

Temperate rainforests: wet, wild, wonderful woodlands

“Britain’s temperate rainforests are globally important due to the richness and rarity of the lichen and bryophyte species they support, some of which are found nowhere else in the world. In a biodiversity crisis, we can’t afford to let this fragile habitat, and the species that rely on it, to disappear. Plantlife is part of a collective effort to protect and restore these amazing places – a Rainforest Revival.”

Alistair Whyte
Head of Plantlife
Scotland



Britain's rainforests

Britain has temperate rainforests that are *just as special and spectacular as their tropical cousins but are actually even rarer* and need better recognition and protection. This globally significant habitat is found in Western Britain on the west coast of Scotland, the Lake District, North Wales and South West England.

These wonderful wet and wild ancient woodlands lock down carbon and are one of the most biodiverse habitats on Earth, home to a vast array of wildlife, much of it scarce and threatened. Some species are *only* able to survive in these places; internationally important populations of lichens and bryophytes (mosses and liverworts) adorn Britain's rainforests. White script lichen, so-called because the patterns on its surface resemble writing – is found nowhere else in the world except for Scotland's spectacular rainforests.

Britain's rainforests have become smaller, more fragmented and isolated over centuries due to human influence on the landscape and, in more recent times, inappropriate grazing, clearance, and conversion. Despite being bountiful biodiversity hot spots, nearly three quarters of England's remaining temperate rainforests do not have any formal protection as they fall outside Sites of Special Scientific Interest.

The climatic conditions required to form temperate rainforest occur over **less than 1% of the planet**, which makes it a very rare habitat we must protect, restore and manage well.



Britain's remaining remnants of rainforest habitat and its richness of species now face severe and surging threats from climate change, rampant invasive species, tree diseases including ash dieback, and air pollution:

- Invasive non-native species present a huge threat to rainforests, none more so than *Rhododendron ponticum*, the garden escapee now widespread throughout British rainforests
- Changes in habitat management, especially grazing management – many rainforest sites are becoming increasingly dark and dominated by holly, ivy, and beech regeneration. Many rainforests, especially in Scotland, are also threatened by too much deer browsing preventing adequate regeneration
- Ash is one of the most important rainforest tree species for lichens, so the rapid spread of ash dieback is a threat to the rich lichen populations of many rainforests
- Periods of extended drought seem to be having an impact on some species, especially in South-West England.

There is a very real threat this globally important habitat will **slowly vanish from Britain** unless serious and urgent action is taken to save and protect what remains.

The public support for decisive action is clear: a 2022 YouGov poll commissioned by Lost Rainforests of Britain found that:

93%

of the British public support protecting the country's rainforest

85%

back its expansion

80%

think public funding should support its restoration



What Plantlife is doing?

For decades, Plantlife has been at the vanguard of conservation efforts to ensure temperate rainforests are better appreciated and managed.

We work directly with landowners to advise on how best to restore and expand rainforests, including translocating rare lichens from vulnerable sites, eradicating invasive species smothering other plant life, and introducing appropriate grazing to let more light in to the understorey. Some of our work traversing the rainforest zones includes:



Rainforest landscape recovery

Plantlife's work, in collaboration with the British Lichen Society and British Bryological Society to document the significant lichen and bryophyte interest of our woodlands, led to the identification of much of Britain's temperate rainforest habitat as globally recognised Important Plant Areas. This has inspired landscape-level recovery action.

Breathing new life into Welsh woodlands

Plantlife has played a key role in developing the Celtic Rainforest conservation project, a £7million 7-year EU LIFE-funded partnership led by the Snowdonia National Park Authority. The project protects and celebrates Wales' temperate rainforests by managing invasive species such as *Rhododendron ponticum*, restoring ancient oak woodlands and reintroducing appropriate grazing.

Co-ordinating collaborative conservation action across Scotland's rainforests zone

Plantlife and the Woodland Trust jointly lead the Alliance for Scotland's Rainforest, a dynamic partnership of over twenty organisations committed to restoring and expanding temperate rainforests that span the west coast of Scotland. Our specialist team co-ordinates advocacy, communications, fundraising, habitat management and monitoring.



Improving and embedding skills with land managers

Plantlife has an unrivalled reputation for fostering identification skills and habitat knowledge and inspiring an appreciation of lichens and bryophytes with landowners and managers. Building on this, we create opportunities and make connections to showcase best practice rainforest management and encourage discussion between site managers. Plantlife has worked in partnership with The Wildlife Trusts, RSPB, the Woodland Trust, National Trust, National Park Authorities, Natural England, National Resources Wales, NatureScot, National Trust for Scotland and many others to improve temperate rainforest stewardship.

What needs to happen now?

From urging governments to better prioritise protection for rainforests to engaging local communities, we fight for rainforests because their health is fundamental to tackling the twin climate and biodiversity emergencies. Based on our extensive experience in this special habitat we propose a multi-pronged plan to revitalise rainforests for future generations:

Practical action

- Support rainforest site managers with advice and demonstrations of good practice to tackle threats
- Develop and implement *Rainforest Species Recovery Plans*
- Prioritise rainforest *Important Plant Areas* for landscape-scale recovery.

Science

- Use rainforest assessment methods to understand the state of Britain's rainforests
- Research the ecosystem service and natural capital value of rainforests
- Maintain online resources to aid understanding and practical action.

Advocacy

- Form rainforest alliances to amplify and coordinate action
- Protect remaining rainforest sites and species through national strategy, policy and legislation
- Dedicate rainforest finance packages from public and private funding sources to support targeted action.

Learning & engagement

- Provide training to develop professional knowledge and skills in rainforest management
- Offer opportunities for everyone to experience and learn about rainforest lichens, bryophytes, ferns, fungi and other wildlife
- Improve access and cultural connections to rainforest for local communities, the public and decision makers.



Britain's rainforest is home to the pearl-bordered fritillary butterfly, now one of our most-threatened species, having declined by **95% in the last 40 years.**

The rainforest is especially important for songbirds such as wood warbler, pied flycatcher and redstart whose populations have declined due to ancient woodlands being cleared elsewhere for agriculture.



Plantlife

Plantlife is the international conservation charity working to secure a world rich in wild plants and fungi. It is funded by donations from its members and supporters, through grants and charitable trusts and through its pioneering land management advice and projects www.plantlife.org.uk

For further information about Plantlife's work to protect and restore temperate rainforests and how we can support you please contact: enquiries@plantlife.org.uk

