

Adapting the UK to extreme heat – Horticultural Trades Association (HTA)

Introduction to HTA

The HTA is the leading voice for the UK horticultural industry, representing around 1,400 member businesses across the breadth of the UK's environmental horticulture supply chain, including growers, garden centre retailers, manufacturers, landscapers, and service providers.

Environmental horticulture is a sector of over 90% SMEs, many of those family-owned businesses. They support 722,000 green jobs, contribute £38 billion to UK GDP, and deliver nearly £8.4 billion in tax revenues. The sector also delivers a multitude of benefits for our health and wellbeing, biodiversity and climate resilience, and community and social cohesion.

Why green infrastructure matters

The UK's recent record-breaking May temperature highlights the urgent need for adaptation to a rapidly heating climate. Our green infrastructure – trees, plants, gardens and green spaces - should be positioned as a vital part of the solution to climate change and the urban heat island effect.

Environmental horticulture is essential in delivering the fundamentals of sustainable community design – access to green space, climate-resilient environments, nature-rich urban spaces that supports long-term wellbeing. These are not optional features, but core components of healthy, resilient places.

Urban heat island effect

Urban and residential areas tend to be hotter than rural areas due to buildings and solid surfaces absorbing and retaining heat – known as the urban heat island effect. Inner urban areas facing constraints such as limited space and high density of urban infrastructure are often accompanied by the 'heat island' effect and increased air pollution. Fortunately, these challenges can be addressed by fundamentally ingraining green infrastructure into residential areas.

How plants and green spaces cool our towns and cities

Plants and greenery absorb heat from the sun and cool the air through evapotranspiration; their shade also reduces the amount of heat absorbed by solid surfaces. Green infrastructure reduces air temperatures in denser environments. In these

ways, gardens and green spaces cool urban areas, protecting people from the effects of heatwaves, also removing harmful air pollutants.

Measurable cooling and economic value

Evidence demonstrates the scale and value of this cooling effect:

- Research by the UK Centre for Ecology & Hydrology found that on average, domestic gardens specifically in the London City region reduce temperatures by 0.24°C (Urban Natural Capital Accounts 2023).
- A study in Manchester found that in full sun, concrete surfaces reached 40°C, whereas grass only reached 23°C.
- Adding an element of tree shade reduced the concrete temperature by 12°C and grass by 9°C (HTA, Value of Gardens report).
- The annual value of the urban cooling services provided by the UK's vegetation was estimated at £430million in 2020, equivalent to around £547million per annum in 2025 prices.

These findings demonstrate that environmental horticulture is not a “nice to have” but a vital climate adaptation tool, delivering measurable cooling benefits in urban environments.

Practical implementation in new communities

Challenges relating to climate change can be addressed by fundamentally ingraining green infrastructure into residential areas, using green corridors along transport routes and small parks to connect zones, while street trees, green roofs and walls provide both cooling and improved air quality.

In edge-of-urban locations, green corridors, larger private gardens, allotments and community growing spaces provide room for climate-resilient, nature-based solutions. Future-proofing new towns would involve designing and implementing green infrastructure and environmental horticulture so that they remain both effective and adaptable over the long-term, and don't require repeated intervention or costly retrofits. By committing to multifunctional green spaces and climate resilient infrastructure such as parks, gardens, nature-based solutions, green corridors and community gardens at the planning stage, alongside long-term maintenance mandates, we can ensure that these spaces continue to deliver benefits regardless of heat or drought pressures.

The gardens and green spaces that provide these benefits must be recognised as vital infrastructure that is incorporated in spatial planning from the outset, shaping the structure and long-term resilience of new towns, rather than being treated as a luxury later in the process. This requires consistent national policy recognition of the value of

gardens, green spaces and the environmental horticulture sector. To ensure that new communities remain healthy and liveable for residents over the long-term, they must embed environmental horticulture and green infrastructure from the design stage, which contributes directly to urban cooling, creating comfortable temperatures.

Water resilience in a changing climate

In terms of water resilience, spring 2025 was the driest since 1983 followed by the hottest summer on record, with four heatwaves. As a result, many parts of the country experienced drought and prolonged dry weather conditions. The Environment Agency's report, '[Drought prospects for spring 2026](#)', warned that without significant and sustained rainfall over winter, drought conditions could continue into spring 2026 and with our changing climate, more persistent hot, dry weather is something governments, businesses, water companies, and government agencies must start preparing for.

HTA asks

The HTA calls for:

- A long-term, year-round water resilience strategy, rather than reactive responses when extreme water situations occur, including a focus on capturing and storing water in wetter and cooler months
- Removing unnecessary planning red tape that prevents businesses from investing in on-site water infrastructure, including reservoirs and rainwater harvesting systems
- Ensuring all new homes and developments include rainwater harvesting and storage systems at the point of construction, to reduce pressure on water supplies and improve resilience
- Improved access to grants and funding to enable environmental horticulture businesses to invest in climate-resilient infrastructure

Our gardens and green spaces and the people providing and maintaining them – HTA members – are the experts when it comes to advising on drought-tolerant planting, ensuring our vital green spaces can continue to flourish, even in the driest conditions, cooling our cities, removing air pollutants, and helping to make us more water resilient.

The Government should continue to increase its work with sectors like environmental horticulture to understand the value of green infrastructure and to determine when, where, and how it is best utilised. The HTA stands ready to support with this.