## August 2008

Temperature: The final month of meteorological summer featured near normal temperatures across the area. Temperature departures were $+0.5^{\circ} \mathrm{F}$ at DCA, $-0.9^{\circ} \mathrm{F}$ at BWI and $-0.6^{\circ} \mathrm{F}$ at IAD. August featured numerous pleasant days with comfortably low humidity. This pattern resulted in 10 days with minimum readings below $60^{\circ} \mathrm{F}$ at IAD and 7 such days at BWI. DCA recorded 7 days with highs at or above $90^{\circ} \mathrm{F}$ but zero days at or above $95^{\circ} \mathrm{F}$. There were no extended periods of heat and humidity.

Precipitation: Dry conditions prevailed across the region with rainfall totals generally between 1"-3". Monthly totals included 1.23 " at DCA ( -2.21 "); $1.48^{\prime \prime}$ at BWI $\left(-2.26^{\prime \prime}\right)$; and $2.48^{\prime \prime}$ at IAD $\left(-1.30^{\prime \prime}\right)$. BWI and DCA observed no measurable rainfall for 13 days $\left(15^{\text {th }}-27^{\text {th }}\right)$, equaling the $7^{\text {th }}$ longest period on record at Baltimore. IAD recorded no measurable from the $16^{\text {th }}-27^{\text {th }}$, its $5^{\text {th }}$ longest stretch in August. Some locations reported no measurable rainfall for 20 consecutive days ( $8^{\text {th }}-27^{\text {th }}$ ). While topsoil conditions worsened, ground water was plentiful as most areas continued to show an annual precipitation surplus through months' end.

While severe weather was not as frequent as earlier in the summer, the month featured several newsworthy events. On the $2^{\text {nd }}$, an EF-0 tornado (wind gusts to 70 mph ) touched down in Elkton, VA, (Rockingham County). The path width was 70 yards and the length was $1 / 4$ mile. The tornado caused tree damage in the area. Damaging thunderstorm wind gusts and large hail also were reported in the metro area. 1.75" hail was observed in Bel Air (Harford County) and near Annapolis, MD. On the $7^{\text {th }}$, more severe weather impacted the region. Thunderstorm wind gusts reached 59 mph in Montgomery Village, (Montgomery County) MD, while golf ball size hail was measured near Beltsville, (Prince Georges County) MD. One person was struck by lightning in Charles County, MD, according to press reports. On the $10^{\text {th }}$, some areas observed large hail, including Elkton, VA, with 1.25 " measured. The months' final severe weather event occurred on the $14^{\text {th }}$ when large hail was reported in many areas including 1" hail in Finksburg, (Carroll County) MD. The remnants from Tropical Storm Fay brought beneficial rainfall to the area on the $28^{\text {th }}-29^{\text {th }}$. IAD reported 1.26 ", while heavier amounts were recorded south and west of Washington, including 4.99" in Charlottesville, VA.

AUGUST 2008 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA

| Location | Station Temperatures ( ${ }^{( } \mathbf{F}$ F) |  |  |  | Extreme/Day |  | Precipitation (Inches) |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | AvMx | AvMn | AvgT | NmIT DepNmI | MaxT | MinT | Total | Norm | DepNmI | Year to Date |
| National (DCA) | 86.6 | 69.1 | 77.9 | 77.4 | +0.5 | $94 / 19$ | $64 / 12$ | 1.23 | 3.44 | -2.21 |
| Baltimore (BWI) | 84.5 | 62.7 | 73.6 | 74.5 | -0.9 | $93 / 19$ | $55 / 27$ | 1.48 | 3.74 | -2.26 |
| Dulles (IAD) | 85.2 | 62.3 | 73.8 | 74.4 | -0.6 | $93 / 1,6$ | $56 / 11,17$ | 2.48 | 3.78 | -1.30 |

Summer (June-August) Temperature: For the fourth consecutive summer, temperatures were above normal across the Washington/Baltimore area. Positive departures were +1.4 at DCA, +1.1 at BWI and +1.3 at IAD. After a cool May, June heat came on intensely with a 4 -day heat way from the $7^{\mathrm{th}}-10^{\text {th }}$, bringing highs in the mid to upper 90 s , including a record high of $98^{\circ} \mathrm{F}$ at DCA . Washington recorded $95^{\circ} \mathrm{F}$ or higher on 4 consecutive days, its first such occurrence since 1925. Records also include Washington's 4th hottest June on record and its hottest since 1994. There were two reported fatalities from the heat wave. DCA observed only 2 days with highs in the 70 s; BWI and IAD, only 4 such days. July marked the $14^{\text {th }}$ out the past 15 months with at or above normal temperatures at BWI and IAD and $13^{\text {th }}$ out of 15 months at DCA. DCA recorded 14 days with highs at or above $90^{\circ} \mathrm{F}$; IAD, 11 such days; BWI, 10 . The months' most significant heat wave occurred from the $16^{\text {th }}-22^{\text {nd }}$ when many areas recorded highs at or above $90^{\circ} \mathrm{F}$ along with high levels of humidity. DCA's maximum of $96^{\circ} \mathrm{F}$ on the $21^{\text {st }}$ and $95^{\circ} \mathrm{F}$ on the $20^{\text {th }}$ marked the 6 th and final day this season with highs at or above $95^{\circ} \mathrm{F}$. The month had some cooler periods. BWI's minimum of $59^{\circ} \mathrm{F}$ on the $25^{\text {th }}$ tied a record low set in 1976. August temperatures were near normal (see monthly summary above.)

Summer Precipitation: While not as dry as last summer, the region observed subnormal rainfall across the area. Negative departures were -1.93 at DCA, -0.37 at BWI, and -2.55 at IAD. June started the season with numerous severe weather events, bringing above normal but highly variable precipitation to the area. Most of the rainfall arrived with thunderstorms. The most widespread severe weather outbreak arrived on June 4 when a rapidly moving line of strong to severe thunderstorms produced damaging wind gusts across the region and one reported fatality. In Stafford County, VA, an EF-1 tornado cut a path along the same location as the May 8 EF-2 tornado near Abel Reservoir in the England Run area. Two additional EF-1 tornadoes also struck Virginia. Additional thunderstorms brought more wind damage and large hail on several occasions in June. July brought more severe weather. For the 3rd consecutive year, Independence Day featured strong to severe thunderstorms with strong winds and hail. On July $9^{\text {th }}$ and $14^{\text {th }}$ more than $2.5^{\text {l }}$ of rain fell in some locations across the area. The months' most widespread event followed on the $23^{\text {rd }}$ when two EF-0 tornadoes were observed in Northern Virginia with winds speeds to 75 mph and a 1.5 mile path. The second tornado touched down in Rappahannock County between Rock Mills and Washington, VA, with estimated wind speeds of 80 mph and a path length of 1.3 miles. The event brought heavy downpours in some areas; more than 20,000 customers lost power in the metro area, according to press reports; BWI measured $2.42^{\prime \prime}$ of rain, DCA 1.09 ". Dry conditions were prevalent across the area until month's end (see monthly summary above).

## SUMMER 2008 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA

| Location | Station Temperatures ( ${ }^{\circ} \mathrm{F}$ ) |  |  | NmIT DepNmI |  | Precipitation (Inches) |  |  | Norm | DepNmI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AvMx | AvMn | AvgT |  |  | MaxT | MinT | Total |  |  |
| National (DCA) | 87.8 | 69.8 | 78.3 | 76.9 | +1.4 | 98/6-7 | 58/6-18 | 8.30 | 10.23 | -1.93 |
| Baltimore (BWI) | 86.3 | 64.3 | 75.4 | 74.3 | +1.1 | 96/6-10 | 52/6-18 | 10.65 | 11.02 | -0.37 |
| Dulles (IAD) | 87.4 | 63.8 | 75.0 | 73.7 | +1.3 | 95/6-7* | 53/6-18 | 8.87 | 11.42 | -2.55 |

*Additional Occurrences: 6-10, 8-20
Looking Ahead to September: After a warmer and drier than normal summer, what does meteorological Autumn hold in store? The season often produces some of the finest weather in this area. Below is a list of autumn extremes in Washington since the U.S. began keeping records in 1871.

Temperature Extremes
Coldest: 1917 (Average Temperature: $52.9^{\circ} \mathrm{F}$; Dep. Nml.: -6.5${ }^{\circ} \mathrm{F}$ )
Warmest: 1973 and 1931 (Average Temperature: $63.1^{\circ} \mathrm{F}$; Dep. Nml.: $+3.7^{\circ} \mathrm{F}$ )
Extreme Minimum Temperature: $11^{\circ} \mathrm{F}$ (Nov. 30,1929)
Extreme Maximum Temperature: $104^{\circ} \mathrm{F}$ (Sep. 7, 1881)
Most Days With Lows < $32^{\circ} \mathrm{F}: 19$ (1901); Highs $>90^{\circ}$ F: 14 (1980)

## Precipitation Extremes

Wettest: 1934 (Total Precipitation: 21.78"; Dep. Nml.: +11.74")
Driest: 1930 (Total Precipitation: 1.83"; Dep. Nml.: -8.21")
Snowiest: 1987 (Total Snowfall: 11.5")
Most 1 Day Precipitation: 5.16" (Sep. 2, 1922)
Most Snowfall in 1 Day: 11.5" (Nov. 11, 1987)

