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2019 Weather in Review: Flight 93 National Memorial

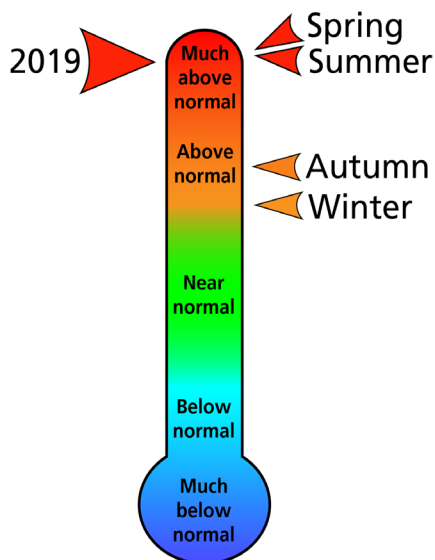
In all, 2019 was very warm and wet. The year ended as the 7th warmest and 12th wettest since 1895. Weather data collected from surrounding areas from 1895–2019 show increasing trends in annual average temperature (+0.08 °F per decade) and annual total precipitation (+0.44 inches per decade).

Information in this brief represents county-scale weather data for Somerset County, PA. Individual weather station data may vary from what is reported here.

Temperature

In total, 2019 was the 7th warmest year at the park since 1895. In particular, spring and summer were much warmer than normal (Figure 1). Nine months had higher than normal temperatures, with February, May, and September all being at least 4 °F above long-term averages (Table 1).

Table 1. Average monthly, average annual, and departures from long-term average temperatures. Departures from average are based on a comparison of 2019 average temperatures to relevant averages from 1895-2018. Data are available at <https://www.ncdc.noaa.gov/cag/county/time-series>.



Month/ Year	Average temperature (°F)	Departure from average (°F)
January	25.5	+0.6
February	31.6	+5.2
March	34.2	-1.2
April	49.9	+3.8
May	61.1	+4.5
June	64.0	-0.4
July	70.8	+2.6
August	67.2	+0.7
September	64.4	+4.0
October	52.8	+3.3
November	35.7	-2.8
December	32.5	+3.9
2019	49.1	+2.0

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>.

Precipitation

In total, 2019 was the 12th wettest year at the park since 1895 (Figure 2). By the end of the year, the area received 51.8 inches of precipitation, almost 8 inches more than the long-term average (Table 2).

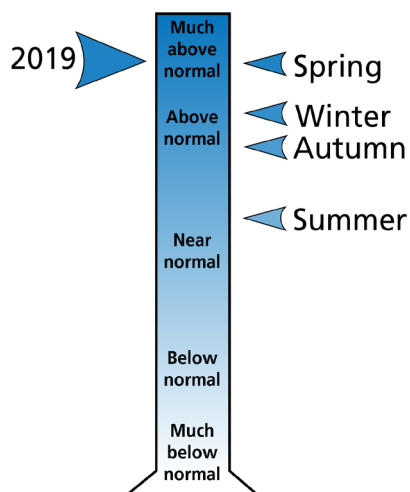


Figure 2. Seasonal and annual precipitation rankings. An arrow at the top of the figure would represent the wettest year/season on record (since 1895); at the bottom, the driest year/season on record. Data are available at <https://www.ncdc.noaa.gov/cag/county/rankings>.

Table 2. Monthly and annual total precipitation and departure from long-term averages. Departures from average are based on a comparison of 2019 precipitation to relevant averages from 1895–2018. Data are available at <https://www.ncdc.noaa.gov/cag/county/time-series>.

Month/ Year	Total precipitation (in.)	Departure from average (in.)
January	4.2	+0.8
February	5.8	+2.9
March	2.3	-1.6
April	4.4	+0.6
May	6.7	+2.5
June	5.4	+0.8
July	6.4	+2.1
August	3.9	-0.1
September	1.5	-2.0
October	4.2	+1.1
November	2.0	-1.1
December	5.0	+1.7
2019	51.8	+7.7

Temperature and Precipitation Trends (1895–2019)

Data from 1895–2019 for Somerset County, PA show increasing trends in annual average temperature (+0.08 °F per decade) and annual total precipitation (+0.44 inches per decade; Figure 3)..

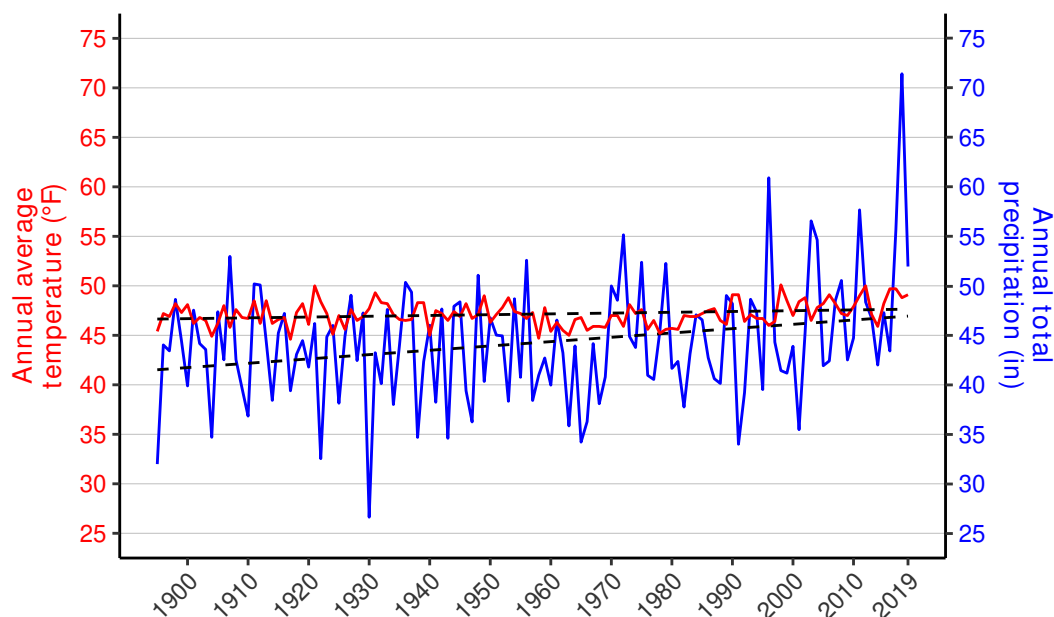


Figure 3. Annual average temperature (°F) and annual total precipitation (in.) from 1895–2019 for Somerset County, PA. Dashed lines represent linear trends. Data are available at <https://www.ncdc.noaa.gov/cag/county/time-series>.

Lead Scientist

Jeb Wofford
Jeb_Wofford@nps.gov
Biologist / Science Writer

Eastern Rivers and Mountains Network

Matt Marshall - Program Manager
Matt_marshall@nps.gov
www.nps.gov/im/ermn

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 NR • Upper Delaware SRR