Alberta Crops, 2007

The following presents a review of the 2007 crop season in Alberta, as well as some analysis relating to crop production. Also, a precipitation map for the 2007 crop season is shown on page 96.

The 2007 Crop Season

Wet weather conditions in spring caused major delays in field operations. In most areas of the province, seeding progress was well behind normal. As a result, many producers switched to shorter season varieties of canola or cereals for feed and forage production. This was particularly the case in the Peace Region, North West Region and western parts of the Central Region. Some fields were saturated and left unseeded, resulting in a higher summerfallow area than intended.

Despite the late start, nearly 80 per cent of the spring seeded crops and 90 per cent of winter cereals were in good to excellent condition in late June, based on information from the Alberta Crop Report. However, in some areas, heavy rainfall in June caused localized flooding and left water standing in low-lying fields.

Persistent hot, dry weather across the province in July depleted soil moisture reserves and caused some crops to abort flowering and podding, resulting in significant deterioration in crop conditions and yield potentials. At the same time, the hot, dry weather also hastened crop development, particularly in the Southern Region.

The early maturity of crops allowed producers to start their harvesting operations earlier than usual in the province. By mid-August, about seven per cent of the crop was already in the bin, with the majority of crop harvest occurring in the Southern Region. However, due to late seeding, the development of some crops was still behind normal. Additionally, hailstorms in August caused crop damage in many areas of the province.

Cool, damp weather conditions prevailed through the second half of August and most of September. These conditions slowed crop maturity and hampered harvesting operations. Based on information from the Alberta Crop Report, harvest was only 65 per cent complete as of September 27, compared to 85 per cent in an average year.

In October, producers took advantage of the drier weather conditions and made significant progress in their harvesting operations. By the end of October, combining in the province was virtually complete, although some crops, mostly canola in the Peace Region, were taken off the field in November. In some cases, crops intended for grain production were either grazed or baled for forage use. Also, some crops were left in the field over the winter, due to excessive moisture conditions.

Overall, the cool, damp fall weather not only caused major delays in harvest operations, but also resulted in a significant deterioration in crop quality. Provincially, crop quality was estimated to be average for cereals, but below average for canola. Yields for most major crops were similar to their 10-year averages, but lower than in 2006.

Insects and Crop Diseases

In 2007, grasshoppers, gophers and sawflies caused the most noticeable crop damage. Producers also encountered problems with other pests, including cabbage seedpod weevil, diamondback moths, wheat midge, root maggots, wireworm, lygus bugs, and bertha armyworm moths.

Crop diseases were less prevalent in 2007 than in most years, although the application of fungicides was reported in some areas. The lower incidence of diseases was attributed to the dry weather conditions in July and early August.

Forage and Pasture

Due to excellent soil moisture reserves, pasture and tame hay growth ranged from good to excellent in most areas of the province during the spring of 2007. The Alberta Crop Report released in late May rated pasture conditions as five per cent poor, ten per cent fair, 56 per cent good, and 29 per cent excellent, with similar ratings reported for tame hay as well. Pasture and tame hay continued to improve in June, as soil moisture conditions remained favourable.

High temperatures and a lack of rainfall during July and early August slowed down pasture and tame hay growth. The Alberta Crop Report released in mid-August rated pasture conditions as 26 per cent poor, 37 per cent fair, 33 per cent good, and four per cent excellent, a substantial decline from conditions in the spring.

With respect to tame hay, the provincial average yield in 2007 was the highest in the last decade, due mainly to well above yields from the first cut. Overall, hay quality ranged mostly from fair to excellent. Also, it is worth mentioning that to secure additional forage supplies, some producers chose to harvest some of their annual cereals as greenfeed and silage.

Crop Production

On December 6, 2007, Statistics Canada released a report entitled "November Estimate of Production of Principal Field Crops, Canada, 2007". It showed Alberta's total production of principal crops in 2007 at 26.4 million tonnes, or two per cent lower than in 2006, but 13 per cent higher than the 10-year average (1997-2006). Due to the hot, dry July weather, the provincial average yields for most crops were lower than in 2006, but similar to their 10-year averages. In addition, the total acreage of principal crops seeded and harvested remained virtually unchanged from a year earlier, while total summerfallow area declined by five per cent to 2.1 million acres, from 2.2 million acres in 2006.

More specifically, in 2007, total production of spring wheat declined 22 per cent from a year earlier, to 5.2 million tonnes. The lower production was attributed to declines in harvested area and yield. Total harvested area was estimated at 4.8 million acres, or 16 per cent lower than a year earlier. The provincial average yield was 40.2 bushels per acre, down seven per cent from 2006. For durum wheat, production increased to 670,000 tonnes, or two per cent higher than in 2006. The higher production stemmed from a large increase in harvested area, which more than offset the marked reduction in yield. The provincial average yield was estimated at 32.4 bushels per acre, or 24 per cent lower than in 2006. The lower yield was the result of dry conditions during the 2007 summer in the Southern Region, where most of the crop is grown. Overall, production of all wheat was 6.1 million tonnes, down 19 per cent from 2006.

Oats production was estimated at 627,400 tonnes in 2007, or 11 per cent lower than in 2006. The decline was attributed to a reduction in harvested area, as yield was practically unchanged. The provincial average yield was 65.6 bushels per acre, compared to 65.0 bushels per acre in 2006, and the 10-year average of 67.3 bushels per acre. With respect to barley, production increased 16 per cent from 2006, to 5.1 million tonnes in 2007. The gain was the result of a 26 per cent increase in harvested area. The provincial average yield was estimated at 55.0 bushels per acre, down eight per cent from 2006. Despite the higher barley production, feed grains supplies in local markets remained tight due to a low carry-over from the 2006/07 crop year, and the increased use of grains for ethanol production. As a result, significant amounts of US corn were imported into the province.

Canola production in 2007 declined to 3.0 million tonnes, or 13 per cent lower than in 2006. Driving the decline was a reduction in the provincial average yield, as harvested area remained virtually unchanged. The provincial average yield was estimated at 29.6 bushels per acre, down 12 per cent from 2006. Dry peas production in 2007 fell five per cent to 527,500 tonnes, despite an increase in harvested area. The lower production was due to a decline in yields, which fell nine per cent to 32.6 bushels per acre.

Hay, Greenfeed and Silage Production

Favorable moisture conditions in spring and early summer resulted in an excellent hay crop. Total tame hay production in the province jumped 14 per cent, to 9.3 million tonnes, the highest in the last ten years. Triggering the increase were higher yields, which on average for the province was 1.8 tons per acre, or 12 per cent higher than in 2006, and 41 per cent above the 10-year average.

As a result of the near record tame hay production in 2007, the need for greenfeed and silage production was significantly reduced. The results of a survey conducted by the Statistics and Data Development Unit of Alberta Agriculture and Rural Development showed the total provincial greenfeed production in 2007 at 1.1 million tonnes, or 32 per cent lower than in 2006. The survey also showed silage production down 34 per cent, to 3.1 million tonnes. The lower production was mainly due to substantial reductions in harvested area. Total area harvested for greenfeed declined 28 per cent from 2006, to 430,000 acres, while silage acreage fell 31 per cent to 550,000 acres. The estimated provincial average yields for greenfeed and silage were slightly down from 2006, due to a combination of delayed seeding and the hot, dry weather in July. In 2007, barley, oats and mixed grains remained the major crops harvested for greenfeed and silage production.

Crop Prices and Marketings

In 2007, local and international grains and oilseeds markets rallied, due to tight supplies and the increased demand for bio-fuel production. In Alberta, the average price of all wheat increased 47 per cent to $5.03 per bushel, while the average price for barley was estimated at $3.70 per bushel, up 73 per cent from a year earlier. For canola, the average price was estimated at $8.50 per bushel, 43 per cent higher than in 2006. Similarly, prices for other crops rose markedly in 2007. With respect to marketings, year over year changes varied substantially among the major crops. Total wheat marketings was estimated at 6.7 million tonnes, up one per cent from a year earlier, while barley marketings increased 21 per cent, to 1.6 million tonnes, mainly the result of higher exports. For canola, a smaller crop in 2007 resulted in reduced marketings, which was estimated at 3.3 million tonnes, or down ten per cent from a year earlier.