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# EASTERN NORTH CAROLINA MONTHLY CLIMATE REPORT

# **APRIL 2022**

WEATHER FORECAST OFFICE NEWPORT/MOREHEAD CITY, NC

## **National Weather Service**

**NEWPORT/MOREHEAD CITY, NC** 

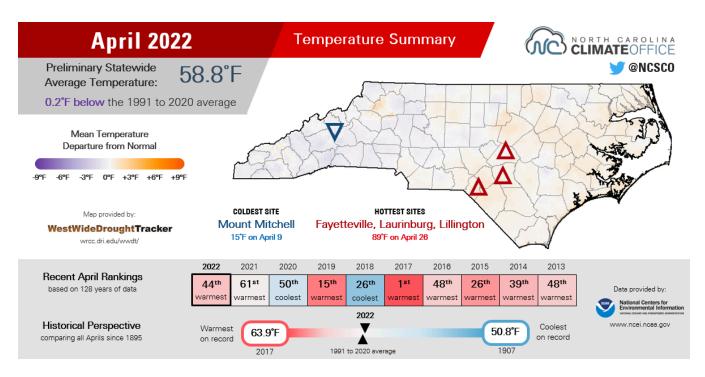
# **MONTHLY SUMMARY**

pril 2022 was yet another continuation of warmer and drier than normal conditions across eastern North Carolina, although not nearly as severe as in March. Temperatures were generally within a couple of degrees of average, with the coastal plain slightly cooler than its coastal counterpart. Precipitation was highly variable, with a late-month coastal storm bringing as much as 4-5 more inches of rainfall than some sites across the inner coastal plain. Scattered thunderstorm activity further exaggerated these differences. Drought conditions improved slightly along and east of Highway 17, with little to no improvement west.

CPC seasonal outlooks slightly favor above-average temperatures in the June-July-August time frame (around 40-50%), and above average precipitation for the same time period (around 33-40%, slightly higher closer to the mid-Atlantic). Drought conditions are still expected to improve as we shift into our wetter climatological period, although seasonal drought outlooks now suggest some level of drought will still be present at summer's end, particularly for the coastal plain.

# **TEMPERATURES**

Analysis conducted by the North Carolina State Climate Office showed that temperatures were right in line with climatological norms for the month of April. The average temperature statewide was 58.8°F or a mere 0.2°F below the 1991-2020 average. This was the 44th warmest April statewide since records began in 1895, with 138 years of data.



April 2022 Temperature Summary from the North Carolina State Climate Office

Eastern North Carolina was slightly warmer than the statewide average. The three primary climate sites in the Morehead City CWA were around a degree above average for the month. Additional observations can be found in Appendix A.

<b>MHX Select Site</b>	<b>Temperature</b>	<b>Statistics:</b>	<b>April 2022</b>
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Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Beaufort (KMRH)	70.9	54.6	62.8	62.1	0.7
Hatteras (KHSE)	70.3	55.9	63.1	61.8	1.3

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
New Bern (KEWN)	74.5	50.1	62.3	61.8	0.5

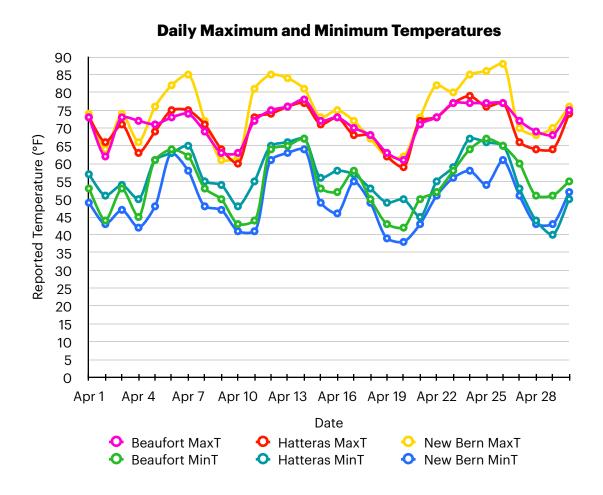
Normals are based on a period from 1990-2020.

County-averaged statistics are presented in the following table. Note that mean temperature and anomaly calculations are based on a period of 1901-2000, rather than 1990-2020. Data courtesy of the National Centers for Environmental Information (NCEI).

County	Avg. Temperature (°F)	Mean (°F)	Departure (°F)	Rank
Beaufort	61.4	59.8	1.6	37 W
Carteret	62.0	60.5	1.5	32 W
Craven	61.5	60.1	1.4	37 W
Dare	60.7	58.7	2	26 W
Duplin	61.4	60.3	1.1	44 W
Greene	60.5	59.8	0.7	52 W
Hyde	61.6	59.9	1.7	29 W
Jones	61.2	60.0	1.2	38 W
Lenoir	60.6	60.0	0.6	56 W
Martin	60.5	58.9	1.6	37 W
Onslow	61.9	60.6	1.3	36 W
Pamlico	62.0	60.5	1.5	35 W
Pitt	60.5	59.7	0.8	54 W
Tyrrell	61.0	59.0	2.0	28 W
Washington	61.0	58.9	2.1	28 W
Area Average	61.2	59.8	1.4	

Means are based on a period from 1901-2000. For rankings, "C" designates coldest and "W" designates warmest.

Area-wide, temperatures were roughly a degree and a half above average. Areas along and east of U.S. 17 saw April 2022 place in the top third warmest of historical records, with the coastal plain coming in closer to near normal. We got one last gasp of winter in late April as temperatures dropped into the 30s around April 19-20.

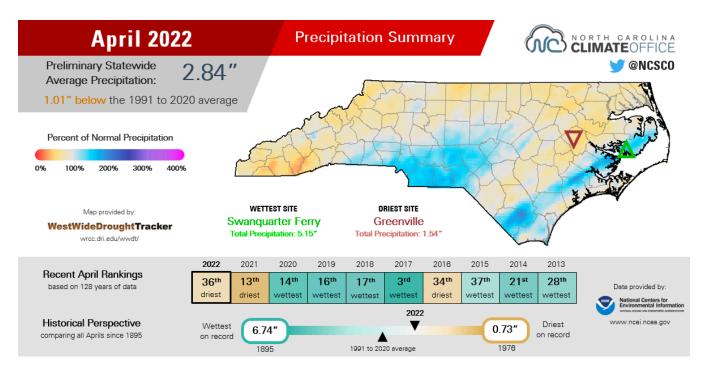


### **RECORDS OF NOTE**

**Cape Hatteras** set a record low of 40°F on April 29th. This tied the previous record of 40° set in 1967.

#### **PRECIPITATION**

Analysis conducted by the North Carolina State Climate Office indicated average statewide precipitation of 2.84" for March or about 1.01" inches below average, although the distribution was far from uniform. This was the 36th driest month for the state since records began in 1895.



April 2022 Precipitation Summary from the North Carolina State Climate Office

Eastern North Carolina's precipitation spread was very large for April, owing to a couple of coastal systems that greatly benefited portions of the coastal plain but left more inland areas behind. Both the driest and wettest sites across all of North Carolina were observed in the MHX forecast area.

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Beaufort (KMRH)	2.76	3.39	-0.63
Hatteras (KHSE)	2.93	3.92	-0.99
New Bern (KEWN)	2.45	3.18	-0.73

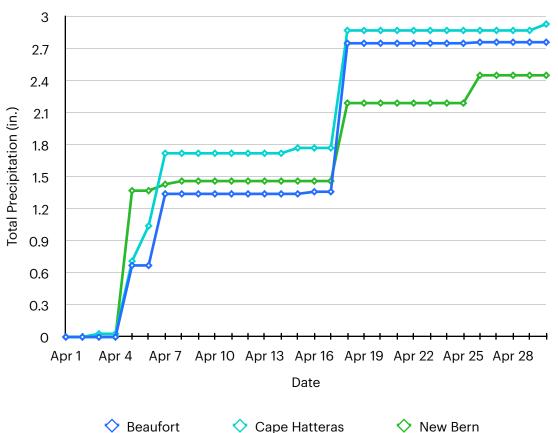
County-averaged statistics are presented in the following table. Like temperatures, mean and anomaly precipitation calculations are based on a period 1901-2000. Data courtesy of the National Centers for Environmental Information (NCEI).

County	Avg. Accum. (in.)	Mean (in.)	Departure (in.)	Rank
Beaufort	2.48	3.34	-0.86	35 D
Carteret	2.54	3.19	-0.65	43 D
Craven	2.48	3.21	-0.73	37 D
Dare	2.69	3.26	-0.57	47 D
Duplin	2.75	3.08	-0.33	55 D
Greene	2.44	3.38	-0.94	31 D
Hyde	2.43	3.37	-0.94	35 D
Jones	2.25	3.16	-0.91	33 D
Lenoir	2.38	3.31	-0.93	32 D
Martin	1.87	3.40	-1.53	19 D
Onslow	1.95	3.01	-1.06	30 D
Pamlico	3.04	3.28	-0.24	56 D
Pitt	2.04	3.38	-1.34	23 D
Tyrrell	2.49	3.34	-0.85	35 D
Washington	2.25	3.38	-1.13	28 D
Area Average	2.41	3.27	-0.87	

Means are based on a period from 1901-2000. For rankings, "W" designates wettest and "D" designates driest.

The primary precipitation events were widespread rainfall events owing to deepening low pressure across the mid-Atlantic on April 5th and a late-season Hatteras Low spinning up along the NC coastline on April 18th. A few convective episodes resulted in increased variability of precipitation amounts, but based on county averages eastern NC was just under an inch below average for the month.





The precipitation surplus across near-shore locales provided drought relief in April, with the early May U.S. **Drought Monitor indicating** conditions improving along and east of U.S. 17. The inner coastal plain remained in D2 (Severe) drought as of the early May report. Drought is expected to persist through the summer according to CPC seasonal outlooks, even with some anticipated improvement.

#### U.S. Drought Monitor **North Carolina**



May 3, 2022 sed Thursday, May. 5, 2022) Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	
Current	54.16	45.84	26.62	11.02	0.00	0.00
Last Week 04-26-2022	56.68	43.32	26.62	10.17	0.00	0.00
3 Month's Ago 02-01-2022	33.44	66.56	14.22	0.00	0.00	0.00
Start of Calendar Year 01-04-2022	2.84	97.16	60.20	2.76	0.00	0.00
Start of Water Year 09-28-2021	91.27	8.73	0.00	0.00	0.00	0.00
One Year Ago 05-04-2021	49.22	50.78	0.00	0.00	0.00	0.00

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drough

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droughtmonitor.unl.edu

#### **ADDITIONAL CLIMATE RESOURCES**

For a look at climate on the national scale, as well as statistics from a CONUS-wide to county and city level, please visit the **National Centers for Environmental Information** at <a href="https://www.ncei.noaa.gov/">https://www.ncei.noaa.gov/</a>.

For climate statistics and real time observations across the state of North Carolina, please visit the **North Carolina State Climate Office** at <a href="https://climate.ncsu.edu/">https://climate.ncsu.edu/</a>.

For climate forecasts and outlooks, visit the **Climate Prediction Center** at <a href="https://www.cpc.ncep.noaa.gov/">https://www.cpc.ncep.noaa.gov/</a>.

For community-based precipitation observations from across the United States, visit **CoCoRaHS** at <a href="https://www.cocorahs.org/">https://www.cocorahs.org/</a>.

For climate statistics relevant to various regions of North Carolina, please visit the following climate pages:

Eastern (WFO Morehead City): <a href="https://www.weather.gov/wrh/climate?wfo=mhx">https://www.weather.gov/wrh/climate?wfo=mhx</a>

Southeastern (WFO Wilmington): <a href="https://www.weather.gov/wrh/climate?wfo=ilm">https://www.weather.gov/wrh/climate?wfo=ilm</a>

Northeastern (WFO Wakefield, VA): <a href="https://www.weather.gov/wrh/climate?wfo=akq">https://www.weather.gov/wrh/climate?wfo=akq</a>

Central (WFO Raleigh): <a href="https://www.weather.gov/wrh/climate?wfo=rah">https://www.weather.gov/wrh/climate?wfo=rah</a>

Northwestern (WFO Blacksburg, VA): https://www.weather.gov/wrh/climate?wfo=rnk

Southwestern (WFO Greer, SC): <a href="https://www.weather.gov/wrh/climate?wfo=gsp">https://www.weather.gov/wrh/climate?wfo=gsp</a>

Cherokee and Clay Co. (WFO Knoxville, TN): <a href="https://www.weather.gov/wrh/climate?">https://www.weather.gov/wrh/climate?</a> wfo=mrx

# **APPENDIX A: ADDITIONAL TEMPERATURE DATA**

#### **Cooperative Observation Site Temperature Statistics: April 2022**

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Greenville	72.9	48.2	60.6	61.8	-1.3
Kinston	75.0	49.4	62.2	63.4	-1.2
Williamston	73.9	49.3	61.6	60.8	0.8
Plymouth	75.0	49.0	62.0	61.6	0.4
Bayboro	72.9	49.6	61.3	60.2	1.1
Manteo	67.5	51.2	59.4	59.6	-0.3

Normals are based on a period from 1990-2020.

#### **Maximum and Minimum Monthly Temperatures: April 2022**

Site	Max High (°F)	Date Observed	Min Low (°F)	Date Observed
Beaufort (KMRH)	78	Apr 14	42	Apr 20
Hatteras (KHSE)	79	Apr 24	40	Apr 29
New Bern (KEWN)	88	Apr 26	38	Apr 20
Greenville	87	Apr 26	30	Apr 10
Kinston	87	Apr 27	35	Apr 20
Williamston	88	Apr 27	34	Apr 20
Plymouth	86	Apr 25-27	34	Apr 20
Bayboro	84	Apr 26-27	38	Apr 20-21
Manteo	83	Apr 25, Apr 27	41	Apr 21, Apr 29

# **APPENDIX B: ADDITIONAL PRECIPITATION DATA**

#### **Cooperative Observation Site Precipitation Statistics: April 2022**

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Bayboro	4.37	3.76	0.61
Greenville	1.54	3.81	-2.27
Kinston	2.25	3.53	-1.28
Manteo	4.18	2.93	1.25
Plymouth	2.45	3.74	-1.29
Williamston	1.98	3.72	-1.74

Sites in red have missing data in their record.

#### **CoCoRaHS Monthly Accumulated Precipitation: April 2022**

Site	County	Amount (in.)
Bath 0.7 N	Beaufort	4.79
Bath 6.6 ESE	Beaufort	3.22
Bath 1.6 SSE	Beaufort	3.21
Pantego 0.4 WSW	Beaufort	3.10
Newport 1.0 N	Carteret	3.49
Newport 0.2 SW	Carteret	3.32
Harkers Island 3.2 NE	Carteret	3.14
Beaufort 15.1 N	Carteret	3.08
Beaufort 3.8 N	Carteret	3.02
Beaufort 12.2 N	Carteret	3.01

Site	County	Amount (in.)
Swansboro 3.7 NNE	Carteret	2.85
Beaufort 5.3 N	Carteret	2.81
Morehead City 6.0 WNW	Carteret	2.79
Newport 1.7 SSE	Carteret	2.77
Cape Carteret 1.5 NE	Carteret	2.62
Newport 10.3 SW	Carteret	2.56
Stella 2.5 SE	Carteret	2.52
Morehead City 5.7 W	Carteret	2.51
Morehead City 2.9 WNW	Carteret	2.48
Beaufort 0.5 W	Carteret	2.46
Cape Carteret 0.8 NE	Carteret	2.40
Morehead City 0.6 NW	Carteret	2.39
Cedar Point 0.4 WSW	Carteret	2.30
Swansboro 2.7 NE	Carteret	2.28
Cedar Island 0.3 SSE	Carteret	2.23
Atlantic Beach 0.6 W	Carteret	2.17
Emerald Isle 0.2 ENE	Carteret	2.05
Emerald Isle 2.3 WSW	Carteret	2.03
Cedar Point 0.9 WSW	Carteret	2.02
New Bern 4.9 SW	Craven	5.75
New Bern 5.3 SW	Craven	5.61
New Bern 1.3 NNE	Craven	5.26
New Bern 1.5 W	Craven	4.60

Site	County	Amount (in.)
New Bern 7.3 ESE	Craven	4.43
Trent Woods 1.2 ENE	Craven	4.40
Trent Woods 1.3 SSE	Craven	3.90
New Bern 8.8 W	Craven	3.72
New Bern 4.2 S	Craven	3.48
Havelock 1.9 SSE	Craven	3.17
Manteo 2.8 NW	Dare	3.56
Buxton O.3 ENE	Dare	3.52
Southern Shores 0.5 NNE	Dare	3.12
Rodanthe 1.0 SSE	Dare	2.73
Wallace 14.8 E	Duplin	4.66
Rose Hill 0.1 NNW	Duplin	2.75
Mount Olive 6.0 SE	Duplin	2.46
Snow Hill 3.1 NNE	Greene	2.19
Ayden 6.5 WNW	Greene	1.69
SQ Tower	Hyde	4.48
Ocracoke 0.2 ESE	Hyde	3.43
Kinston 7.0 SW	Lenoir	2.84
Kinston 3.7 WNW	Lenoir	2.29
Kinston 4.7 ESE	Lenoir	2.28
Kinston 4.4 WNW	Lenoir	2.25
Kinston 1.2 NW	Lenoir	2.01
Kinston 5.1 WNW	Lenoir	1.98

Site	County	Amount (in.)
Williamston 8.9 SSE	Martin	1.70
Jacksonville 1.0 NW	Onslow	4.60
Jacksonville 3.3 W	Onslow	3.93
Swansboro 1.4 N	Onslow	2.98
Sneads Ferry 1.2 SSW	Onslow	2.81
Camp Lejeune 1.4 NW	Onslow	2.70
Sneads Ferry 3.3 SW	Onslow	2.67
Holly Ridge 9.0 ENE	Onslow	2.47
Hubert 4.9 SE	Onslow	2.45
Lowland 0.2 SE	Pamlico	5.09
Oriental 2.1 WSW	Pamlico	3.72
Oriental 1.9 WSW	Pamlico	3.37
Oriental 4.3 NNW	Pamlico	3.30
Merritt 1.5 WSW	Pamlico	3.26
Greenville 4.6 W	Pitt	3.33
Fountain 0.1 NE	Pitt	2.56
Greenville 5.7 NW	Pitt	2.49
Winterville 2.8 WNW	Pitt	2.23
Greenville 7.1 SSE	Pitt	2.06
Winterville 3.5 W	Pitt	1.83
Greenville 2.0 SE	Pitt	1.80
Greenville 2.8 ESE	Pitt	1.68
Greenville 5.0 SE	Pitt	1.64

#### **APRIL 2022 REPORT**

Site	County	Amount (in.)
Greenville 4.3 SSE	Pitt	1.56
Winterville 1.0 ENE	Pitt	1.32
Columbia 0.8 NNE	Tyrrell	3.23

CoCoRaHS inclusion in this table is based on a complete 30-day liquid precipitation record. Thank you to all observers!