FEBRUARY 1999: For the third consecutive year, warmer than normal conditions along with below-normal snowfall highlighted February across the Washington/Baltimore area. In fact, above-normal temperatures were reported on 16 of the first 19 days at DCA. The abnormal warmth peaked on the 12th when highs soared into the seventies, establishing daily record highs at DCA (74°F). BWI (73°F) and IAD (74°F). In sharp contrast, much colder weather gripped the area during the last week of the month, with temperatures averaging about 5°F below normal. Highs on the 23rd failed to top the freezing mark at DCA and lows dipped into the teens across many of the northern and western suburbs.

Although precipitation was near normal across most of the area, snowfall once again fell short of February averages. Monthly precipitation totals exceeded 2.50" at four of the five airports. There were three significant rain events (1st-2nd, 17th-18th, and 28th), each providing between 0.50" and 0.75". Snowfall was minimal with less than an inch recorded throughout the area, marking the 11th year of the last 12 with subnormal February snowfall at many locations. On the 4th and again on the 12th, some areas reported thundershowers. Although precipitation amounts were generally light with both events, some locations reported small hail with the storms on the 4th.

FEBRUARY 1999 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

| Temperatures (°F) | | | | Extreme/Day | | Precipitation (In) | | | |
|-------------------|-----------|--|--|--|---|--|--|--|--|
| <u>AvMx</u> | | NmII | <u>DepNml</u> | <u>MaxT</u> | MinT | <u>Total</u> | Norm | DepNml | Snow |
| 49.3 | | 37.5 | +3.4 | 74/12 | 20/23 | 2.54 | 2.71 | -0.17 | 0.2 |
| | | 34.8 | +2.8 | 73/12 | 16/1 | 2.65 | 3.12 | -0.47 | 0.6 |
| | | | +3.9 | 74/12 | 16/1 | | 2.81 | -0.19 | 0.9 |
| | | | | | | | 3.0 | +0.2 | T |
| 48.0 | 28.9 38.5 | N/A | N/A | 73/12 | 16/23 | 2.11 | 3.3 | -1.2 | 0.2 |
| | | AvMx AvMn AvgT 49.3 32.6 40.9 47.3 27.9 37.6 48.1 26.9 37.5 51.3 31.7 41.5 | AvMx AvMn AvgT NmIT 49.3 32.6 40.9 37.5 47.3 27.9 37.6 34.8 48.1 26.9 37.5 33.6 51.3 31.7 41.5 N/A | AvMx AvMn AvqT NmlT DepNml 49.3 32.6 40.9 37.5 +3.4 47.3 27.9 37.6 34.8 +2.8 48.1 26.9 37.5 33.6 +3.9 51.3 31.7 41.5 N/A N/A | AvMx AvMn AvgT NmlT DepNml MaxT 49.3 32.6 40.9 37.5 +3.4 74/12 47.3 27.9 37.6 34.8 +2.8 73/12 48.1 26.9 37.5 33.6 +3.9 74/12 51.3 31.7 41.5 N/A N/A 77/12 | AvMx AvMn AvgT NmIT DepNml MaxT MinT 49.3 32.6 40.9 37.5 +3.4 74/12 20/23 47.3 27.9 37.6 34.8 +2.8 73/12 16/1 48.1 26.9 37.5 33.6 +3.9 74/12 16/1 51.3 31.7 41.5 N/A N/A 77/12 21/23 | AvMx AvMn AvqT NmlT DepNml MaxT MinT Total 49.3 32.6 40.9 37.5 +3.4 74/12 20/23 2.54 47.3 27.9 37.6 34.8 +2.8 73/12 16/1 2.65 48.1 26.9 37.5 33.6 +3.9 74/12 16/1 2.62 51.3 31.7 41.5 N/A N/A 77/12 21/23 3.16 | AvMx AvMn AvgT NmIT DepNml MaxT MinT Total Norm 49.3 32.6 40.9 37.5 +3.4 74/12 20/23 2.54 2.71 47.3 27.9 37.6 34.8 +2.8 73/12 16/1 2.65 3.12 48.1 26.9 37.5 33.6 +3.9 74/12 16/1 2.62 2.81 51.3 31.7 41.5 N/A N/A 77/12 21/23 3.16 3.0 | AvMx AvMn AvgT NmlT DepNml MaxT MinT Total Norm DepNml 49.3 32.6 40.9 37.5 +3.4 74/12 20/23 2.54 2.71 -0.17 47.3 27.9 37.6 34.8 +2.8 73/12 16/1 2.65 3.12 -0.47 48.1 26.9 37.5 33.6 +3.9 74/12 16/1 2.62 2.81 -0.19 51.3 31.7 41.5 N/A N/A 77/12 21/23 3.16 3.0 +0.2 |

WINTER (DECEMBER-FEBRUARY) 1998-99: For the third year in a row, all three winter months were dominated by warmer than normal conditions. Seasonal temperature departures topped +3°F at the three major airports and each month featured a 70°F+ reading at DCA. In addition, there were 62 days (69%) with at or above normal readings at DCA, making it the 8th warmest winter on record at DCA (11th overall in Washington). The winter season commenced with abnormal warmth as readings soared above 60°F on each of the first 8 days. During this period, all-time record monthly highs were tied or established at the three major airports as readings soared into the upper seventies. In sharp contrast, much colder conditions prevailed during the last week of the month, as highs failed to top 32°F at DCA on the 23rd, 24th and 31th. Cold conditions continued into January with temperatures averaging more than 6°F below normal from the 1th-11th at DCA. During this period, highs remained at or below freezing on 7 days at DCA (the most in a month since January 1994) and lows dipped into the single digits across many suburban locations. Around mid-month, milder air enveloped the local area and highs topped 50°F on the 12 of the final 16 days. On the 23rd, readings in the seventies were observed at many locations, including both DCA and IAD with highs of 71°F. Abnormal temperatures at DCA, including 11 consecutive such days from the 2rd-11th. In addition, temperatures averaged more than 7°F above normal at DCA between the 1th and 19th, including highs in the seventies on the 12th. Sharply colder conditions gripped the area during the last week of the month as highs remained in the thirties on 4 of the last 7 days.

Above normal precipitation was observed in Washington/Baltimore area for the first season since the spring of 1998. This was due primarily to a very wet January when monthly precipitation totals exceeded five inches. Although seasonal precipitation was above normal, the winter of 1998-99 featured little snowfall. In fact, it was the 11th winter of the last 12 with subnormal snowfall in Washington. In addition, this winter combined with the last two featured the lowest snowfall total ever observed in three consecutive winters in Washington. The season began with a drier than normal December, with precipitation totals at all five airports under two inches (about 50% of normal). There were only two rain events (8th and 12th-13th) with more than 0.50". The first wintry precipitation of the season fell on the 23rd as Montgomery, Howard, and Carroll Counties in Maryland received up to three inches of snow, BWI reported 3.0" while lesser amounts fell across the remainder of the local area (IAD: 0.6" and DCA: 0.4"). In January, wetter than normal conditions were observed across the local region for the first time since June 1998. Numerous strong storm systems affected the area, producing precipitation totals over 5 inches (more than the combined September-December 1998 total and nearly 75% of the total for the last six months of 1998). A fast moving storm generated over an inch of precipitation (the most precipitation in one day since Sept. 16, 1998 for some areas) at most locations on the 2nd-3rd. The precipitation initially began as sleet and freezing rain, coating roads and making travel extremely hazardous; however, much warmer temperatures a short while later melted the icy conditions as temperatures rose as much as thirty degrees in only a few hours. The first and only event with greater than one inch of snowfall at DCA, occurred on January 8th as a steady snowfall developed before dawn and produced 2 to 4 inches across most of the area by afternoon. It marked the first 1"+ snowfall at DCA in nearly two years (since February 8, 1997), ending a record 23-month streak of less than one inch snowfalls in Washington. About a week later, portions of the local area endured one of the worst ice storms in recent memory. On the evening of the 14th-15th, heavy rains accompanied by subfreezing temperatures coated trees, power lines and roads with a heavy glaze of ice in Montgomery, Howard and portions of Anne Arundel counties in Maryland as well as Fairfax and Loudoun counties in Virginia. The weight of the ice downed numerous trees and power lines, knocking out power to more than 400,000 customers, in some cases for as long as a week. On the 24th, another storm system dumped over an inch of rain, resulting in the wettest month for most locations since May 1998. February's precipitation was slightly below normal and, unlike January, featured no precipitation events (liquid) above an inch at DCA.

WINTER 1998-99 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

| Station | Temperatures (°F) | | | Extreme/Month-Day | | | Precipitation (In) | | | | |
|-------------------|-------------------|-------------|------|-------------------|--------|----------|--------------------|-------|------|--------|------|
| Location | AvMx | <u>AvMn</u> | AvaT | NmlT | DepNml | MaxT | MinT | Total | Norm | DepNml | Snow |
| National (DCA) | 49.2 | 33.1 | 41.1 | 37.2 | +3.9 | 79/12-7 | 16/1-6 | 9.70 | 8.55 | +1.15 | 2.9 |
| Baltimore (BWI) | 47.6 | 28.2 | 38.0 | 34.5 | +3.5 | 77/12-6* | 7/1-6 | 8.62 | 9.58 | -0.96 | 7.5 |
| Dulles (IAD) | 48.3 | 27.2 | 37.8 | 33.2 | +4.6 | 79/12-6 | 4/1-6 | 9.54 | 8.73 | +0.81 | 5.6 |
| Ft. Belvoir (DAA) | 51.7 | 32.2 | 41.0 | N/A | N/A | 82/12-6* | 11/1-6 | 11.65 | 9.1 | +2.6 | 3.0 |
| Andrews AFB (ADW) | 48.3 | 29.9 | 39.1 | N/A | N/A | 79/12-6* | 9/1-6 | 7.95 | 9.3 | -1.3 | 2.8 |

Other Occurrences: * December 7th.

LOOKING AHEAD TO MARCH: The transitional month.

With the end of a relatively mild winter our thoughts now turn to spring. Since March is the transitional month from winter to spring, it can be a month of extremes. Below is a list of some notable March climatological statistics for Washington since records began in 1871 (snowfall records began in 1888).

| Temperature Extremes | Precipitation Extremes | | | | |
|--|---|--|--|--|--|
| Coldest: 1885 Avg. Temp.: 34.5°F Dep. Nml.: -12.7°F | Wettest: 1891 Tot. Prec.: 8.84" Dep. Nml.: +5.67" | | | | |
| Warmest: 1921 & 1945 Avg. Temp.: 55.5°F Dep. Nml.: +8.3°F | Driest: 1910 Tot. Prec.: 0.57" Dep. Nml.: -2.60" | | | | |
| Extreme Minimum: 4°F (March 4, 1873) | Snowiest: 1914 Tot. Snowfall: 19.3" Dep. Nml.: +17.7" | | | | |
| Extreme Maximum: 93°F (March 23, 1907) | Most precipitation in one day (liquid): 2.79" (March 9, 1881) | | | | |
| Most days with: lows $\leq 32^{\circ}$ F: 24 (1960); highs $\geq 90^{\circ}$ F: 3 (1907) | Most snowfall in one day: 11.3" (March 29. 1942) | | | | |