

Crop and Pasture Report South Australia

2020–21 Spring Crop Performance

November 2020



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Information current as of 5 November 2020 © Government of South Australia 2020

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

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State Summary

Weather

- September rainfall in the agricultural areas was mostly near average.
- October rainfall varied from average in the South East and Southern Murray Mallee to very much above average in the Upper North, Southern Yorke Peninsula and most of Eyre Peninsula.
- In the Pastoral Zone, September rainfall ranged from average in the Marla/Oodnadatta area to very much above average in areas east of the Flinders Ranges, between Leigh Creek and Marree and northwest of Woomera. Most other areas were above average.
- October rainfall was above average to very much above average across the Pastoral Zone.
- Mean maximum temperatures for September were above average to very much above average
 across the State. September minimum temperatures were very much above average across most
 of the State with pockets of above average temperatures in the South East, KI and coastal areas.
 Areas in the Pastoral Zone recorded their highest minimum temperatures on record.
- October mean maximum temperatures were average for all agricultural areas and the majority of the Pastoral Zone, with small areas of below average temperatures.
- Mean minimum temperatures for October were average in the South East, western Kangaroo Island and the northern part of the Pastoral Zone and above average to very much above average in the rest of the State.
- Strong, hot northerly winds occurred on September 6 and 7.
- Several frosts, mostly light, occurred in several districts in late September.

Crops

- Total crop production is estimated to be 8.8 million tonnes from a crop area of 4.0 million hectares which is well above the long-term average.
- Average to above average September and October rainfall, combined with average maximum temperatures in October, provided ideal conditions in most areas of the State for crops to flower and fill grain.
- Hot northerly winds in early September severely stressed crops in parts of Western and Eastern Eyre Peninsula, Upper and Mid North and Northern Yorke Peninsula.
- Rain following these winds allowed pulse and wheat crops to partially recover.
- Despite many barley crops being stressed in the hot northerly winds causing some loss of potential, barley yield estimates remained above average overall across the State.
- Harvest of barley and pulses commenced in the western part of the Upper North in mid-October
 with farmers in other districts starting soon after. Slow ripening of crops and continued damp
 conditions have delayed harvest, with only small areas in earlier districts harvested by the end of
 October.
- Most farmers will not commence harvest until mid-November, even in early districts.
- Barley crops in most districts are ripening, however late developing tillers are still green and many crops have high numbers of late germinating weeds. Many farmers will crop-top barley before harvest to control weeds and even up ripening.
- Yields and quality of the first crops harvested were variable, ranging from low yields and shrivelled grain from crops that had suffered moisture stress, to average yields and quality in others. Later maturing crops should have higher yields and good quality grain.
- Despite the wet spring, most farmers have been proactively managing disease with minor incidences of infection in most crops.
- Farmers began cutting hay in mid-September and those with small areas were able to get it baled with minimal weather damage, however larger hay producers have suffered significant weather damage.

- Frost in late September caused significant damage to crops in low lying areas in a number of districts. The worst affected crops with more than 50% yield loss were cut for hay but those with less damage have been left for grain harvest, given lower hay returns.
- Ideal growing conditions enabled many of these crops to compensate with more and larger grains, resulting in only minor over-all yield loss.
- A few oaten hay crops were destroyed after numerous heavy rainfall events and will not be baled.
 In most districts, most export oaten hay was weather damaged with only a small percentage likely to make top export grades.
- Farmers began windrowing canola crops in mid-October. A larger area is likely to be windrowed
 this year compared to last season, due to the risk of high seed losses, patchy ripening and late
 germination of ryegrass. Most crops will be sprayed at windrowing to control weeds and stop
 regrowth.
- Chickpea crops benefited from the October rain and those with low disease levels are likely to yield well above average.
- Native budworm, etiella and other larvae were in moderate to high numbers in most districts.
- Aphids were in moderate to high numbers in pulse crops and Russian wheat aphids were widespread in cereal crops with many crops sprayed to control numbers.
- Aphid populations increased too rapidly for beneficial insects to provide effective control.
- Diamond back moth larvae numbers have increased in canola and brassica crops in a number of districts and crops have been sprayed to reduce damage.
- There was a rapid germination of grasses and summer weeds following September rains and many farmers in a number of districts began spraying summer weeds while waiting for crops to ripen.

Pastures

- In some of the lower rainfall areas, pastures that had dried-off with low amounts of biomass at the end of August were revived by spring rains and are producing significant new growth.
- Although this growth provided extra spring feed, pasture production is generally below average.
- In better rainfall districts, pastures have grown rapidly and many have high amounts of biomass. There are high numbers of barley grass in many pastures, causing seed injury and contamination problems in livestock, especially lambs.
- Perennial pastures have grown well and are providing high levels of quality feed.
- Crops cut for hay have also regrown, providing high amounts of quality feed.
- Most pasture hay has suffered weather damage and hay quality is likely to be poor.
- Livestock throughout the agricultural areas are in good to excellent condition.

Pastoral

- Conditions have finally changed across most of the Pastoral Zone with some rainfall in August, widespread rainfall in September and more rain in October, producing moderate to high amounts of feed.
- Perennial grasses have grown rapidly and are setting seed, while shrubs have re-shot and put on new growth.
- Most properties have very low stock numbers and now have excess feed for the stock on property.
- Those who sent stock on agistment have taken them back and some properties have bought animals however very high prices for breeding stock has limited the numbers producers can afford to buy.
- Producers are looking at a range of options to enable them to re-build their flocks and herds as quickly as possible at an affordable cost.
- The heavy rain has partially or completely filled dams and will ensure there is sufficient water for the next 6 to 12 months.

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	438 000	143 000	373 000	164 000	247 000	253 000	71 000	4 600
	t	569 000	484 000	485 000	558 000	580 500	708 000	263 000	16 000
Durum	ha	0	0	0	13 500	6 000	5 000	4 200	0
	t	0	0	0	41 000	20 000	13 500	14 300	0
Barley	ha	95 000	70 000	79 000	166 000	86 500	96 500	24 000	2 600
,	t	133 000	253 000	111 000	566 000	216 000	296 000	96 000	8 300
Oats	ha	14 000	3 500	4 600	4 200	5 500	5 000	3 500	1 600
	t	15 500	8 200	5 500	11 000	10 500	13 000	10 000	4 800
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	1 800	650	2 800	2 800	4 800	1 400	350
Peas	ha	2 500	2 400	4 200	11 000	14 000	15 000	6 100	400
	t	2 000	3 600	3 400	20 000	22 000	24 000	15 200	650
Lupins	ha	1 500	11 000	5 000	1 000	3 000	1 800	500	1 000
	t	1 350	15 500	4 000	1 400	4 400	2 500	1 000	1 700
Beans	ha	400	9 000	400	12 000	12 200	13 000	3 100	3 400
	t	500	16 000	300	21 000	21 000	22 000	7 800	6 100
Chickpeas	ha	0	400	200	6 600	4 600	2 500	400	0
	t	0	650	200	13 000	7 800	5 500	750	0
Lentils	ha	2 000	9 000	2 000	128 000	10 000	14 500	6 200	0
	t	1 600	16 000	1 400	231 000	15 800	23 000	12 500	0
Vetch	ha	2 400	3 600	2 000	2 600	5 600	4 000	300	0
	t	700	2 500	900	1 500	2 200	2 700	450	0
Canola	ha	5 500	65 000	7 500	12 000	24 500	23 000	5 500	5 200
	t	6 000	123 000	6 600	21 200	42 000	37 000	11 000	11 500
Нау	ha	5 500	5 100	7 800	23 000	18 000	35 000	10 000	7 500
(not in total)	t	12 000	24 000	18 500	105 000	55 000	150 000	50 000	35 500
Total	ha	559 700	317 400	478 400	521 900	420 100	435 000	125 200	18 900
	t	730 150	924 250	618 950	1 487 900	945 000	1 152 000	433 400	49 400

TABLE 2 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	6 000	63 000	258 000	110 000	82 000	23 000	2 235 600
	t	17 000	138 500	464 000	277 000	231 000	92 000	4 883 000
Durum	ha	300	1 000	300	0	7 500	0	37 800
	t	650	1 800	450	0	18 500	0	110 200
Barley	ha	11 200	77 500	60 000	120 500	39 000	7 000	934 800
	t	33 500	194 000	107 500	314 000	109 000	29 000	2 466 300
Oats	ha	2 100	2 200	2 200	4 000	21 000	4 700	78 100
	t	5 200	4 400	3 500	9 000	51 000	15 000	166 600
Rye	ha	0	1 000	5 000	1 000	1 600	0	8 600
•	t	0	1 600	6 000	1 500	2 000	0	11 100
Triticale	ha	500	4 000	2 000	15 000	1 000	500	28 800
	t	1 400	9 000	3 000	37 000	2 200	2 000	69 700
Peas	ha	1 000	3 000	4 000	3 100	2 900	400	70 000
. 000	t	1 800	4 500	4 000	5 500	4 000	850	111 500
Lupins	ha	1 600	1 000	5 400	4 100	11 000	2 700	50 600
	t	2 700	1 400	5 400	7 400	13 500	4 800	67 050
Beans	ha	300	500	0	2 000	29 500	13 800	99 600
	t	600	600	0	3 200	46 500	37 000	182 600
Chickpeas	ha	200	3 000	6 800	4 000	600	200	29 500
·	t	300	4 200	8 000	6 500	950	350	48 200
Lentils	ha	300	3 000	2 000	5 000	3 000	200	183 200
	t	550	4 200	2 000	9 000	3 800	350	321 200
Vetch	ha	0	3 100	6 500	5 100	1 200	0	36 400
	t	0	3 700	4 000	6 000	1 100	0	25 750
Canola	ha	3 500	5 100	18 000	6 000	22 500	16 500	219 800
	t	6 000	7 200	18 000	10 500	38 000	39 000	377 000
Hay	ha	30 000	11 000	5 600	31 000	48 000	27 000	259 000
(not in total)	t	140 000	39 000	14 000	138 000	230 000	149 000	1 160 000
Total	ha	27 000	167 400	370 200	279 800	222 800	69 000	4 012 800
	t	69 700	375 100	625 850	686 600	521 550	220 350	8 840 200

TABLE 3 CURRENT 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	2 235 600
	t	4 315 500	6 460 500	4 122 500	3 156 000	3 251 500	4 261 200	4 883 000
Durum	ha	49 500	55 200	55 700	42 000	42 900	49 100	37 800
	t	86 750	209 700	139 400	75 220	82 560	118 700	110 200
Barley	ha	839 300	799 300	714 600	818 600	990 000	832 400	934 800
	t	1 978 000	2 774 800	1 640 700	1 725 800	2 091 000	2 042 100	2 466 300
Oats	ha	70 300	94 600	77 000	75 700	72 800	78 100	78 100
	t	103 000	258 700	149 300	121 500	120 450	150 600	166 600
Rye	ha	7 500	10 500	6 500	5 300	5 700	7 100	8 600
	t	6 200	15 700	5 100	3 150	4 250	6 900	11 100
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	69 700
Peas	ha	102 600	97 300	90 200	65 700	65 300	84 200	70 000
	t	103 600	176 100	113 750	53 600	70 100	103 400	111 500
Lupins	ha	76 700	76 800	62 800	61 000	51 100	65 700	50 600
	t	63 850	134 800	53 400	59 950	53 800	73 200	67 050
Beans	ha	68 600	75 500	67 400	63 100	98 400	74 600	99 600
	t	77 300	166 530	101 660	79 680	156 650	116 400	182 600
Chickpeas	ha	20 500	20 500	29 700	33 600	22 200	25 300	29 500
	t	19 240	34 360	33 580	23 870	17 000	25 600	48 200
Lentils	ha	123 700	169 600	184 700	149 800	164 300	158 400	183 200
	t	120 080	447 680	260 200	177 870	220 400	245 200	321 200
Vetch	ha	29 600	32 200	32 400	28 400	34 000	31 300	36 400
	t	11 900	34 800	15 350	5 760	9 420	15 400	25 750
Canola	ha	210 500	203 000	200 200	200 100	206 600	204 100	219 800
	t	293 300	372 900	261 400	278 900	347 400	310 800	377 000
Hay	ha	282 700	258 800	202 900	370 000	320 600	287 000	259 000
(not in total)	t	1 094 800	1 454 300	948 600	1 104 000	1 258 900	1 172 100	1 160 000
Total	ha	3 820 600	3 893 700	3 565 200	3 572 100	3 897 700	3 749 900	4 012 800
	t	7 211 400	11 144 700	6 931 400	5 794 900	6 466 800	7 509 800	8 840 200

District Reports

Western Eyre Peninsula

Weather

- September rainfall was average across the district. Rainfall for October was above average in the centre of the district and very much above average west of Nunjikompita and east of Minnipa.
- Growing season rainfall was below average in an area from Minnipa to Streaky Bay and average in the rest of the district.
- Mean maximum temperatures were above average to very much above average for September.
 October maximum temperatures were average.
- Mean minimum temperatures were very much above average for September and October.
- Strong, hot northerly winds occurred on September 6 and 7.
- A number of light frosts were reported in the central part of the district during September.

Crops

- Good rainfall and mild conditions resulted in rapid crop and pasture growth on all but the heaviest soil types in the region.
- Hot north winds in early September severely stressed crops and some barley crops did not recover. Pulse and wheat crops recovered and rains in October helped to fill grain.
- Although small areas of pulses and barley were harvested in late October, slow ripening of crops and continued damp conditions delayed harvest in most areas so only around 10% of farmers had started harvest by the end of October.
- Most farmers hope to start harvest in the first week of November, however many crops still
 contain green patches which might have to be harvested later.
- Many farmers started spraying summer weeds such as caltrop, melons and heliotrope while waiting for crops to finish ripening.
- Early yields were highly variable; earlier ripening crops on heavier soil types suffered moisture stress throughout the season and yielded poorly. On lighter textured soils, crops responded well to late rains and have potential for some good yields.
- Some early harvested barley from heavier-textured soils had low test weights. Sandy loam soil
 types that experienced good conditions at grain fill are expected to result in higher yields and
 grain weights, but lower grain protein.
- Farmers began cutting hay in mid-September, mainly to replenish on-farm supplies. Most hay was baled by the start of October with little weather damage.
- Crop pests and disease levels during this period were generally low. There were some reports of diamond back moth in canola and native budworm larvae in pulse crops that were generally well controlled by chemical application.
- Russian wheat aphids occurred in high numbers in isolated crops where late rains germinated crops on poorer soil types.

- Pastures that had dried-off with little biomass at the end of August were revived by spring rains producing significant new growth. Crops cut for hay have also regrown.
- Although this has provided extra spring feed, pasture production is still less than usual. Crop stubbles will become available after harvest for livestock feed but these will have low amounts of biomass
- Most livestock producers have cut or bought hay and will retain grain to replenish supplementary feed supplies for late summer and autumn.
- Most livestock are in excellent condition.

Lower Eyre Peninsula

Weather

- September rainfall was above average south of Edillilie and average in the rest of the district. Rainfall for October was very much above average across the district.
- Growing season rainfall was average across the district.
- Mean maximum temperatures were above average for September and average for October.
- Mean minimum temperatures were above average to very much above average for September and October.
- Hot, northerly winds occurred across the region on September 6 and 7.
- A number of light frosts were reported north and west of Cummins in September.

Crops

- Hot winds in early September stressed some early sown crops, particularly barley and beans. Cool conditions and good rainfall following this event, reducing potential yield losses.
- Good rainfall and mild temperatures encouraged plant growth and grain fill.
- No significant crop damage resulted from the light frosts in September.
- Most crops have average to above average yield potential. Pulses responded well to late rainfall, with good pod set on crops not affected by hot winds, and many crops were still flowering at the end of October.
- Late October rains delayed harvest and many crops contain large green patches which will cause problems for reaping.
- Canola windrowing began in mid-October and a larger area is being windrowed this season as large yield losses from wind damage of 'direct headed' crops occurred in 2019.
- Grain quality is expected to be generally good with large grain size and low screenings. Most crops received sufficient nitrogen throughout the season, however the extended ripening period could lower grain protein percentages in some instances.
- Late spring rainfall has not damaged crops. Warm, dry days will be required in early November to ripen crops and maintain grain quality.
- A rapid germination of grasses and summer weeds followed September rains and many farmers began their summer weed spraying programs while waiting for crops to ripen.
- Farmers began cutting hav in late September to replenish farm supplies or for local sale.
- Constantly changing weather conditions hampered baling operations and heavy rain rendered some cut hay unsuitable for baling.
- Pests and diseases were generally low. Diamond back moth and native budworm larvae were present in some crops and controlled with insecticides.

- Pastures grew rapidly after August rains so many paddocks have high amounts of biomass.
- Livestock are in excellent condition with good lambing percentages and feed levels in pasture paddocks.
- Some pastures will be cut for hay in spring however most of this will be used on-farm or sold locally. The area of pasture cut for hay is expected to be close to average.

Eastern Eyre Peninsula

Weather

- September rainfall was above average in the Kimba area and average in the rest of the district.
 Rainfall for October was very much above average across the district with locations in the east of the district recording their highest rainfalls on record.
- Mean maximum temperatures were very much above average for September and average for October.
- Mean minimum temperatures were above average to very much above average for September and October.
- Strong, hot northerly winds blew on September 6 and 7.
- A number of light frosts occurred during September.

Crops

- Late September and early October rainfall helped fill grain in crops on lighter soils in the Cleve Hills, Darke Peak, Kielpa, and Wharminda districts.
- Cool, damp conditions caused regrowth and weed germination in many crops resulting in uneven ripening and green patches in crops. This has delayed harvest in most districts and farmers will need to reap in patches or desiccate crops to ensure even ripening.
- Some frosted crops were cut for hay near Tooligie however in other districts the reduction in yield is expected to be less than 10% and farmers will harvest these crops.
- Some barley, pulses and canola were harvested in the Kimba, Tooligie, Franklin Harbour and Arno Bay districts in the last half of October.
- Pulses in the Kimba district were desiccated in early October in preparation for harvest. Early
 pulse and canola yields varied significantly depending on soil type and early season rainfall.
 Canola yields have been average to above average and lentil yields average to well below
 average.
- Early cereal yields have been below average however these were generally on poorer soil types that suffered moisture stress during the season.
- Late October rainfall may have affected grain quality. It is too early at this stage to determine the extent of the damage.
- Spring rainfall prompted a large germination of summer weeds particularly caltrop, melons, and heliotrope. Many farmers sprayed these weeds while waiting for suitable harvesting conditions.
- Hay cutting began in mid-September and most was baled by the start of October with little
 weather damage. However, large areas of export oaten hay around Kimba suffered weather
 damage from October rain and will not make export grades.
- There was generally minimal disease and insect pests in most crops. Diamondback moth in canola and low numbers of native budworm in pulses were controlled with insecticides.

- Pastures that dried-off with little biomass at the end of August were revived by spring rains that stimulated significant new growth. Crops cut for hay have also regrown.
- This growth provided extra spring feed but the amount of pasture biomass is generally below average. Crop stubbles will become available for livestock after harvest but will have less feed than usual.
- Most livestock producers have cut or bought hay and will retain grain for supplementary feeding in late summer and autumn.
- Runoff from October rainfall filled many dams in the Cleve Hills 50% or more, relieving livestock producers from carting water over summer.
- Livestock are generally in excellent condition.

Upper North

Weather

- Rainfall for September was average in the south and above average north of Jamestown.
- October rainfall was very much above average across the district.
- Growing season rainfall was above average across the district.
- Mean maximum temperatures were above average in September and average for October.
- Mean minimum temperatures were above average to very much above average for September and very much above average for October. Several frosts were recorded in inland areas during late September.

Crops

- Crops have flowered and filled grain with ample stored soil moisture and mild weather, resulting
 in a larger number of grains per head in wheat crops and larger grains in wheat and barley crops.
- New tillers grew following rain in August, September and October enabled crops to produce good quality grain, significantly adding to yield potential.
- Yields of all crops will be average to above average.
- Crops vary in growth stage from fully ripe in the western part to grain fill in the eastern part of the district.
- Harvest of barley and pulse crops commenced around Port Germein in mid-October. Grain
 quality has varied with reports of some lower quality barley due to dry conditions in early August.
 Harvest of pulses began east of the ranges in the third week of October.
- Barley crops are ripening, however late tillers are still green. Most farmers will wait for these to ripen while others will use herbicide on crops (crop-top) to hasten ripening and stop seed set of late germinating weeds, particularly ryegrass.
- Windrowing of canola started in late October.
- Frost in late September caused significant damage to crops in low-lying areas from Mannanarie to Booborowie.
- The worst affected crops (more than 50% yield loss) were cut for hay but many farmers chose to leave less severely damaged crops for grain. Ideal growing conditions have enabled many of these crops to compensate with more and larger grains, resulting in only minor yield loss.
- Most farmers have been proactively managing disease with low infection in most crops.
- Pea crops have grown well with an extended flowering period and high pod set. Most crops are likely to yield well above average.
- Bean crops podded well and have low amounts of disease; most crops have average to above average yield potential.
- A large amount of export oaten hay was cut in late September and early October and suffered severe weather damage from 3 or 4 heavy rainfall events. Most has been rejected for export and some has been abandoned so will not be baled.
- Russian wheat aphid continued to cause damage particularly in the northern part of the district Most cereal crops were sprayed to reduce damage.

- Pastures have grown rapidly with the mild wet conditions.
- Clover pastures have high levels of biomass and some will be harvested for seed.
- Pastures on un-arable hills have grown well and will set high amounts of seed.
- Pasture growth in the area north of Orroroo has improved greatly and livestock producers will have adequate feed for the reduced number of livestock still on property.
- Many producers cut hay to replenish their supplies. Those cutting small areas were able to get it baled with only minor weather damage.

Mid North

Weather

- Rainfall for September was above average in the east and average across most of the remainder of the district. October rainfall was average to above average.
- Growing season rainfall was average across the district.
- Mean maximum temperatures were above average for September and average for October.
- Mean minimum temperatures were very much above average for September and October. Several moderate frosts were recorded in late September.

Crops

- Mild conditions and average to above average rainfall allowed crops to flower and fill grain under ideal conditions.
- Most crops are between grain fill and maturity.
- Barley crops are ripening however late tillers are still green. High numbers of ryegrass germinated late in the season and many farmers will crop-top barley before harvest.
- Early canola has been windrowed and the rest is close to windrowing or spraying. About 70% is likely to be windrowed and the remainder direct headed.
- West of Clare, crops suffered moisture stress during August and September and have not fully recovered. They have only 70% of average yield potential. Around Clare and further east, yield potential will be average to above average. Canola and pulse crops are likely to yield close to average. Chickpea crops have benefited from October rains and those with low disease levels are likely to yield well above average.
- Frost damaged wheat, barley and some pulse crops in low lying flats. Areas that had more than 50% yield loss were cut for hay. Other less affected areas were left for grain harvest.
- Most farmers have been proactively managing disease with low infection in most crops. Some stripe rust was detected in late September and some crops were sprayed to reduce infection.
- Powdery mildew and blackleg increased in canola crops late in the season.
- High numbers of native budworm and etiella moths were present in late September but have now reduced.
- Common armyworm was widespread in cereal crops and required control.
- Aphids were in high numbers in pulse crops and many required spraying to control numbers as beneficial insects were not able to effectively reduce numbers.
- Russian wheat aphids were present in many crops but numbers were managed.
- Early-cut export oaten hay received high amounts of rain so very little of this will make premium export quality. Most will be baled but more than 50% has been downgraded and will not be sold, as exporters are only buying better quality hay.
- In the eastern part of the district much of the hay was not cut until late October and most should be of good quality making up 30 to 40% of Mid-North production.

- Pastures have grown very well and have high amounts of barley grass, annual ryegrass and other annual grasses.
- Clover pastures have produced large amounts of biomass and some will be harvested for seed.
- Pasture on nonarable hills throughout the district have grown well and pastures will set high amounts of seed to ensure good cover for future years.
- Livestock are in good condition.

Lower North

Weather

- September rainfall was average across the district. Rainfall for October was average to above average.
- Growing season rainfall was average across the district.
- Mean maximum temperatures were above average for September and average for October.
- Mean minimum temperatures were very much above average for September and above average to very much above average for October.

Crops

- Above average rainfall and cool conditions allowed crops to finish under ideal weather conditions generating expectations of well above average yields in all crops.
- Wheat crops are at grain-fill to grain-ripening stages while barley crops are beginning to ripen.
- Consistent rain throughout September and October caused mould damage to most of the export oaten hay crop with significant tonnages being rejected for export. Only 10 to 20% is of good quality.
- Field pea crops are close to maturity and other pulse crops are beginning to ripen.
- Harvest is likely to commence in mid to late November, depending on weather conditions.
- Despite the wet spring, incidence of cereal diseases has been very low, with only a few reports of stripe rust. Most cereal crops were sprayed either once or twice.
- Dry conditions in July and the first half of August reduced pulse disease inoculum so there was very low disease incidence. Lentil and chickpea crops were sprayed with a fungicide 3 or 4 times, some peas were sprayed once while others were not sprayed at all.
- Some cereal crops were sprayed in late winter and early spring to control Russian wheat aphids with minimal damage reported.
- Snail numbers started to increase again in the Pinery fire area but are not yet at high enough numbers to warrant control.
- Native budworm larvae were at low levels in pulse crops, but most farmers added an insecticide with their fungicide application to minimise damage.
- Diamondback moth numbers started to build up on canola crops in the Mallala area in late
 September but heavy rain in late September and early October reduced numbers.

- Pastures have good amounts of biomass although quality has been reduced by barley grass going to seed and medic finishing flowering.
- There is concern that mouldy hay could have risks to both animals eating the hay and humans handling it breathing in spores.
- Pasture hay is of medium to poor quality as significant rain damage affected it.
- Livestock throughout the district are in good condition.

Yorke Peninsula

Weather

- Rainfall for September was average. October rainfall was above average to very much above average across the district.
- Growing season rainfall was average across the district.
- Mean maximum temperatures were above average to very much above average for September and average for October.
- Mean minimum temperatures were above average to very much above average for September.
 In October, they were very much above average on Northern Yorke Peninsula and above average in the remainder of the district.

Crops

- Yields are expected to be well above average south of Minlaton, below average in coastal areas and average to slightly above average in the rest of the district.
- Cereal crops in coastal areas were moisture stressed during the end of August and early September. Rainfall in September fell too late to benefit these areas.
- Harvest started in the second week of October on coastal areas that did not benefit from September rainfall. Barley and lentil harvesting commenced late October on Northern Yorke Peninsula with other areas expected to start early November and the majority by mid-November.
- Barley crops have been sprayed to control weeds, kill re-growth and achieve even maturity before harvest.
- Frosts in late September caused some damage to wheat and lentil crops but very little was cut for hay given the poor return from wheaten hay versus grain. October rainfall enabled crops to compensate for the frost damage with minimal overall yield loss likely.
- Disease in cereal crops was low, with little to no effect on yield. Some late infection of powdery mildew required fungicide application in a minor number of cases.
- Ascochyta is present in several lentil crops that were not protected with fungicide during the
 October rains. This will have a small impact on yield but will primarily affect grain quality (seed
 staining).
- Cereal yields are expected to be average or slightly above average. Grain quality is expected to be good with most grains filling well. Weather damage could downgrade grain quality if rain continues into November and December.
- Yields of all pulses are expected to be above average, however coastal regions are likely to be below average yields and contain some shrivelled grain due to lack of moisture during grain fill.
- Chickpeas are podding very well with the late moisture and are expected to be well above average. However, there is a reduced area sown to chickpeas this season.
- Canola crops have had adequate pod development and average yields are expected. Dry
 conditions at the start of September when crops were flowering limited canola yield potential.
 Grain size is expected to be good with high oil content due to the excellent finishing conditions.
- Most canola crops were windrowed in the last week of October.
- Export oaten hay crops had high amounts of rainfall between cutting and bailing, resulting in very poor quality hay. Hay yields were average to below average.
- Some oaten hay crops have been left to harvest for grain as the wet weather delayed cutting.

- Spring rains prolonged pasture growth and provided adequate levels of high-quality feed. Many medic pastures went to seed early due to moisture stress.
- Few medic pastures grew enough biomass to cut for hay.
- Summer weeds and volunteer cereals will provide some feed to stock after harvest.

Adelaide Hills, Fleurieu & Kangaroo Island

Weather

- September rainfall was above average on western KI and average in the rest of the district.
 Rainfall for October was average on western KI and above average in the rest of the district.
- Growing season rainfall was below average on the far west of KI and average in the rest of the
 district.
- Mean maximum temperatures were above average for September and average for October.
- Mean minimum temperatures for September were above average to very much above average.
 October temperatures were average on western KI and above average in the rest of the district.

Crops

Central Hills/Fleurieu Peninsula

- Some crops were damaged by frost. The worst affected areas were cut for hay.
- Leaf diseases in cereal crops have been at low levels.
- Barley crops are beginning to ripen but late forming tillers are still green.
- Barley, field pea and early sown lentil crops are ripening rapidly, however wheat, lupin and faba bean crops are still at grain fill stage.
- Harvest is likely to commence by mid-November.
- Most crops across the district will yield above average.
- There is limited disease in pulse crops, but some farmers have applied extra fungicides to protect crops from further infection.
- Insect and pest numbers are normal, with some insecticides applied to minimize crop damage.

Kangaroo Island

- Minor frost damage occurred in some cereal crops.
- Heavy rainfall in September reduced canola pod set. Some canola and cereal crops lodged, particularly barley crops.
- All crops are currently at grain fill stage.
- Harvest is likely to commence in early December.
- Yield potential is above average for all crops.
- Extra fungicide is being applied to bean crops to protect pods from chocolate spot.
- Diamondback moth larvae numbers are increasing and being treated in canola and forage brassica crops. Native budworm larvae have been slow to hatch.

Pastures

Central Hills/Fleurieu Peninsula

- Pasture feed quantities are well above average.
- Significantly more hay was cut than normal, but most was rain-damaged and the effect on quality is as yet unknown.
- Livestock are in very good condition.

Kangaroo Island

- Pasture feed amounts are high, but pasture quality is variable.
- High numbers of red legged earth mite are damaging some pastures, requiring producers to implement appropriate control measures.
- The area of pasture cut for hay is slightly above average, but quality is poor due to rain damage.
- Livestock are in good condition and most are rapidly gaining weight.

Lower Murray

Weather

- September rainfall was average across the district. Rainfall for October was average to above average.
- Growing season rainfall was above average in the south and average in the rest of the district.
- Mean maximum temperatures were above average for September and average for October.
- Mean minimum temperatures for September were very much above average. Temperatures for October were above average in the south and very much above average in the north of the district.
- Several minor frosts were recorded in early September.

Crops

- Continued dry conditions in early September lowered crop yield expectations in the northern part of the district.
- Rainfall in mid-September saved many crops that were suffering extreme moisture stress and dying prematurely.
- Crops in the southern part of the district have good yield potential with above average yields expected.
- Harvest has been delayed due to the wet conditions and cooler day time temperatures.
- Most farmers will begin harvest as soon as the weather warms up in early November.
- Farmers cut hay in early October but continued wet weather did not allow windrowed hay to dry and heavy rainfall events have reduced hay quality.
- Native budworm larvae have been present in pulse crops with most farmers spraying to reduce damage to developing grains.

- Annual pastures began to dry off in early September due to dry conditions, however rainfall in late September and October produced some regrowth.
- Perennial pastures have grown well with above average spring rainfall and there is now an abundance of pasture feed.
- Pastures along the Murray River flats have grown well with high amounts of biomass produced. Some areas along the river flats are being prepared for sowing of summer forage crops.
- Livestock are in very good condition.

Northern Murray Mallee

Weather

- Rainfall in September was average and October rainfall was above average in the north and average in the southern part of the district.
- Growing season rainfall was generally above average.
- Mean maximum temperatures were above average for September and average for October, and mean minimum temperatures were very much above average for September and above average for October. Several light frosts occurred in September.

Crops

- Excellent spring rainfall greatly increased cereal yield potential across all soil types to well above average yields.
- More crown rot, leaf scalds and rusts were evident this year but did not cause significant crop damage.
- Some harvesting of early barley has commenced, interrupted by weather. A few dry days will enable harvest to start in earnest in early November.
- Pulse crops have filled well, and most crops should produce above average yields.
- The wet finish to the season caused more pulse and canola crops to be desiccated to achieve even ripening in preparation for harvest.
- Due to high amounts of spring rainfall, late fungicide spays were applied to chickpea and lentil crops to reduce the spread of Aschocyta blight and protect grain quality.
- Most pulse and canola crops were sprayed to control native budworm larvae and other insects.
- Some frost damage is evident in some low-lying areas, but it has not caused major yield loss as wheat crops were able to compensate by filling more and larger grains with the available moisture.
- Summer weed spraying has commenced and is expected to continue for some time after harvest.

- Livestock are in excellent condition, with plenty of feed available going into summer.
- Livestock farmers have cut hay crops to replenish their supplies but continued wet weather has prevented baling.
- Hay has some minor weather damage but is not likely to significantly affect its quality.

Southern Murray Mallee

Weather

- September rainfall was above average in the southwest and average in the remainder of the district. Rainfall for October was above average in the western and eastern edges and average in the remainder of the district.
- Mean maximum temperatures were above average for September and average for October.
- Mean minimum temperatures were very much above average for September and above average for October. Several light frosts occurred in September.

Crops

- Weather conditions during September and October were excellent for crop and grain production but made hay production difficult.
- Crops are maturing and beginning to ripen but harvest has been delayed by nearly two weeks by ongoing wet and cool conditions.
- Yield potential in all crops is above average.
- Some frost damage occurred but yield loss is likely to be minimal as wheat crops have compensated by producing more and larger grains.
- Native budworm larvae were present in pulse crops; farmers sprayed them to reduce crop damage.
- Hay was cut in late September but extended wet weather during October has not allowed it to dry sufficiently for baling. Heavy rain has caused damage with nearly all hay in the district affected to some extent.
- Hay quality will be variable with most of poorer quality.

- Many annual pastures began to dry off following dry conditions in August and early September but rainfall in late September and October resulted in some regrowth.
- Perennial pastures have grown well following the above average spring rainfall and there is now an abundance of pasture feed.
- Livestock are in very good condition.

Upper South East

Weather

- September rainfall was above average in the southwest and average in the remainder of the district. Rainfall for October was above average in the northeast and average in the rest of the district.
- Growing season rainfall was average across the district.
- Mean maximum and mean minimum temperatures were above average for September and average for October.

Crops

- Some crops lodged because of strong winds and rain but have not been significantly damaged.
- Frost damage to cereal crops killed some grains in heads but many crops, particularly wheat, have partially compensated for this resulting in only minor yield losses.
- All crop yields are expected to be above average.
- With high soil moisture content, there is good green leaf retention in all crop canopies.
- Most canola grain crops have started changing colour and are within 10-14 days of windrowing.
- Barley crops completed grain filling and are beginning to ripen. Wheat crops are halfway through grain fill. Lentil crops are still flowering while beans are nearing maturity.
- The wet weather has delayed harvest by 7-10 days compared to normal. Beans, barley and wheat crops will be harvested mid to late November.
- Frequent rainfall events increased disease pressure in crops. This is being proactively managed through fungicide applications. Diseases have included chocolate spot in beans, septoria and stripe rust in wheat, leaf rust in oats, blackleg in upper canopies of canola and botrytis grey mould in lentils and vetch.
- Powdery mildew is present in wheat. However, farmers are not using fungicides but waiting on warm weather to reduce its incidence.
- Cereal aphids are present in oat crops with most being controlled by beneficial insects.
- Native budworm larvae have been in high numbers in pulse crops with some bean crops treated twice with insecticides.
- Diamondback moth larvae numbers have increased close to upper threshold levels for control in canola crops. Southern army worm present in some cereal crops was controlled.

- Pastures have grown rapidly and have high quantities of biomass. Barley grass has grown well, increasing the risk of eye injury and wool contamination in sheep.
- Prolonged wet weather and high rainfall events slowed curing of hay and reduced quality with hay still in windrows developing mould. To minimise damage, producers are delaying or staggering hay cutting.
- Pasture hay yields have increased however wet weather has dramatically reduced hay quality.
- With good pasture feed supply, livestock are in good condition. The incidence of flystrike and foot abscesses has increased due to the wet conditions but as pastures begin to dry off, the amount of foot abscess has reduced.

Lower South East

Weather

- September rainfall was average to above average. Rainfall for October was above average along the coast but average for most of the remainder of the district.
- Growing season rainfall was average across the district.
- Mean maximum temperatures were above average for September and average for October.
- Mean minimum temperatures were average to above average for September and generally average for October.

Crops

- Minor lodging occurred in crops due to the weight of higher yielding crops.
- Yield potential is expected to be above average for all crops.
- Canola crops are at mid to late flowering, dependent on variety. Windrowing of canola is expected to commence in late November to early December.
- Barley crops are in head.
- Spring wheat crops are at early grain fill while some winter wheat varieties have not yet reached flowering stage.
- Beans have finished flowering and have commenced podding.
- Broad beans are at late flowering to early pod set stages.
- Harvest is expected to commence later than usual this year due to increased soil moisture; most farmers will not start harvest until mid to late December.
- Botrytis grey mould infection has increased in faba bean crops with more fungicide applications required to protect crops.
- Stripe rust infection has been widespread in wheat crops with many treated with fungicides. There have been increasing reports of powdery mildew infection in wheat crops.
- Barley scald and net form net blotch are present in barley crops, requiring fungicide applications to reduce crop damage.
- Chocolate spot is present in bean crops and fungicide applications have been timed according to rain events.
- Insect and pest levels have been low.
- Diamond back moth is present in fodder brassica and is being controlled with insecticides.

- High amounts of pasture feed are available. Clover is still actively growing. Pastures have been spray-topped to stop grass weeds setting seed.
- Red legged earth mites are present in moderate numbers in pastures with treatment differing from farm to farm.
- Hay cutting commenced in late October and hay yields are expected to be above average however on-going wet weather is likely to diminish hay quality.
- Livestock are in very good condition.
- The amount of flystrike in sheep is increasing across the district.



Department of Primary Industries and Regions