



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

EXTREME HEAT AND DRYNESS TURNS COOL AND WET AT MONTHS END

This summer's heat continued almost unabated for the first 23 days. Seasonal warm temperatures then took over and lasted until a cold front stalled south of the region and brought with it rains and quite cool maximum temperatures from the 28th to the 31st. Except for few scattered heavy thunderstorms, some of which were severe on the 1st and the 3rd, very little rain fell the first 23 days of the month.

TEMPERATURE

August began on a very hot note and ended on a very cool note. If it was not for the unseasonable cool maximum temperatures of the 29th and 30th along with seasonal cool temperatures of the 28th and 31st this would had been one of, if not the hottest August on record.

The month began with temperatures in the mid 90's to 100+ degrees. Maximum temperatures of 100 or higher were recorded at the following ACON sites: **Gary Gallaher** of **Bear 2 SW DE**, 100 on the 1st & 2nd; **Joe Manfre** of **Baltimore 2 SE**, 100 degrees on the 2nd; **Rich Giannola** of **Laurel JHU/APL**, 100 degrees on the 2nd; **Tony Scafide** of **Bethesda**, 100 on the 1st and 101 on the 2nd; **Kevin Shaw** of **Gaithersburg 2 WNW**, 100 degrees on the 2nd; **Joe Terry** of **Forest Glen**, 101 on the 2nd; **Bill Hudelson** of **South Bowie**, 100 on the 2nd; and **Jim Vaughn** of **Smithsburg 2 NE**, 101 on the 1st, 103 on the 2nd and 3rd, and 100 on the 5th. Washington National NWS recorded 100 on the 2nd.

The first reprieve from the extreme heat came on the 6th. Minimum temperatures fell generally into the 50's or low 60's from the 7th through the 11th. **Al Kreinik** of **Parkton 5 SW** recorded a 46 degree reading on the 8th. **Rebecca Harvey** of **Eagle Rock** recorded 48 on the 7th and 8th while **Rob Rickell** of **Hanover 2 S PA** recorded 48 on the 8th and 49 on the 7th and 9th. The only other readings in the 40's occurred at the "cold" Salisbury Wicomico County Airport

where 48 was recorded on the 8th and 49 on the 7th and 9th.

The heat returned in full force on the 11th. 90 degree plus temperatures lasted until the 20th to the 24th depending upon station location. 100 degree temperatures were observed by the following ACON observers: **Gary Gallaher** of **Bear 2 SW DE**, 100 on the 13th; **Jug Bay Wetlands**, 100 on the 19th; **Marty Sharrow** of **Owings Mills 2 SE**, 100 on the 14th; **Bill Hudelson** of **South Bowie**, 100 on the 14th; **Brian Smith** of **Oxon Hill**, 100 on the 12th & 14th; **Mike Van Wie** of **Oraville**, 100 on the 13th; and **Jim Vaughn** of **Smithsburg 2 NE**, 103 on the 13th and 100 on the 15th. Washington National NWS recorded 100 degrees on the 13th. It also recorded eight (8) consecutive days from the 12th-19th with =>95 degrees. This set an August record. It was also the third time this has ever occurred.

Temperatures failed to rise out of the 60's on the 29th and 30th as a result of a stalled frontal system along the south-east coast and a high pressure system over the northeast.

PRECIPITATION

This months total rainfall did not reflect the severe dryness and drought conditions the majority of the region is experiencing. Very little rain fell during the hottest portion of the month, the 1st through the 23rd. There were a few widely scattered thunderstorms, some severe during that period. **Brian Smith** of **Oxon Hill** observed 1" hail 1818-1824 hours on the 1st which covered the ground to an average depth of about a half inch. The hail also stripped many leaves off trees. **Marty Sharrow** of **Owings Mills 2 SE** reported 1" hail 1450 hours on the 3rd. **Ralph Hartsock** of **Westminster 4 SSE** reported marble size hail on the 3rd. Also on the 3rd **Joe Manfre** of **Baltimore 2 SE** reported a severe destructive thunderstorm 2 to 3 AM. 2.03" of rain fell. **Dan Hanson** of **Millersville 1 SE** reported 0.99" and **Rich Giannola** of **Olney 1 S** both on the 3rd. **Kevin Shaw** of **Gaithers-**

EXTREMES REPORTED BY

ACON OBSERVERS

MAXIMUM TEMPERATURE

Smithsburg 2 NE	103
Bethesda	101
Forest Glen	101
Oxon Hill	101

MINIMUM TEMPERATURE

Eagle Rock	42
Parkton 5 SW	46

WARMEST AVG. TEMP.

Baltimore 2 SE	81.1
Oxon Hill	80.0

COLDEST AVG. TEMP.

Eagle Rock	69.7
Hanover 2 S	74.0

MAXIMUM PRECIPITATION

St. Margarets	5.11
Glenmont 1 NNE	4.92

MINIMUM PRECIPITATION

Ridge	1.96
Eagle Rock	2.24

burg 2 WNW reported 0.72" on the 5th.

The next significant rains fell on the 24th. **Greg Keefer** of **Hagerstown 1 E** and **Jim Vaughn** of **Smithsburg 2 NE** both reported over 2", while between 1 and 2 inches was reported by **Gary Gallaher** of **Bear 2 SW DE**, **Al Kreinik** of **Parkton 5 SW**, **Marty Sharrow** of **Owings Mills**, **Herb Close** of **Manchester 1 S**, **Bobby Miller** of **Millersville 4 NE**, **Lynn Albright** of **Fallston 2 NW**, and **Rob Rickell** of **Hanover 1 S PA**.

The heaviest rains fell on the 28th and 29th. The greatest amount of 4.39" fell at **Jug Bay Wetlands**. Amounts of over 2" was common from Baltimore south into Montgomery County and portions of Prince Georges County. The balance of the area, except for **Greg Keefer's Hagerstown 1 E** station, received over 1".

OBSERVER COMMENTS FOR AUGUST 2002

Gary Gallaher of Bear 2 SW, DE

Warmest August maximum temperature in station history. First month in station history with more than two (2) 100 degree days. Very dry through the 23rd. Plants showed extreme stress due to lack of moisture—the worst that I have ever seen. Lost many shrubs.

Dan Hanson of Millersville 1 SE

Hot and dry also describe the month. Rainfall was more than one inch below average. Heavy rains on the 4th (0.99") and the 28th (1.21") were the biggest events of the month. There was also a rainless stretch from the 7th to the 22nd. The temperature reached 90 degrees on 12 days in a row from the 11th to the 22nd.

Al Kreinik of Parkton 5 SW

Summer Stats: Average max 85.6; Average min 61.5; Average temp 73.6, +2.3; Precipitation. 9.92", -1.95".

2nd-- Heavy thunderstorm after observation (11:30 PM) with much lightning.

20th -- 10th consecutive day with temps 90 or higher.

24th -- Heavy thunderstorm with constant lightning 1:30 - 2:30 AM again 3:30 - 5:00 AM.

Marty Sharrow of Owings Mills

3rd -- Pre Dawn and PM thunderstorms. 1" hail at 1450 hours.

14th -- Blazing sunshine but continued bone dry.

Joe Manfre of Baltimore 2SE

3rd-- Severe destructive thunderstorm 2 to 3 AM, 2.03".

Herb Close of Manchester 1 S

Hottest summer on record, 75.3 degrees; hottest August and second hottest month on record, 77.0 degrees; hottest average maximum temperature for any month, 88.0 degrees; most number of consecutive 90+ days for any month, 10 days; most number of 95+ days for any month, 10 days; tied all time record high temperature of 99 degrees on the 12th, 13th & 14th. Length of record is 14 years.

Ralph Hartsock of Westminster 4 SSE

3rd -- PM thunderstorm with marble size hail.

Bobby Miller of Millers 4 NE

Summer Stats: Average max 85.4, +3.6; Average min 63.5, +1.4; Average temp 74.5, +2.5; Precipitation. 8.73", -2.15".

Warmest August on record. Record 15 days with temperatures 90+ and for the year - 33 days.

Rebecca Harvey of Eagle Rock

4th --Thunderstorm with hail.

Rich Giannola of Olney 1 S

3rd -- TSHRA with vivid lightning 3-4 AM = 0.10". TS began 3:40 PM. TSHRA 4:15 - 5:40 PM = 0.79".

28th-29th -- RA all day on 28th totaling 1.95" by 10 PM. More RA began later in evening totaling 0.32" more by 7 AM on the 29th. Received 0.01" more RA later in AM.

Rob Cohen of Potomac 4 N

12th to 14th-- Record maximum temperature each day.

Kevin Shaw of Gaithersburg 2 WNW

A hot August once again with a number of record breaking maximum temperatures to start the month similar to July. A cooler period at the end of the month with the biggest rainfall of the month kept us from breaking a lot of temperature records.

Joe Terry of Forest Glen

2nd -- First 100+ day since July 1999.

6th -- Refreshing air finally moves in after 9 straight 90+ days.

20th -- Foliage on small trees starting to yellow and fall off.

28th -- Relief! 24 hours of continuous rain, occasionally heavy. Most since July 4, 2001.

Brian Smith of Oxon Hill

1st -- Hail up to 1" between 1818 and 1824 EDT. More hail than rain at one point, with leaves being shredded off trees. Hail covered the ground to about a half inch average depth.

Floyd Abell of Hollywood

Record 13 days with temperatures 95 degrees or higher.

Mike Van Wie of Oraville

16th -- First 100 degree day ever!

John Zyla of Ridge

Only two (2) thunderstorm days this month.

Greg Keefer of Hagerstown 1 E

August 2002 tied 1993 for the sixth (6th) hottest on record. This summer's average temperature of 75.3 degrees was the 6th hottest on record. The hottest ever is 76.0 degrees set in 1995.

6th -- Beautiful day with bright sunshine, lower temperature, and humidity.

14th -- Set daily record maximum temperature of 98 degrees. Old record was 97 set in 1988.

18th -- Tied daily maximum temperature of 96 degrees set in 1987.

Jim Vaughn of Smithsburg 2 NE

First month in the past 17 and the second in the past 23 months with above normal precipitation. New record maximum temperatures set on the 1-5, 11-14, 18, 19, 21, 22, & 25. New record maximum minimum temperatures set on the 3, 15, 16, 18-20, 22, & 23. Maximum temperature of 103 on the 2nd, 3rd, & 13th tied station record maximum temperature.

24th -- 2.17" set a daily record. It was also the most rain to fall in a 24 hour period since 3/21/00 and the most to fall in August since 8/17/94.

28th -- 55 MPH wind gust set a new August record.

30th -- 70 degrees set a daily low maximum temperature. It also tied the second lowest maximum temperature for August.