



PRIMARY
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Crop and Pasture Report South Australia

2016-17 CROP ESTABLISHMENT

JULY 2016

PREMIUM
FOOD AND WINE FROM OUR
CLEAN
ENVIRONMENT



Crop and Pasture Report - South Australia

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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ALL ENQUIRIES

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State Summary

WEATHER

- May rainfall was average to above average in most of the agricultural districts. Rainfall in areas of Lower Eyre Peninsula and Central Yorke Peninsula was very much above average.
- June rainfall was average to above average in most of the agricultural districts with areas of very much above average rainfall on Northern Yorke Peninsula and Eastern Eyre Peninsula.
- Mean maximum temperatures for May were average on Western Eyre Peninsula and the western part of the Upper North and above average in the remainder of the agricultural districts.
- Mean maximum temperatures for June were above average on KI and average in the remainder of SA's agricultural areas.

CROPS

- Crop area is similar to the last season crop at 3.9 million ha. Soil moisture profiles are now generally full with the rains of late autumn and winter to date. The crop this season is now well positioned with the current production estimate of 7.2 million tonnes slightly above the 10 year average.
- Seeding was extended with many farmers sowing into dry soils in April and early May, while others delayed sowing until rains in late May. Wet conditions during June have delayed the completion of seeding on heavy clay soils.
- Early-sown cereal crops have grown rapidly with the mild conditions during May and some crops along the coastal areas of the Upper North and North Yorke Peninsula are at the booting to early head emergence stage. Late-sown crops had not yet emerged at the end of June.
- Some early-sown crops had poor emergence due to the marginal soil moisture conditions, but have fully emerged following good rains in late May.
- Some early-sown canola crops in several districts had poor establishment and some crops or parts of crops were re-sown, primarily with peas.
- Strong winds in mid to late May caused wind erosion and sand blasting to newly emerged crops in several districts with small areas re-sown.
- Farmers on Eyre and Yorke Peninsula have applied nitrogen to early-sown crops.
- There is currently a shortage of nitrogen fertiliser, which should be rectified by mid-July.
- Russian wheat aphid was identified for the first time in Australia in the Tarlee area in mid-May. Early efforts to eradicate the pest proved fruitless as it was quickly identified over a wide area of eastern South Australia and western Victoria, indicating that it must have been present for some time.
- The Russian wheat aphid is widespread through the eastern part of the state. It has caused severe damage to some March and April sown cereal crops in the northern agricultural districts. Most of these crops have been sprayed and have recovered rapidly with no reinfestation of the aphids.
- Later-sown crops generally only have low numbers of Russian Wheat aphids and the cold wet weather has been effective in washing aphids off plants and reducing numbers. Farmers and agronomists will closely monitor crops for aphid numbers as the temperatures increase in spring.
- Green peach aphid numbers have built-up on volunteer canola plants and are now infesting newly sown canola crops in a number of districts. Virus symptoms (showing yellow, reddened and stunted plants) have been observed on several crops on Lower Eyre Peninsula.
- Red legged earth mites and lucerne flea are widespread in most districts. The use of insecticide with knockdown herbicides in paddocks sown with susceptible crops has reduced damage in many crops. Control has been required in some crops to reduce damage.

- A range of other pests has caused minor damage to emerging crops in a number of districts and pest numbers appear higher where summer weeds and volunteer crops were not controlled.
- Wheat curl mites have transmitted wheat streak mosaic virus from volunteer cereals to crops on Eastern Eyre Peninsula and Northern Yorke Peninsula.
- Spot form of net blotch is present in early-sown barley crops on Eyre and Yorke Peninsula. Other leaf diseases are currently at relatively low levels.
- The area sown to barley has been reduced in many districts across the state due to the low price outlook.
- The area sown to wheat has remained stable.
- There has been a significant increase in the area sown to lentils across the state, particularly on Yorke Peninsula.
- The area sown to canola has been reduced in the South East but increased on Eyre Peninsula and parts of the Mallee.

PASTURES

- Pasture growth has been variable across the state with good growth of early sown pastures on Eyre Peninsula, the Mid and Lower North and Northern Yorke Peninsula but relatively slow growth in other districts.
- There has been an increased area of pasture sown on Upper Eyre Peninsula, Southern Mallee and the South East, due to good livestock prices.
- Supplementary feeding of livestock was necessary in many areas of the state, particularly on the heavier clay soils where pasture germination was slow.

KEY LINKS TO OTHER INFORMATION

Department for Environment, Water and Natural Resources - Soil and Land Condition monitoring:
www.environment.sa.gov.au/Knowledge_Bank/Science_research/Monitoring_evaluation_analysis/Monitoring/Soil_and_land_condition

Bureau of Meteorology - Weather and rainfall observations:
www.bom.gov.au

NOTES ON 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 dryland 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	<i>ha</i>	477 000	145 000	392 000	165 000	237 000	236 000	56 500	5 700
	<i>t</i>	668 000	408 000	627 000	495 000	380 000	638 000	169 000	13 500
Durum	<i>ha</i>	0	0	0	20 000	9 500	8 500	6 500	0
	<i>t</i>	0	0	0	48 000	16 000	20 000	17 000	0
Barley	<i>ha</i>	60 000	59 000	71 000	143 000	93 000	93 000	27 000	1 800
	<i>t</i>	85 000	178 000	113 000	428 000	160 000	260 000	85 000	4 500
Oats	<i>ha</i>	16 500	3 200	6 000	4 000	4 800	5 500	1 500	3 300
	<i>t</i>	17 500	6 700	7 000	9 000	6 200	11 500	3 300	8 000
Rye	<i>ha</i>	0	0	0	0	0	0	0	0
	<i>t</i>	0	0	0	0	0	0	0	0
Triticale	<i>ha</i>	400	500	500	1 000	1 200	1 700	400	0
	<i>t</i>	480	1 250	650	2 800	2 200	3 800	1 200	0
Peas	<i>ha</i>	4 800	4 500	5 500	13 000	28 000	24 000	6 700	400
	<i>t</i>	4 300	5 500	4 400	18 000	30 000	31 000	10 500	650
Lupins	<i>ha</i>	1 500	26 000	5 400	1 000	3 500	1 800	500	1 000
	<i>t</i>	1 200	34 000	4 300	1 300	4 000	2 300	650	1 600
Beans	<i>ha</i>	100	6 500	400	12 500	7 900	12 200	6 200	3 500
	<i>t</i>	110	9 800	400	21 000	8 700	18 000	9 300	5 600
Chickpeas	<i>ha</i>	0	400	200	6 500	3 200	5 000	1 000	0
	<i>t</i>	0	500	100	8 500	3 500	5 500	1 300	0
Lentils	<i>ha</i>	100	2 000	300	117 000	5 500	14 000	7 500	0
	<i>t</i>	100	2 600	250	164 000	6 100	18 000	9 000	0
Vetch	<i>ha</i>	2 400	1 800	2 000	2 000	5 500	5 200	300	0
	<i>t</i>	1 000	1 300	600	1 800	2 200	2 600	300	0
Canola	<i>ha</i>	8 000	75 000	11 000	20 500	23 000	26 000	3 200	2 200
	<i>t</i>	10 000	112 000	10 000	33 000	27 000	35 000	4 500	3 900
Hay (not in total)	<i>ha</i>	4 500	3 700	2 600	24 000	24 000	45 000	6 000	7 000
	<i>t</i>	18 000	15 000	7 800	108 000	97 000	195 000	26 000	34 000
Total	<i>ha</i>	570 800	323 900	494 300	505 500	422 100	432 900	117 300	17 900
	<i>t</i>	787 690	759 650	767 700	1 230 400	645 900	1 045 700	311 050	37 750

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	<i>ha</i>	4 500	66 000	245 000	124 000	65 000	22 000	2 240 700
	<i>t</i>	10 000	105 000	318 000	186 000	162 000	74 000	4 253 500
Durum	<i>ha</i>	300	600	300	0	9 500	0	55 200
	<i>t</i>	600	750	300	0	22 000	0	124 650
Barley	<i>ha</i>	10 500	60 000	56 000	84 000	33 000	5 500	796 800
	<i>t</i>	26 000	96 000	77 000	126 000	79 000	17 500	1 735 000
Oats	<i>ha</i>	1 800	3 000	2 200	4 100	19 500	5 200	80 600
	<i>t</i>	4 100	4 500	2 600	5 300	41 000	12 500	139 200
Rye	<i>ha</i>	0	1 500	2 800	5 000	1 200	0	10 500
	<i>t</i>	0	1 500	2 500	5 000	1 000	0	10 000
Triticale	<i>ha</i>	500	4 900	2 500	6 400	1 000	500	21 500
	<i>t</i>	1 200	7 300	3 000	11 500	2 000	1 600	38 980
Peas	<i>ha</i>	1 500	3 200	2 500	2 700	3 000	400	100 200
	<i>t</i>	2 700	3 200	1 250	2 700	4 000	800	119 000
Lupins	<i>ha</i>	2 000	3 400	2 800	8 000	16 800	3 000	76 700
	<i>t</i>	3 500	3 400	1 700	8 000	20 000	4 800	90 750
Beans	<i>ha</i>	400	200	0	1 000	12 000	11 000	73 900
	<i>t</i>	750	200	0	900	17 000	23 000	114 760
Chickpeas	<i>ha</i>	200	200	1 400	1 000	200	200	19 500
	<i>t</i>	250	200	1 000	900	300	250	22 300
Lentils	<i>ha</i>	300	1 200	800	5 000	3 600	200	157 500
	<i>t</i>	400	1 200	400	4 500	4 300	280	211 130
Vetch	<i>ha</i>	0	1 500	4 300	6 000	800	0	31 800
	<i>t</i>	0	600	2 150	2 400	600	0	15 550
Canola	<i>ha</i>	4 100	3 000	14 000	5 000	15 000	10 500	220 500
	<i>t</i>	5 000	3 000	7 000	5 000	22 000	19 500	296 900
Hay (not in total)	<i>ha</i>	29 000	5 400	3 600	16 000	67 000	27 500	265 300
	<i>t</i>	116 000	19 000	7 200	56 000	304 000	124 000	1 127 000
Total	<i>ha</i>	26 100	148 700	334 600	252 200	180 600	58 500	3 885 400
	<i>t</i>	54 500	226 850	416 900	358 200	375 200	154 230	7 171 720

TABLE 2 CROP ESTIMATES AGAINST FIVE YEAR AVERAGE

		2011/12	2012/13	2013/14	2014/15	2015/16	5 year ave	2016/17
Wheat	<i>ha</i>	2 226 100	2 176 300	2 295 900	2 236 000	2 200 000	2 226 900	2 240 700
	<i>t</i>	4 444 800	3 556 500	4 976 000	4 672 000	4 315 500	4 393 000	4 253 500
Durum	<i>ha</i>	74 600	77 200	68 300	51 300	49 500	64 200	55 200
	<i>t</i>	223 950	181 240	194 930	118 250	86 750	161 000	124 650
Barley	<i>ha</i>	987 700	907 100	854 900	804 000	839 300	878 600	796 800
	<i>t</i>	2 031 800	1 912 900	2 093 500	1 922 000	1 978 000	1 987 600	1 735 000
Oats	<i>ha</i>	75 800	85 800	85 000	73 300	70 300	78 000	80 600
	<i>t</i>	117 400	128 740	159 700	120 700	103 000	125 900	139 200
Rye	<i>ha</i>	9 500	9 500	7 100	9 000	7 500	8 500	10 500
	<i>t</i>	7 900	7 500	6 350	9 300	6 200	7 500	10 000
Triticale	<i>ha</i>	80 200	69 200	49 300	27 100	21 800	49 500	21 500
	<i>t</i>	117 500	95 920	86 500	44 300	32 700	75 400	38 980
Peas	<i>ha</i>	109 900	103 700	106 100	98 000	102 600	104 100	100 200
	<i>t</i>	144 400	116 100	143 250	114 600	103 600	124 400	119 000
Lupins	<i>ha</i>	64 900	63 200	69 300	64 700	76 700	67 800	76 700
	<i>t</i>	78 900	75 110	105 500	72 250	63 850	79 100	90 750
Beans	<i>ha</i>	72 200	69 400	69 000	65 600	68 600	69 000	73 900
	<i>t</i>	121 220	105 510	139 400	93 900	77 300	107 500	114 760
Chickpeas	<i>ha</i>	12 200	19 700	20 700	19 700	20 500	18 600	19 500
	<i>t</i>	19 550	21 810	29 280	20 250	19 240	22 000	22 300
Lentils	<i>ha</i>	106 100	88 800	94 800	106 200	123 700	103 900	157 500
	<i>t</i>	181 600	97 720	163 350	152 350	120 080	143 000	211 130
Vetch	<i>ha</i>	13 100	13 100	17 000	23 200	29 600	19 200	31 800
	<i>t</i>	11 120	6 800	14 320	13 150	11 900	11 500	15 550
Canola	<i>ha</i>	269 500	302 700	301 000	321 200	210 500	281 000	220 500
	<i>t</i>	435 700	398 700	434 400	313 800	293 300	375 200	296 900
Hay (not in total)	<i>ha</i>	201 500	204 500	227 300	211 500	282 700	225 500	265 300
	<i>t</i>	774 400	769 000	1 018 100	763 000	1 094 800	883 900	1 127 000
Total	<i>ha</i>	4 101 800	3 985 700	4 038 400	3 899 300	3 820 600	3 969 200	3 885 400
	<i>t</i>	7 935 840	6 704 550	8 546 480	7 666 900	7 211 400	7 613 000	7 171 700

District Reports

Western Eyre Peninsula

WEATHER

- Rainfall for May was above average in the western part of the district and average in the east.
- June rainfall was above average across most of the district with cold fronts bringing regular showers.
- Mean maximum temperatures in May were average in the western and northern part of the district and above average in the south. Temperatures for June were near average.

CROPS

- Good soil moisture in May allowed most farmers to sow according to their plans and most finished seeding by the first week of June.
- Dry sowing conditions around Kyancutta and Warramboos in late May resulted in poor germination on non-wetting sands.
- Strong winds in late May caused sand blasting to newly emerged crops. Some farmers re-sowed areas of crop on the tops of dunes in early June and these areas have recovered well.
- Warm conditions in May resulted in rapid crop and pasture germination. Cooler conditions during June slowed crop growth.
- Timing of sowing has made a large difference to crop maturity with early-sown crops at late tillering and later-sown crops at early tillering. Pulses were sown later to minimise the risk of frost and diseases and are at two to three node stage with some very early sown canola beginning to flower.
- Despite the very early sowing, paddocks do not seem to have higher than normal weed numbers. Most growers (80%) have finished removing grass weeds from pastures and are about 15% of the way through broadleaf herbicide applications.
- There were some early infestations of bryobia mite, blue oat mite and green peach aphids but numbers of these pest have fallen with cooler weather.
- Cowpea aphids are causing damage to vetch pastures.
- Many farmers have spread nitrogen fertiliser on crops. There is currently a shortage of nitrogen. This should be rectified by mid-July with minimal impact on yield.
- Manganese deficiency was observed on early sown barley crops and many farmers have applied trace elements with their herbicides and will follow up with a second spray if necessary.
- Rhizoctonia symptoms have been observed in crops on susceptible soil types.
- Despite high levels of moths at seeding, cutworm damage has been limited.
- High levels of powdery mildew were observed on medic pastures and some farmers sprayed to reduce damage. Cool conditions with regular rainfall have seen pastures outgrow this in late June.
- Spot form net blotch is prevalent in barley.
- There have been reports of snail damage to young crops where snail baits were applied too late for effective control.

PASTURES

- Early-sown medic and vetch pastures have grown quickly and contain a high amount of quality feed.
- Livestock are in excellent condition.

Lower Eyre Peninsula

WEATHER

- Rainfall was above average to very much above average for May and June.
- Mean maximum temperatures were above average for May and average for June.

CROPS

- Good soil moisture at seeding enabled most growers to sow their crops as planned and crop areas are expected to be around the long term average.
- Most farmers had finished seeding by the first week of June.
- Above average temperatures throughout May resulted in rapid germination and growth of early-sown crops and pastures. Crop and pasture growth was slowed by below average temperatures in June, resulting in large difference in growth between early and late-sown crops.
- All soils contain high levels of stored moisture. Mild waterlogging has been observed in low lying areas of paddocks from the middle of June.
- Farmers began in-crop broadleaf weed control by the end of June.
- Cereal crops are at mid-tillering with canola crops at full canopy closure.
- Later sown pulse crops are yet to reach full canopy closure.
- Forecast rain prompted most growers to spread at least one application of nitrogen in June.
- Manganese deficiency has been a problem on susceptible crops and soil types.
- There have been reports of blackleg causing leaf drop on susceptible canola varieties and isolated reports of leaf rust on susceptible wheat varieties.
- Spot form of net blotch has been observed on barley crops.
- Green peach aphid has infested early-sown canola crops with patches showing symptoms of Beet Western Yellows Virus. Affected crops have been close to areas with volunteer canola plants, which have allowed the build-up of green peach aphid.
- Whilst red legged earth mite numbers have been low, there have been reports of bryobia mite and lucerne flea damage in many crops and pastures.
- False wire worm and cutworm have also been reported on cereal crops around Ungarra and Tumby Bay.

PASTURES

- Pastures have responded to generally mild and damp conditions with high amounts of quality feed on offer.
- Livestock are in excellent condition.
- Farmers completed spraying grasses in pastures by the end of June.

Eastern Eyre Peninsula

WEATHER

- Rainfall was average across most of the district in May and above average to very much above average in June.
- Mean maximum temperatures for May were above average and average for June.

CROPS

- Most growers had finished seeding by the first week of June.
- Good moisture conditions during seeding enabled farmers to sow their whole crop with no significant changes in crop area or type.
- Generally mild conditions in May and the first half of June resulted in rapid emergence and growth of crops and pastures.
- There is variability in crop growth due to differences in soil type, rainfall and time of sowing.
- Crop growth stages vary from early to late tillering for cereals and 75 to 100% canopy closure for pulses. Many canola crops are beginning to bolt with some early-sown canola near Lock already flowering.
- Good stored soil moisture levels have given farmers confidence to spread nitrogen fertiliser on cereal and canola crops. There have been some difficulties with nitrogen fertiliser supply which may impact on yield if wet conditions continue through winter.
- Zinc and manganese deficiency symptoms have been observed on susceptible varieties and soil types. Farmers will apply foliar trace elements with their herbicide applications to correct crop deficiencies.
- A high proportion of growers applied insecticides at seeding due to risk of increased insect pest numbers from the high levels of summer weeds and volunteer crops prior to seeding. Despite this a wide variety of insect pests have been observed in crops and pastures with lucerne flea, red legged earth mite and cutworm all causing damage to emerging crops and pastures.
- A variety of aphids (including blue green, green peach, spotted alfalfa and oat aphid) and mites (Bryobia, blue oat mite and red-legged earth mite) as well as pasture webworm have been observed in crops. The higher than normal insect numbers are likely due to the high amounts of volunteer crops present over summer.
- Russian wheat aphid has been reported in crops in the Franklin Harbour districts.
- Wheat streak mosaic virus has been common, particularly in crops in close proximity to paddocks that grew volunteer cereals over summer.
- Most growers are about to begin in-crop broadleaf herbicide applications.
- There have been isolated reports of leaf rust on wheat crops at Arno Bay with spot form of net blotch common in susceptible barley crops throughout the region. There have also been reports of powdery mildew on medic pastures and pulse crops.
- Given the good soil moisture and early crop growth, most producers will be looking to apply preventative fungicides to protect crops.

PASTURES

- Mild conditions have resulted in generally high levels of feed in pasture paddocks.
- Livestock are in excellent condition.
- Most growers have finished spraying grass weeds out of pastures.

Upper North

WEATHER

- Rainfall was average to above average for May and above average for June.
- Mean maximum temperatures for May were average in the south western part of the district and above average in the remainder.
- June maximum temperatures were average to below average with a number of frosts recorded towards the end of the month.

CROPS

- There are good soil moisture levels across the district.
- Seeding was completed in the western part of the district by mid-May but progress was slower in the eastern part due to marginal soil moisture particularly on the clay soils. In those area of marginal soil moisture, large areas were sown dry or semi dry.
- Farmers with large areas to sow continued seeding during May but many only sowed pasture feed, oaten hay, canola and pulses. Widespread rainfall in the last week of May enabled many farmers to commence sowing cereals.
- Extended wet periods during June made completion of seeding difficult for those farmers who had delayed sowing waiting for good soil conditions.
- Crop emergence of early-sown crops was patchy due to the marginal soil moisture but most have now emerged well.
- There has been some poor emergence of canola, particularly on black cracking clays and some areas were re-sown.
- There have been higher levels than normal of red legged earth mite and lucerne flea and many pulses and some cereals crops have been treated, with others needing to be treated but too wet to spray.
- There has been a slight reduction in the area sown to barley, particularly in the lower rainfall areas, due to the fall in price.
- The area sown to canola, peas and beans are all similar to last year with a reduction in the area of lupins and an increase in the area of lentils.
- Russian wheat aphids were identified in the Baroota area in the second week of June, causing significant damage to wheat sown in mid-April. A number of farmers have sprayed large areas of crop to reduce the damage. Low numbers were also identified around Appila and farmers are monitoring levels as they are currently well below economic thresholds for spraying.

PASTURES

- Pastures in the southern part of the district germinated with rain in late April and early May but little germination occurred in the northern part of the district until mid to late May.
- Early-sown pastures germinated in early May on the lighter soils but not on the heavier clay soils until widespread rain in mid to late May.
- Supplementary feeding of livestock has been necessary in most areas during May, particularly for ewes in late pregnancy or lactating.

Mid North

WEATHER

- Rainfall was average to above average for May and June.
- Mean maximum temperatures were above average for May and average for June.

CROPS

- The majority of seeding was completed by early May. Continued wet weather delayed the completion of seeding for many farmers.
- Soil moisture levels are now good throughout the district.
- Post emergent spraying of weeds has begun with grasses removed from early sown legumes and canola. On heavier clay soils, wet conditions have delayed spraying.
- There has been a significant reduction in the area sown to barley and beans (10% each).
- The areas sown to wheat and canola have remained similar to previous years but the area sown to oaten hay, peas and lentils have all increased.
- Aphids numbers have built-up in many crops with cowpea aphids in legumes, and corn and Russian wheat aphids in cereals.
- Russian wheat aphids are widespread but at relatively low numbers and only a few crops have had high enough numbers to warrant spraying to control them at this stage. Farmers and consultants are closely monitoring crops for aphid numbers and damage but breeding has slowed with the cold wet weather.
- SARDI is currently undertaking trials with a range of products and rates to determine the most cost effective control options for Russian wheat aphids. Early indications are that previously recommended insecticide rates might be able to be reduced. There is some concern regarding the potential for insecticide residue levels in grain with spring applications.
- Disease levels in both cereals and pulses are relative low at this stage, although careful monitoring will be required given the prolonged periods of wet weather during June.

PASTURES

- Early-sown pastures have grown well and many are being grazed or will be in the next few weeks.
- Some early-sown cereal crops are also being grazed to reduce biomass and provide additional feed.
- Regenerating medic pastures have established well and some farmers have already sprayed out grasses.
- Livestock are generally in good condition with the amount of supplementary feeding being reduced as pastures become established.

Lower North

WEATHER

- Rainfall was above average for May and average to above average for June.
- Mean maximum temperatures were above average in May and average in June.

CROPS

- Seeding was completed in late June with most finished by mid-June.
- Soil moisture levels across the district are excellent with moisture down in the soil profile to 80 cm depth.
- The area sown to wheat has increased by 5 to 10%, particularly in the fire scar area.
- The area sown to lentils has increased by 15 to 20% but the area sown to other pulse crops has remained stable.
- There has been a significant reduction in the areas sown to barley (5%) and canola (25%).
- Heavy rain and post sowing pre-emergent herbicide caused damage on some dry-sown canola crops resulting in poor emergence. A small area on lighter soil types has been re-sown with peas.
- Strong winds in mid-May caused damage to early sown emerging crops on the lighter sandy soils in the Pinery fire scar area and a few areas were re-sown. Crops sown using discs appear to be worst affected and most crops were re-sown using knife points with good success.
- Early sown pulse crops are at risk of damage from high levels of disease but those sown later will not be subject to the same level of infection.
- Some growers have already applied extra nitrogen to seedling cereal crops and these crops have a high risk of producing excessive growth, increasing the risk of disease and lodging.
- Russian wheat aphid was identified for the first time in Australia in the Tarlee area in mid-May. Early efforts to eradicate the pest proved fruitless as it was quickly identified over a wide area of eastern South Australia and western Victoria, indicating that it has been present for some time.
- The aphid is widespread through the Lower North and has caused severe damage to very early-sown (March) crops. Most of these crops were sprayed and have recovered rapidly with no reinfestation of the aphids.
- Later-sown crops only have low numbers of aphids and the cold wet weather has been effective in washing aphids off plants and reducing numbers. Farmers and agronomists will closely monitor crops for aphid numbers as the temperatures rise in spring.
- Red legged earth mite and lucerne flea are present but are generally in low numbers and have not required control at this stage.

PASTURES

- Early sown pastures have established well and are providing good pasture feed for livestock.
- Regenerating medic pastures have emerged well but growth is slow due to the delayed opening rains.
- A variety of pasture blends have been used by farmers with good success.
- Medic seed crops have emerged and growing well.

Yorke Peninsula

WEATHER

- May rainfall was average on Southern Yorke Peninsula and above to very much above average across the remainder of the district.
- June rainfall ranged from average in the south of the district to very much above average in the north.
- Mean maximum temperatures were above average for May and average for June.

CROPS

- Seeding was completed across the district by early June, although many crops in the southern part of the district were sown under marginal moisture conditions.
- Some early-sown crops had patchy emergence, particularly on Southern Yorke Peninsula due to marginal soil moisture conditions and mice damage but most have recovered with good rains in late May.
- There has been a 25% increase in the area sown to lentils with reductions in the area of barley, chickpeas, peas and canola.
- Above average temperatures in April and May, resulting in rapid growth of early sown crops with high soil nitrogen and good moisture. Early-sown crops on Northern Yorke Peninsula are at stem elongation stage.
- Crops on heavier clay soil types have become waterlogged and freshwater seeps in the northern part of the district have started to appear again after drying up in 2015.
- The above average rainfall will have resulted in some leaching of nitrogen and sulphur, particularly on the sandy soils in Northern Yorke Peninsula. The wet conditions during June delayed spraying by 10-14 days.
- Cereal pasture sown in March hosted wheat curl mite in Northern Yorke Peninsula and crops sown next to these pastures were infested with the mites, transmitting wheat streak mosaic virus.
- Russian wheat aphid has been observed in localised areas with some crop damage. Spring monitoring will be critical to avoid significant crop damage.
- Red legged earth mite, lucerne flea and blue oat mite have all been present in a minority of paddocks with little impact on crop growth. Susceptible crops such as lentils were treated with knockdown insecticides at sowing.
- Net blotch has been observed in barley crops, particular those sown into barley stubbles. A new seed dressing available to growers has been very effective in controlling the disease.
- Rhizoctonia has been very prevalent in some wheat and many barley crops on most soils but particularly the northern sandy soils.
- Yellow leaf spot has been detected in a lot of wheat due to prolonged wet weather, coupled with the high frequency of wheat in the crop rotation (wheat-on-wheat, or wheat-lentil-wheat).
- Some early ascochyta has been reported in lentils sown in mid-April at Port Broughton.
- Snail control over summer has generally been good but numbers are still high where no or little management occurred.
- Mice numbers have been higher than normal, particularly in the coastal areas and the grey loams soils, due to the build-up in population during autumn. Baiting has been required to reduce crop damage.

PASTURES

- Pasture growth has been slow on SYP but good to excellent in the remainder of the district.
- Early sown pastures are providing a high amount of quality feed.
- Livestock are generally in good condition, although some lactating ewes have lost condition.

Adelaide Hills, Fleurieu Peninsula & Kangaroo Island

WEATHER

- Rainfall was average to above average in May. June rainfall was average in the Adelaide Hills and average to very much below average on KI.
- Mean maximum temperatures for May were above average in the Adelaide Hills and Fleurieu and very much above average on KI. Temperatures for June were above average on KI and average in the Adelaide Hills.

CROPS

Central Hills/Fleurieu

- Soil moisture levels are excellent.
- Seeding was completed by the end of June.
- The total area sown to crop will remain similar to previous years with an expected 10% increase in barley at the expense of wheat.
- The area sown to canola is likely to decrease slightly (5%) due to insect pest concerns. This area will be replaced by pulses.
- There is likely to be a 15% increase in the area sown to hay crops due to low on-farm supplies from the previous dry springs.
- There are no significant pest issues. Agronomists and growers are on the lookout for Russian wheat aphid.

Kangaroo Island

- Soil moisture levels are good with limited evidence of waterlogging.
- Seeding was completed by the third week of June, with most completed by late May which is the usual time for KI.
- There is a significant increase (approximately 50%) in the area sown to soft biscuit wheat at the expense of milling wheat varieties. All other crop types remain the same.
- Cut worm and brown pasture looper are present in cereals and hay mixes. Levels are high enough to justify spraying and will possibly be an ongoing issue.
- Snails have caused damage to some emerging crops but there is no evidence of slug damage at this stage.
- Some emerging canola crops have been damaged by earwigs and vegetable beetle.

PASTURES

Central Hills/Fleurieu

- Pasture growth was initially slow due to the later than ideal break but is now good.
- Livestock are generally in good condition but many lactating ewes are poorer in condition than normal, due to the late break.

Kangaroo Island

- Pasture growth has been good but is now starting to slow with the onset of cooler weather.
- A lack of run-off into dams on eastern KI has limited stock water availability.

Lower Murray

WEATHER

- May rainfall ranged from average in the south to above average in the north of the district.
- June rainfall was average across the district.
- Mean maximum temperatures were above average for May and average for June.

CROPS

- Some farmers sowed into marginal soil moisture in April and early May.
- Most farmers did not sow the majority of their crop until after the opening rains in late May.
- The later than ideal start to the season meant that some areas of the district did not complete seeding until mid-June.
- Paddocks with poor summer weed control have been slower to establish due to less soil moisture.
- Cereal crops are generally between the early and late tillering growth stages.
- There has been a slight reduction in the area sown to wheat with increases in feed grains, particularly barley and triticale.
- The area sown to peas has declined with increases in the area sown to lupins and lentils.
- Russian wheat aphids are present in the district with early-sown cereals more affected.
- Some insecticide spraying for aphids has been taking place.

PASTURES

- Pasture feed levels remain low in the southern areas of the district with slow growth and bare areas observed in paddocks.
- Pasture growth should improve following good rains in mid to late June.
- Livestock are in average to good condition.

Northern Murray Mallee

WEATHER

- May rainfall was above average across most of the district, with pockets of well above average rainfall, mainly in the south of the district. Most of the rain was received in the last week of May.
- June rainfall was average across the district.
- Mean maximum temperatures for May were above average in the west and very much above average in the east of the district. June temperatures have been close to average with only a few frosts recorded.

CROPS

- Farmers started dry-sowing in late April and continued through May with an estimated 60% of the crop sown prior to the opening rains in late May.
- Stored soil moisture generally increased after good May rains and levels are higher than at the same time last season, with plant available water generally at above half of capacity.
- Many paddocks coming out of pasture, or heavily grazed stubbles, have suffered some erosion on lighter soils from at least two strong wind events in mid to late May.
- The majority of crops emerged and established well with cereals now up to the late tillering stage.
- Most cereal crops have low levels of grassy weeds however some have high levels where grass control last year was poor.
- There has been little change to crop area, despite the later than ideal break to the season.
- Minor changes include a slight reduction in the intended area sown to pulses such as vetch, chickpeas, lupins and lentils. Despite this, the area sown to these crops has continued to increase.
- Russian wheat aphid has been identified in areas of the district but numbers are relatively low and control has not been necessary at this stage.
- The area sown to canola has increased after a dramatic reduction in recent years.

PASTURES

- Pasture feed is very limited moving into winter, with farmers continuing to provide livestock with grain and hay.
- Both regenerating and sown pastures have been slow to establish with the late rains and cooler temperatures in June.

Southern Murray Mallee

WEATHER

- May rainfall was average in the south and above average in the north of the district.
- Rainfall for June was average across the district.
- Mean maximum temperatures were above average for May and average for June.

CROPS

- Most farmers started seeding in May and finished well into June.
- At the end of June cereal growth stages ranged from 1 leaf for late-sown crops to late tillering for early-sown crops.
- Patchy germination has been observed due to the dry start and sporadic rainfall events.
- Subsoil moisture is varied across the district with areas that had rain early in March still at an advantage.
- The area sown to both wheat and barley has been reduced, particularly in the frost risk areas.
- This area has been replaced by either hay or sown pasture.
- An increasing number of farmers are sowing barley as a dual-purpose grazing and grain crop.
- There has been an increase in lentil area sown due to farmers' increased confidence in growing lentils and the higher value of the crop, with a reduced area of peas and lupins.
- There has been an increase in the area sown to hay with high demand from export markets providing another option for high frost risk areas.
- Russian wheat aphids are present throughout the district and have been observed in early sown feed and hay crops. Their numbers have been generally below threshold with minimal crop spraying taking place at this stage.
- There has been an increase in the area sown to hay with high demand from export markets providing another option for high frost risk areas.

PASTURES

- Pasture growth is slow due to dry conditions during most of May and the onset of colder weather in June.
- Pasture feed is in short supply with the highest availability in paddocks sown to feed cereals.
- Livestock condition is reasonable at this stage.

Upper South East

WEATHER

- May rainfall for many areas was average to slightly above average
- June rainfall has been slightly below average to average.
- Temperatures have been above average for May and average for June. Minimal frosts were recorded.

CROPS

- Subsoil moisture levels have been boosted by summer thunderstorm activity and good autumn-early winter rainfall.
- Seeding was almost complete by the end of June with only some lucerne still to sow.
- Early sown crops have grown well and farmers are currently spraying these to control broadleaf weeds. Crops sown into June have been slow to emerge due to a drastic drop in soil temperature.
- The area sown to canola has fallen further due to lower prices and poor performance over the last few years. The estimated reduction is around 25% this year and approximately 40% over the last three years.
- The area sown to milling oats has increased with good premiums being offered by Blue Lake Milling.
- The area sown to pulses, cereals and general pasture feed have increased due to higher focus on livestock.
- Russian wheat aphid was detected in cereals around Bordertown in early June and PIRSA held information sessions to inform growers and advisers of identification and suggest management actions.
- Aphid numbers will need to be closely monitored in spring as temperatures rise, to avoid significant crop damage.
- General pest activity is minimal with knock-down insecticides applied with pre-emergent herbicides providing good control.
- Farmers are generally positive about this season following several poor seasons.
- Crops have good vigour and health.

PASTURES

- There is adequate pasture feed for sheep in most of the district, but inadequate feed for cattle.
- There has been a good germination of pastures but the cold temperatures are now restricting growth.
- Supplementary feeding continued in May and early June. Many producers are still feeding cows to control pregnancy toxaemia (milk fever). Straw or cereal hay is being fed as cases of bloat emerge from livestock eating fresh lucerne.
- Lambing and calving is under way across the district. Some producers have changed their lambing from early autumn to late autumn-early winter to ensure there is sufficient green feed for lactating ewes. The bulk of calving has finished.
- Producers are continuing to re-establish lucerne stands on sandy soils that have recently been spread with clay.

Lower South East

WEATHER

- May rainfall was above average in most of the district.
- Rainfall for June has been average in the north to above average in the south. Large falls were recorded in the Lower South East in the last week of June.
- Mean maximum temperatures were above average for May and average for June, with Mount Gambier recording above average temperatures for June. There have been few reports of frosts.

CROPS

- Sub soil moisture is generally adequate for good crop growth.
- Crops sown in May have emerged well and grown rapidly, however crops sown after the second week of June have been slow to emerge, due to the drop in soil temperature.
- Farmers are being encouraged to monitor crops for Russian wheat aphid as the weather warms up in late winter/spring.
- There are high levels of ryegrass in some dry sown and early sown crops.
- There has been an increase in the area sown to broad beans and other pulse crops due to a strong price outlook.
- A lower forecast price has resulted in an estimated 25% fall in the areas sown to canola.
- The area sown to milling oats has increased as a significant premium is being offered by Blue Lake Milling. The favourable contract terms have given farmers confidence to increase the area of oats.

PASTURES

- Pasture growth is adequate for this time of the year but most are still relatively short.
- Supplementary feeding continued in most areas well into June with cattle generally still requiring hay due to minimal pasture growth.
- Lambing and calving are well underway with lamb marking commencing in some areas. Marking percentages have generally been good and livestock prices continue to remain high.
- Predicted future livestock market prices are very positive.