Eastern Rivers and Mountains Network

National Park Service
U.S. Department of the Interior

Inventory and Monitoring Division

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2020 Weather in Review: Friendship Hill National Historic Site

In all, 2020 was very warm but had near-normal precipitation. The year ended as the 4th warmest and 58th wettest on record.

Weather data collected from surrounding areas indicate that annual average temperature and annual total precipitation have both increased over the last century (+0.04 °F per decade and +0.34 inches per decade, respectively).

This brief provides county-scale weather data from Fayette County, PA, including data from 1895–2020 (i.e. period of record). Individual weather station data may vary from what is reported here.

Temperature

In total, 2020 was the 4th warmest year ever recorded at the park. All of the seasons were very warm except the spring, which was unusually cold (Figure 1). Eight months had higher than normal temperatures with January, February, and March all being more than 5.0 °F above long-term averages (Table 1).

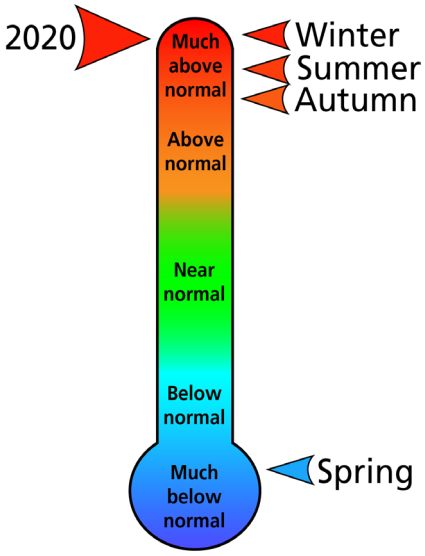

Figure 1. Seasonal and annual temperature rankings. An arrow at the top of the figure would represent the warmest year/season on record (since 1895); at the bottom, the coldest year/season on record. Data are available at https://www.ncdc.noaa.gov/cag/county/rankings.

Table 1. Average monthly, average annual, and departures from long-term average temperatures. Departures from average are based on a comparison of 2020 average temperatures to relevant averages from 1895-2019. Data are available at https://www.ncdc.noaa.gov/cag/county/time-series.

Month/ Year	Average temperature (°F)	Departure from average (°F)
January	34.7	+7.0
February	34.5	+5.1
March	45.4	+7.1
April	46.6	-2.5
May	56.3	-2.8
June	66.9	-0.2
July	74.8	+3.9
August	71.7	+2.4
September	63.1	-0.3
October	53.0	+0.8
November	45.6	+4.7
December	32.8	+1.5
2020	52.1	+2.2

Precipitation

In total, it was a near-normal year for precipitation, but it was highly variable across seasons (Figure 2). The year ended as the 58th wettest on record. In all, 45.7 inches of precipitation fell, very close to the long-term average (Table 2).

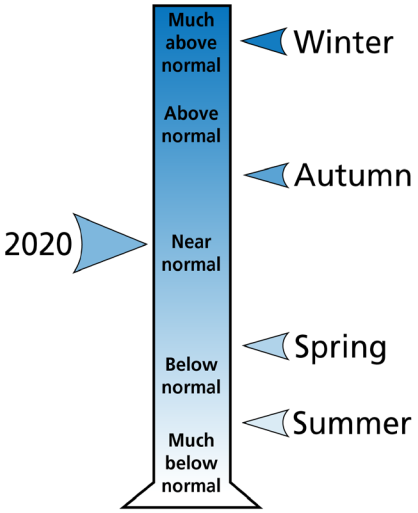

Figure 2. Seasonal and annual precipitation rankings. An arrow at the top of the figure would represent the wettest year/season on record (since 1895); at the bottom, the driest year/season on record. Data are available at https://www.ncdc.noaa.gov/cag/county/rankings.

Table 2. Monthly and annual total precipitation and departure from long-term averages. Departures from average are based on a comparison of 2020 precipitation to relevant averages from 1895–2019. Data are available at https://www.ncdc.noaa.gov/cag/county/time-series.

Month/ Year	Total precipitation (in.)	Departure from average (in.)
January	4.1	+0.6
February	5.5	+2.5
March	4.7	+0.8
April	6.0	+2.1
May	3.5	-0.8
June	2.0	-2.7
July	2.9	-1.9
August	4.3	+0.1
September	2.4	-1.1
October	3.4	+0.3
November	2.7	-0.5
December	4.2	+0.8
2020	45.7	+0.2

Temperature and Precipitation (1895–2020)

Data for Fayette County, PA indicate that annual average temperature has increased approximately +0.04 °F per decade and annual total precipitation has increased approximately +0.34 inches per decade since 1895 (Figure 3).

National Park Service scientists have forecast future changes in climate too. Models estimate that by 2100, annual average temperature at the park will increase by 3.1–9.2 °F (from a best-case to worst-case scenario, respectively). Annual total precipitation is expected to increase by 6–12% (see Gonzalez et al., 2018 for details).

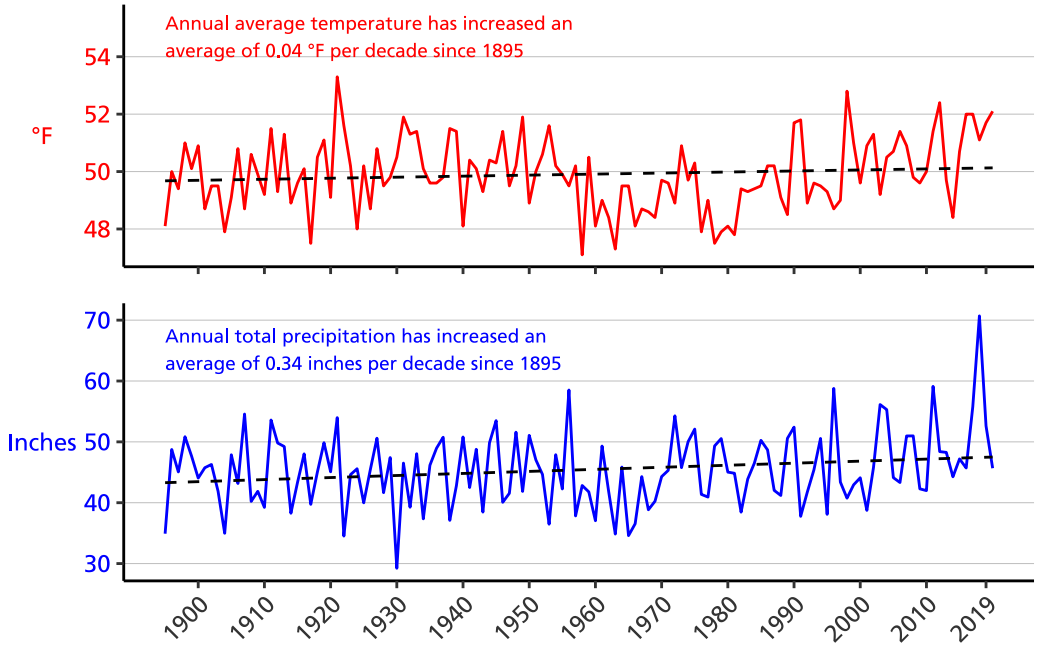

Figure 3. Annual average temperature (°F) and annual total precipitation (in.) from 1895–2020 for Fayette County, PA. Dashed lines represent linear estimates of change. Data are available at https://www.ncdc.noaa.gov/cag/county/time-series.

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Parks monitored: *Allegheny Portage Railroad NHS • Bluestone NSR • Delaware Water Gap NRA • Flight 93 NMem • Fort Necessity NB • Friendship Hill NHS • Gauley River NRA • Johnstown Flood NMem • New River Gorge NP & PRES • Upper Delaware SRR*

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