

# **Crop and Pasture Report South Australia**

2021-22 Harvest

January 2022



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# **State Summary**

# Weather

- November rainfall was above average across most agricultural districts with large areas of very
  much above average rainfall on Eyre Peninsula, Northern Yorke Peninsula, Upper and Mid North.
  Kangaroo Island, Southern Yorke Peninsula, Southern Mallee and the Upper South East
  received average rainfall and the Lower South East received below average rainfall.
- December rainfall was very much below average across most agricultural areas with only parts of Western Eyre Peninsula and the Northern Mallee being below average.
- Mean maximum temperatures for November were average on Kangaroo Island and the South
  East and below average to very much below average in the remainder of the agricultural districts.
   December mean maximums were below average in the Far West and above average in the
  Northern and Southern Mallee and average in the remainder of the agricultural districts.
- Mean minimum temperatures for November varied from above average in the Far West region of
  to below average in the Lower South East with most areas being average. Mean minimum
  temperatures in December were average on Lower Eyre Peninsula, Upper North, Southern Yorke
  Peninsula, Lower North, Adelaide Hills and Northern Mallee and below average in most other
  agricultural districts.
- Severe thunderstorms with strong winds, hail and heavy rain in early November affected parts of the Upper North.

# **Crops**

- Well above November rainfall increased yields in later districts but had little or no benefit to yields in the earlier maturing areas.
- Many crops yielded better than expected and crop production is now estimated at 8.32 million tonnes from 3.9 million hectares. This is above the ten-year average of 7.73 million tonnes.
- Harvest was completed in most districts by the end of December with only some farmers in the later districts still harvesting in January.
- Cool weather conditions delayed harvest during November and early December in most agricultural districts except for the South East,
- The Far West and northern parts of Western Eyre Peninsula and parts of the Upper and Mid North observed their highest November rain on record.
- Early maturing crops were weather damaged causing downgrading of wheat, barley and pulse crops. The wet weather had minimal effect on the grain quality of most later maturing crops.
- On Northern Eyre Peninsula, northern Upper North and the Murray Mallee, crops on shallow or heavier textured soils were severely affected by the dry spring, and crop yields were below to very much below average.
- In Northern Eyre Peninsula crops on the lighter textured soils yielded average to above average.
- In the Mallee even crops on the better soil types yielded below average.
- Late spring frosts, strong winds and hailstorms severely damaged crops in isolated areas across
  the State. Although these events were devastating for individual farmers, the overall impact on
  the crop production was relatively small.
- Cereal yields were well above average in parts of the Upper, Mid and Lower North and South East.
- Most wheat grain was delivered as APW and ASW with some downgraded to General Purpose and Feed, depending on the severity of weather damage. Only a relatively small percentage was classified as Hard.
- Barley crops sown dry into wheat stubbles were highly contaminated with wheat, but most was still classified as Feed 1 or 2. There was a smaller percentage than normal classified as malt.
- As most canola crops are grown in the better rainfall areas of the state, yields were generally average to well above average, with reasonable to excellent oil content.

- Yields of pulse crops varied considerably across the State, being well below average in the northern part of the Upper North and Northern and Southern Mallee, average to above average yields in the Mid North, Yorke Peninsula and Fleurieu and Kangaroo Island, and well above average yields in the Lower North and South East.
- Summer weeds germinated after November rains in all districts except the South East and Kangaroo Island. Spraying to control weeds began in mid-December and continued into January with most farmers having sprayed one herbicide application to control the initial growth.
- With a shortage of some herbicides, many farmers are considering using livestock grazing to control further germination of weeds rather than spraying.
- Low mice numbers in several districts could increase given high grain losses from hail and wind damage in some paddocks and numbers are currently being monitored.
- A limited supply of mice bait might restrict control.

# **Pastures**

- Most pasture paddocks have adequate soil cover to provide protection from erosion however the quality and quantity of feed deteriorated after November rains.
- Livestock are mainly grazing crop stubbles, which generally contain reasonable to good amounts
  of quality feed from spilt grain and germinating volunteer crops and weeds.
- In the northern part of the Upper North, and Lower Murray, Northern and Southern Mallee districts, stubble feed will be exhausted quickly and producers have already commenced containment and supplementary feeding of livestock.
- Perennial pastures grew rapidly in areas that received above average November rainfall and have provided quality feed.
- Perennial pasture in the South East deteriorated with dry spring and early summer conditions.
- Livestock are generally in good to excellent condition across the State and farmers have been reducing numbers to take advantage of high prices and reduce grazing pressure.
- Most districts have adequate to good supplies of hay and grain for livestock.

# **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 PIRSA 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	442 000	146 000	369 000	171 000	247 000	248 000	72 000	5 400
	t	707 000	513 000	684 000	614 000	506 500	720 000	290 000	17 500
Durum	ha t	0	0	0	13 500 43 000	5 000 15 000	5 000 14 500	4 200 16 500	0
Barley	ha t	91 000 182 000	68 000 250 000	77 000 146 000	161 000 573 000	91 500 201 000	96 500 304 000	26 000 109 500	2 400 8 200
Oats	ha	14 000	3 500	4 600	3 800	4 800	4 500	2 500	1 600
	t	17 000	8 300	6 700	10 300	7 700	11 000	7 500	4 500
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	1 400	700	2 800	2 200	4 400	1 400	400
Peas	ha	2 500	2 200	4 200	12 700	15 300	14 300	6 100	400
	t	3 100	3 750	4 200	16 500	18 300	21 000	14 600	600
Lupins	ha	1 500	10 000	5 000	1 000	3 000	1 800	500	1 000
	t	1 650	16 000	6 000	1 200	3 200	2 200	900	1 600
Beans	ha	400	9 200	400	11 200	13 500	13 000	2 500	3 400
	t	520	14 700	360	19 600	17 400	20 000	7 500	7 500
Chickpeas	ha	0	400	200	4 000	3 200	2 000	300	0
	t	0	500	200	5 600	3 800	2 500	550	0
Lentils	ha	2 400	8 000	2 000	139 000	12 000	16 000	7 000	0
	t	2 650	14 600	2 000	250 000	15 500	20 000	15 400	0
Vetch	ha	2 400	3 600	2 000	2 600	5 600	4 300	300	0
	t	700	1 800	900	1 800	1 700	2 500	200	0
Canola	ha	5 700	74 000	7 500	11 800	22 000	24 500	4 300	4 700
	t	7 400	162 500	9 600	21 250	33 200	38 800	9 500	11 700
Hay	ha	5 500	5 600	6 200	13 500	12 000	33 500	8 500	7 500
(not in total)	t	13 000	25 000	15 000	52 000	38 500	142 000	31 500	19 000
Total	ha	562 300	325 400	472 400	532 600	424 100	431 600	126 100	19 000
	t	922 520	986 550	860 660	1 559 050	825 500	1 160 900	473 550	52 000

TABLE 1 CROP ESTIMATES BY DISTRICT (CONT)

		Central Hills & Fleurieu	Lower Murray	Nth Murray Mallee	Sth Murray Mallee	Upper South East	Lower South East	State Total
Wheat	ha	6 700	50 500	220 000	101 000	81 000	23 000	2 182 600
Wilde	t	18 800	55 500	132 500	101 000	188 000	108 500	4 656 300
Durum	ha	300	500	0	0	7 300	0	35 800
	t	650	600	0	0	16 000	0	106 250
Barley	ha	12 000	75 000	62 000	120 000	39 000	7 000	928 400
	t	34 000	90 000	37 000	120 000	117 000	49 000	2 220 700
Oats	ha	2 100	2 000	2 200	4 000	21 000	4 700	75 300
	t	5 000	2 000	1 300	3 600	53 000	23 000	160 900
Rye	ha	0	1 000	3 000	1 000	1 600	0	6 600
	t	0	900	1 200	500	1 900	0	4 500
Triticale	ha	500	2 000	1 500	10 500	1 000	500	21 800
	t	1 250	2 000	600	7 000	2 300	2 000	28 950
Peas	ha	1 000	1 500	1 500	2 000	2 900	400	67 000
	t	1 600	1 200	450	600	4 600	1 000	91 500
Lupins	ha	1 600	800	3 000	3 000	11 000	2 700	45 900
	t	2 500	650	900	900	15 200	5 400	58 300
Beans	ha	300	0	0	2 000	28 000	13 800	97 700
	t	550	0	0	600	78 500	48 000	215 230
Chickpeas	ha	200	800	1 000	1 000	600	200	13 900
	t	200	650	300	300	1 000	350	15 950
Lentils	ha	300	1 000	300	3 000	3 000	200	194 200
	t	420	800	110	900	6 400	400	329 180
Vetch	ha	0	3 100	4 200	5 100	1 200	0	34 400
	t	0	1 500	1 250	1 500	1 200	0	15 050
Canola	ha	2 800	1 000	2 200	3 000	24 500	15 500	203 500
	t	4 500	700	650	2 100	61 500	54 000	417 400
Hay	ha	27 000	10 000	2 500	25 000	37 000	27 000	220 800
(not in total)	t	114 000	25 000	1 500	50 500	185 000	140 000	852 000
Total	ha	27 800	139 200	300 900	147 600	222 100	68 000	3 907 100
	t	69 470	156 500	176 260	239 000	546 600	291 650	8 320 210

TABLE 2 CROP ESTIMATES AGAINST FIVE YEAR AVERAGE

		2016/17	2017/18	2018/19	2019/20	2020/21	5 year ave	2021/22
Wheat	ha	2 237 700	2 024 100	2 000 400	2 112 100	2 201 600	2 115 200	2 182 600
	t	6 460 500	4 122 500	3 156 000	3 251 500	4 923 000	4 382 700	4 656 300
Durum	ha	55 200	55 700	42 000	42 900	37 800	46 700	35 800
	t	209 700	139 400	75 220	82 560	114 870	124 400	106 250
Barley	ha	799 300	714 600	818 600	990 000	953 500	855 200	928 400
•	t	2 774 800	1 640 700	1 725 800	2 091 000	2 560 000	2 158 500	2 220 700
Oats	ha	94 600	77 000	75 700	72 800	77 700	79 600	75 300
	t	258 700	149 300	121 500	120 450	173 700	164 700	160 900
Rye	ha	10 500	6 500	5 300	5 700	8 600	7 300	6 600
•	t	15 700	5 100	3 150	4 250	11 100	7 900	4 500
Triticale	ha	21 500	19 900	29 400	32 300	28 800	26 400	21 800
	t	58 130	35 050	33 500	42 250	70 750	47 900	28 950
Peas	ha	97 300	90 200	65 700	65 300	70 000	77 700	67 000
	t	176 100	113 750	53 600	70 100	113 700	105 500	91 500
Lupins	ha	76 800	62 800	61 000	51 100	50 600	60 500	45 900
·	t	134 800	53 400	59 950	53 800	75 650	75 500	58 300
Beans	ha	75 500	67 400	63 100	98 400	100 600	81 000	97 700
	t	166 530	101 660	79 680	156 650	212 700	143 400	215 230
Chickpeas	ha	20 500	29 700	33 600	22 200	29 500	27 100	13 900
	t	34 360	33 580	23 870	17 000	44 050	30 600	15 950
Lentils	ha	169 600	184 700	149 800	164 300	184 700	170 600	194 200
	t	447 680	260 200	177 870	220 400	345 950	290 400	329 180
Vetch	ha	32 200	32 400	28 400	34 000	36 400	32 700	34 400
	t	34 800	15 350	5 760	9 420	27 750	18 600	15 050
Canola	ha	203 000	200 200	200 100	206 600	220 800	206 100	203 500
	t	372 900	261 400	278 900	347 400	461 800	344 500	417 400
Hay	ha	258 800	202 900	370 000	320 600	258 000	282 100	220 800
(not in total)	t	1 454 300	948 600	1 104 000	1 258 900	1 195 000	1 192 200	852 000
Total	ha	3 893 700	3 565 200	3 572 100	3 897 700	4 000 600	3 785 900	3 907 100
	t	11 144 700	6 931 400	5 794 900	6 466 800	9 135 000	7 894 600	8 320 200

# **District Reports**

# **Western Eyre Peninsula**

#### Weather

- Rainfall for November was very much above average with storms in the first half of the month.
   The Far West and northern part of the district recorded its highest November rainfall on record.
- December rainfall was below average to very much below average.
- Mean maximum temperatures were very much below average for November. December temperatures were below average in the Far West and average in the remainder of the district.
- Mean minimum temperatures in November were above average in the Far West and average in the remainder of the district. December mean minimums were below average.

# **Crops**

- Most growers completed harvest before Christmas despite delays from cool, wet weather in November
- Crop yields were better than expected and on better soil types were mostly above the 10-year average.
- Rainfall at harvest significantly damaged grain quality and most of the wheat crop was
  downgraded due to sprouted grain. Some very early crops harvested before the rain had good
  quality grain. Fortunately, good yields and high prices for feed wheat still made 2021 a profitable
  season for most farmers.
- Cereals west of Ceduna yielded 1.4 to 2.0 t/ha.
- Crop yields east of Ceduna varied significantly depending on soil type, with loamier soils near Chimbingina and Minnipa yielding 1.3 to 2.0 to t/ha and some exceptional yields of more than 2.5 t/ha in some paddocks.
- Lighter soils from Minnipa to Koongawa yielded 1.8 to 2.5 t/ha, whilst heavier red flats yielded 1.0 to 1.2. t/ha. Coastal districts near Streaky Bay yielded 1.7 to 2.0 t/ha and near Pt Kenny yields were 2.5 to 3.5 t/ha.
- Heavier soils around Chandada and Mudamuckla were severely moisture stressed from dry spring conditions and yielded less than 0.5 t/ha on heavier textured shallow soils.
- Although several significant frosts were recorded in some areas only small low-lying areas of paddocks were affected.
- Yields of pulse crops were not affected by frost and were of average to above average yields.
   Pea yields ranged from 1.0 to 2.0 t/ha and lentils 0.8 to 1.5 t/ha.
- Where grain was significantly weather damaged, farmers will need to source good quality seed for sowing in 2022.
- Summer weeds germinated rapidly after November rains and most farmers applied a first summer herbicide spray before Christmas.
- Spring rainfall stimulated increased snail activity at harvest which will require farmers to undertake management activities to reduce numbers until sowing time.

- Stubble paddocks generally have adequate surface cover but only limited amounts of quality feed
- Most producers have replenished hay and grain supplies to supplement paddock feed summer and autumn.
- Livestock are in generally good condition.

# **Lower Eyre Peninsula**

# Weather

- Rainfall for November was above average in the southern part of the district and very much above average in the north. December rainfall was very much below average across the district.
- Mean maximum temperatures were below average for November and average for December.
- Mean minimum temperatures were average to above average for November and average for December.

# **Crops**

- Most farmers completed harvest before Christmas despite cool and damp conditions frustrating harvest during November and early December.
- Yields were better than expected given very dry spring conditions, with most districts reporting cereal yields of 3.2 to 4.0 t/ha on better soil types.
- Cereals on heavier soils around Tumby Bay and Butler yielded 2.0 to 2.5 t/ha.
- Some grain crops sprouted near Karkoo and Mt Hill, downgrading their quality. Later crop ripening in other districts alleviated significant grain quality problems.
- Given the high yields, grain protein levels were generally good with much of the wheat delivered as ASW or APW, and small amounts achieving Hard quality.
- Canola generally performed well, producing yields of 1.8 to 2.5 t/ha and oil content above 43%.
- Lentil and pea crops produced average to above average yields, in the range 1.5 to 2.0 t/ha, with isolated reports of lentils yielding over 2.5 t/ha.
- Bean yields varied from 1.0 to 2.0 t/ha, depending on soil type and rainfall distribution.
- November rains resulted in a rapid germination of summer weeds and most farmers began spraying these immediately after harvest.
- Despite a late flight of native budworm moths in spring, normal pest control programs were sufficient to control them, and no significant crop damage was reported.
- Russian wheat aphids were in high numbers in pastures and volunteer cereal crops in spring.
   Effective summer weed control and seed treatment prior to sowing should effectively manage numbers in 2022.

- Stubble and pasture paddocks contain high amounts of quality feed.
- Livestock are in excellent condition and grazed stubbles as they became available after harvest during December.
- Most farmers cut hay to replenish on farm supplies and have enough for supplementary feeding in late summer and autumn.

# **Eastern Eyre Peninsula**

## Weather

- Rainfall for November was well above average across the district and the highest on record around Kimba. December rainfall was generally very much below average.
- Mean maximum temperatures were generally very much below average for November and average in December.
- Mean minimum temperatures in November were average. October mean minimums were below average.
- Strong winds were recorded in mid-November.

# Crops

- Rainfall in November slowed crop maturity with many farmers harvesting paddocks in patches as sections of crops ripened.
- Most farmers finished harvest before Christmas despite cool and damp conditions causing delays.
- Very dry spring conditions resulted in very poor yields (less than 1.0 t/ha) on heavier textured soils near Kimba, Buckleboo and north of Cowell.
- In other districts, yields were generally better than expected with most above the long-term average.
- Cereals on loamier soil types from Darke Peak to Wharminda, achieved yields of 2.0 to 3.5 t/ha, except for hail affected crops,
- Cereals on heavier soil types south of Cowell produced around 1.2 to 1.5 t/ha.
- Large areas around Tooligie were significantly affected by frost with large parts of paddocks yielding less than 0.5 t/ha. Elsewhere in the district frost damage was restricted to small portions of paddocks.
- Grain quality was highly variable depending on the effect of late rains. Grain proteins were high, but sprouted grain in some districts significantly downgraded quality. Good prices and above average yields still made it a profitable season for most farmers.
- Canola crops in the Cleve Hills yielded well, from 1.2 to 1.5 t/ha, with good oil content from 40 to 47%.
- Pulse crops generally yielded above the long-term average, with lupins, peas and lentils all yielding more than 1.0 t/ha.
- Pea and lupin grain quality was generally good, with some seed staining in lentils.
- Most farmers started spraying summer weeds as soon as they finished harvest.

- Pastures have some biomass, but the quality of dry feed has been reduced by rain.
- A germination of summer weeds and volunteer crops in stubble paddocks provided some feed for livestock.
- Most farmers plan to supplementary or containment-feed livestock to maintain their condition.
- There are adequate supplies of hay and grain on-farm for livestock feed.

# **Upper North**

#### Weather

- Rainfall for November was very much above average across the district with the south west portion receiving its highest rainfall on record.
- December rainfall was very much below average.
- Mean maximum temperatures were below average to very much below average for November and average for December.
- Mean minimum temperatures in November were average. Mean minimums in December were below average in the south-east of the district and average in the remainder.
- Thunderstorms brought strong winds, heavy rain to the southern part of the district in early November with a strip of hail from Beetaloo to Caltowie.

# **Crops**

- Heavy rain in early to mid-November delayed harvest in the eastern part of the district.
- Once harvest resumed after the rain, wheat samples were tested for weather damage which slowed delivery of grain.
- Most of the harvest was completed by the end of December with only a few farmers in the southern and eastern parts of the district still harvesting.
- Earlier maturing wheat crops were more severely weather damaged and significantly downgraded.
- Later crops, particularly in the south-east of the district, benefited from the November rains.
- Wheat yields in the northern part of the district were well below average but mainly of good quality. Thirty percent was downgraded to General Purpose standard and the remainder ASW, APW and a small amount of Hard.
- In the southern part of the district, yields were average to above average with late rain and cool conditions during flowering and grain fill benefiting later maturing crops. Although some grain was downgraded to General Purpose, most has been classified as APW or ASW.
- Hail and strong winds caused severe damage to ripe crops in a narrow strip from Beetaloo to Caltowie with the worst affected crops suffering 100% loss.
- Many dry-sown barley crops sown into wheat stubble had high levels of wheat contamination and were downgraded to Feed 1 or 2.
- Field pea and lentil crops in the northern part of the district yielded well below average, while in the south and along the ranges, yields were average to above average.
- Canola yields were generally average to above average, most grown in the better rainfall parts of the district.
- Bean crops generally suffered moisture stress with below average yields.
- Summer weeds germinated rapidly following heavy rainfall in November. Most farmers began spraying weeds soon after harvest and continued into January. Most have sprayed paddocks once.
- Mice are at low numbers in the south west of the district and given the grain losses from hail and wind, could increase rapidly in some paddocks.

- Pastures in the northern part of the district still contain reasonable amounts of quality feed, with most farmers having lower than normal stock numbers.
- Further south, pastures still contain some feed although quality has suffered following heavy November rains.
- Sown pastures provided high amounts of quality feed, but this has now been exhausted.
- Livestock are currently grazing crop stubbles that have a significant germination of summer weeds and self-sown crop plants.
- Most producers are looking at increasing livestock numbers where possible.

# **Mid North**

#### Weather

- Rainfall for November was very much above average across the district with the northern part receiving its highest rainfall on record. December rainfall was very much below average.
- Mean maximum temperatures were below average for November and average for December.
- Mean minimum temperatures were average for November. December minimum temperatures were below average in the west and average in the remainder of the district.

# **Crops**

- Harvest was delayed by rain in November.
- Most farmers completed harvest by the end of December with only a few continuing into early January.
- In the western part of the district, yields of both wheat and barley were average to slightly above average.
- East of Clare, barley crops yielded average to slightly above average and wheat was average.
- The central part of district had above average yields for both wheat and barley.
- Barley crops harvested before the rain had very good grain quality but after the rain most barley was graded Feed 1 and 2. Some malting was delivered.
- Wheat grain quality was reasonable with only a small amount being downgraded.
- Durum produced yields similar to bread wheat, however quality varied with the majority delivered as DR1 to 3 with a small amount of Feed.
- Canola yields were above average across the main canola growing areas and had high oil content.
- Bean yields were average to slightly above average, proving better than earlier expectations.
- Lentil crops yielded average to slightly below average.
- Field peas produced average to above average yields and lupins were about average.
- Chickpea crop yields were close to average.
- Summer weeds germinated after November rains with some farmers spraying to control these in mid-December, before completing harvest. Most farmers waited until harvest was completed before spraying weeds.
- Mice are at low numbers across most of the district. As a result of higher grain losses last harvest, low mice numbers have remained over the year and could increase. Bait is in limited supply, reducing the ability to control numbers.

- Pastures paddocks contain low amounts of quality feed, with the rain in November reducing pasture quality.
- Livestock are grazing cereal and pulse stubbles, with reasonable amounts of quality feed available from grain and summer weeds.
- Un-arable hills country has good ground cover with growth of perennial grasses.
- Most producers are likely to maintain current livestock numbers.

# **Lower North**

#### Weather

- November rainfall was above average in the south to very much above in the north of the district.
   Rainfall for December was very much below average.
- Mean maximum temperatures were below average for November and average for December.
- Mean minimum temperatures were average for November and average to below average for December.
- Strong winds were recorded during November.

# **Crops**

- Crop damage from hail in late October was up to 85% in isolated areas, however overall damage was limited.
- Despite above average November rainfall, grain quality was generally good. Some grain was downgraded but discounts were relatively minor.
- Wet conditions delayed harvest for some farmers by two weeks, however dry conditions during December enabled rapid harvest progress.
- Harvest was almost complete by the end of December.
- Strong winds during November caused crops losses in unharvested barley and canola crops.
- Wet conditions enabled rapid growth of some weeds in pea and lentil crops, so most were crop topped to enable easier harvest.
- Some pea and lentil grain was rejected due to weed contamination and required recleaning to meet delivery standards. Wireweed, thistles and wild lettuce also caused harvesting issues in other crops but had little effect on yield or quality.
- Yields of all crops were well above average, particularly in the eastern part of the district where crops benefited from late October and November rainfall.
- Summer weeds germinated and grew rapidly. Some paddocks, mainly pulse stubbles, were sprayed to conserve moisture for next season's wheat crops.
- Most farmers were able to obtain enough herbicides for summer weed control. With more summer rain, most stocks of herbicide might be used, reducing the amount available for presowing weed control.
- High grain losses from hail, wind and harvest produced large amounts of feed for mice. Mild
  conditions and plenty of feed could result in a rapid build-up in mice numbers and farmers will
  need to monitor paddocks for mice activity.
- Grazing with livestock and the use of "Speed Tillers" could help to reduce mice feed supplies.
- Later-maturing medic seed crops benefited from November rains, prompting a significant increase in yields. Earlier-maturing varieties will have lower yields as they matured before the late rains.
- Lime sales have increased as more farmers plan to apply lime to acidic soils over the next few months.
- Fertiliser prices have more than doubled and many farmers are likely to reduce application rates, particularly of phosphorus, to reduce costs. Nitrogen fertiliser prices have almost tripled, however there should be adequate supply.

- High amounts of livestock feed are available from dry pasture feed and crop stubbles.
- Most dry pasture feed has reasonable quality with only minimal weather damage.
- There are high amounts of hay and grain available for livestock consumption.
- Livestock across the district are in good to very good condition.
- Most producers sold lambs earlier than normal to take advantage of high prices and some will buy in additional stock to graze stubbles.

# Yorke Peninsula

## Weather

- Rainfall for November was average in the Southern Yorke Peninsula, above average in Central Yorke Peninsula and very much above average in Northern Yorke Peninsula. December rainfall was very much below average.
- Mean maximum temperatures were below average for November and average for December.
- Mean minimum temperatures for November were average. December temperatures were average in the southern half and below average in the northern half of the district.

# **Crops**

- The completion of harvest was delayed due to rain during November. Most reaping was completed by mid-December and all had finished by the end of December.
- Most grain yields were average to above average with only some small areas along the coast with saline or shallow soils producing below average yields.
- Wheat yields were better than expected, ranging from slightly below average to slightly above average. Grain protein content was lower than normal and most grain was delivered as APW or ASW.
- Barley crops did not yield as well as wheat and yields were generally average across the district.
- Lentil yields were generally average to above average across most of the district. Only crops
  grown on some saline soils produced below average yields. Grain quality was excellent with only
  very minor reports of damage from hail.
- Pea crop yields were generally below average.
- Canola yields were average to slightly above average, with moderate grain oil content. Growing
  genetically modified canola enabled good weed control and reduced pod shatter.
- Farmers started spraying summer weeds before Christmas to conserve soil moisture and nutrients. The southern half of Yorke Peninsula did not receive enough rain during November to germinate many summer weeds.
- Snails were less of an issue than normal during harvest. Grain only required cleaning to remove snails in the areas where they are normally a problem.
- Seed cleaning is under way in preparation for the new season.
- Crop planning took place prior to harvest. Preliminary seeding intentions for the season are similar to last year with some reduction in barley and replacement with lentils.
- Soil chemical residues could limit crop choices in 2022 as IMI tolerant wheat varieties are required where residues remain high.
- Mice numbers began to increase, particularly in paddocks of windrowed barley. Numbers will require management prior to seeding in 2022.
- There will be a shortage of several herbicides combined with large price increases in 2022. In
  most cases alternative herbicide options can be used however, weed control might be affected in
  some situations, potentially reducing crop yields.

- Livestock are grazing crop stubbles, with wheat, barley and lentil stubbles providing good amounts of feed due to harvest losses and germination of summer weeds and volunteer crop plants.
- As a result of dry spring conditions, less pasture hay was cut than normal. A large percentage of oaten hay was down-graded due to weather damage and could be available for livestock feed.

# Adelaide Hills, Fleurieu & Kangaroo Island

#### Weather

- November rainfall was average to above average and December rainfall was very much below average.
- Mean maximum temperatures were average to below average for November and average for December.

# **Crops**

#### Central Hills/Fleurieu Peninsula

- November rainfall and winds across the hills and Fleurieu slowed crop harvesting and damaged some hay on the ground. Up to 60mm of rain was recorded in some areas.
- The start of harvest was delayed by cold and wet weather until the second half of December and continued into the new year.
- Harvest was 60% completed by the end of December.
- Yields vary across the district from below average to well above average. The variation relates to
  planting date relative to soil type and the amount of water logging experienced earlier in the
  season.
- Some wheat and barley grain was downgraded in quality but overall losses have not been severe.
- Summer weeds are present, but not of concern yet.
- Herbicide shortages for summer weed control could affect the amount of stored soil moisture available for 2022 season.

# Kangaroo Island

- Harvest was underway and on schedule for a normal completion date.
- There were harvest delays in broad beans as crops were not yet ripe.
- Canola crops produced average to well above average yields, with the average being about 2.5 tonnes per hectare.
- The wet winter limited crop growth early in the season but a long spring increased grain size, offsetting most of the earlier losses.
- Yields of most wheat, barley and oat crops were average with some above average.
- Overall, grain quality is average and unaffected by late rains.

# **Pastures**

#### Central Hills/Fleurieu Peninsula

- There is a good supply of paddock feed available.
- Dry conditions early in spring has reduced volume and quality of pasture feed.
- Hay and grain are in plentiful supply.
- Livestock are in good condition.

# Kangaroo Island

- Many pastures had a big spring finish which compensated for the lost growth caused by a late break and cold winter conditions
- Hay yields were below average and access to local hay is very limited.
- There is adequate grain available for purchase, but prices are high.
- Most ewes have recovered well from their poor condition in August and September.

# **Lower Murray**

## Weather

- Rainfall for November was very much above average in the north and above average in the south. December rainfall was very much below average.
- Mean maximum temperatures were below average for November and average for December.
- Mean minimum temperatures were average in November and December.
- Some strong winds raised dust.

# **Crops**

- Crop yields varied markedly across this district, with average yields achieved in the south and well below average yields in the northern areas.
- Grain and hay quality was affected by late October and November rainfall, leading to some downgrading.
- Hail and strong winds in late October caused 10 to 30% crop damage in a strip of land from Palmer to Bow Hill.
- Pulse and canola yields varied between average and well below average across the district.
- Most farmers controlled the first germination of summer weeds in November and December with herbicide. Further control may be more difficult, due to the low availability and high prices of chemicals.
- Farmers will need to carefully manage pasture and stubble cover on high-risk soils and implement other land protection strategies to reduce wind erosion in coming months.

- Pasture feed availability is very poor in the northern part of the district and farmers have already begun supplementary and some containment-feeding.
- Farmers will need to maintain as much of the current low levels of ground cover to minimise the risk of wind erosion over the summer and autumn.

# **Northern Murray Mallee**

#### Weather

- November rainfall was very much above average in the north and above average in the south of the district. Rainfall for December was below average in the northwest and very much below average in the remainder of the district.
- Mean maximum temperatures were below average for November and above average for December.
- Mean minimum temperatures were average in November and December.
- Strong winds were recorded on several occasions throughout the period.

# **Crops**

- Crop yields were well below average across the district and November rains generally were too late to benefit yields.
- Many crops in the Waikerie district were not reaped or yielded very poorly.
- While there was some downgrading of grain quality due to rain damage, the effects were not as great as in other districts.
- Crops on deep sands, shallow-stone and heavy textured flats yielded very poorly after suffering significant moisture stress.
- Cereal yields generally averaged between 0.3tha to 1t/ha, with a few areas faring slightly better.
- Very few pulse and canola crops were sown this year. Those that were produced well below average yields.
- A 5 km wide strip of hail damage in late October caused up to 100% crop damage in many paddocks, falling back to 10 to 20% damage on the edges of the strip.
- Summer weeds germinated following November rains and most farmers applied herbicide to control the initial growth.
- Many farmers used sensor technology which greatly reduced the amount of herbicide used, which might prove vital for later applications given the short supply and high cost of some products.
- Many mixed farmers are likely to allow livestock to graze rather than spray summer weeds.
- On-farm grain storage appears to be increasing across the district.
- Lighter textured soils in many areas have minimal soil cover and will be very prone to wind erosion going into autumn.

- The availability of pasture feed is very low.
- Livestock are grazing stubble paddocks and summer weeds.
- Some farmers have already commenced containment and supplementary feeding of sheep to ensure they are maintained in good condition.
- With many paddocks extremely vulnerable to erosion, farmers will need to carefully manage livestock grazing to protect soil cover.

# **Southern Murray Mallee**

## Weather

- Rainfall in November was generally average with small areas above average. December rainfall was generally very much below average with an area around Pinnaroo of below average rainfall.
- Mean maximum temperatures were average to below average for November and average to above average for December.
- Mean minimum temperatures in November were average. Temperatures in December were below average in the south and average in the remainder of the district.
- Strong winds were recorded on several days during November.

# **Crops**

- Harvest was completed prior to Christmas and crop yields were well below average.
- Some late frosts caused further yield loss to crops already suffering moisture stress.
- Crops on heavy textured flats, deep sands and shallow stony soils were severely affected by dry conditions and produced very poor yields.
- Some areas around Borrika had their worst production for many years.
- Average cereal yields ranged between 0.5 t/ha to 1.5 t/ha across the district.
- November rains caused some damage to grain, but most crops produced reasonable quality grain.
- Yields of pulse and canola crops were extremely low this season.
- Hay yields were also well below average.
- There was a rapid germination of summer weeds after rain in November and most farmers sprayed herbicide once to control early growth.
- Many farmers plan to reduce summer spraying and use more livestock grazing to manage weeds in the summer and autumn period, due to the reduced availability and high price of herbicides.
- Many areas in the district are very vulnerable to wind erosion after another poor season of poor crop and pasture growth.

- Livestock are mainly grazing stubble paddocks and feed supply is rapidly being depleted.
- Many farmers commenced confinement feeding to retain livestock and maintain soil cover.
- There has been some reduction of livestock numbers in the last few months, as farmers take advantage of good prices on offer.

# **Upper South East**

## Weather

- Rainfall in November was generally average with a small area in the northwest corner above average. December rainfall was very much below average across the district.
- Mean maximum temperatures were average to above average for September and average to above average for December.
- Mean minimum temperatures were below average in the south west and average in the remainder of the district for November. December temperatures were generally below average.

# **Crops**

- Harvest was completed smoothly and quickly with few delays.
- Wheat yields varied widely from less than 0.5 t/ha up to 6 t/ha.
- Frost caused significant yield losses, depending on the time of flowering and soil type.
- The worst frost-affected areas were mostly west of Bordertown on sandier textured soils where crops were damaged by three or four major frosts during the season.
- Barley crops were not as severely damaged by frost and although yields varied depending on soil type, most were close to average.
- Canola yields were exceptional with most yielding over 3 t/ha, which is well above average.
- Beans crops also yielded well above average with most 3 to 4 t/ha across the district.
- High bean and canola yields and prices helped to offset lower returns from wheat crops.
- Lentil crops yielded above average with most close to 2.5 t/ha.
- Dryland lucerne seed crops performed poorly due to dry conditions in spring and early summer, producing low seed yields. Irrigated crops have grown and set high amounts of seed under warm and dry conditions and average to above average yields are expected.

- Livestock are grazing crop stubbles, that contain high amounts of quality feed.
- Some producers sowed brassica and millet summer feed mixes and although these have not reached their full feed potential due to dry conditions, they have provided spring lambs with good quality feed.
- Irrigated lucerne hay producers had to water for an extended period, because of dry spring and early summer weather and those with diesel pumps have been affected by high diesel prices.
- Some isolated areas of pastures were damaged by high numbers of wingless grasshoppers, before they were controlled.
- High amounts of pasture feed and crop stubbles have kept livestock in excellent condition.
   Producers have commenced supplementary feeding livestock and there are high amounts of hay and grain reserves across the district.
- Producers are receiving high prices for cattle and sheep,
- Local livestock prices may fluctuate in the short term due to the closure of the local abattoir as a result of COVID outbreaks and continued dry conditions.

# **Lower South East**

#### Weather

- Rainfall for November was generally below average and for December was very much below average.
- Mean maximum temperatures were generally average in November and December.
- Mean minimum temperatures were average to below average for November and December.

# **Crops**

- Dry conditions in late spring and early summer enabled harvest to be completed by early January
  in the northern part of the district. Harvest continues in the remainder of the district and is unlikely
  to be completed until the end of February.
- Some wheat crops in the northern part of the district were severely affected by frost, and yields varied from 0.5 to 6 t/ha depending on time of flowering and soil type. Most crops sown in early June were severely damaged by frost.
- Frost did not damage crops in the southern part of the district and wheat yields ranged from 8 to 11 t/ha.
- Barley crops were not affected by frosts and yielded well above average with most yielding close to 7t/ha.
- Bean crop yields were diminished by dry spring conditions, however most still yielded 3.5 to 4 t/ha.
- Canola crops yielded 3.5 to 4 t/ha in the northern part of the district and 4 to 5 t/ha in the south and were of above average oil content.

- Continued dry conditions from November through to early January reduced the quality and quantity of pastures across the district.
- Some producers sowed brassica and millet summer feed mixes, but these did not reach their full feed potential due to the dry conditions.
- Dry conditions maintained feed quality of crop stubbles, however they are being heavily grazed.
   Many producers have been forced to keep stock longer than planned due to reduced processing capacity of abattoirs.
- Producers have high amounts of cereal hay stored on-farm.
- Pastures have been damaged by high numbers of common army worm and barley grub in some areas and control has been required.



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