

# Alberta Crop Report



## Alberta 2020 Crop Season in Review

### Overview

This report presents a review of the 2020 crop season in Alberta and an analysis of crop production statistics. In addition, a precipitation map for the 2020 crop season is also attached for reference.

### The 2020 Crop Season

Overall, the 2020 crop season can be categorized as a good year for Alberta producers, despite some of the challenges of a wet spring and summer in the western and northern parts of the province. The cool, wet spring delayed seeding, especially in the areas where producers had to complete the harvesting of overwintered crops from the previous crop season (fall 2019). September had lower than normal precipitation and mostly above average temperatures, which was key for producers to have a normal harvest season, after a couple of challenging years. From mid-September, harvest season was two to three weeks ahead of the five-year average. As of October 20, 2020, about 98.7 per cent of all crops across the province were in the bin, with slightly less than one per cent of crops in the swath (0.8 per cent) or still standing (0.5 per cent).

More specifically, the season started in May, while about 10 per cent of acres across the province still needed to be harvested from 2019. Moving from the south to the northern part of the province, the number of 2019 unharvested acres increased, with the North West and Peace Regions furthest behind. Provincially, as of May 12, 2020, about 14 per cent of overwintered spring wheat acres, 12 per cent of barley, 29 per cent of oats and 16 per cent of canola remained unharvested. Producers had also seeded about 21 per cent of acres provincially, which was 11 per cent behind the five-year average (2015-2019). Mid-May saw variable weather across the province impact field operations, particularly the seeding of 2020 crops and the harvesting of 2019 crops in the North East, North West and Peace Regions. Additionally, temperatures during the second half of May were colder than normal. By May 26, 2020, combining of 2019 overwintered acres was complete in the Southern, Central and North East Regions, except for some low-lying areas which were still too wet to support harvest equipment.

However, in the North West and Peace Regions, producers still had some acres to harvest, as they were dealing with excessive soil moisture in some areas. At this point, about 80 per cent of all crops were seeded across the province. Regionally, seeding was ahead in the Southern, Central and North East Regions but behind in the Peace and North West, due to excessive moisture.

With respect to soil moisture, the season started with 76 per cent of province having good or excellent surface soil moisture. Excessive soil moisture was an issue across much of the North West and the Peace Regions, which experienced wet conditions in fall 2019. Precipitation over the month of May was varied across the province. While rain supported soil moisture in the eastern half of the province, promoting active growth for both crops and forages, it led to excessive soil moisture in other areas, particularly in the Peace and North West Region. With all the precipitation received in May, soil moisture reserves were improved across the province. As of May 26, 2020, surface soil moisture (five-year averages shown in brackets) was rated at 0 (10) per cent poor, 10 (24) per cent fair, 54 (41) per cent good, 32 (21) per cent excellent and 4 (4) per cent excessive.

Provincial seeding progress was reported at nine per cent for the first week of May, 21 per cent by mid-May and 80 per cent by the end of May. At the beginning of June, 93 per cent of all crops across the province were seeded, slightly behind the five-year average of 94 per cent. Seeding in the Southern and Central Regions was complete, while producers in the northern parts of the province still faced seeding challenges. Seeding in the North East and North West Regions was 94 per cent and 88 per cent complete, respectively, while in the Peace Region seeding was at 72 per cent. As of June 9, more than 98 per cent of 2020 spring planting was in the ground, with 75 per cent of seeded crops emerged (12 per cent behind the five-year average).

Over the month of June, challenges continued for the northern parts of the province. In these regions, the cool, wet weather which delayed seeding in the spring affected crop development. Due to saturated fields, some producers had to re-seed their fields in mid-June with cereals to be used for greenfeed and silage. For other producers, mainly in the North West, Peace Regions and some areas in the North East Region, the excessive soil moisture, coupled with the challenges they faced in harvesting overwintered crops, led to some unseeded acres. Soil moisture in the first half of June was near field capacity across a wide area of the province, resulting in very good soil moisture conditions throughout the province, with 82 per cent rated as good or excellent. Crop growing conditions were generally better than normal for June, especially for the Southern and Central Regions, due to a wet spring and available moisture for germination. Provincially, as of June 16, about 81 per cent of crops were rated as good to excellent, compared to the five-year average of 69 per cent. However, rainfall in the areas that were already near or at the field moisture capacity resulted in excessive moisture and flooding of some crops, and in some cases, tame hay. Cool temperatures coupled with too much moisture slowed crop development, particularly in the northern parts of the province. By the end of June, crops in the western areas started to show early signs of stress from excessive moisture. In fact, producers across much of the province welcomed hot, arid days to dry out the soil, advance crop development and allow time to finish post-emergent spraying. At the end of June, crop conditions remained above the five-year average, at 82 per cent good to excellent in the Southern, 95 per cent in the Central, 84 per cent in the North East and 68 per cent in the Peace Region. In the North West Region crop conditions were much below normal at 45 per cent good or excellent. Also, temperatures across Alberta were normal to moderately warm, while precipitation was quite steady.

Precipitation continued in the first half of July, resulting in large areas having excess moisture. There was also, local thunderstorm activities and hail storms occurring across the province. By mid-July, crop condition ratings for the North East, North West and Peace Regions started to deteriorate, due to wet

conditions. Barley, canola and dry peas fields started to show significant yellowing from excessive moisture, unlike in the Southern and Central Regions. Provincially, crop condition ratings were at 78 per cent, which was still above the five-year average of 64 per cent. As a result of persistent rains, excessive surface and sub-surface soil moisture continued to be an issue for all regions, except in the Southern Region. Soil moisture reserves at mid-July were near normal or higher for more than 95 per cent of the province, with some wet areas reported in the Central, North East, North West and Peace Regions, which were near a “one in 50-years” high. In the second half of July, Alberta’s weather started to get warmer, with normal to moderate temperatures recorded. However, rains were still fairly persistent across the Central, North East, North West and Peace Regions, with widespread thunderstorm activity generating localized moisture and hail activity.

By the end of July, provincial crop condition ratings remained at 78 per cent good or excellent. Crop conditions in the North West Region were still well below the five- and 10-year averages, with the Peace Region three points lower. By contrast, the North East was five per cent above the five-year average and on par with the 10-year average. The Southern and Central Regions experienced good or excellent crop conditions and were well above the five and 10-year averages. Deterioration to crop conditions and damage to crop quality in wet areas became more evident with time, primarily affecting peas, canola and barley. Crop staging for spring cereals was mid-way through flowering, while fall cereals were in early dough, compared to the five-year averages of early milk and hard dough, respectively. Oilseeds and pulses were 44 per cent in the podding stage, compared to the five-year average of 57 per cent. The first estimates of dryland yield were reported at the end of July and indicated yields above both the five and 10-year averages. The southern parts of the province were well above the five-year norm, ranging from 112 to 132 per cent above, while yields in the North West and Peace Regions were lower at 84 and 92 per cent, respectively. Soil moisture reserves relative to the long-term normal remained high across most parts of the province, with a few pockets moderately low.

After a period of warmer than normal temperatures, by mid-August, temperatures in general returned to normal, with a few pockets experiencing moderately cool temperatures. The warm temperatures and relatively lower precipitation in July and the first week of August accelerated crop development, although spring seeded cereals across the province were mostly a week or less behind normal. Canola and dry peas stage development were behind in the western and northern parts of the province. By mid-August, harvest operations began in the Southern and Central Regions for fall-seeded crops and dry peas. As of August 11, 2020, about two per cent of all crops in the Southern Region and three per cent in the Central Region were in the bin. Also, provincial crop condition ratings declined slightly, with 77 per cent of crops in good or excellent condition, but still above the five-year average of 59 per cent. Soil moisture reserves remained high across the province, with excessive surface soil moisture rated at three per cent in the Central Region, seven per cent in the North East, 40 per cent in the North West and seven per cent in the Peace Region. There was no excessive soil moisture in the Southern Region.

The favorable weather conditions in the second half of August, particularly in Southern and Central Regions, allowed most producers in the province to start harvesting spring seeded crops. As of August 25, 2020, harvest progress in all regions was at eight per cent, on par with the five-year average. The

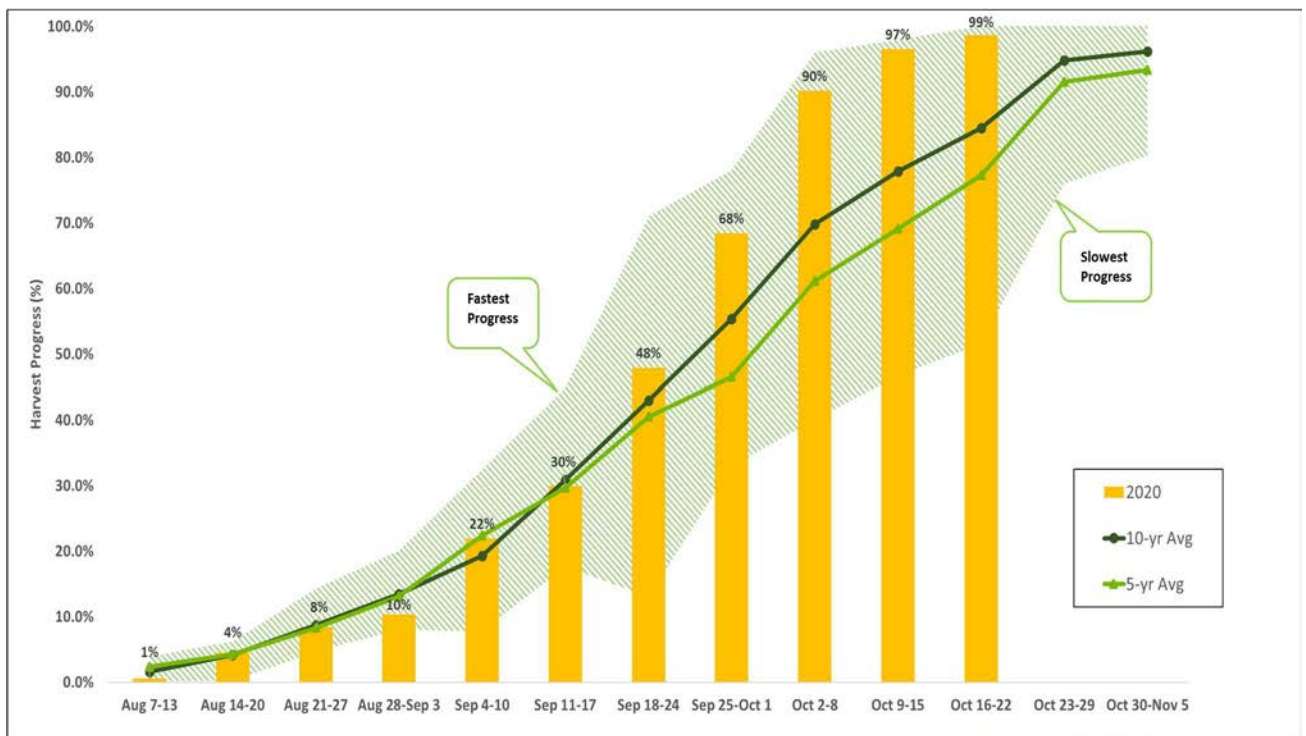
Southern Region was most advanced with 24 per cent of crops combined, followed by the Central Region with five per cent progress. In the northern parts of the province, variable weather conditions resulted in less than two per cent of crops combined. Given the earlier start to harvest, by the end of August, the provincial yield estimates rose slightly and were 14 per cent above the five-year averages. Yields in the Southern Region were at 43 per cent above the five-year averages, followed by the Central Region at 21 per cent and North East Region at nine per cent. Excessive moisture conditions across much of the North West and Peace Regions resulted in yield estimates below the five-year index at 85 and 87 per cent respectively. The warmer, drier weather over the last week of August in many parts of the North West, North East and Peace Regions, accelerated for some crop maturity and allowed producers to start desiccating, swathing canola and barley and combining dry peas. As of September 1, 2020, about 10 per cent of major crops were in the bin, compared to the five-year average of 13 per cent.

Precipitation over the first week of September slowed harvest progress in most areas across the province, particularly in the North East, North West and Peace Regions. As of September 8, about 22 per cent of all crops were in the bin (on par with the five-year average), compared to 15 per cent in 2016, 32 per cent in 2017, 17 per cent in 2018, 16 per cent in 2019 and the five-year average of 22 per cent. Regionally, when compared to the five-year averages, harvest progress was ahead in the Southern, Central and North West Regions and behind in the North East and Peace. The second frost of the season happened on September 8, after a brief one frost on August 31, with many areas (particularly in the southern half of the province) experiencing freezing temperatures as low as  $-4^{\circ}\text{C}$ . By mid-September, harvest operations had progressed in most parts of the province. However, cold cloudy weather persisted for a few days across most of the province, resulting in high humidity and poor harvest conditions. These factors, coupled with heavy dew, especially in the northern parts, hampered harvest progress. As of September 15, 2020, about 30 per cent of major crops were combined, on par with the five-year average. When compared to the five-year averages, harvest progress was on par in the Southern Region and ahead in the Central and North West Regions, by three and two per cent respectively. Harvest progress was behind in the North East Region by one per cent and in the Peace Region by three per cent. Just to note, the five-year averages referenced include three challenging harvest seasons (2016, 2018 and 2019).

Warm, dry weather over the second half of September allowed harvest activities to proceed at a strong pace. Starting September 22, 2020, harvest progress was ahead of normal, with about 47 per cent of all crops in the bin, compared to the five-year average of 45 per cent. By the end of September, harvest had progressed rapidly, with more than two-thirds of major crops across the province in the bin, 21 per cent above the five-year average (47 per cent). Frost activity was prevalent in the northern areas of Alberta in the second half of September. Although the southern areas did not experience killing frost, there were extended periods which temperatures dipped below  $-2^{\circ}\text{C}$  in the northern half of the province. The lack of precipitation in the second half of September resulted in some deterioration of both surface soil and sub-surface soil moisture ratings. As of September 29, 2020, soil moisture rating overall was 61 per cent good or excellent. Likewise, sub-surface soil moisture was rated at 66 per cent good or excellent.

Low precipitation and warmer than average temperatures continued in the first week of October, allowing producers across the province to make significant harvest progress. Provincially, as of October 6, 2020, about 90 per cent of crops were in the bin, 29 per cent ahead of the five-year average and 20 per cent ahead of the 10-year average. Compared to the five-year averages, regionally harvest was furthest ahead in the North East and North West Regions, where combining was 42 per cent and 41 per cent ahead of the average, respectively. Harvest in the Central Region was 33 per cent ahead, and in the Peace Region 27 per cent. For the Southern Region, harvest was practically complete and 10 per cent ahead of the five-year average. An additional five per cent of crops were in swath, while another five per cent were still standing. Precipitation over the second week of October slowed harvest operations, but was not enough to stop producers from harvesting or increase soil moisture reserves. Provincially as of October 13, 2020, about 97 per cent of major crops were in the bin, up 27 per cent from the five-year average (69 per cent). When compared to the five-year and 10-year averages, harvest in Alberta was two to three weeks ahead. By October 20, 2020, the weather cooled down drastically with the vast majority of the province experiencing temperatures 6 to 10 degrees lower than the long-term average. The cooling trend led to a snowfall through the foothills, creeping east to include the Red Deer area. Despite the cold weather, harvest still progressed with the province reported nearly 99 per cent of crops in the bin, as of October 20, 2020, well ahead of the five and 10-year averages (see Figure 1). Regionally, harvest progress for both the Southern and North West Regions stood at over 99 per cent, closely followed by the North East and Peace at just under 99 per cent. The Central Region was slightly behind with 97 per cent of crops in the bin. The remaining acres in the region were a challenge to harvest, resulting in some being grazed.

Figure 1- Alberta Harvest Progress, 2020 vs Five-Year (2015-2019) and Ten-Year (2010-2019) Averages



Source: Alberta Crop Report Survey, (AF and AFSC)

Soil moisture reserves deteriorated in mid-October, as a result of lower than normal fall precipitation. Moisture reserves were varied among regions, with the North West Region and some areas in the Peace and North East Regions having adequate reserves. Surface soil moisture conditions in Alberta (five-year averages shown in brackets) were rated as 14 (6) per cent poor, 24 (20) per cent fair, 44 (47) per cent good and 17 (24) per cent excellent, with 1 (3) per cent excessive. Provincial sub-surface soil moisture conditions (five-year averages shown in brackets) are currently rated as 13 (12) per cent poor, 18 (26) per cent fair, 43 (42) per cent good and 23 (19) per cent excellent, with 3 (1) per cent excessive. At the end of the season, soil moisture reserves varied greatly throughout Alberta with pockets of “one-in-50-year” lows in the Central, North West and Peace regions. This was in contrast with areas experiencing “one-in-25-year” highs in the North East and Peace Regions. While areas in the southeastern parts of the province experienced very dry conditions in summer, rain in September helped to replenish soil moisture.

Crop yields were variable across the province. Final estimates of provincial dryland yield indices suggested that yields were eight per cent above the five-year average and seven per cent above 10-year averages. Regional yields for the Southern and Central Regions were above their five-year averages (by 39 and 17 per cent, respectively), while yields were on par with five-year averages in the North East Region. For the North West and Peace Regions, yields were below their five-year averages by 27 and 12 per cent, respectively. The provincial average yields for potatoes on dryland and irrigated fields were estimated at 11.7 tons per acre and 16.7 tons per acre, respectively. Yields for irrigated dry beans and sugar beets were reported at 2,900 pounds per acre and 28 tonnes per acre, respectively.

Crop quality was also variable across the province. In the western and northern parts of the province, quality was impacted by wet conditions during spring and summer. Provincially, about 87 per cent of hard red spring wheat and 98 per cent of durum wheat were graded in the top two grades. About 43 per cent of barley was eligible for malt and 51 per cent graded as No. 1 feed. For oats, about 59 per cent was graded in the top two grades. Almost 89 per cent of canola was graded as No. 1, with another eight per cent as No. 2. For dry peas, about 29 per cent was graded as No. 1, 57 per cent as No. 2, 12 per cent as No. 3 and three per cent as feed.

## **Insects and Crop Diseases**

Flea beetles were a major pest in canola through much of the province, similar to 2019. Grasshoppers increased in southern Alberta, but were almost non-existent in the Peace Region and the north-central parts of the province. Bertha armyworm was a major concern in the Peace Region, while Spotted Wing Drosophila was detected in some areas in central Alberta.

## **Alberta Crop Production, 2020 (Statistics Canada Estimates)**

On December 3, 2020, Statistics Canada released their November estimates of crop production for 2020. For Alberta, the production of selected field crops (including forages) in Alberta was estimated at 34.3 million tonnes, up 5.6 per cent from 2019, and 9.1 per cent higher than the 10-year average (2010-2019). The 2020 total production of crops and forages was the third highest on record and about 800,000 tonnes below the record set in 2013 and 2016. Excluding forages, selected field crop production was the second highest on record, totalling 25.9 million tonnes. Total forage production was

slightly up by 0.4 per cent from 2019 to 8.4 million tonnes, but 0.4 per cent below the 10-year average. This was a result of a 19.6 per cent increase in fodder corn production, and a 4.4 per cent decline in tame hay production.

## 2020 Production by Crop Type

Total spring wheat production in 2020 increased a marginal 0.5 per cent to 9.6 million tonnes, the highest following the 2013 record, and 13.9 per cent above the 10-year average. The higher production was due to a 3.8 per cent increase in yield, which more than offset a 3.2 per cent decline in harvested area. The provincial average yield was estimated at 56.8 bushels per acre, with harvested area at 6.2 million acres. For durum wheat, production more than doubled from 2019 to 1.3 million tonnes, the second highest on record. Durum wheat production was up 104.7 per cent from 2019, and 53.7 per cent above the 10-year average. Triggering the jump was an increase in yield by 51.6 per cent to 48.5 bushels per acre, and harvested area increasing by 35.2 per cent to one million acres. Winter wheat production increased 55.6 per cent from 2019 to 160,400 tonnes, but was 28.4 per cent lower than the 10-year average. The increased production was the result of a 15.7 per cent increase in harvested area to 89,400 acres, and a 34.5 per cent average yield increase to 65.9 bushels per acre. Overall, all wheat production was estimated at 11 million tonnes, the second highest on record after 2013. Production was up 7.6 per cent from 2019, and 16.5 per cent above the 10-year average. The higher production stemmed from a 6.7 per cent increase in yield to 55.8 bushels per acre, as well as harvested area up 0.9 per cent from 2019, to 7.3 million acres.

Total barley production increased to 5.3 million tonnes, up 6.6 per cent from 2019 and 17.7 per cent above the 10-year average. The higher production was due to a 4.2 per cent increase in harvested area to 3.3 million acres and yield increasing 2.2 per cent to 74 bushels per acre.

Total production of oats fell to 802,000 tonnes, down 3.9 per cent from 2019, but still 29.1 per cent above the 10-year average. This was attributed to an 8.2 per cent decline in average yield, more than offsetting a 4.7 per cent increase in harvested area. Harvested area was estimated at 605,500 acres and average yield at 85.9 bushels per acre.

Total canola production decreased to 5.2 million tonnes, the lowest since 2012, two per cent lower than in 2019, and 8.8 per cent below the 10-year average. Driving the decline was a reduced harvested area at 5.7 million acres (down 1.8 per cent), as well as a marginal decline in average yield by 0.2 per cent to 40.2 bushels per acre.

Dry peas production increased by 6.7 per cent to 1.8 million tonnes, which is 22.7 per cent above the 10-year average. The gain was due to a 16.9 per cent increase in average yield to 41.5 bushels per acre, more than offsetting an 8.7 per cent reduction in harvested area to 1.6 million acres.

Lentils, production more than doubled to 370,600 tonnes, the second highest on record after 2016. Production was up 121.1 per cent from 2019, and 120.5 per cent above the 10-year average. The higher production was attributed to a 97.3 per cent jump in average yield to 32.5 bushels per acre (or 1,949 pounds per acre), as well as a 12 per cent increase in harvested area to 419,100 acres.

Dry bean production increased to a record 73,000 tonnes, which was 11.8 per cent above 2019 and 34.3 per cent higher than the 10-year average. The higher production was due to increased harvested area at 54,300 acres (up 0.7 per cent) and higher yield at 3.3 tonnes per acre or 49.5 bushels per acre (up 11.2 per cent).

Sugar beets production increased 60 per cent to 833,100 tonnes, 29.1 per cent higher than the 10-year average. The higher production was due to a significant increase in harvested area to 29,000 acres (up 62 per cent from 2019), which more than offset a lower average yield at 31.7 tons per acre (down 1.2 per cent).

Total forage production was up by a marginal 0.4 per cent from 2019 to 8.4 million tonnes, and 0.4 per cent below the 10-year average. This stemmed from a 19.6 per cent increase in fodder corn production, which more than offset a decline in tame hay production. Tame hay production decreased 4.4 per cent to 6.4 million tonnes, 9.1 per cent lower than the 10-year average. This was attributed to a 3.7 per cent reduction in average yield to 1.8 tons per acre, as well as a 0.8 per cent decline in harvested area to 3.8 million acres. For fodder corn, production set a new record high at two million tons, up 19.6 per cent from 2019, and 42.9 per cent higher than the 10-year average. The gain was due to a 49.2 per cent increase in average yield to 18.3 tons per acre, despite harvested area falling by 19.9 per cent to 121,500 acres.

## 2020 Crop Production, Canada

Total 2020 Canadian production for selected major field crops increased slightly from 2019. Estimates of Canadian production was 25.8 million tonnes for spring wheat, 6.6 million tonnes for durum wheat, 4.6 million tonnes for oats, 10.7 million tonnes for barley, 18.7 million tonnes for canola, and 4.6 million tonnes for dry peas.

## Alberta Forage Production, 2020

For the 2020 crop season, hay and pasture growth started well in spring. This was attributed to warm temperatures over the first three weeks of May, as well as good soil moisture in much of the province. However, the northern and western parts had excessive moisture. As of May 19, 2020, pasture growth conditions (tame hay growth conditions shown in brackets) were rated at 7 (7) per cent poor, 24 (26) per cent fair, 64 (62) per cent good and 5 (5) per cent excellent. By mid-May, pasture and tame hay fields showed reasonable growth. The turnaround in the temperature to colder than normal over the second half of May impacted hay and pasture fields, but they remained in good shape.

Over the month of June, pasture and tame hay remained in fairly good shape across the province and was the best over the last five years, with the exception of some small lower areas that had flooding as a result of excessive rainfall. In mid-July, pasture and tame hay fields were still in a good shape for most of the province, particularly in the Southern Region, where blank areas from past dry years were slowly filling in. However in some wet areas, pastures were flooded and dying off. In these areas, hay fields were also soaked in water, making it impossible for producers to start haying. Provincially as of July 14, 2020, pasture conditions (tame hay conditions shown in brackets) were rated as 1 (3) per cent poor, 7 (6) per cent fair, 66 (57) per cent good and 26 (34) per cent excellent. By the end of July,



provincial forage crop growth ratings remained high with tame pasture at 89 per cent good or excellent and hay reported as 90 per cent good or excellent.

First cut dryland hay was 23 per cent complete across the province in mid-July and 56 per cent by the end of July, behind the five-year averages of 47 per cent and 72 per cent, respectively. The estimated yield for dryland hay was 1.9 tons per acre (above the five-year average of 1.3 tons per acre), with quality rated as 65 per cent good to excellent, compared to the five-year average of 62 per cent. For irrigated hay, first cut was 88 per cent complete (down from the five-year average of 96 per cent), with yield at 2.4 tons per acre, on par with the five-year average. Quality was rated as 78 per cent good to excellent, compared to the five-year average of 79 per cent.

Pasture and tame hay growth conditions continued to be above average over the month of August, while first cut dryland hay across the province was 88 per cent completed as of August 11, 2020. At the beginning of September, pasture and hay condition ratings started to show some minor regression from good and excellent ratings to slightly more fair and poor ratings. This was attributed to prolonged periods of low moisture in the Southern Region and counties in the southwestern portion of the Central Region over the month of August. Hence, vegetation browned off and second cut hay potential was greatly reduced in these areas. As of September 1, 2020, pasture was rated as 55 per cent good and 15 per cent excellent, still well above the five-year average of 33 and eight per cent respectively. Tame hay ratings were also above average, at 57 per cent good and 21 per cent excellent, compared to the five-year average of 37 and nine per cent, respectively.

As of September 8, 2020, second cut dryland hay across the province was 39 per cent completed (on par with the five-year average), while second cut hay was limited in the Southern Region. The provincial average yield for second cut dryland hay was estimated at 1.5 tons per acre, above the five-year average of 1.1 tons per acre. The quality of the baled dryland hay was rated as 30 per cent poor to fair, 57 per cent good and 13 per cent excellent. Second cut haying in irrigated fields was 71 per cent complete, with yield estimated at 1.6 tons per acre (below the five-year average of 1.9 tons per acre) and quality was rated as 17 per cent poor to fair, 66 per cent good and 17 per cent excellent. Third cut hay was limited to irrigated haylands in the Southern Region with the yield reported at 1.8 tons per acre and quality rated at 45 per cent good and 55 per cent excellent.

Pastures in mid-September were still mostly green, especially in the northern parts of the province, but growth slowed, due to colder temperatures and shorter days. As of September 15, 2020, pasture growing conditions were rated as 19 per cent poor, 24 per cent fair, 49 per cent good and eight per cent excellent. Similarly, tame hay growing conditions were reported at 15 per cent poor, 19 per cent fair, 51 per cent good and 15 per cent excellent. Pasture conditions further deteriorated by the end of September, with reports of grass going into dormancy or turning yellow due to lack of precipitation. As of September 29, 2020, the overall pasture conditions (five-year averages shown in brackets) remained strong for this time of year with 20 (26) per cent rated poor, 29 (31) per cent fair, 48 (39) per cent good, and three (four) per cent excellent.

Based on a survey conducted as part of the Alberta Crop Reporting Program, total production for greenfeed was estimated at 908,500 tonnes, 40.7 per cent below 2019 (1.5 million tonnes), and 22.2

per cent below the five-year average of 1.2 million tonnes (See Table 2). This was attributed to a 26 per cent drop in average yield from 2019 and a 19.9 per cent decline in harvested area. Production for greenfeed barley was 287,300 tonnes, down 55.7 per cent from 2019. For spring wheat, greenfeed production was estimated at 22,400 tonnes (down 79 per cent from 2019), while for oats it was at 409,700 tonnes (down 14.7 per cent from a year ago).

Total silage production was estimated at 2.7 million tonnes, up 26.5 per cent from 2019 and six per cent above the five-year average of 2.5 million tonnes. Compared to 2019, the higher production stemmed from a 34.2 per cent increase in harvested area for silage, more than offsetting a 5.7 per cent decline in the average provincial yield for silage. Barley silage production was estimated at 1.8 million tonnes (up 31.6 per cent from 2019), spring wheat at 317,800 tonnes (up 55.5 per cent from 2019) and oats at 293,600 tonnes (up 2.7 per cent from 2019).

Total harvested area for both greenfeed and silage slightly increased to 886,200 acres (up 5.9 per cent). This was attributed to a 34.2 per cent jump in silage harvested area, which more than offset a 19.9 per cent decline in greenfeed acreage (See Figure 1). Compared to 2019, producers harvested less greenfeed, but more silage, mainly due to late seeding and wet conditions in the western and northern parts of the province. Compared to previous years, the wet conditions also led to more abandoned acres, which were the second highest over the last decade following 2016.

## Contact

For additional information relating to this report, please do not hesitate to contact the author.

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Table 1: Alberta Crop Production ('000 tonnes)									
Crops	2015	2016	2017	2018	2019	2020p	10-year Average	% change	
								20 vs 19	20 vs Avg
Winter Wheat	225.9	318.4	176.9	100.4	103.1	160.4	224.1	55.6%	-28.4%
Spring Wheat	7,247.6	8,204.4	8,720.0	8,771.6	9,512.8	9,555.9	8,389.8	0.5%	13.9%
Durum Wheat	816.5	1,583.9	1,083.2	1,134.1	647.3	1,324.7	861.8	104.7%	53.7%
All Wheat	8,290.0	10,106.6	9,980.1	10,006.1	10,263.2	11,041.0	9,475.8	7.6%	16.5%
Oats	393.3	624.6	609.2	700.1	834.8	802.0	621.1	-3.9%	29.1%
Barley	4,289.2	4,398.0	3,906.0	3,996.3	4,955.2	5,283.0	4,488.1	6.6%	17.7%
All Rye	33.0	59.7	33.5	30.0	26.8	107.4	38.9	300.7%	175.9%
Mixed Grains	12.2	30.6	33.0	-	26.3	68.0	27.0	158.6%	152.0%
Flaxseed	83.8	59.8	62.2	60.5	81.5	78.6	65.0	-3.6%	21.0%
Canola	5,851.3	6,157.5	6,826.6	5,870.6	5,320.1	5,212.1	5,717.7	-2.0%	-8.8%
Corn for Grain	87.6	98.0	152.9	118.3	63.3	108.6	83.2	71.6%	30.5%
Dry Beans	47.9	61.6	61.5	72.8	65.3	73.0	54.3	11.8%	34.3%
Fababeans	81.6	54.4	45.4	43.4	38.5	41.0	61.8	6.5%	-33.7%
Dry Peas	1,314.5	2,271.2	1,991.5	1,608.4	1,685.9	1,799.2	1,466.4	6.7%	22.7%
Lentils	176.4	451.8	264.4	199.6	167.6	370.6	168.1	121.1%	120.5%
Mustard Seed	31.9	73.3	27.1	36.7	27.6	36.5	40.4	32.2%	-9.6%
Triticale	14.5	30.2	23.2	32.0	29.2	21.6	24.2	-26.0%	-10.9%
Sugar Beets	503.5	811.9	771.1	854.5	520.7	833.1	645.1	60.0%	29.1%
All Crops	21,210.7	25,289.2	24,787.7	23,629.3	24,106.0	25,875.7	22,941.3	7.3%	12.8%
Tame Hay	4,640.2	7,239.3	7,175.8	6,035.7	6,674.7	6,379.3	7,020.3	-4.4%	-9.1%
Fodder Corn	1,388.0	1,814.4	1,564.9	1,660.4	1,687.6	2,018.2	1,412.5	19.6%	42.9%
All Forages	6,028.2	9,053.7	8,740.7	7,696.1	8,362.3	8,397.5	8,432.9	0.4%	-0.4%
Total	27,238.9	34,342.9	33,528.4	31,325.4	32,468.3	34,273.2	31,409.9	5.6%	9.1%

p - Preliminary - Not available 10-year average refers to 2010-2019  
Source: Statistics Canada Prepared by: Alberta Agriculture and Forestry, Statistics and Data Development Section

Table 2: Alberta Crop Area and Yield									
Crops	2019	2020p	2019	2020p	2019	2020p	10-year	Yield % change	
	Seeded	Seeded	Harvested	Harvested	Yield	Yield	Avg Yld	20 vs 19	20 vs Avg
	('000 acres)		('000 acres)		(bu/acre)				
Winter Wheat	79.9	91.7	77.3	89.4	49.0	65.9	57.9	34.5%	13.7%
Spring Wheat	6,587.6	6,314.1	6,389.0	6,183.1	54.7	56.8	52.2	3.8%	8.8%
Durum Wheat	775.0	1,012.0	742.6	1,003.9	32.0	48.5	42.3	51.6%	14.8%
All Wheat	7,462.6	7,448.4	7,208.9	7,276.4	52.3	55.8	51.1	6.7%	9.3%
Oats	899.1	881.2	578.3	605.5	93.6	85.9	85.2	-8.2%	0.9%
Barley	3,563.1	3,661.7	3,144.8	3,277.2	72.4	74.0	69.1	2.2%	7.2%
All Rye	65.7	102.8	19.3	72.0	54.7	58.7	46.9	7.3%	25.2%
Mixed Grains	162.9	171.0	20.5	66.4	62.8	50.2	60.4	-20.1%	-16.9%
Flaxseed	114.0	97.1	106.6	93.3	30.1	33.2	30.1	10.3%	10.2%
Canola	5,933.5	5,876.0	5,820.8	5,716.8	40.3	40.2	40.2	-0.2%	0.0%
Corn for Grain	29.1	40.8	20.1	30.3	124.0	141.1	117.6	13.8%	20.0%
Dry Beans	57.2	54.9	53.9	54.3	44.5	49.5	41.6	11.2%	18.9%
Fababeans	35.0	32.5	31.5	29.0	44.8	52.0	47.1	16.0%	10.5%
Dry Peas	1,800.2	1,650.1	1,743.3	1,592.4	35.5	41.5	40.6	16.9%	2.2%
Lentils	387.8	422.9	374.2	419.1	16.5	32.5	27.3	97.3%	19.1%
Mustard Seed	104.4	80.0	99.8	79.7	12.2	20.2	17.4	65.7%	16.1%
Triticale	36.0	40.3	20.6	17.5	55.8	48.6	53.8	-12.9%	-9.6%
					(tons/acre)				
Sugar Beets	28.5	34.5	17.9	29.0	32.1	31.7	29.6	-1.2%	7.0%
Tame Hay	4,187.1	3,982.5	3,852.1	3,821.7	1.9	1.8	1.8	-3.7%	3.7%
Fodder Corn	261.8	217.6	151.6	121.5	12.3	18.3	16.8	49.2%	8.9%
Total	25,128.0	24,794.3	23,264.2	23,302.1	---	---	---	---	---

p - Preliminary --- Not applicable 10-year Avg Yld refers to 2010-2019 average yield  
Source: Statistics Canada Prepared by: Alberta Agriculture and Forestry, Statistics and Data Development Section

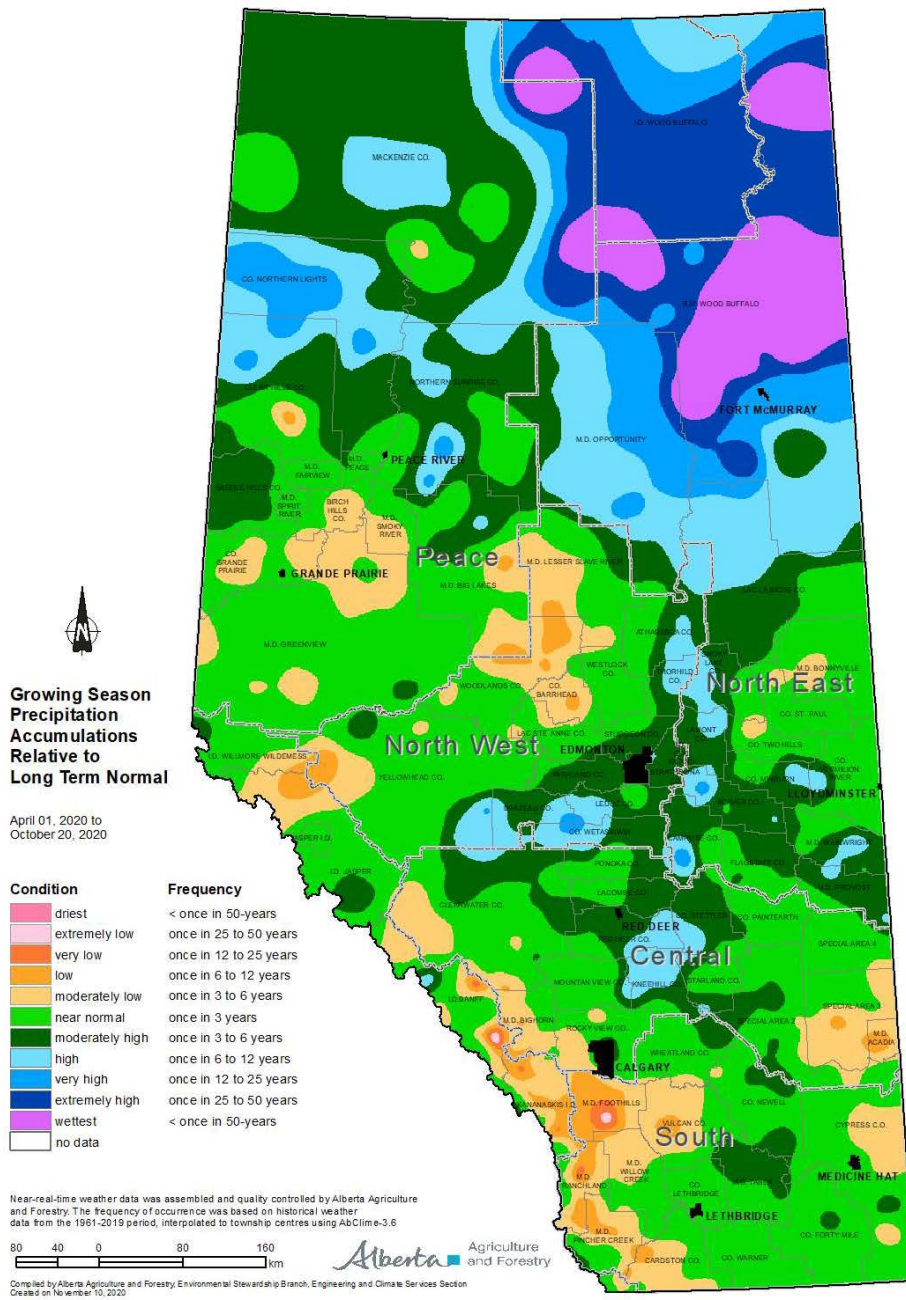
Table 3: Alberta Greenfeed and Silage Production								
		Total Seeded Area	Harvested Greenfeed Area	Harvested Silage Area	Average Greenfeed Yield	Average Silage Yield	Total Greenfeed Production	Total Silage Production
		('000 acres)			(tonnes/acre)		('000 tonnes)	
2020	Spring Wheat	6,314	13.9	60.0	1.61	5.30	22.4	317.8
	Durum Wheat	1,012	1.3	0.0	0.50	0.00	0.7	0.0
	Barley	3,662	137.7	368.0	2.09	4.77	287.3	1,756.0
	Oats	881	134.8	53.2	3.04	5.52	409.7	293.6
	Mixed Grains	171	37.6	39.4	2.55	5.74	95.8	226.3
	Triticale	40	26.0	9.2	3.57	5.72	92.5	52.5
	Dry Peas	1,650	0.0	5.1	0.00	4.95	0.0	25.3
	<b>Total</b>	<b>13,730</b>	<b>351.3</b>	<b>534.9</b>	<b>2.59</b>	<b>4.99</b>	<b>908.5</b>	<b>2,671.6</b>
2019	Spring Wheat	6,588	56.0	64.6	1.91	3.17	106.7	204.4
	Durum Wheat	775	1.9	0.0	1.09	0.00	2.1	0.0
	Barley	3,563	175.3	242.6	3.70	5.50	648.9	1,334.0
	Oats	899	141.5	47.8	3.39	5.98	480.2	286.0
	Mixed Grains	163	48.9	36.3	5.47	7.13	267.3	258.9
	Triticale	36	14.4	7.0	1.88	3.75	27.0	26.1
	Dry Peas	1,800	0.3	0.4	1.46	5.22	0.4	1.9
	<b>Total</b>	<b>13,824</b>	<b>438.3</b>	<b>398.7</b>	<b>3.50</b>	<b>5.30</b>	<b>1,532.6</b>	<b>2,111.2</b>
5-year average*	Spring Wheat	6,070	71.9	54.0	2.18	4.50	144.1	221.4
	Durum Wheat	1,008	5.6	1.6	1.25	1.47	6.5	6.8
	Barley	3,288	144.5	269.6	2.81	5.85	409.2	1,547.3
	Oats	786	118.5	57.0	3.26	6.01	387.0	346.3
	Mixed Grains	167	49.6	53.7	3.75	6.59	195.6	357.9
	Triticale	39	10.6	8.6	2.27	4.21	24.8	39.0
	Dry Peas	1,707	0.3	0.5	1.18	1.32	0.6	0.9
	<b>Total</b>	<b>13,066</b>	<b>400.9</b>	<b>445.0</b>	<b>2.95</b>	<b>5.69</b>	<b>1,167.9</b>	<b>2,519.6</b>

Note: Yields and production are reported on a wet weight basis. Totals may not add up due to rounding.

\* 5-year average refers to 2015-2019

Source: Statistics Canada and Alberta Agriculture and Forestry

# Precipitation Map for the 2020 Crop Season



Visit [weatherdata.ca](http://weatherdata.ca) for additional maps and meteorological data

Source: Alberta Agriculture and Forestry, Environmental Stewardship Branch, Engineering and Climate Services Section