



# ATLANTIC COAST OBSERVER NETWORK, MD / DE / DC CHAPTER WITH DATA FROM NEARBY AREAS

## VERY COOL JULY. DRY IN THE NORTH WHILE WET IN THE SOUTHEAST & WEST

**July 2001** was a very pleasant and a very cool month across the region. No extreme period of heat occurred. Across the region, this July was almost as cool as last year (0.2 degrees warmer) and quite a bit drier (1.93"). As noted in many observers summaries quite a few intrusions of cool Canadian air masses moved into the area. One such air mass permitted early morning temperature to fall into the 40's and 50's on the morning of the 3rd. Most of the precipitation fell during the first 10 days and the last 6 days.

### PRECIPITATION

Precipitation varied quite a bit across the region. Less than two (2") inches fell across the northern portion of the region from extreme Northern Delaware west into Maryland through Harford County, portions of Baltimore City and County, Carroll County, and into Washington County which was the driest. **Greg Keefer** of **Hagerstown 1 E** observed the third driest July where records date back to the late 1890's.

On the other end of the spectrum, Rebecca Harvey of Eagle Rock in Western Maryland's Garrett County reported a whopping 9.77". This amount was made up of numerous storms. Over 1/2" fell on 10 out of 12 days where precipitation was observed. The other wet area was south and east of Washington DC where amounts ranged in the 7" to 9" range.

Scattered heavy showers and thunderstorms brought over 1" of rain to an area generally (not including Western Maryland's Garrett County) south of Baltimore. The heaviest daily amount of 5.15" was reported by **Clinton Bubb** of **Morganza** on the 26th. Two other St Marys County observers, **Floyd Abell** of **Hollywood** (3.48") and **Mike Van Wie** of **Oraville** (3.36"), also reported extremely heavy rain that day. **Joe Terry** of **Forest Glen** observed 3.14" of rain as a result of

AM and PM heavy thunderstorms on the 4th.

A day long rain on the 29th held afternoon temperatures down in the 60's at most stations.

Full-grown trees were uprooted in the south Bowie area, and substantial damage was reported along Mitchellville Road and Central Avenue, as well as on Church Road as a result of a late afternoon thunderstorm on July 1st. **Jim Vaughn** of **Smithsburg 2 NE** reported a tornado 8 miles NE of his station on the 10th. **Bill Hudelson** of **South Bowie** reported pea-dime size hail the evening of the 4th.

### TEMPERATURE

July began on a quite cool note. Record low temperatures covered the area on the third. Temperatures fell into the lower 50's with some in the upper 40's. The Wakefield NWS reported that the temperature fell to 45 at Salisbury, which is located on Maryland's Eastern Shore. **Rob Rickell** of **Hanover 1 S** reported that the mercury fell into the 40's on 5 days.

All-time monthly minimum temperatures were reported by the following ACON observers: **Gary Gallaher** of **Bear 2 SW DE** (48), **Al Kreinik** of **Parkton 5 SW** (46), **Bobby Miller** of **Millers 4 NE** (47), and **Floyd Abell** of **Hollywood** (52). Along the same note the following ACON observers reported their coolest July on record: **Floyd Abell** of **Hollywood**, and **Jim Vaughn** of **Smithsburg 2 NE**. The NWS at Wilmington DE also reported this was their coolest July on record.

The number of days with the temperature of 90 or higher was less than normal this year. The maximum number of days 90 or above was 9. This was observed by the following ACON observers: **Joe Manfre** of **Baltimore 2 SE**, **Lynn Albright** of **Fallston 2 NW**, and **Bill Hudelson** of **South Bowie**.

### EXTREMES REPORTED BY

#### ACON OBSERVERS

##### MAXIMUM TEMPERATURE

Smithsburg 2 NE	98
Fallston 2 NW	97
Owings Mills	97
Jug Bay Wetlands	97

##### MINIMUM TEMPERATURE

Eagle Rock	38
Parkton 5 SW	46

##### WARMEST AVG. TEMP.

duPont Circle NW DC	77.1
Baltimore 2 SE	77.0

##### COLDEST AVG. TEMP.

Eagle Rock	65.4
Hanover 2 S, PA	69.2

##### MAXIMUM PRECIPITATION

Eagle Rock	9.77
Morganza	9.08

##### MINIMUM PRECIPITATION

Hagerstown 1 E	1.02
Westminster 4 SSE	1.18

The hottest period this month was from the 22nd to 24th. Low to mid 90's were common. The only two ACON observers to record back to back maximum temperatures of 95 or above were: **Marty Sharrow** of **Owings Mills**, and **Jim Vaughn** of **Smithsburg 2 NE**. The warmest minimums of the month occurred on the 26th. They averaged in the mid-70's across the region. The maximum reported was 79 by **Joe Manfre** of **Baltimore 2 SE**.

In response to a question from **Karyn Molines** of **Jug Bay Wetlands**, the new 1971-2000 normals are scheduled to be released on August 31st. Thanks to **Kevin Shaw** for doing the research.

New Wind Chill Formula has been issued. A wind chill table can be found at: <http://www.noaanews.noaa.gov/stories/s720.htm>  
Wind Chill (°F) = 35.74 + 0.6215T - 35.75(V<sub>0.16</sub>) + 0.4275T(V<sub>0.16</sub>) Where, T = Air Temp (°F) V = Wind Speed (mph)  
(V<sub>0.16</sub> = V to the 0.16 Power - Did not print correctly due to the font.)

# OBSERVER COMMENTS FOR JULY 2001

## **Gary Gallaher of Bear 2 SW, DE**

Many days with low humidity. Average temperature was the second coldest in station history and 0.2 degrees cooler than last year. July set a station record for the lowest minimum average temperature, most days with the minimum temperature in the 50's and tied the record for least days with the minimum temperature in the 70's.

**3rd** - 48 degrees, coolest July temperature on record.

## **Brian Papa of duPont Circle, NW DC**

**1st** - Evening thunderstorms result in daily low temp.

**8th-9th** - Thunderstorms began 11:45 PM the 8th and continued till 3 AM on the 9th.

## **Al Kreinik of Parkton 5 SW**

**3rd** - 46 degrees, Record low for July.

**13th** - Partly cloudy day - brilliant white CU against deep blue sky.

**18th** - Light / medium rain with light evening fog.

## **Marty Sharrow of Owings Mills**

Despite frequent cool fronts that brought refreshing breezes, rainfall events were in short supply especially after the 10th.

**10th** - Partly sunny; late day storms; tree limb damage.

**13th** - Deep azure blue skies puffy cumulus clouds., breezy

## **Joe Manfre of Baltimore 2SE**

**25th** - Partly cloudy, hot, and humid.

**31st** - Partly cloudy, warm, low humidity.

## **Herb Close of Manchester 1 SW**

**25th**-Hot, Hazy, Humid. Heat lightning to W to N 10:30 PM.

## **Ralph Hartsock of Westminster 4 SSE**

**2nd** - Sun & much cooler - chilly at times.

## **Bobby Miller of Millers 4 NE**

Second coolest July. Last year was cooler. Many lawns and crops brown at months end.

**3rd** - 47 degrees, Record low for July.

**25th** - 92 degrees, Warmest since 8/17/99

## **Rich Giannola of JHU/APL Laurel**

**23rd** - AM fog, burning off by 8:00 AM.

## **Rob Cohen of Potomac 4 N**

**13th, 14th, 21st, 22nd** - Record low min temp each day.

**29th** - Afternoon max temp 65 degrees. Day max was 72.

## **Rich Giannola of Olney 1S**

**5th** - Rainbow at 7:10 PM after a light thundershower (0.03")

## **Kevin Shaw of Gaithersburg 2 WNW**

July's average minimum temperature of 61.7 was my coolest July minimum ever, just surpassing last year's average minimum of 61.9°. Only one daily high temperature record was set, with the 90° reading on the 1st. This was rather noteworthy as this had been the only day during July that I had never recorded a 90° or greater daily maximum temperature. I set 5 daily record minimums during the month, (3rd, 13th, 14th, 22nd, & 28th), and tied one other record (21st).

## **Joe Terry of Forest Glen**

**2nd** - Unusually cool for July, 75 degree max temp under full sun. 1 HDD today. Dew points in the upper 40's.

**4th** - AM thunderstorms with heavy rain (1.41") additional late day thunderstorms dumped another 1.73". Highest hourly total was 1.08" during the late afternoon. Greatest 1 day total since T. S. Floyd in September 1999.

**29th** - 26 hours of continuous light to moderate rain and drizzle. Afternoon max temp only 64 degrees.

## **Bill Hudelson of South Bowie**

**4th** - Thunderstorm 1815 hours with 0.85" in 15 minutes, pea to dime size hail, gusts NW 23 MPH. At least 4 thunderstorms today dropped 2.08" of heavy rain.

**26th** - Thunderstorm 1530-1830 hours, rain heavy 1845-1930 hours. Rain ended at 2330 hours.

## **Floyd Abell of Hollywood**

This July was the coolest and 3rd wettest on record.

**3rd, 21st, 22nd, 28th** - Record low min temp each day.

**26th** - Heavy thunderstorm with 2.00" rain between 4:30 & 5 PM. Vivid lightning, rain all evening. Total rainfall 3.48".

**29th** - Rainy day 1.94".

## **Greg Keefer of Hagerstown 1 E**

This July was the 3rd driest on record with only 1.02" of rain. The record driest is 0.20" which was set in 1968, and the 2nd driest is 1930 with 0.69". This July was also the 5th coolest on record with an average temperature of 71.9 F. The record coolest was in 1920 with an average of 70.5. July 2000 was also cool. It was the 7th coolest on record.

**13th**- Low of 52 F tied the record for this date set in 1904.

**25th**- Warm overnight low of 73 F. Hot hazy and very oppressive with a high of 94 F dew point peaked at 76 with a heat index averaging just over 100 and peaking at 105.

## **Jim Vaughn of Smithsburg 2 NE**

Coolest July on record breaking the 73.1 set last year. 1.61" of precipitation made this July the second driest. The driest July is 1.58" set in 1983.

**1st** - Thunderstorm with 42 MPH winds.

**10th** - Strong thunderstorm with tornado 8 miles NE of my station. I have a 35 to 40 mile line of sight from SW to NE from my homestead in the hills. I saw a very impressive rain shield with the tornado imbedded in that shield. I saw no rotation but the outflow from that storm was strong enough to give my station 45 MPH winds.

**25th** - Record max temp of 98 breaking the 95 set in 1995.

**29th** - Record low maximum temperature of 69 degrees. This tied for the second lowest maximum for July.

## **John Zyla of Ridge**

**26th to 30th** - 73% of the monthly precipitation (3.95" of 5.40") fell.

## **Rob Rickell of Hanover 1 S, PA**

July averaged much cooler and drier than normal. The morning low temperatures dipped below 60 on 18 days, and into the 40's on 5 days.