Crop and Pasture Report South Australia

2020–21 Seeding and Crop Establishment

July 2020

SOUTH AUSTRALIA

Government of South Australia

Primary Industries and Regions SA

Crop and Pasture Report South Australia

Information current as of 6 July 2020

This is a bimonthly report prepared by Rural Solutions SA, for the Agriculture Food and Wine Division of Primary Industries and Regions SA (PIRSA).

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State Summary

Weather

- May rainfall was average to above average in all agricultural areas in a line south of Adelaide. North of Adelaide, rainfall was mainly below average with some areas average.
- Rainfall for June varied from above average in the Adelaide Hills to very much below average in part of the Northern Mallee and Eastern Eyre Peninsula.
- In the Pastoral areas May rainfall was average in the northern part of the North East Pastoral Zone and generally below average to very much below average elsewhere.
- June rainfall was below average to very much below average across the whole Pastoral area with several locations recording their lowest June rainfall on record.
- Mean maximum temperatures for May were below average across most of the state. May minimum temperatures were average for the Adelaide Hills, Fleurieu, Southern Mallee and Upper South East and below average to very much below average for the rest of the state.
- June mean maximum temperatures were generally average for the agricultural area. Western Eyre Peninsula and the majority of the pastoral Zone had above average June temperatures.
- Mean minimum temperatures for June were average on Eyre Peninsula and below average to very much below average for the rest of the state.

Crops

- Total crop area sown is estimated to have increased to 4.0 million hectares which is significantly higher than the five-year average of 3.75 million hectares.
- Seeding was completed earlier than usual in some districts and close to normal in the remainder of the State.
- There were very minimal delays to seeding although farmers in several areas on Eastern Eyre Peninsula delayed sowing of non-wetting sands due to insufficient soil moisture. Some of these areas had still not emerged 4 to 5 weeks after sowing.
- The area sown to barley has been reduced by 5 to 10% in many districts although the increase in Chinese tariffs and reduction in barley prices was too late to enable many farmers to make significant changes.
- Most of the reduced barley area was sown to either wheat, canola, or pulse crops.
- Early sown crops emerged rapidly with good crop establishment. Growth of later sown crops has been much slower, due to cold conditions in late May and June.
- Strong winds caused drift on exposed sandy rises on Eyre Peninsula and in parts of the Mallee, resulting in sand blasting of newly emerged crops. Some of the worst affected areas were re-sown to get effective ground cover.
- Crop growth slowed in early June following numerous frosts in most districts however following rain in mid to late June, crops recovered and most are actively growing.
- Crops in areas that received little rainfall in June, such as Western and Eastern Eyre Peninsula, northern Lower Murray and the northern part of the Upper North, are beginning to show signs of moisture stress, particularly on heavier textured soils.
- Most farmers achieved good control of weeds with a combination of knockdown and pre-emergent herbicides and many crops have relatively low numbers of weeds.
- A wide range of insect pests damaged emerging crops in many districts, including red-legged earth mite, lucerne flea, pasture web worm, cut worms and snails. These have been effectively controlled using insecticides and minimised crop damage.
- Russian wheat aphid numbers increased to damaging levels in some districts, particularly where grasses were not controlled over summer or where the seed was not treated with an insecticide.

- Farmers applied additional nitrogen fertiliser to growing crops, particularly in areas with moderate to high levels of stored soil moisture.
- Disease levels were generally low in most crops and any diseases are being monitored closely. Some farmers are applying preventative fungicides with post-emergent herbicides to ensure disease levels remain low.

Pastures

- Pastures germinated following rains in late April in all districts however growth was slowed by cold weather in late May and early June.
- Areas of the state that received below average rainfall in May and June have had little pasture growth and many farmers are continuing to supplementary feed livestock with hay and grain.
- Many farmers on Western and Eastern Eyre Peninsula will not spray annual grasses out of pastures to maximize pasture growth and will instead spray-top pastures later in the season to stop grass seed set.
- Dry sown pastures established well and put on good early growth in most parts of the State, and livestock are now grazing them.
- Insect pests including red-legged earth mite, lucerne flea and cockchafers were in high numbers, causing damage to pastures. They were controlled to reduce further damage.
- Livestock are generally in good condition in all agricultural districts.
- Lambing percentages have been higher than normal in most districts with many reports of 100% or more.

Pastoral

- Conditions remain extremely dry across most parts of the Pastoral Zone.
- In many areas, there is very little surface cover of soils.
- A few properties north-west of Port Augusta and south of Coober Pedy had sufficient rain to produce adequate pasture growth for livestock.
- In these few favoured areas, producers have begun re-stocking and breeding up sheep numbers.
- In most other areas, rainfall was too light to produce sufficient feed and perennial bushes have minimal new growth.
- Pastoralists who had been supplementary feeding core breeding stock have had to either sell or seek agistment as the on-going cost of feeding exhausts financial resources.
- The continued decline in stock numbers is a growing concern with some smaller producers unlikely to be financially able to re-stock when it does rain.
- Decline in wool prices has reduced the profitability of feeding.
- A few loads of donated hay were distributed to pastoral properties by charitable organisations, enabled by reduced hay demand due to easing of drought conditions in the eastern states.

Key links to other information

Department for Environment, Water and Natural Resources - Soil and Land Condition monitoring

Bureau of Meteorology - Weather and rainfall observations

Notes on the calculation of crop estimates

Crop estimates for the current year assume average rainfall and temperature conditions for the remainder of the growing season.

Grain estimates are for total grain production and include grain delivered for immediate sale and warehousing plus grain retained on farm for seed, feed and future sale.

Hay estimates are for total hay production and include all pasture, cereal and other crops cut for hay, both dry-land and irrigated.

The estimates are based on information provided by Rural Solutions SA District Reporters from a variety of sources and are updated throughout the season as conditions change and further information becomes available. They are intended to provide an indication of crop potential at the time the report is prepared.

The estimates are updated using ABS census data as available.

Crop Estimates

TABLE 1 CROP ESTIMATES BY DISTRICT

		Western Eyre Peninsula	Lower Eyre Peninsula	Eastern Eyre Peninsula	Yorke Peninsula	Upper North	Mid North	Lower North	Kangaroo Island
Wheat	*ha*	450 000	145 000	373 000	162 000	257 000	248 000	66 000	4 800
	t	608 000	480 000	597 000	553 000	463 000	670 000	217 500	15 500
Durum	*ha*	0	0	0	13 500	6 500	5 000	4 300	0
	t	0	0	0	39 500	13 000	12 500	8 800	0
Barley	*ha*	100 000	70 000	79 000	163 000	88 500	96 500	20 000	3 000
	t	155 000	253 000	135 000	570 000	168 000	270 000	71 000	8 000
Oats	*ha*	16 000	3 300	4 600	3 500	4 800	4 200	2 600	1 600
	t	19 000	8 200	6 500	8 700	7 200	10 200	6 500	4 100
Rye	*ha*	0	0	0	0	0	0	0	0
	t	0	0	0	0	0	0	0	0
Triticale	*ha*	400	500	500	1 000	1 200	1 700	400	100
	t	500	1 600	700	2 800	2 400	4 200	950	400
Peas	*ha*	3 000	3 400	4 200	11 000	14 000	15 000	6 100	400
	t	3 000	5 100	4 200	17 500	16 800	21 000	9 100	600
Lupins	*ha*	1 500	16 000	5 000	1 000	2 900	1 800	500	1 000
	t	1 350	22 000	4 200	1 300	3 200	2 000	650	1 500
Beans	*ha*	400	13 000	400	10 700	12 200	13 000	3 100	3 400
	t	600	23 000	300	19 200	14 500	18 000	5 600	5 500
Chickpeas	*ha*	0	400	200	8 800	4 600	2 500	700	0
	t	0	550	100	11 500	5 500	3 100	850	0
Lentils	*ha*	2 000	13 000	2 000	127 000	9 900	14 500	6 200	0
	t	2 200	21 200	2 000	216 000	12 000	18 500	8 000	0
Vetch	*ha*	2 400	2 600	2 000	2 000	5 600	4 000	300	0
	t	700	1 800	900	1 000	2 200	2 000	120	0
Canola	*ha*	4 300	72 000	8 000	21 500	15 500	22 500	3 500	4 700
	t	5 100	129 000	8 000	36 700	20 000	34 000	5 200	9 400
Hay	*ha*	4 500	5 100	7 800	23 000	20 000	23 000	6 500	7 500
(not in total)	*t*	11 500	24 000	18 500	115 000	80 000	101 000	29 000	35 500
Total	*ha*	578 000	339 200	478 900	525 000	422 700	428 700	113 700	19 000
	t	795 450	945 450	758 900	1 477 200	727 800	1 065 500	334 270	45 000

TABLE 1 CROP ESTIMATES BY DISTRICT (CONT)

		Central Hills & Fleurieu	Lower Murray	Nth Murray Mallee	Sth Murray Mallee	Upper South East	Lower South East	State Total
Wheat	*ha*	4 300	60 000	255 500	109 500	70 000	23 000	2 228 100
	t	10 800	102 000	383 000	197 500	175 000	85 500	4 557 800
Durum	*ha*	300	1 000	300	1 000	7 700	0	39 600
	t	600	1 200	360	900	15 500	0	92 360
Barley	*ha*	10 200	75 000	64 000	120 500	30 000	7 000	926 700
	t	26 500	135 500	96 000	241 500	78 000	28 000	2 235 500
Oats	*ha*	1 600	2 000	2 200	4 000	20 000	4 700	75 100
	t	3 700	2 600	2 900	7 200	41 500	14 000	142 300
Rye	*ha*	0	1 000	2 800	1 000	1 200	0	6 000
	t	0	1 000	2 800	1 200	1 350	0	6 350
Triticale	*ha*	500	4 000	2 000	15 000	1 000	500	28 800
	t	1 300	5 200	2 800	27 000	2 000	2 000	53 850
Peas	*ha*	1 000	3 000	4 000	3 100	2 900	400	71 500
	t	1 600	3 600	3 600	3 700	4 000	800	94 600
Lupins	*ha*	1 600	1 000	5 400	4 100	11 000	2 700	55 500
	t	2 500	1 200	4 300	5 000	13 500	4 600	67 300
Beans	*ha*	300	500	0	2 000	29 500	13 800	102 300
	t	550	500	0	2 400	43 500	34 500	168 150
Chickpeas	*ha*	200	3 000	6 000	4 100	600	200	31 300
	t	250	3 000	4 800	5 000	600	250	35 500
Lentils	*ha*	300	3 000	2 000	5 000	3 000	200	186 100
	t	420	3 000	1 600	6 000	3 500	300	294 720
Vetch	*ha*	0	3 100	6 500	5 100	1 200	0	34 800
	t	0	2 500	2 600	4 000	1 100	0	18 920
Canola	*ha*	3 000	2 100	18 000	5 200	22 500	16 500	219 300
	t	4 500	2 500	14 500	7 200	33 500	35 750	345 350
Hay	*ha*	27 000	10 000	3 600	30 000	48 000	27 000	238 500
(not in total)	*t*	123 000	35 000	7 200	119 500	216 000	135 000	1 050 200
Total	*ha*	23 300	158 700	368 700	279 600	200 600	69 000	4 005 100
	t	52 720	263 800	519 260	508 600	413 050	205 700	8 112 700

TABLE 2 CURRANT ESTIMATES AGAINST PREVIOUS FIVE SEASONS

		2015/16	2016/17	2017/18	2018/19	2019/20	5 year ave	2020/21
Wheat	*ha*	2 200 000	2 237 700	2 024 100	2 000 400	2 112 100	2 114 900	2 228 100
	t	4 315 500	6 460 500	4 122 500	3 156 000	3 251 500	4 261 200	4 557 800
Durum	*ha*	49 500	55 200	55 700	42 000	42 900	49 100	39 600
	t	86 750	209 700	139 400	75 220	82 560	118 700	92 360
Barley	*ha*	839 300	799 300	714 600	818 600	990 000	832 400	926 700
	t	1 978 000	2 774 800	1 640 700	1 725 800	2 091 000	2 042 100	2 235 500
Oats	*ha*	70 300	94 600	77 000	75 700	72 800	78 100	75 100
	t	103 000	258 700	149 300	121 500	120 450	150 600	142 300
Rye	*ha*	7 500	10 500	6 500	5 300	5 700	7 100	6 000
	t	6 200	15 700	5 100	3 150	4 250	6 900	6 350
Triticale	*ha*	21 800	21 500	19 900	29 400	32 300	25 000	28 800
	t	32 700	58 130	35 050	33 500	42 250	40 300	53 850
Peas	*ha*	102 600	97 300	90 200	65 700	65 300	84 200	71 500
	t	103 600	176 100	113 750	53 600	70 100	103 400	94 600
Lupins	*ha*	76 700	76 800	62 800	61 000	51 100	65 700	55 500
	t	63 850	134 800	53 400	59 950	53 800	73 200	67 300
Beans	*ha*	68 600	75 500	67 400	63 100	98 400	74 600	102 300
	t	77 300	166 530	101 660	79 680	156 650	116 400	168 150
Chickpeas	*ha*	20 500	20 500	29 700	33 600	22 200	25 300	31 300
	t	19 240	34 360	33 580	23 870	17 000	25 600	35 500
Lentils	*ha*	123 700	169 600	184 700	149 800	164 300	158 400	186 100
	t	120 080	447 680	260 200	177 870	220 400	245 200	294 720
Vetch	*ha*	29 600	32 200	32 400	28 400	34 000	31 300	34 800
	t	11 900	34 800	15 350	5 760	9 420	15 400	18 920
Canola	*ha*	210 500	203 000	200 200	200 100	206 600	204 100	219 300
	t	293 300	372 900	261 400	278 900	347 400	310 800	345 350
Hay	*ha*	282 700	258 800	202 900	370 000	320 600	287 000	238 500
(not in total)	*t*	1 094 800	1 454 300	948 600	1 104 000	1 258 900	1 172 100	1 050 200
Total	*ha*	3 820 600	3 893 700	3 565 200	3 572 100	3 897 700	3 749 900	**4 005 100**
	t	7 211 400	11 144 700	6 931 400	5 794 900	6 466 800	7 509 800	**8 112 700**

District Reports

Western Eyre Peninsula

Weather

- May rainfall was average to below average. June rainfall was very much below average in the Far West and below average in the rest of the district.
- Mean maximum temperatures were below average for May and above average for June.
- Mean minimum temperatures were below average for May and average for June.
- Strong winds occurred in late May and early June.

Crops

- Most farmers finished seeding before the end of May, and there were no significant changes in crop areas.
- Strong winds caused drift on exposed sandy rises throughout the region, particularly on paddocks that were recently sown. Persistent windy weather into late June saw many of these areas continue to drift.
- Crop growth stage is highly variable depending on sowing date. Early sown crops germinated well and had good yield potential by the end of June. Cold and dry conditions slowed the emergence and growth of crops sown later, and some had still not emerged more than 6 weeks after sowing.
- Regular small rainfall events maintained the health and yield potential of crops south of Minnipa. Given good rainfall these crops have average to above average yield potential.
- Crops on heavier soil types north and west of Poochera are showing signs of moisture stress and will require good rains in early July to maintain yield potential.
- A number of farmers re-sowed areas that drifted in late May. Heavier flat country generally has adequate surface cover to protect against wind erosion but many of the sandy rises remain susceptible to wind damage.
- Good knockdown and pre-emergent herbicide efficacy combined with low soil moisture has resulted in low numbers of crop weeds.
- A few farmers near Mt Cooper who received good early rains have applied urea to canola and cereal crops. Farmers in other districts have adequate fertiliser supplies on hand and are prepared to apply extra nitrogen ahead of forecast rainfall events.
- High numbers of Cutworm and Native budworm damaged emerging canola and cereal crops. Red-legged earth mite were also in high numbers across the region and many farmers applied an insecticide with their knockdown herbicides to protect emerging crops. A second spray at crop emergence was necessary for effective control in many cases.
- Spot form net blotch has been reported in susceptible barley varieties and many farmers will apply fungicide to minimise damage, if required. Other crop disease levels are generally low, including Rhizoctonia.

Pastures

- Pasture feed is limited and many farmers are supplementary feeding stock with hay and grain.
- Most pastures will be spray-topped to maximize pasture growth.
- Many lambs will be sold soon after weaning to preserve pasture feed for breeding ewes.
- Despite the dry summer, lambing percentages have been average as a result of increased supplementary feeding.

Lower Eyre Peninsula

Weather

- May rainfall was below average in the north-east and average in the remainder of the district. Rainfall for June was average in the north-west and below average in the remainder of the district.
- Mean maximum temperatures were below average for May and average for May.
- Mean minimum temperatures were below average for May and average for June.

Crops

- Some stubble burning undertaken around Cummins in early May to manage herbicide resistant weeds.
- Good opening rains around 25 April enabled most farmers to begin seeding and continued good conditions allowed most to finish before the start of June.
- All farmers sowed their planned crop types and areas, indicating that crop area will not vary significantly from the long-term average.
- Warm soil temperatures in early May stimulated a rapid germination of early sown crops.
- Soil profiles contain some stored moisture.
- Strong winds at the end of May damaged emerging crops on sandy soils north of Ungarra. Some badly affected areas were re-sown but good soil moisture levels enabled many of these areas to recover quickly without re-sowing.
- Strong weed germination following earlier rainfall increased the effectiveness of pre-sowing knockdown herbicides so weed levels in most crops are low.
- Crops are healthy and growing rapidly following warmer sunny days in June and have excellent yield potential.
- Most farmers applied nitrogen to crops ahead of forecast rainfall in the middle of June, and most are preparing to apply more as the season progresses.
- Disease prevalence in crops is generally low except for isolated reports of spot form net blotch on susceptible barley varieties. Where necessary, farmers will apply fungicides to reduce further damage.
- Many growers are considering using growth regulators on cereal crops to reduce the risk of crop lodging and fungal infection later in the season.
- High numbers of insect pests including pasture webworm, cutworm, armyworm and red-legged earth mite, have caused some minor damage to emerging crops but were controlled with insecticide.

Pastures

- Livestock are generally in excellent condition.
- Warm soils prompted rapid germination and growth of pastures following April and May rainfall, and most producers were able to reduce or stop supplementary feeding livestock.
- The area cut for hay is expected to be similar to normal with most producers replenishing on-farm supplies.

Eastern Eyre Peninsula

Weather

- May rainfall was average in the east and below average in the remainder of the district. Rainfall for June was very much below average in the east and below average in the rest of the district.
- Mean maximum temperatures were below average for May and average for June.
- Mean minimum temperatures were below average for May, and for June were below average in the east and average in the rest of the district.

Crops

- Despite lower than average rainfall, most farmers finished seeding before the end of May, with most sowing all of their planned crop types and area.
- The exception to this was near Wharminda and Rudall which did not receive early rainfall and some farmers did not sow non-wetting sands. Continued dry conditions affected crop establishment and some crops still had not germinated 4 to 5 weeks after sowing.
- Very strong winds on 30 May eroded soils with poor surface cover near Cleve, Arno Bay and Cowell, and on exposed sandy rises near Darke Peak and Wharminda.
- The area sown to canola and barley was reduced given poor market signals and has mainly been replaced with wheat.
- Dry topsoils and persistent wind events during June affected crop establishment. Some farmers re-sowed areas but were limited by poor soil moisture.
- Crop growth stage varies depending on sowing date. Dry sown crops in areas that received early rains established quickly and generally have good yield potential. Later sown crop growth was slowed by cold conditions during June.
- Crops on heavier textured soils around Cleve, Kimba and Buckleboo are showing signs of moisture stress from dry conditions and low stored soil moisture amounts.
- Good knockdown and pre-emergent herbicide efficacy combined with low soil moisture has resulted in low crop weed numbers.
- Large numbers of insect pests occurred across the district. Pasture web worm and cut worm caused significant damage to emerging crops on lighter textured soils around Darke Peake and Kimba, and there have been isolated occurrences of Russian wheat aphid near Crossville, carried over on volunteer cereals that grew after summer rain. Insecticide applications were generally effective in controlling these pests.
- Crop disease has generally been low. However, spot form net blotch appeared in susceptible barley varieties and fungicides will be applied to protect crops where necessary.

Pastures

- Pastures germinated well in districts that had good early rainfall and grew considerable biomass prior to cold weather in mid-May.
- Although this allowed some livestock producers to reduce or stop supplementary feeding, pasture growth is poor in most of the district and farmers will continue to provide hay and grain to stock until pasture growth improves.
- Many farmers will delay spraying out grass weeds in pastures to preserve paddock biomass and will instead spray-top these paddocks in spring to stop grass weeds setting seed.
- Sheep are in excellent condition with reports of good lambing percentages despite dry conditions over summer. Most producers were able to maintain the condition of ewes with supplementary feed.
- Farmers in the Cleve Hills who rely on dams have had to continue to cart water for livestock.

Upper North

Weather

- Rainfall for May was below average around Carrieton and Quorn and average to above average in the rest of the district.
- June rainfall was average in the south-east of the district and below average in the remainder of the district.
- Mean maximum temperatures were below average in May and average in the south to above average in the north for June.
- Mean minimum temperatures for May were very much below average in the north-west and below average in the remainder of the district. June temperatures were very much below average with numerous frosts.

Crops

- Seeding was completed one to two weeks earlier than normal with only a few short weather delays, mainly on heavier soils.
- Early sown crops emerged and grew rapidly but later sown crops have been slow to emerge as temperatures dropped.
- Stored soil moisture amounts are moderate to high, however in the northern part of the district the soil surface has dried and plant roots are in semi-dry soil.
- Crop growth was very slow during June due to cold conditions and numerous frosts.
- Crops in the northern part of district have stopped growing at early to mid-tillering growth stage. Early sown crops grew well, but are starting to show signs of moisture stress on heavier soils.
- Around Booleroo, crops are still actively growing but have very little soil moisture reserves and will start to suffer moisture stress without good falls of rain in July.
- Crops are actively growing. Early sown crops south of Booleroo where more rainfall has been received, are at stem elongation stage
- The area sown to barley has been reduced with an increase in mainly wheat and pulses.
- Knock-down and pre-emergent herbicides provided very good weed control so most crops currently have low numbers of weeds.
- Farmers have begun applying post-emergent herbicides to crop weeds.
- Red-legged earth mite and lucerne flea caused damage to emerging cereal and pulse crops, so many were sprayed to reduce damage.
- Russian wheat aphid numbers built up and caused damage, particularly where grasses were not controlled over summer. Moderate to high populations are being controlled.
- Leaf diseases are currently at low levels however some farmers are applying preventative treatments to slow development. Crops will be monitored closely should the forecasted above average August and September rainfall eventuate.

Pastures

- Pastures germinated and grew rapidly following the rains in late April however growth slowed as temperatures dropped in late May and early June.
- Dry sown pastures have grown well and some are being grazed, depending on the availability of other pasture feed.
- Later sown pastures have only grown slowly with minimal biomass.
- Stock are in reasonable condition where they have adequate feed.
- Some supplementary feeding is still continuing, particularly where farmers increased their cropping area at the expense of pasture area.

Mid North

Weather

- Rainfall for May and June was generally below average with small areas of average rainfall.
- Mean maximum temperatures were below average for May and average for June.
- Mean minimum temperatures were below average for May and June with numerous frosts.

Crops

- Most farmers completed seeding in the third week May with a few crops sown in late May.
- Crop establishment was very even across the district.
- Knockdown herbicides gave good weed control. Marshmallow was widespread and required higher rates of herbicides to give effective control.
- Pre-emergent herbicides provided very good weed control, particularly those activated by soil moisture.
- Amounts of soil moisture are still reasonable in most areas of the district, although less in the western part of the district.
- Cereals vary in growth stage from three leaf to fully tillered, depending on time of sowing.
- Early sown canola crops have complete ground cover and later sown crops are close to full ground cover.
- Early post-emergent herbicides are being applied to crops.
- Russian wheat aphid numbers are starting to build up in some cereal crops where self-sown plants were not sprayed off and insecticides not applied to seed. Where damage is occurring, aphids are being controlled with insecticide mixed with post-emergent herbicides.
- There was an estimated 5% reduction in area sown to barley late in the seeding program with this area replaced by wheat or pulses.
- There was a slight increase in the area sown to hay however the export market is fully committed with no new contracts being offered to farmers.
- Green peach aphids are present in early sown canola crops and will require monitoring.
- Downy mildew started to develop in pea crops and will need to be managed.
- Net blotch is present at low levels in susceptible barley varieties.
- Bean and lentil crops currently have low levels of disease.
- There are low levels of ascochyta leaf disease in early sown vetch crops.

Pastures

- Pastures germinated and established well however growth has slowed with cold weather.
- Early sown vetch is providing high quality feed for livestock.
- Early sown cereals have grown well and are being grazed by livestock.
- Later sown pastures have been slow to develop due to the cold conditions.
- Livestock are generally in good condition.
- Lambing percentages are high with many over 100%.
- Some ewe losses occurred due to changes in diet and some pregnancy toxaemia was also reported.

Lower North

Weather

- May rainfall was below average in the north-west and average in the remainder of the district. Rainfall for June was average in the south-east and below average in the rest of the district.
- Mean maximum temperatures were below average for May and average for June.
- Mean minimum temperatures were below average for May and June with a high number of frosts during June.

Crops

- Seeding was completed seven to 10 days earlier than normal with minimal delays.
- Stored soil moisture levels are moderate with moisture to a depth of 40cm in the higher rainfall parts of the district.
- The area sown to barley was reduced by 5 to 10% and replaced by either wheat or canola.
- Crops emerged well but growth has been slow due to the below average temperatures in June.
- Red-legged earth mite caused damage to some crops with spraying providing effective control.
- Russian wheat aphid was present in a few crops where insecticide seed dressings were not applied. These have been effectively controlled with insecticide.
- There have been a few incidences of pink cutworm and pasture webworm causing damage to cereals and requiring control.
- Knock-down and pre-emergent herbicides have provided very effective weed control with most crops having low numbers of grassy weeds. Post emergent weed control has not yet commenced.
- A shortage of LVE MCPA herbicide may cause some delay in post-emergent herbicide application as alternative products can cause more crop damage when applied too early.

Pastures

- Pastures have established and grown well with some broadleaf herbicide applied to control weeds.
- There have been high numbers of red-legged earth mite and lucerne flea, both effectively controlled by insecticides.
- Most livestock producers are still feeding stock hay to supplement new pasture growth.
- The area sown to hay crops was reduced slightly given a predicted reduction in demand for hay.
- Livestock are in excellent condition with reports of high lambing percentages, most around 100%.

Yorke Peninsula

Weather

- Rainfall for May varied from below average in Central Yorke Peninsula to above average in parts of Southern Yorke Peninsula. June rainfall was average on Southern Yorke Peninsula and below average on Central and Northern Yorke Peninsula.
- Mean maximum temperatures for May were below average and average for June.
- Mean minimum temperatures were below average for May and June with numerous frosts recorded in late May and early June, mainly on Northern Yorke Peninsula.

Crops

- Seeding was completed across the Peninsula by the end of May, with minimal weather delays. This was an earlier finish than usual in Southern Yorke Peninsula.
- Stored soil moisture levels range from 20 to 50% of capacity with higher amounts mainly on lighter, sandier soils.
- Wheat area remained stable but there was a 5% reduction in the area sown to barley. This has been replaced by mainly lentils (up 5 to 10%) and canola.
- Early sown crops on Northern Yorke Peninsula are at late tillering stage.
- Canola crops have good ground cover and crops sown in mid-April are budding.
- Wheat crops range from three leaf to mid-tillering stage, depending on the region and sowing date.
- Lentil and chickpea crops have started to branch and farmers are beginning to spray out grasses.
- Farmers applied nitrogen fertiliser to cereal crops in the third week of June, ahead of forecast rainfall events.
- Septoria tritici leaf blotch was found in some wheat crops on Northern Yorke Peninsula in the third week of June.
- Net form of net blotch leaf disease has been observed in susceptible barley varieties on Central Yorke Peninsula.
- Higher levels of diseases yellow leaf spot in wheat and net blotches in barley on Southern Yorke Peninsula, starting to develop due to wetter conditions.
- Mice activity has increased since February and baiting has ranged from all crops on some farms to only a few paddocks. There are active holes in some crop paddocks on Northern Yorke Peninsula and numbers could increase in spring.
- Farmers are applying preventative fungicides to manage ascochyta in chickpea crops while applying grass herbicides.
- Snail damage to emerging crops has been greater than normal and higher rates of bait have been applied to control these high snail populations.
- Chemical residues have affected some crops where farmers have not abided by rainfall and/or time periods for plant back.

Pastures

- Both sown and regenerating pastures have established well and there is adequate pasture growth for livestock.
- Livestock are in above average condition and lambing percentages are generally above average.
- There have not been any reports of livestock losses with the cold, windy weather as farmers are generally able to protect their stock in sheltered areas during extreme weather events.
- On-farm hay reserves are generally low.
- There has been an increase in the area sown to hay, mainly as a management tool to control herbicide resistant ryegrass.

Adelaide Hills, Fleurieu & Kangaroo Island

Weather

- May rainfall was average for Kangaroo Island (KI) and average to above average for the Adelaide Hills and Fleurieu. Rainfall for June was average for the Adelaide Hills, Fleurieu and eastern KI and below average for the rest of KI.
- Mean maximum temperatures were below average for May for all areas and average for June.
- Mean minimum temperatures for May were below average for KI and average for the Adelaide Hills and Fleurieu. June temperatures were generally below average across all districts with numerous severe frosts in the Adelaide Hills.

Crops

Adelaide Hills/Fleurieu Peninsula

- Seeding was completed close to normal time.
- Stored soil moisture amounts are just adequate but will require above average winter rainfall to achieve full capacity.
- There have been only minor changes to crop area and type, with a slight increase in the area sown to cereals and hay mixes, and a reduction in higher input crops such as pulses and canola.
- At this stage there are no reports of significant pest, disease or weed problems.

Kangaroo Island

- Seeding was completed slightly later than normal, mainly due to ongoing fire recovery efforts.
- Stored soil moisture levels are high with most soils at 90 to 100% capacity.
- There has been a slight decrease in the area sown to beans and an increase in cereals (mainly for stock feed) in the fire scar area.
- Cutworms, red-legged earth mite, earwigs, conical snails and lucerne flea are all present and causing damage to crops.
- Annual ryegrass and vetch are a weed problem in many crops and will require effective control to maintain yield potential.

Pastures

Adelaide Hills/Fleurieu Peninsula

- Pasture growth was slowed by cold conditions and frosts, and livestock feed amounts are only just adequate.
- Some supplementary feeding is still occurring where livestock are grazing weedy, poor pastures.
- There are many weedy pastures, due to limited reseeding and active pasture management over the last three to four years as a result of seasonal and financial constraints.
- More hay has been sown than usual to replenish on-farm stocks.
- Livestock condition and lambing percentages are variable due to variable pasture quality at both joining and lambing times.

Kangaroo Island

- Pasture growth has been excellent due to the great start to the season and mild weather. Livestock feed availability varies across farms due to stocking rates.
- Supplementary feeding of livestock has ceased.
- Red-legged earth mite and cockchafers have caused minor damage to some pastures.
- The area sown to hay crops is close to normal.
- Livestock are in good condition with lambing still underway.

Lower Murray

Weather

- May rainfall varied from above average in the south to below average in the north of the district. Rainfall for June was below average in the north and average in the remainder of the district.
- Mean maximum temperatures were below average for May and average for June.
- Mean minimum temperatures for May were below average in the north and average further south. Temperatures for June were below average across the district.

Crops

- Seeding was completed at a similar time to normal in most parts of the district.
- In the southern part of the district, crops have emerged and are growing rapidly with average rainfall.
- In the north of the district, crops germinated and established but growth has slowed or even stopped with the cold, dry conditions. Crops on heavier soil types are showing signs of moisture stress and substantial rain will be required for these crops to achieve average yield potential.
- Farmers in the southern part of the district applied additional nitrogen fertiliser and are applying early pre-emergent herbicides to control weeds. There are low levels of pests and diseases present.
- Most crops have low numbers of grassy weeds with good control achieved with knock down herbicides before seeding.
- Canola and pulses in the southern part of the region have grown well and have above average yield potential.
- Farmers have been able to obtain most of their cropping inputs despite shortages and delayed delivery of some products.
- Most farmers are optimistic that this season will be better than the past two years.

Pastures

- Pastures established well in the southern part of the region with good ground cover. Although most of these pastures are being grazed, biomass is still increasing.
- Stock are in good condition and supplementary feeding has either slowed or stopped.
- Lamb marking is finished on most properties and some early lambs have already been weaned. Good percentages have been reported.
- Early sown hay crops are growing well and cereals sown for pasture are already being grazed.
- Irrigated river flats sown with a mix of winter pasture species achieved good establishment and early growth but a series of frosts in early June slowed growth.

Northern Murray Mallee

Weather

- Rainfall in May was average in the south and below average in the north of the district. June rainfall was below average in the north-west and average in the remainder of the district.
- Mean maximum temperatures for May were below average and average for June.
- Mean minimum temperatures for May were below average in the north and average in the south of the district. Minimum temperatures for June were below average. There were several periods of consecutive frosts recorded during this period.

Crops

- Crops were generally sown on time after the excellent opening season rains and most farmers finished by the end of May.
- A week of frosts in mid-June slowed crop growth and dried out topsoil but was generally followed by enough rain to maintain good crop growth.
- There is good subsoil moisture available in most soil types which gives some security for crop yields.
- Strong winds on numerous days raised dust, with sandy rises with little cover being the most vulnerable.
- Some soil movement and crop damage from the tops of sandy rises with poor surface cover, but only minimal re-seeding was required.
- Farmers generally increased the area sown to wheat, chickpeas, canola and vetch this season.
- Many farmers reduced their intended barley area, due to forecast lower prices.
- Autumn rains allowed good pre-emergent weed control and broadleaf weeds in cereals and grasses in pulse and canola crops are being controlled in-crop.
- Russian wheat aphid was evident particularly where no seed treatment was applied (such as early sown feed paddocks) but numbers are generally being monitored and controlled as required.
- Red-legged earth mite and cutworm numbers were much higher this season, requiring insecticide application on many crops to reduce damage.
- A rainfall of 25mm or more will set up the rest of the season, but currently small rainfall events is all they have been receiving.

Pastures

- Livestock are in good condition, with the early season rains providing early establishment and growth of both volunteer and sown pastures.
- Lambing percentages have been higher than average and many farmers are reporting 115 to 120%.
- Some farmers have continued to supplementary feed livestock with grain to provide additional nutrition throughout lambing.

Southern Murray Mallee

Weather

- May rainfall was average. Rainfall for June was below average in the west and average in the remainder of the district.
- Mean maximum temperatures were below average for May and average for June.
- Mean minimum temperatures were average for May and below average for June.

Crops

- Most crops were sown by mid to late May and established well. The damp conditions enabled good early growth.
- Crops sown into paddocks with good soil cover have excellent establishment.
- Crops sown into paddocks with sparse ground cover (due to over grazing, deep ripping or soil amelioration) have been damaged by wind blasting.
- Subsoil moisture is high and with continued weekly rainfall events the topsoil is now quite damp.
- Many farmers have applied a large portion of their post emergent herbicides.
- Additional nitrogen fertiliser has been applied to crops, with farmers confident of average to above average yields.
- Pulse and canola crops established well with excellent growth. Red-legged earth mite damaged some crops.
- Although there were some delays with obtaining some chemical and fertiliser products, this had limited impact on timeliness of operations.
- Hay and pulse crops have grown well and most have been rolled to aid cutting and harvest operations.

Pastures

- Pastures established well with good growth from timely rainfall events.
- Cereals sown for livestock feed are starting to be grazed around the region.
- Lucerne and veldt grass pastures put on good early growth but suffered from a series of frosts in early June. They have now recovered with good growth.
- Supplementary feeding of livestock has generally stopped apart from roughage for livestock grazing cereals.
- Livestock are in very good condition.
- Most producers have completed lamb marking and some early drop lambs have been weaned with farmers reporting much better growth rates due to better seasonal conditions.

Upper South East

Weather

- May rainfall was above average in the north-west and average in the remainder of the district. Rainfall for June was average to below average.
- Mean maximum temperatures for May were below average and average for June.
- Mean minimum temperatures were average for May and below average for June. Many parts of the district received numerous severe frosts.

Crops

- There is good stored soil moisture, particularly on clayed, delved or heavier soils.
- Sandy soils have dried out somewhat following the frost, and follow up rain on these soil types will be important to maintain crop growth.
- Crops were generally sown at the optimum time with most farmers finishing seeding one to three weeks earlier than normal.
- Early germination enabled good control of weeds with knockdown herbicides prior to seeding, reducing the reliance on pre-emergent or post-emergent herbicide applications. There are lower numbers of volunteer cereals, brome grass and cape weed than normal.
- Cut worm, wire worm and earwigs were active in higher numbers than normal on heavier soil types.
- Conical snails were in greater numbers and baiting was required to reduce crop damage.
- There has been an increase in the area sown to wheat by 10%, due to higher prices being offered relative to barley. Some canola and hay crops have also been replaced by wheat.
- There has been a decrease in the area sown to barley by 15%, due to the introduction of Chinese tariffs. Wheat, milling oats or canola has replaced barley.
- The unsuccessful control of ryegrass with two knockdown glyphosate applications on some properties has highlighted the rapid increase in glyphosate resistant ryegrass.

Pastures

- Pasture growth slowed with the cold weather and supplementary and creep feeding is being undertaken on some properties, particularly for cattle.
- Red-legged earth mites were in higher numbers than normal and caused significant damage as pasture growth slows.
- A higher number than normal of pastures have been renovated.
- Rain in some parts of the South East in February and March stimulated germination of clover which subsequently died in the absence of follow up rains. Some areas lost around 20% of their clover seed reserves.
- Lambing percentages were 10% down for early lambing flocks while later lambing flocks had higher than normal lambing percentages due to the availability of a high amount of quality pasture.
- Producers with later lambing ewes achieved 95-98% in single bearing ewes and 180-190% in multiple bearing ewes that were separated and managed according to the number of lambs detected in pregnancy scans.
- Livestock overall are in good condition
- There has been an increase in the application of urea to pastures before forecast rain and an increased use of pasture growth promotants to boost pasture production.
- Some producers cancelled contracts to purchase hay as they have good pasture growth.

Lower South East

Weather

- May rainfall was above average in the east and average in the west of the district. Rainfall for June was below average in the northeast of the district and average to above average in the remainder of the district.
- Mean maximum temperatures for May were below average and average for June.
- Mean minimum temperatures for May were below average in the west and average in the east. Minimum temperatures for June were below average with several consecutive severe frosts.

Crops

- Seeding was completed around the normal time despite many producers commencing seeding earlier than usual.
- Most crops emerged well although the cold conditions slowed growth.
- Some soils are saturated and very close to being waterlogged.
- There were no significant changes to crop types and areas sown.
- Septoria tritici leaf blotch has already started to develop in some wheat varieties.
- Ascochyta and cercospora leaf diseases were found in faba bean crops.
- Slugs severely damaged isolated canola crops which had to be re-sown.
- Annual ryegrass numbers are high in many crops and management remains an ongoing problem.
- Farmers have commenced broadleaf weed control in cereal crops.
- Post sowing nitrogen fertiliser is being applied to crops, ahead of forecast rain events.

Pastures

- Although pasture growth slowed as a result of frosts and cooler soil temperatures, the early growth and establishment of pastures provided more feed than normal for this time of year.
- Livestock are in good condition.
- Most producers have not yet marked lambs so lambing percentages are unknown.
- Many producers are pregnancy scanning ewes and splitting those with singles, twins and triplets into separate mobs and managing them accordingly.
- Supplementary feeding is being undertaken, particularly for cattle.
- A greater uptake of containment feeding has deferred the grazing of establishing pastures, resulting in better pasture growth.
- Red-legged earth mite, cockchafers and lucerne flea were present in greater numbers than normal, with control required to reduce damage to pastures.

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