



# STAY COOL!

THE CLIMATE IS CHANGING... SO CAN WE!

## The Climate Science Behind Heatwaves

### What is a heatwave?

A heatwave is defined as "an extended period of hot weather relative to the expected conditions of the area at that time of year, which may be accompanied by high humidity."

- Met Office

In the UK, this is a period of at least three consecutive days in which the daily maximum temperature meets or exceeds a certain threshold. In London, this threshold is 28°C.

During the July 2022 heatwave, temperatures in London reached 40.2°C, significantly higher than the 28°C threshold.

### The urban heat island (UHI) effect

Urban areas are often much warmer than surrounding rural areas. The urban heat island effect is a significant contributing factor to the amplified heat in Camden.

Camden is an urban landscape characterised by concrete structures, asphalt roads, and limited green spaces. These urban features absorb and retain heat, making cities noticeably warmer than rural areas.

An Arup study found that London's urban centre has temperatures 4.5°C hotter than rural surroundings.

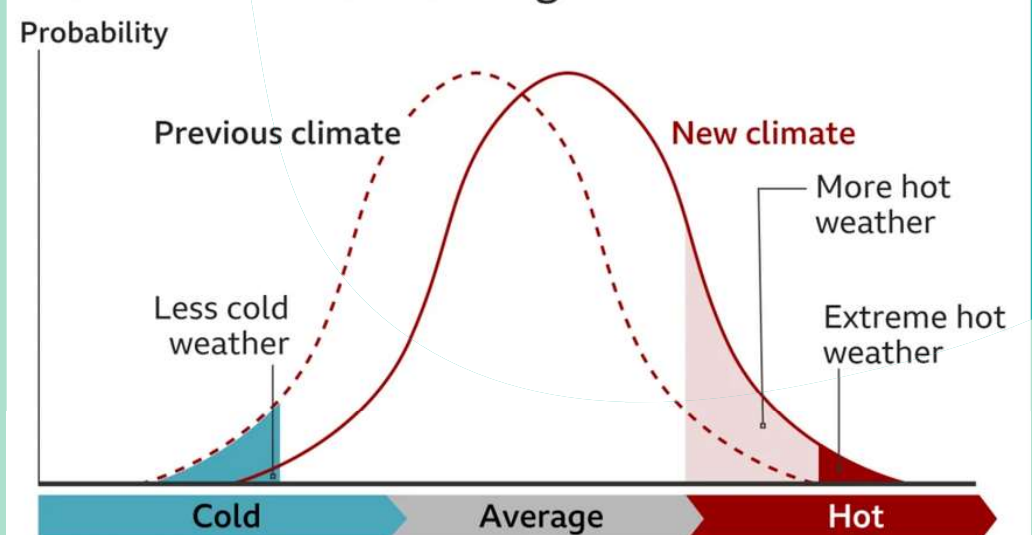
Increasing greenery in Camden, including planting trees, could help to reduce the UHI effect and contribute to cooling the city down.

### Why are heatwaves becoming more common?

In the past 60 years, the average number of heatwave days per year has increased from 6 to 18 days.

Increased levels of carbon dioxide and other greenhouse gases in the atmosphere are leading to increased surface temperatures on earth. The result of this in the UK will be hotter and drier summers, warmer and wetter winters, and an increased frequency and intensity of hotter days. The graph below describes this effect:

### A small shift makes a big difference



Source: US EPA

BBC

(Source: <https://www.bbc.co.uk/news/science-environment-58073295>)

By the end of the century, we can expect 40°C days to occur every 3-4 years.

Taking action now to combat climate change is vital! Why not get involved today? Visit these websites to find out more.

<https://camdenclimatefund.commonplace.is/>

<https://camdenclimateaction.commonplace.is/>

<https://www.thinkanddocamden.org.uk/>

