MARCH 1999: After a mild winter with little snowfall, Spring roared into the Washington/Baltimore area with subnormal temperatures and the snowiest March in Washington since 1960. A persistent flow of cold Canadian air produced 20 days with subnormal temperatures at DCA and monthly temperatures departures between -1.5°F and -3°F at the three major airports. While there were no prolonged periods of extreme cold, DCA observed 10 consecutive days with subnormal temperatures (7th-16th). During this 10-day period, daily temperatures averaged nearly 10°F below normal at DCA and included one day with a subfreezing high (31°F on the 9th), the first such March occurrence in 3 years. In addition, lows dropped into the teens in many suburban locations on the 8th, including readings of 18°F and 17°F at BWI and IAD. In contrast, there were only a few days (17th, 18th, 29th & 31st) when highs topped the 70°F mark. The highest readings came on the 17th when the mercury soared into the middle seventies (76°F at DCA and 74°F at both BWI and IAD), following morning lows in the thirties (a rise of more than 40°F at some locations).

Monthly precipitation was slightly above normal across most of the local area with monthly totals generally between 3.5" and 4.0"; however, snowfall was much above normal. In fact, it was the snowiest March in Washington since 1960 and the snowiest month since February 1996. There were 5 days with a trace of snow or more at DCA, but a snowstorm on the 9th accounted for most of the monthly total. The month's first measurable snowfall occurred during the early morning hours of the 4th, as up to 4" of wet snow blanketed parts of Montgomery, Howard, and Carroll counties in Maryland. The precipitation, which initially fell as rain with a few thunderstorms, came from a strong storm that intensified as it passed across the area, bringing sharply colder temperatures and a change to wintry precipitation. The precipitation ended as flurries in both Washington and Baltimore leaving only a trace of snow, while to the west, measurable snowfall was observed at IAD (0.3"). On the 9th, a strong storm system produced the largest snowfall in more than three years for some locations. Heavy snow began during the morning rush hour and created dangerous driving conditions. Despite relatively warm ground temperatures, up to 11 inches of snow blanketed northern Virginia (8.9" at IAD, 8.4" at DCA and 4.9" at BWI) before ending late in the day. It was the largest snowfall at DCA and IAD since the "Blizzard of 1996", and the largest snowfall at BWI since Feb.'97. It was also the largest March snowfall for most areas since the "Storm of the Century" in 1993; however, this event eclipsed the 1993 storm and was the greatest daily March snowfall on record at DCA. A powerful East Coast storm on the 14th generated a wintry mixture of precipitation around the Washington/Baltimore area, but periods of heavy snow occurred across many of the northern and western suburbs. producing accumulations up to 6 inches at some locations (IAD 5.4"). Snowfall from this storm pushed monthly totals in some of the northern and western suburbs to more than 1 foot, including IAD (14.6"), while lesser monthly totals were observed nearer the cities (DCA: 8.7") and (BWI: 7.6"). Farther west, the storm blanketed portions of the Appalachians with up to of 18" of snow. On the 21st, another storm system generated over an inch of rain and spawned a few thunderstorms. Both DCA and BWI reported more than an inch of rain, pushing accumulated precipitation surpluses above 3 inches for the first three months of 1999 at DCA.

## MARCH 1999 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

| <u>Snow</u> |                        | Precipitation (In)  |                      |                      |                         | Temperatures (°F)     |                     |                      | l Station            |                      |                              |
|-------------|------------------------|---------------------|----------------------|----------------------|-------------------------|-----------------------|---------------------|----------------------|----------------------|----------------------|------------------------------|
| 8.7         | <u>DepNml</u><br>+0.70 | <u>Norm</u><br>3.17 | <u>Total</u><br>3.87 | MinT<br>20/8         | MaxT<br>76/13           | <u>DepNml</u><br>-2.7 |                     |                      |                      | <u>AvMx</u><br>53.4  | Location<br>National (DCA)   |
| 7.6<br>14.6 | +0.08<br>+0.27         | 3.38<br>3.17        | 3.46<br>3.44         | 18/8<br>17/8         | 74/17<br>74/17          | -2.3<br>-1.8          | 44.1<br>43.2        | 41.8<br>41.4         | 32.1<br>31.3         | 51.5<br>51.6         | Baltimore (BWI)              |
| 7.0<br>14.1 | +0.7<br>+0.6           | 3.7<br>3.6          | 4.38<br>4.21         | 21/8<br>21/8         | 79/17<br>75/17          | N/A<br>N/A            | N/A<br>N/A          | 45.4<br>43.3         | 35.1<br>33.9         | 55.7<br>52.6         | Ft. Belvoir (DAA)            |
|             | +0.08<br>+0.27<br>+0.7 | 3.38<br>3.17<br>3.7 | 3.46<br>3.44<br>4.38 | 18/8<br>17/8<br>21/8 | 74/17<br>74/17<br>79/17 | -2.3<br>-1.8<br>N/A   | 44.1<br>43.2<br>N/A | 41.8<br>41.4<br>45.4 | 32.1<br>31.3<br>35.1 | 51.5<br>51.6<br>55.7 | Baltimore (BWI) Dulles (IAD) |

**LOOKING AHEAD TO APRIL:** The lust freeze of the spring?

After a cold and snowy March our thoughts now turn to warmer weather and for many toward the growing season. As mentioned earlier, there were 10 March days with subfreezing readings at DCA. April is usually the last month when a 32°F or lower reading will occur in Washington until the following autumn. In fact, a freezing reading has never occurred in Washington in May, but that has not always been the case just outside Washington. Below is a list of the last date of a 32°F or lower reading at DCA and IAD for the last ten years. As one can see, this date can vary widely between the city and suburban locations.

| DCA LAD |                                    |      |                                    |      |                                    |      |                                       |  |  |  |
|---------|------------------------------------|------|------------------------------------|------|------------------------------------|------|---------------------------------------|--|--|--|
| Year    | Date of last 32°F or lower reading | Year | Date of last 32°F or lower reading | Year | Date of last 32°F or lower reading | Year | Date of last 32°F or<br>lower reading |  |  |  |
| 1998    | March 25 (31°F)                    | 1993 | March 20 (29°F)                    | 1998 | April 13 (32°F)                    | 1993 | April 28 (32°F)                       |  |  |  |
| 1997    | April 10 (28°F)                    | 1992 | April 4 (31°F)                     | 1997 | May 8 (31°F)                       | 1992 | April 6 (30°F)                        |  |  |  |
| 1996    | March 23 (32°F)                    | 1991 | March 32 (31°F)                    | 1996 | May 14 (32°F)                      | 1991 | April 3 (23°F)                        |  |  |  |
| 1995    | April 5 (30°F)                     | 1990 | April 13 (32°F)                    | 1995 | April 15 (29°F)                    | 1990 | April 19 (27°F)                       |  |  |  |
| 1994    | March 18 (31°F)                    | 1989 | March 20 (32°F)                    | 1994 | April 8 (29°F)                     | 1989 | April 24 (30°F)                       |  |  |  |

Latest 32°F or lower reading ever recorded in Washington: April 29 (1874)

Latest 32°F or lower reading ever recorded at IAD: May 17 (1984)