

AUGUST 2003 (2)

Sunshine was still in ample supply with a 10-day total of 61.8 hours of which 13.3 hours was recorded on the 14th. Rainfall for the same period amounted to a mere 1.3mm/0.05in just 0.9mm/0.04in of this falling on the 11th in a slight shower. Evaporation amounted to 31.7mm/1.25in over the same 10 days giving a water deficit of 30.4mm/1.20inch, yet another month with a shortage of water. So far this year just one month, January has seen rainfall exceed evaporation, not at all a satisfactory situation as far as water supply is concerned.

Winds were from a westerly quarter on 70% of the days, mostly light at a mean speed of 4.6knots/5.5mph, the maximum gust of 18kn/21mph occurring on August 19th and 20th. With the final third of the month still to go this August seems set to break several long-standing records.

Late August was ushered in with little overall change in the patterns of the weather set earlier, warm to very warm days, light winds and generally cloudy conditions with sufficient breaks to allow sunshine to reach the usual August values. Even the 10-day forecast could not hold out much hope of any substantial rain in the foreseeable future, though the warm weather was expected to continue. The 22nd and 23rd were to see maximum temperatures as high as 25.3C/77.5F and 26.3C/79.3F respectively though sunshine was limited to 3.4 hours and 2.3 hours with a great deal of cumulus or strato-cumulus cloud present. The first sign of

rain appeared at 0644 on the 25th with slight drizzle lasting barely 30 minutes.

From the 24th to the end of the month the weather changed appreciably with rain, however light, on several days and less in the way of prolonged sunshine. This period saw 8mm/0.31in of rain that ended any signs that this would be a near record dry month. Temperatures dropped off considerably, especially at night with a ground frost of -0.6C/30.9F on the morning of the 31st, the first August ground frost since 1974! What an exceptional month "temperature-wise", and what a brilliant end to an excellent spell of summer weather.

AUGUST SUMMARY

August 2003 was an exceptional month in many ways. Firstly there was a temperature range over the month in the air of 29.4C from 33.1C/91.6F on the 9th to 3.7C/38.7F on the 31st. Then there were 12 "hot" days with an air maximum in excess of 25C/77F and 26 days in which the air maximum exceeded 21C/69.8F. The mean maximum of 23.9C/75F was the highest since 1997 and the 4th highest on file with a mean minimum of 12.8C/55.0F providing the 2nd highest since records began [1956] and the highest since 1997. Finally the mean daily temperature of 18.3C/64.9F gave the 5th highest figure on file which was also the highest since 1997.

The grass minimum of -0.6C/30.9F was the lowest since 1974 and only the 5th August grass frost on record here. All soil and earth temperatures show positive anomalies from +3.2C at the surface to +1.7C at

100cm depth. Solar radiation temperatures have also been exceptionally high, the maximum of 60.1C/140.2F on the 9th being the same as in 2001 with the minimum of 30.4C/86.7F on the 28th the highest since 1996. The mean radiation temperature of 51.9C/125.4F was the same as in 1993 and the 2nd equal highest on record.

Rainfall was sparse with a fall of just 12.3mm/0.48in, the lowest since 1995 and 2nd lowest in data back to 1946 with 8mm/0.31in of this falling in the last 8 days. Rain duration of 11.7 hours was the lowest on record with a maximum intensity of 20mm/0.79in per hour being the 2nd lowest recorded here in August. Rain fell on just 5 days, 3rd equal lowest with no heavy rain falling at all during the month.

Sunshine totalled 204.2 hours, the same as in 2000 and nothing exceptional. Just 2 days were sunless, about average for the month, though the 13.8hours of bright sunshine recorded on the 2nd gave the 3rd highest daily sunshine figure

recorded in August. Ten days produced in excess of 9 hours sun daily with 5 days in excess of 12 hours daily.

Three thunderstorms were recorded but no hail or fog was noted. Winds were light from the easterly quarter with a maximum gust no higher than 28kn/32mph. Evaporation equalled 96.3mm/3.79in which, with total rainfall of just 12.3mm/0.48in produced a water deficit of 84mm/3.31ins, very disturbing news for water companies since there has been just one month, January, in which rainfall has exceeded evaporation!