# UK gardens designed with flood resilience more crucial as climate risks escalate



Homeowners in the UK are being encouraged to cultivate gardens specifically designed to withstand and recover from the increasing threat of flooding brought on by climate change. The Department for Environment, Food and Rural Affairs (Defra) has identified five key types of plants—including trees, shrubs, grasses, and flowers—that can enhance a garden’s resilience to heavy rainfall and waterlogging.

Defra highlights species such as the river birch (Betula nigra), valued for its rapid growth and shallow root system that helps stabilise the soil and absorb water efficiently. The dogwood shrub (Cornus sericea), with its characteristic red stems and fibrous roots, is also recommended for its ability to reduce soil erosion. Other plants on the list include mace sedge (Carex grayi), which slows water flow with its dense tufts, yellow flag iris (Iris pseudacorus), known for stabilising wet soils and bright blooms, and red bistort (Bistorta amplexicaulis), a pollinator-friendly groundcover suited to damp areas.

These flood-resilient plants work as natural “sponges,” absorbing excess water through roots and leaves, thereby slowing runoff and facilitating better soil drainage. Defra stresses that planting such species should complement other flood preparations, including checking local flood risks, signing up for warnings, and devising flood response plans. Flood Minister Emma Hardy underlined the practical benefits of gardening for flood resilience, urging residents to “dust off your spades” and prepare their gardens to better withstand winter downpours.

This push comes amid warnings from the Climate Change Committee that the UK is ill-prepared for the escalating frequency and severity of extreme weather events exacerbated by global warming. Gardens represent a vital frontline in mitigating flood damage as urban areas become increasingly vulnerable.

Additional insights from the Royal Horticultural Society, presented at the 2024 Chelsea Flower Show, further expand on plant options that combine aesthetic appeal with flood resilience. Their showcase featured quince trees, with robust root systems ideal for wet soils; resilient pollarded willows; adaptable Ranunculaceae species suited for damp conditions; and ground-covering annuals and biennials that support pollinators while quickly stabilising soil. These choices exemplify how garden design can thoughtfully balance beauty and function in flood-prone settings.

The London Fire Brigade also advocates for particular trees and shrubs in flood management strategies, citing species such as yew, cotoneaster, and western red cedar for their dense canopies, which store rainfall. Certain flowering shrubs like forsythia, hawthorn, and privet contribute by evaporating significant amounts of water, reducing runoff and the risk of flooding.

Private sector actors, including insurer Aviva, echo this focus on flood-resilient gardening. Their British Rainforest Garden concept highlights biodiversity alongside flood prevention, featuring native and shade-tolerant species like silver birch, maidenhair spleenwort fern, and cow parsley, which thrive in wet or shaded areas while supporting wildlife and ecosystem health.

Flood Re, an organisation specialising in flood risk awareness, lists further valuable plants such as water mints, astilbe, and male fern. These species not only manage moisture but also provide habitats for pollinators and wildlife, enhancing garden ecology in flood-affected zones.

Moreover, experts emphasise planting dense shrubs like hawthorn and holly as natural windbreaks, deep-rooted perennials to prevent soil erosion, and low-growing groundcovers like creeping thyme that maintain soil structure and enable better water drainage. Proper placement and combination of these plants create gardens that offer year-round protection against flooding and storm damage.

The Flood Resilient Garden project by Flood Re demonstrates practical applications of these principles, featuring diverse plant zones from sunny banks to boggy areas, integrating species such as hydrangeas, salvia, lilies, and various grasses. This approach shows how ecological landscaping can both reduce flood risks and deliver aesthetic value.

As flooding risks rise in tandem with climate change, these multiple expert-backed strategies underline the role of gardening as a cost-effective, environmentally beneficial way for homeowners to mitigate flood damage and support broader resilience efforts.

### 📌 Reference Map:

* Paragraph 1 – [[1]](https://www.independent.co.uk/property/gardening/garden-plants-weather-flooding-defra-uk-b2846734.html)
* Paragraph 2 – [[1]](https://www.independent.co.uk/property/gardening/garden-plants-weather-flooding-defra-uk-b2846734.html)
* Paragraph 3 – [[1]](https://www.independent.co.uk/property/gardening/garden-plants-weather-flooding-defra-uk-b2846734.html), [[2]](https://www.rhs.org.uk/shows-events/rhs-chelsea-flower-show/gardens/2024/flood-re-the-flood-resilient-garden/key-plants)
* Paragraph 4 – [[2]](https://www.rhs.org.uk/shows-events/rhs-chelsea-flower-show/gardens/2024/flood-re-the-flood-resilient-garden/key-plants)
* Paragraph 5 – [[3]](https://www.london-fire.gov.uk/safety/flooding/flood-prevention/planting-and-flooding/)
* Paragraph 6 – [[4]](https://www.insightdiy.co.uk/news/aviva-encourages-homeowners-to-create-floodresilient-gardens/15131.htm)
* Paragraph 7 – [[5]](https://www.floodre.co.uk/must-have-plants-for-a-flood-resilient-garden/)
* Paragraph 8 – [[6]](https://www.idealhome.co.uk/garden/garden-advice/plants-that-protect-garden-from-storms)
* Paragraph 9 – [[7]](https://www.floodre.co.uk/flood-resilient-garden/)

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.independent.co.uk/property/gardening/garden-plants-weather-flooding-defra-uk-b2846734.html> - Please view link - unable to able to access data
2. <https://www.rhs.org.uk/shows-events/rhs-chelsea-flower-show/gardens/2024/flood-re-the-flood-resilient-garden/key-plants> - The Royal Horticultural Society (RHS) highlights key plants featured in the Flood Re: The Flood Resilient Garden at the RHS Chelsea Flower Show 2024. The garden showcases a variety of plants, including a quince tree (Cydonia oblonga), which has strong, deep roots providing good anchorage and better tolerance to wet conditions. Ferns are used to colonise damp and shady areas, while Ranunculaceae species like Ranunculus acris and Trollius europaeus are chosen for their adaptability and harmonious appearance. Pollarded willow (Salix) adds structure and resilience, and annuals and biennials are included to quickly cover the ground and support pollinators. These plant selections aim to demonstrate how gardens can be designed to mitigate flood risks while enhancing aesthetic appeal.
3. <https://www.london-fire.gov.uk/safety/flooding/flood-prevention/planting-and-flooding/> - The London Fire Brigade discusses the role of planting in managing rainfall to prevent flooding. They recommend choosing plants, trees, and hedges that suit soil and sunlight conditions. Specific suggestions include yew (Taxus baccata), cotoneaster (Cotoneaster franchetii), and western red cedar (Thuja plicata) for their dense canopies that store rainfall. Forsythia × intermedia, hawthorn (Crataegus monogyna), and privet (Ligustrum species) are noted for their higher rates of evapotranspiration, reducing rainfall runoff. The RHS report 'Improving the environmental resilience of UK gardens' offers more detail on this topic.
4. <https://www.insightdiy.co.uk/news/aviva-encourages-homeowners-to-create-floodresilient-gardens/15131.htm> - Aviva encourages homeowners to create flood-resilient gardens by planting specific species. The British Rainforest Garden at RHS Chelsea Flower Show 2025 features silver birch, supporting up to 300 insect species; cypress-leaved plait-moss, suitable for free-draining soil and shady, wet spots; maidenhair spleenwort, a native fern that complements border flowers; cow parsley, thriving in partial shade; and foxglove, adding colour and attracting bees. These plants are chosen to enhance biodiversity and resilience against flooding.
5. <https://www.floodre.co.uk/must-have-plants-for-a-flood-resilient-garden/> - Flood Re provides a list of plants essential for a flood-resilient garden. Water mints (Mentha aquatica and Mentha cervina) are recommended for their ability to absorb water and attract pollinators. Astilbe, a robust perennial, thrives in damp spots and produces fluffy plumes of flowers. Male fern (Dryopteris filix-mas) is native to the UK and suitable for waterlogged areas. These plants help manage excess water and support local wildlife.
6. <https://www.idealhome.co.uk/garden/garden-advice/plants-that-protect-garden-from-storms> - Garden experts recommend five key plants to protect gardens from storm damage. Ivy (Hedera helix) acts as insulation for walls, hardy shrubs like hawthorn and holly function as natural windbreaks, privet hedging (Ligustrum ovalifolium) protects building foundations, strong-rooted plants like vinca major and deep-rooted perennials help combat soil erosion, and creeping thyme (Thymus serpyllum) creates a flood-resistant surface in gravel gardens. Proper placement of these plants offers year-round structure and natural defense against harsh weather conditions.
7. <https://www.floodre.co.uk/flood-resilient-garden/> - Flood Re showcases The Flood Resilient Garden, a project demonstrating how outdoor spaces can reduce flood risks while enhancing aesthetics. The garden features various plant zones, including a raised mount with quince and climbing roses, a gully with meadow-style grasses and wildflowers, a shady bank with hydrangea and salix species, a pond with lilies, a bog zone with astilbe and irises, and a sunny bank with hydrangea and salvia. These plant selections aim to create a functional and beautiful garden that mitigates flooding.