

Issue 1 – May 17, 2023

Manitoba Potato Report



Weekly Provincial Summary

- We wish our potato growers and industry colleagues a very good 2023 potato season.
- Planting for the province is around 60% complete, with rapid progress expected in the next few days.

Overview

- Potato planting started in western Manitoba on April 27, as opposed to May 11, in 2022, and April 23, in 2021. Snow cover and mid-April snow fall delayed planting by about a week.
- Planting in the western side of the province is currently 60-100% complete. Central potato growing areas around Portage are at 0-50% complete. The southern part of the province is close to 20% planted.
- Overall, potato planting is around 60% complete in the province. With good weather in the forecast planting should be over 75% within a week. In comparison, in 2021 over 75% of planting was completed by mid-May, but only about 15% in 2022.
- Regular weekly reports for the season will provide late blight risk forecasting, updates on other disease and insect pests, and control recommendations. Along with the reports, the late blight risk maps, P-Days, SprayCast maps for various sites will be available at <http://www.mbpotatoes.ca/index.cfm>.

Ag Weather Data

Precipitation and Soil Moisture

- Precipitation (mm) in the first two weeks of May has been below normal in the potato growing areas of the province (Fig 1). <http://www.gov.mb.ca/agriculture/weather/pubs/percent-normal-precipitation.pdf>
- Soil moisture in the top 30 cm was optimal to wet in the potato growing areas by May 14 (Fig 2). “Frost boils” in places led to equipment sinking into the apparently dry soils. <https://www.gov.mb.ca/agriculture/weather/pubs/soil-moisture-30cm.pdf>
- Rain is needed across all potato growing regions of the province. Scattered light rains that have occurred so far were not substantial enough to slow planting operations.

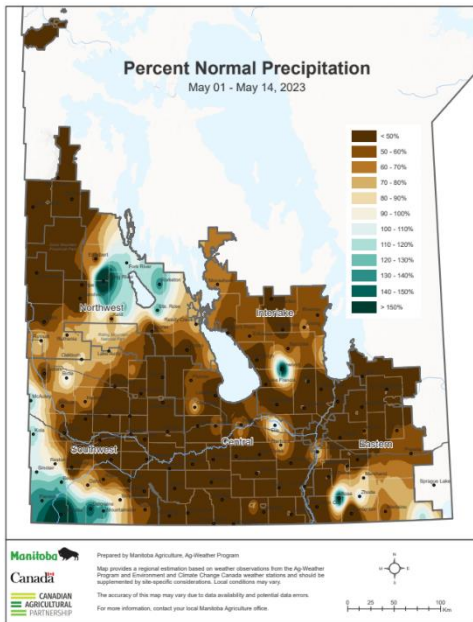


Fig 1. Precipitation (mm) in the first two weeks of May has been below normal.

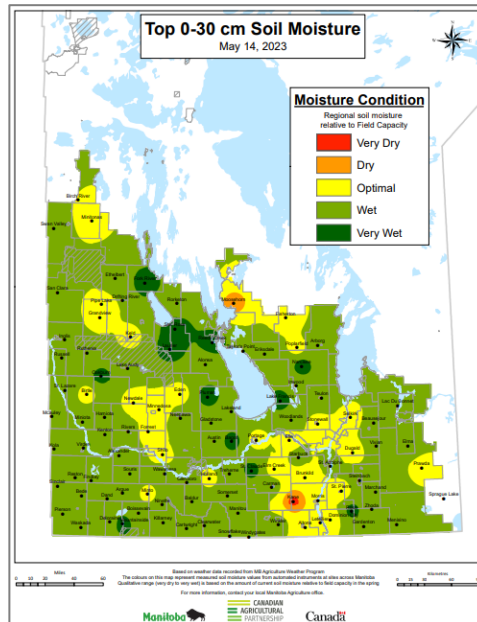


Fig 2. Soil moisture (0-30 cm depth) by mid-May is optimal to wet.

Temperatures – Air & Soil

- In the potato growing areas, daytime high (max) temperatures for the week (May 8-14) ranged around 25.5 to 28.5°C, while the minimum temperatures ranged from 1.5 to 8.2°C (Table 1). The daytime highs were around 8°C warmer than the same week in 2022. The GDD (Growing degree days with base 5°C) is 125%+ above normal (Fig 3), indicating we have a warmer start to the season.
- Generally, soil temperatures were much warmer at planting time than last year. At 5 cm depths the temperatures were similar to 2022, but much warmer at 20 cm depths (Fig 4a, 4b). 2022 soil temperatures at 20 cm stayed below 10°C till mid-May but are much warmer in 2023.
- Winkler and Treherne had cooler soils at 5 cm depth which may lead to slower emergence. At 20 cm depths Winkler, Treherne and Glenboro were cooler than other selected sites.
- Soil temperatures remain cool, while air temperatures have fluctuated widely, reaching over 30°C in some areas.

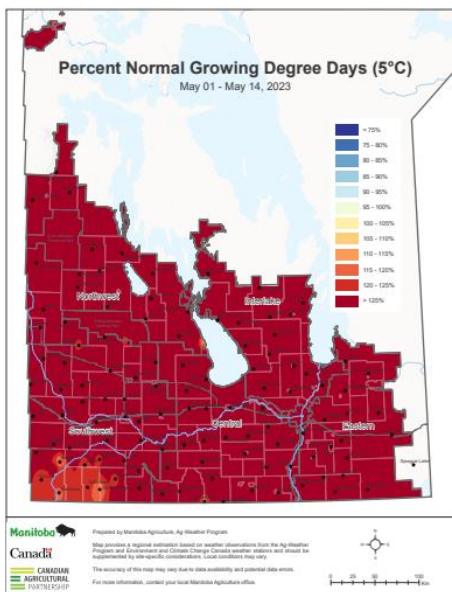


Fig 3. Accumulated heat units, GDD (May 1-14) across Manitoba show an early warm start to the season.

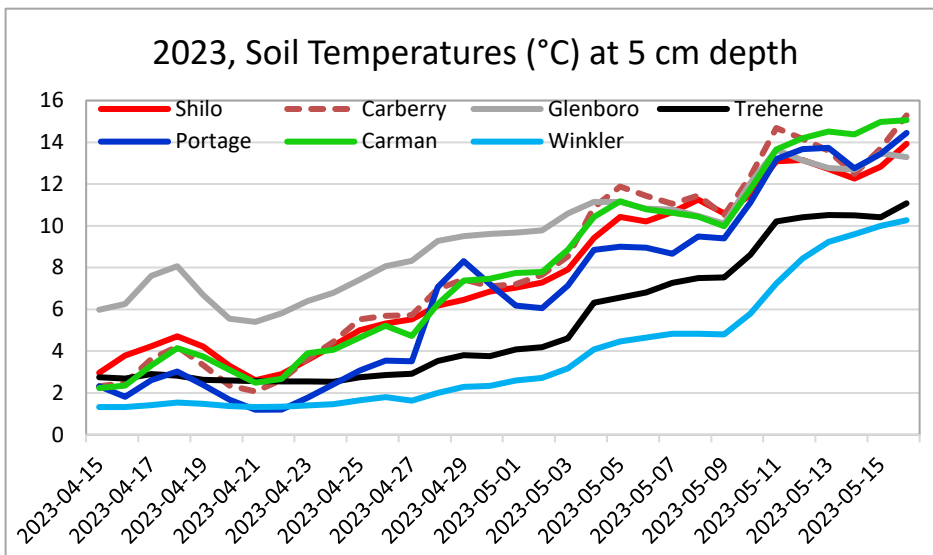


Fig 4a. Soil temperatures at 5 cm depths at selected locations across Manitoba.

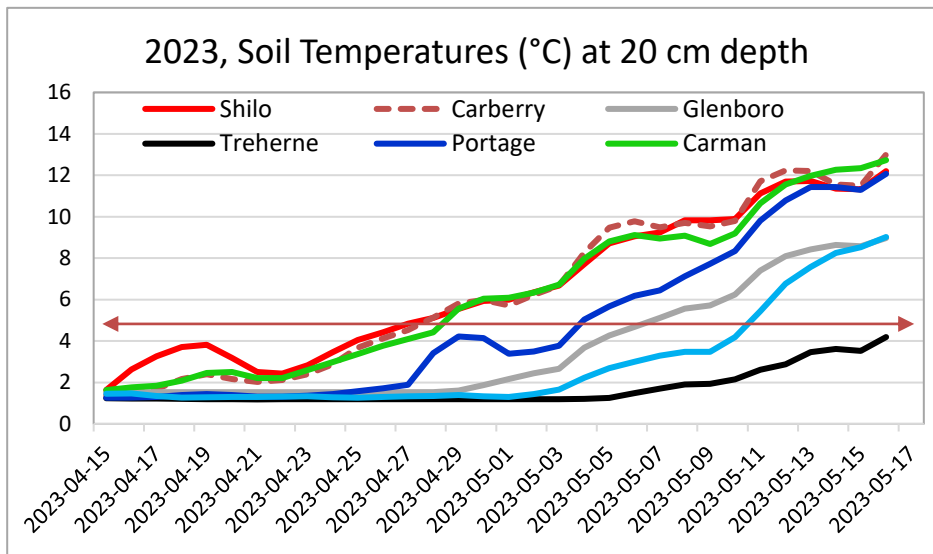


Fig 4b. Soil temperatures at 20 cm depths at selected locations across Manitoba.

Weather Data Summary

- The daytime highs in potato producing areas were in mid-20s which is about 8°C higher at the same time in 2022.
- The weather highlight for 2023 so far has been the lack of rain. This has led to all potato growing areas being significantly below normal for precipitation (12 to 62% of normal). At the same time in 2022, the rains in most potato growing areas were 86 to 287% of normal).

Table 1. MB Ag Weather Data – May 8 to 14, 2023

Region	Max Temp (°C)	MinTemp (°C)	Rain (mm) for the week	Rain (Since May 1) (mm)	2023 Rainfall (% of normal) from May 1	2022 Rainfall (% of normal) from May 1 -14
Altona	27.6	5.3	2.7	3	12	135
Austin	26.2	4.9	4.0	4	22	188
Bagot	26.0	3.8	11.2	11	60	163
Carberry EC	26.2	4.3	5.3	5	23	132
Carman	27.1	6.0	1.9	3	15	108
Cypress River	26.6	2.8	2.7	5	17	165
Glenboro	25.9	2.3	3.3	6	22	146
Holland	26.9	4.3	3.5	5	17	153
Morden	27.5	7.1	12.7	15	61	105
Portage EC	26.5	5.1	11.2	12	62	134
Rivers	25.1	4.0	5.2	5	27	287
Shilo	25.6	3.5	4.5	5	20	184
St. Claude	26.2	5.2	6.5	10	36	93
Treherne	26.4	1.5	6.2	7	28	86
Wawanesa	27.1	1.6	4.3	5	21	148
Winkler	28.5	8.2	6.3	10	38	111

Agronomics

- Planting operations are progressing rapidly, given the dry spring and easy field access.
- Soil conditions are ideal in most regions for rapid planting. Some short delays did occur due to scattered rains. Portage area will need a few more days for fields to dry before seeding can continue.

Crop Progress

- The first crop emergence is expected around the first week of June in the early planted fields.
- Later planted fields often catch up in emergence due to warmer soils at the time of planting.

Disease & Insect Pests Monitoring

- Dry rot in some seed lots has been reported.
- Due to lower aphid population in Manitoba, most local seed should have had low virus levels.
- Aphid and ECB monitoring will be done again in 2023. After a few years of no potato psyllid catches, we have stopped monitoring for this insect.
- Verticillium early dying survey will be conducted in selected fields across Manitoba.
- Plants will be monitored for disease pressure throughout the season.

Late Blight Monitoring

Information

- Late blight risk forecasting will be provided on a regional basis. Please refer to the risk maps on www.mbpotatoes.ca.
- Late Blight Monitoring will occur again this year with weekly updates when plant stage and conditions are optimum for disease transmission.
- As in earlier years, there will be a network of passive traps for late blight spores, across Manitoba.
- If you suspect late blight in your area, please contact vikram.bisht@gov.mb.ca