

## **Alberta 2008 Crop Season in Review**

This report presents a review of the 2008 crop season and an analysis of 2008 crop production statistics. In addition, a precipitation map for the 2008 crop season is attached for reference.

### **The 2008 Crop Season**

The 2008 crop season was off to a slow start, with cool spring temperatures causing delays in seeding operation and crop emergence. In term of precipitation, rain, along with snow received in some areas, brought various amounts of moisture across the province. In general, soil moisture reserves at the surface level were adequate for seed germination. A lack of moisture at the sub-surface level was a concern, particularly in the Southern Region and some eastern parts of the Central Region.

The cool weather persisted through the first three weeks of June. As a result, crop emergence was delayed and growth was slow. By the end of June, crop development was 7-10 days behind normal. Despite the late development, crops were mostly in good condition, mainly due to adequate soil moisture reserves. The province received significant amounts of precipitation in June, with many areas reporting crop damage from hailstorms.

Rain continued to bring moisture to most areas of the province during the first two weeks of July, with the exception of the Peace Region. For the remainder of July, precipitation received was mostly confined to the North West Region, and northern and eastern parts of the Peace Region. In those areas not receiving much precipitation, soil moisture reserves and crop conditions deteriorated significantly. The most noticeable deterioration occurred in the western and southern parts of the Peace Region, where about half of the crops were in poor condition at the end of July. Overall, crop development was about 10-14 days behind normal. Also, in July, hailstorms caused some severe crop damage, mostly in the Southern Region.

In August, weather conditions were mainly hot and dry during the first two weeks, followed by seasonal temperatures with light precipitation. Crop conditions and yield potentials varied considerably across the province, ranging from above average in the Southern Region to well below average in western and southern parts of the Peace Region. Elsewhere in the province, crop yield potentials were mostly above average. Due to the late development (10-14 days behind normal), crop harvest progress was slow. As of August 28, about eight per cent of the crop in Alberta was in the bin, based on the Alberta Crop Report.

Cool, damp weather conditions during the first two weeks of September slowed crop maturity and harvest operation. Frost occurred in many areas, resulting in some deterioration in crop quality. Some grains were taken off damp and tough, and needed to be dried. A return of

favorable weather conditions in mid-September allowed crop harvest to progress rapidly. As of September 25, crop harvest was 60 per cent completed, based on the Alberta Crop Report.

October began with favourable weather conditions, with temperatures above seasonal levels and reaching record highs in many areas. Crop harvest in the province was virtually completed by mid-October. In many areas, crop yields were higher than expected earlier. Overall, provincial average yields for most major crops were estimated to be significantly above average. For specialty crops, yields ranged from average to above average. With respect to crop quality, estimated grades were average for barley and canola, and above average for spring wheat and durum.

### **Insects and Crop Diseases**

In 2008, cabbage seedpod weevils caused some crop damage, mostly in the Southern Region. Wheat midges and gophers were problematic in some areas. Also reported were problems with other pests, including sawflies, flea beetles, root maggots, wireworms, lygus bugs, grasshoppers, and army cutworms.

Many producers were concerned about diseases in cereal crops, including stripe rust, tan spot on wheat, net blotch on barley, and some head and kernel diseases. Sclerotinia and clubroot in canola, and some pulse crop diseases, also occurred in 2008.

### **Forage and Pasture**

Due to cool spring temperatures, pasture and tame hay were off to a slow start as well. Based on the Alberta Crop Report released in late May, pasture condition was 16 per cent poor, 33 per cent fair, 46 per cent good, and five per cent excellent, with a similar rating reported for tame hay.

In June, pasture condition showed some improvement, the result of adequate soil moisture reserves. As of June 19, pasture was seven per cent poor, 29 per cent fair, 52 per cent good, and 12 per cent excellent, based on the Alberta Crop Report. However, this was short lived, as the lack of precipitation in July and August caused pasture to deteriorate. By the end of August, less than one-third of the pasture in the province was rated as good, a substantial decline from conditions in June.

With respect to tame hay, favourable moisture reserves in June resulted in well above average yields from the first cut. Yields from the second cut were mostly below average, due to the lack of precipitation in July and August. Overall, the provincial average hay yield in 2008 was significantly above average, mainly as a result of an excellent first cut. In term of quality, the majority of hay crop was rated as good or excellent. Additionally, producers harvested some of their annual cereals as greenfeed and silage, to secure forage supplies.

### **Alberta Crop Production, 2008**

On December 4, 2008, Statistics Canada released its report entitled “November Estimate of Production of Principal Field Crops, Canada, 2008”. Based on the report, total production of principal field crops in Alberta reached a record 30.27 million tonnes, or 13 per cent higher than in 2007, and 29 per cent above the 10-year average (see Table 1). The record production

stemmed from excellent yields and increased harvested acreage. Provincial average yields for major grains and oilseeds were estimated to be higher than in 2007, and their 10-year averages (see Table 2). As well, total seeded and harvested acres for principal field crops were up significantly from 2007, the result of strong grains and oilseeds prices.

In 2008, total production of spring wheat jumped 39 per cent, to a record 7.27 million tonnes. The record production was due to an increase in harvested area and excellent yields. The provincial average yield was estimated at 47.3 bushels per acre (up 18 per cent from 2007), while total harvested area increased 18 per cent, to 5.66 million acres. For durum wheat, production jumped 61 per cent to 1.08 million tonnes, as both yields and harvested area increased significantly from a year earlier. The provincial average yield was estimated at 43.0 bushels per acre, up 33 per cent from 2007, and harvested area increased 21 per cent to 0.92 million acres. Similarly, due to a larger harvested area and improved yields, total production of winter wheat more than doubled its 2007 level, reaching 0.39 million tonnes in 2008. Overall, total production of all wheat increased 44 per cent from 2007, to a record 8.74 million tonnes.

The total barley production in 2008 was estimated at 5.45 million tonnes, up seven per cent from 2007, and nine per cent above the 10-year average. The provincial average yield was estimated at 66.7 bushels per acre, 21 per cent higher than in 2007, while harvested area fell 12 per cent to 3.75 million acres. Total oat production, estimated at 0.54 million tonnes, was down 14 per cent from 2007, and 23 per cent below the 10-year average. The lower production was due to a 19 per cent reduction in harvested acreage, the result of competition for land from other crops. The provincial average yield was estimated at 70.2 bushels per acre, or seven per cent higher than in 2007.

In 2008, canola production reached a record 4.32 million tonnes. This was up 27 per cent from 2007, and 65 per cent above the 10-year average. The marked increase in production was due to record harvested area and significantly higher yields. Total harvested area was up three per cent to 5.17 million acres. With respect to yield, the provincial average was estimated at 36.9 bushels per acre, or 23 per cent higher than in 2007. Also, production of dry peas in 2008 jumped 39 per cent, to a record 0.73 million tonnes. This stemmed from a combination of higher yields and record harvested area. The provincial average yield, estimated at 38.4 bushels per acre, was 18 per cent higher than in 2007. The harvested area increased 18 per cent, to a record 0.70 million acres.

### **Alberta Forage Production, 2008**

The total tame hay production in Alberta in 2008 was estimated at 9.34 million tonnes, based on the Statistics Canada report “November Estimate of Production of Principal Field Crops, Canada, 2008”. This was the second highest production on record, and was fuelled mainly by significantly higher yields. As well, it was up one per cent from 2007, and 45 per cent above the 10-year average.

The near record tame hay production reduced the need for greenfeed and silage production. A survey conducted by the Statistics and Data Development Unit of Alberta Agriculture and Rural Development pegged the provincial greenfeed production at 875,000 tonnes, or 18 per cent lower than in 2007. Likewise, silage production fell 17 per cent, to 2.58 million tonnes. The marked decline in greenfeed and silage production was attributed to lower harvested acreage. Total area

harvested for greenfeed declined 22 per cent from 2007, to 335,000 acres, while silage acreage fell 21 per cent to 435,000 acres. Due to improved growing conditions, most crops produced higher greenfeed and silage yields than in 2007. As in previous years, barley, oats and mixed grains were the major crops harvested for greenfeed and silage production in 2008.

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**Table 1: Alberta Crop Production ('000 tonnes)**

	2003	2004	2005	2006	2007	2008	10-year average	% change	
								08 vs 07	08 vs avg
Winter Wheat	144	196	191	167	176	387	115	120%	235%
Spring Wheat	5,278	6,393	7,160	6,679	5,231	7,272	5,766	39%	26%
Durum Wheat	1,007	983	1,021	657	670	1,078	862	61%	25%
<b>All Wheat</b>	<b>6,430</b>	<b>7,571</b>	<b>8,371</b>	<b>7,503</b>	<b>6,076</b>	<b>8,736</b>	<b>6,743</b>	44%	30%
Oats	827	828	830	706	627	541	707	-14%	-23%
Barley	5,421	5,628	5,232	4,405	5,114	5,448	5,001	7%	9%
Fall Rye	76	69	79	57	37	76	55	107%	39%
Mixed Grains	41	45	41	66	24	31	44	27%	-31%
Flaxseed	25	29	53	36	16	33	30	102%	11%
Canola	2,223	2,926	3,651	3,425	3,402	4,323	2,614	27%	65%
Dry Beans	60	34	53	61	54	35	49	-36%	-28%
Dry Peas	491	642	618	553	528	731	520	39%	41%
Mustard Seed	39	51	31	26	27	37	30	37%	24%
Triticale	30	28	22	15	18	19	32	9%	-40%
Tame Hay	6,396	7,394	8,754	8,142	9,276	9,344	6,427	1%	45%
Fodder Corn	454	340	454	953	839	572	475	-32%	20%
Sugar Beets	680	744	608	871	762	345	700	-55%	-51%
<b>Total</b>	<b>23,193</b>	<b>26,330</b>	<b>28,796</b>	<b>26,818</b>	<b>26,801</b>	<b>30,271</b>	<b>23,428</b>	<b>13%</b>	<b>29%</b>

Totals may not add up due to rounding.

10-year average refers to 1998-2007.

Source: Statistics Canada, and Alberta Agriculture and Rural Development

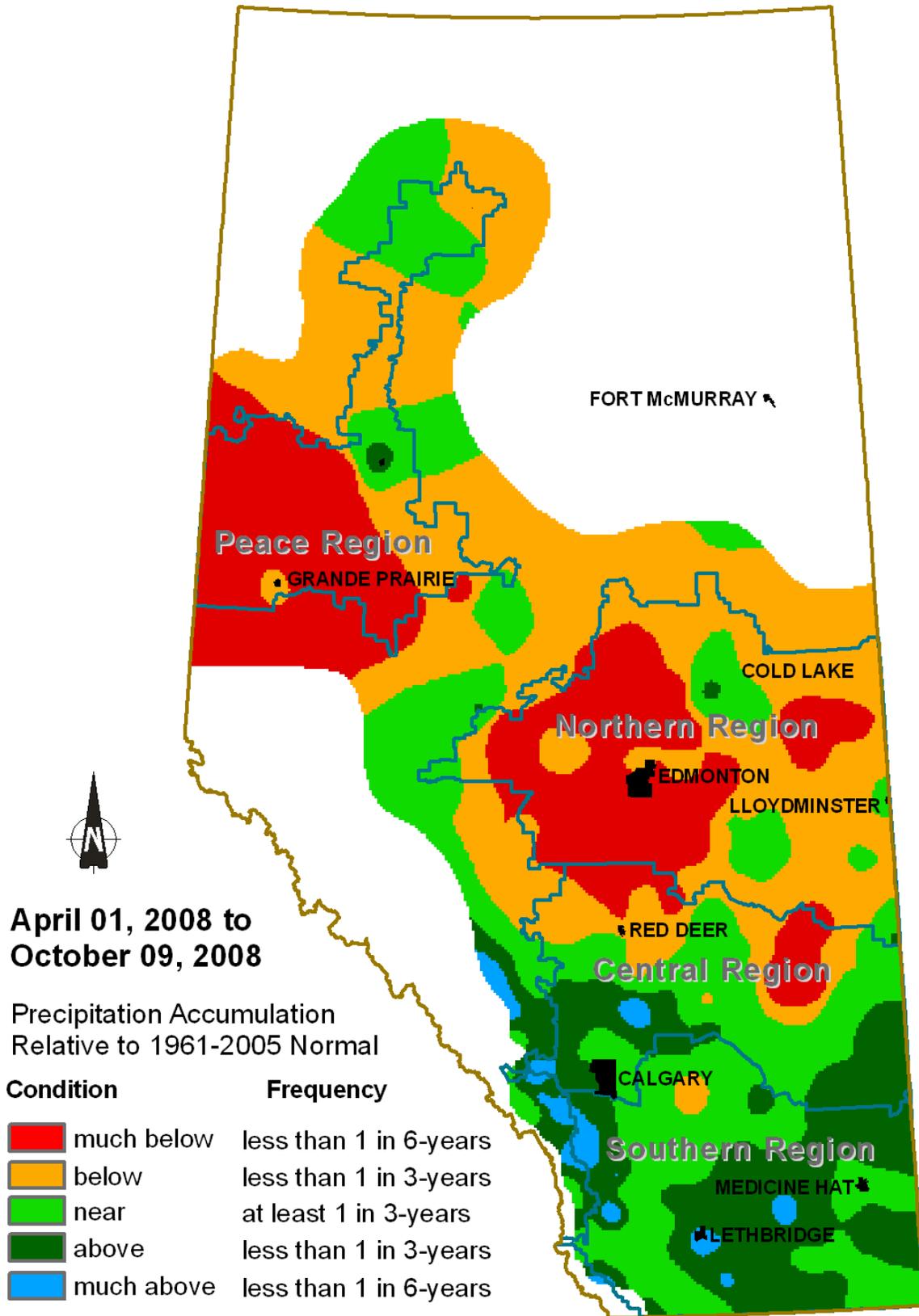
**Table 2: Alberta Crop Area and Yield**

	2007	2007	2007	2008	2008	2008	10-year avg yld	Yield % change	
	seeded	hrvtd	yield	seeded	hrvtd	yield		08 vs 07	08 vs avg
	('000 acres)	(bu/acre)	(bu/acre)	('000 acres)	(bu/acre)	(bu/acre)	(bu/acre)		
Winter Wheat	160	140	46.1	270	270	52.6	45.2	14%	16%
Spring Wheat	4,867	4,785	40.2	5,700	5,655	47.3	39.3	18%	20%
Durum Wheat	765	760	32.4	930	920	43.0	39.6	33%	9%
<b>All Wheat</b>	<b>5,792</b>	<b>5,685</b>	<b>39.3</b>	<b>6,900</b>	<b>6,845</b>	<b>46.9</b>	<b>36.4</b>	19%	29%
Oats	1,050	620	65.6	850	500	70.2	67.3	7%	4%
Barley	4,850	4,270	55.0	4,150	3,750	66.7	57.8	21%	15%
Fall Rye	70	40	36.3	70	70	42.9	36.6	18%	17%
Mixed Grains	140	20	59.0	130	25	60.0	53.7	2%	12%
Flaxseed	30	30	21.3	45	45	28.9	22.8	36%	27%
Canola	5,035	5,000	30.0	5,200	5,170	36.9	29.4	23%	25%
Dry Beans	53	53	37.7	40	35	36.7	36.1	-3%	2%
Dry Peas	610	595	32.6	710	700	38.4	34.7	18%	11%
Mustard Seed	85	85	14.0	110	105	15.6	15.1	11%	3%
Triticale	40	18	38.9	35	14	54.6	40.1	40%	36%
			(tons/acre)			(tons/acre)	(tons/acre)		
Tame Hay	6,240	5,585	1.8	6,200	5,585	1.8	1.3	0%	41%
Fodder Corn	70	50	18.5	70	40	15.8	16.7	-15%	-5%
Sugar Beets	34	34	24.7	18	17	22.4	21.8	-9%	3%
<b>Total</b>	<b>24,099</b>	<b>22,085</b>	-	<b>24,528</b>	<b>22,901</b>	-	-	-	-

hrvtd - harvested. avg - average. yld - yield. 10-year average refers to 1998-2007

Totals may not add up due to rounding.

Source: Statistics Canada, and Alberta Agriculture and Rural Development



Source: Alberta Agriculture and Rural Development, Environmental Stewardship Division, Technology and Innovation Branch