

**MAY 1999:** May featured slightly above-normal temperatures and subnormal rainfall across the area. Monthly temperatures averaged less than 1°F above normal at all three airports. There were 20 days with at or above-normal temperatures at DCA. The month commenced with cool conditions from the 1<sup>st</sup>-3<sup>rd</sup> as lows dipped into the forties in Washington and Baltimore on the 1<sup>st</sup> and 2<sup>nd</sup> and into the thirties in the far northern and western suburbs on the 1<sup>st</sup>. On the 4<sup>th</sup>, warmer than normal conditions overspread the local area and prevailed for the next 10 days as highs routinely reached above 70°F and even topped 80°F on the 12<sup>th</sup>. Toward the end of the month, a southwesterly flow of very warm air pushed maximum temperatures into the eighties on numerous days between the 21<sup>st</sup> and 31<sup>st</sup>, including the first 90°F+ readings of the year on the 30<sup>th</sup> at all three major airports.

Very dry conditions were observed across the Washington/Baltimore with precipitation deficits near or exceeding 2 inches reported at all five airports. DCA recorded its driest May since 1986 (8<sup>th</sup> overall in Washington) with only 1.28" of rain while both BWI and IAD reported their driest May since 1991 with monthly precipitation totals of 1.72" and 2.22", respectively. At DAA only 1.52" of rain fell, making it the driest May since 1986 while at ADW only 0.95" of precipitation was reported, equaling the lowest May rainfall on record (since 1943). Measurable precipitation was recorded on only 5 days at DCA. Brief showers and a few thunderstorms moved through the area during the late-evening hours of the 7<sup>th</sup> and the morning of the 8<sup>th</sup>. Amounts were generally 0.25" or less, although some portions of southern Maryland and parts of Loudoun and Fairfax counties in Virginia recorded close to an inch of rain. Additional showers and thunderstorms generated about one-half inch of rain on the 22<sup>nd</sup>, while on the 24<sup>th</sup> most areas recorded close to an inch of rain from morning and afternoon thunderstorms. Some of the storms on the 24<sup>th</sup> produced brief, powerful wind gusts that caused some property damage in Laurel MD.

**MAY 1999 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:**

Station Location	Temperatures (°F)					Extreme/Day		Precipitation (In)			
	AvMx	AvMn	AvgT	NmlT	DepNml	MaxT	MinT	Total	Norm	DepNml	Yr to Date
National (DCA)	77.9	56.7	67.3	66.4	+0.9	92/30	47/1	1.28	3.66	-2.38	15.20
Baltimore (BWI)	76.5	51.8	64.2	63.4	+0.8	91/30	42/16	1.72	3.72	-2.00	14.80
Dulles (IAD)	76.5	49.1	53.0	62.2	+0.6	90/30	39/1*	2.22	4.02	-1.80	16.35
Ft. Belvoir (DAA)	80.7	52.6	66.7	N/A	N/A	97/30	41/1	1.52	3.8	-2.3	17.78
Andrews AFB (ADW)	76.6	51.5	64.1	N/A	N/A	90/30#	43/2	0.95	4.0	-3.0	13.91

Other Occurrences: \* May 16<sup>th</sup>; # May 31<sup>st</sup>.

**SPRING (MARCH-MAY) 1999:** Near to slightly below normal temperatures and subnormal precipitation prevailed across the local area. The season began with unusually cold conditions as Canadian air persistently infiltrated the region, producing 20 March days with subnormal temperatures at DCA and monthly temperature departures between -1.5°F and -3°F at the three major airports. While there were no periods of extreme cold, DCA observed 10 consecutive days (March 7<sup>th</sup> - 16<sup>th</sup>) with subnormal readings. During this period, daily temperatures averaged nearly 10°F below normal at DCA and included one day with a subfreezing high (31°F on the 9<sup>th</sup>), the first such March occurrence in 3 years. In addition, lows dropped into the teens in many suburban locations on the 8<sup>th</sup>, including readings of 18°F and 17°F at BWI and IAD, respectively. April averaged near-normal at most locations as the month featured periods of unusual warmth interspersed with abnormally cool conditions, sometimes within a few days of each other. On the 8<sup>th</sup>, highs above 80°F were common across the area, but three days later, very chilly conditions prevailed as clouds and rainfall held maximum temperatures in the upper forties and lower fifties. The last freeze of the season was reported at BWI on the 6<sup>th</sup>, while at IAD the last freeze occurred on April 25<sup>th</sup>. Slightly warmer than normal temperatures were observed in May, mainly as a result of abnormal warmth at month's end as the region experienced the first 90°F+ highs of the year during the Memorial Day weekend.

Despite a wet March, subnormal seasonal precipitation was recorded across the Washington/Baltimore area during Spring with deficits reaching 3 inches at some locations. March precipitation totals were generally between 3.5" and 4.0", but snowfall was much above normal. In fact, it was the snowiest March in Washington since 1960 and the snowiest month since February 1996. The month's first measurable snowfall occurred during the early morning hours of the 4<sup>th</sup>, as up to 4" of wet snow blanketed parts of Montgomery, Howard, and Carroll counties in Maryland. On the 9<sup>th</sup>, a strong storm system produced the largest snowfall in more than three years at some locations. Heavy snow began during the morning rush hour and created dangerous driving conditions. Up to 11 inches of snow covered parts of northern Virginia (8.9" at IAD, 8.4" at DCA, and 4.9" at BWI). It was the largest snowfall at DCA and IAD since the "Blizzard of 1996" and the largest snowfall at BWI since February 1997. A powerful East Coast storm on March 14<sup>th</sup> generated a wintry mix of precipitation around the local area, but periods of heavy snow occurred across many of the northern and western suburbs, producing accumulations up to 6 inches at some locations (5.4" at IAD). April yielded slightly below normal rainfall with monthly totals of two or three inches common across the area. The highlight of the month was a line of strong, fast-moving thunderstorms that raked northern Virginia and southern Maryland on the 23<sup>rd</sup>, generating brief heavy rains, frequent lightning, and hail nearly 4 inches in diameter. Measurable precipitation during May was infrequent and yielded monthly totals of only 1-2 inches at most locations. There were several prolonged periods of dry weather as measurable precipitation (≥ 0.01") was not reported during May 1<sup>st</sup>-6<sup>th</sup>, 9<sup>th</sup>-21<sup>st</sup>, and 25<sup>th</sup>-31<sup>st</sup> at DCA. Thunderstorms accounted for the majority of the rainfall, occurring on four days (7<sup>th</sup>, 8<sup>th</sup>, 22<sup>nd</sup> and 24<sup>th</sup>).

**SPRING 1999 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:**

Station Location	Temperatures (°F)					Extreme/Month-Day		Precipitation (In)			
	AvMx	AvMn	AvgT	NmlT	DepNml	MaxT	MinT	Total	Norm	DepNml	Snow
National (DCA)	65.9	46.3	56.1	56.8	-0.7	92/5-30	20/3-8	7.24	9.54	-2.30	8.7
Baltimore (BWI)	64.1	41.9	53.0	53.7	-0.7	91/5-30	18/3-8	7.45	10.19	-2.74	7.6
Dulles (IAD)	64.6	40.2	52.4	52.7	-0.3	90/5-30	17/3-8	8.34	10.30	-1.96	14.6
Ft. Belvoir (DAA)	68.7	44.1	56.4	N/A	N/A	97/5-30	21/3-8	7.93	10.7	-2.8	7.0
Andrews AFB (ADW)	65.0	42.7	53.8	N/A	N/A	91/5-30*	21/3-8	7.70	10.6	-2.9	14.1

Other Occurrences: \* May 31<sup>st</sup>.

**LOOKING AHEAD TO JUNE: Dry Spring=Dry Summer?**

As mentioned earlier, drier than normal conditions prevailed across the Washington/Baltimore area during the Spring. With this in mind, the question arises as to whether a drier than normal spring is often followed by a summer with subnormal precipitation? Below is a list of the ten most recent springs with subnormal rainfall and the corresponding summer precipitation totals at DCA. [Summer normal precipitation at DCA: 11.09"]

Year	Spring Tot. Prec. (In.)	Summer Tot. Prec. (In.)	Year	Spring Tot. Prec. (In.)	Summer Tot. Prec. (In.)
1995	8.22	7.33	1986	3.47	10.41
1992	9.44	10.17	1985	7.70	7.31
1991	7.38	7.06	1981	7.54	11.26
1988	8.77	7.08	1979	7.88	11.83
1987	6.36	8.56	1977	6.56	12.08