

### **Foreword**



Britain's temperate rainforests are among the rarest and most biodiverse habitats on Earth - yet they now cover less than 1% of the British Isles. Their decline mirrors the broader story of nature loss and climate disruption. But today, we are writing a new chapter.

Through the visionary partnership between Aviva and The Wildlife Trusts, we are not only restoring these magical woodlands - we are reimagining how nature, climate and community can thrive together. This is part of a 100-year journey to reconnect fragmented landscapes, revive ecosystems and build resilience for generations to come.

Across the British Isles, new rainforest sites are taking root. These are places where carbon will be captured, floods will be mitigated and wildlife will return. But they are also places where people will reconnect with nature - through volunteering, green jobs and education.

This is more than restoration. It's regeneration. It's hope. And it's happening now.

#### **Rob Stoneman**

Director of Landscape Recovery, The Wildlife Trusts







2023

Temperate Rainforest Restoration Programme

**Timeline** 





## Site acquisitions

The total area of land for rainforest expansion in the programme has extended to 665 hectares, with an additional 1443 hectares of other habitats including peatlands, species rich grasslands, heathlands and existing woodlands.

Whilst rainforest creation is the primary goal, the sites being acquired often have other features and areas that are unsuitable for tree planting. This programme is therefore allowing the protection and restoration of a whole host of other habitats as well as temperate rainforest. In addition to the nine live sites there is a pipeline of future sites in development.

#### Six new acquisitions were made this period;

- **Glion Darragh**, the second site on the Isle of Man includes one of a very few remaining fragments of temperate rainforest left on the island.
- **Trellwyn Fach** in Pembrokeshire South Wales, which has an interesting archaeological feature in a ruined farmhouse complete with water wheel.
- Skiddaw in Cumbria (see spotlight on pages 10 and 11)
- **Coed Pentwd** also in Pembrokeshire, forms an extension of the Wildlife Trust's existing flagship Teifi Marshes nature reserve providing fantastic access and engagement opportunities whilst also buffering important wetland habitats.
- Glen Auldyn on the Isle of Man, with one edge bordering the famous TT motor
  racing course so that as the trees grow, the landscape of that course will begin to
  change.
- **Park Gill** in the Yorkshire Dales. Old maps show there was a woodland there once called Park Gill wood but now only a few scattered trees remain.

The programme expanded, with Montgomeryshire, Radnorshire and Somerset Wildlife Trusts all joining, bringing the total number of Wildlife Trusts involved to 12 out of a potential 14.

Note: figures subject to change, accurate at the time of writing



#### SPOTLIGHT ON

### **Skiddaw**

Skiddaw is currently the programme's largest acquisition to date. An iconic peak in the Lake District, popular with walkers, is now protected forever. The site has not been farmed for several years so this programme will see a return of people working the land for the purpose of nature restoration and visitor enjoyment.

Skiddaw Forest covers 3,000 acres of upland between Skiddaw and Great Calva and of this total, 620 acres of precious lost temperate rainforest will be restored. Several other habitats will be recovered at the same time; scrub, woodland, heather moorland and peatbogs are each vital for nature but are also important stores of carbon. Not only will existing public access to this popular fell be maintained but new signage, activities and ways to get involved will renew people's connection to this site so that it becomes a national flagship for nature recovery.



An additional £1.25 million was needed to secure this site. A public appeal received more than 4000 individual donations and reached its target in only six weeks!





SPOTLIGHT ON

# South and West Wales

"The Aviva temperate rainforest project has set a real vision for the Wildlife Trust of South and West Wales to establish and expand this habitat in North Pembrokeshire. Having already acquired two sites, Trellwyn Fach (146 acres) and Coed Pentwd (60 acres) we are already on our way to creating better ecological resilience in this area through the planting of woodland on what was previously improved grassland. This also increases the area of land under our ownership and management, ensuring that these sites are protected for future generations.

Local communities to these sites are keen to be involved and are supportive of the Wildlife Trust of South and West Wales' plans which has been most encouraging. The establishment of these temperate rainforests will take time, yet it is pleasing to know the vision is shared by locals and visitors to Pembrokeshire. Future plans involve interpreting the site's historical interest and running events to engage with local communities, raising awareness of temperate rainforests in Pembrokeshire and the UK."

Nathan Walton
Reserves Manager for Pembrokeshire and Ceredigion,
Wildlife Trust of South & West Wales



#### SPOTLIGHT ON

### Devon

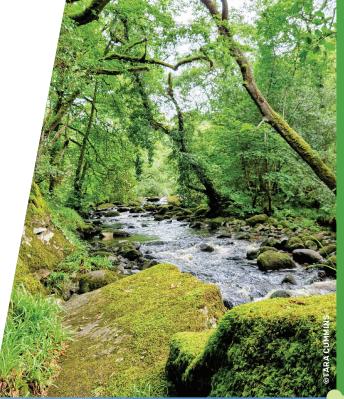
"We live about a mile away, just over the hill, and we drive past every day and saw the tree guards going up so researched it to see what was happening.

We're very interested in wildlife and get a little bit sad about the lack of wildlife around, so we feel that this is a really positive step to take to come and help today, and hopefully over the next few years we can watch the trees grow and help at more of these volunteer days."

Sarah Kent and her daughter Maddy (age 11)
Volunteer, for Devon Wildlife Trust

"I've been volunteering with Devon Wildlife Trust for the past 13 years, today we're planting trees and it's a really good atmosphere. We're going to be creating this temperate rainforest which is a rare habitat nationally and, in fact, internationally, so it should really, really improve the quality of wildlife in Devon and I'd love to come back in 200 years and be able to see what it's like, but sadly, that ain't gonna happen!"

Barry Henwood Volunteer, Devon Wildlife Trust





#### SPOTLIGHT ON

### Isle of Man

"Every native tree counts when you live in one of the least wooded countries on the planet. Just two centuries ago our little island nation had been completely denuded, with over 99.5% of our original temperate rainforest cleared. Today, just 9% of our island is woodland, and most of that is non-native commercial conifers. This nursery will play a vital role in changing that."

David Bellamy
Head of Conservation, Manx Wildlife Trust

"It's incredibly exciting being part of something this big. I feel so grateful to be able to set the ground conditions for nature recovery while providing benefits for centuries to come."

Alex Ponko
Manx Wildlife Trust Nursery Manager

"My volunteering experience is enjoyable and full of fun. The nursery manager is very patient and knowledgeable. I'm very glad to do a little for this beautiful island"



## Site impacts

#### **Creg y Cowin and Bowden Pillars Bryn Ifan Glion Darragh** Trees sourced through Moor Trees, a local bio secure nursery, and Devon Wildlife Trust's own Saving Devon's Treescapes The planting area has been mapped with project nursery which has grown stock Several thousand new native Manx drone footage 'orthophotos', creating a from seeds collected on their own nature trees are now in the ground at both high-resolution record of how the land **Impacts** for reserves. First breeding bird survey looks pre-planting, so we can see the sites, marking the end of the second completed which shows the site is already **Nature** progress of the woodland and support planting season at Creg y Cowin and home to a number of important generalist future mapping and baseline vegetation the first at Glion Darragh. species such as skylarks, ravens and monitoring. sparrowhawks. Plans are coming together with an outdoor learning centre to use Glion North Wales Wildlife Trust youth group The local community has been very Darragh as an educational site for visited the site and worked to clear involved in the site, enjoying planting footpaths. Fungi courses, guided walks, bat young people, teaching bushcraft and days of up to 80 people at a time. This Social walks, wildlife identification courses and ecology. The Isle of Man Woodland Trust has included local MPs and councillors. multiple volunteer days have all been held has a group of 35 volunteers spending **Impacts** More than 7000 trees were planted as a dozens of hours on post planting result which one volunteer described as maintenance across both sites. "inspiring for the future". The community expressed so much interest in site warden roles that there A new tree nursery was created to The large number of community events has has not been a need to externally meant use of community halls, pubs and support the planting at these and **Economic** advertise. Devon Wildlife Trust will hire other businesses locally providing sources future sites, creating two new job roles of income for the local community. In two people, alongside several wildlife and providing a long term source of **Impacts** addition, the numerous surveys have used survey volunteers, providing new trees on island and a potential source local consultants and surveyors. opportunities for people to get involved of income.





with the site and gain new skills.

## Site impacts

Trellwyn Fach

Breeding bird and fungi surveys

have taken place on site.

### Impacts for Nature Social Impacts

An education officer from the Trust has met with the local school to progress engagement activities.

Two new staff members to help

in north Pembrokeshire. This

was funded by the Moondance

to the impact of the rainforest

programme.

with landscape scale connectivity

Foundation but made possible due

Economic Impacts

#### Skiddaw

Contracts have been awarded to consultants carrying out surveys on breeding birds, bryophytes, invertebrates and a new National Vegetation Classification habitats survey of the whole site. Cumbria Wildlife Trust's own tree nursery is well into development.

Cumbria Wildlife Trust's community tree grower is developing plans to get as many people as possible involved in growing trees for Skiddaw, including enlisting the help of charities working with prisons and nursing homes respectively.

Two jobs have been created to help run the project so far; a site manager and a community tree grower.

#### **Coed Pentwd**

Tefi Marshes, home to the Welsh Wildlife Centre is one of the best wetland sites in Wales and home to otters, kingfishers and osprey. Coed Pentwd will be an expansion to this reserve, benefitting the species already present by acting as a buffer to existing habitats.

The new site is nearby to Trellwyn Fach, the Wildlife Trust of South and West Wales' first reserve within the rainforest programme. This will create exciting opportunities for volunteers and schools to work across both sites, and help identify how rainforest development progresses differently.

Improvements are being made to the visitor centre (funded separately) and surrounding infrastructure to make them more accessible and inclusive. This means Coed Pentwd will benefit from an increased level of community engagement and access.



### Media statistics

February 2023 - June 2025



1.25K

total mentions



<u> 10.8Bn</u>

#### total reach

Total reach is a measure of the total number of times a piece of content could have been seen across all forms of public media, this includes the same people viewing it multiple times. It gives a broad impression of the scale of coverage achieved.



£1.18m

total advertising value equivalent



#### Garden inspired by 'magical' Devon landscape heading to Chelsea Flower Show

A garden inspired by Devon's rainforest is set for Chelsea Flower Show. | ITV News West Country

ITV News / 11 Jan



#### Lost rainforest dubbed 'iewel' of UK wildlife could be brought back to life

The 'rare' habitat used to cover a vast expanse of western Britain and Ireland.

Metro / 30 Dec 2023



#### Incredible maps reveal Britain's hidden RAINFORESTS

Britain is one of the few places on Earth where temperate rainforests flourish, but these stunning maps reveal just how little is left of the UK's rare and beautif...

M Daily Mail / 6 Jan 2024



#### Rare rainforests in Devon will be restored after huge charity donation

Today sees one of the biggest ever corporate donations for nature - allowing the UK network of Wildlife Trusts to restore one of the rarest types of rainforest on the...

4 Channel 4 News / 1 Feb 2023



#### Winners announced at the 2025 RHS Chelsea Flower Show

Find out which medals were awarded to this year's cohort of show gardens and designers

The English Garden / 20 May



#### How to grow your own rainforest

Moss, ferns, lichens and native trees that 'are a little bit wonky' are the ingredients needed to set you off in the right direction, according to one of this year's Chelsea...

FT Financial Times / 15 May

### Progress on carbon work

Fundamental to the success of the Aviva Programme is the use of an accredited, internationally recognised carbon accounting scheme. The <u>UK Woodland Carbon Code</u> (WCC) forms the basis of our work and it is through this that we record, register, verify and eventually assign all the sequestered carbon in our rainforest sites to Aviva. RSWT are the project developers and registered with the MK Environmental Registry (S&P Global) in early spring 2023.

Initial validation (by Year 3) and subsequent verification (Year 5, 15, 25 etc) is undertaken by an independent external body. There are currently two accredited institutions in the UK to support this work: the Soil Association and the Organic Farmers and Growers. Quotations have been received from both bodies with costs heavily dependent on the number of registered sites and how they are grouped by date. Once the next group of sites are registered, we will appoint as necessary, to begin the process of validation which will start from September 2025.

Detailed planting plans and carbon calculations have now been completed for all the "live sites". We are working with the site managers at each Wildlife Trust to run several woodland creation scenarios using recommended forest development types from Forest Research models, exploring how we can maximise carbon returns from the planting mixes whilst ensuring the highest possible biodiversity gains. This has involved scenario testing and uplift is proving possible on many sites, whilst some remain more restricted due to their sensitive location or elevation.

The carbon return predicted through the Woodland Carbon Code is highly dependent on the yield models for each species. These are intrinsic to the model and they vary significantly with location. Lower elevation sites, with deeper soils and less extreme climates tend to have higher yields. For example, one species which features in almost every site planting plan (and intrinsic to most temperate rainforests) is oak. In the south-west of England, oak typically has a yield of six or seven (which is close to the maximum value possible of eight). At upland sites in the northwest this figure can be as low as two.

The species present is a key indicator of rainforest on most sites, so is an important constituent of the planting mixes, but the variation in yield significantly affects the carbon predicted. On these more challenging exposed sites, we must make greater use of species such as goat willow or rowan, which may still only achieve a maximum yield of two or four. For context, a fast-growing non-native sitka spruce may achieve yields of over 20 but this provides no ecological uplift. Naturally, the lower elevation sites on better soils attract much higher land prices – especially in south-west England so we are trying to strike a balance between initial purchase price and potential carbon return. In addition, the higher yielding land is often suitable for agriculture and so not where we wish to aim our temperate rainforest recovery.



## Research and Monitoring

The Aviva rainforest research programme is now up and running. After a successful research call for phase one in 2024, with considerable interest from across the academic sector (including submissions from almost all institutions involved in temperate rainforest research) we completed an external peer review in January 2025. We were delighted by the quantity and quality of the project ideas put forward and were able to align them closely to our current evidence needs for rainforest restoration. Six projects have been successful in this grant round, with three substantive main grants and three shorter, pilot projects which have been funded as scholarships. All the projects started in April 2025.

### Three main grants awarded:



Professor John Healey, Bangor University:
Will be working directly with the
Wildlife Trust of South and West Wales
on experimental trials of tree seedling
establishment on challenging upland sites in
Wales. The focus will be on our Aviva funded
site at Trellwyn Fach, near to Fishguard
in Pembrokeshire. In a second strand, this
project will also sample a range of established
rainforest sites of different ages across Wales
to sample the soils and explore the carbon
sequestration potential below ground.



Professor Dominick Spracklen, University of Leeds: Monitoring, mapping and modelling the microclimate of temperate rainforests across the UK. Dominick's team will be undertaking UK wide sampling of the microclimates of a stratified sample of temperate rainforests. Microclimate is key to the development of key rainforest indicator species such as lichens and bryophytes but little is known about the variation in this across the rainforest zone. This project will produce a detailed map of microclimate features which will inform our site acquisition and planting process well into the future. In addition, Dominick will be undertaking hydrological sampling on key rainforest sites to establish the role that they play in reducing flood peaks after rainfall events.



Dr Jim Vafidis, Cardiff University: Working with leading bio-acoustics consultancy Wilder Sensing, Jim and his team will be applying bio-acoustic monitoring to the Welsh rainforest sites. He will be exploring the soundscape of healthy rainforests and those along the restoration timeline to refine sound indicators of biodiversity which we can use to monitor the establishment and health of our new Aviva rainforest sites over time.

### **Aviva Scholars**

We were particularly pleased to award our inaugural Aviva Rainforest Scholarships to three very different but exciting projects. These scholarships were designed as shorter 18-month projects to test and refine innovative approaches, with the potential to deliver useful research outputs quickly. This strand of the research programme is ringfenced for Early Career Researchers (ECRs); one key role being the development of the next generation of rainforest researchers. This is after all, a 100-year restoration programme, and we need the skills to support our aspirations over the coming decades.

#### **Three Aviva Scholars:**



**Dr Ellie Scopes,** from Forest Research will be applying her spatial modelling expertise to our rainforest landscapes and will predict lichen dispersal across the fragmented UK rainforest landscape. This will inform our management interventions at our new sites. as Ellie's work should indicate which lichen species may be able to reach the site from the surroundings unaided and those which will need active translocation to speed up establishment. This work will focus on a regional case study either in the Isle of Man or the south-west of England as the most likely locations to benefit. Added value comes with Ellie's scholarship as this modelling will be extended through additional funding from Defra to Forest Research. Here our Aviva funding has helped to unlock another allied project in the south-west of England.



Dr Karina Marsden, Bangor University. Karina undertakes cutting edge experimental work, measuring the methane and nitrous oxide gas exchange from temperate rainforest cryptograms (plants that reproduce through spores rather than seeds or flowers) to evaluate their contribution to greenhouse gas exchanges. Rainforests are full of cryptograms – the lichens and mosses that clothe the trees and woodland floor are key examples. If cryptograms are enabling the capture and sequestration of these other 'greenhouse gases' the role of rainforests in stabilising climate may be underestimated. This is because these two gases have significant climate impacts, for example, in the first 20 years after emission, methane has 80 times the radiative forcing of carbon dioxide (see Marr et al. 2022), whilst nitrous oxide is 270 times more potent with significant impacts on the ozone layer (UNEP, 2024).



Becca Funnell, our final Aviva Scholar, takes a different format after a successful application to the Welsh Graduate School of Social Sciences for co-funding. We have secured a 3.5 year PhD with Bangor University. Becca will start in October and be jointly supervised by Dr Sophie Wynne-Jones, Dr Neal Hockley, Prof Julia Jones from Bangor University and Dr Ruth Swetnam from RSWT. This project focuses on the social and cultural aspects of afforestation in upland Wales. Becca will be providing an independent analysis of our approach as well as our aspiration to undertake our work in a socially equitable manner.



Our research programme was formally launched in early May 2025 with our first research seminar, where the project leads introduced their projects. We were keen to bring them together at this early stage to foster opportunities to collaborate between institutions. Discussions between the teams have already started to identify links and shared fieldwork sites.

"At Aviva, we recognise that tackling the climate and nature crises requires long-term investment in both ecosystems and evidence. That's why we're proud to support pioneering research into temperate rainforest restoration. This work will not only deepen our understanding of these rare and vital habitats, but also help shape practical solutions that benefit biodiversity, carbon sequestration and communities across the UK."

Stephen Mardon
Aviva's Sustainability and Strategy Lead

The lead role that we are playing in the development of rainforest research activity across the UK was cemented by the publication of The Wildlife Trusts' research manager's article on British rainforests in the journal Geography (Swetnam, 2025). Ruth Swetnam also presented the outputs of a rainforest research prioritisation exercise that she helped to lead alongside other NGO colleagues at the UK's first temperate rainforest conference in Plymouth.

## Advocacy

The extraordinary reach and strong public support for the programme has enabled us to advocate for wider policy shifts that not only support direct delivery of this programme but the expansion of rainforests and native woodlands as a whole.

#### Tree planting regulations in Wales

In Wales the regulatory framework was being interpreted in such a restrictive way that delivery of tree planting (particularly for native woodlands) was becoming almost impossible. This was in spite of national targets for woodland expansion. We were able to bring together other NGOs and woodland planners with Welsh Government and regulators to talk through the issues and find workable solutions. This resulted in rapid turnaround of consents for planting on two of our programme sites and commitment to review the guidance for woodland officers assessing these applications more broadly. This should improve the ability for land managers to increase tree cover and help Welsh Government meet their targets.

#### Research - Working with Defra

The rainforest programme also featured at a number of conferences (sometimes sharing a platform with Aviva). This included the UK's first Temperate Rainforest Conference at Plymouth University where The Wildlife Trusts' presented on our research programme. The Wildlife Trusts programme lead, Stan Smith, and Aviva's sustainability lead, Henrietta Stock, also showcased the partnership at the Nature Finance UK conference.

The Wildlife Trusts have maintained good links to the Defra Trees and Woodlands team throughout the development of our rainforest research programme. Sharing our research strategy early informed their thinking and we were was subsequently asked to provide expert review of a rainforest research project led by Forest Research in the south-west of England. Our prioritisation exercise was directly referenced in that separate research bid and she was able to advocate for rainforest funding

more generally. Our research and carbon lead has since been invited to sit on the Programme Advisory Board providing an applied steer to Defra's subsequent investment in rainforest research. Aviva's early commitment to this evidence base has successfully leveraged nearly £400,000 of additional research funding into this key area over the past year.

Wildlife Trust Wales supported the creation and launch of the first report looking into the state of rainforests in Wales through the Alliance for Wales' Rainforests. The Alliance for Wales' Rainforests is a partnership of organisations dedicated to safeguarding and expanding rainforest habitat in Wales. The State of Wales' rainforests report launched in the Senedd on the 26th November with Welsh politicians including the Deputy First Minister, Huw Irranca-Davies, present and this was covered across the Welsh press. The report establishes an ecological baseline for rainforest condition in Wales, shining a spotlight on the multiple threats that the habitat faces and outlining the actions required to restore Wales' temperate rainforest and create a healthier, better connected and more resilient rainforest landscape.





### Get in touch

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The Wildlife Trusts are a federation made up of 46 Wildlife Trusts and a central charity (the Royal Society of Wildlife Trusts). Each is an independent charity with a shared mission for nature's recovery.

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### Thank you

The programme owes in thanks a great number of individuals and organisations, but in particular, Aviva, without whom it would not exist.

We would also like to thank the other NGOs working on rainforest restoration across the UK including Plantlife, RSPB, the National Trust and Woodland Trust, as well as several regional alliances.

Supported by



Together we will see a return of temperate rainforest to many more parts of the UK and Isle of Man.