

Model-based principal field crop estimates, July 2024

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In 2024, Canadian farmers are projected to produce more wheat, canola, oats, and soybeans, but less corn for grain and barley, compared with 2023, according to recent yield model estimates using satellite imagery and agroclimatic data. Increased production for almost all crops is expected to be driven by higher yields because of overall better growing conditions in Western Canada as of the end of July, compared with a year earlier. However, a lack of moisture and high temperatures in some parts of the Prairies continued to be a cause for concern.

Across parts of the Prairies, lower-than-average precipitation and prolonged high temperatures have resulted in a decline in crop conditions from the beginning of the season, although conditions were up in some areas compared with a year earlier. In Alberta, provincial reports indicated that more than half (55%) of the total crop was rated as being in good to excellent condition at the end of July, below the five-year average of 57%, but ahead of the same period in 2023. In Saskatchewan, dry conditions continued to be a concern. Provincial reports from Manitoba indicated that crop conditions in the province were generally good.

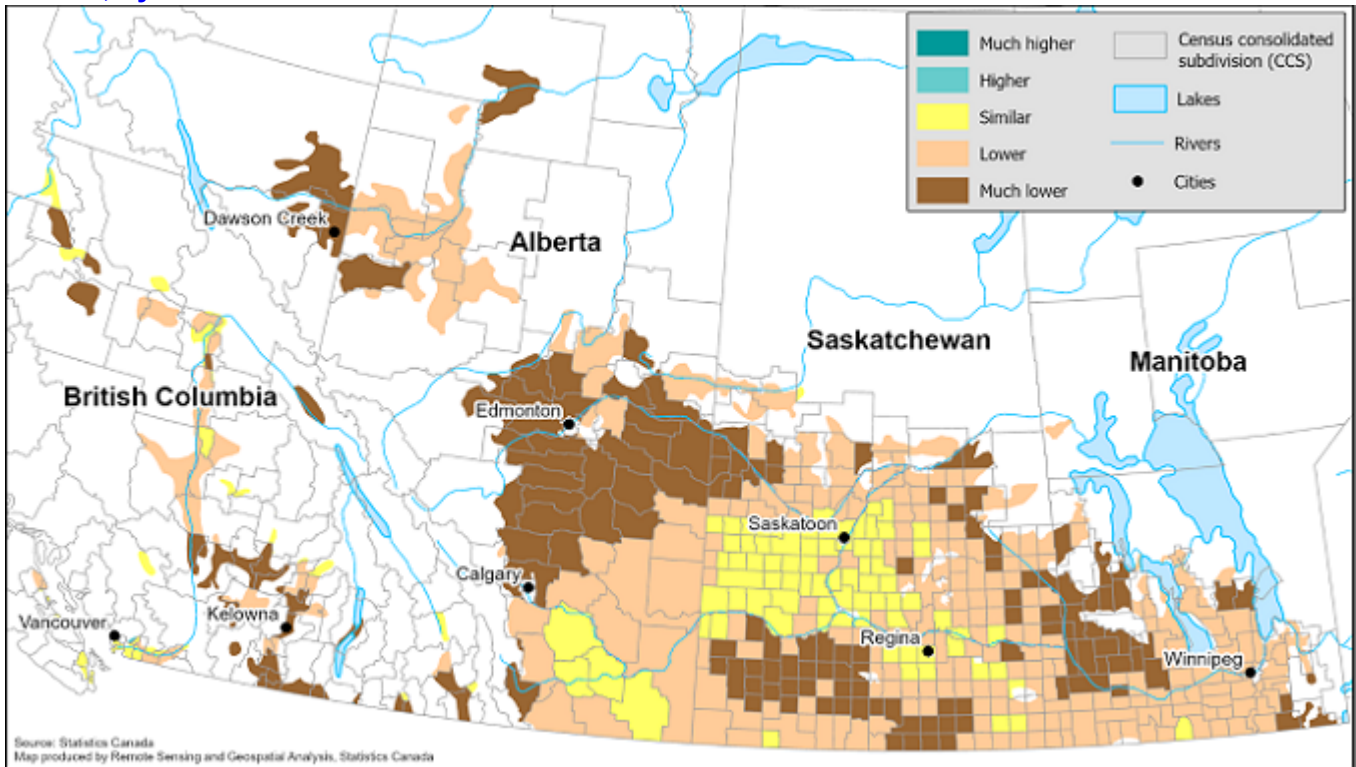
Quebec and the Atlantic provinces have experienced warmer weather and less rainfall than average since the beginning of the growing season, while in Ontario, excessive moisture continued to be a concern in some areas.

Statistics Canada has relied on proven satellite technology and agroclimatic data to model preliminary crop yields and production for several years. These methods have successfully been used to produce modelled estimates since 2016. Final harvested area estimates based on the November 2024 Field Crop Survey will be published on December 5, 2024.

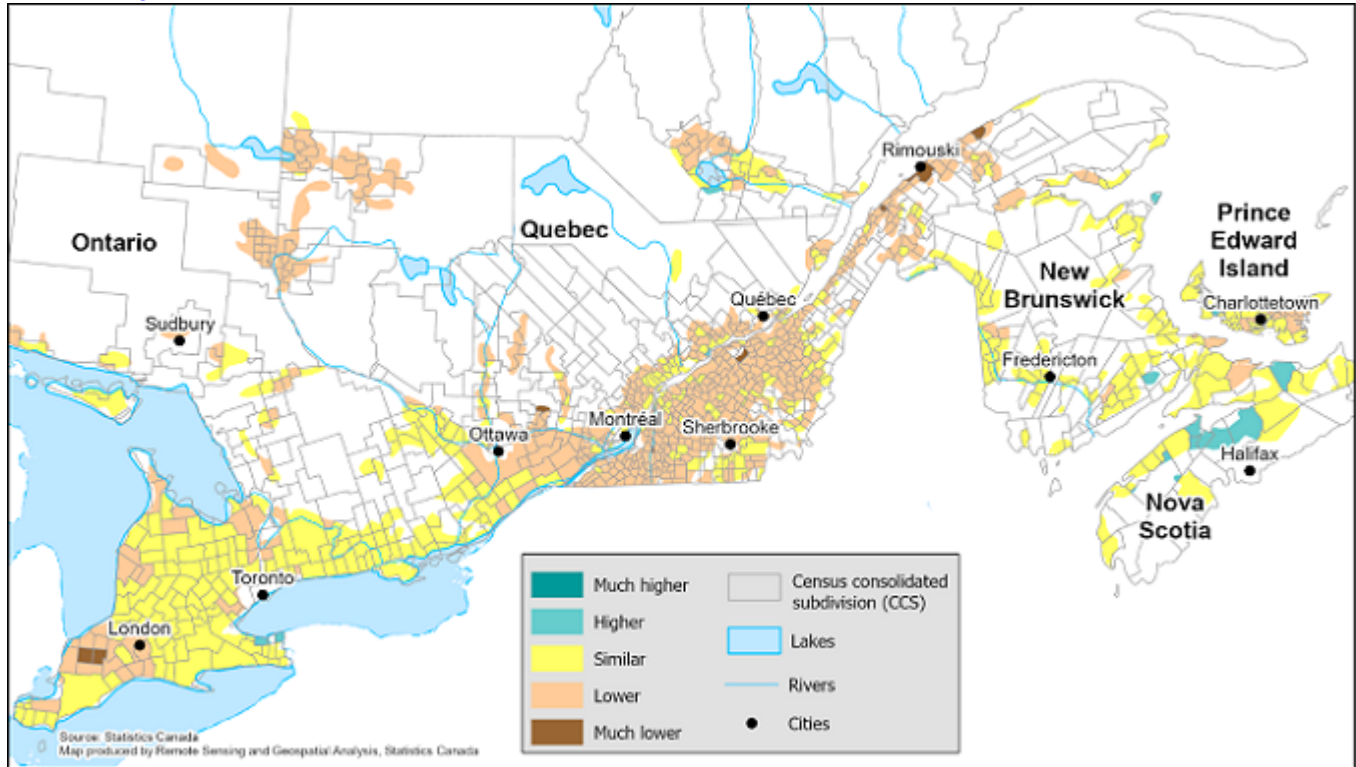
Measurements of Normalized Difference Vegetation Index produced using satellite data indicate that overall plant health in the Prairie provinces ranged from much lower than normal to similar to normal at the end of July, indicating the possibility of yields ranging from much lower than normal to similar to normal.

Crop development in Eastern Canada generally ranged from lower than normal to similar to normal.

Map 1 – Vegetation growth index as of the week of July 22 to July 28, 2024, compared with normal, by census consolidated subdivision for Western Canada



Map 2 – Vegetation growth index as of the week of July 22 to July 28, 2024, compared with normal, by census consolidated subdivision for Eastern Canada



Wheat production is expected to increase as yields rise

Nationally, wheat production is projected to grow by 4.3% year over year to 34.4 million tonnes in 2024. The increase is expected to be led by higher yields, which are anticipated to rise by 5.9% to 48.5 bushels per acre. Harvested area is expected to decrease by 1.6% to 26.0 million acres.

Spring wheat production is expected to fall by 0.7% to 25.4 million tonnes. Spring wheat yields are anticipated to increase by 2.9% to 50.3 bushels per acre, while harvested area is expected to decrease by 3.4% to 18.5 million acres.

The anticipated increase in total wheat production is largely attributable to durum wheat. Harvested area is expected to increase by 5.3% to 6.2 million acres, while yields are anticipated to increase by 39.8% to 35.8 bushels per acre, contributing to higher anticipated durum wheat production (+47.3% to 6.0 million tonnes).

Wheat harvested area in Saskatchewan is projected to decrease by 0.6%, while yields are expected to rise by 9.0% to 42.2 bushels per acre, resulting in an 8.4% increase in production, to 15.9 million tonnes.

Wheat production in Alberta is projected to increase by 9.6% to 10.2 million tonnes, compared with 2023. This rise is anticipated to result from higher yields (+10.7% to 49.5 bushels per acre) offsetting lower harvested area, which is expected to fall by 1.1% to 7.6 million acres.

In Manitoba, wheat harvested area is expected to decline by 2.1% to 3.2 million acres, while yields are anticipated to decrease by 1.6% to 60.3 bushels per acre. Total wheat production is anticipated to fall by 3.7% year over year to 5.2 million tonnes.

Wheat production in Ontario (the majority of which is winter wheat) is projected to decrease by 16.6% year over year to 2.5 million tonnes on lower harvested acres (-11.6%) and lower yields (-5.5%).

Higher yields push canola production up

Nationally, canola production is projected to increase by 1.6% to 19.5 million tonnes in 2024. This increase in production is anticipated to be driven by higher yields, which are projected to jump by 1.8% to 39.4 bushels per acre, while harvested area is expected to edge down by 0.4% to 21.8 million acres.

Saskatchewan is expected to produce 2.9% more canola in 2024 than in 2023, at 10.6 million tonnes. Yields are projected to increase by 5.4% to 39.0 bushels per acre, while harvested area is expected to decline by 2.3% to 12.0 million acres.

Production in Alberta is expected to increase by 2.4% to 5.7 million tonnes. The increase is the result of anticipated higher yields (+2.0% to 39.9 bushels per acre), while harvested area is projected to remain unchanged (6.3 million acres).

In Manitoba, yields are expected to decrease by 9.0% to 40.3 bushels per acre, while harvested area is anticipated to rise 5.7% to 3.3 million acres, resulting in a 3.8% production decrease to 3.0 million tonnes.

Corn for grain production is projected to decrease

Nationally, corn for grain production is projected to fall by 1.2% from one year to the next to 15.2 million tonnes in 2024. Yield is anticipated to jump to 168.5 bushels per acre (+4.1%), while harvested area is expected to fall to 3.6 million acres (-5.2%).

In Ontario, the largest corn-for-grain-producing province, production is expected to decrease to 9.7 million tonnes (-3.0%) because of lower harvested area (-4.7% to 2.1 million acres), offsetting higher yields (+1.8% to 180.1 bushels per acre).

Production in Quebec is projected to rise from one year to the next by 7.3% to 3.6 million tonnes. Yields are expected to jump by 9.1% to 161.6 bushels per acre, while harvested area is anticipated to decrease by 1.6% to 873,800 acres.

In Manitoba, production is expected to fall by 4.8% to 1.7 million tonnes because of lower anticipated harvested area (-11.9% to 482,400 acres) offsetting higher expected yields (+8.0% to 138.7 bushels per acre).

Soybean production is expected to rise

Nationally, soybean production is projected to increase by 2.4% year over year to 7.1 million tonnes in 2024. Yields are expected to rise by 0.4% to 46.1 bushels per acre, while harvested area is anticipated to increase by 2.0% to 5.7 million acres.

Production in Ontario is expected to rise by 6.9% to 4.3 million tonnes. Harvested area is projected to increase by 7.6% to 3.1 million acres, while yields are anticipated to edge down 0.6% to 51.1 bushels per acre.

In Manitoba, production is projected to decrease by 14.1% to 1.3 million tonnes. Harvested area is expected to fall by 11.4% to 1.4 million acres. Yields are anticipated to fall by 3.0% year over year to 35.1 bushels per acre.

In Quebec, production is projected to increase by 7.7% to 1.4 million tonnes on higher anticipated harvested area (+6.9% to 1.1 million acres), combined with a 0.6% expected increase in yields to 47.2 bushels per acre.

Barley production is projected to fall, while oat production is expected to rise

Barley yields (-2.1% to 59.9 bushels per acre) are projected to fall in 2024, compared with 2023. Harvested area is anticipated to decrease by 14.3% to 5.7 million acres. As a result, barley production is expected to fall by 16.1% year over year to 7.5 million tonnes in 2024.

Oat production is projected to rise by 10.1% to 2.9 million tonnes. The increase is anticipated to be driven by higher harvested area, which is expected to rise by 14.6% to 2.3 million acres, offsetting lower yields, which are projected to fall by 3.8% year over year to 80.7 bushels per acre.

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Note to readers

This release provides the preliminary production estimates for 2024. The estimates are produced using model-based data.

The approaches employed in producing these estimates are in line with the [AgZero initiative](#) underway at Statistics Canada, which aims to produce high-quality estimates using modelling, administrative data and other non-traditional survey-based approaches.

The Field Crop Reporting Series produces data from Quebec, Ontario, Manitoba, Saskatchewan and Alberta for all occasions during the crop year (from March to December). However, data are collected twice a year (in the June field crop survey on seeded areas and in the November field crop survey on final crop production) for Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick and British Columbia, which represent from 2% to 4% of national totals.

As of July 2014, for these provinces, July production estimates are calculated using the final estimates of the last three crop years. The harvested area is first estimated based on the ratio obtained from the sum of harvested areas of the last three years over the sum of the seeded areas of the last three years. This average ratio is applied to their current year's seeded acreage from the June survey. This harvested area is then multiplied by the average yield of the last three years to estimate production.

Final survey-based production estimates for 2024 will be released on December 5, 2024, and are subject to revision for two years.

July model-based data were used to produce estimates of crop yield at the Census Agricultural Region level. For more information regarding the model-based data please visit [An Integrated Crop Yield Model Using Remote Sensing, Agroclimatic Data and Crop Insurance Data](#).

Release calendar: The dates for upcoming releases of stocks, areas and production of principal field crops are available online.

In this release, percentage changes are calculated using unrounded data.

Data for July 2024 are compared with final 2023 data.

An easy-to-print chart, [Crop Reporting Survey at a Glance](#), which provides an overview of our survey cycle, is now available.

Table 1
Estimates of production of principal field crops, Canada

	2022	2023	2024	2022 to 2023	2023 to 2024
	thousands of tonnes			% change	
Total wheat	34 807	32 946	34 373	-5.3	4.3
Durum wheat	5 790	4 087	6 022	-29.4	47.3
Spring wheat	26 164	25 520	25 351	-2.5	-0.7
Winter wheat	2 852	3 338	3 001	17.0	-10.1
Barley	9 987	8 905	7 469	-10.8	-16.1
Canary seed	159	112	162	-29.6	44.3
Canola	18 850	19 192	19 502	1.8	1.6
Chick peas	146	159	330	9.0	107.7
Corn for grain	14 539	15 421	15 229	6.1	-1.2
Dry field peas	3 423	2 609	3 008	-23.8	15.3
Flaxseed	473	273	300	-42.4	10.0
Fall rye	514	354	381	-31.1	7.7
Lentils	2 331	1 801	2 774	-22.7	54.0

Table 1
Estimates of production of principal field crops, Canada

	2022	2023	2024	2022 to 2023	2023 to 2024
Mustard seed	162	171	191	5.5	11.9
Oats	5 226	2 643	2 911	-49.4	10.1
Soybeans	6 543	6 981	7 150	6.7	2.4
Sunflower seed	84	92	37	10.0	-60.3

Source(s): Table [32-10-0359-01](#).

Available tables: table [32-10-0359-01](#).

Definitions, data sources and methods: survey number [5225](#).

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).