# Alberta Crop Report



### Crop Conditions as of July 13, 2021

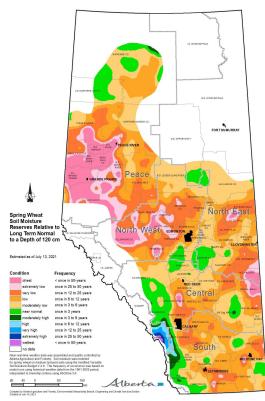
The prolonged record-breaking heat that peaked at the end of June and continued into early July brought extremely warm air and drying winds across the province. The high temperatures either advanced the stage of crop development rapidly or stagnated some crops. Additionally, precipitation was limited over the past two weeks. Some areas have received moisture in the form of thunderstorms, while many others have not. This deteriorated crop growing conditions across the province and reduced yield potential. Crops and forages in most areas are in need of immediate moisture and cooler temperatures to make any recovery.

Compared to the previous report (conditions as of June 28), provincial crop growing conditions dropped 32 per cent and are now rated as 37 per cent good to excellent, below the provincial 5-year average of 74 per cent and the 10-year average of 73 per cent (See Table 1). Crop growing condition ratings dropped for all regions, with the North East Region deteriorating the most (down 50 per cent), followed by the Peace (down 48 per cent) and North West Region (down 45 per cent). Conditions deteriorated 18 per cent in the Central Region and 16 per cent in the South Region. Regionally, crop growing conditions are currently the best in the Central Region, with 59 per cent of all crops rated as good or excellent, while the worst conditions are reported in the Peace and North West Regions where crop conditions are rated at 18 and 27 per cent good or excellent, respectively. About 33 per cent of crops in the South and 35 per cent in the North East Region are rated as good or excellent.

Table 1: Regional Crop Condition Ratings as of July 13, 2021

	Per cent rated in Good to Excellent Condition							
	South	Central	N East	N West	Peace	Alberta		
Spring Wheat*	34.3%	55.7%	42.5%	27.6%	16.5%	38.8%		
Durum Wheat	31.7%	42.5%				33.2%		
Barley*	31.0%	66.4%	32.7%	29.2%	19.7%	41.4%		
Oats*	35.1%	53.5%	30.3%	24.6%	31.7%	33.9%		
Canola*	30.1%	61.1%	28.2%	24.1%	16.3%	32.6%		
Dry Peas∗	33.1%	57.7%	32.6%	32.5%	22.8%	35.5%		
Mustard	41.3%	43.7%				42.0%		
Flax	37.0%	27.6%				30.8%		
Potatoes	70.5%	90.9%		100.0%		73.4%		
Chickpeas	14.0%	50.0%				15.6%		
Lentils	27.0%	55.0%				30.8%		
All Crops, July 13	33.4%	59.4%	34.6%	26.9%	18.1%	36.6%		
Major Crops (*), July 13	32.3%	60.2%	34.5%	26.6%	18.1%	36.5%		
All Crops, June 28	48.9%	77.2%	84.3%	71.7%	65.8%	68.3%		
5-year (2016-2020) Avg	67.2%	78.7%	83.0%	68.7%	69.9%	74.1%		
10-year (2011-2020) Avg	72.3%	75.1%	78.6%	68.2%	67.2%	73.4%		

Source: AF/AFSC Crop Reporting Survey









The year over year precipitation deficits now exceed 1 in 50 year lows in some areas. For many of these areas, deficits started accumulating in July 2020, as wet spring weather was replaced with a drying trend which ran through fall and winter. It eased off in spring 2021, but has since returned. The lack of moisture, coupled with the effects of the intense heat have been amplified and taken its toll on soil moisture reserves (see the map on the previous page). Provincial surface soil moisture ratings (sub-surface soil moisture ratings shown in brackets) are rated at 42 (36) per cent poor, 35 (38) per cent fair and 23 (26) per cent good.

Concern over the lack of pasture is rising. Pasture growing conditions are poor and fields are turning yellow or brown, with little re-growth. Some producers are silaging their cereals or pulses, in order to salvage some crops. First cut hay yields were below average and the second cut is not promising, as fields are in need of immediate rain. First cut dryland hay is 82 per cent complete across the province, significantly ahead of the 5-year average of 37 per cent. The estimated yield for dryland hay is 1.1 tons per acre (below the 5-year average of 1.5 tons per acre), with quality rated as 55 per cent good to excellent, compared to the 5-year average of 69 per cent. For irrigated hay, first cut is 91 per cent complete (ahead of the 5-year average of 78 per cent), with yield at 2.1 tons per acre, below the 5-year average of 2.4 tons per acre. Quality is rated as 65 per cent good to excellent, compared to the 5-year average of 84 per cent. Pasture conditions (tame hay numbers shown in the brackets) across the province are now reported as 35 (39) per cent poor, 38 (36) per cent fair and 27 (25) per cent good (see Table 2).

Table 2: Pasture Growth Conditions as of July 13, 2021

	Poor	Fair	Good	Excellent
South	28.2%	52.6%	18.2%	1.0%
Central	22.6%	24.7%	52.5%	0.2%
North East	51.2%	24.4%	24.1%	0.3%
North West	52.0%	41.7%	6.3%	0.0%
Peace	52.4%	40.6%	7.0%	0.0%
Alberta	34.6%	37.9%	27.0%	0.5%
5-year (2016-2020) Avg	11.1%	21.7%	50.4%	16.8%
10-year (2011-2020) Avg	12.4%	20.0%	48.6%	19.0%

Source: AF/AFSC Crop Reporting Survey

## Regional Assessments:

#### Region One: South (Strathmore, Lethbridge, Medicine Hat, Foremost)

- The extreme heat caused crops to quickly advance development. Although the heat was followed by cooler temperatures in the region and rain in some areas, the moisture was not enough to alleviate dry conditions. Crops have generally stunted and are forming small heads and pods. Early seeded crops have suffered the worst. Even irrigated crops have been impacted by the high temperatures, keeping their yield potentials below average. Hailstorms were reported on July 5 and 11 in some counties, causing heavy to moderate damage in some areas. Gopher's infestation is becoming a concern in some areas.
- Crop development in the region is slightly ahead of normal. Spring cereals are mostly in the flowering stage of
  development and fall seeded crops are finishing the milk development stage. About 81 per cent of canola and 35 per
  cent of dry peas are now in flower, while 16 per cent of canola and 65 per cent of dry peas are in the podding stage.
- Hot dry conditions have allowed first cut haying to progress quickly, but with poor yields. Currently, dryland haying is 90 per cent complete, ahead of the 5-year average of 73 per cent. Irrigated hay is 95 per cent complete, compared to the 5-year average of 85 per cent. Dryland and irrigated yields (5-year averages shown in the brackets) are estimated at 0.9 (1.1) and 2.2 (2.4) tons per acre, respectively. Hay quality is rated at 62 per cent poor or fair and 38 per cent good or excellent for dryland, and 36 per cent poor or fair and 64 per cent good or excellent for irrigated. Tame hay growing conditions are now reported as 24 per cent poor, 55 per cent fair, 20 per cent good and 1 per cent excellent.

• Surface soil moisture is rated (sub-surface soil moisture ratings shown in brackets) at 37 (38) per cent poor, 46 (45) per cent fair, 16 (16) per cent good and 1 (0) per cent excellent.

#### Region Two: Central (Rimbey, Airdrie, Coronation, Oyen)

- The heat wave took a toll on crops, hay and pastures. Rain showers brought moisture to most parts of the region and cooler weather, which came later, helped to revive some crops and forages. Even so, yield loss is expected. More moisture is needed to help fill out crops, and also for second cut hay. Some producers in drier areas are in process of making silage or green feed for their cereals. Some areas have had hail with moderate to severe damage. Gopher's infestation is becoming a concern in some areas.
- Spring cereals are in the head emergence stage of development and fall seeded crops are in the milk development stage. About 86 per cent of canola and 47 per cent of dry peas are now in flower, while six per cent of canola and 23 per cent of dry peas are in the podding stage.
- About 73 per cent of dryland and 60 per cent of irrigated haying is complete, compared to their respective 5-year averages of 36 and 21 per cent. Dryland and irrigated yields (5-year averages shown in the brackets) are estimated at 1.4 (1.4) and 2.0 (2.2) tons per acre, respectively. Hay quality is rated at 34 per cent poor or fair and 66 per cent good or excellent for dryland, and 30 per cent poor or fair and 70 per cent good for irrigated. Tame hay conditions are now reported as 26 per cent poor, 27 per cent fair and 47 per cent good.
- Surface and sub-surface soil moisture are both rated at 26 per cent poor, 28 per cent fair and 46 per cent good.

#### Region Three: North East (Smoky Lake, Vermilion, Camrose, Provost)

- Recent hot windy weather has advanced crop development and deteriorated crop conditions, impacting yield
  potential. Some areas have now received rain, improving crop conditions, while other areas remain dry. Rain and
  moderate temperatures are needed to salvage some crops. Hail damage was reported in some areas. Gopher's
  infestation is becoming a concern in some areas.
- Crop development is slightly ahead, with spring cereals mostly at the beginning of the flowering stage of development and fall seeded crops at the dough development stage. About 60 per cent of canola and 31 per cent of dry peas are in flower, while 35 per cent of canola and 69 per cent of dry peas are already in the podding stage.
- Haying is advanced and 80 per cent complete, compared to the 5-year average of 14 per cent. Hay yield is estimated
  at one ton per acre, below the 5-year average of 1.5 tons per acre. First cut quality is rated at 21 per cent poor or fair
  and 79 per cent good or excellent. Tame hay conditions are rated as 63 per cent poor, 24 per cent fair and 13 per
  cent good.
- Surface soil moisture is reported (sub-surface soil moisture ratings shown in brackets) at 57 (42) per cent poor, 25 (33) per cent fair and 18 (25) per cent good.

### Region Four: North West (Barrhead, Edmonton, Leduc, Drayton Valley, Athabasca)

- Extreme heat, warm winds and very little precipitation have impacted crop conditions for most parts of the region, as crops are burning and not filling out very well. Cooler weather and rainfall will help to moderate any crop damage, but yields are expected to be less than normal for most areas. Some hail damage was reported in the region. Spring cereals are mostly are at the end of the head emergence stage of development, slightly ahead of normal. About 73 per cent of canola and 63 per cent of dry peas are in flower, while 13 per cent of canola and 33 per cent of dry peas are in the podding stage.
- As a result of the dry conditions, haying is 91 per cent complete, significantly ahead of the 5-year average of 29 per cent. Yield is estimated at 1.2 tons per acre, compared to the 5-year average of 2.1 tons per acre. Hay quality is rated as 35 per cent poor or per cent fair and 65 per cent good or excellent. Tame hay conditions are now rated as 44 per cent poor, 40 per cent fair and 16 per cent good.
- Surface soil moisture is reported (sub-surface soil moisture ratings shown in brackets) at 53 (34) per cent poor, 38 (47) per cent fair and 9 (19) per cent good.

#### Region Five: Peace (Fairview, Falher, Grande Prairie, Peace River, Valleyview)

- The extreme heat has rapidly advanced growth for both cereals and canola. In some parts of the region, isolated showers brought limited amount of moisture to fields, but was not enough to have a positive impact. Crops are now showing signs of extreme stress as a result of high temperatures and lack of moisture. Grasshopper's infestation in the region is becoming a concern.
- Crop development is significantly ahead of normal in the region, with most of the cereals in the flowering stage. About 76 per cent of canola and 50 per cent of dry peas are in flower and the rests are in the podding stage.
- About 81 per cent of haying is complete, ahead of the 5-year average of 26 per cent, with yield reported at 0.8 ton per acre, below the 5-year average of 1.4 tons per acre. Hay quality is rated at 78 per cent poor or fair and 22 per cent good or excellent. Tame hay growing conditions are reported as 46 per cent poor, 34 per cent fair, 18 per cent good and 2 per cent excellent.
- Surface soil moisture is rated (sub-surface soil moisture ratings shown in brackets) at 58 (39) per cent poor, 32 (41) per cent fair and 10 (20) per cent good.

### Contact

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