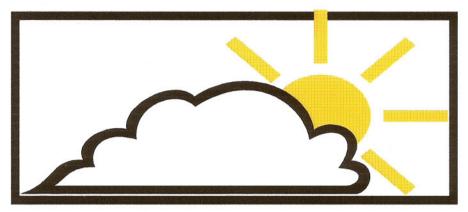
# METEOROLOGICAL OFFICE. [CO-OPERATING NETWORK].

# DETAILED OVERVIEW OF THE WEATHER OF 1994.



## JANUARY

The month was fairly open with only one incidence of sleet and no lying snow, the fourth successive such year.

Temperatures were around 1.5C above the 30-year means with 6 air frosts (the normal is 11.6) and 19 on the ground (normal 17.6). No day was classified as "cold" with the mean daily below 0C.

Rainfall was slightly up on the average at 72.8mm (2.87ins), though it rained on 22 days against the usual 18.

Sunshine was well above average by almost 50% with 71.8 hours. The sunniest day was the 28th with 7.0 hours, the best since 1989.

Wind was a feature of the month, with 51 gusts above gale force over 4 days, the strongest to 45 knots (52mph) on the 25th.

Fog occurred on one morning, the 24th.

## FEBRUARY.

The month was more seasonable than for many years. Snow lay on 5 days, the greatest incidence since 1986, with snow or sleet falling on 8 days the worst since 1987.

Mean temperatures were all

down on normal, by around 0.5C. On the 14th the air failed to rise above freezing all day, peaking at only minus 1C (30F). Frost occurred in the air on 11 nights and on the ground on 23, the latter being a third above the 30-year mean.

Rainfall at 67.9mm (2.67ins) was also a third up on normal, falling over 16 days and totalling 70 hours in duration. The wettest day, the 25th, produced 12.2mm (0.48in) and was totally in the form of rain.

Sunshine was almost 10 hours below normal at 51.8 hours, with 10 totally sunless days, which, apart from the 14 last year, is the worst since 1986

## THE WINTER OF 1993/1994.

The winter was at the lower end of the "average" tercile in general conditions though in some respects it was better than expected.



In general temperatures

were up on normal by as much as 0.5C for the mean daily, though the coldest night was some 2.6C better than the exected low of minus 5.7C continuing the run of mild winters. Air frosts were 7 down on normal but ground frosts, numbering 60, were 10 above average.

Snow lay on only half the expected days, with the incidence of both snow and sleet about average. Fog was also only half as prevalent as usual with 5 occurrences.

Sunshine totalled 170.5 hours, some 16.8 hours above the 30-year mean, the sunniest day, February 21st. providing 7.5 hours. In all 28 days were totally without sun as opposed to the customary 37.

Rainfall was well above average at 239mm (9.41ins) and fell on 64 days, well up on the normal 49. The wettest days, December 12th and February 25th both produced falls of 12.2mm (0.48in), this being about 60% of expectation.

Yet again no gale or thunder was reported, though hail occurred on 1 day. The maximum wind gust to 47 knots (54mph) was reported on December 12th.

#### MARCH.

March was the mildest in general since 1991 and the fifth mildest on record with a mean daily of 7.5C (46F). All temperatures, air soil and radiation, were well above the 30-year means by as much as 4C. Air temperatures ranged from 15.5C (60F) on the 8th, to minus 0.3C (31F) on the 26th.

Rainfall totalled 62.4mm (2.46ins), about normal, though it rained on 19 days, 3 above expectation. No hail, sleet or snow was reported.

Sunshine at 114 hours was 11% above the 30-year mean, with 7

sunless days, about average for March. The 26th saw 10 hours of bright sunshine, well below the 11.6 hours recorded on March 29th 1965.

It was a windy month with gusts above 40 knots on 2 days and with a total of 7 days experiencing gusts above gale force (34 knots). The mean hourly speed of 10.4 knots was well above expectation.

Air frost occurred on 2 nights and ground frost on 15, both down on average.

#### APRIL.

The month began cold and unsettled with spells of snow. Easter Monday had 1cm of snow lying, only the second time for such an event in 38 years. Snow or sleet was noted on 8 days, three times normal, with hail on 3 and thunder on 4 occasions, almost six times expectation.

The maximum temperature of 21.2C (70F) occurred on the 30th, whilst the night minimum of 11.7C (53F) on the 28th gave us the warmest April night on record. Such is the variability of the British weather.

Sunshine was marginally below normal at 162 hours, the best day being the 30th with almost 13 hours of bright sunshine. Only one day was sunless, just a quarter of the 30-year mean.

Total rainfall was below average at 51mm (2.00ins) though ground frosts numbering 14 were an eighth up on the usual value for April.

## MAY.

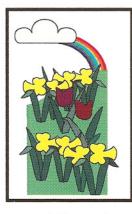
May was a poor month, cool, generally dull and with rain on half of the days, though ending with a burst of summer. May 31st produced 15.1 hours of bright sunshine, the highest May value on record, and coming incidentally, after the week May 20th to May 26th which registered a mere 12 minutes !

It was a cool month, temperatures ranging from 21.3C (70F) on the 31st to 2C (36F) on the 8th. The mean daily of 10.5C (51F) was 0.5C below the 30-year mean and the coolest since 1987. Ground frost occurred on 4 nights, the worst to minus 0.7C (31F) on the 27th.

Sunshine was 81% of average at 146 hours, with 8 totally sunless days, the equal worst May figure with 1985, since May 1956, and three times more than normal.

Total rainfall was two-thirds of expectation, rain actually falling over a period of 65 hours, almost 40% up on the 30-year mean, with the 15.6 hours on the 25th some 6 hours above the customary figure for the month.

## THE SPRING OF 1994.



With its position of 6th out of the last 39 years, the Spring of 1994 was a very open one, lying between those of 1974 and 1993.

Once

again, air temperatures remained above the 30-year means in all but the highest maximum. Means varied upwards by 0.4C for the maximum to 0.9C for the minimum. However, the extreme maximum of 21.3C (70F) on May 31st was the lowest May maximum since the 20.5C (69F) of May 2nd 1986.

Rainfall was 16% below expectation at 154.5mm (6.08ins) falling over 53 days, 7 more than usual. The highest daily fall of 13.9mm (0.55in) on March 21st was well below the customary 21.3mm (0.84in).

Sunshine was marginally above average at 422 hours, though the number of sunless days, 16, was slightly up on the mean of 14. The sunniest day was May 31st with 15.1 hours, creating a new Spring record.

Air frost was well down at 5, from the norm of 13, though ground

frost was close to average. No gale was recorded though snow lay on one day with snow or sleet observed on 8 days. Thunder was marginally up with 4 occurrences.

#### JUNE.

A pleasant Summer month with all temperatures up on the 30-year means, the extreme maximum reaching 27.5C (82F) on the 24th with two days "hot" (above 25C/77F).

Sunshine was 25% above average at 234 hours, 14 days seeing more than 9 hours each, 6 above 12 hours each and 4 above 15 hours each, the best since 1989.

Rainfall was only 43% of the 30-year average at just below an inch, this falling over 12 days, 8 being "wet" and one "very wet" (the 24th).

One severe thunderstorm occurred on the 24th when almost half of the month's total rain fell in a little under 20 minutes. This storm led to the death of a teenage girl in the West Midlands and damage to roofing and telephone systems. However, it still managed to end as the driest since 1983.

JULY.

July was an excellent Summer month. Eleven days were "hot" with air maxima above 25C (77F), the same as in the glorious Summer of 1976, but 9 fewer than in 1983 and 4 fewer than in 1984, both of which were outstanding July's. The highest daily temperature was 30C (86F) on the 12th. In all 27 days produced maxima above 21C (70F), including every day from the 7th to 25th inclusive. The mean maximum of 24 (75F) was the second highest on record behind the 26C (79F) of 1983.

Sunshine was 30% above the 30-year mean at 239 hours, also the best since 1983 with its 290 hours which was the highest on record. In all 15 days saw more than 9 hours of bright sunshine each, the same as in 1969 and 1984, but 2 fewer than the record of 17 days set in both 1989 and 1990.

Rainfall was around half expectation at 28mm (1.1ins), the lowest since 1990. Rain fell on just 9 days, a fifth on the entire month's fall occurring in one thunderstorm on the 31st.

After three "poor" Summers events now seem to be returning to the pattern set in the 1980's.

#### AUGUST.

Despite some warm and sunny days, the mean temperatures for August were remarkably close to the 30-year averages. Only one day, the 22nd, was "hot" with an air maximum above 25C (77F) though 15 days saw maxima above 21C (70F). Nights were cooler than usual, temperatures falling to 0.7C (33F) on the grass, and 4C (39F) in the air, the atter some 1.6C below normal for the month.

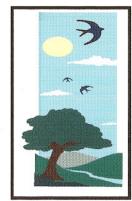
Rainfall was marginally above half expectation at 43mm (1.70ins),a third of this falling on the 31st which proved the longest spell of August rainfall in 6 years. Rain fell on 15 days, 9 of which were "wet" and 3 "very wet". Thunder was heard on two days, the 3rd and 4th.

Sunshine was 11% above expectation, though 3 days were totally sunless, opposed to the 9 regarded as "sunny" (more than 9 hours).

Prevailing winds were SW averaging 6 knots (7mph) though gusts to 32 knots (37mph) occurred on the 28th on a very blustery day.

## THE SUMMER OF 1994.

Though the Summer of 1994 broke no long-standing records, it did merit its



position as the best in 18 years, lying second to that of 1976 in this are in overall conditions.

The mean daily temperature of 16.1C (61F) was the fifth best in 39 years lying just behind that of 1990. The all-time record Summer of 1976 saw a mean temperature of 17.3C (63F).

The Summer months produced 14 "hot" days with air maxima above 25C (77F), whilst 1993 saw only 4 and 1992 just 5. Exceptionally hot Summers were 1990, 1989 and 1983. The hottest of all, 1976, saw 35 days with temperatures above 25C (77F).

In terms of sunshine 1994, with its 659 hours, lay in fifth position overall, with 1989 the best on record. The dullest Summer was 1987. The total of sunless days was 5, equalling 1960 and 1970, and was in fourth equal position since 1956. The highest number of sunless days occurred in 1977, closely followed by 1992.

Rainfall at 95.7mm (3.77ins) was around half expectation for the three months and was the driest since 1976. The heaviest daily fall of 15.7mm (0.62in) on August 31st was itself only about half of the normal maximum fall during the Summer.

#### SEPTEMBER

September was very wet, the second wettest on record behind that of 1976. Almost half of the month's total fell on the 14th, which was the wettest September day, as well as the second wettest day, on record here. Rain fell over the entire 24 hours, some quite heavy amounting to 72.7mm (2.86ins). The current daily record is for August 19th 1970 when 74.9mm (2.95ins) fell, whilst the previous September record was for 71.4mm (2.81ins) on September 24th 1976. In all rain occurred on 19 days, half as much again as usual, 7 of these being classified as "very wet".

This succession of dull and wet weather depressed temperatures appreciably, and the month ended cooler than average. Only one day exceeded 21C/70F, and it was cool enough on the 18th for a ground frost, the grass falling to minus 0.5C. Soil temperatures were also below normal for the time of year, by as much as 1C at 30cm (1ft) depth. Bright sunshine was 14% below average, 7 days being totally sunless, twice the usual for September. The sunniest day, however, produced over 11 hours each which is above expectation.

Thunder occurred on 3 days and hail on two.

#### OCTOBER.

Despite the wet end to the month, October was drier than average by some 5.5mm (0.22in), over two-thirds of the month's total falling in the final 10 days.

It was a sunny month with 130 hours of bright sunshine, the best since 1971 (23 years). Only two days were totally sunless from a norm of 6. The 10.4 hours of sunshine on the 4th set a new October record for Halesowen.

Sunny days mean clear skies resulting in Autumn frost. Temperatures have been disappointing, most being below average by as much as 1C. Six ground and 1 air frost occurred, both about normal for October.

Fog was noted on 4 mornings, though there was no incidence of hail, sleet, snow or thunder.

#### NOVEMBER.

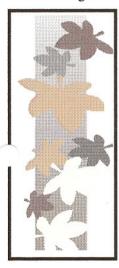
An exceptional month, the warmest November on record here, and reportedly the mildest in the Midlands area in over 300 years. The mean daily temperature of 9.7C (49F) was 3.6C above the 30-year average, 1.7C higher than the previous best set in 1970. The mean maximum of 12.2C (54F) was 1.1C up on the previous record in 1978 whilst the mean minimum of 7.3C (45F) was far above the earlier record of 5.3C (42F) set in 1970. The 9.0 am to 9.0 am period of the 19th/20th saw a minimum no lower than 12.4C (54F), some 8C above usual and the 3rd warmest on record (warmest 13.8C (57F) which occurred on 3/11/1969).

No air frost was recorded, only the second such incidence, the last in 1984. Ground frosts at 3 were a mere quarter of expectation for November.

It was, however, dull with only two-thirds of normal sunshine, and 14 sunless days, the same as in 1992 but well above average.

## THE AUTUMN OF 1994

The record-breaking warm November resulted in the Autumn of 1994 finishing up barely 4 positions outside being one of the best third since



1956.

Temperatures were well above the 30-year norms, the mean maximum of 14.2C (58F) being 0.7C up, and the daily mean of 10.7C (51F) 0.8C up on the 30-year values. This resulted in the 1994 season being the warmest since 1978.

However, rainfall was also above expectation, the total of 260.5mm (10.24ins) being 36% above average. This resulted mainly from the heaviest September fall on record of 86.5mm (3.41ins) from the 13th to the 15th when it rained non-stop for 42 hours. In contrast both October and November were drier than usual.

Sunshine was below expectation by around 9 hours, with November quite dull, the month producing a total of 14 sunless days with a preponderance of "anticyclonic gloom" at the month's end. Autumn thus ended with 24 sunless days instead of the customary 20.

The season was not unduly windy, only two days producing gusts in excess of gale force, September 8th and October 24th.

There was no incidence of snow or sleet though thunder was heard on 3 occasions.

Air frost was remarkably absent with only one occurrence instead of the normal 8, whilst ground frost with 10 instances was itself only half of expectation.

## DECEMBER.

The month began with a very mild airstream over the British Isles which originated in the Azores. Temperatures were well above average until the 14th. The minimum of 11.7C on the night of the 11/12th set a new record for the warmest night, whilst the day maximum of 14.2C on the 11th was the highest since December 28th 1974 and the second highest on record.. From the 14th ground frost became quite prevalent, the month ending with more ground frost than usual though air frost was only two-thirds expectation.

Rainfall was well above normal, and, with the 19 days on which some rain fell, it was rather a wet month.

Sunshine broke about even at 44.6 hours, though there were fewer sunless days than usual.

Snow was noted on one day (the 31st) with fog on three, though there was no incidence of either hail or thunder.