

OFFICIAL

# South Australian Crop and Pasture Report

## 2023-24 Post-Harvest Summary

March 2024



Government  
of South Australia

Department of Primary  
Industries and Regions

OFFICIAL

## Crop and Pasture Report South Australia

Information current as of 14 March 2024  
© Government of South Australia 2024

This is a report prepared by the Department of Primary Industries and Regions (PIRSA).

### Disclaimer

PIRSA and its employees do not warrant or make any representation regarding the use, or results of the use, of the information contained herein as regards to its correctness, accuracy, reliability and currency or otherwise. PIRSA and its employees expressly disclaim all liability or responsibility to any person using the information or advice.

### All Enquiries

Matthew Palmer, General Manager  
Department of Primary Industries and Regions (PIRSA)  
GPO Box 1671, Adelaide SA 5001  
T 08 8429 0493  
E [matthew.palmer@sa.gov.au](mailto:matthew.palmer@sa.gov.au)

### Key link to Weather information

[Bureau of Meteorology - Weather observations and outlooks](#)

### Notes on the calculation of crop estimates

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 to PIRSA 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.

## State Crops and Pastures – 2023/24 Final Summary

### Summary

Good early season rainfall combined with stored soil moisture and warmer than average temperatures, accelerated the development of early sown crops in 2023. Despite the favourable start to the season, below average late winter and spring rainfall in all grain producing areas of the State, limited crop yield potential in a number of regions. Significant frost events in September and October impacted grain production in some areas. Many producers experienced their earliest ever commencement and completion of harvest due to the dry finish to the season, however late season rainfall from summer storms impacted grain quality and harvest logistics in later maturing regions.

Despite the dry finish, the absence of extreme heat events during spring, together with carryover subsoil moisture from the 2022 season enabled average to slightly above cereal grain yields in most districts. Canola yields were average to slightly above, but with lower oil contents reported in early finishing crops. Lentil yields were variable due to the dry finish. Hay crops achieved good yields and exceptional quality.

In general, grain quality was very good with the majority of wheat meeting AH and APW quality standards, however wheat crops harvested after the rain experienced downgrading to feed grades. On the positive, strong prices for feed quality grain reduced the financial impact from quality downgrades. Despite achieving reasonable incomes, farm profitability has been constrained by high input costs coupled with increased overhead costs in 2023.

Pasture growth in southern regions was limited by the warm/dry finish to the season. Pasture growth in all regions was boosted with summer rainfall, however little-to-no rainfall during February and heatwave conditions in March has resulted in reduced pasture availability and increased reliance on supplementary feeding of livestock to maintain condition.

Final crop production is estimated at 8.7 million tonnes, which is slightly above the 2021-22 season. Grain prices remained strong, resulting in an estimated Farm Gate Value of \$3.3 billion.

#### Sown crop area and production for previous six seasons

Seasons	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24 <i>estimated</i>
Area sown (ha)	3,572,000	3,898,000	4,003,000	3,942,000	3,942,000	<b>4,011,000</b>
Production (t)	5,795,000	6,467,000	9,135,000	8,445,000	12,788,000	<b>8,703,000</b>
Farm gate value	\$1.7 billion	\$2 billion	\$2.5 billion	\$3.3 billion	\$4.8 billion	<b>\$3.3 billion</b>

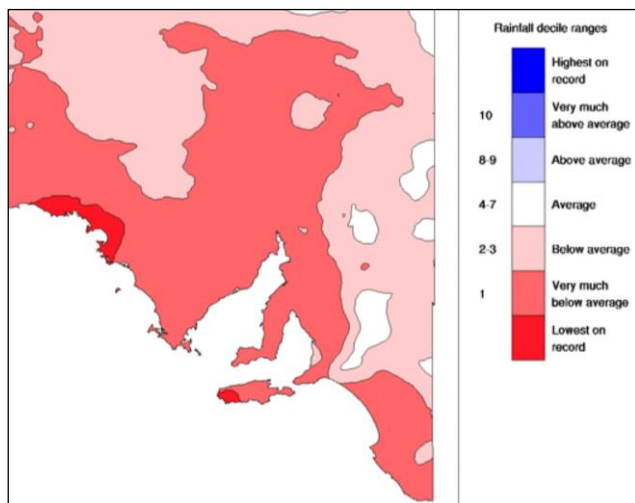


Figure 1: Rainfall deciles for the five-month period 1<sup>st</sup> Jul to 30<sup>th</sup> Nov 2023.

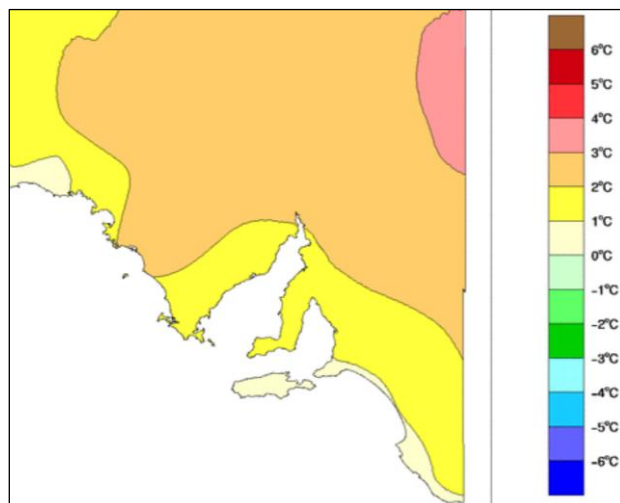


Figure 2: Maximum Temperature Anomaly for the three-month period 1<sup>st</sup> Sep to 30<sup>th</sup> Nov 2023.

© Commonwealth of Australia 2024, Bureau of Meteorology

## Season 2023/24

### Weather

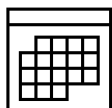


Average rainfall was widely received during autumn. This, together with good subsoil moisture reserves from the wet finish to the 2022 season provided confidence to producers to commence seeding. Warm and wet conditions in early winter accelerated the development of early sown crops. Warm conditions persisted during winter. Northern and western regions of the state experienced below average total winter rainfall.

Spring rainfall was below average to well below average for all grain producing areas of the State, which limited yield potential in many regions. Maximum temperatures continued to be above average in northern regions, but fortunately, no extreme heat events occurred during spring. Significant frost events in September and October impacted yield potential on upper Eyre Peninsula and late maturing, cooler areas of the Mid and Lower North. Late season rainfall from summer storms impacted grain quality and harvest logistics in cooler later maturing regions.

Little to no rain has been recorded in arable areas since the end of January. Dry conditions coupled with heatwave conditions experienced during March, has resulted in low pasture availability and increased reliance on supplementary feeding of livestock.

### Season outlook



Following several months of El Niño WATCH, the Bureau of Meteorology formally declared in September 2023 that El Niño and a positive Indian Ocean Dipole were underway. El Niño conditions persisted well into summer, however, this had a reduced impact on Australian summer rainfall due to contradictory influences including the Southern Annular Mode and Madden-Julian Oscillation.

According to BOM, El Niño has persisted into early autumn 2024 although a steady weakening trend is evident in its oceanic indicators. Climate models indicate sea surface temperatures in the central tropical Pacific are expected to continue declining and are forecast to return to ENSO-neutral in the southern hemisphere in autumn 2024.

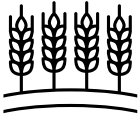
### Subsoil moisture



The wetter and cooler summer period of 2022/23 provided carry over subsoil moisture in most regions, which combined with autumn rainfall, provided a confident start to the 2023/24 season. The carryover moisture provided significant benefits to many 2023 crops enabling good crop yields to be achieved despite a very dry finish to the season.

As we look forward to the 2024/25 season, stored soil moisture at the end of summer is variable across the state, as some regions received significantly more rainfall than others between November and January.

### Crop mix



A reduction in the area sown to barley was observed in 2023, mainly being replaced by wheat. A significant increase in lentil sowings were observed in areas of the Upper Eyre Peninsula, and Murraylands regions.

The area of lentils is expected to further increase in the 2024/25 season, with producers reducing sheep numbers and associated pasture areas, and including more lentils in their programs. The area of field peas is likely to reduce in 2024/25 season due to proposed rationalisation of receival sites by a key bulk handler.

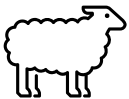
### Cropping progress



Many producers in northern and western regions experienced their earliest ever commencement and completion of harvest due to the exceptionally dry seasonal finish. In contrast, significant rainfall events in December and early January slowed harvest progress in later areas of the Fleurieu, South-East and Lower Yorke Peninsula regions.

Post harvest, many producers have taken the opportunity to invest substantial time and capital into property improvement, especially given the lack of opportunity to do so in 2023 following the extended harvest due to weather delays. Significant areas of lime, gypsum and soil amelioration treatments are being applied this autumn in preparation for seeding.

### Pastures and livestock condition

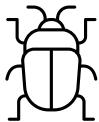


Autumn pasture growth was strong across the State in 2023, with most areas having good feed levels heading into the cooler winter months. Low beef and lamb prices prompted a number of producers to retain livestock on-farm to utilise higher than average pasture growth, rather than accepting low prices at market. By spring, pasture growth in the Lower South East and Central Hills and Fleurieu regions had slowed significantly due the warm and very dry finish.

Pasture growth received a major boost with December and early January rainfall, however little-to-no rainfall during February and heatwave conditions in March resulted in low pasture availability and increased reliance on supplementary feeding of livestock to maintain condition.

## Challenges and opportunities

### Pests and diseases



Mice numbers were of concern in a number of regions early in the season, however the only significant impacts were in areas of the Eyre Peninsula where some producers undertook targeted aerial baiting and some areas of the Mallee. Field slugs impacted the establishment of crops in the Southeast and higher rainfall areas of the Mid North, necessitating the adoption of baiting programs.

Mid-season concerns regarding stripe rust, leaf rust and powdery mildew were well managed with foliar fungicide programs adopted by producers and were assisted by warm and dry weather conditions from later winter until the onset of harvest.

Cowpea aphids were problematic in isolated areas, threatening lentil yields and causing some livestock health issues when grazing infested vetch and legume pastures.

Overall, pest and disease impacts were generally low, and outbreaks were managed well by most producers.



### Regional issues and adverse events

A widespread frost event occurred on 9th September, which had the greatest impact on crops in the Upper and Western Eyre Peninsula regions. Additional late season frost events occurred on 23rd and 26th October through the Upper North, Mid North, Murray Plains and Upper South East regions which had significant impact in a number of later maturing crops, however many crops were unaffected.

Significant summer rainfall delayed harvest of later maturing crops and caused some quality downgrades. Crop producers in the Mid and Lower South-East were particularly affected with up to 300mm of rainfall occurring in December to mid-January causing paddock trafficability and access issues and frustrating harvest efforts. Harvest logistics and grain quality were also impacted in the Central Hills and Fleurieu, Kangaroo Island and Lower Yorke Peninsula regions.

# Crop Estimates

**TABLE 1 CROP ESTIMATES BY DISTRICT**

		Western Eyre Peninsula	Lower Eyre Peninsula	Eastern Eyre Peninsula	Yorke Peninsula	Upper North	Mid North	Lower North	Kangaroo Island
Wheat	<i>ha</i>	450,000	145,000	371,000	170,000	241,100	248,000	73,000	5,400
	<i>t</i>	585,000	551,000	593,600	612,000	530,420	744,000	255,500	10,260
Durum	<i>ha</i>	0	0	0	13,600	6,000	5,000	4,200	0
	<i>t</i>	0	0	0	43,520	13,800	14,500	12,600	0
Barley	<i>ha</i>	75,000	67,000	74,000	159,000	91,500	90,000	21,000	2,200
	<i>t</i>	105,000	261,300	133,200	596,250	210,450	297,000	68,250	6,160
Oats	<i>ha</i>	14,100	0	4,600	4,200	5,300	4,400	2,300	1,600
	<i>t</i>	14,100	0	6,440	10,500	9,010	11,000	5,980	3,840
Rye	<i>ha</i>	0	0	0	0	0	0	0	0
	<i>t</i>	0	0	0	0	0	0	0	0
Triticale	<i>ha</i>	400	0	500	1,000	1,200	1,700	400	100
	<i>t</i>	400	0	800	3,400	2,400	4,760	1,200	300
Peas	<i>ha</i>	2,800	1,500	4,200	10,000	10,000	13,900	6,000	400
	<i>t</i>	2,240	3,000	3,360	20,000	12,000	22,240	10,800	600
Lupins	<i>ha</i>	0	10,500	4,800	1,000	2,900	1,800	500	1,000
	<i>t</i>	0	21,000	4,800	1,600	3,190	2,340	900	1,000
Beans	<i>ha</i>	400	10,000	400	11,000	12,200	12,900	3,100	3,400
	<i>t</i>	320	25,000	400	24,200	18,300	23,220	5,890	5,100
Chickpeas	<i>ha</i>	0	0	200	4,000	2,500	2,300	400	0
	<i>t</i>	0	0	200	6,000	3,000	2,760	520	0
Lentils	<i>ha</i>	20,000	10,000	20,000	133,000	12,500	20,000	6,800	0
	<i>t</i>	16,000	22,000	22,000	226,100	16,250	30,000	10,880	0
Vetch	<i>ha</i>	2,400	0	2,000	2,600	5,600	4,200	300	0
	<i>t</i>	1,200	0	2,000	3,120	2,240	2,520	300	0
Canola	<i>ha</i>	5,100	80,000	9,000	14,500	28,300	25,400	4,600	4,200
	<i>t</i>	5,100	200,000	9,000	29,000	39,620	45,720	8,740	9,240
Hay (not in total)	<i>ha</i>	5,500	6,400	10,000	13,700	22,000	38,000	10,000	7,600
	<i>t</i>	13,750	28,800	27,000	61,650	74,800	167,200	40,000	31,920
Total	<i>ha</i>	570,200	324,000	490,700	523,900	419,100	429,600	122,600	18,300
	<i>t</i>	729,360	1,083,300	775,800	1,575,690	860,680	1,200,060	381,560	36,500

TABLE 1 CROP ESTIMATES BY DISTRICT (CONT)

		Central Hills & Fleurieu	Lower Murray	Nth Murray Mallee	Sth Murray Mallee	Upper South East	Lower South East	State Total
Wheat	<i>ha</i>	8,300	62,500	220,000	130,000	81,000	25,300	2,230,600
	<i>t</i>	26,975	93,750	264,000	312,000	186,300	101,200	4,866,005
Durum	<i>ha</i>	0	500	0	0	7,300	0	36,600
	<i>t</i>	0	625	0	0	16,425	0	101,470
Barley	<i>ha</i>	7,000	55,000	60,000	94,500	39,500	7,000	842,700
	<i>t</i>	22,400	82,500	72,000	245,700	102,700	29,400	2,232,310
Oats	<i>ha</i>	1,500	3,000	2,200	3,500	21,200	4,700	72,600
	<i>t</i>	4,050	3,600	2,200	6,300	50,880	15,510	143,410
Rye	<i>ha</i>	0	1,500	3,500	2,400	1,600	0	9,000
	<i>t</i>	0	1,500	2,100	2,880	1,760	0	8,240
Triticale	<i>ha</i>	500	2,600	1,500	6,200	1,000	500	17,600
	<i>t</i>	1,350	3,120	1,800	9,300	1,900	1,750	32,480
Peas	<i>ha</i>	1,000	4,000	2,000	3,600	2,900	400	62,700
	<i>t</i>	2,200	3,600	1,000	4,320	3,770	920	90,050
Lupins	<i>ha</i>	1,600	2,000	3,000	10,100	11,000	2,700	52,900
	<i>t</i>	2,880	1,800	1,800	14,140	13,200	4,860	73,510
Beans	<i>ha</i>	1,000	1,100	0	1,200	34,500	14,500	105,700
	<i>t</i>	2,800	880	0	1,440	70,725	39,150	217,425
Chickpeas	<i>ha</i>	200	3,000	14,500	10,500	600	200	38,400
	<i>t</i>	200	1,800	5,800	12,600	720	300	33,900
Lentils	<i>ha</i>	200	4,000	4,300	6,300	2,900	200	240,200
	<i>t</i>	260	2,800	1,720	10,080	3,770	400	362,260
Vetch	<i>ha</i>	100	4,000	6,700	5,300	1,200	0	34,400
	<i>t</i>	200	2,800	2,345	6,360	1,320	0	24,405
Canola	<i>ha</i>	8,000	6,000	7,800	13,200	39,500	21,600	267,200
	<i>t</i>	16,000	4,800	1,560	19,800	71,100	58,320	518,000
Hay (not in total)	<i>ha</i>	23,900	7,200	5,000	13,800	28,100	27,100	218,300
	<i>t</i>	119,500	21,600	9,000	62,100	120,830	132,790	910,940
Total	<i>ha</i>	29,400	149,200	325,500	286,800	244,200	77,100	<b>4,010,600</b>
	<i>t</i>	79,315	203,575	356,325	644,920	524,570	251,810	<b>8,703,465</b>



TABLE 2 CROP ESTIMATES AGAINST FIVE YEAR AVERAGE

		2018/19	2019/20	2020/21	2021/22	2022/23	5-year average	2023/24
Wheat	<i>ha</i>	2,000,400	2,112,100	2,201,600	2,195,400	2,185,955	2,139,100	2,230,600
	<i>t</i>	3,156,000	3,251,500	4,923,000	4,705,500	7,330,250	4,673,300	4,866,005
Durum	<i>ha</i>	42,000	42,900	37,800	35,800	37,200	39,100	36,600
	<i>t</i>	75,220	82,560	114,870	108,350	142,200	104,600	101,470
Barley	<i>ha</i>	818,600	990,000	953,500	917,400	858,600	907,600	842,700
	<i>t</i>	1,725,800	2,091,000	2,560,000	2,151,700	3,080,500	2,321,800	2,232,310
Oats	<i>ha</i>	74,700	72,800	77,700	75,300	75,700	75,200	72,600
	<i>t</i>	121,500	120,450	173,700	162,400	230,950	161,800	143,410
Rye	<i>ha</i>	5,300	5,700	8,600	6,600	9,100	7,100	9,000
	<i>t</i>	3,150	4,250	11,100	4,600	16,250	7,900	8,240
Triticale	<i>ha</i>	29,400	32,300	28,800	21,400	18,300	26,000	17,600
	<i>t</i>	33,470	42,250	70,750	30,150	49,600	45,200	32,480
Peas	<i>ha</i>	65,700	65,300	70,000	66,800	69,700	67,500	62,700
	<i>t</i>	53,620	70,100	113,700	92,500	137,550	93,500	90,050
Lupins	<i>ha</i>	61,000	51,100	50,600	45,900	54,200	52,600	52,900
	<i>t</i>	59,950	53,800	75,650	63,400	124,650	75,500	73,510
Beans	<i>ha</i>	63,100	98,400	100,600	107,300	102,100	94,300	105,700
	<i>t</i>	79,730	156,650	212,700	247,280	318,800	203,000	217,425
Chickpeas	<i>ha</i>	33,600	22,200	29,500	13,500	43,500	28,500	38,400
	<i>t</i>	23,870	17,000	44,050	15,450	81,650	36,400	33,900
Lentils	<i>ha</i>	149,800	164,300	186,700	197,200	191,600	177,900	240,200
	<i>t</i>	177,870	220,400	345,950	339,180	527,250	322,100	362,260
Vetch	<i>ha</i>	28,400	34,000	36,400	34,400	37,900	34,200	34,400
	<i>t</i>	5,810	9,420	27,750	15,050	63,950	24,400	24,405
Canola	<i>ha</i>	200,100	206,600	220,800	224,700	258,400	222,100	267,200
	<i>t</i>	278,900	347,400	461,800	509,750	684,000	456,400	518,000
Hay (not in total)	<i>ha</i>	436,000	320,600	263,500	220,800	210,600	290,300	218,300
	<i>t</i>	1,297,000	1,258,900	1,195,000	852,000	989,950	1,118,600	910,940
Total	<i>ha</i>	3,572,100	3,897,700	4,002,600	3,941,700	3,942,255	3,871,200	<b>4,010,600</b>
	<i>t</i>	5,794,890	6,466,780	9,135,020	8,445,310	12,787,600	8,525,900	<b>8,703,465</b>