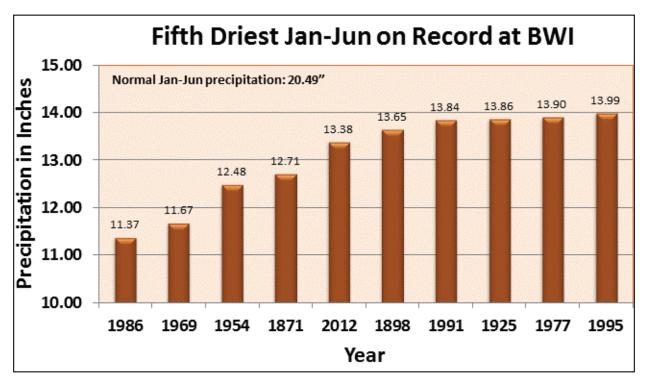






JUNE 2012: Derecho Causes Widespread Damage, Fatalities, Significant Power Outages; Hottest June Day Ever in Washington



## June Highlights

- Above normal temperatures at DCA (+1.1°F) and BWI (+1.2°F); slightly below normal readings (-0.6°F) at IAD
- \* BWI marked 17th consecutive month with above normal temperatures; DCA, 8th consecutive month
- Hottest June day on record: 104°F in Washington and 102°F at IAD on 29<sup>th</sup>
- Record 99°F at DCA on 21st and 100°F at BWI ties record for date
- ♦ DCA and BWI recorded 6<sup>th</sup> consecutive month with subnormal precipitation: 2.38" (-1.40") at DCA, 2.68" (-0.78") at BWI, and 1.79" (-2.19") at IAD
- On 1st, 12 tornadoes confirmed across Maryland: 4 EFI (estimated wind speeds up to 100 mph) and eight EF0 (estimated wind speeds up to 85 mph). Two injuries were reported in the EF1 tornado near Bel Air (Harford County), MD; Property and tree damage were the main impacts; damaging thunderstorm winds, including gusts to 60 mph in Falls Church (Arlington County), VA, and torrential rainfall in some areas, including 4.56" near Long Green (Baltimore County), MD, and 3.06" near McLean (Fairfax County), VA; over an inch soaked BWI (1.55") and DCA (1.22")
- On the 22<sup>nd</sup>, thunderstorm downburst winds reach 90-100 mph in Bladensburg (Prince Georges County), MD, resulting in structural damage to 15 buildings and a home and displacing at least 70 residents according to press reports. The storm uprooted 40 foot trees, causing significant property damage, and taking down power lines. In Jonesville (Frederick County), MD, winds peaked at 80 mph damaging a dairy barn and uprooting trees. Near Langley Park (Prince Georges County), some property damage and 20 trees ripped out of the ground by the intense winds
- On the 29th, a derecho, a fast moving, long lasting line of intense thunderstorms, blew through the metro area late evening. The event featured widespread wind gusts from 60-90 mph, frequent lightning and heavy rain. The storms resulted in five fatalities: two elderly women were crushed by trees that fell through their roofs; two drivers were killed in their cars by fallen trees, and one person drowned in the Chesapeake Bay when a boat capsized. There was also extensive property damage and loss of power to 1.3 million residents, according to press reports. PEPCO, the utility for DC and its Maryland suburbs, noted the largest amount of outages for any weather event outside of a tropical storm: winds gusted to 71 mph at IAD, 70 mph at DCA, and 68 mph at BWI.

#### **June 2012**

**Temperatures:** The first month of meteorological summer featured above normal temperatures at DCA (+1.1°F) and BWI (+1.2°F), while IAD observed slightly below normal readings (-0.6°F). The month featured very warm to hot temperatures from the 9th-11th and then, with the exception of the 26th, from the 19th through month's end. DCA and BWI recorded 11 days with highs at or above 90°F and IAD, 9. The hottest day of the month was the 29th when DCA sizzled to 104°F, a record for the date and the highest June reading on record. IAD also set a record 102°F, also warmest on record for June, while BWI recorded 103°F, two degrees shy of a record. High temperature records were also set on the 21st when DCA observed a maximum of 99°F and a record high minimum of 78°F; BWI equaled a record at 100°F.

In sharp contrast, IAD's maximum of 68°F on the 18th was the coolest maximum reading on record for the date. There were also a number of cool mornings; IAD recorded 14 days with lows in the 50s and BWI 13 such days.

**Precipitation:** The three major airports recorded drier than normal conditions: 2.38" (-1.40") at DCA, 2.68" (-0.78") at BWI, and 1.79" (-2.19") at IAD. June marked the 6th consecutive month with subnormal precipitation at DCA and BWI, 5th at IAD. Severe weather made the weather headlines. The month started on a stormy note with a tornado outbreak across Maryland on the afternoon and evening of the 1st. A total of 12 tornadoes were confirmed: 4 EF1 (estimated wind speeds up to 100 mph) and eight EF0 (estimated wind speeds up to 85 mph). Two injuries were reported in the EF1 tornado near Bel Air (Harford County) where a structure were blown in, causing blocks to fall on the two men sheltering inside. Tornadoes also occurred near Poolesville (Montgomery County), Mt. Airy (Carroll County), Watersville (Howard County), Damascus (Montgomery County), Finksburg (Carroll County), Scaggsville (Howard County), Landover (Prince Georges County), Odenton (Anne Arundel County), Bellegrove (Allegany County), and Ft. Meade to BWI (Anne Arundel County). In Virginia, winds gusted to 60 mph in Falls Church (Arlington County) and hail to 1.75" struck near Massies Mill (Nelson County). Many locations recorded the majority of the month's rainfall on the first day: BWI (1.55") and DCA (1.22"). Highest totals included 4.56" near Long Green (Baltimore County) and 3.06" near McLean (Fairfax County).

On the 18th, parts of the Shenandoah in Virginia were impacted by severe weather. In Rockingham County, hail measured 1.50" near Montezuma while Mt. Crawford suffered property damage from thunderstorm winds. Shenandoah (Page County) measured 2.23" of rain.

On the 22<sup>nd</sup>, two lines of severe thunderstorms rolled through the metro area. The first line impacted Virginia during the mid afternoon when 1.0" hail struck near White Oak (Stafford County) and thunderstorm winds knocked down trees near Massaponax (Spotsylvania County). The second line of storms roared through the entire metro area during the evening. The most intense storms brought straight line downburst winds to Maryland with gusts of 90-100 mph in Bladensburg (Prince Georges County). The winds resulted in structural damage to 15 buildings and a home, displacing at least 70 residents, according to press reports. The storm uprooted 40 foot trees, causing significant property damage and taking down power lines. In Jonesville, (Frederick County), winds peaked at 80 mph, damaging a dairy barn and uprooting numerous trees. Near Langley Park (Prince Georges County), there was property damage and 20 trees were ripped out of the ground by the intense winds. Rainfall was heavy in isolated areas with 1.14" observed in Potomac, MD (Montgomery County), and 1.02" in Warrenton, VA (Fauquier County).

The most damaging area event of 2012 occurred on the June 29 when a derecho, a fast moving, long lived line of intense thunderstorms, blew through the metro area during the late evening. The thunderstorm complex, which developed during the morning in Iowa, raced east at speeds up to 60 mph across Illinois, Indiana, Ohio, and West Virginia before reaching the metro area between 10 pm-11 pm. Widespread wind gusts reached 60-90 mph, along with frequent lightning and heavy rain. The derecho caused five fatalities: two elderly women were crushed by trees that fell through their roofs; two drivers were killed in their cars by trees, and one person drowned in Chesapeake Bay when a boat capsized. The event also caused property damage to homes and businesses from downed trees and wires, and loss of power to 1.3 million residents, according to press reports. PEPCO, the utility for DC and its Maryland suburbs, noted the largest amount of outages for any weather event outside of a tropical storm. Winds gusted to 71 mph, at IAD, 70 mph at DCA, and 68 mph at BWI. This was the first derecho to impact the metro area since June 4, 2008.

# June 2012 Weather Statistics for the Washington/Baltimore Area

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	Station Temperatures (°F) Extreme/Day						Precipitation (Inches)				
Location	AvMx	AvMn	AvgT	NmIT	DepNml	Max	MinT	Total	Nml	DepNml	Yr to Date
National (DCA)	85.9	66.6	76.2	75.1	+1.1	104/29	58/6,7	2.38	3.78	-1.40	13.12
Baltimore (BWI)	85.3	61.9	73.6	72.4	+1.2	103/29	50/6	2.68	3.46	-0.78	13.38
Dulles (IAD)	83.8	59.9	71.8	72.4	-0.6	102/29	50/3	1.70	3.89	-2.19	14.60

**Looking Ahead to July:** With a hot June behind us, what does July hold? Below are some noteworthy statistics for Washington at DCA: Normal Average Temperature: 79.2°F; Normal Monthly Precipitation: 3.66".

### **DCA July Temperature**

**Hottest:** 2011 (Average Temperature: 84.5°F) **Coolest:** 1891 (Average Temperature: 72.0°F)

Most 90°F+ days: 25 (2011) Fewest 90°F+ days: 0 (1891) Most 100°F+ days: 6 (1930)

Longest consecutive period of 90°F days: 16 (July 3-18, 1993) Longest consecutive period of 100°F+ days: 4 (July 19-22, 1930) Record monthly high: 106°F (July 20, 1930, and August 6, 1918) Record monthly low: 52°F (July 4, 1919 and July 31, 1895)

### **DCA July Precipitation**

Wettest: 1945 (Precipitation Total: 11.06") Driest: 1872 (Precipitation Total: 0.82") Record daily rainfall: 4.69" (July 9, 1970)