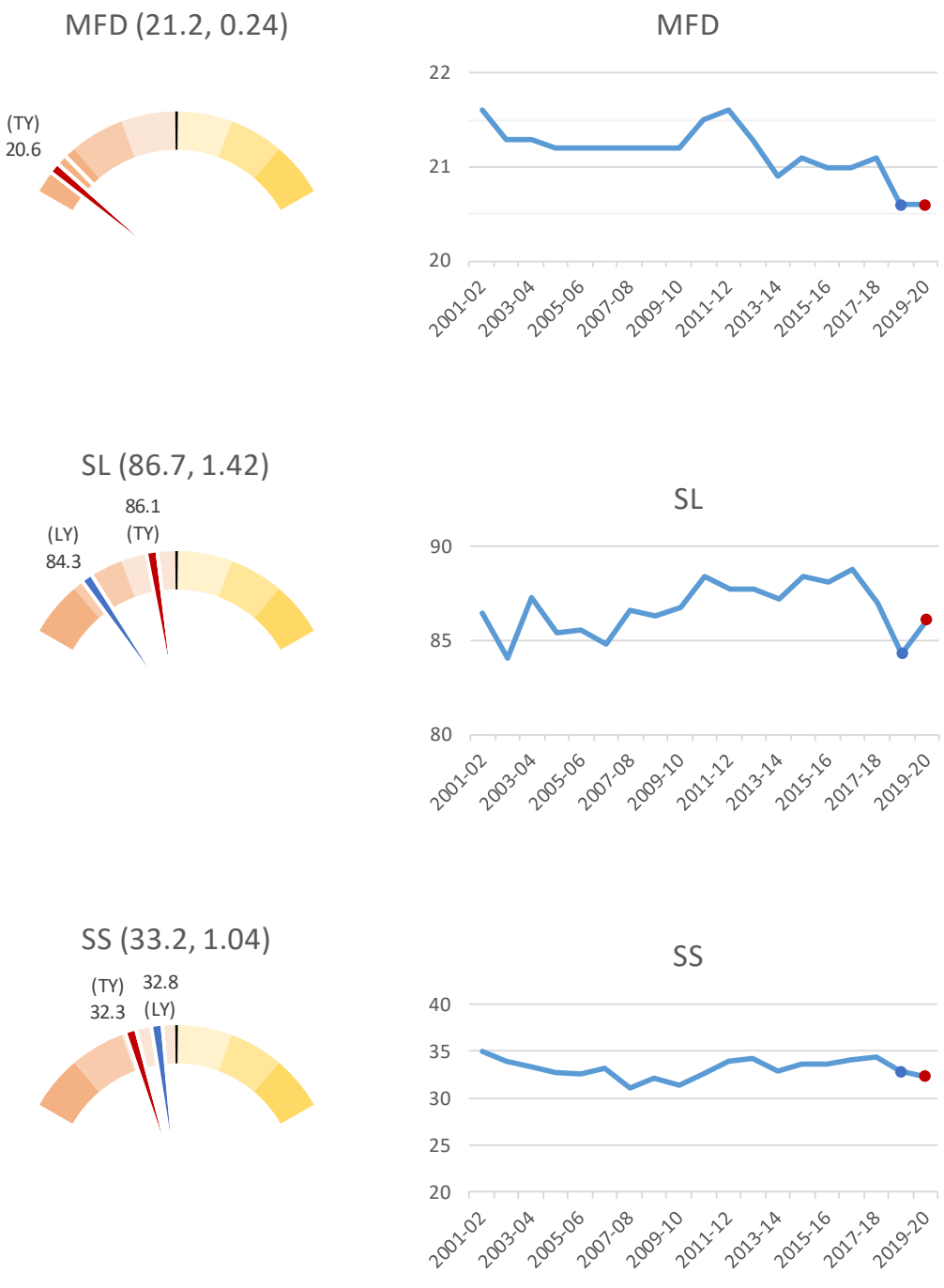

Figure 4a: AWTA Key Test Data (by sampling site) fibre diameter (MFD), staple length (SL) and staple strength (SS) for the Australian wool clip from 1 July to 31 March for the 2000/01 to 2019/20 seasons

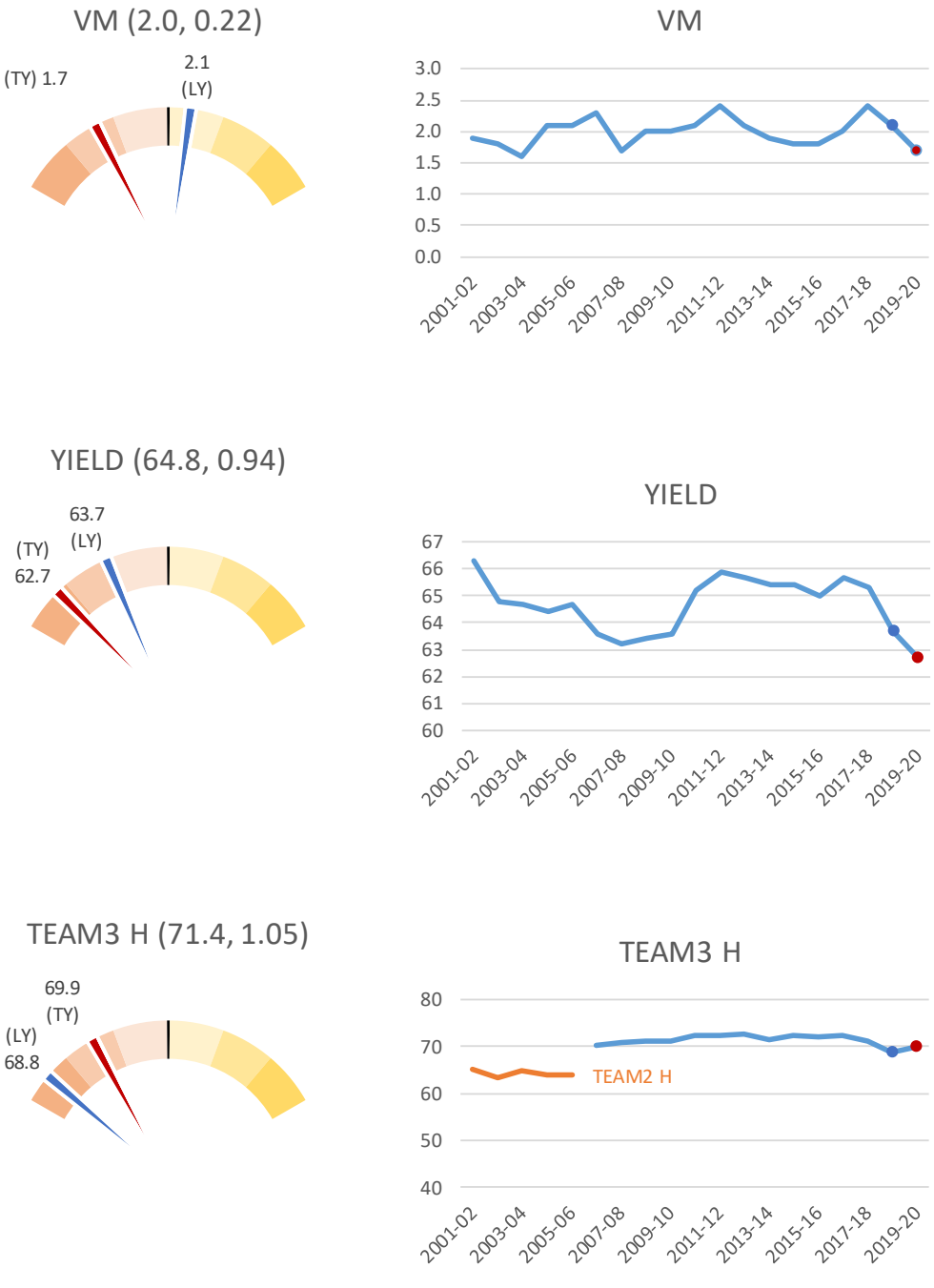

Figure 4b: AWTA Key Test Data (by sampling site) vegetable matter (VM), yield (YIELD) and TEAM 3 H (TEAM 3 H) for the Australian wool clip from 1 July to 31 March for the 2000/01 to 2019/20 seasons

AWEX auction statistics

The AWEX auction statistics for the 2019/20 season to the end of week 42 (Table 5) show a decrease in first hand wool offering volumes compared with the same time period in 2019/20.

- First hand bales offered (i.e. excluding reoffers) for Australia were 17.9% lower during July to March compared with the same time period in 2018/19.
- Large decreases were evident in each state. South Australia was down 21.3%, Queensland down 21.1%, Victoria down 19.8%, New South Wales down 16.4%, Western Australia down 16.2% and Tasmania down 13.4%.
- There was a 17.4% decrease in the volume of first-hand Merino wool offered across Australia, and a 19.9% decrease in first-hand Crossbred wool offered. The share of Merino wool of all first-hand offered wool was 79.9% in 2019/20 compared with 79.4% for the same time period in 2018/19.
- There was a 21.0% decrease in the volume of 'Prem-shorn' Merino fleece wool between July 2019 and March 2020 (12.8 mkg) compared with the same time period in 2018/19 (16.3 mkg).
- As a percentage share of the total, 10% of Australian first-hand bales offered were prem shorn between July 2019 and March 2020. On a state-by-state basis this ranged from 14% in South Australia to 4% in Tasmania.

Table 5: AWEX Auction Statistics 2019/20 to the end of week 42

2019/20	NSW	VIC	WA	SA	TAS	QLD	AUST
First hand bales offered (% change on 2018/19)	-16.4%	-19.8%	-16.2%	-21.3%	-13.4%	-21.1%	-17.9%
Merino first hand offered (% change on 2018/19)	-15.4%	-17.6%	-16.5%	-21.9%	-16.4%	-20.6%	-17.4%
Crossbred first hand offered	-20.1%	-24.5%	-10.2%	-18.8%	-5.8%	-36.9%	-19.9%
Merino first hand offered (% share)	78.3%	68.9%	94.0%	80.4%	68.8%	97.6%	79.9%
Crossbred first hand offered	21.7%	31.1%	6.0%	19.6%	31.2%	2.4%	20.1%
Merino First Hand 'Prem' Shorn Fleece							
Weight (mkg)	4.6	1.6	2.8	3.4	0.1	0.3	12.8
% share of total	10%	8%	10%	14%	4%	7%	10%
% change on 2018/19	-18%	-27%	-15%	-26%	-33%	-27%	-21%

Note: Data on 'prem shorn' wool from AWEX is based on the assessed length of the wool being offered. it is defined as <85 - 75 mm, depending on micron and excluding weaners and lambs wool

Australian Bureau of Statistics (ABS) data

The ABS provide data on wool receivals and sheep and lamb turnoff.

Wool receivals

National wool receivals for July to December 2019 were lower compared with the same time period in 2018/19 (Table 6):

- Wool receivals for Australia fell by 13.2% up to December 2019 which is higher than the AWTA test data but lower than the AWEX first-hand offered data (note the latter are both to the end of March 2020).
- Wool receivals for July to December 2019 were the lowest for the past five seasons and 40.0% below the five-year average.
- Wool receivals decreased in all states. The largest falls occurred in Victoria (down 17.9%), Queensland (down 16.1%), Western Australia (down 12.4%), South Australia (down 12.0%), New South Wales (down 10.8%) and Tasmania (down 5.0%).
- Wool receivals in all states were below the five-year average.

Table 6: ABS Wool Receivals data

mkg	NSW	VIC	WA	SA	TAS	QLD	AUS
2014/15	64.616	79.493	58.292	42.967	6.944	3.645	285.154
2015/16	58.892	77.747	63.672	44.987	6.307	3.105	281.517
2016/17	60.531	81.468	73.236	45.159	5.388	3.649	300.685
2017/18	59.490	56.891	47.356	30.981	3.939	2.853	201.510
2018/19	49.149	50.605	39.188	26.947	3.171	2.399	171.460
2019/20	43.842	41.568	34.333	23.722	3.331	2.013	148.807
% change 2019/20 vs 2018/19	*-10.8%*	*-17.9%*	*-12.4%*	*-12.0%*	*5.0%*	*-16.1%*	*-13.2%*
Five year average 14/15 to 18/19	58.536	69.241	56.349	38.208	5.150	3.130	248.065
% change 2019/20 vs 5 year av	*-25.1%*	*-40.0%*	*-39.1%*	*-37.9%*	*-35.3%*	*-35.7%*	*-40.0%*

Sheep turn-off

Australian sheep and lamb turn-off statistics for the 2019/20 season to the end of February 2020, sourced from the ABS, covers sheep slaughter, lamb slaughter and live exports and is compared with the equivalent period in 2018/19 and the five-year average 2014/15 to 2018/19 July to February (Table 7):

- The ABS data shows a 7% decrease in sheep slaughter and a 5% decrease in lamb slaughter during July 2019 to February 2020 compared with the same time period in the previous season.
- The number of live sheep exported from Australia decreased by 8% during this time.
- Total turnoff of sheep and lambs between July 2019 and January 2020 was 6% lower compared with the same time in the previous season and 5% below the five-year average for the same time period.

Table 7: ABS Sheep turn off data for 2019/20

Parameter	Financial year to-date			5-yr FYTD	
	July 2018 to Feb 2019	July 2019 to Feb 2020	% Δ	Avg	%Δ
Sheep slaughter ('000 hd)	7,134	6,657	-7%	5,980	11%
Sheep weights (kg/hd cwt)	24	25	5%	24	3%
Mutton production (tonnes cwt)	170,617	167,861	-2%	146,170	15%
Lamb slaughter ('000 hd)	14,603	13,881	-5%	15,093	-8%
Lamb weights (kg/hd cwt)	22	23	5%	22	5%
Lamb production (tonnes cwt)	324,352	323,859	0%	335,606	-4%
Live exports ('000 hd)	572	528	-8%	1,184	-55%
Total Turnoff ('000 hd)	22,309	21,065	-6%	22,256	-5%

Bureau of Meteorology (BoM) seasonal rainfall seasonal outlook

Seasonal conditions have improved across many of the main sheep growing regions of Australia in 2019/20 with rainfall between 1 January and 31 March 2020 being average or above average across most of the country (Figure 5). The driest regions continue to include the south coast of Western Australia and the eastern pastoral region of South Australia.

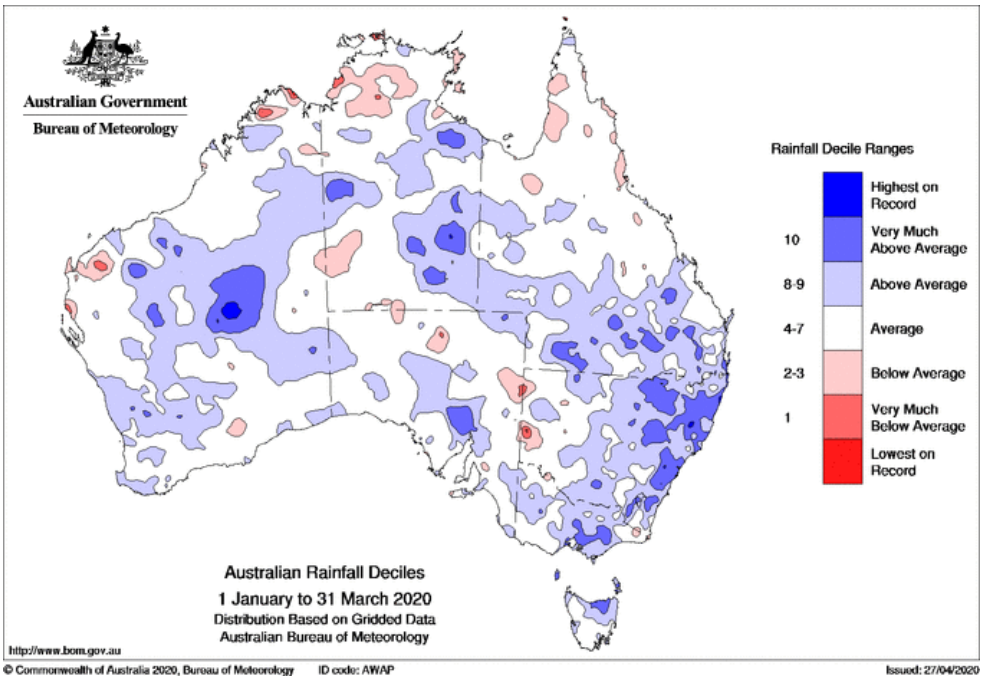

Figure 5: Australian rainfall deciles 1 January to 31 March 2020

The rainfall deciles for the past 12 months (Figure 6) clearly show how dry it has been across the country in the past year, particularly in the eastern states and the south coast of eastern Australia, most of South Australia and New South Wales.

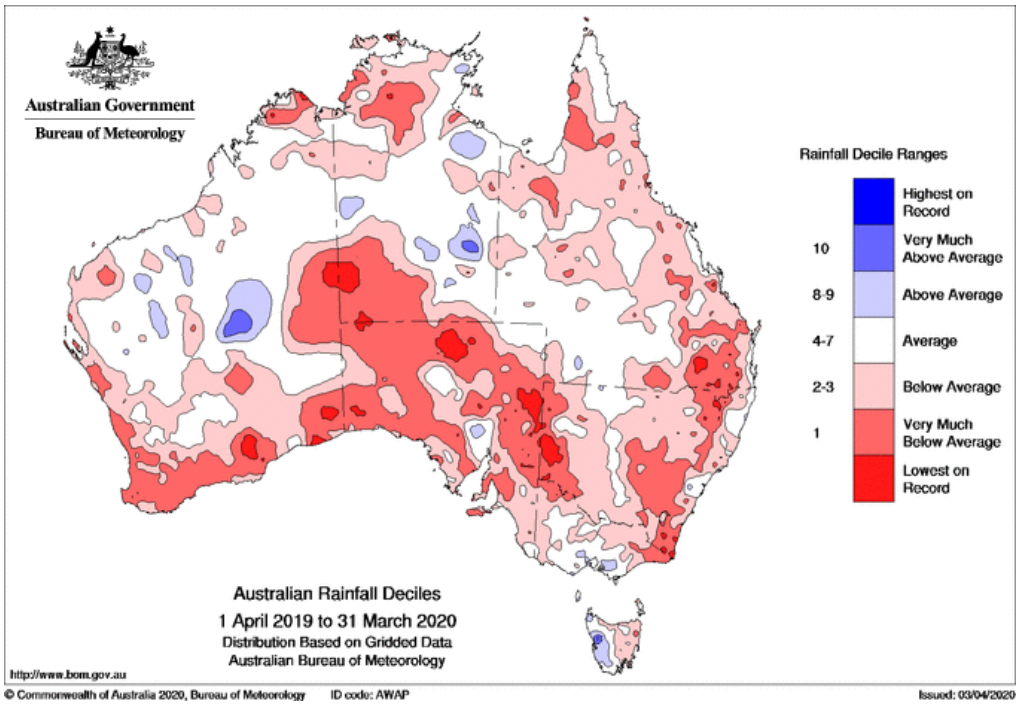

Figure 6: Australian yearly rainfall deciles (April 2019 to March 2020)

The low rainfall deciles combined with high temperatures over the past 12 months have contributed to the average and below average landscape water balance in Western Australia (Figure 7). North and central Queensland continue to have areas of below average landscape water balance with the remainder of the country now at average to very much above average levels. Although more rain will be needed to maintain these levels going forward.

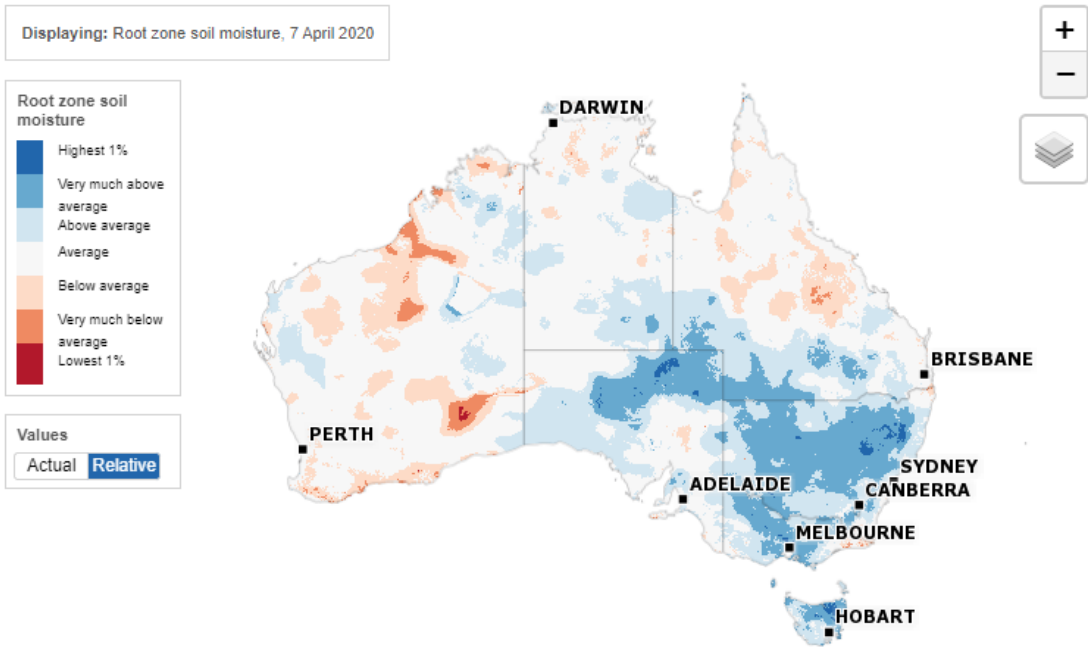

Figure 7: Australian landscape water balance, year-to-date 7 April 2020

The Bureau of Meteorology's outlook for the April to June 2020 period is that rainfall is likely to be above average across much of Australia (Figure 8) along with below average maximum temperatures (Figure 9).

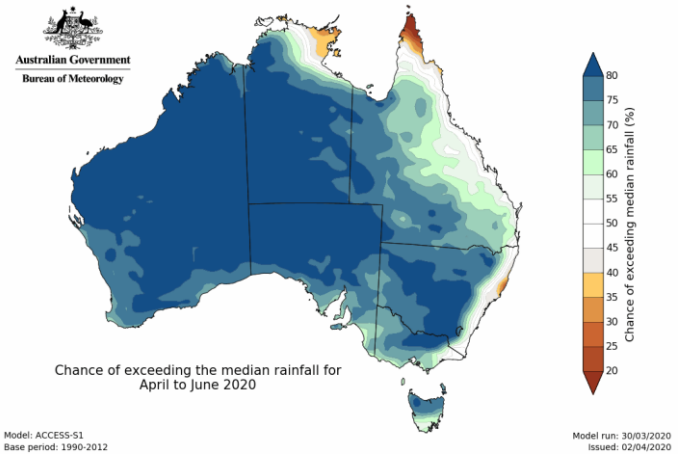

Figure 8: Chance of exceeding median rainfall (April - June 2019)

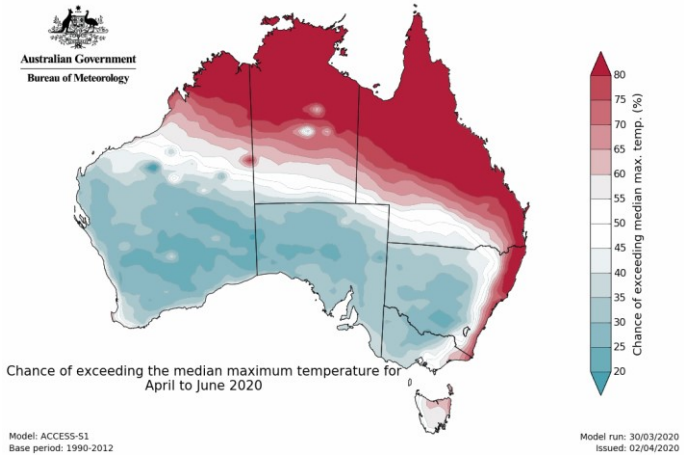

Figure 9: Chance of exceeding median maximum temperature (April - June 2019)

In its update on 31 March 2020, the Bureau noted that the El Niño–Southern Oscillation (ENSO) was inactive. The tropical Pacific was neutral with respect to the atmospheric and oceanic ENSO indicators including the Southern Oscillation Index (SOI), trade winds, cloudiness near the Date Line, sea surface and sub-surface temperatures in the tropical

Pacific Ocean. Six of the eight climate models surveyed by the Bureau indicate that ENSO is likely to stay neutral through the southern hemisphere, meaning it will have limited influence on the Australian and global climate in the coming months.

State Committee input

The following provides a summary of seasonal conditions and wool production forecast in 2019/20 in each state as reported by the AWPFC state committees in April 2020. The state committees reported that seasonal conditions in most major sheep producing areas across Australia have improved since their last meeting in November.

New South Wales

A significant seasonal improvement across most of NSW since November 2019 has reduced the percentage of the state classified as being in intense drought by NSW DPI decrease from more than 90% to 6%. The south western region, near the South Australian border and the Monaro region remain in intense drought. A reasonably widespread seasonal break occurred in early February although the falls were patchy in some regions. There was some increase in stock numbers on the northern tablelands due to agistment. The north west, far west and southern tablelands regions have improved but need follow up rain to increase pasture growth and available feed.

Many areas now have good feed with supplementary feeding ceasing in the past month and flocks being released from containment lots. Producers have become good at managing the nutrition and subsequent condition of their flocks during the long period of containment and supplementary feeding, so ewes are in good condition coming into joining with good scanning rates expected. An 85% marking rate reflects the higher proportion of maiden and younger ewes remaining in the NSW flock with lower reproduction rates. However high prices for replacement stock, low on-farm fodder and grain reserves, high prices for slaughter stock and uncertainly surrounding COVID-19 impact on wool demand and price will slow any recovery in numbers.

Limited cash flow in mixed farming regions may result in opportunistic cropping rather than flock re-building in the short-term and there is potential for goats, Dorpers and other non-wool breeds to replace Merino ewes. Sheep that were shorn and sold to slaughter during 2019/20 will limit sheep shorn numbers. **Shorn wool production in 2019/20 is expected to decline by 6.8% compared with 2018/19 to 92.4 mkg greasy**.

Victoria

Welcome rainfall has fallen across most key wool producing areas of the state, except the northwest region which is still dry. Central and western regions of Victoria are going well and have experienced ‘two springs’. The eastern areas of the state have received rain, but more is required. Sheep numbers remain low and will take time to rebuild.

Wool cuts are expected to be slightly higher than 2018/19 as Autumn wool cuts are looking to be higher than last season, despite poorer per head production in Spring. A significant increase in SL (+1.8 mm cv 2018/19) reflects a move away from 6- or 8-month shearing as producers are opting to take fleeces through to 12 months growth. AWEX Merino prem to week 42 is down (-27.3%). Tasmanian origin wool tested in Victoria is impacting on the KTD micron data for Victoria (as is wool of SA and NSW origin).

There is some evidence of producers holding wool on-farm, as they are reluctant to have it tested and held in store due to current price levels. AWTA April wool tests are down 8% on last year as rain events caused a lull mid-month. They are expecting a 6.5% reduction for the 2019/20. **Shorn wool production in 2019/20 is expected to decline by 5.4% compared with 2018/19 to 63.3 mkg greasy.**

Western Australia

The Great Southern region, extending up to Darkan and Williams, remains tight with no effective rain since November 2019. Producers continue to reduce numbers as feed and water supply remains a limiting factor. Slaughter rates at local processing plants are up with good prices paid and stock continue to be sold interstate. Producers are increasingly nervous about the base level for wool prices and stock reductions are likely to continue.

Elsewhere good rains fell during February which prompted some early pasture growth which was subsequently sprayed for sowing. In eastern and northern regions stock numbers have held firm as producers intend to retain core breeding stock. A return to an average season is likely if follow-up rain occurs. Early lambing flocks have had good results from lambing onto green feed. Average cut per head are likely to increase due to good feed over summer and autumn. Farm water availability will be the key factor limiting sheep production moving forward.

Some reported disruption to shearing times due to COVID-19 border closures preventing NZ shearers working normal WA runs, and concerns about shearer availably in September is bringing some shearing forward. There is generally not a lot of shearing occurring now as producers focus on sowing. Fresh wool is generally being tested and sent straight to sale to meet the market. There is some indication that producers shearing at 6 or 8 months are lengthening the shearing interval out to 8 to 12 months. **Shorn wool production in 2019/20 is expected to decline by 3.5% compared with 2018/19 to 60.0 mkg greasy**.

South Australia

The north east and upper north regions remain dry with the poor season continuing. Few sheep are left in these areas with many moved to agistment in the south east with some clips reduced by 70%. Some larger properties are containment feeding their flock but are beginning to talk about sending their sheep away. The north west has had good rain and producers are beginning to rebuild numbers but are starting from a low base. Good lambing percentages will be important as replacement ewes are scarce and expensive.

The south east and other regions are looking good and returning to an ‘average’ season, with some areas producing large clips, although the upper south east is down. The use of containment lots and supplementary feeding has maintained ewe condition and allowed producers to retain stock numbers. State-wide scanning percentages are up on 2018/19 (top 140 - 150%) with no evidence of big failures. Sheep are moving into the south east from Western Australia bare shorn as producers take the trading opportunity. The Kangaroo Island fires were devastating for some producers, but not so dramatic for others and some restocking has been undertaken. **Shorn wool production in 2019/20 is expected to decline by 9.0% compared with 2018/19 to 49.4 mkg greasy**.

Tasmania

Seasonal conditions are good across most of the state following good rain which began in February. Compared with 2018/19, conditions are much improved this Autumn, particularly across the northern regions as rainfall continued during March and into April. Southern areas of the state have also improved, but the change is not as marked as southern soils still have a way to go to recharge moisture levels. Significant rain fell along the east coast, but that region is rebuilding from extremely low soil moisture levels. Follow up rain is required.

Improvement in season will not impact on 2019/20 production as the peak season for shearing is from mid-April to May/June and that wool has already grown. Wool testing has been sporadic, with relatively low-test volumes in past 3 months. Little wool is stored on farm, clips have been tested and kept in brokers stores. Expecting increased test numbers from late April to early June. **Shorn wool production in 2019/20 is expected to decline by 6.7% compared with 2018/19 to 8.4 mkg greasy.**

Queensland

The season has improved through most of Queensland with rainfall in January, February and March, although the south east region near the NSW border remains dry. Sheep are being moved within WSA Q12 from dry regions around Barcaldine and Ilfracombe to south of Longreach and around Winton where the season is good resulting in no net loss of sheep from that region). Grasshopper and locust activity in northern areas have decimated any green pastures, while wild dog numbers in unfenced areas in the SE have increased with the rainfall and are negatively impacting flocks.

Sheep slaughter levels appear to have levelled out with a small increase in lamb slaughter (+10%) but both are significantly lower than the 5-year average. Sheep producers continue to be optimistic, but this has been tempered by the recent reduction in wool prices. Sheep numbers to remain low despite improvements in season. Flocks that shore and sold sheep last Spring (July to September 2019) in the south east will not re-stock due to dogs and the high price of replacement sheep. **Shorn wool production in 2019/20 is expected to decline by 12.3% compared with 2018/19 to 7.1 mkg greasy.**

Appendix

Table A1: Comparison of the fourth forecast for 2019/20 against the final estimates for 2018/19 and 2017/18

2017/18	NSW	VIC	WA	SA	TAS	QLD	National
Sheep Numbers Shorn (million)	28.3	17.2	14.8	11.9	2.4	2.2	76.8
Average Cut Per Head (kg)	4.40	4.30	4.40	5.00	3.90	3.80	4.45
Shorn Wool Production (mkg greasy)	125.7	73.5	65.1	59.5	9.3	8.3	341.0

Change (%)	NSW	VIC	WA	SA	TAS	QLD	National
Sheep Numbers Shorn	3.3%	7.6%	-1.8%	6.1%	-3.2%	3.4%	3.4%
Average Cut Per Head	-4.3%	1.9%	-6.7%	-3.1%	5.0%	-5.4%	-2.8%
Shorn Wool Production	-0.3%	9.0%	-8.4%	2.8%	1.0%	-2.8%	0.2%

2018/19	NSW	VIC	WA	SA	TAS	QLD	National
Sheep Numbers Shorn (million)	24.8	16.7	14.6	11.8	2.4	2.2	72.5
Average Cut Per Head (kg)	4.00	4.00	4.25	4.60	3.78	3.65	4.13
Shorn Wool Production (mkg greasy)	99.1	66.9	62.2	54.3	9.0	8.1	299.6

Change %	NSW	VIC	WA	SA	TAS	QLD	National
Sheep Numbers Shorn	-12.5%	-2.8%	-1.1%	-0.7%	-1.0%	1.4%	-5.5%
Average Cut Per Head	-9.1%	-7.0%	-3.4%	-8.0%	-3.1%	-3.9%	-7.2%
Shorn Wool Production	-21.2%	-9.0%	-4.4%	-8.7%	-3.4%	-2.4%	-12.1%

2019/20 Fourth Forecast	NSW	VIC	WA	SA	TAS	QLD	National
Sheep Numbers Shorn (million)	22.4	15.6	14.3	11.8	2.4	1.9	68.4
Average Cut Per Head (kg)	4.13	4.05	4.20	4.20	3.55	3.70	4.11
Shorn Wool Production (mkg greasy)	92.4	63.3	60.0	49.4	8.4	7.1	281.0

Change %	NSW	VIC	WA	SA	TAS	QLD	National
Sheep Numbers Shorn	-9.7%	-6.6%	-2.1%	0.0%	0.0%	-13.6%	-5.7%
Average Cut Per Head	3.3%	1.3%	-1.2%	-8.7%	-6.1%	1.4%	-0.5%
Shorn Wool Production	-6.8%	-5.4%	-3.5%	-9.0%	-6.7%	-12.3%	-6.3%

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 A2: Australian wool production statistics since 1991/92

Year	Sheep (million)	Average (kg)	Shorn (mkg
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
2018-19	72.5	4.13	300
2019-20f	68.4	4.11	281

Table A3: 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
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
2018/19	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	20.5
2019/20*	5.2%	10.6%	18.6%	20.3%	14.4%	7.0%	3.3%	2.1%	1.9%	5.0%	5.9%	2.9%	2.8%	20.6

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, sheep pregnancy scanners 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.