



## 2025 – Weather and Climate Change

The Met Office recently published its review of the weather in 2025. A number of historical records were broken during the year which showed the effects of climate change on our weather. The Met Office has developed methods of attributing weather events that show the record-breaking annual mean temperature was about 260 times more likely to have happened because of climate change caused by human activity such as the burning of fossil fuels.

Last year was the warmest and sunniest on record in the UK. The mean annual temperature was 10.09 °C putting 2025 into the top three warmest years since records began in 1884 (Table 1).

When they looked at the data for the four nations of the UK, the Met Office found that England had its record highest mean temperature of 10.94 °C. Scotland also broke its record (8.63 °C); Wales and Northern Ireland had their second highest mean temperatures on record (10.29 and 10.09 °C respectively).

Of course, these record temperatures were in part due to 2025 being the sunniest since records began in 1910. There were 1648.5 hours of sunshine in the UK, which was 61.4 hours more than the previous record in 2002.

Year	Mean Annual Temperature, °C
2025	10.09
2022	10.03
2023	9.97
2014	9.88
2024	9.79

Table 1. UK Highest mean annual temperatures. Met Office data.

Whilst the mean annual temperature varies, there has been a overall upward trend since 1884. That upward trend shows no real signs of slowing (Figure 1). Some parts of the UK were hotter than others but it wasn't a north-south divide. Most

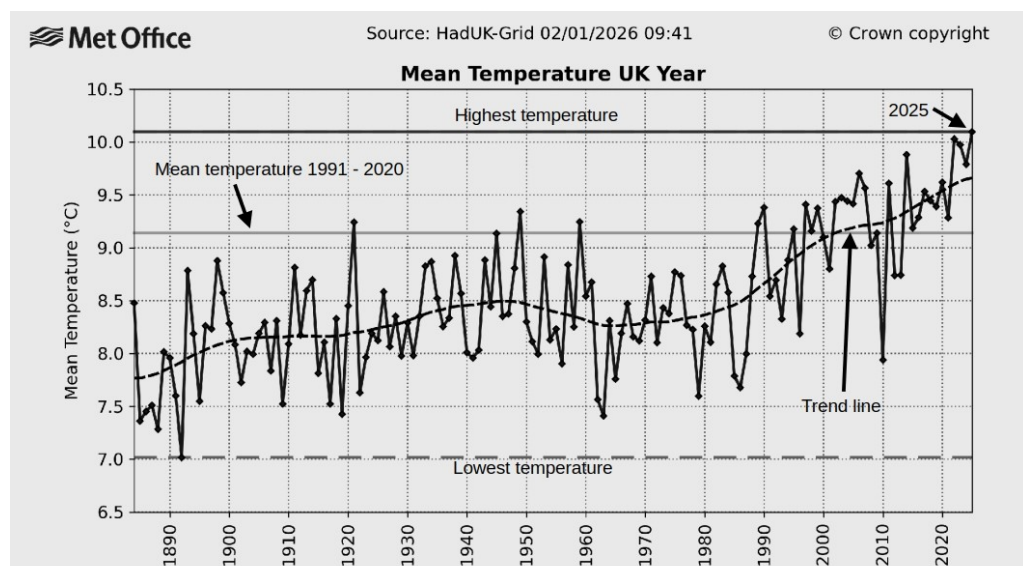


Figure 1. UK Mean annual temperatures 1884 – 2025. Met Office, UK Open Government Licence for Public Sector Information v3.0

of the east coast of Scotland and England, the Midlands and most of Berkshire was over 1 degree above the 1991 – 2020 mean, whilst the majority of Wales, East Anglia and the

southern counties were about 0.5 degree higher. The highest temperature of the year, 35.8 °C, was recorded in Faversham, Kent in July.

There are other changes in our weather patterns too. Winters are tending to be a bit wetter and warmer. We are seeing fewer frosts and overall less snowfall each year, though there are always going to be some extremes. The wet autumn of 2024 extended into the first part of 2025 but then things dried up so that January, February, March, April and May were drier than average and the drought continued through the summer. The average rainfall from March to August was less than 50 % of the norm and some places only had 40 % of the average. Once we were into September, things started getting wetter again and the mean annual rainfall for the year was about 90 % of the long term average.

Climate change is driving the changes in UK weather patterns. Advanced data analysis techniques can now attribute weather events to the changes in global climate. Since the start of the 21<sup>st</sup> century, the UK has been getting warmer, wetter and sunnier than in most of the previous century. Since the 1980s, there has been an increase in the average temperature of 0.25 °C per decade but this trend is accelerating such that the last 10 years were 0.41 °C warmer than 1991 – 2020 and 1.24 °C warmer than 1961 – 1990.

The changes in climate and the consequent changes in weather patterns is affecting wildlife. A citizen science project, Nature's Calendar, is collecting information on four woody plants, four flowering plants and four animals. They have found that elder, hawthorn, silver birch and oak were all showing the first leaf between 11.1 and 7.9 days earlier in 2024 than in the period 1999 – 2023. Hazel, lesser celandine, wood anemone and bluebell were flowering earlier too. Blackbirds were nesting earlier, frogspawn was being seen earlier and brimstone butterflies were emerging earlier. So it is clear that nature is being affected by the warming climate. In some cases this doesn't matter but if butterflies and bumblebees emerge too soon, there is limited food for them. Similarly, if birds start raising young before their food sources are fully out, they will have trouble feeding them.

With the very wet and very dry conditions we have experienced, and are likely to continue to experience, farming is suffering. Climate change has been identified as the biggest medium to long-term risk to UK food production. When fields are flooded. Crops cannot be planted and grass doesn't grow. This leads not only to a short-fall in food crops but also difficulties in feeding livestock. Then in hot, dry summers, crops become water-stressed and yields are lower, animals have less drinking water. These factors put pressure on farming and food production that leads to increased prices and increased imports.

This state of affairs can be slowed and even reversed in the longer term. However, many governments, including our own are stepping back from taking the sort of measures that will limit climate change. Certain politicians and political parties, at home and abroad, want to abolish 'net zero' and promote the continued use of fossil fuels for short term gain. Democratic governments have a relatively short period in office so they mostly fail to look

very far ahead. What seems to be missing is any perspective on the longer term impacts of climate change and certainly no realisation that the costs, both economic and social will be far more serious if nothing is done now.

If you care about the future, there are a few things you can do. As described in these articles over several years, you can cut your use of fossil fuels which will reduce your carbon footprint. If you fly anywhere, there are off-setting schemes that are more effective than simply planting trees. And fortunately our present MP is concerned about climate change – why not write to him and let him know you are too?

### **Richard Marshall**

We'd love to have some new members. Contact the Cold Ash Parish Greening Group chair, Richard Marshall: [marshalr@btinternet.com](mailto:marshalr@btinternet.com)