Issue 4 – May 31, 2024

Manitoba Potato Report

Seasonal Reports Weekly Weather Maps Potato Production

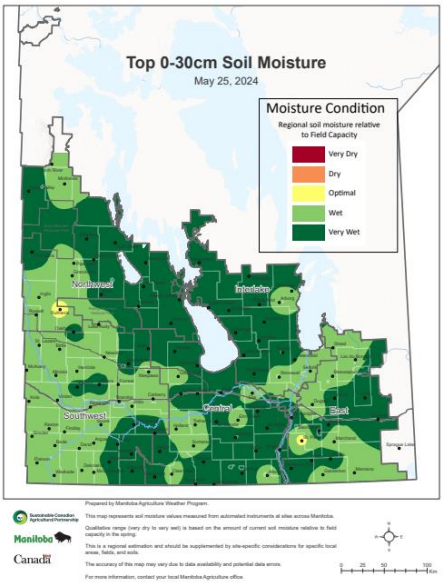
Provincial Summary

- Over 95% of potato acres have been planted in Manitoba, ranging from 40 to 100% for various farms.
- Rains, so far, are 200 to 300% of normal in potato growing areas; and 48 to 86 mm of rain from May 20 – 25 interrupted planting again in some areas of the province.
- Seed rot has been reported in some wet fields.
- Regular weekly reports and other features will be provided, including late blight risk forecasts, updates on disease and insect pests on potatoes, and control recommendations. All reports and information will also be available at *http://www.mbpotatoes.ca/index.cfm*.

Ag Weather Data

Precipitation and Soil Moisture

- The top 30 cm by May 25 was generally wet to very wet in the potato growing areas (*Fig. 1*), which is wetter than the previous week. The 0-120 cm depths also showed more areas in the wet to very wet conditions (*Fig. 2*). *https://www.gov.mb.ca/agriculture/weather/pubs/soil-moisture-30cm.pdf* and *https://www.gov.mb.ca/agriculture/weather/pubs/soil-moisture-120cm.pdf.*
- Precipitation (mm) in the first three weeks of May was above normal in almost all of the province (*Fig. 4*), The potato growing areas received above normal rains (Fig. 4), ranging from 211% (Altona) to 337% (Bagot) in the selected sites (*Table 1*). *https://www.gov.mb.ca/agriculture/weather/pubs/percent-normal-precipitation.pdf.*
- There was snow reported on May 24 in the western parts of the province (Fig. 3 a, b).



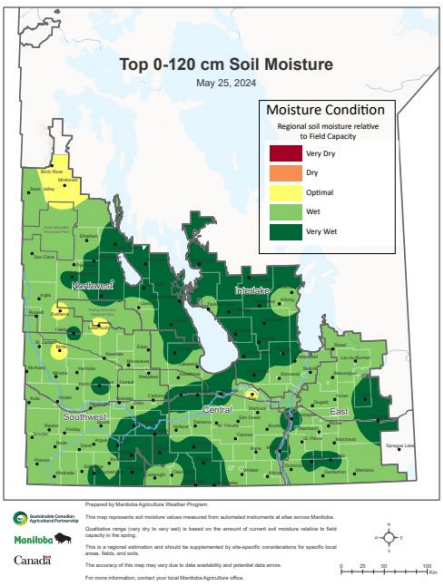


Fig. 1 (left): 0-30 cm depth and Fig. 2 (right): 0-120 cm depths: show generally wet to very wet current (May 25) soil moisture conditions relative to field capacity. It was much wetter than last week at both depth profiles.

Report compiled by Dr. Vikram Bisht
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Fig. 3. Snow fall on May 24 on the western side of the province, a: Janelle Lavich (Choice Ag) and b: Dave Adriaansen (Adriaansen Farms).

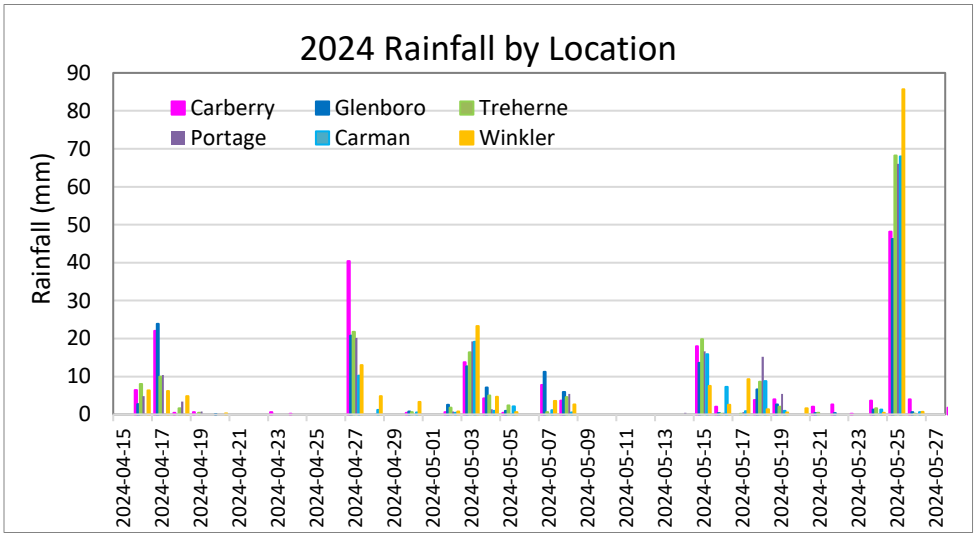
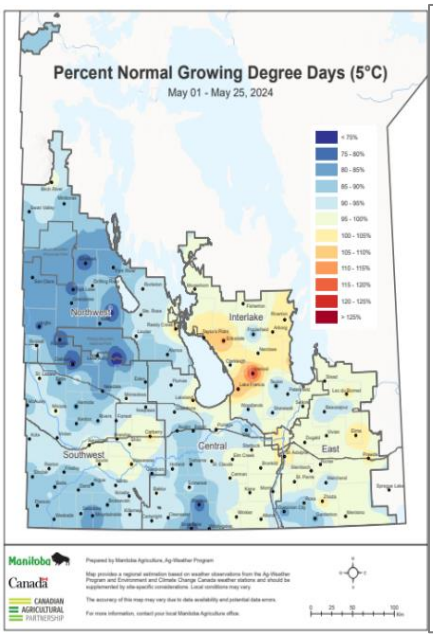


Fig. 4. Heavy and widespread rain on May 25 led to many wet fields across Manitoba and disrupted planting in some areas. Precipitation (mm) in the first three weeks of May (May 1-25) was 211 to 337% above normal in selected potato sites.

Temperatures – Air and Soil



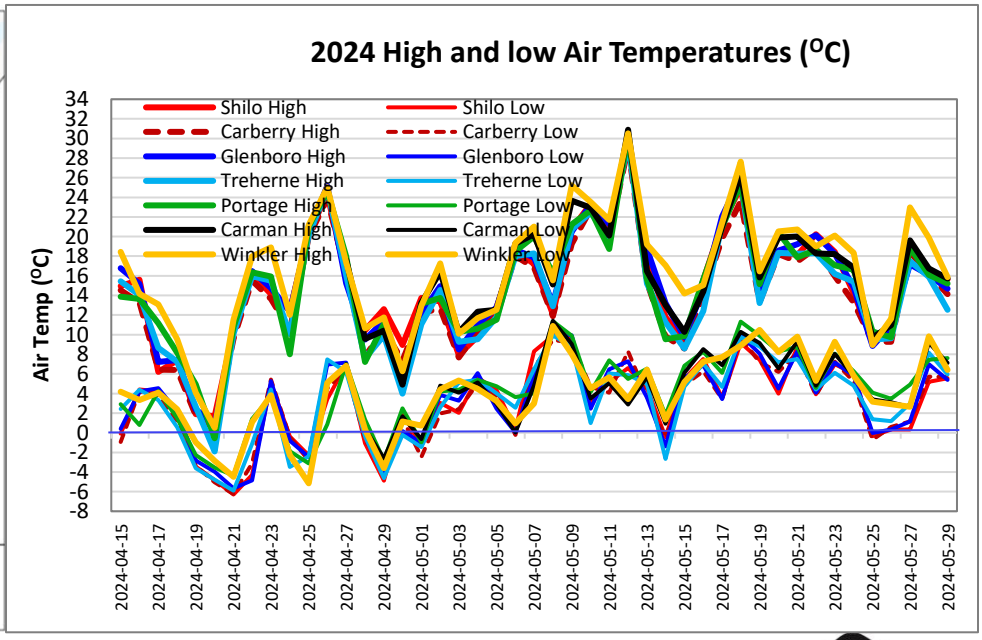
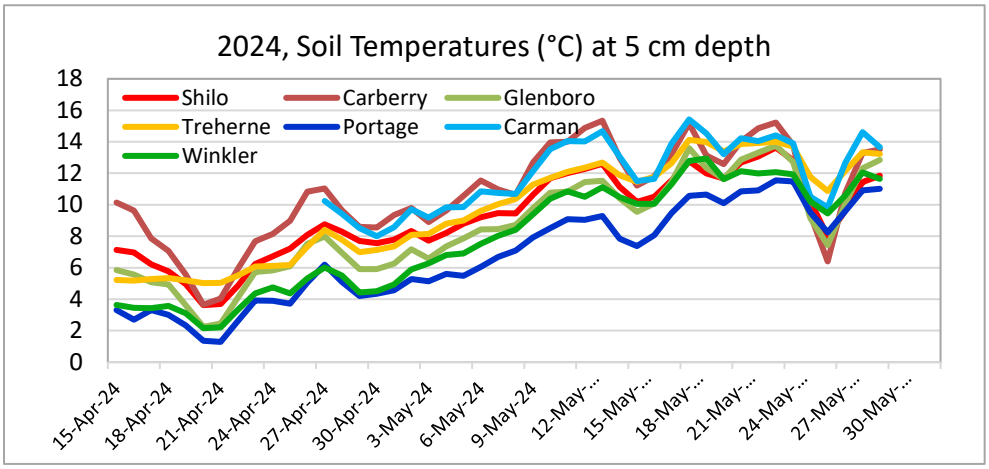


Fig. 5 (left) Growing Degree Days (GDD base 5) in the first three weeks of May has become generally below normal, ranging from 85 to 100% of normal in potato growing areas. Fig. 6 (right) After a cool early May, the 2nd and 3rd weeks were warmer. Rains have cooled the temperatures towards end of the 3rd week.

- Last week (May 13-20) accumulated a lot of heat units, resulting in GDD ranging from 85 to >100% of normal for May 1 to 25 (*Fig. 5, 6*). https://www.gov.mb.ca/agriculture/weather/pubs/percent-normal-gdd.pdf.
- The GDD accumulation in the week was lower than last week with daytime high temperatures ranging from 18.5 (St. Claude, Austin, Bagot) to 20.7^{O}C (Winkler, Wawanesa) (*Table 1*) and overnight lows ranging from -0.4 (Shilo) to 3.4 ^{O}C, (Altona).
- Soil temperatures on May 26 dipped drastically at 5 cm depths and ranged from nearly 6.4 (Carberry) to 10.4 ^{O}C (Treherne). Temperatures were slightly cooler at the 20 cm depths, ranging from 7.8 (Carberry) to 9.9 ^{O}C (Winkler) (*Fig. 7*).



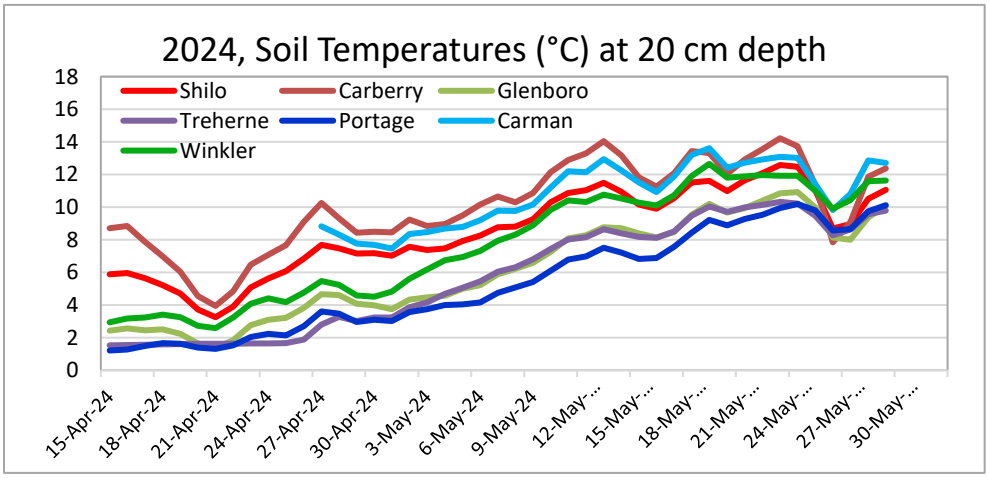


Fig. 7 (top). Soil temperatures at 5 cm depths and Fig. 8 (bottom) 20 cm depths at selected sites show a steady increase in temperature, but a sharp dip around May 26.

The 5 cm depths are warmer than 20 cm depths as expected.

Weather Data Summary for Selected Potato Site Stations

- The daytime highs in potato producing areas ranged from 18.5 to 20.7^{O}C (Table 1) and are lower than last week's. The overnight low temperatures have been around 3-6^{O}C. Due to cool temperatures in the week, the GDD appears to have come close to normal, ranging from 85 to 100% of normal cumulative GDD (May 1-25).

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- There was a substantial amount of rainfall in the week (May 20-25), mostly on May 24 and 25. The cumulative amounts for the week ranged from low of 48.6 mm (Glenboro) to high of 86.7 mm (Winkler).
- The cumulative rainfall for 2024 from May 1 to 25 (Table 1) has been above normal for the period, and much higher than below-normal rains of 2023 for the same period.
- According to the Environment and Climate Change Canada (ECCC) weather forecast more rains are expected from June 2 to 5 in many areas of Manitoba.

Table 1. Manitoba Agriculture Weather Data – May 20-25

Region	Max Temp (ºC)	Min Temp (ºC)	Rain (mm) for the week	Rain (mm) (Since May 1)	2024 Rainfall (% of normal) May 1-25	2023 Rainfall (% of normal) May 1 - 23	2022 Rainfall (% of normal) May 1 - 23
Altona	20.1	3.4	54.5	98	211	23	115
Austin	18.5	1.4	66.1	132	317	29	230
Bagot	18.5	1.9	65.8	140	337	47	223
Carberry EC	19.7	0.2	65	123	275	123	180
Carman	20.0	3.1	69.7	127	275	Data unavailable	125
Cypress River	19.8	0.2	67.2	139	277	24	166
Glenboro	20.2	0.0	48.6	112	237	29	161
Holland	19.5	0.1	67.8	121	241	23	163
Morden	20.0	2.8	86.4	144	287	144	105
Portage EC	19.0	3.1	65.6	118	283	56	221
Rivers	19.2	0.3	37.6	99	281	38	
Shilo	20.3	-0.4	57.5	122	275	29	189
St. Claude	18.5	2.6	73.7	123	243	35	131
Treherne	18.3	1.2	65.5	123	243	28	131
Wawanesa	20.7	-0.2	50.2	130	293	31	168
Winkler	20.7	2.9	86.7	145	287	28	103

For more Manitoba weather information, visit: *www.gov.mb.ca/agriculture/weather*

Crop Progress

- Manitoba's potato planting is over 95% complete. The week had heavy rainfall across Manitoba, mostly on May 25, leading to wet fields and delayed planting.
- Potato planting in the western side of the province is nearly complete, with a few heavier soil fields left. Central potato growing areas are around 50-100% complete. The southern part of the province is 60% to 100% planted.
- Early planted fields are showing emergence (Fig. 8), however, 50% of the fields had not shown emergence by May 29.
- Heavy rains across Manitoba on May 25 led to many wet fields and interrupted planting again in areas with heavy wet soils.

Fig. 8. Early planted fields are showing good emergence – Left a: Orla Sheridan (Shilo farms) and Right b: Kyle Froese (Corduroy Farms), it has taken 4 weeks for first planted (April 22-25) potatoes to show emergence. There is good moisture and temperature for quick emergence in other fields.

Disease & Insect Pests Monitoring

- Fields will be monitored for diseases throughout the season.
- Incidences of poor emergence due to soft rot are being reported from some wet fields (Fig. 9). There appears to be varietal differences in incidence of rotting within the same field.

Fig. 9. Poor emergence in some wet spots in some fields has been reported. Kirsten Eggie (Delta Ag).

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. The late blight Disease Severity Index Values (DSVs) represent the potential risk of late blight occurring when the inoculum is present.
- 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. Anyone interested in joining the spore trap network is quite welcome, especially those who make fungicide

recommendations for late blight management on the farms. To place new orders for Sporonado spore trap cassettes please contact Vikram Bisht or Sporometrics.

- Late blight risk maps, P-Days, and SprayCast maps will be available at http://www.mbpotatoes.ca/index.cfm.

Growers and industry stakeholders, please report or submit for diagnosis, any disease or insect observations of importance. If you suspect late blight in your area, please contact vikram.bisht@gov.mb.ca or 204-745-0260