



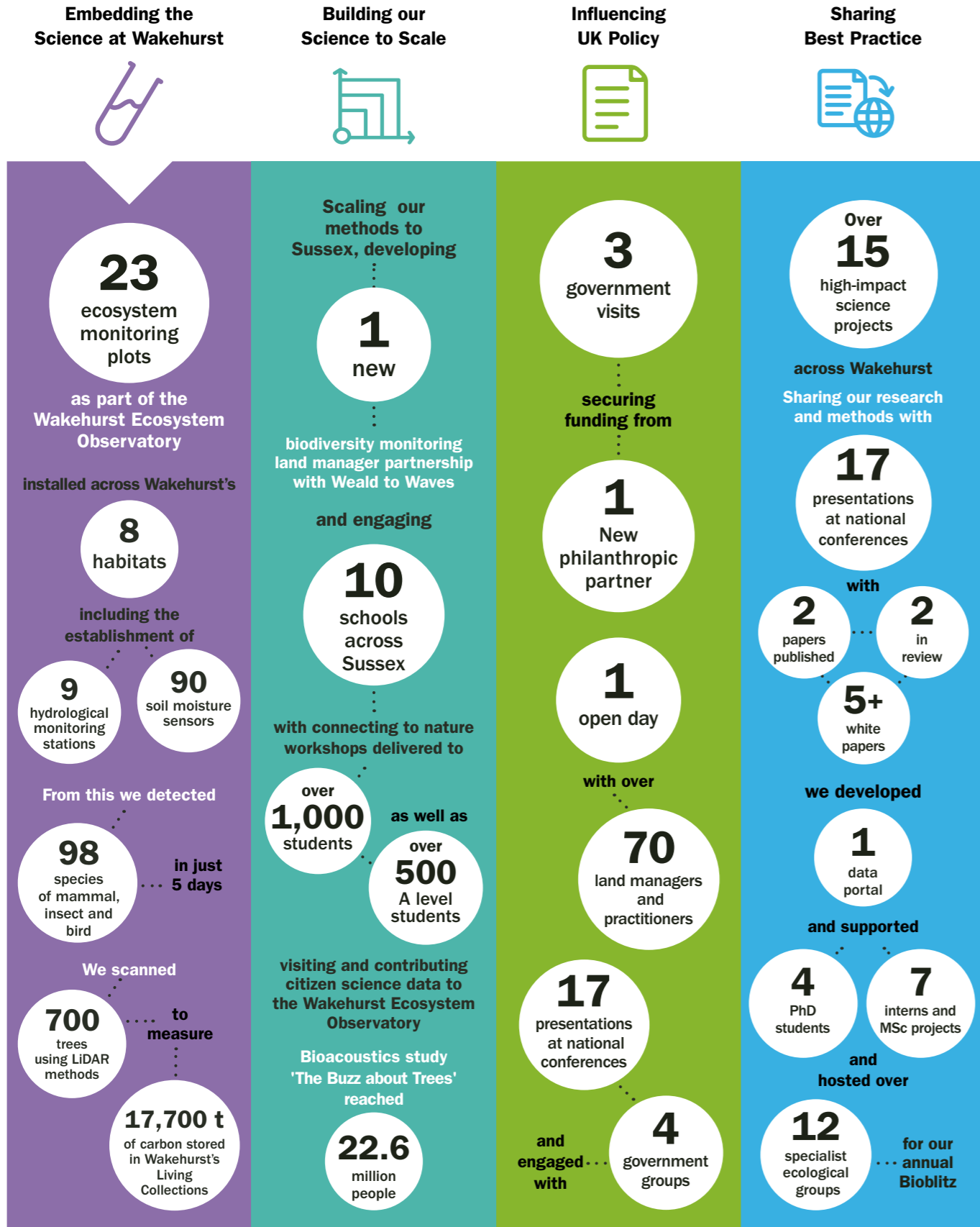
Royal Botanic Gardens

Kew

**Nature Unlocked:
A Year in Review
2024–2025**

Date – January 2026
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Nature Unlocked: A year in review



1. Five years of Nature Unlocked: Science in action for landscape recovery

In 2021, we launched Nature Unlocked, the [Landscape Ecology Programme](#) at Wakehurst. This is now entering a new phase of pioneering research and partnership development, which will lay the groundwork for developing methods and gathering vital data over space and time, using Wakehurst and realising its potential as an environmental science living laboratory.

In September 2024, Nature Unlocked published its strategic focus for the next three years. Two main workstreams were identified:

Embed science at Wakehurst



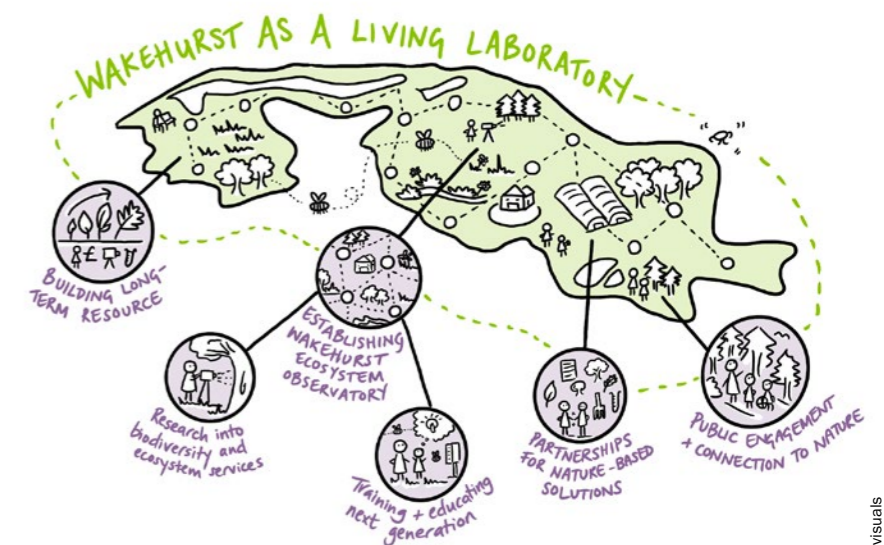
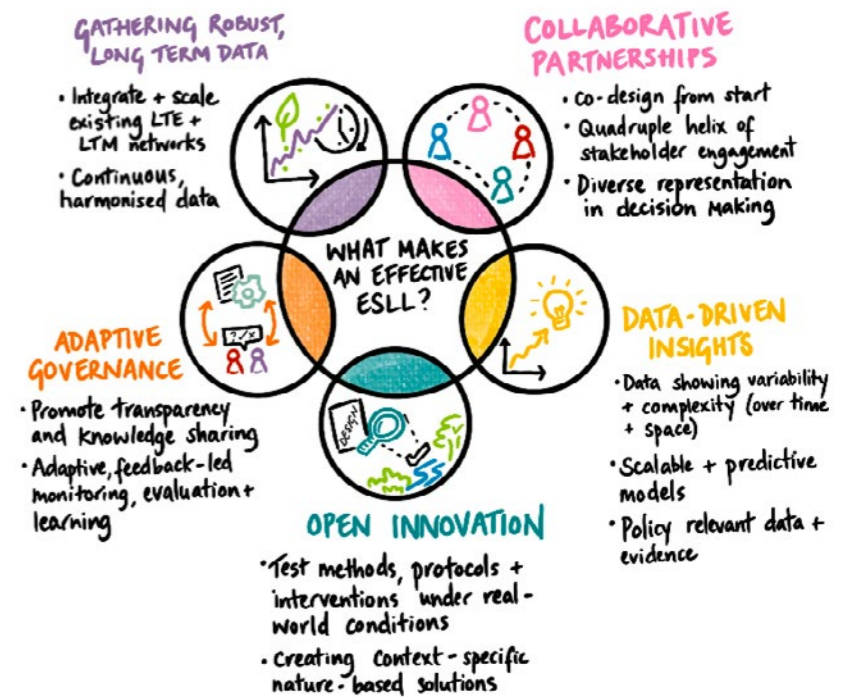
Build resource to scale



At a time of rapid land-use change, Nature Unlocked aims to demonstrate how science on the ground can inform better decisions for the future. By blending research, partnership and practical management, Wakehurst's living laboratory is helping pave the way to more-connected, climate-resilient UK landscapes.

Learn more and explore partnership opportunities at kew.org/wakehurst/nature-unlocked.

Environmental Science Living Laboratories (ESLLs) bring together researchers, policymakers, businesses and communities to co-develop, test and apply practical innovations for complex environmental challenges at a range of scales.



Nature Unlocked's contributions to Wakehurst as a living laboratory

2. A year in numbers

2.1. Embedding science in the Wakehurst landscape

Nature Unlocked has now fully installed the initial monitoring infrastructure and is beginning to invite researchers to use the facility through our new Wakehurst Ecosystem Observatory (WEO) [web page](#), advertising Wakehurst as a space to collaborate and co-develop innovative research on ecosystem function and services.

Our approach de-silos research and takes a whole-ecosystems approach. Long-term environmental monitoring across multiple

UK habitats – including hydrology, pollination ecology, gas flux measurements, and above- and below-ground carbon assessments – help us to better understand how habitats provide vital ecosystem services and how habitats respond to drivers such as climate change.

Establishing the Wakehurst Ecosystem Observatory

We launched the Wakehurst Ecosystem Observatory as a collaborative research facility, producing a video to introduce the Wakehurst habitats. Click the link [here](#).

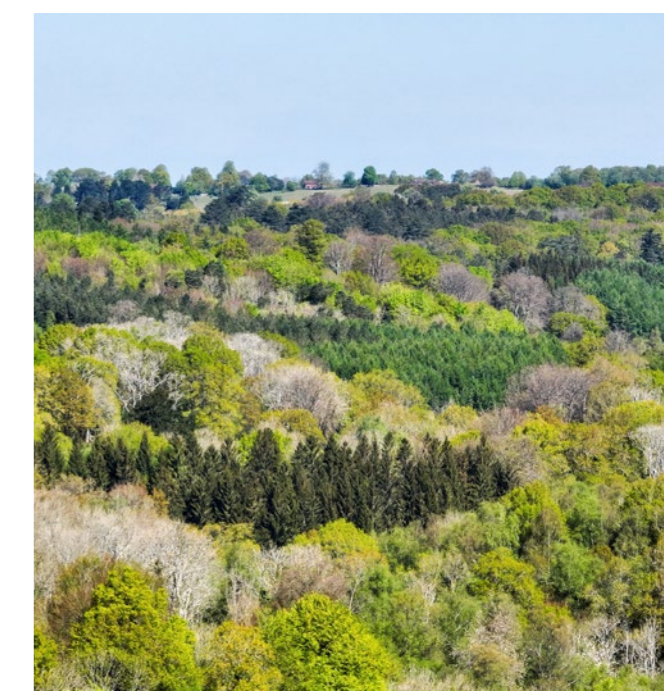
2.2. Building resource to scale

Wakehurst is part of a multifunctional regional landscape, including agricultural, urban and semi-natural ecosystems. Diverse groups – including communities, land managers, industry and local government – have varied interests and challenges related to the environment.

Nature Unlocked is developing strategic partnerships and providing environmental data, methods and protocols to inform nature-positive decision-making at the regional level. This has included:

- **Inviting over 70 practitioners, academics and local government representatives** to Wakehurst for an open day in collaboration with the High Weald National Landscape Partnership. The day explored scientific evidence needs for the region and co-design principles, and helped set future research priorities.
- **Forming a new partnership with the Weald to Waves project**, to establish long-term environmental monitoring plots that are harmonised with WEO along the Weald to Waves 100-mile nature recovery corridor. The partnership may also involve inclusion in the Weald to Waves' 100-mile classroom, to encourage nature connectedness.
- **Contributing expertise and evidence to UK policy**, including the Defra 'Land Use Framework for England', the Local Nature Recovery Strategy public consultation, Defra's BSI Flex standards, and the Defra 'Pollinator Action Plan'.

- **Developing protocols for pollinator-friendly planting** supported by Mount Anvil and partners, and Peabody, with Wakehurst methods informing urban land management.
- **Presenting nature connectedness at the Festival of Science with the University of Sussex**, and forming **local school and community partnerships** on nature connectedness.



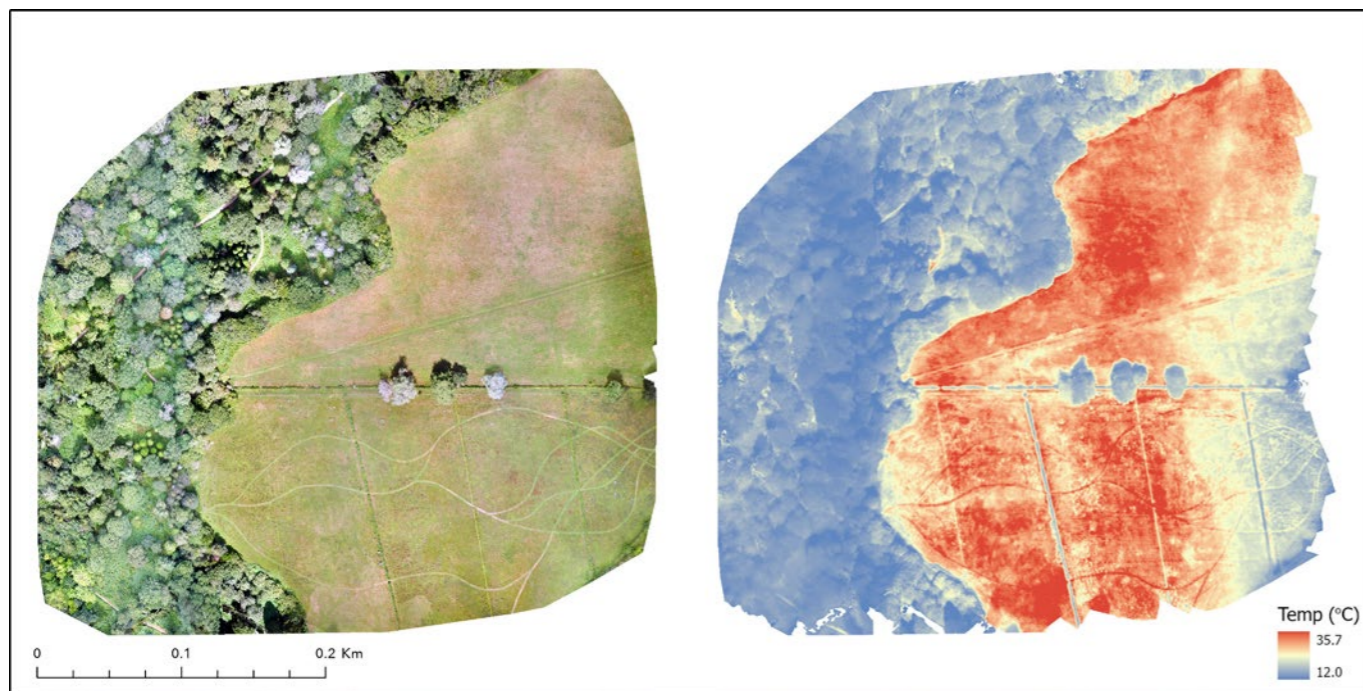


The Wakehurst Ecosystem Observatory spans a remarkable diversity of habitats, reflecting centuries of land use and management. Key landscapes under study include:

- ancient broadleaf woodland
- managed hazel coppice woodland
- conifer plantation
- alder carr (wet woodland)
- woodland affected by ash dieback
- unimproved grassland
- historic deer park
- highly managed formal gardens

Together, these varied habitats provide scientists with a living laboratory to explore how ecosystems function, respond to change, and deliver vital services for people and nature.

A weather station in the Wet Woodland WEO plot



Thermal mapping of Coronation Meadow and surrounding woodland at Wakehurst

2.3. Communicating our work

Communicating evidence in ways that are relevant to end users is key to translating science into impact on the ground and in policy. Nature Unlocked has focused on public (B2C) and wider stakeholder communications (e.g. government, land managers). This has included:

- **245 pieces of Nature Unlocked coverage** in 2024–25 (+211 compared with 2022–23)
 - 276 million broadcast reach
- total **Nature Unlocked press reach**, including national and international coverage: **1.172 billion** (+5757.9% compared with 2022–23)
- development of the [Trees for Bees app](#)
- **3 government visits to Wakehurst**, including Mims Davies MP and Mary Creagh CBE MP, Defra Minister for Nature
- presenting at 17 conferences and events, ranging from Local Nature Recovery Summits to the Defra Soils Seminar and the Nature Connectedness Network Conference

- publishing a **review of best practice** for co-design in environmental monitoring, supporting scaling of long-term monitoring plots to broader landscapes and working successfully with practitioners (e.g. farmers)
- contributions towards a cross-organisational report through the Nature Returns project led by Natural England. Available on access to evidence: hyperlink: <https://publications.naturalengland.org.uk/publication/5924090708492288>

Highlights

- As part of [Trees for Bees](#), press on the [bioacoustics study 'The Buzz about Trees'](#) reached **22.6 million** across broadcast, and **86.3 million** online.
- Most-popular post: sharing Nature Unlocked scientists' stories for International Day of Women and Girls in Science. Read the post [here](#).



Iain Parkinson, Wakehurst's Head of Landscape and Horticulture speaking with Mary Creagh CBE MP, Defra Minister for Nature



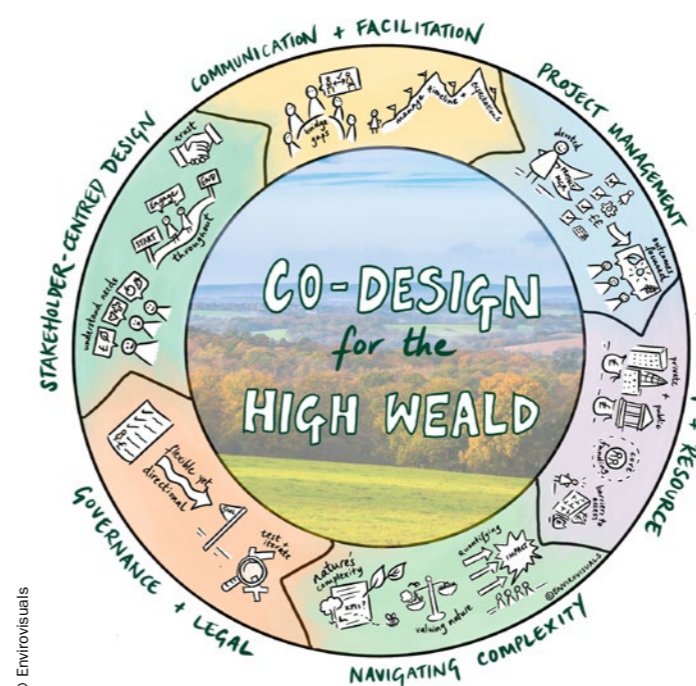
Bioacoustics monitor in tree canopy

3. Next steps for Nature Unlocked

We aim to create long-term environmental monitoring networks at Wakehurst and beyond, as part of a living laboratory framework, generating data and evidence on ecosystem service benefits that will inform land management policy and practice.

Our next steps for 2026 include:

- **Inviting collaborators to use the Wakehurst Ecosystem Observatory:**
 - focusing on building academic partnerships to address evidence and expertise gaps, such as nature connectedness and hydrology
 - continuing the Trees for Bees citizen science project
- **Establishing long-term monitoring plots, co-designed with local partners,** across the Sussex region.
- **Building a prototype environmental science living laboratory,** including a peer-reviewed paper outlining the importance of importance of living laboratories, co-design and a framework for implementation.
- **Linking to national environmental monitoring net-works and promoting harmonised data frameworks:**
 - holding a regional workshop on harmonising data frameworks on ecosystem services across Sussex
 - installing a permanent research-grade weather station, linking Nature Unlocked meteorological data with national Met Office weather station networks
 - partnering with research organisations, such as the UK Centre for Ecology & Hydrology, to develop an interoperable data portal, aiming to make our data 'AI ready'
 - becoming part of national living laboratory or long-term monitoring networks
- **Sharing and communicating evidence to multiple stakeholders:**
 - presenting findings at conferences
 - creating communications tailored to Defra, focused on environmental and climate policy priorities
 - feeding science into the Henry Moore installation at Wakehurst, using themes of nature connectedness
 - a Year of Nature Connectedness at Wakehurst, connecting the public to biodiversity and nature



Co-design best practice for the High Weald, Sussex.



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