Alberta Crop Report

Alberta 2006 Crop Season in Review
With Feed Availability Report

This report presents a review of the 2006 crop season and an analysis of 2006 crop production statistics, as well as information on feed availability in Alberta. In addition, a precipitation map for the 2006 crop season is attached for reference.

The 2006 Crop Season

With adequate moisture reserves and above normal temperatures in spring, the 2006 crop season was off to a good start in most areas of the province. Seeding operations progressed rapidly and were virtually complete by the end of May. Crops germinated quite well, the result of favorable crop growing conditions. However, due to excessive moisture, some fields were left unseeded, resulting in a higher summerfallow area than intended.

In June, soil moisture conditions continued to improve, as rains brought significant amounts of precipitation. The exception was the Peace Region where most areas received only scattered rain showers. In the Southern and Central Regions, heavy rainfall caused localized flooding. Overall in the province, soil moisture levels were good to excellent, and crops showed excellent growth.

However, in July, crop growing conditions changed dramatically. Persistent hot, dry weather prevailed across the province, severely depleting soil moisture reserves and causing crops to abort flowering and podding. This resulted in a significant deterioration of crop conditions and yield potentials. Winter cereals also suffered from heat stress, but to a much lesser extent. In the Southern Region, relatively adequate moisture reserves resulted in crops being in better condition compared to the rest of province. It should be pointed out that the hot, dry weather hastened crop development across the province.

Due to the early maturity of crops, harvesting began much earlier than normal in the province. By the end of August, about 35% of the crop was in the bin, 10-14 days ahead of most years. Also, it is worth mentioning that hailstorms in August caused significant crop damage, particularly in the Central Region.

Warm, dry weather conditions allowed harvesting to progress rapidly until mid-September (estimated to be 83% complete), when rain showers halted field operations in the province. By mid-October, most producers had managed to take their crops off the field, although cool, damp conditions continued to hamper field operations. Crop quality was also impacted particularly for some of those crops harvested during the latter part of 2006 crop season. Also, excess moisture delayed crop harvest, with some being left in the field over the winter.

Overall, yields for major crops in 2006 were estimated to be down considerably from a year earlier, reflecting the impact of the hot, dry weather conditions in July, and to some degree, the damage caused by hailstorms in August. Despite this, crop quality was estimated to be above average.

Insects and Crop Diseases

Crop damage from pest infestations was less severe in 2006 than in most years. The most noticeable pest damage was caused by wheat stem sawflies, cabbage seedpod weevils and bertha armyworms. Infestations of grasshoppers and flea beetles were confined to several local areas, mostly in the Peace Region. Also reported were concerns and problems with other pests, including pea leaf weevils, root maggots, wireworms, lygus bugs, diamondback moth/larvae, and gophers.

Due to humid conditions, leaf diseases developed in cereal crops early in the season, resulting in the application of fungicides in some areas. Other crop diseases were also reported, including sclerotinia in canola.

Forage and Pasture

Pasture and tame hay showed excellent growth in most areas of the province early in the season. This was due to adequate soil moisture reserves and above normal temperatures. Based on a survey conducted by the Statistics and Data Development Unit (SADD) of Alberta Agriculture and Food in late May 2006, pasture conditions in Alberta were reported as 5% poor, 20% fair, 55% good, and 20% excellent, while the rating for tame hay was slightly better. In June, pasture and tame hay continued to improve across the province, as crop growing conditions remained generally favourable.

However, the persistent hot, dry weather in July had a negative impact on pasture and tame hay growth. A lack of rainfall in August and early September caused further deterioration in pasture and tame hay conditions. By mid-September, pasture conditions in Alberta were rated as 42% poor, 37% fair, 19% good, and 2% excellent, representing a substantial decline from June.

With respect to tame hay production, provincial average yield in 2006 was estimated to be higher than in most years. This stemmed from above average yields for the first cut. Overall, hay quality was estimated to be above average, although the quality of third cut hay under irrigation suffered from rain showers. As well, to secure forage supplies, producers harvested some annual cereal crops as greenfeed and silage.

Alberta Crop Production, 2006

Based on the Statistics Canada report, "November Estimate of Production of Principal Field Crops, Canada, 2006", production of principal field crops in Alberta in 2006 totaled 26.6 million tonnes, 15% higher than the 10-year average (see Table 1). However, the 2006 production was down 9%, when compared to a year earlier. Much of the decline in production was driven by significantly lower crop yields that resulted from the persistent hot, dry weather in July.

To offer some perspective, most producers in the province had an average or above average crop in 2006. Overall, the provincial average yields were similar to their 10-year averages for barley, oats and dry peas, and above 10-year averages for spring wheat, durum wheat and canola. Also, yields were significantly higher than the 10-year averages for fall-seeded crops and most specialty crops grown in southern Alberta. With respect to crop quality, estimates of grades for major crops were better than in most years.

Regarding estimates for specific crops, total 2006 production of spring wheat in Alberta declined 5%, to 7.0 million tonnes. The lower production stemmed from a 10% reduction in the provincial average yield which negated a 6% increase in harvested area. Compared to 2005, durum production fell 32% to 691,300 tonnes, the result of a substantial decline in harvested acreage. Total production of all wheat was estimated at 7.8 million tonnes, or 9% lower than the record production of 8.5 million tonnes in 2005, but still 13% higher than the 10-year average. Also, this was the second highest wheat production on record in the province.

Total barley production was estimated at 4.6 million tonnes, down 17% from 2005, and 15% below the 10-year average. The lower production was the result of reductions in both yields and harvested area. With respect to oats, production was down 22% to 670,900 tonnes, mainly due to lower yields. The lower barley and oats production, coupled with improved crop quality, contributed to a tight supply of feed grains in Alberta.

Compared to a year earlier, total canola production was down 11% to 3.3 million tonnes in 2006. The decline in production was attributed to a lower provincial average yield of 33.7 bushels per acre, compared to 37.9 bushels per acre in 2005. Total flaxseed production was down significantly by 20% from a year earlier, to 42,900 tonnes, as a result of lower yields and a smaller harvested area in 2006.

Dry peas production fell 5% to 586,100 tonnes, the result of lower yields. The provincial average yield was down 16% thereby negating the 13% increase in harvested area. Similarly, tame hay production declined 5% to 8.0 million tones, driven by a 6% reduction in the provincial average yield, despite total harvested area increasing by 3%.

Alberta Greenfeed and Silage Production, 2006

Although not shown in the tables, total area harvested for greenfeed and silage production was estimated at 1.40 million acres (about 8% of 2006 grain/oilseed crop acreage). This was down 7% from the 2005 area of 1.50 million acres, with acreage for both greenfeed and silage showing significant declines. The lower acreage was to be expected given the high tame hay production in 2005 and 2006, which reduced the need for greenfeed and silage production. Total area harvested for greenfeed fell 6% from 2005, to 600,000 acres, while for silage, acreage was down 7% to 800,000 acres.

Due to the persistent hot, dry weather in July, provincial average yields for both greenfeed and silage were down in 2006, compared to a year earlier. With lower yields and reductions in harvested area, greenfeed and silage production declined significantly in 2006. Total greenfeed

production was estimated at 1.57 million tonnes or about 20% lower than in 2005, while total silage production fell 21% in 2006, to 4.67 million tonnes.

Feed Availability and Quality in Alberta

Most producers in Alberta had adequate or surplus supplies of feed grains and forages, based on a survey conducted by the Statistics and Data Development Unit of Alberta Agriculture and Food in November 2006. With respect to quality, feed grains and forages were mostly rated as good to excellent.

Feed Grains

A smaller 2006 crop, coupled with improved crop quality contributed to a tighter supply of feed grains in Alberta, compared to 2005. This was cushioned to some degree by a large carryover from the 2005 crop, which helped relieve some pressure in the feed grain market. However, feed grains prices jumped substantially from a year earlier, due mainly to a high global demand, including increased usage for ethanol production.

Most producers in the province managed to secure their supplies of feed grains in 2006. The majority of feed grains purchased came from producers within the same area, as well as other regions of the province. Also, some producers sourced their supplies from Saskatchewan, British Colombia, and Manitoba. As a result of high corn prices, imports of US corn into the province were limited.

Overall, in the province, survey respondents rated feed barley supply as 5% deficit, 15% possible shortfall, and 60% adequate, and 20% surplus. Similar ratings were also reported for feed oats and feed wheat. In terms of quality, about 80% of feed barley and feed oats, and 85% of feed wheat were reported as good to excellent.

Forages

Favourable moisture conditions in May and June contributed to an excellent hay crop in 2006. High tame hay production, coupled with harvested greenfeed and silage, provided an abundant supply of forages. As a result, most producers in Alberta had adequate supplies of forages. The majority of forages purchased came from producers in the same area.

Overall, 85% of survey respondents reported adequate or surplus supplies of straw for feed and straw for bedding. Supplies were even better for tame hay, greenfeed, and silage, with about 90% of survey respondents reporting having enough or surpluses. In terms of quality, nearly 80% of tame hay and greenfeed, and 90% of silage were rated as good to excellent. Producers also reported that 85-90% of straw for feed and straw for bedding was in good to excellent condition.

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Table 1: Alberta Crop Production ('000 tonnes)

	2001	2002	2003	2004	2005	2006	10 year average	% change 06 vs 05	% change 06 vs avg
Winter Wheat	68.0	29.9	144.2	196.0	190.5	160.6	95.0	-16%	69%
Spring Wheat	5,266.2	2,800.6	5,278.4	6,593.7	7,337.2	6,966.2	5,939.0	-5%	17%
Durum Wheat	468.1	898.1	1,034.2	1,007.0	1,020.6	691.3	879.0	-32%	-21%
All Wheat	**5,802.3**	**3,728.6**	**6,456.8**	**7,796.7**	**8,548.3**	**7,818.1**	**6,913.0**	**-9%**	**13%**
Oats	592.2	370.1	876.0	886.8	859.0	670.9	794.0	-22%	-16%
Barley	4,746.4	2,569.1	5,530.2	5,835.0	5,565.0	4,624.5	5,451.0	-17%	-15%
Fall Rye	50.8	14.2	76.2	94.0	79.0	31.2	60.0	-61%	-48%
Mixed Grains	53.1	16.3	40.8	44.9	40.8	43.9	57.0	8%	-23%
Flaxseed	20.3	20.3	25.4	29.2	53.3	42.9	30.0	-20%	43%
Canola	1,632.9	1,020.6	2,222.6	2,925.7	3,651.4	3,265.9	2,313.0	-11%	41%
Dry Peas	506.2	234.3	507.9	698.1	617.5	586.1	493.0	-5%	19%
Mustard Seed	8.5	21.9	38.8	52.4	31.1	25.6	33.0	-18%	-22%
Chick Peas	20.5	36.5	13.2	8.6	19.6	22.8	15.8	16%	44%
Triticale	18.8	8.3	34.3	27.9	21.8	15.0	32.0	-31%	-53%
Sugar Beets	523.1	422.4	628.1	740.5	668.1	870.9	671.0	30%	30%
Fodder Corn	435.4	435.5	453.6	589.7	453.6	517.1	356.0	14%	45%
Tame Hay	4,309.1	3,039.1	6,395.7	7,393.6	8,436.8	8,019.5	5,784.0	-5%	39%
Total	**18,720**	**11,937**	**23,300**	**27,123**	**29,045**	**26,554**	**23,003**	**-9%**	**15%**

Totals may not add up due to rounding. 10-year average refers to 1996 to 2005.

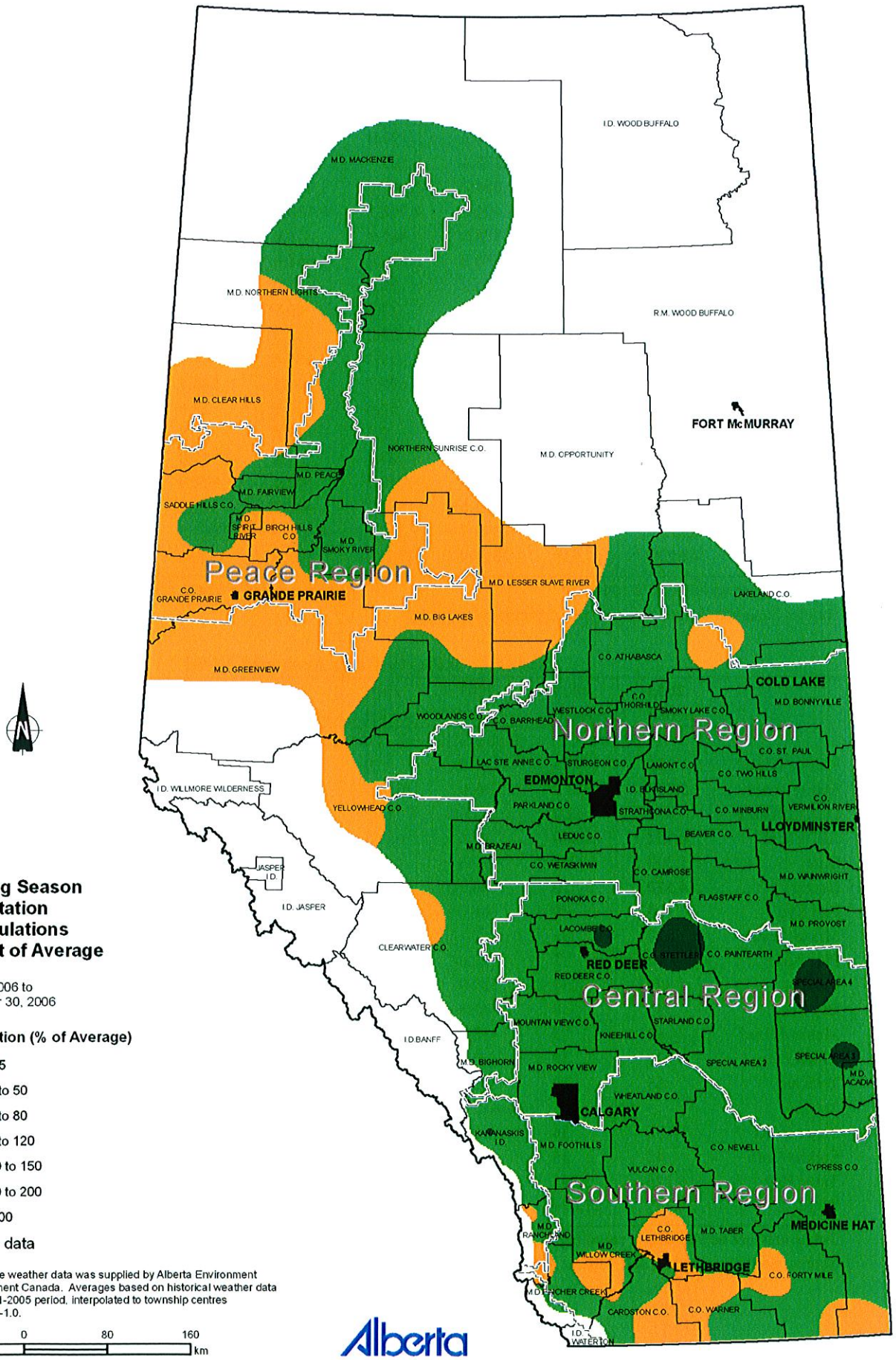
Source: Statistics Canada, and Alberta Agriculture and Food

Table 2: Alberta Crop Area and Yield

	2005 seeded	2005 harvested	2005 yield	2006 seeded	2006 harvested	2006 yield	10 year avg yield	Yield % change 06 vs 05	Yield % change 06 vs avg
	('000 acres)		(bu/acre)	('000 acres)		(bu/acre)			
Winter Wheat	125	125	56.0	120	115	51.3	42.4	-8%	21%
Spring Wheat	5,737	5,615	48.0	6,033	5,933	43.1	39.3	-10%	10%
Durum Wheat	870	860	43.6	600	595	42.7	35.3	-2%	21%
All Wheat	**6,732**	**6,600**	**47.6**	**6,753**	**6,643**	**43.2**	**38.8**	-9%	11%
Oats	1,300	700	79.6	1,200	670	64.9	67.3	-18%	-4%
Barley	4,500	3,830	66.7	4,300	3,570	59.5	58.2	-11%	2%
Fall Rye	100	70	44.4	55	30	41.0	36.0	-8%	14%
Mixed Grains	220	35	57.1	250	40	53.8	53.8	-6%	0%
Flaxseed	80	75	28.0	70	65	26.0	22.5	-7%	16%
Canola	4,300	4,250	37.9	4,300	4,270	33.7	28.0	-11%	20%
Dry Peas	555	530	42.8	630	600	35.9	35.9	-16%	0%
Mustard Seed	80	75	18.3	60	60	18.8	14.9	3%	26%
Chick Peas	30	30	24.0	35	35	24.0	17.5	0%	37%
Triticale	65	20	43.0	65	15	39.3	39.3	-9%	0%
			(tons/acre)			(tons/acre)			
Sugar Beets	35	34	19.9	37	37	25.9	21.0	30%	23%
Fodder Corn	45	35	14.3	35	30	19.0	16.1	33%	18%
Tame Hay	6,125	5,345	1.7	6,250	5,485	1.6	1.2	-6%	33%
Total	**24,167**	**21,629**	-	**24,040**	**21,550**	-	-	-	-

Totals may not add up due to rounding. - Not applicable

Source: Statistics Canada, and Alberta Agriculture and Food



Growing Season Precipitation Accumulations Percent of Average

April 01, 2006 to
September 30, 2006

Precipitation (% of Average)

- < 25
- 25 to 50
- 50 to 80
- 80 to 120
- 120 to 150
- 150 to 200
- > 200
- No data

Near-real-time weather data was supplied by Alberta Environment and Environment Canada. Averages based on historical weather data from the 1961-2005 period, interpolated to township centres using AbClim-1.0.

80 40 0 80 160 km

Alberta

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