

JAN. 2002

### JANUARY DATA

The very cold spell of snowy weather that began on December 30<sup>th</sup> continued into the beginning of January with days of biting cold winds and up to 8cm of lying snow. This snow lay on the first five days with "over-snow" temperatures during the night of the 1<sup>st</sup>/2<sup>nd</sup> falling as low as -10.9C [12.4F]. Daytime maxima during the first five days managed no higher than 7.1C [44.8F] on the 5<sup>th</sup> by which time a rapid thaw was setting in. All snow had gone by the 6<sup>th</sup> as milder Atlantic air flowed across the region bringing in very warm, but also moist, air resulting in wet fog which persisted for long periods on the 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup>.

After the first three days which were quite sunny, there ensued a spell of dull and sunless weather lasting from the 4<sup>th</sup> to the 11<sup>th</sup> when it was broken, briefly, by just 1.8 hours sunshine. Rainfall totalled just 6.3mm [0.25in] over the first ten days, with a maximum fall of 2.4mm [0.09in] on the 5<sup>th</sup>. The persistent fog and mist led to depressed radiation levels which were in the region of 2 to 14 watts per square metre means over the period. In all the first ten days saw an air maximum of 7.1C [44.8F] on the 5<sup>th</sup> with a night minimum of -9.5C [14.9F] on the 1<sup>st</sup> with winds in a predominantly easterly quarter and light.

The second week of the month saw the marked change in the weather continuing, with considerably milder air flowing across the country from the Atlantic bringing a much-needed rise in temperature. Daytime maxima rose steadily from 4.5C [40.1F] on the 8<sup>th</sup> to 10.4C [50.6F] on the 14<sup>th</sup>. Nighttime minima were much more marked with just one frost on the 11<sup>th</sup> to a low of -1.3C [29.7F], the rest of the week seeing good positive values. However, this flow of moist, warm air from the ocean did have the effect of bringing in much fog and mist, the air being wet enough to give measurable precipitation on several days, and streaming walls and pavements. The sun appeared briefly on the 9<sup>th</sup> and 10<sup>th</sup> to give a total of 5 hours of sunshine, the rest of the week being totally sunless. Thus, apart from the above two days which saw reasonable radiation levels, the rest of the period produced depressed values, the mean on the 9<sup>th</sup> rising no higher than 6 watts per square metre.

The generally unsettled but mild weather continued into the third week of January with some precipitation, howbeit light, on each of the days. Consequently sunshine was well down with high cloud amounts holding totals well down. Slight frost on the ground also occurred on the 16<sup>th</sup> and 18<sup>th</sup> though none was severe. By the 17<sup>th</sup> daytime maxima had reached 9.3°C [48.7°F], quite reasonable for the time of the year. The prevailing synoptic situation was dominated by low-pressure systems in the Atlantic, which heightened the chances of gales or windy weather markedly. By the 20<sup>th</sup> a deepening depression moved in from the Atlantic bringing with it strengthening winds and south-westerly gales to sea areas and high ground.

The fourth week of January continued the thread of very unsettled weather with a succession of Atlantic depressions crossing the country bringing heavy rain in places and strong to gale force winds, though it did continue very mild for the time of year. Precipitation occurred every day, with the heaviest fall being 17.3mm [0.68in] on the 26<sup>th</sup>. The week's total amounted to 55.6mm [2.19ins], high for any week of the year. Over the same period sunshine totalled just 8.6 hours, three days, the 23<sup>rd</sup>, 25<sup>th</sup> and 27<sup>th</sup> being completely sunless as a series of deep depressions brought low cloud and heavy rain across the area. Temperatures remained relatively high for January, the mercury reaching 13.3°C [55.9°F] on the 27<sup>th</sup> making this a very mild day. The week was also frost-free with the lowest minimum reaching 0.5°C [32.9°F] on the 25<sup>th</sup> with just a touch of ground frost to -0.8°C [30.6°F] in the early hours. An exceptionally deep depression crossed Scotland on the 28<sup>th</sup> bringing hurricane force gusts of 100 knots [120 mph] over the Cairngorms and gusts to 45 knots [54 mph] here. A line squall passed at 07.45 on the 28<sup>th</sup> with these gusts bringing a heavy shower of small hail, enough to form "snow-balls". Seven lives were lost due to this storm, mainly in Scotland and the north of England.

The final few days of the month continued stormy and wet, a further 6.2mm [0.24in] of rain falling on the 30<sup>th</sup>, adding to the already swollen rivers in the Midlands, the Severn by now showing signs of rapidly reaching the top of the bank in places. At the same time maximum day temperatures fell to 12.5°C [54.5°F] on the 29<sup>th</sup> and 11.0°C [51.8°F] on the 31<sup>st</sup>.