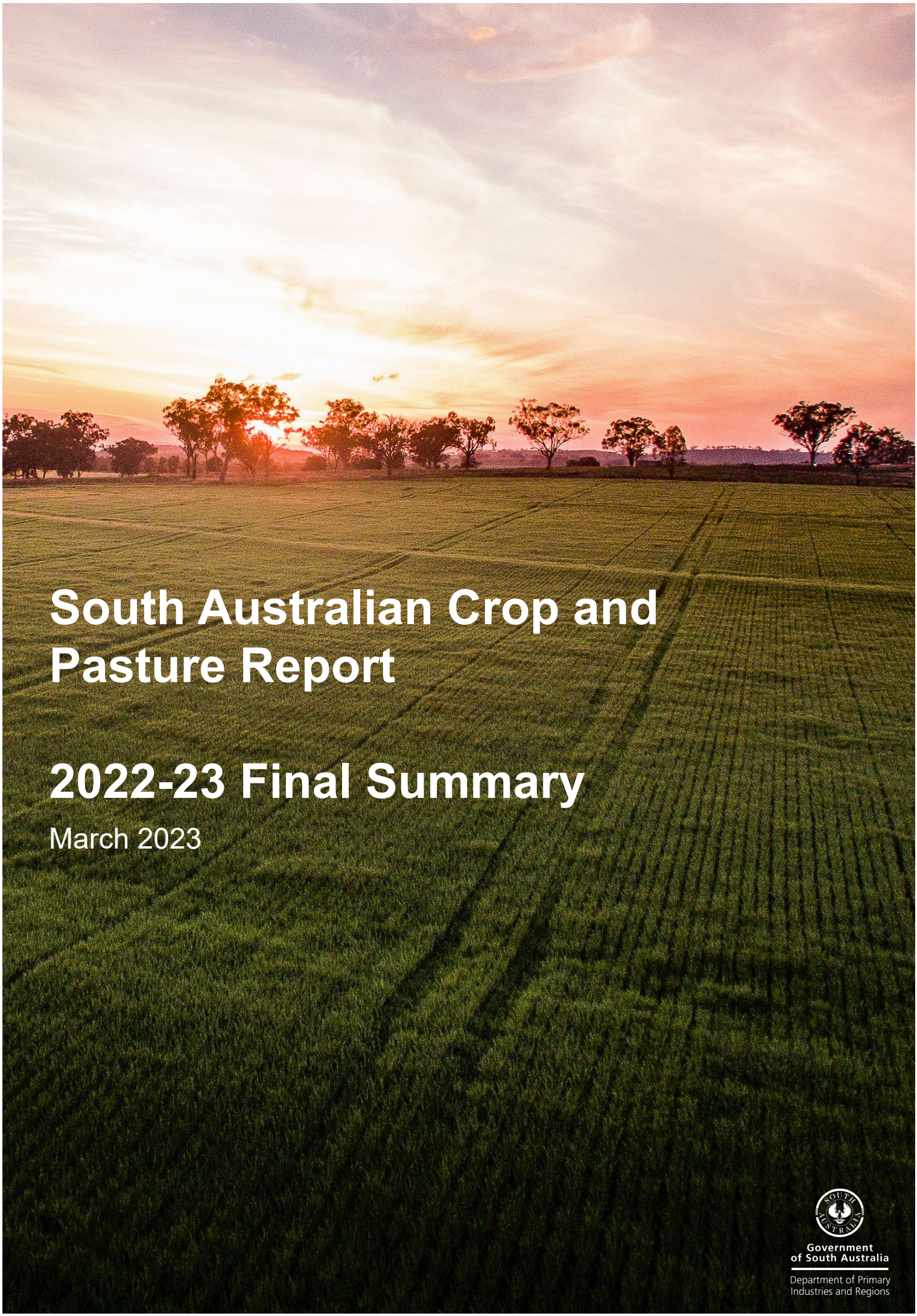

South Australian Crop and Pasture Report

2022-23 Final Summary

March 2023

Government of South Australia
Department of Primary Industries and Regions

Crop and Pasture Report South Australia

Information current as of 17 March 2023

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

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Key link to Weather information

Bureau of Meteorology - Weather and rainfall observations

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 dry-land and irrigated.

The estimates are based on information provided to PIRSA 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.

State Crops and Pastures – 2022-23 Final Summary

Summary

The total rainfall during Spring 2022 (September to November) was well above average for much of the State's cropping zone, and highest on record for the Northern and Southern Murray Mallee (Figure 1). The average maximum temperature for the same period was up to 3°C cooler than average across the State (Figure 2).

Despite damaging flooding in some regions with January rains filling soil profiles with moisture, the late arrival of opening rains in some districts delayed seeding. Near ideal conditions in late winter and early spring allowed crops to catch up, although for some early regions the spring rains were too late for cereals to fully benefit. Hay production and grain harvest was delayed by repeated rain events in late spring and throughout summer, with some reports of crop damage due to strong winds, heavy rain, and hail in some districts. Some of the grain harvested was impacted by weather related quality issues.

Final crop production is estimated to be 12.8 million tonnes resulting in an increase of 51% from 2021-22 and the highest on record. Production was also 74% above the 5-year average for the State. This was driven by an ideal spring finish for a crop generally of good to excellent condition. This result exceeds the previous crop production record in 2016-17 of 11.1 million tonnes.

The record production at high global prices, even with some weather damage downgrading, has an estimated Farm Gate Value of $4.6 billion, also well above the 2021-22 record high farm gate value.

Sown crop area and production for previous six seasons

Seasons	2017-18	2018-19	2019-20	2020-21	2021-22	*2022-23 estimated*
Area sown (ha)	3,565,000	3,572,000	3,898,000	4,003,000	3,942,000	*3,942,000*
Production (t)	6,921,000	5,795,000	6,467,000	9,135,000	8,445,000	*12,788,000*
Farm gate value	$1.7 billion	$1.7 billion	$2 billion	$2.5 billion	$3.3 billion	*$4.6 billion*

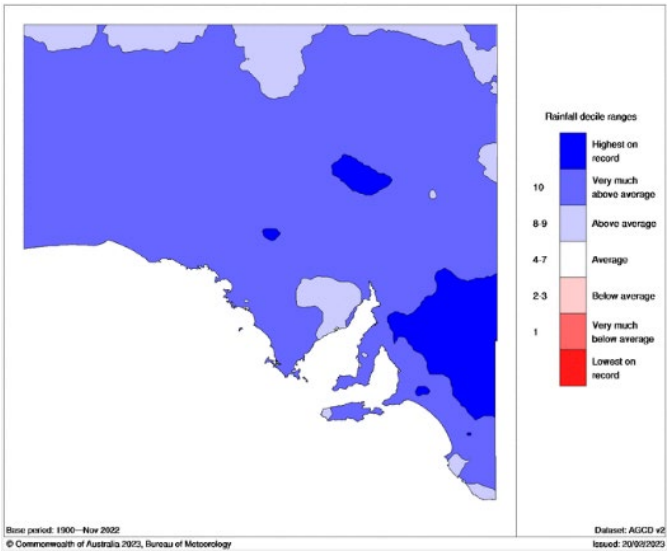

Figure 1: 1 Sep 2022 to 30 Nov 2022 Rain Deciles

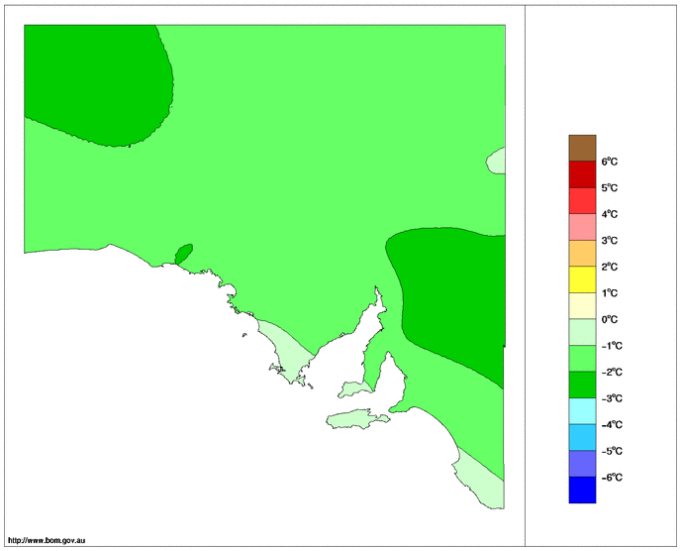

Figure 2: 1 Sep 2022 to 30 Nov 2022 Maximum Temperature Anomaly

Season 2022-23

Weather

Above average rains in January and February of 2022 resulted in flood damage in some districts but filled subsoil moisture reserves. Useful opening rains arrived later in many districts, followed by a dry July. The season turned in August, with well above average rainfall that continued beyond November and into harvest. Spring rainfall (September to November) was well above average for much of the State's cropping zone, and was the highest on record for the Northern and Southern Murray Mallee (Figure 1). Average maximum temperature for the same period was up to 3°C cooler than average across the State (Figure 2). Subsoil moisture remains high in most regions, which should help to underpin the 2023/24 growing season.

Crop mix

The area of wheat planted was near average and similar to last season. High canola prices resulted in an increased canola area at the expense of barley this year. The decline in pea area continued to a record low this year. Hay areas were lower due to the second year of low export hay demand.

Cropping progress

Harvest was completed considerably later than previous years. The extended harvest period exposed crops to additional weather-related challenges which impacted yield and quality, including weed contamination and head loss in barley due to wind. The late end to harvest has also impacted the preparation time for the 2023-24 season. Most of the wheat quality was graded as Australian Standard White, with more than expected Australian Premium White and Australian Hard quality parcels being delivered.

Pastures and livestock condition

Producers handfed supplements during winter in some districts, until spring feed availability increased to above average. Grain reserves were sufficient to cover livestock needs, but rain spoilage of newly cut hay was widespread, and quality was below average. Livestock finished in good to excellent condition, with good stubbles available to delay the need for supplementary feeding into autumn.

Challenges and opportunities

Pests and diseases

Most districts reported issues with leaf disease, including stripe rust and septoria in wheat, powdery mildew in cereals, chocolate spot in beans, grey mould, and other diseases in lentils. Powdery mildew was more widespread than in previous years, and was a new issue in some regions. Managing disease was a challenge due to limited trafficability in wet paddocks, small spray windows due to weather conditions, and high disease pressures in crops. Extended favourable conditions for snail breeding have increased populations. Summer weed growth has added pressure to post-harvest weed control operations.

Regional issues and adverse events

Severe storms during October and first half of November disrupted and delayed harvest, with some storm and hail damage to crops reported in several districts. The timing of spring rainfall was too late in the Lower Murray and Murray Mallee regions for cereal crops to fully benefit, however canola and legume crops were excellent. Cold and waterlogged soils reduced the yield potential of pulse crops in the Lower Eyre Peninsula. There were only isolated reports of crop yields being impacted by spring frost.

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*	433,200	145,200	362,200	165,900	241,100	248,200	73,200	5,400
	t	1,170,000	655,000	1,115,000	865,000	725,000	1,090,000	385,000	21,500
Durum	*ha*	0	0	0	13,600	6,000	5,000	4,200	0
	t	0	0	0	61,000	19,000	21,500	17,000	0
Barley	*ha*	81,700	69,600	77,900	163,100	91,500	94,700	20,600	2,100
	t	205,000	315,000	235,000	815,000	275,000	405,000	92,500	8,500
Oats	*ha*	14,100	3,200	4,600	4,200	5,300	4,400	2,300	1,600
	t	35,500	11,200	11,500	16,500	15,000	16,750	7,000	4,750
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	600	1,750	1,250	4,000	3,250	6,750	1,250	400
Peas	*ha*	2,800	2,300	4,200	11,700	13,900	13,900	6,100	400
	t	2,800	5,500	6,250	29,000	27,500	30,500	9,000	500
Lupins	*ha*	1,500	10,500	4,800	1,000	2,900	1,800	500	1,000
	t	1,950	31,500	9,500	3,000	4,250	3,250	1,500	2,000
Beans	*ha*	400	7,700	400	11,200	12,200	12,900	3,100	3,400
	t	800	27,000	1,000	39,000	27,000	39,000	11,000	12,000
Chickpeas	*ha*	0	400	200	6,600	4,600	2,300	400	0
	t	0	1,000	500	18,500	7,250	4,000	900	0
Lentils	*ha*	2,000	9,000	2,200	128,500	9,900	17,100	6,200	0
	t	5,000	18,000	5,500	385,000	22,000	41,000	17,500	0
Vetch	*ha*	2,400	3,600	2,000	2,600	5,600	4,200	300	0
	t	4,800	7,200	4,000	5,250	5,500	5,000	550	0
Canola	*ha*	5,100	79,200	8,000	14,200	28,300	25,400	4,600	4,700
	t	7,650	240,000	12,750	40,000	51,000	56,000	15,000	14,000
Hay	*ha*	5,500	6,400	10,100	13,700	18,900	33,800	9,500	7,600
(not in total)	*t*	17,000	28,000	35,500	82,000	95,000	135,200	57,000	21,000
Total	*ha*	543,600	331,200	467,000	523,600	422,500	431,600	121,900	18,700
	t	1,434,100	1,313,150	1,402,250	2,281,250	1,181,750	1,718,750	558,200	63,650

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*	7,000	62,100	200,900	129,200	79,300	24,255	2,177,155
	t	29,750	155,000	405,000	350,000	242,000	122,000	7,330,250
Durum	*ha*	300	800	0	0	7,300	0	37,200
	t	1,100	1,600	0	0	21,000	0	142,200
Barley	*ha*	8,000	50,400	60,500	94,700	36,800	7,000	858,600
	t	36,000	125,000	135,000	265,000	123,500	45,000	3,080,500
Oats	*ha*	1,500	3,000	2,200	3,400	21,200	4,700	75,700
	t	4,500	6,000	4,000	8,250	66,000	24,000	230,950
Rye	*ha*	0	1,500	3,500	2,500	1,600	0	9,100
	t	0	3,000	5,500	5,500	2,250	0	16,250
Triticale	*ha*	500	2,600	1,500	6,400	1,000	500	18,300
	t	1,600	5,250	2,750	15,500	2,500	2,750	49,600
Peas	*ha*	1,000	4,500	2,000	3,600	2,900	400	69,700
	t	2,750	9,000	2,500	7,250	4,000	1,000	137,550
Lupins	*ha*	1,600	2,000	3,000	10,000	10,900	2,700	54,200
	t	3,200	5,000	3,500	24,000	24,000	8,000	124,650
Beans	*ha*	1,000	1,100	0	1,200	33,700	13,800	102,100
	t	3,500	2,250	0	3,250	101,000	52,000	318,800
Chickpeas	*ha*	200	3,000	14,500	10,500	600	200	43,500
	t	300	5,400	23,000	19,000	1,000	800	81,650
Lentils	*ha*	200	3,000	4,200	6,200	2,900	200	191,600
	t	300	5,400	6,000	14,000	6,750	800	527,250
Vetch	*ha*	100	4,000	6,600	5,300	1,200	0	37,900
	t	150	8,000	10,500	10,600	2,400	0	63,950
Canola	*ha*	6,000	6,000	7,700	13,000	35,500	20,700	258,400
	t	15,000	9,000	9,000	28,600	96,000	90,000	684,000
Hay	*ha*	23,900	7,200	5,000	13,800	28,100	27,100	210,600
(not in total)	*t*	135,000	42,250	15,000	55,000	145,000	127,000	989,950
Total	*ha*	27,400	144,000	306,600	286,000	234,900	74,455	**3,933,455**
	t	98,150	339,900	606,750	750,950	692,400	346,350	**12,787,600**

TABLE 2 CROP ESTIMATES AGAINST FIVE YEAR AVERAGE

		2017-18	2018-19	2019-20	2020-21	2021-22	5-year average	2022-23
Wheat	*ha*	2,024,100	2,000,400	2,112,100	2,201,600	2,195,400	2,106,700	2,185,955
	t	4,122,500	3,156,000	3,251,500	4,923,000	4,705,500	4,031,700	7,330,250
Durum	*ha*	55,700	42,000	42,900	37,800	35,800	42,800	37,200
	t	139,400	75,220	82,560	114,870	108,350	104,100	142,200
Barley	*ha*	714,600	818,600	990,000	953,500	917,400	878,800	858,600
	t	1,640,700	1,725,800	2,091,000	2,560,000	2,151,700	2,033,800	3,080,500
Oats	*ha*	77,000	74,700	72,800	77,700	75,300	75,500	75,700
	t	149,300	121,500	120,450	173,700	162,400	145,500	230,950
Rye	*ha*	6,500	5,300	5,700	8,600	6,600	6,500	9,100
	t	5,100	3,150	4,250	11,100	4,600	5,600	16,250
Triticale	*ha*	19,900	29,400	32,300	28,800	21,400	26,400	18,300
	t	35,050	33,470	42,250	70,750	30,150	42,300	49,600
Peas	*ha*	90,200	65,700	65,300	70,000	66,800	71,600	69,700
	t	113,750	53,620	70,100	113,700	92,500	88,700	137,550
Lupins	*ha*	62,800	61,000	51,100	50,600	45,900	54,300	54,200
	t	53,400	59,950	53,800	75,650	63,400	61,200	124,650
Beans	*ha*	67,400	63,100	98,400	100,600	107,300	87,400	102,100
	t	101,660	79,730	156,650	212,700	247,280	159,600	318,800
Chickpeas	*ha*	29,700	33,600	22,200	29,500	13,500	25,700	43,500
	t	33,580	23,870	17,000	44,050	15,450	26,800	81,650
Lentils	*ha*	184,700	149,800	164,300	186,700	197,200	176,500	191,600
	t	260,200	177,870	220,400	345,950	339,180	268,700	527,250
Vetch	*ha*	32,400	28,400	34,000	36,400	34,400	33,100	37,900
	t	15,350	5,810	9,420	27,750	15,050	14,700	63,950
Canola	*ha*	200,200	200,100	206,600	220,800	224,700	210,500	258,400
	t	251,400	278,900	347,400	461,800	509,750	369,900	684,000
Hay	*ha*	202,900	436,000	320,600	263,500	220,800	288,800	210,600
(not in total)	*t*	948,600	1,297,000	1,258,900	1,195,000	852,000	1,110,300	989,950
Total	*ha*	3,565,200	3,572,100	3,897,700	4,002,600	3,941,700	3,795,800	**3,942,255**
	t	6,921,390	5,794,890	6,466,780	9,135,020	8,445,310	7,352,600	**12,787,600**