

Top Ten
Weather Stories of
2021
in the
Winnipeg Area
By Julien Corriveau

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1 Exceptional Drought and 4th Worst Fire Year Since 1914

The Winnipeg area has been, overall, very dry since 2017, but 2021 was really when the drought became widespread across all the Canadian Prairies and the Northern Plains of the US. The widespread and severe drought in combination with above normal temperatures caused waterways to drop to levels not seen in decades, posing a challenge for farmers and municipalities. The dry conditions caused an active fire season which choked Manitoba with smoke most of the summer.

Highlighting the prolonged dry cycle, Winnipeg had 21 consecutive months of below normal precipitation at the Airport, which was unprecedented since records began in the city in 1872. Every month from November 2019 to July 2021 was drier than normal, with only 54% of normal precipitation in the period, an almost 400 mm deficit. The old record was, in fact, closer to the beginning of this prolonged dry cycle which began in 2017: a streak of 11 months of below normal precipitation from October 2017 to August 2018.

Exceptionally low river levels were seen much of the year. In Winnipeg, the low water levels exposed previously submerged relics, such as an old car and ancient bridge pylons near The Forks. In May, masses of glass were seen along the Red River where old breweries resided a century ago. The Red River in the city was 3 feet lower than the previous record for mid May back in 1981. The Assiniboine was low enough to walk across in spots.



Low river levels exposed old relics. Photos by Ian McCausland (left) and Jennifer Still/CBC (right)

In general, the whole water system in the province was well below normal, not just rivers but also the lakes and soil moisture. According to Manitoba Infrastructure, Lake Manitoba dropped to its lowest level in history. The province had not seen a situation this dire since the Dirty Thirties, and the Minister of Infrastructure and Emergency Measures declared it a once in 700-year drought. Above normal snowfall this winter and perhaps rainfall next year will be necessary to avoid economic disaster. Agriculture and Agri-Food Canada declared exceptional drought in southern Manitoba, a designation defined as having a recurrence interval of twice a century. Due to low river levels, Holiday Mountain Ski

Resort declared they would not open in winter 2021-22 due to an inability to produce enough artificial snow.



(Left) Roseau River near Dominion City in early Aug. Brenda Max. (Right) Lake Diefenbaker, SK in late July. Terri Lang.

Some rural municipalities declared states of agricultural disaster because of drought conditions. For ranchers, inadequate soil moisture made it difficult to grow grass. Cattle was moved around or sold off across the Prairies and in North Dakota. Some ranchers went out of business altogether. This was exacerbated by the consecutive dry summers we had seen. If drought wasn't enough to stunt crops, some areas saw more pests such as grasshoppers, which ate away at what little crop was present. Drought and heat reduced honey production and devastated U-pick berry farms.

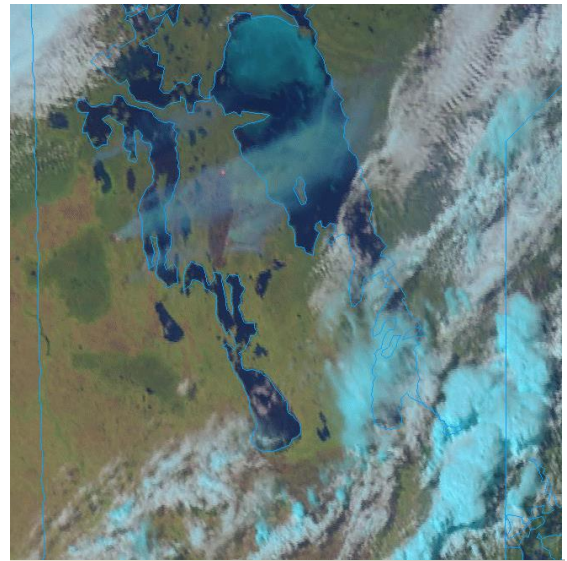
The City of Morden was under water restrictions much of the year because of extremely low reservoir levels on Lake Minnewasta. The Minnewasta Golf and Country Club was forced to use recycled city wastewater to water its greens. Usage of the water supply was banned for construction, crop spraying, irrigation, and landscaping. The city announced in late July that it had less than a year's supply of water. For Manitoba Hydro, the slow water flows heading into the winter meant it would be unable to meet export targets for hydroelectricity. The heat and drought resulted in a cricket explosion in the province. Some homes faced foundation issues from shifting soils.

It was a year with numerous fires, fire bans and backcountry travel restrictions. There were several evacuations, including in Nopiming Provincial Park and in several First Nations communities. Firefighters from all over came to battle the fires, such as from Ontario, NWT, Alberta, Quebec, Nova Scotia, New Brunswick, and South Africa. The Canadian Military also helped extinguish fires. Some fires were some of the largest ever seen in the province. According to Manitoba Conservation and Climate, 1,266,775.6 ha of land was reported burned in 2021, the 4th worst fire year on record since 1914 and the worst since 1994. The largest fires by area burned were:

June - East of Berens River - 370,000 hectares
May - East of Waterhen Lake - 206,000 hectares
July - Near Bloodvein FN - 108,000 hectares

With the exceptional fire year, smoke was common. With 265 hours of smoke at Winnipeg Airport, it was the smokiest year since 1961 and the 3rd smokiest year on record since 1953. With 242 hours of smoke in July and August, it was the 2nd smokiest summer since 1953. July was the smokiest on record with 137 hours of smoke, eclipsing the record of 79 hours in 2015. 25 days saw special air quality statements for Winnipeg.

With 393.9 mm of precipitation, 2021 was the 16th driest year since 1873. 4 out of the past 5 years have been in the top 18 driest, which highlights the stubbornness of the dry weather. In fact, the past 5 years were easily the driest five-year period since 1873 with 1927.9 mm of precipitation. The previous record was 2054.1 mm from 1885 to 1889. Even if we assumed snow at 10:1 ratio, as was the case back in the 1880s, 2017-2021 would still rank as 2nd driest five-year period.



(Top) Large burn scars in central MB on May 19.
(Bottom) A typical summer 2021 sky. Tyson Koschik/CBC

Several milestones or impressive rankings were set in 2021:

- 3rd driest winter and tied 4th driest February.
- May 12 relative humidity of 10% - lowest on record in May since 1953, beating 11% in 1978, 1980 and 1982. Tied with April 1977 and 1980 for lowest relative humidity for any month since 1953.
- Driest second half of June on record with only 0.1 mm of rain. Beat 0.5 mm in 1874 and 1912.
- 5th consecutive year to have a top 21 driest first half of the year (January to June)
- 2nd driest January to July period with 148.7 mm. Driest was 140.9 mm in 1980.
- Driest 12-month period on record. 264.2 mm of precipitation from Aug 2020 to Jul 2021 beat 275.3 mm from Sep 1885 to Aug 1886.
- Driest July on record with 8.5 mm. Beat 10.0 mm in 2011.
- 8th driest September with 12.6 mm.
- Tied with 1961 for 3rd fewest thunderstorm days since 1953 - only 15 days - fewest since 1967.

2 A Very Warm Year Overall

2021 was a very warm year, particularly for daily highs. Highs averaged 10.9°C, the 2nd warmest on record since 1873, behind only 11.1°C in 1987. Mean temperature was

4.5°C, tied with 2006 for 7th warmest year since 1873. 2012 and 2016 were even warmer, averaging 4.6°C. 6 out of 12 months in 2021 averaged more than two degrees above normal, while only one averaged more than one degree below normal.

Warmest Years by Average Daily High Temperature	
11.1°C	1987
10.9°C	2021
10.7°C	1878
10.5°C	1931, 2006, 2012
10.2°C	1998

Winter 2020-21 was tied 14th warmest; spring was tied 22nd warmest, summer was tied 4th warmest, and fall was tied 5th warmest.

6 of 12 months in 2021 were in the top 10 warmest on record: January was 2nd warmest, March 6th warmest, June 10th warmest, July 9th warmest, September 6th warmest and October 10th warmest.

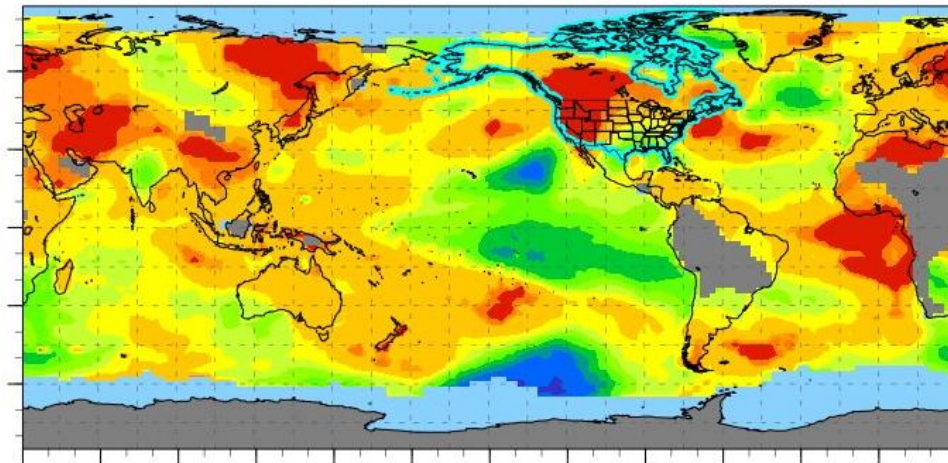
3 Relentless Summer Heat & the Heat Dome

Summer 2021 was the hottest on record since 1900 for the US and Canada combined, according to data from NASA. Western parts of the two countries were especially hot, with a vast area recording its hottest summer on record. Both Calgary and Edmonton had their hottest summers. Southern Manitoba was on the fringe of the record heat, recording many hot days, but not enough to make it the hottest summer. In Winnipeg, with a mean temperature from June to August of 20.2°C, it tied with 1955 for 4th hottest summer since 1873. Summer 2021 was in many ways quite like summer 1961 for southern Manitoba. In Winnipeg, both recorded a record number of 30°C days, a record amount of smoke, and extreme dryness. The main reasons it wasn't the hottest summer was because of the smoke inhibiting maximum heating in July, and the cooler and wetter conditions in the second half of August.

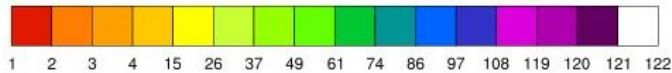
Winnipeg Airport recorded 35 days above 30°C this year, tied with 1988 for the most on record since 1873.

# of 30°C days	
35 days	1988, 2021
34 days	1961
33 days	1983
32 days	1936

NASA GISS Temp: June 2021 - August 2021 (Ranks)



B. Brettschneider 2021 (Data Source: NASA).
Ranks are from 1 (High) to 122 (Low). [Since 1900]
Compared to all June - August periods.



Overall Rank for the U.S. / Canada is 1 out of 122.
Pct ranked #1 is: 26.4%. Pct ranked #122 is: 0.0%.

The summer was hot right from the get-go, with record heat June 4 and 5 across southern Manitoba. Some of the hottest temperatures ever recorded in the province occurred during this heat wave. Temperatures exceeded 40°C south of the Trans Canada in the Red River Valley. The high of 41.3°C in Gretna was the hottest recorded in Manitoba since August 6, 1988, when Starbuck hit 41.5°C. It was early in the season to achieve these temperatures as well. Only one other time in recorded history has temperatures exceeded 40°C this early - 42.2°C on May 30, 1934, in Morden.

High Temperatures on June 4	
41.3°C	Gretna
40.6°C	Emerson
40.4°C	Morden, Altona, Dominion City
40.2°C	Morris
36.5°C	Winnipeg Airport

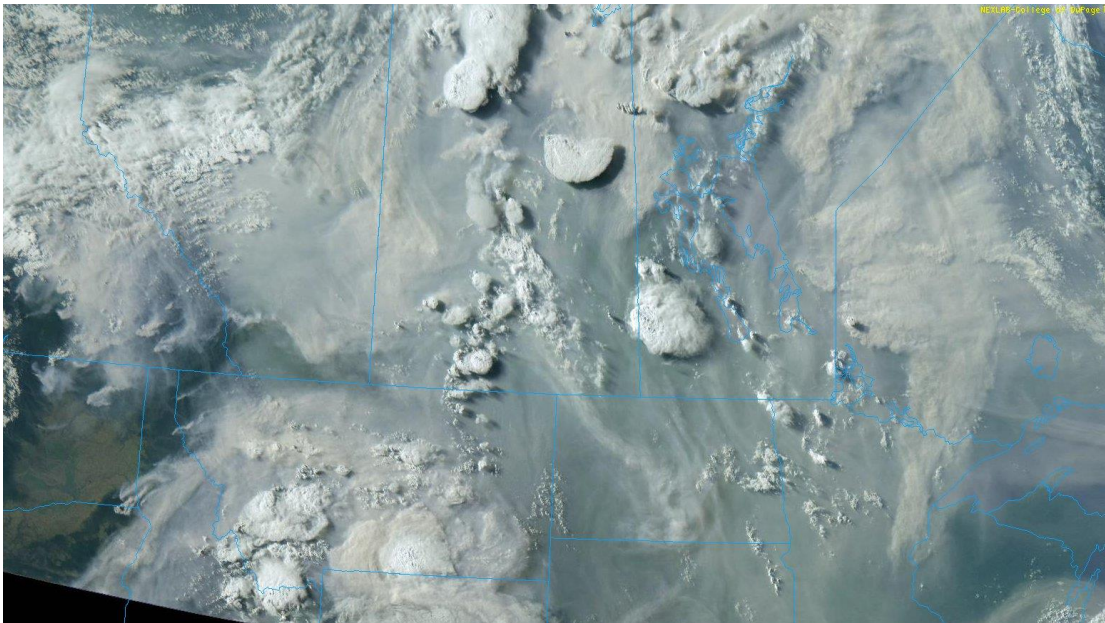
In Emerson, it was the first 40°C since 1939. In Morden, it was the first since 1989. Winnipeg reached 36.5°C at the Airport, but some backyard stations reached higher, such as 37.6°C in Whyte Ridge and 37.2°C in Charleswood. The reason Winnipeg did not get hotter was because of a cold front that pushed through in the afternoon. If the front had passed just a couple hours later, then 40°C could have occurred.

Temperatures had also risen very quickly, like mornings in July 1936 – Manitoba's hottest month on record. Winnipeg recorded the hottest 9 am, 10 am and 11 am temperatures on record since 1953 (28.1°C, 31.4°C and 33.8°C respectively). In Carman and Winkler, it

was already 31°C at 9 am and 34°C at 10 am. In Morden and St Adolphe, it was 36°C at 11 am. By noon, it was 38°C in Morden, Morris, and Winkler.

From then on, it remained mostly hot through to mid August. At Winnipeg Airport, June tied 10th warmest since 1872 and July tied 9th warmest. June daytime highs averaged 27.5°C, tied with 1961 for 4th hottest on record. July highs averaged 29.5°C, the 3rd hottest on record and only the 8th month to average above 29°C. 16 days exceeded 30°C in July, tied with 2006 for 2nd most. The June to July period averaged 20.9°C, tied with 1923 for 2nd warmest on record. On August 16, Winnipeg Airport recorded a minimum of 22.2°C, the 3rd highest in August since 1873 and the highest since July 2007.

"Heat Dome" was a term coined in late June for a massive ridge of high pressure in western Canada which produced the worst heat wave and deadliest weather event in Canadian history. Some 570 deaths were recorded in BC directly related to the heat. The all-time Canadian heat record of 45.0°C in Saskatchewan in 1937 was broken three times in the BC interior. Temperatures approached the unthinkable, with a maximum of 49.6°C in Lytton, BC on June 29. The heat was seemingly never ending, with day after day of temperatures above 30°C and overnight lows above 20°C. This included Alberta, which is a province unaccustomed to extreme heat and humidity, proven by a low number of residents with air conditioning. Air conditioning sales, of course, exploded because of the heat wave with long wait times for installation and purchase. Edmonton had 4 consecutive days above 34°C and 3 consecutive nights above 20°C, very rare for the city. The daily low of 23.4°C on July 1 was the highest the city had ever seen, eclipsing the previous record of 21.4°C on July 14, 2007. The city hit 37.0°C on June 30, only the second time in its history to reach 37°C. The extreme heat provided the conditions for devastating fires in BC. Some fires grew so intense that they generated their own thunderstorms, and one of these fires unfortunately burned down the town of Lytton.



July 15 visible satellite image showing widespread smoke from BC to Ontario and points northward and southward.

The extreme heat and humidity had even extended into far northern Alberta and the Northwest Territories. The jet stream had advanced so far north, that multiple waves of thunderstorm complexes moved through the region, while the Prairies and BC remained dry. On June 30, Fort Smith, NWT reached 39.9°C and a stunning humidex of 50. It appears the previous humidex record for NWT was 45 (according to Patrick Duplessis). The high of 39.9°C was also the highest ever recorded in NWT. Once again on August 1, parts of NWT broke all-time August heat records with highs approaching 35°C.

4 Second Warmest January

It was a very slow start to winter as temperatures remained well above normal in both December and January. With a mean temperature of -10.4°C, it was the 2nd warmest January on record since 1873, behind only 2006. The first half of winter was quite reminiscent of the warmest winter on record in 1877-78. Daytime highs from November to January were the warmest on record, averaging -2.0°C, beating -2.2°C in 1877-78. Temperatures did not reach -20°C in January until the 18th, tying with 2006 for the latest. The first two weeks of January were the warmest on record, averaging -4.8°C. In total, only 7 days dipped below -20°C in January, the 2nd fewest. Only 2006 saw fewer with 3 days. Normal is 18 days.



Rime ice January 9, Assiniboine Park. Rob Paola.

Warmest Januarys by Mean Temperature	
-7.4°C	2006
-10.4°C	2021
-10.6°C	1944
-10.8°C	2012
-11.4°C	1942, 1992

Thanks to the warmer temperatures, rain was seen in January as well. There were three days with rain at Winnipeg Airport. However, they only amounted to 0.4 mm. Brandon, on the other hand, received 2.2 mm of rain (and freezing rain) on January 13 alone. This was a new daily rainfall record for January, beating 2.0 mm on Jan 11, 1928, and Jan 15, 2006.

5 Warmest March Since 2012 Ends Very Short Winter

Despite a brutal cold snap in February, spring came very early in 2021. Snow was already gone by the second week of March and temperatures were already reaching double digits. River ice already began breaking away, golfers were out, and the wildfire season began early. This was reminiscent of 2012 and 1878, the two warmest Marches on record. The main difference was the dryness, 1878 and 2012 were rainy. As a result, overnight lows were less impressively warm than the daytime highs.

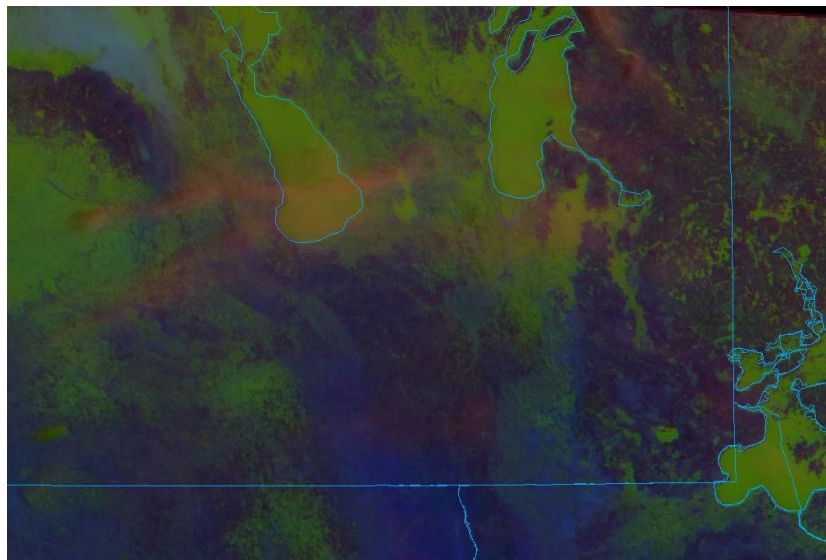
In Winnipeg, snow depth reached 0 cm on March 9, the 2nd earliest spring melt date on record since 1955, behind only February 28, 2000. Snow depth likely reached 0 cm even earlier in 1878, which would make 2021 the 3rd earliest known spring melt date.

Earliest Spring Melts (reach 0 cm) Since 1955	
February 28	2000
March 9	2021
March 14	1995
March 14	2012
March 15	2015
March 15	2016

With the winter snowpack (at least trace) beginning later than normal in December 2020, the winter snowpack was the 2nd shortest in duration on record since 1955, lasting only 87 days. The shortest was in the winter of 1999/2000, lasting 76 days. Again, anecdotal evidence exists to suggest it lasted an even shorter amount of time in the winter of 1877/78, making it the 3rd shortest known winter snowpack.



(Left) Emerson webcam Feb 22. Snow almost gone. (Right) Winnipeg Assiniboine Park March 8, by Rob Paola.



March 5 visible satellite image showing very little snow in the RRV

With the snow disappearing much earlier than normal, temperatures were quite mild. With a mean temperature of -0.4°C, March was 6.5°C above normal and the 6th warmest since 1872. Only 6 days dipped below -10°C, the 3rd fewest since 1872 and the fewest since 1973. The warmth was most impressive on March 8, 20, and 29 when Winnipeg broke temperature records. The first half of March was 4th warmest.

On March 8, a high of 14.4°C obliterated the old record of 6.7°C in 1902. It was the 2nd earliest date to reach 14°C since 1872. March 6, 2000, with a high of 16.5°C, was the only other date. The highest temperatures were south of the city with maximums of 15.9°C in Emerson, 15.3°C in Gretna and 15.2°C in Altona. In North Dakota, highs between 16 and 18°C were recorded from Grand Forks to Fargo.

Another push of warm air March 19 to 21 brought temperatures into the mid to high teens. On March 20, a high of 17.3°C broke the old record of 13.9°C in 1878. Temperatures were warmest south and southwest of the city with highs of 18.5°C in Winkler and 18.3°C in Carman. In Saskatchewan, several locations exceeded 20°C on March 19th, marking the earliest date to reach 20°C on record in some locations. Moose Jaw, SK, reached 21.9°C, breaking the previous earliest 20°C of March 20, 1910. Regina reached 20.9°C, breaking the previous earliest 20°C of March 22, 1928.

Then came the warmest weather of the month on March 29. Winnipeg Airport reached 19.9°C, breaking the old record of 18.2°C in 2010. This narrowly missed the official 20°C mark, but was still tied with March 17, 2012, as the 7th warmest March date on record since 1872. Some stations in the city did reach 20.0°C, such as The Forks with a high of 20.0°C. South of the city, temperatures above 20°C were widespread, even reaching as high as 22°C. South of the border, Fargo, ND hit 25°C and Grand Forks 23°C, both daily records.

Highs March 29	
Winkler	22.1°C
Brunkild	21.6°C
Gretna	21.4°C
Beausejour	21.3°C
Emerson	21.0°C
Steinbach	20.2°C
Wpg The Forks	20.0°C

The early spring, combined with little winter snowfall and a dry March, caused an early fire season in southern Manitoba. March was driest south of the Trans Canada, with regions from Melita to Emerson seeing anywhere from a measly 0.2 mm to 2.0 mm of precipitation. Fire bans and backcountry travel restrictions were already put into place in mid-late March and early April. Numerous grass fires occurred, including one in the Charleswood neighbourhood of Winnipeg. In Piney, burn bans were announced as soon as March 24. On the evening of March 17, hundreds of hectares of land were burned in the Taché municipality. On March 18, more fires occurred along the US border near Vita. On April 7, four buildings were damaged by fire near Lorette.



Fires in RM of Taché on March 17. Andy Brandt via Steinbach Online

The early spring brought an ice breakup as well. This caught some people off guard. One man died while crossing the Winnipeg River on March 18. Another man died while crossing the Red River in Selkirk on March 21. Both men fell through the thin ice.

6 Warm Fall Provides Extended Growing Season

Summer warmth continued into the fall. The most anomalous warm spell occurred in the final days of September and in the first week of October, with 30°C making a return.

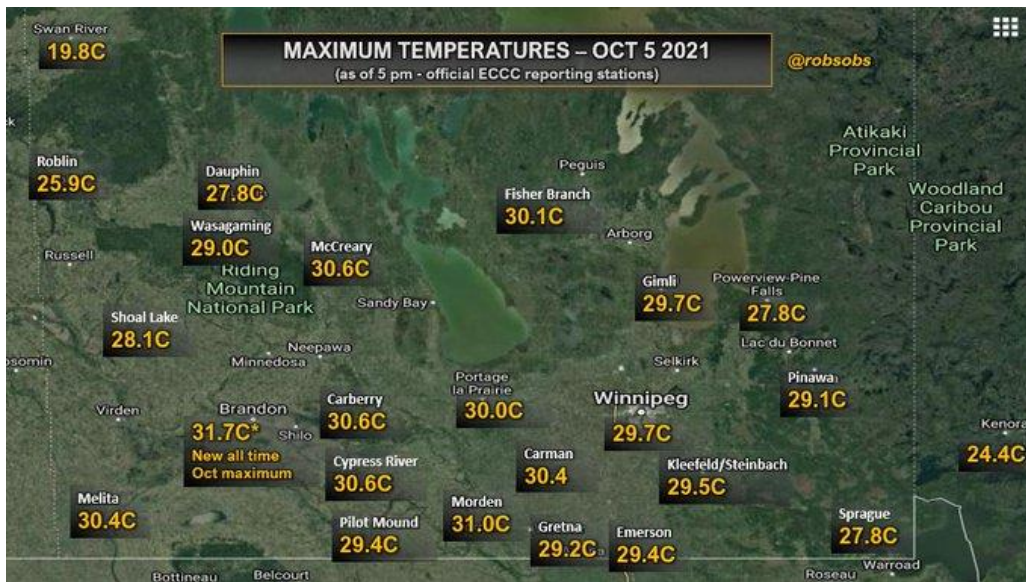


Flowers still blooming (Left) September 24 and (Right) October 7 (Natalie Hasell)

On September 28 and 29, three temperature records were broken in Winnipeg - two record highs and a record high minimum. A high of 31.5°C on the 29th was the hottest for so late in the season since 1872 and tied with 1905 for 5th latest 30°C. Even more remarkable was the humidity, with humidex values reaching 36. This was the latest date since 1953 to have humidex over 35, beating September 26, 2014. Temperatures were even higher in other places. Parts of southeastern Manitoba exceeded 32°C, with a maximum of 33.1°C in Beausejour. Humidex values reached as high as 37. Southern

Saskatchewan reached as high as 34°C on the 28th, with Melita hitting 32.5°C. In Western North Dakota, temperatures reached 100F (over 37°C).

The heat continued into the first week of October, which was the 3rd warmest on record in Winnipeg, averaging 16.7°C. Daytime highs tied with 2011 for warmest on record, averaging 25.3°C. The 7 consecutive days above 20 was tied with 1914, 1943 and 2011 for 3rd longest streak in October since 1872. Most were 11 days in 1963 and 8 days in 1909 and 2010. Winnipeg narrowly missed 30°C on October 5 with a high of 29.7°C, the 5th hottest October day on record since 1872. Brandon Airport broke its all-time October high temperature record (records since 1941) twice with highs of 31.7°C and 31.5°C on October 5 and 6. Note that Brandon CDA hit 32.5°C on Oct 1, 1992.



October 5 daytime highs, courtesy of Rob Paola on Twitter

Thanks to continued warmth, the first frost was significantly later than normal. Winnipeg Airport did not freeze until October 12, the 3rd latest first frost since 1872. However, within the city, the frost was even later. The Forks did not freeze until October 20. The extended growing season meant gardeners were still harvesting well into October as plants continued to grow. However, some grass fires continued to develop into October.

Latest First Frost Since 1872	
October 27	1963
October 16	1920
October 12	2021
October 11	1931
October 8	2016

It was the warmest October since 1963 with a mean temperature of 8.7°C, and the 10th warmest since 1872. September tied with 2015 for 6th warmest, averaging 15.8°C.

The warmth continued into early November with temperatures reaching the mid to high teens across southern Manitoba on the 6th. Winnipeg Airport hit 16.1°C. The provincial hotspots were Deerwood and Carman with 17.3°C.

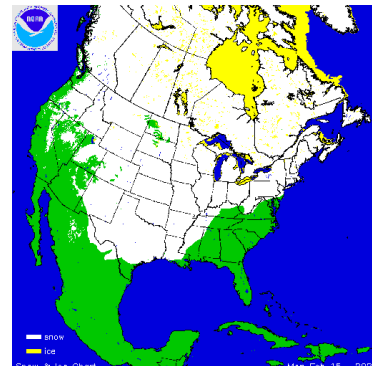
In the end, meteorological fall (Sep to Nov) 2021 tied with 1953, 2011 and 2015 for 5th warmest since 1872, averaging 7.3°C. 30 days exceeded 20°C, tied 2nd most with 1897, 1914 and 1938, and behind only 38 days in 1963.

7 Prolonged February Cold Snap

After a very mild January, February came in like a wrecking ball, bringing with it the only extended period of anomalous cold this year. And this wasn't just the case for Manitoba, it was a cold snap that covered most of the continent all the way down to the Gulf of Mexico. At one point on February 14, the entire state of Texas was under a winter storm

warning, with snow and subfreezing temperatures all the way to the Mexico border. In fact, on February 15, temperatures down to -10°C were recorded close to the Gulf Coast and Mexico border, with temperatures in the -20s in northwestern Texas and Oklahoma. Dallas and Oklahoma City both had their 2nd coldest temperatures on record with lows of -19°C and -26°C respectively. Snow and ice caused millions of power outages in what was one of the most devastating electricity disasters on record. Almost all of Texas was covered in snow and ice and highways were very quiet as people stayed home.

In Manitoba, it was mostly just cold. Winnipeg saw 9 consecutive days with daytime highs below -20°C, the longest streak since 1996 and tied 17th longest since 1872. Five of these days did not even rise above -25°C. On February 6 and 7, there were 41 consecutive hours of wind chill below -40, the longest since 2014. February 13 saw the worst cold, with a high of -26.0°C and a low of -38.8°C. Both were record lows for the date. Wind chill dipped to -50, the latest date in the season since 1967. Only 1962, 1966 and 1967 had wind chill below -50 later, since 1953. Several lows below -40°C occurred in other parts of southern Manitoba. In northern Manitoba, some places dipped to -46°C. Regina, SK recorded over 105 consecutive hours with wind chill below -40.



Feb 15 North America snow cover.

Lows February 13	
Narcisse	-45.6°C
Wasagaming	-45.3°C
Ethelbert	-43.8°C
Eriksdale	-43.8°C
Fisher Branch	-43.1°C
Sprague	-42.1°C
Brandon Airport	-40.6°C
Winnipeg Airport	-38.8°C

8 Wet August Provides Intermission to Heat and Drought

After relentlessly hot and dry conditions throughout the summer, a pattern change finally provided some relief in August with heavy rains and cooler temperatures. Over 100 mm of rain fell in August across many portions of southern Manitoba. 128.4 mm fell at Winnipeg Airport, the wettest August since 2010 and 12th rainiest on record since 1872. Brandon Airport received 161.9 mm, the 3rd wettest August on record since 1890.

August 20 was the rainiest day for most of southern Manitoba. Winnipeg Airport received 65.7 mm, the wettest day since 2000 and the wettest August day since 1993. It was also the 6th wettest August day on record since 1873. Brandon received 63.6 mm, its 3rd wettest August day on record since 1890. Interestingly, the downpours did not produce as much lightning as you would have expected with the rainfall rates. Winnipeg Airport received 41.5 mm in a one-hour timeframe, potentially a new August record, or second place to August 13, 2010. It is difficult to confirm the record because I do not have access to hourly rainfall amounts going back to 2010. The 2010 event dropped anywhere from 41 to 43 mm in an hour. Other parts of southern Manitoba received even heavier rain during the August 20, 2021, event. Amounts approaching 100 mm were recorded in some places, as seen in the following list.

Rainfall August 20		
Mountainside	96.3 mm	Mb Ag
Deloraine	90.3 mm	Mb Ag
Argue	87.2 mm	Mb Ag
Sprague Lake	78.9 mm	Mb Ag
Emerson	70.9 mm	ECCC
Winnipeg Airport	65.7 mm	ECCC
Brandon Airport	63.6 mm	ECCC

The wetter and cooler conditions allowed the province to finally lift some backcountry travel and fire restrictions and provided firefighters some relief.

9 November 10-11 Snowstorm

One of the strongest November storms in a decade brought much needed moisture across most of southern Manitoba in the form of rain and snow. A good swath of 20 to 40 mm of precipitation fell November 10 and 11 through southeastern Manitoba into western portions of the province. The moisture, immediately preceding the winter freeze up, aided soil moisture levels heading into the winter, but were still near to below normal.

Winnipeg received around 17 cm of snow with the system. With roads not plowed before the morning rush hour, the commute to work was treacherous with vehicles getting stuck and traffic very slow. Several highways, particularly southwest of the city, were closed, including the Trans Canada around Brandon and Falcon Lake. Several schools in rural areas were closed, and there were delays to transit, trash collection and mail delivery.

Other parts of southern Manitoba received much heavier snow. Traditional upslope areas of the Parklands, such as around Riding Mountain, received locally 30 to 50 cm. The lakes also caused locally enhanced amounts in the Interlake.



The morning commute was a nightmare in Winnipeg.

Thanks to the storm, in addition to more snowfall later in the month, November 2021 was the snowiest since 2012. With 29.6 cm, it was also the first November with above normal snowfall since 2013.



St Vital Park after the storm, Nov 14. Rime ice on trees from fog as well.

10 April 12-13 Snowstorm

For the second April in a row, a significant snowstorm dropped over 20 cm in the Winnipeg area. The storm hit April 12 and 13, dumping 23 cm in Winnipeg. This made it the 7th largest two-day April snowfall since 1872. Last year, we had a 22 cm storm, the 8th largest two-day April snowstorm.



Elie webcam April 12

The storm was part of a large system that dumped copious amounts of snow from southern Saskatchewan to northwestern Ontario and south of the international border. 20 to 30 cm fell in southeastern Saskatchewan including Regina. With wind gusts up to 70 km/h, drifts were significantly higher. Similar amounts fell across most of southern Manitoba, except for subsident downslope areas southwest of the Riding and Duck Mountains. Amounts between 5 and 15 cm fell in these parts, such as around Brandon.

Impacts of the storm included some highway closures, particularly in Saskatchewan, such as the Trans Canada east of Regina. The storm was extremely beneficial given the dry conditions. Some burn bans were relaxed, and the moisture provided a break for firefighters fighting grass fires. Some rural schools closed due to poor highway conditions. The storm also caused a record number of pole fires according to Manitoba Hydro, due to the moisture interacting with dust buildup during the dry spring.

Honourable Mentions

- 3rd largest 24-hr temperature drop since 1953 on March 29-30. A 30.7°C drop, from 19.9°C to -10.8°C. Came with wind gusts of 80-100 km/h.
- Nocturnal thunderstorms dump 40+ mm over north Wpg on May 22
- Significant freezing rain/drizzle events Nov 26, Dec 15, Dec 24
- Dec 27 snowstorm dumps 20 cm, followed by cold snap

Acknowledgement of Sources

This summary document contains information from a variety of sources, including CBC, the government of Manitoba, College of Dupage, ECCC, Twitter, the City of Winnipeg, Pembina Valley Online, Facebook, Steinbach Online.