

JULY 2003 (2)

Rain fell on three days totalling a mere 10.3mm/0.41in, its duration being 7.4 hours in total. With evaporation levels reaching 37.1mm/1.50in the period ended with a water deficit of 26.8mm/1.06in. Winds were from a westerly quarter on 50% of the days with a mean 09hr speed of 5kn/6mph and a peak gust of 29kn/32mph on the 20<sup>th</sup>. It was now beginning to show signs of a potential water shortage later in the year if the current conditions continued, though present water supplies are adequate, most reservoirs being filled from 80% to 90% of capacity.

Sunshine has been plentiful, the 13<sup>th</sup> producing a daily total of 15.0 hours and a 10-day total of 96.7 hours with just one day completely sunless. The month has certainly lived up to its reputation of a "summer" month this year in almost all respects. Doubtless, however, the summary at the end of the month will reveal nothing really outstanding, for it is surprising how statistics "even out" over a period, a feature which is even more apparent when the data covers such a long time-span as it does for Halesowen, one approaching 46 years. With this length of time it becomes more and more difficult to set "new" records.

As the month progressed the unsettled weather followed suit, days varying from warm, sunny and dry, to warm, dull and wet. Winds, however, remained relatively light and from a westerly quarter, gusts peaking around the mid-twenties of knots on occasions. The fourth week of July

was by far the wettest, some rain falling on all but one day and totalling mm/in. Sunshine was correspondingly down, though no day was sunless, the highest daily total of 6.8 hours falling on the 27<sup>th</sup>. Though the maximum for the week, it was less than half of the maximum for the month, the 15 hours recorded on the 13<sup>th</sup>. The month was to end on an unsettled note with showery weather on most days and less in the way of sunshine. However, it did remain warm both by night and day, the latter proving uncomfortable for sleep. We did not get the very heavy rain, or tempest here, as did other Midland areas so July ended with the one thunderstorm and no gale force gusts.

#### JULY SUMMARY

July was a month during which all temperatures, air, soil and earth, produced values above their 30-year means. The maximum air temperature of 31.5C/88.7F attained on the 1<sup>st</sup> 3.8C above average with the mean maximum 0.6C above, the mean minimum 1C above and the mean daily 0.7C above their respective 30-year values. Soil and earth temperatures were also high, the anomalies varying from +2.4C for the 5cm depth to +1.3C at 10, 20, 30 and 50cm depths. It was a month of high temperatures and the best since 1999. In all, 7 days were hot [max  $\geq$  25C/77F] with 18 days having maxima equal to or above 21C/69.8F. The coolest day, the 1<sup>st</sup> with 17.4C/63.3F was the highest since 1995 [17.6C]. Black bulb radiation temperatures were also high, the peak of 60.3C/140.5F occurring

on the 15<sup>th</sup> being in line with recent years. The mean solar radiation temperature of 51.2C/124.2F was the 3<sup>rd</sup> highest in 10 years.

Rainfall was slightly below average at 43.9mm/1.73in, the lowest since 2000, with rain falling on 14 days, 20% above expectation and the 2<sup>nd</sup> highest in a decade. Eight days were wet and 1 very wet [ $\geq$  10mm/0.39in]. Set against this evaporation totalled 82.6mm/3.25in thus producing a water DEFICIT for the month of 43.9mm/1.73in, not a good sign if it continues into the autumn season!

Sunshine was also a little below expectation at 184.6 hours, the lowest since 2000, though the sunniest day, the 13<sup>th</sup> with its 15 hours of sunshine was a mere 12 minutes below the all-time record for Halesowen. Just 1 day, the 17<sup>th</sup> was sunless, though the 31<sup>st</sup> produced just 6 minutes! In all 7 days provided 9 hours daily and 5 days over 12 hours daily, well below the records being set in the early 1990's.

Winds were generally light from a SW direction, the maximum gust of 28 knots being well below gale force. Thunder occurred once with no hail noted. Mean sea level pressure remained relatively low due to the succession of depressions crossing the country and the failure of the Azores High to become established. In general a fair, but not exceptional summer month!