

Nature-Based Solutions Services Guide – for Landowners and Land Managers

Introduction

What if nature and natural ecosystems were fully recognised as part of society's critical infrastructure?

We can't get away from the fact that nature is declining. It's an ugly truth but one that we all have to face head on. As the landmark Lawton Report sets out, everything needs to be bigger, better and more joined up. This is the only way natural ecosystems will thrive and the abundance of nature that is now so scarce may recover.

The targets set out by the Environment Act 2021 are stark. They call for at least 30% of our land and sea to be managed in a wildlife-friendly manner by 2030. Whilst the Surrey Wildlife Trust manages over 6,000 ha of land, time is short and it is only by working collaboratively to empower landowners and communities to take positive action for nature across the county, that these targets will be met, thereby achieving a much Wilder Surrey.

It is only by truly understanding the role that nature plays as 'Natural Capital', enabling better appreciation of the urgency to repair the function of natural processes, that tackling issues such as climate change, water and food security, human health and biodiversity loss, is made at all possible by putting 'nature-based solutions' into effect at the scale required.

2 What are Nature-Based Solutions?

Nature-Based Solutions (NBS) involve working with nature and natural processes to protect and restore ecosystems, whilst also addressing challenges such as climate change or flood-risk management.

NBS have the potential to offer huge benefits, both to local people and to local nature and ecosystems, they increase our resilience to future economic or environmental crises and help us to strive towards a net zero carbon future.

NBS can take many forms. In urban environments, rain gardens, permeable pavements, green roofs and walls, and additional tree cover all make a difference. In rural locations, this can take the form of planting a hedge, restoring woodlands and wetlands, or regenerative agriculture. These actions can be undertaken on a large or small scale.

The evolution of Green Finance is helping to put nature at the heart of land management strategies and decisions by increasing the levels of financial flows from both the public, private and not-for-profit sectors into the environment. This means economic and business goals can be realised alongside an uplift in biodiversity.

The Surrey Wildlife Trust NBS team can work with you to develop your land management plans and identify changes that could benefit biodiversity on your site. We can also connect you to other landowners and facilitate conversations around funding and investment.

3 Who do we work with?

We work with a broad range of landowners and land managers within Surrey and work closely with trusted partners to ensure we offer a broad range of experience and expertise. Lasting, long-term relationships are key.

Landowners we work with include private landowners, farmers, smallholders, golf courses, larger estates, schools, community groups, churches, Parish Councils and more. Every landholding is unique, and we build lasting long-term relationships to ensure advice is bespoke and based on individual circumstances.

We've highlighted some examples of the trusted partners we work with below, although there are many more.

The **LandApp** provides an interactive mapping platform to help you map your site and give you a visual guide to management options. This is free-of-charge, and is proving popular through its ease of use.

The **Surrey Wildlife Trust's Ecology Services** consultancy provides robust and pragmatic ecological advice, specialist surveys and Biodiversity Net Gain analysis throughout the county.

Finance Earth provides independent advice and a range of market research, investment, cost modelling, structuring, strategy and fund delivery services around finance tools to deliver and scale solutions for nature.

We also work with other partners to assist with land agency, regularity, legal and tax issues.





finance earth

4 Our services

To 'test the water', we can offer an initial range of services to help you define your vision and land aspirations, and explore how we can help you. These are free of charge and focus on:

Initial face to face/online meeting or call

This initial interaction helps us both to get to know each other better. It enables you to articulate your vision for your land and enables us to start building a picture of what could be possible. After this initial meeting, vou will receive a short report that summarises your landholding, the ideas discussed and high-level recommendations for next steps. This could include a more in-depth review of your land, ecological surveys, and recommendations for management interventions.

Online mapping

We can offer an introductory session using LandApp to show you how to map your site and the potential opportunities with ease.

We can work with you to develop an interactive map of your site, including current features and management recommendations.

We can also set you up with your own account so you can access this at any time.

This can be offered as a stand-alone option or alongside other services.

We can also offer:

Full review of land holding

This is a detailed review of your land and is a follow on from the initial site visit or call. It provides in depth analysis of your land holding and detailed recommendations for habitat enhancement, natural flood management and investment opportunities based on its exact location in the county. You will receive an extensive report which would include detailed recommendations, mapping, and a breakdown of costings/potential income where relevant.

Our Natural Capital services

Natural Capital assessment is a developing area and we can offer services and advice to help you determine opportunities for Biodiversity Net Gain and other markets. These include:

Biodiversity Net Gain

Assessment

Working with our Ecology Services team, you can obtain a full assessment of your landholding which includes:

- A full Baseline evaluation
- Habitat Condition
 Assessment
- Completion of the Defra Biodiversity Metric
- Indicative costings for habitat enhancement
- Support and advice should you wish to pursue BNG unit sales

Other Specific Assessments

We can also provide assessments aimed at specific areas, for example:

- Hedgerow Assessments
- Natural Flood Management Assessments

*Depending on your requirements, some services may incur a charge. We will provide a quote where this is the case.

River Condition

Assessment

A River Condition Assessment (RCA) forms part of your Biodiversity Net Gain Calculations if you are responsible for managing river habitat. The Modular River Physical Habitat (MoRPH) survey assesses river habitats and functions and is the tool of choice to attribute a river condition score within the Defra Biodiversity Metric.

Our additional services

The Surrey Wildlife Trust also hosts our Ecological Planning Advisory Service and Biological Records Centre, and we work in partnership with our Ecology Services Consultancy. Whatever your needs, we can connect you with the right teams to deliver what is right for you.

Ecological Data Search

The Surrey Biodiversity Information Centre (SBIC) Enquiry Service has been established as a service for local authorities. developers, ecological consultancies, educational establishments, and the general public to supply information about the biodiversity of Surrey. This data search will supply a detailed report on designated sites and threatened species recorded within a given radius of your site. For more information, visit www.surreywildlifetrust.org/sbic

Ecological Planning Advice

Our Ecological Planning Advisory Service (EPAS) is comprised of trained ecologists with a detailed understanding of local wildlife and planning policy. They offer professional ecological advice to the planning system through direct consultation with Local Planning Authority case officers. We maintain a neutral stance on development and focus on ensuring the best outcome for wildlife. For more information, visit www.surreywildlifetrust.org/whatwe-do/professionalservices/planning-advice

Ecology Services

Our experienced Ecologists offer a range of services that assess the current condition and potential options for your site. These include preliminary ecological appraisals, species and habitat surveys, Ecological Impact Assessments, Biodiversity Benchmarks, Site Management Plans, Site Condition Assessments, Biodiversity Net Gain Metric Calculations and much more. For more information, visit www.swtecologyservices.org/

*Depending on your requirements, these services will likely incur a charge. We will provide a quote where this is the case.



It may be possible to access funding for certain restoration or intervention works on your land.

This is contingent on meeting the criteria for a given scheme and will not necessarily be available for every landowner. Our team can help you understand what funding you may be eligible for.

Funding may be obtained through schemes such as selling Biodiversity Net Gain units, or through government schemes including Environmental Land Management (ELMS) and Countryside Stewardship (CS).

Please note that we do not offer specific financial advice. Separate expert financial advice should be sought over matters relating to grants and funding options. Advice given is based on the current accepted guidance and government regulations.



6 Testimonials

As owners of a 90-acre family farm, we have been seeking ways to invest in its future while also supporting nature restoration. Surrey Wildlife Trust has been an invaluable resource in guiding us towards a practical and actionable strategy for investment aligned with new markets. Their knowledge, support, and consultancy services have been incredibly helpful, and we would highly recommend them to any landowner looking to plan for the future.' - Tim Hopkin (Norney Farm) At Hampton Estate, we love working with Surrey Wildlife Trust. The team is so helpful, their range of experience and expertise means that we always learn something new and find answers to our questions. It's always a positive conversation when we're talking to the NBS team at SWT.'

- Molly Biddell (Hampton Estate)





River Restoration on the Tillingbourne

The River Tillingbourne stream supports some of the finest riparian habitat in Surrey.

However, much of the channel was modified in past centuries to power a series of mills across the full length of the stream. The channel is now very straight and over-wide in many areas and does not support the natural processes required to maintain the habitats that plants, invertebrates and fish need. Surrey Wildlife Trust has been working on a project with the Tillingbourne fly-fishing community to restore natural processes to the river just upstream of Shalford.

Between October 2019 and October 2022, berms were installed along the channel margins to help create a more natural river course, allowing marginal plants to take hold and creating cover for fish. Deflectors were also pinned into the river to re-meander the channel, and bankside trees were coppiced to enable more light to penetrate.



Case studies

Conservation grazing on Pirbright Ranges

Pirbright Ranges is a wildlife-rich lowland heathland habitat and SSSI.

It is also a 750-hectare live firing range owned by the Ministry of Defence (MoD). There is no public access into the ranges for safety reasons, which makes it impossible to manage the habitat using conventional land management techniques. The solution is to use Red Deer, a native British species that is ideally suited to the heathland, woodland and wetland habitats found on the Ranges.

This pilot project was the first of its kind, looking at Nature-Based Solutions to address the long-term management requirements for the site, as well as providing a sustainable and more natural approach to managing this type of habitat. The deer help to manage the dominance of Scots Pine, Silver Birch and Common Gorse scrub on the heath, as well as creating a diverse structure in the regenerating and maturing heather. As a result, rare threatened species such as the Nightjar are on the increase and rely on this large expanse of heathland to breed.



Case Studies

Biodiversity Net Gain Unit Sale – Manor Farm

Manor Farm is a restored farmland site alongside the River Wey which attracts an abundance of wildlife, currently used as lay-back grazing land for our herd of Belted Galloway cows.

In early 2023, we completed our first Biodiversity Net Gain (BNG) unit sale to Shepperton Studios, for a deal value of c. £1 million. The studios plan to expand their footprint, and Spelthorne Borough required them to provide biodiversity net gain, both on and off site, to compensate for lost habitat. Whilst 10% gain was advised, we are insisting on 20% net gain when our land is used for offsetting, which Shepperton agreed to. Funding was also provided for educational outreach work. The site is only six miles from Shepperton Studios and has further BNG capacity of over 100 units via its conversion to speciesrich meadow.

In order to restore the grassland habitat, the land at Manor Farm will initially undergo carefully-timed hay cutting as well as targeted grazing with Belted Galloway cattle. This will benefit wildflower species that require low-nutrient soils, which could include Wild-thyme, Bird's-Foot-Trefoil and Greater Knapweed. The restored habitat will also support a variety of insects, birds and other species such as voles and Slow Worms.



"Shepperton Studios is incredibly proud to be partnering with the Surrey Wildlife Trust. Our shared commitment to improving local habitats and ensuring young people learn about their environment demonstrates how major development projects can deliver economic and social benefits, while also benefiting the environment around them."

- Matthew Wright, Shepperton Studios' Head of Planning and Technical Development

Case studies

Hedgerow Heritage

Since 1945, hedgerows have been disappearing from the landscape. Across the county, the quality of remaining hedgerows is rapidly deteriorating.

Often offering the only link between other isolated patches of wildlife habitat scattered across the landscape; thick, flora-rich hedgerows provide valuable nesting and foraging opportunities for a huge range of wildlife.

Hedgerow Heritage is an ambitious National Lottery Heritage funded project that aims to inspire and teach young budding ecologists, practical conservationists and the wider local community to restore, renew and create hedgerows in the North Downs and Surrey Hills. The area of focus is the North Downs Biodiversity Opportunity Area (BOA), part of the Surrey Hills AONB.

We have run a range of activities and events as part of the project, including practical hedge-laying sessions and training, Hedgerow Bioblitzes, competitions such as hedge-laying and hedgerow storytelling, and Surrey's first ever Hedgerow Festival. The project began in 2019 and will conclude in 2024.



Our legacy in The North Downs will be 6.5km of new or restored hedgerows, 63km of protected existing hedgerows, an inspired local community and a more diverse and skilled group of hedge-layers acting as stewards to maintain this vital natural heritage feature.

Case Studies

Wishmoor Bottom, Barossa - Valley Mire Restoration

Barossa is a stunning lowland heath with areas of conifer and native deciduous woodland.

It is also an active military training estate, managed by the Trust on behalf of the Ministry of Defence. This valley mire restoration project investigates the feasibility of restoring the mire habitat along the Wishmoor Stream on Barossa, and will run from early 2022 to early 2024. A series of surveys including ecological surveys, LiDAR and soil core sampling have been carried out on site with the aim of establishing a hydrological baseline with soil characteristics of the valley mire system and surrounding habitat.

The results of the surveys will help us to look at strategic areas for Natural Flood Management interventions and will also help us gather important ecological data looking at the potential benefits and impacts of such interventions. Recommendations following the invertebrate surveys include further re-wetting of the valley mire, scrub and individual tree management as well as adaptations to existing grazing regimes. All management and potential valley mire/hydrological restoration will be considered in more detail by the end of the project.



Glossary

Biodiversity Net Gain (BNG) – From late 2023, all planning permissions granted in England will be legally required to deliver a minimum of 10% biodiversity net gain. If BNG cannot be achieved on the development site, there are opportunities to deliver BNG off-site through a credits system.

Environment Act 2021 – The UK's new legal framework for environmental protection.

Green Finance – Structured financial activity (usually loans or investments) that support actions which benefit the environment.

Lawton Report – This report was published in 2010 by Sir John Lawton. Its aim was to review England's nature conservation strategy and assess whether this is capable of adapting to the challenges of a changing climate (the report found summarily that it wasn't).

Natural Capital – Natural Capital puts a value on Earth's natural assets, such as soil, air, water and living things, in their role of providing natural services such as generating renewable energy and providing public water supplies etc.

Natural Ecosystem – Ecosystems that are naturally occurring and exist without any intervention from humans. They are self-sufficient systems where organisms freely interact with their environment.

Natural Flood Management (NFM) - Natural Flood Management aims to restore the natural functions of rivers and water courses through techniques including creating storage ponds and installing leaky dams to help reduce flood risk for communities downstream.

Regenerative Agriculture – Sustainable farming and grazing practices that deliver high quality food production while also restoring soil health and biodiversity.

Contact Us

If you would like to find out more about our services or if you have any queries, please contact us at:



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