MARITIME CANADA CLIMATE SUMMARY August 2021

August Brings Return to Above Normal Temperatures and Below Normal Rainfall

The slightly cooler and wetter than normal July proved to be short-lived as August brought a return to the warmer and drier trend that has characterised 2021 across most of the Maritimes. Temperatures were significantly warmer than normal (up to close to 3C) across NB, PEI and Western NS. At several locations August 2021 ranked in the top 10 warmest on record and at Bathurst and Bas Caraquet it was **the** warmest. Rainfall was generally below normal with NW NB, PEI and E NS receiving just 25-50% of the average total. Despite the overall dryness, there were several locally significant rainfall events accompanied by thunderstorms. The relative dryness did not lead to a significant increase in drought conditions and crop yields continued to be good to excellent. However, by the end of the month the daily fire weather index was showing pockets of moderate to high risk in SE NB and most of PEI.

The Warmest (°C)

New Brunswick Bathurst A.	34.1
Nova Scotia Kejimkujik	32.4
Prince Edward Island Maple Plains	32.9

The Coldest (°C)

New Brunswick Edmundston	1.9
Nova Scotia Upper Stewiacke	2.7
Prince Edward Island Maple Plains	5.6

The Wettest (Total mm)

New Brunswick Fundy Park	158.2
Nova Scotia Halifax Airport	145.1
Prince Edward Island Summerside A	59.7

The Capital Stats

	Mean Temperature (°C)			Extremes	
Station Name	Monthly Mean	Normal Mean	Diff from Normal	Max (Date)	Min (Date)
Charlottetown Airport	20.3	18.6	1.7	30.6 (13)	7.9 (9)
Halifax Stanfield Airport.	20.1	18.7	1.4	30.9 (25)	10.4 (29)
Fredericton	20.7	18.6	2.1	33.0 (13)	6.3 (28)

	Total Precipitation			Snowfall	
Station Name	Monthly Total (mm)	Normal Total (mm)	Percent Normal	Total (cm)	Max SOG (Date)
Charlottetown Airport	94.2	85.9	110	NA	NA
Halifax Stanfield Airport	145.1	93.5	155	NA	NA
Fredericton	94.8	85.9	110	NA	NA

Daily Temperature Records

Given the high ranking on the all-time lists of August 2021, not surprisingly, there were many daily high temperature records set across the region. NS recorded 35 daily high records at 22 different stations. In NB and PEI, the numbers were 44 at 17 stations and 17 at 5 stations respectively. In NB the 13th was exceptionally warm with 10 new records mainly in the NE region. In NS on the 25th there were 12 new records across the province. Daily record low temperatures were few with just 5 in NB, 2 in PEI and none in NS.

Other Significant Events (information provided by Climate Services, ECCC)

August 2: A low-pressure system passing by just to the south of NS brought some heavy rain to southernparts of the region. The highest amounts - in the 30 to 75 mm range, were reported in NS. There were some reports of vehicle accidents due to hydroplaning on highways.

Firefighters Of Nova Scotia | Facebook

August 5-6: Another low-pressure system brought some heavy rain to the southern Maritimes. The highest amounts ranged from 30 to 80 mm affecting all 3 provinces. Some locations reported high precipitation rates of up to 22 mm/h with hydroplaning leading to at least one accident reported.

August 12-14: A very warm and humid southwest flow developed across the region resulting in heat warnings for all 3 provinces with many new high temperature records set on all 3 days. Maximum temperatures reached the 28 to 34C range with overnight lows remaining above 20 C at many locations.

Heat warning issued for P.E.I. starting Thursday | CBC News

Heat warnings issued for whole province as humidex heads toward 40 | CBC NewsHeat warnings in place as humidity blankets Nova Scotia | CBC News

August 17-20: Another very warm airmass moved into the region resulting in dozens of new temperaturerecords over the 4-day period. Maximum temperatures ranged from 29 to 34C with overnight lows remaining above the high teens at many locations. A weak disturbance brought some heavy rainfall to parts of western and central NS on the 19th and 20th with amounts reaching the 30 to 60 mm range.

August 24-26: Another southwesterly flow brought very warm conditions with heat warnings across the region. Maximum temperatures ranged from 27 to 33 C setting dozens of new temperatures records with again overnight lows remaining above the high teens at many locations. A cold front moving through late on the 26th set off thunderstorms, some likely severe especially in NB. A severeweather watcher in Plaster Rock, NB, reported a possible funnel cloud in a rotating supercell. Brief heavy downpours were also reported with up to 28 mm of rain.

<u>Severe thunderstorm warning issued for Campbellton, Restigouche areas | CBC News Lightning Show Over Greater</u> Moncton Entertains For Hours | 91.9 The Bend (919thebend.ca)

Compiled by Peter J. Lewis with data and information provided by Client Service Operations Atlantic, Meteorological Service of Canada Environment and Climate Change Canada / Government of Canada

Other CMOS News

New Scholarship: In partnership with Imhotep's Legacy Academy (ILA) at Dalhousie University, CMOS-Halifax has created the CMOS Scholarship for African Nova Scotian and Indigenous Students. The scholarship will be awarded to a student attending a post-secondary institute in September 2022 in an applied science program. Future scholarships will be awarded on an as-available basis. Stay tuned for more information on how you can donate to this scholarship fund.