

## Alberta 2002 Crop Season in Review



### **The 2002 Crop Season**

*The precipitation map for the 2002 crop season is available on the Internet at: <http://www.agric.gov.ab.ca/economic/stats/crpsum02.html>.*

The 2002 crop season will be remembered as one of the worst in Alberta's farming history. The season was full of challenges for producers from beginning to end. Major challenges included a cool and dry spring, persistent dryness in much of Alberta, flooding in the Southern Region in June, heat in July, cool and wet conditions in August, early frosts, damp, cool weather conditions during the harvest season and severe insect problems.

The 2002 crop season began under cool and dry conditions in spring, which delayed seeding and germination across Alberta. By May 28, seeding was only three-quarters completed, about 7 to 10 days behind normal. Producers in most areas reported late and uneven germination in June, which contributed to a late and uneven crop development and maturity in 2002.

In June, rainstorms prevailed and brought much needed moisture in southern Alberta. The rainstorms also caused flooding and soil erosion, particularly in areas towards the South and West of the region. As a result, some crops were lost, and some fields were left unseeded for the season due to excess moisture.

The dryness, however, persisted in other parts of the province through June and much of July. In addition, most areas reported well above average temperatures in July. A combination of heat and dryness had crops deteriorating rapidly. Appreciable amounts of moisture were received in late July and August. The moisture, however, was considered too late for the most drought-stricken areas in central and northern Alberta, where many crops were written off and used for grazing or harvested for livestock feed. Some crops were abandoned due to poor yield potentials.

The late rain showers also improved soil moisture conditions, and caused considerable second growth of annual crops and another round of germination. This increased the yield potential of crops for greenfeed/silage production. However, it contributed to an uneven maturity of crops intended for grain and oilseed production.

Crop damage from frosts was reported as early as August in the Peace Region. Frost damage occurred a little later in many other locations, causing losses of crop yields and quality.

Cool, damp weather conditions in September and October, coupled with late and uneven maturity, slowed down harvest operations across Alberta and lengthened the harvest season. By the end of 2002, some crops were still in the field. Many crops were taken off damp and tough. Quality of 2002 grains and oilseeds was well below average.

## **Insects and Crop Diseases**

Due to the persistent dryness, heavy grasshopper infestations were reported in many areas during the 2002 crop season. High grasshopper numbers were reported as early as June in many eastern parts of the Central Region. Crop damage from sawfly in the Southern Region and grasshoppers across the province were the most noticeable, though problems with flea beetles, lygus bugs and others were also reported.

Various crop diseases were reported in the 2002 crop season, particularly in southern Alberta where the excess moisture conditions fostered development of root and leaf diseases early in the season.

## **Irrigation**

After a year of shortage and rationing of irrigation water in 2001, irrigation districts in Alberta had no problem with water supply in 2002. Concern with irrigation water supply early in the season soon vanished as heavy rainstorms brought well above normal precipitation across the Southern Region. Reserves of irrigation water were generally rated as adequate in the fall of 2002.

## **Forage, Pasture and Cattle**

Due to low temperatures and dry conditions, tame hay growth was very slow in spring and early summer. Many producers in central and northern Alberta skipped the first cut. Some hay fields were used for grazing. Yields were very disappointing for many producers who took in the first cut. With the precipitation received in late July and August, yields from the second cut were generally better than the first cut. However, yields were still below average in many areas, particularly in central and northern Alberta. The exception was the Southern Region where close to average yields were reported.

Overall in Alberta, 2002 tame hay yields and production were far below average. Hay quality, however, was mostly rated as good. To help compensate for the low tame hay production, producers harvested an unusually high acreage of annual crops as greenfeed or silage in 2002.

Pasture growth was slow early in the season due to lack of moisture and low temperatures. The persistent dryness left pasture conditions largely unchanged through most of the season in many central and northern areas, where poor annual crops and hay fields were used for grazing. Pasture conditions in the Southern Region, however, improved dramatically as rainstorms brought much needed moisture in June. Additionally, water shortage on pasture prevailed in central and northern Alberta. Pressured by these factors, many producers reduced or sold off their cattle herd, or moved their cattle to other locations.

According to estimates from a survey conducted by the Statistics and Data Development Unit of AAFRD in November 2002, pasture and pasture water reserves in Alberta were rated as 60% poor, 20% fair and 20% good. Pastures may not be as ready in spring 2003 as many farmers hoped, and cattle feeding will likely last longer than normal.

## **2002 Crop Production, Alberta**

Total 2002 production of major grains and oilseeds in Alberta was about 45% of the previous 5-year average, according to Statistics Canada's November estimate. The low production in 2002 was a result of poor yields and reduced harvested acreage, caused primarily by a combination of a cool and dry spring, persistent dryness, heat in July, insect infestations and early frosts. Total seeded area of field crops in

2002 was about 24.2 million acres, relatively unchanged from 2001 and the 5-year average. However, total harvested area in 2002, estimated at 15.1 million acres, was only 69% of the 5-year average. The shortage of forage supplies and high forage prices, particularly in the summer and early fall, led to an unusually high crop acreage harvested for greenfeed or silage and extensive straw baling in Alberta. The low yield potential for grain production also contributed to the high crop acreage harvested for forage. Additionally, many crops were grazed or abandoned because of poor crop conditions, particularly in central and northern Alberta.

Total production of wheat in Alberta was estimated at 3.5 million tonnes, 49% below the 5-year average and the lowest since 1977. A reduction in spring wheat production caused the overall reduction in wheat production. Total durum production was 843,700 tonnes, 4% above the 5-year average and 80% higher than a year ago, due to better moisture conditions in southern Alberta this year.

Total barley production was estimated at 2.5 million tonnes, 56% below the 5-year average and the lowest since 1964. Total oats production was 285,300 tonnes, 63% below the 5-year average and 52% lower than a year ago.

Total canola production, estimated at 793,800 tonnes, was 65% below the 5-year average and 51% lower than a year ago. Total production of dry peas was estimated at 221,600 tonnes, about 57% below the 2001 and 5-year average levels.

Total production of sugar beets fell 34% from last year to 344,700 tonnes. Total production of dry beans was 31,700 tonnes, 30% below the 5-year average and 47% lower than the 2001 level.

Total production of tame hay was estimated at 3.0 million tonnes, 41% below the 5-year average and 30% lower than a year ago.

Additionally, a total of 4.5 million acres or 25% of 2002 grain/oilseed crops in Alberta were harvested as forages, three times the 5-year average of 1.5 million acres, according to estimates by the Statistics and Data Development Unit of AAFRD. Total area harvested as greenfeed in 2002 was estimated at 2.0 million acres while total silage harvested area was about 2.5 million acres. These acreages are significantly up, compared to the 5-year average of 620,000 acres for greenfeed and 880,000 acres for silage. The marked increase in forage harvest in 2002 was a result of low crop yield potentials for grain production and the severe shortage of forage supply in Alberta. Total greenfeed production in Alberta was estimated at 1.5 million tonnes in 2002, compared to the 5-year average of 1.2 million tonnes. Total silage production in Alberta is 4.0 million tonnes in 2002, significantly below the 5-year average.

### **Feed Supply and Quality**

The low crop production in 2002 led to a severe shortage and high prices of feed grains and forages in Alberta. To secure winter supplies, many producers purchased feed grains and/or forages from Manitoba, Saskatchewan, Ontario, B.C. and USA. US corn imports into Alberta have increased substantially and are expected to reach a record high in the crop year of 2002/03.

**Alberta Crop Production ('000 tonnes)**

	1997	1998	1999r	2000r	2001r	2002p	5-year avg.	2002/ 5-yr avg
Winter wheat	49.0	65.3	69.4	46.3	68.0	29.9	59.6	50.2%
Spring wheat	6,055.5	5,543.9	7,251.7	6,267.7	5,266.2	2,661.8	6,077.0	43.8%
Durum	734.8	1,143.1	898.1	809.7	468.1	843.7	810.8	104.1%
<b>All wheat</b>	<b>6,839.3</b>	<b>6,752.3</b>	<b>8,219.2</b>	<b>7,123.7</b>	<b>5,802.3</b>	<b>3,535.4</b>	<b>6,947.4</b>	<b>50.9%</b>
Oats	979.3	771.1	863.6	657.0	592.2	285.3	772.6	36.9%
Barley	6,270.5	5,660.8	5,987.4	5,268.9	4,746.4	2,460.3	5,586.8	44.0%
All rye	66.1	77.5	72.4	42.5	58.4	16.1	63.4	25.4%
Mixed grains	108.2	55.1	42.9	60.2	53.1	16.3	63.9	25.5%
Flaxseed	31.8	39.4	39.4	17.8	20.3	20.3	29.7	68.3%
Canola	2,109.2	2,472.1	2,971.0	2,188.6	1,632.9	793.8	2,274.8	34.9%
Dry peas	421.8	488.0	530.8	620.5	506.2	221.6	513.5	43.2%
Lentils	8.3	8.0	12.4	9.9	5.0	1.9	8.7	21.8%
Mustard seed	50.6	39.7	44.8	13.8	8.5	19.1	31.5	60.7%
Chick peas	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	16.8	20.5	15.9	18.7	85.3%
Triticale	14.0	48.3	81.3	52.1	18.8	8.3	42.9	19.3%
Sugar beets	650.4	959.3	839.8	920.3	523.1	344.7	778.6	44.3%
Fodder corn	163.3	272.2	181.4	462.7	435.4	362.9	303.0	119.8%
Tame hay	4,490.6	5,216.3	6,191.5	5,556.5	4,309.1	3,039.1	5,152.8	59.0%
<b>Total</b>	<b>22,203.4</b>	<b>22,860.1</b>	<b>26,077.9</b>	<b>23,011.3</b>	<b>18,732.2</b>	<b>11,141.0</b>	<b>22,577.0</b>	<b>49.3%</b>

Source: Statistics Canada

5-year average includes 1997 to 2001

p - Preliminary

r - Revised

avg. - average

n.a. - not available

**Alberta Crop Area and Yield**

	2002	2002	2002	5-year Average			2002/5-yr avg
	seeded ( <sup>'000</sup> acres)	hrvtd*	yield (bu/acre)	seeded ( <sup>'000</sup> acres)	hrvtd* (bu/acre)	yield (bu/acre)	yield (%)
Winter wheat	50	25	44.0	58	57	38.9	113.2%
Spring wheat	5,659	3,688	26.5	5,965	5,802	38.4	69.0%
Durum	1,100	950	32.6	939	905	32.9	99.1%
<b>All wheat</b>	<b>6,809</b>	<b>4,663</b>	<b>27.9</b>	<b>6,962</b>	<b>6,764</b>	<b>37.6</b>	<b>74.1%</b>
Oats	1,650	350	52.9	1,370	760	66.2	79.9%
Barley	5,400	2,700	41.9	5,170	4,430	58.0	72.3%
All rye	80	25	25.4	104	75	33.5	75.8%
Mixed grains	250	20	40.0	284	61	51.7	77.4%
Flaxseed	50	40	20.0	57	54	21.6	92.7%
Canola	2,950	1,700	20.6	3,880	3,828	26.2	78.6%
Dry peas	650	440	18.5	527	510	37.5	49.4%
Lentils	15	6	11.9	24	22	15.2	78.1%
Mustard seed	85	70	12.1	93	89	14.6	82.8%
			<b>(tons/acre)</b>			<b>(tons/acre)</b>	
Sugar beets	30	25	15.2	38	38	22.5	67.6%
Fodder corn	35	30	13.3	23	21	15.7	84.7%
Tame hay	6,200	5,000	0.7	5,558	5,120	1.1	63.6%
<b>Total</b>	<b>24,204</b>	<b>15,069</b>		<b>24,090</b>	<b>21,772</b>		

5 year average includes 1997 to 2001

\*hrvtd - harvested

Source: Statistics Canada

Prepared by: Statistics and Data Development Unit, Alberta Agriculture, Food and Rural Development

## **The Southern Region**

Most respondents reported surplus/adequate supplies for feed grains and forages. Only 10-15% indicated possible shortfall or deficit. Quality of feed grains/forages was mostly rated as fair or good. Feed grains were purchased from local producers, Saskatchewan, Manitoba and USA, while forage supply was mostly from local farmers.

## **The Central Region**

The forage supply was rated (by survey respondents) 60% as adequate, 30% as possible shortfall and 10% as deficit, while supply of feed grains was reported 40% as adequate, 30% as possible shortfall and 30% as deficit. For feed/bedding straw, about 45% reported possible shortfall and 25% indicated deficit. Quality of forages and feed grains ranged from fair to good.

Feed grains (purchased from outside the region) were from southern Alberta, Peace Region, Saskatchewan, Manitoba and USA, while forages were purchased from southern Alberta, Saskatchewan and Manitoba.

## **The North East Region**

Most producers in the region reported deficit or possible shortfall for supply of forages and feed grains. Quality of feed grains ranged from poor to good, while forages were rated as fair or good. Forages and feed grains were purchased mainly from other locations in Alberta, Manitoba and Saskatchewan, with some corn coming from Ontario.

## **The North West Region**

Tame hay supply in the region was rated 50% as adequate, 40% as possible shortfall and 10% as deficit. Feed grains were reported 35% as adequate, 55% as possible shortfall and 10% as deficit. Quality of forages and feed grains were rated as fair or good. Feed grains (purchased from outside the region) were from Manitoba, Saskatchewan, Ontario, B.C., USA and other locations in Alberta. Tame hay (purchased from outside) came from the Peace Region, Manitoba and Saskatchewan, while supply of greenfeed, silage and straw was mostly from local farmers.

## **The Peace Region**

Most producers in the region had adequate supply of forages and feed grains. Producers reporting possible shortfall or deficit purchased forages and feed grains mainly from local producers. Quality of forages and feed grains varied, ranging from poor to excellent.

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