# **Economics & Competitiveness**

# Alberta Crop Report

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FEB 1 2005

Alberta 2004 Crop Season in Review With Feed Availability Report

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This report presents a review of the 2004 crop season and an analysis of the 2004 crop production statistics, as well as information on feed availability in Alberta. Also attached for your reference is the precipitation map for the 2004 crop season.

## **The 2004 Crop Season**

Crop growing conditions during the 2004 crop season in Alberta generally improved from a year earlier, although adverse weather conditions in the fall significantly reduced crop quality. As a result, yields for most major crops in Alberta in 2004 are much higher than the 10-year averages. Crop quality of major crops, however, is below average.

The 2004 crop season in Alberta began under cool, dry conditions. Lack of soil moisture reserves, particularly at the sub-surface level, was a common concern in spring, although surface moisture levels were adequate for seed germination in most areas. Most producers completed seeding by the end of May or early June.

Timely rain showers in June brought much needed moisture across Alberta. Soil moisture conditions improved significantly, especially at the surface level. In July and August, rainstorms, many accompanied by hail, were common throughout Alberta, causing crop damage in some areas. Exceptions were eastern areas of the Central Region and northern parts of the Peace Region, where dry conditions remained largely unchanged due to lack of precipitation.

Based on a survey conducted by the Statistics and Data Development Unit of AAFRD in mid-August, about three-quarters of major grains and oilseeds were in good to excellent condition. Some areas in the Southern Region reported excellent dryland crop conditions which had not been seen in many years. Provincially, crop development of major cereals/oilseeds was generally on par with the 10-year average.

However, cool, wet weather conditions prevailed across the province for most parts of the fall, delaying crop maturity and hindering harvesting operations. Frosts and snow brought additional challenges to the harvesting season. Crop lodging and sprouting in both standing and swathed crops were occurring in many areas. Some grains and oilseeds were being taken off damp and tough, and needed to be dried. Combining progress in 2004 was well behind normal. About 4% of the 2004 crop is still in the field, either being abandoned or to be harvested in spring of 2005. The majority of these crops are in the Peace Region.



#### **Insects and Crop Diseases**

With the improved moisture conditions, grasshopper infestations during the 2004 crop season were confined to several local areas. Flea beetle infestations and sawflies caused crop damage in many areas. Lygus bugs, wireworms, and gophers were also problematic.

The cool, damp conditions during the later part of the 2004 season led to the development of some crop diseases. White mold and powdery mildew significantly reduced yields of pulse crops in 2004. Leaf diseases and smut in cereals, sclerotinia in canola, and other crop diseases were also reported.

# Forage and Pasture

Due to low temperatures and lack of moisture, pasture and tame hay growth was slow in spring. Based on a survey conducted by the Statistics and Data Development Unit of AAFRD in late May, pasture conditions were reported as 47% poor, 35% fair, 17% good, and 1% excellent, while rating of tame hay was 41% poor, 39% fair, 17% good, and 3% excellent.

The moisture received during summer and early fall improved conditions of pasture and tame hay. By early October, pasture conditions were rated as 18% poor, 38% fair, 35% good, and 9% excellent. The provincial average yield of tame hay in 2004 was significantly higher than in 2003 and the 10-year average. Quality of tame hay, however, suffered some damage from rain showers. Overall in the province, quality of tame hay in 2004 was rated as 29% poor, 29% fair, 32% good, and 10% excellent. Additionally, producers in Alberta harvested significant annual cereal crops as greenfeed and silage in 2004.

#### 2004 Crop Production, Alberta

Based on the Statistics Canada report entitled "November Estimate of Production of Principal Field Crops, 2004" released on December 8, total crop production in Alberta in 2004 is estimated at 27.15 million tonnes (see Table 1). This is 16% higher than in 2003 and 21% above the 10-year average. Due to improved crop growing conditions, provincial average yields for most major crops are estimated to be much higher than in 2003 and the 10-year average (see Table 2). However, cool, wet weather conditions in the fall reduced crop quality, particularly of cereal crops in northern Alberta. As a result, crop quality of major crops in the province is generally below average. Total 2004 seeded area and harvested acreage for principal crops are close to the 10-year average levels. Total summerfallow area in 2004 decreased to 2.15 million acres, from 2.20 million acres in 2003.

Total production of spring wheat in Alberta in 2004 is estimated at 6.59 million tonnes, up 25% from a year ago. The higher production is due mainly to improved yields. The provincial average yield for spring wheat is estimated at a record 46.1 bushels per acre, or 19% higher than in 2003, and 24% above the 10-year average. However, total production of durum wheat fell by 3%, to 1.01 million tonnes. This is attributed to a large reduction in harvested area. The average yield of durum wheat increased 20% to 42.0 bushels per acre. Due to the large increase in spring

wheat production, total wheat production (spring and durum wheat) in 2004 increased to 7.80 million tonnes. This is 21% higher than in 2003, and 19% above the 10-year average.

In 2004, total barley production in Alberta is estimated at 5.84 million tonnes, 6% higher than in 2003 and the 10-year average. The higher production is due to a large increase in yields, which more than offset losses from a lower harvested area. The provincial average yield of barley is estimated at 65.4 bushels per acre, compared to 56.4 bushels per acre in 2003, and the 10-year average of 56.7 bushels per acre. Total oat production in 2004 is estimated at 0.89 million tonnes, up 1% from the 2003 level and 9% higher than the 10-year average. The average yield of oats in 2004 is 76.7 bushels per acre, or 17% higher than in 2003, and 18% above the 10-year average.

Canola production in Alberta in 2004 jumped 32%, to 2.93 million tonnes, and is 38% higher than the 10-year average of 2.13 million tonnes. The high production is due to significant increases in both yields and harvested area. The average yield for canola in 2004 is estimated at a record high 33.9 bushels per acre, compared to the previous record high of 29.7 bushels per acre in 2003, and the 10-year average of 25.4 bushels per acre.

In 2004, total production of dry peas in Alberta increased 37% from a year earlier, to a record 0.70 million tonnes. The record production is driven by increases in both yields and harvested acreage. Total production of mustard seed is estimated at 52,400 tonnes, 35% higher than in 2003, and 56% above the 10-year average.

Total production of tame hay in 2004 is estimated at 7.39 million tonnes, 16% above the 2003 production level, and 28% higher than the 10-year average. The higher production is due to a combination of higher average yield and larger harvested acreage.

Additionally, 1.35 million acres or 8% of 2004 grain/oilseed crop acreage in Alberta were harvested as greenfeed or silage, based on survey estimates by the Statistics and Data Development Unit of AAFRD. This is 33% below the 2003 area of 2.01 million acres. Improved crop growing conditions in 2004 resulted in high forage yields, which reduced the acreage needed for greenfeed and silage production. A high tame hay production in 2004 also contributed to the lower area harvested for greenfeed and silage production. In 2004, total harvested area is estimated at 635,000 acres for greenfeed production and 715,000 acres for silage production.

In 2004, total greenfeed production in Alberta is estimated at 2.20 million tonnes, 7% higher than 2.06 million tonnes in 2003. Total silage production in 2004 was 5.20 million tonnes, compared to 4.53 million tonnes a year earlier. The high production of greenfeed and silage in 2004 is due to increased average yields, which more than offset the impact of lower harvested area.

Table 1: Alberta Crop Production ('000 tonnes)

	<u>1999</u>	2000	<u>2001</u>	2002	2003	2004	10-year average	2004/ 10-year
Winter Wheat	69.4	46.3	68.0	29.9	144.2	196.0	71.7	273%
Spring Wheat	7,251.7	6,267.7	5,266.2	2,800.6	5,278.4	6,593.7	5,661.7	116%
<b>Durum Wheat</b>	898.1	809.7	468.1	898.1	1,034.2	1,007.0	823.7	122%
All Wheat	8,219.2	7,123.7	5,802.3	3,728.6	6,456.8	7,796.7	6,557.1	119%
Oats	863.6	657.0	592.2	370.1	876.0	886.8	814.7	109%
Barley	5,987.4	5,268.9	4,746.4	2,569.1	5,530.2	5,835.0	5,491.0	106%
All Rye	72.4	42.5	58.4	16.1	82.8	102.9	63.5	162%
Mixed Grains	42.9	60.2	53.1	16.3	40.8	44.9	68.3	66%
Flaxseed	39.4	17.8	20.3	20.3	25.4	29.2	30.9	94%
Canola	2,971.0	2,188.6	1,632.9	1,020.6	2,222.6	2,925.7	2,126.2	138%
Dry Peas	530.8	620.5	506.2	234.3	507.9	698.1	439.1	159%
Mustard Seed	44.8	13.8	8.5	21.9	38.8	52.4	33.5	156%
Lentils	12.4	9.9	5.0	4.9	6.9	11.3	10.4	109%
Chick Peas	-	16.8	20.5	36.5	13.2	8.6	21.7	40%
Triticale	81.3	52.1	18.8	8.3	34.3	27.9	32.9	85%
Sugar Beets	839.8	920.3	523.1	422.4	628.1	743.9	704.6	106%
Fodder Corn	181.4	462.7	435.4	435.5	453.6	589.7	290.7	203%
Tame Hay	6,191.5	5,556.5	4,309.1	3,039.1	6,395.7	7,393.6	5,798.5	128%
Total	26,077.9	23,011.3	18,732.2	11,943.9	23,313.1	27,146.7	22,483.1	121%

Source: Statistics Canada and AAFRD.

Totals may not add up due to rounding.

- Not available.

Table 2: Alberta Crop Area and Yield

	2004 2004		2004	10-year Average			2004/10-year
	<u>seeded</u>	<u>harvested</u>	yield	seeded	harvested	yield	<u>yield</u>
	('000 acres)		(bu/acre)	('000 acres)		(bu/acre)	(%)
Winter Wheat	160	160	45.0	70	66	40.2	112%
Spring Wheat	5,460	5,260	46.1	5,829	5,515	37.3	124%
Durum Wheat	900	880	42.0	925	897	33.9	124%
All Wheat	6,520	6,300	45.5	6,824	6,477	36.9	123%
Oats	1,450	750	76.7	1,430	807	65.0	118%
Barley	4,900	4,100	65.4	5,250	4,400	56.7	115%
All Rye	140	100	40.5	103	75	33.1	122%
Mixed Grains	230	40	55.0	260	62	53.8	102%
Flaxseed	50	45	25.6	58	56	21.7	118%
Canola	4,000	3,800	33.9	3,830	3,694	25.4	133%
Dry Peas	700	655	39.2	508	471	34.6	113%
Mustard Seed	135	128	18.0	98	94	15.3	118%
Lentils	18	18	22.9	25	23	16.1	142%
Chick Peas	15	15	21.1	55	48	15.0	141%
Triticale	100	25	44.0	64	31	41.3	107%
	(tons/acre			(tons/acre)			
Sugar Beets	35	35	23.4	36	35	20.2	116%
Fodder Corn	50	35	18.6	22	20	16.6	112%
Tame Hay	6,500	5,900	1.4	5,699	5,249	1.2	115%
Total	24,843	21,946	-	24,260	21,539	-	

Source: Statistics Canada and AAFRD.

Totals may not add up due to rounding.

- Not available.

# Feed Supply and Quality in Alberta

In 2004, high crop yields and production, coupled with below average crop quality, resulted in increased supplies of feed grains in Alberta. Most producers in the province had adequate or surplus supplies of feed grains and forages, with varying quality, according to results of a survey conducted by the Statistics and Data Development Unit of AAFRD in November 2004.

In 2004, Alberta producers purchased feed grains mainly from producers in the province and Saskatchewan, while in the case of forages, most producers sourced their supplies from other producers in the same region. With an improved supply of feed grains in Alberta, US corn imports into the province are expected to be limited in the 2004/05 crop year.

#### The Southern Region

Due to good moisture conditions, yields of major grains and oilseeds grown on dryland in 2004 were among the highest for the Southern Region. As a result, producers in the region generally reported adequate or surplus supplies of feed grains and forages. Less than 3% of survey respondents indicated possible shortfall for feed grains. Feed grains purchased were mostly from local producers in the same region and other regions in Alberta, with some feed barley coming from Saskatchewan.

Survey respondents rated hay quality as 12% poor, 26% fair, 48% good, and 14% excellent. The majority of greenfeed/silage/straw was reported in good or excellent condition. Feed barley was rated as 2% poor, 17% fair, 60% good, and 21% excellent. Feed wheat was reported as 1% poor, 26% fair, 57% good, and 16% excellent.

Average prices (\$/ton) reported in the region: tame hay \$63, cereal greenfeed \$50, cereal silage \$35, and cereal straw \$26.

#### The Central Region

Most producers in the region had surplus or adequate supplies of feed grains and forages. Hay supply was rated as 28% surplus, 58% adequate, 10% possible shortfall, and 4% deficit, while greenfeed supply was reported as 30% surplus, 64% adequate, 5% possible shortfall, and 1% deficit. Rating of feed barley supply was 44% surplus, 50% adequate, 5% possible shortfall, and 1% deficit. For feed wheat, supply was reported as 38% surplus, 51% adequate, 9% possible shortfall, and 2% deficit.

Feed grains purchased were mostly from local producers in the Central Region; some feed grains came from other regions in Alberta, Saskatchewan and USA. Some producers also purchased hay, greenfeed and straw from Saskatchewan.

The majority of feed grains/forages in the region was in good to excellent condition. Quality of hay was rated as 17% poor, 23% fair, 38% good, and 22% excellent, while greenfeed was reported as 15% poor, 27% fair, 39% good, and 19% excellent. Rating of feed barley quality

was 4% poor, 16% fair, 35% good, and 45% excellent. Quality of feed wheat was reported as 3% poor, 16% fair, 54% good, and 27% excellent.

Average prices (\$/ton) reported in the region: tame hay \$61, cereal greenfeed \$45, and cereal straw \$28. Cereal silage price was not available due to limited sales.

## The North East Region

Most survey respondents indicated surplus or adequate supplies of feed grains and forages. Hay supply was rated as 16% surplus, 52% adequate, 23% possible shortfall, and 9% deficit. Rating of greenfeed supply was 27% surplus, 58% adequate, 14% possible shortfall, and 1% deficit. Supply of feed barley was reported as 25% surplus, 54% adequate, 18% possible shortfall, and 3% deficit. For feed wheat, supply was rated as 36% surplus, 61% adequate, 2% possible shortfall, and 1% deficit.

Quality of forages/feed grains varied across the region. Rating of hay quality was 55% poor, 35% fair, 8% good, and 2% excellent. Greenfeed quality was reported as 18% poor, 24% fair, 39% good, and 19% excellent. Quality of feed barley/oats was rated as 10% poor, 16% fair, 55% good, and 19% excellent, while quality of feed wheat was reported as 8% poor, 17% fair, 67% good, and 8% excellent.

Feed grains purchased were from local producers in the North East Region, and producers in the Northwest Region. Forages purchased were primarily from local producers in the same region.

Average prices (\$/ton) reported in the region: tame hay \$51, cereal greenfeed \$42, cereal silage \$18, and cereal straw \$25.

#### The North West Region

Most producers reported adequate or surplus supplies of feed grains and forages. Rating of tame hay supply was 14% surplus, 69% adequate, 13% possible shortfall, and 4% deficit. Greenfeed supply was reported as 7% poor, 76% fair, 16% good, and 1% excellent. Feed barley supply was rated as 14% surplus, 73% adequate, 11% possible shortfall, and 2% deficit.

Survey respondents rated hay quality as 23% poor, 28% fair, 43% good, and 6% excellent. Greenfeed quality was reported as 2% poor, 20% fair, 62% good, and 16% excellent. Quality of feed grains (barley/oats/wheat) was rated as 12% poor, 21% fair, 52% good, and 15% excellent.

Feed grains and forages purchased were from local producers in the North West Region, and producers in other regions of the province.

Average prices (\$/ton) reported in the region: tame hay \$52, and cereal greenfeed \$47. Prices for cereal silage and cereal straw were not available.

## The Peace Region

Most survey respondents in the region reported surplus or adequate supplies for forages and feed grains. Hay supply was rated as 9% surplus, 61% adequate, 19% possible shortfall, and 11% deficit, while greenfeed supply was reported as 9% surplus, 63% adequate, 24% possible shortfall, and 4% deficit. For feed barley, supply was rated as 17% surplus, 66% adequate, 14% possible shortfall, and 3% deficit. Supply of feed wheat was reported as 50% surplus, 47% adequate, and 3% possible shortfall.

Survey respondents rated hay quality as 39% poor, 34% fair, 22% good, and 5% excellent. Greenfeed quality was reported as 13% poor, 52% fair, 30% good, and 5% excellent. Quality of feed barley was rated as 32% poor, 46% fair, and 22% good, while rating of feed wheat quality was 14% poor, 52% fair, 33% good, and 1% excellent.

Feed grains and forages purchased were from local producers in the Peace Region. Average prices (\$/ton) reported in the region: tame hay \$51, cereal greenfeed \$38, and cereal straw \$20. Silage price was not available due to limited sales.

Alberta Agriculture, Food and Rural Development Statistics & Data Development Unit January 31, 2005

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