Crop and Pasture Report South Australia

2016-17 SPRING CROP PERFORMANCE

NOVEMBER 2016

PREMIUM FOOD AND WINE FROM OUR CLEAN ENVIRONMENT

SOUTH AUSTRALIA

Government of South Australia

Primary Industries and Regions SA

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).

Information current as of 4 November, 2016.

Supplement information current as of 14 November, 2016.

ALL ENQUIRIES

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DISCLAIMER

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State Summary

WEATHER

- September rainfall was above average to very much above average in most of the agricultural districts, with a number of locations in the eastern part of the State receiving highest September rainfalls on record.
- October rainfall varied from below average in the northern part of the Upper North to very much above average in parts of the Adelaide Hills and Mid-South East.
- Mean maximum temperatures were below average to very much below average for September and average to below average for October across the agricultural districts.
- Mean minimum temperatures for September ranged from above average in the Lower South East to very much below average in the Upper North and parts of Eastern Eyre Peninsula. Minimum temperatures in October ranged from above average in the Far West Coast to very much below average in the Mid and Upper North and Kangaroo Island.
- Severe storms occurred across the State from September 28 to 30, bringing gale force winds, tornadoes, hail and heavy rain. The heavy rain resulted in flooding of many of the major rivers through the Mid and Lower North and the Northern Adelaide Plains.
- Several frosts were recorded during October.

CROPS

- Rainfall and growing conditions have continued to be ideal in most districts across the State enabling crops to flower and produce grain under mild, wet conditions.
- Current estimates are for a record grain harvest across South Australia, with yield estimates in most districts above average to well above average.
- Above average yields should help most farmers off-set low grain prices.
- Crops on Kangaroo Island and parts of the South East have been severely damaged by waterlogging and yields will be below average in these districts. Crops unaffected by waterlogging in these areas have well above average yield potential.
- Severe storms in late September caused severe crop damage in small areas. The associated rain from this storm benefited undamaged crops, more than off-setting losses incurred for most growers.
- Frost during October caused significant damage to susceptible crops in low-lying areas in a number of districts, with the worst affected areas being cut for hay.
- Harvest of early sown barley and peas began on Upper Eyre Peninsula in mid-October with barley, peas and wheat being harvested in the Upper North in late October. In other areas of the State harvest will not commence until mid-November or later.
- Strong hot winds towards the end of October caused some head loss in semi-ripe barley crops on central Eyre Peninsula with losses of up to 50% in some isolated paddocks.
- Canola crops have been windrowed in earlier districts. An increasing number of growers are desiccating crops in preparation for direct heading to enable more even ripening and to control weed seed set.
- Leaf diseases including leaf rust and septoria tritici were widespread in many districts with some control necessary to reduce crop damage. Stripe rust developed late in the season in most districts with minimal fungicide application required to control the disease, even in susceptible varieties.
- Constant rain throughout spring has resulted in enormous disease pressure in pulse crops, particularly lentils. On Yorke Peninsula botrytis grey mould has been widespread in all lentil varieties, however in other districts the disease has been at relatively low levels.

- Limited supply of some fungicides together with seasonal conditions has delayed application and resulted in the use of less effective products, weakening disease control in some crops.
- Chocolate spot developed rapidly in some crops following the storm in late September, particularly in crops that had been damaged by wind and hail.
- Some lupin, chickpea and lentil crops in the Mid and Upper North and northern Yorke Peninsula have been infected by cucumber mosaic virus with losses in infected crops varying from 10 to 100%.
- Chickpeas have been infected with ascochyta blight, with most crops having received at least 3 applications of fungicide.
- Heavy rain in September and early October appears to have washed Russian wheat aphids off cereal crops, with very few crops needing to be sprayed to reduce crop damage.
- Oaten hay yields have been high in all districts however quality has been highly variable as a result of delays in cutting due to unfavourable weather and weather damage to crops cut early.

PASTURES

- Pastures have continued to provide ample livestock feed in most districts with cool wet growing conditions extending the length of the season.
- In many districts excess pasture growth has been cut for hay, however the wet conditions during curing has reduced the quality of a high proportion of this hay.
- In the high rainfall districts pasture growth has been slow, with the wet and cold conditions limiting production from annuals. High soil moisture levels should enable perennials to remain green well into summer.
- Good meat and wool prices, along with poor cereal grain prices, are expected to see a greater emphasis placed on livestock enterprises in mixed farming systems, particularly in lower rainfall districts.
- Livestock are in good to excellent condition in all districts with minimal health issues.

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.

Supplement

UPDATE REGARDING SEVERE STORMS OF 11 NOVEMBER 2016

Information current as at 14 November 2016.

- Storm damage has been reported from storm systems traversing the northern and eastern crop districts of South Australia on 11 November 2016.
- Early indications are that most damage has occurred in the Murray Mallee.
- A large storm traversing from Cambrai to Karoonda seriously damaged crops and some equipment (field bins) with the same system progressing on to Pinnaroo with any damage yet to be assessed.
- Another storm traversing through the Riverland mostly damaged horticulture properties but also affected a few grain farmers.
- Most farmers' crops are insured against hail and fire, but given record production across unaffected areas, these crops could be underinsured by virtue of under estimation of crop yields.
- The next Crop and Pasture Report on the harvest (release in January 2017) will review the crop production estimate taking into account losses that may have occurred due to these weather events.

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*	477 000	145 000	392 000	165 000	236 000	234 000	56 500	5 700
	t	955 000	553 000	1 019 000	676 000	637 000	936 000	243 000	12 500
Durum	*ha*	0	0	0	20 000	9 500	8 500	6 500	0
	t	0	0	0	71 000	26 500	33 500	25 000	0
Barley	*ha*	60 000	59 000	71 000	151 000	92 500	90 500	27 000	1 800
	t	133 000	237 000	191 000	590 000	259 000	371 000	113 000	4 300
Oats	*ha*	17 000	4 200	7 000	6 000	5 300	10 000	3 500	3 300
	t	34 000	12 500	16 800	21 000	13 200	33 000	11 300	7 200
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	0
	t	680	1 600	1 050	3 200	3 000	6 800	1 600	0
Peas	*ha*	4 800	4 500	5 500	13 000	28 000	24 000	6 700	400
	t	7 200	7 600	6 600	24 000	42 000	38 000	16 000	400
Lupins	*ha*	1 500	26 000	5 400	1 000	3 600	1 800	500	1 000
	t	2 200	53 000	9 700	1 500	5 000	2 700	700	1 500
Beans	*ha*	100	6 500	400	10 200	10 100	12 200	6 200	3 500
	t	200	13 000	800	23 500	18 700	27 000	14 000	7 000
Chickpeas	*ha*	0	400	200	6 500	3 200	5 000	1 000	0
	t	0	600	240	8 100	4 100	6 000	1 400	0
Lentils	*ha*	100	2 000	300	120 000	5 500	14 500	8 000	0
	t	120	3 600	420	216 000	8 400	22 500	13 000	0
Vetch	*ha*	2 400	1 800	2 000	2 000	5 500	5 200	300	0
	t	1 000	1 100	1 200	2 400	4 400	3 600	300	0
Canola	*ha*	8 000	75 000	11 000	11 500	16 000	26 000	3 200	2 200
	t	11 200	164 000	17 500	23 000	27 000	47 500	6 700	3 300
Hay	*ha*	4 500	2 800	4 400	22 000	25 500	39 000	7 500	7 000
(not in total)	*t*	18 000	17 000	15 500	143 000	127 000	252 000	45 000	34 000
Total	*ha*	571 300	324 900	495 300	507 200	416 400	433 400	119 800	17 900
	t	1 144 600	1 047 000	1 264 310	1 659 700	1 048 300	1 527 600	446 000	36 200

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*	4 500	66 000	245 000	124 000	65 000	22 000	2 237 700
	t	11 000	164 000	490 000	322 000	188 000	70 000	6 276 500
Durum	*ha*	300	600	300	0	9 500	0	55 200
	t	650	1 300	500	0	24 000	0	182 450
Barley	*ha*	10 500	60 000	56 000	84 000	33 000	5 500	801 800
	t	28 800	162 000	112 000	227 000	88 000	16 300	2 532 400
Oats	*ha*	1 800	3 500	2 200	6 100	19 500	5 200	94 600
	t	4 500	7 000	4 000	12 200	45 000	13 000	234 700
Rye	*ha*	0	1 500	2 800	5 000	1 200	0	10 500
	t	0	2 200	4 200	7 500	1 800	0	15 700
Triticale	*ha*	500	4 900	2 500	6 400	1 000	500	21 500
	t	1 350	10 800	4 100	15 300	2 600	1 500	53 580
Peas	*ha*	1 500	3 200	2 500	2 700	3 000	400	100 200
	t	2 700	4 500	2 500	4 000	5 400	600	161 500
Lupins	*ha*	2 000	3 400	2 800	8 000	16 800	3 000	76 800
	t	3 500	6 000	2 800	14 500	30 200	5 400	138 700
Beans	*ha*	600	200	0	1 000	12 000	12 500	75 500
	t	1 200	280	0	1 500	24 000	20 000	151 180
Chickpeas	*ha*	200	200	1 400	1 000	200	200	19 500
	t	250	300	1 500	1 000	250	200	23 940
Lentils	*ha*	300	1 200	800	5 000	3 600	200	161 500
	t	420	1 800	800	8 000	5 700	260	281 020
Vetch	*ha*	0	1 500	4 300	6 000	800	0	31 800
	t	0	1 800	4 700	8 000	950	0	29 450
Canola	*ha*	4 100	3 000	14 000	5 000	15 000	9 000	203 000
	t	7 300	4 500	14 000	8 000	30 000	13 500	377 500
Hay	*ha*	29 000	5 000	3 600	14 000	67 000	27 500	258 800
(not in total)	*t*	125 000	25 000	10 800	84 000	338 000	111 000	1 345 300
Total	*ha*	26 300	149 200	334 600	254 200	180 600	58 500	3 889 600
	t	61 670	366 480	641 100	629 000	445 900	140 760	10 458 620

TABLE 2 CROP ESTIMATES AGAINST FIVE YEAR AVERAGE

		2011/12	2012/13	2013/14	2014/15	2015/16	5 year ave	2016/17
Wheat	*ha*	2 226 100	2 176 300	2 295 900	2 236 000	2 200 000	2 226 900	2 237 700
	t	4 444 800	3 556 500	4 976 000	4 672 000	4 315 500	4 393 000	6 276 500
Durum	*ha*	74 600	77 200	68 300	51 300	49 500	64 200	55 200
	t	223 950	181 240	194 930	118 250	86 750	161 000	182 450
Barley	*ha*	987 700	907 100	854 900	804 000	839 300	878 600	801 800
	t	2 031 800	1 912 900	2 093 500	1 922 000	1 978 000	1 987 600	2 532 400
Oats	*ha*	75 800	85 800	85 000	73 300	70 300	78 000	94 600
	t	117 400	128 740	159 700	120 700	103 000	125 900	234 700
Rye	*ha*	9 500	9 500	7 100	9 000	7 500	8 500	10 500
	t	7 900	7 500	6 350	9 300	6 200	7 500	15 700
Triticale	*ha*	80 200	69 200	49 300	27 100	21 800	49 500	21 500
	t	117 500	95 920	86 500	44 300	32 700	75 400	53 580
Peas	*ha*	109 900	103 700	106 100	98 000	102 600	104 100	100 200
	t	144 400	116 100	143 250	114 600	103 600	124 400	161 500
Lupins	*ha*	64 900	63 200	69 300	64 700	76 700	67 800	76 800
	t	78 900	75 110	105 500	72 250	63 850	79 100	138 700
Beans	*ha*	72 200	69 400	69 000	65 600	68 600	69 000	75 500
	t	121 220	105 510	139 400	93 900	77 300	107 500	151 180
Chickpeas	*ha*	12 200	19 700	20 700	19 700	20 500	18 600	19 500
	t	19 550	21 810	29 280	20 250	19 240	22 000	23 940
Lentils	*ha*	106 100	88 800	94 800	106 200	123 700	103 900	161 500
	t	181 600	97 720	163 350	152 350	120 080	143 000	281 020
Vetch	*ha*	13 100	13 100	17 000	23 200	29 600	19 200	31 800
	t	11 120	6 800	14 320	13 150	11 900	11 500	29 450
Canola	*ha*	269 500	302 700	301 000	321 200	210 500	281 000	203 000
	t	435 700	398 700	434 400	313 800	293 300	375 200	377 500
Hay	*ha*	201 500	204 500	227 300	211 500	282 700	225 500	258 800
(not in total)	*t*	774 400	769 000	1 018 100	763 000	1 094 800	883 900	1 345 300
Total	*ha*	4 101 800	3 985 700	4 038 400	3 899 300	3 820 600	3 969 200	3 889 600
	t	7 935 840	6 704 550	8 546 480	7 666 900	7 211 400	7 613 000	10 458 600

District Reports

Western Eyre Peninsula

WEATHER

- Rainfall was average to above average for September and average for October.
- Daily maximum and minimum temperatures were below average for September and average for October.
- Hot and very strong north winds were recorded on October 20.

CROPS

- Cool, wet conditions in spring extended the growth and ripening period for crops.
- Cereal crops have completed grain fill and are ripening, with all crops expected to yield well above average. Canola and pulse crops have finished filling pods.
- Strong hot winds towards the end of October caused some head loss in semi-ripe barley crops on central Eyre Peninsula. Yield losses of up to 50% were reported in isolated very early-sown crops (affecting less than 10% of the area sown to barley).
- Some peas and early-sown barley were harvested in mid-October. Harvest of most crops will not begin until early November.
- Some farmers will windrow barley to improve ripening uniformity and reduce head loss prior to harvest.
- High yield potential and a long ripening period are likely to result in below average grain protein levels. Higher protein grain may be achieved on heavier-textured soils that had good legume production in 2015.
- Pulse crops have been spray-topped to increase uniformity of ripening and reduce weed seed set.
- Some canola has been windrowed. Many canola crops have been spray-topped and will be direct-headed.
- Thick infestations of brome grass have been controlled in paddocks to be cropped again next season (particularly on the tops of sandy rises).
- Insect pest numbers have been generally low. Most growers sprayed pea crops to protect pods from damage caused by native budworm larvae.
- Damp conditions throughout spring have resulted in high levels of snails in all crops. Many farmers are preparing to clean grain to meet delivery standards.

PASTURES

- Favourable spring conditions extended the growing period for pastures, resulting in most pasture paddocks containing high amounts of biomass at the end of October.
- Good conditions for weed growth resulted in many pasture paddocks that were sprayed to remove grasses in winter having to be spray-topped in spring to reduce grass weed seed set.
- Some growers have also sprayed summer weeds that are emerging in paddocks whilst waiting for crops to ripen.
- Good biomass levels in pasture paddocks gave farmers the opportunity to cut hay. However damp spring conditions have been unfavourable for hay production so many farmers have decided to reap paddocks originally sown for hay to increase stored feed grain supplies.
- Livestock are in excellent condition with many growers looking to build up stock numbers.

Lower Eyre Peninsula

WEATHER

- September rainfall was average to very much above average, with widespread thunderstorm activity on September 28 and 29.
- October rainfall was above average in the southern part of the district and average in the north.
- Mean maximum temperatures were below average for September and average for October.
- Strong winds accompanied the thunderstorm activity on September 28 and 29. Strong north winds accompanied by temperatures above 30^{O}C were recorded on October 20.

CROPS

- Cereal crops are filling grain and have well above average yield potential.
- Pulse and canola crops have finished filling grain.
- Grain protein is expected to be low due to the high yield potential and long ripening period. Higher quality grain may result in areas where growers were able to apply extra nitrogen in late September.
- The extended ripening period has resulted in many growers spray-topping canola and other grain crops to reduce weed seed set and improve evenness in ripening.
- Strong winds in late September caused some lodging of crops but this is not expected to impact significantly on yield.
- Canola crops were windrowed in late October.
- Leaf rust caused some damage to the flag leaf of susceptible varieties where late fungicides were not applied. This might reduce yield slightly on those paddocks but yields are still expected to be well above average.
- Insect pest numbers have been generally low. Most farmers have applied insecticide to pulse crops to minimise the risk of pod damage from native budworm.
- The disease loose smut has been observed in susceptible barley varieties with farmers concerned about the cost of control, given the low expected returns.
- Snail numbers are high in all crops and many growers consider that they will need to clean grain to meet delivery standards.

PASTURES

- Good growing conditions throughout spring have resulted in rapid pasture growth, with most paddocks containing high amounts of biomass.
- Unfavourable conditions for hay production during spring have limited the area cut for hay. On paddocks that have been cut and baled, yields are well above average.
- Livestock are in generally good condition, with most producers having adequate feed stored on farm.

Eastern Eyre Peninsula

WEATHER

- Rainfall was above average to very much above average for September and average for October.
- Heavy storm activity on September 28 and 29 brought strong winds and hail.
- Temperatures were below the average monthly maximum and minimums.
- Strong hot north winds were recorded on October 20.

CROPS

- Cereal crops have finished filling grain and are ripening, and yield potential is well above average on all crops.
- Storms at the end of September resulted in hail and wind damage to a few isolated crops on a small number of farms near Cleve and Kimba townships.
- Wind damage occurred in some barley crops around Kyancutta, Darke Peake, Arno Bay and Wharminda towards the end of October. Significant losses (up to 50%) occurred in isolated areas of very early-sown crops (constituting only a very small proportion of the area sown to barley).
- Frost have affected yields around Lock and Darke Peak. Whilst damage has been significant for a few farmers, the proportion of the total crop area affected is small.
- Some early pea and barley crops were harvested in the last week of October.
- The majority of crops will not be ripe until the second or third week of November and crops in the Cleve Hills will not be ripe until late November.
- Early pea yields have been well above average (reports of 1.5 to 2.0 t/ha) and of good quality grain.
- Some growers are windrowing barley crops to prevent head loss and facilitate more uniform ripening.
- Canola and pulse crops have filled pods and most farmers have spray-topped these crops to reduce weed seed set and improve uniformity in ripening.
- High yield potentials and a long ripening period are expected to produce generally low protein grain, except on paddocks with heavier-textured soils that had good legume growth in 2015.
- The quality of large areas of oats intended for export hay around Kimba has been downgraded due to rain after cutting.
- Insect pest numbers have been generally low with few growers needing to spray canola crops. Most grain legume crops had an insecticide spray to minimise native budworm damage to pods.
- Late fungicide sprays generally provided good control of early leaf rust infections.
- Loose smut has been observed in a number of barley varieties with farmers concerned about the cost of control, given the low expected returns.
- Many early-sown barley crops have black tip, which is resulting in grain quality problems at delivery.
- Snail numbers are very high in all crops with many producers looking to clean grain before delivery.
- Unfavourable conditions for oaten hay curing have limited the amount of paddocks cut for hay.
- Many farmers are harvesting hay crops to either replenish feed grain stores or to provide seed for sowing next season.

PASTURES

- Good spring conditions have resulted in an extended growing season which has prompted paddocks to produce a high amount of biomass.
- Livestock are in excellent condition.

Upper North

WEATHER

- Rainfall for September was very much above average with an area around Jamestown receiving the highest rainfall on record. October rainfall was close to average across the district.
- Mean maximum temperatures were very much below average for September and below average in October.
- Severe storms in late September brought mini tornadoes and hail to parts of the district. Several light frosts were recorded in the last week of October in the eastern part of the district.

CROPS

- Cool wet conditions during September and into October were ideal for crop growth.
- Yields are likely to be well above average across the district.
- Harvest of peas, barley and early sown wheat began in the north west of the district in the last week of October. Progress is slow due to the cool conditions.
- Storms in late September caused widespread hail damage through Melrose, Booleroo, Appila and Jamestown with many crops suffering 5 to 10% yield losses.
- Strong winds associated with the storms caused lodging of some crops, but most have now recovered with minimal yield impact.
- Wet conditions delayed some ground fungicide applications. Some farmers used aerial applications.
- Leaf rust developed in many wheat crops in early October. Some crops were sprayed but the majority were far enough advanced to avoid the disease causing major damage.
- Stripe rust developed in mid-October and only later crops (those not in grain fill) required fungicide.
- Septoria tritici was more widespread than usual this season but has not caused major yield losses.
- Chocolate spot developed rapidly in hail-damaged bean crops with significant impact on yield in some crops. Black spot has been very severe in field pea crops with some crops receiving two fungicide applications and still having high disease levels.
- Bacterial blight continues to be a problem in frost-prone areas, with even tolerant varieties being affected. Farmers are sourcing clean seed for next year to reduce spread of the disease.
- Lentils have been infected with cucumber mosaic virus with losses of 10% to some crops.
- Frost in the last week of October caused damage to low-lying wheat and barley crops at early grain fill. A number of crops or patches of crops will be cut for hay but most have only 10 to 15% damage. Later-sown field pea crops suffered the worst damage with losses of up to 50% in low lying areas around Appila and Jamestown.
- Most oaten hay crops have been cut with minimal weather damage, although early-cut crops suffered some weather damage. Quality has varied from average to good with good yields and prices. There has been some poor quality hay but most will be accepted for export.
- Desiccation of canola began in early November with more than 50% likely to be direct-headed.

PASTURES

- High levels of good quality pastures in all of the district.
- Livestock are in good condition however the wet conditions and increasing temperatures have resulted in high blowfly numbers with some farmers jetting sheep to control fly activity.

Mid North

WEATHER

- Rainfall was very much above average for July with areas around Clare receiving the highest rainfall on record. October rainfall was average across the district.
- Mean maximum temperatures were very much below average for September and below average for October.
- Mean minimum temperatures were very much below average for October with several frosts recorded in the eastern part of the district in late October.
- Severe storms from September 28 to 30 brought strong winds, mini tornadoes, hail and heavy rain.

CROPS

- The cool, wet, spring conditions have been ideal for crop growth and have extended the grain development and maturity period, increasing yield potential to record levels.
- Storms in late September caused lodging and widespread hail damage through Redhill, Snowtown and Blyth. Some wheat, barley and pulse crops had losses of up to 15% but in the majority of crops losses were less than 5%.
- Crops in the western part of the district are beginning to ripen but those in the east are still at early grain fill.
- Frosts in the last week of October caused severe damage to wheat and barley crops in frost-prone areas around Booborowie, Burra and Farrell Flat. Crops are still being assessed for damage but many farmers have made the decision to cut the worst affected areas for hay. Canola and pulse crops do not appear to have been as badly affected.
- Canola crops have finished flowering and will be windrowed in mid-November. An increasing number of farmers are desiccating crops and direct heading to ensure even ripening and to control weed seed set.
- Oaten hay crops have had extremely high yields with 9 to 10t/ha common but most has been down-graded in quality because of weather damage and its lush growth.
- Approximately 20% of the crop was not cut due to wet weather, growers' inability to secure contract sales and the likelihood of the hay being of poor quality. These crops will be harvested for grain.
- Summer weeds have already germinated and could cause grain contamination problems at harvest, particularly in lodged crops. Emergency permits have been applied for to control these weeds before harvest. Care will need to be taken when spraying to avoid off-target damage to vines.

PASTURES

- Pastures throughout the district have excellent growth and will provide good quality feed before stubbles become available in December.
- Livestock are in excellent condition.

Lower North

WEATHER

- Rainfall was above average to very much above average for September with a few locations receiving their highest rainfall on record. October rainfall was average across the district.
- Mean maximum temperatures were very much below average in September and below average in October.
- Heavy rain resulted in major flooding of both the Light and Gawler rivers.

CROPS

- Exceptional growing conditions throughout the season are likely to result in highest yields on record for most crops across the district.
- Wheat crops are at late grain fill to early maturity and barley crops are beginning to ripen.
- Pulse crops are remaining green; pea and bean crops have finished flowering and podded well. Lentil crops are flowering with limited pod set but this should improve.
- Most pulse crops have remained relatively disease free with only low levels of the diseases ascochyta and botrytis grey mould.
- Barley yields will be very high, although there has been significant lodging, particularly in some varieties. This may result in minimal yield losses but increases risk to grain quality.
- Canola crops podded extremely well and seed development occurred under mild conditions so very high yields and good grain quality are expected.
- Stripe rust did not develop in wheat crops despite the large area sown to susceptible varieties.
- Early fungicide applications to prevent the build-up of stripe rust helped reduce the levels of the leaf disease septoria tritici.
- Both the Light and Gawler rivers flooded in early October, flooding both crops and pastures. Although minimal damage occurred to broad acre crops there was significant damage to horticultural crops.
- Heavy rain in September and early October appears to have washed Russian wheat aphids off cereal crops, increasing mortality. Very few crops required spraying.
- Oaten hay yields have been high. Early-cut crops have suffered some weather damage but later cut crops exposed to less rain are of reasonable quality.

PASTURES

- Medic seed crops have grown well and podding indicates a high yield potential.
- Specialty pasture hay mixes have high yields of good quality hay.
- Despite low cereal prices there is unlikely to be an increase in livestock numbers in the district, due to the range of high value crop options available.

Yorke Peninsula

WEATHER

- Rainfall for September was above average to very much above average. October rainfall was above average in the south and average further north.
- Severe hail storms hit Port Broughton and Mundoora at the end of September.
- Mean maximum temperatures for September and October were below average in the north, and below average for September and average for October in the south.
- Growing season rainfall was above average to very much above average in the north and average in the south.

CROPS

- The cool, wet conditions have been ideal for grain fill, and boosted yield crop potential, especially wheat and lentils. Yields are expected to be above average for cereals.
- Cereal grains will be large and plump, with low screening levels and excellent test weight.
- Strong winds, hail and storms caused crop damage and lodging to pea, bean, oat and barley crops. Yield and quality losses from barley lodging is expected to be minimal.
- Seed dressings and fertiliser fungicides effectively controlled diseases in cereals until early October.
- Constant rain throughout spring resulted in enormous disease pressures, particularly in lentil crops. Limited supply of some fungicides together with seasonal conditions delayed application and resulted in the use of less effective products.
- Botrytis grey mould has been widespread in all lentil varieties. Initially the more susceptible varieties were worst affected but even the more resistant varieties have had two or three fungicide applications.
- Pulse crops in the northern part of the district were infected by cucumber mosaic virus, with some, lupin and chickpea crops suffering 100% losses. Lentils were less affected.
- Barley yellow dwarf virus has been observed in cereal crops; the main diseases observed in wheat have been eyespot, leaf rust and powdery mildew.
- A final fungicide application has been made on wheat crops, much of which was applied by air.
- Chickpeas have been infected with ascochyta blight, with most crops having received at least three applications of fungicide.
- The larvae of the insect native budworm are present in lentil crops with at least three to four hatchings of caterpillars this season.
- Late snail hatchings and increased snail activity might cause problems at harvest.
- Lodging resulted in a reduction in the quantity of oaten hay. Poor colour and reduced nutritional value due to the wet spring has lowered hay quality.
- Hay making has been prolonged due to unfavourable weather conditions for cutting, curing, and baling.

PASTURES

- Pasture growth has been excellent, particularly as stock numbers are reasonably low. Some pastures have been fertilised to increase pasture growth.
- Some farmers have bought additional sheep to utilise pasture growth and graze stubbles after harvest.
- Stock condition is excellent and supplementary feeding of hay and grain has been cut back over the past couple of months.
- Pastures with very good growth have been cut for hay while hay freeze chemicals have been applied to others to stop grassy weeds setting seed.

Adelaide Hills, Fleurieu Peninsula & Kangaroo Island

WEATHER

- Rainfall for September was very much above average and the highest on record on eastern KI and many parts of Central Hills and the Fleurieu Peninsula. October rainfall ranged from average on eastern KI to very much above average in parts of the Central Hills.
- Mean maximum temperatures were below average for September and average for October.
- Some light frosts were recorded in low lying areas in the Hills.

CROPS

Central Hills/Fleurieu

- Waterlogged soils are drying out rapidly, which will enable some crops to recover.
- Crops are maturing slowly which is to their advantage as crop vegetative growth is above average and some have poor root systems due to waterlogging.
- Farmers have been applying fungicides to reduce the impact of foliar diseases. There is a shortage of some products.
- Grain yields should be 10-15% above average.

Kangaroo Island

- Broad beans will yield well above average as they are suited to the cool damp conditions.
- Below average temperatures have prevented the development of many crop diseases.
- Grain yields of most cereals and canola crops will be below average due to waterlogging.
- There has been a light to moderate infestation of native budworm insect in pulse crops with crops being sprayed to reduce damage.

PASTURES

Central Hills/Fleurieu

- Hay cuts will be average to slightly below average due to the effects of waterlogging and lack of sunshine.
- More silage will be cut due to the wet and cool weather conditions.
- Pasture quality and quantity overall is average, and above average in non-waterlogged areas.

Kangaroo Island

- Hay cuts will be close to average.
- Pasture quality and quantity will be below average as the warming weather will cause rapid maturity of pastures before soil profiles have dried.
- Wire worm infestations have been reported in newly-sown kikuyu pastures.

Lower Murray

WEATHER

- Rainfall for September was highest on record for most locations.
- Rainfall for October varied from average in the northern parts of the district to above average further south.
- Mean maximum temperatures for September were very much below average in the north and below average in the south, while October temperatures were below average.
- Growing season rainfall ranged from above average to very much above average across the district.

CROPS

- Cereal crop maturity across the district varies, with early-sown crops approaching maturity and later-sown crops starting grain fill.
- The majority of pulse and canola crops have finished flowering.
- Storm damage to crops was limited. Some areas of crops lodged due to heavy rains and strong winds, but minimal yield loss is expected.
- Cooler conditions have delayed harvest by several weeks.
- Wet conditions and the inability to drive across paddocks after heavy rain has limited some paddock activities, particularly fungicide applications.
- Hay cutting has been affected by wet conditions and the area cut for hay has been reduced, with crops now to be reaped for grain.
- Leaf diseases, particularly ascochyta and botrytis grey mould, have affected many pulse crops. Later fungicide applications have been necessary (not a common practice in the past).
- Native budworm insect larvae were identified in pulse crops and crops were sprayed as required to reduce damage.
- Yield potential for all crops is well above average and likely to be record breaking.
- Wheat and barley yield estimates have exceeded the 10-year long term average by at least 1t/ha and canola and legume yield estimates are expected to double the long-term average.

PASTURES

- Pastures have continued to provide ample feed with cool, wet conditions extending the length of the growing season.
- There is very good feed on offer for this time of year and livestock are in excellent condition.
- Livestock sales are bringing strong returns for farmers.

Northern Murray Mallee

WEATHER

- Rainfall in September was very much above average with some areas receiving the highest rainfall on record.
- October rainfall was around the average.
- After a dry start and a season break in late May, growing season rainfall across the district was 240mm, about 80mm higher than average.
- There have been very few frost events of any consequence.

CROPS

- Cereals, pulses and oilseeds have grown very well throughout spring and are now showing well above average yield potential across the district.
- Wheat is maturing slowly with most crops still very green at the end of October. Heads are filling at least four grains wide.
- Barley is beginning to change colour and some is likely to be ready to harvest in the third week of November.
- Russian wheat aphid affected crop growth in patches during September and required spraying, but did not develop into a major problem.
- Pulse crops generally have very high yield potential, due to the lack of major crop stresses through spring.
- Soil moisture probes suggest that profiles were generally full at the end of September, and it is expected that many crops will leave plant available water in the soil at the end of the season.
- Hay crops have been cut, with some baling delayed by wet weather. Many hay windrows have had to be turned over after rainfall to dry and minimise quality loss.
- Some yellow leaf spot and leaf scald in wheat and some spot form of net blotch has been evident in barley.
- Some take-all and crown rot has developed late in the season, but not to the point of causing significant yield loss.

PASTURES

- Paddock feed levels are very high and will last well throughout summer.
- Good meat and wool prices, along with poor cereal grain prices are expected to see a greater emphasis placed on livestock enterprises in mixed farming systems in the future.

Southern Murray Mallee

WEATHER

- Rainfall for September was very much above average with the highest on record for all towns along the Mallee highway from Peake to Pinnaroo.
- October rainfall ranged from average in the north to above average in the south of the district.
- Low overnight temperatures persisted throughout September and October with some mild frost events recorded in late September and again in mid to late October.
- Mean maximum temperatures were very much below average for September and below average for October.

CROPS

- Wet and cool spring conditions helped boost yield potential across the district.
- Wheat and barley yields are estimated at double the 10 year average.
- Farmers are reporting that the conditions have helped them to achieve the best crops they have ever grown.
- Stormy conditions with heavy rain and strong winds caused some high biomass crops to lodge making hay cutting very difficult. It is also expected that these lodged crops will slow harvest.
- Some frost damage was reported in crops however wet paddock conditions helped to mitigate significant damage.
- Pulse and cereal crops are at varying stages of grain fill.
- Pulse and canola crops are predicted to yield 40-60% above the 10 year long term average.
- Canola windrowing has begun in some areas.
- Leaf disease, particularly in pulse crops, has required fungicide spray applications to reduce damage.
- Hay cutting operations have been affected by wet weather with some crops cut later than the optimal time and many not cut at all.
- Cut hay has been hard to cure as the ground has been so wet and some hay has also been weather damaged so hay quality will be variable.
- Cereal harvest is expected to begin by mid-November.

PASTURES

- Sown cereal crops are still providing high quality feed.
- Veldt grass pastures, which comprise a large proportion of permanent pasture in the district, have had exceptional growth and are providing excellent feed due to good spring rains.
- The mood amongst livestock farmers remains buoyant with young ewes at annual off shears sales making record prices.

Upper South East

WEATHER

- Rainfall in September was very much above average with some locations receiving their highest falls on record.
- October rainfall ranged from average to very much above average.
- Mean maximum temperatures in September were below average to very much below average. There have been fewer frosts compared to average.

CROPS

- Overall, damage from storm conditions in early October was minimal, with only small areas of hail damaged.
- Russian wheat aphid activity was reduced following the spring rains.
- Crop yields north of Keith are expected to be 10-20% higher than those south of Keith due to waterlogging.
- Oats are expected to yield 35% above average, with many producers locking in good contract prices.
- Windrowing of early barley crops will commence in early to mid-November in parts of the upper South East with yields predicted to be up to 35% higher than the long term average.
- Barley scald and powdery mildew will cause some adverse effects on yield and quality due to rain-delayed fungicide applications.
- Stripe rust has become established in some wheat crops and spread into the grain heads. However, yields will still be 35% above average.
- Pulse crops are predicted to yield 60% above the long term average, despite crops having higher incidence of disease and required double fungicide applications. Fungicide application was delayed due to seasonal conditions and the shortage of some fungicide products.
- Reports of up to 90% lodging in beans will affect quality and staining of the grain.
- Lodging of up to 70% of some barley crops has occurred as a result of early sowing, high nitrogen application, use of high yielding varieties and seasonal conditions.
- Despite the presence of alpha mosaic virus in lentils, average crops are still predicted.
- Lodging in canola due to waterlogging and windy weather has occurred, with effects worse where stems were bent by wind. Reports of up to 60-70% lodging in some paddocks will result in yields being 10% lower than the long term average.

PASTURES

- Pastures look the best they have for many years due to sufficient moisture and minimal frosts, with regeneration of sub clovers and dryland lucerne.
- Livestock are in exceptional condition and lambs are being turned off. Due to the high amounts of feed on offer, livestock are being set-stocked.
- Hay and silage yields are exceptional and are up by 40% compared to normal. However, poorer hay quality is expected due to weather damage or delayed time of cutting as a result of wet weather. In some areas farmers are mowing around wet areas rather than waiting for the entire paddock to dry out.
- Grazing of hay paddocks in August delayed maturation of pastures and cutting times.
- Stocking rates are still 20-30% down compared to the long term average due to farmers selling stock last year during the exceptionally dry conditions.
- Lucerne growth has been early and vigorous due to suitable moisture and warmer conditions.

Lower South East

WEATHER

- Rainfall was very much above average for September and average to very much above average for October.
- Mean maximum temperatures for September and October were below average.

CROPS

- Some paddocks still have water lying in them but are slowly drying out with the warmer weather.
- Yields are expected to be average to less than average, mainly due to waterlogging.
- Wheat is in head and flowering; beans and canola are flowering or finishing flowering.
- Leaf rust and septoria tritici have been present in wheat crops but cooler conditions have kept disease levels low.
- Chocolate spot is present in bean crops but disease levels have remained low due to cooler conditions.
- Very few bean pods are forming and are setting low on the plant due to the cold and wet conditions. Areas within paddocks and even some entire paddocks are looking at yielding only 50% of average.
- Some bean plants lodged because of waterlogging but have recovered to some extent as the ground began to dry out.
- Agronomists are noticing that there has been less bee activity in the Lower South East which might have resulted in reduced pollination.
- Cereal crops are thinner than usual.
- Due to its intolerance of waterlogging, canola is expected to produce below average yields.
- Sprays for disease and weeds in crops have been applied after the optimal time, due to wet soils and persistent rainy weather.

PASTURES

- Pasture growth is accelerating. Annuals have started to go to head despite little growth.
- Cutting for silage has started; yields will be below average.
- There have been low insect populations in pastures due to cooler temperatures and waterlogging.
- Weeds such as capeweed, wild geranium and thistles have been in greater numbers than usual as paddocks have been too wet to apply herbicides. Paddocks are starting to dry out but clover is flowering so producers are reluctant to spray.
- Livestock look well despite waterlogged paddocks.
- This years' lambs are only starting to be turned off, later than last year.
- The current high level of soil moisture supplemented with a few summer rainfalls provides a good chance of perennial pastures staying green throughout summer.