

# East Sussex and Brighton & Hove Local Nature Recovery Strategy

**Statement of Biodiversity Priorities**  
**Part 1 – Context & Description of Strategy Area**

Draft for consultation



#### Cover image

 **Ashdown Forest**  
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# Section 1.

## Introduction

 Starling murmuration, Eastbourne Pier  
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SussexNatureRecovery.org.uk



# Foreword

To be written by an elected member after the public consultation.



# Overview

**This Local Nature Recovery Strategy sets out the main principles and priorities for nature recovery in East Sussex and Brighton & Hove and the actions needed to deliver them.**

**East Sussex and Brighton & Hove is blessed with nationally and internationally important biodiversity.** Nature shapes our iconic landscapes; nearly two thirds of the area is designated for its natural beauty. Our ecosystems support our health and wellbeing and provide us with many benefits and services such as carbon storage, clean water, flood risk reduction and pollination. Nature also underpins vital sectors within our economy such as farming and tourism.

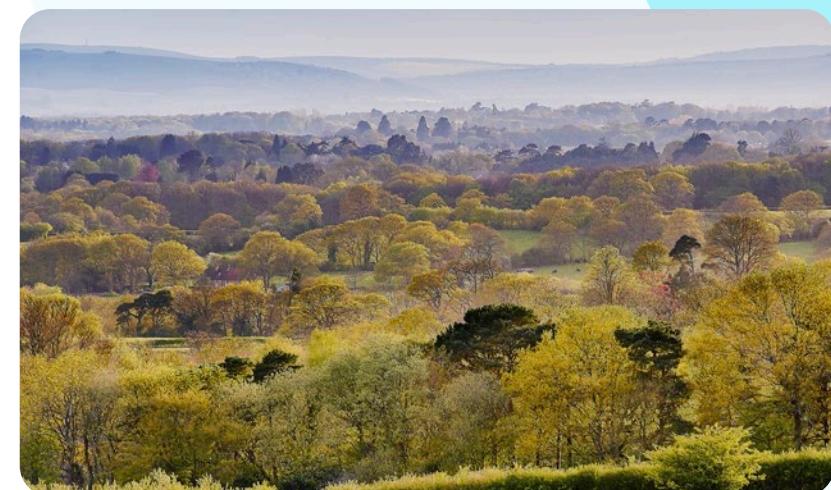
**But nature is at risk.** Many of our important sites are under pressure from impacts such as development, disturbance and pollution. Most are too small and fragmented to function as they should. Some of our most precious habitats have been lost and degraded and many of our species are at risk of extinction. The quality of our water systems has been compromised while water scarcity is a significant concern for the future. Climate change impacts such as drought, flooding, storms and erosion further threaten the health of our habitats and species, and in turn, our own.

**Addressing these systemic challenges requires us to think big.** We need to hold on to what we have and make it better, enhancing our important sites and habitats and making them more resilient into the future. We need to support this through the creation of more nature-rich areas, forming a network of 'bigger, better, more and joined-up' habitats and sites. We need to use nature more effectively as part of the solution to challenges such as flood risk, poor water quality and increasing temperatures in our towns and cities.

**Across East Sussex and Brighton & Hove there is a lot of incredible work already happening for nature.** Bold, new initiatives are gaining traction and inspiring action; dedicated efforts continue to conserve and nurture our natural environments over the long term; partnerships are bringing councils, landowners, community groups and environment experts together; community action is thriving with individuals and groups making a difference at the hyper local level.

To bring about the type of change needed to move from 'nature's decline' to 'nature's recovery', **we need to build on this and move into the next 10 years, sustaining and growing the level of action for nature and harnessing it to deliver a collective, focused and shared ambition for its recovery.**

 The High Weald National Landscape, an Area of Outstanding Natural Beauty, covers 49% of East Sussex.  
© iStock.com/Matthew J Thomas



The role of the Local Nature Recovery Strategy (LNRS) is to guide this recovery.

This LNRS starts by providing, for the first time:

- a **comprehensive description** and in-depth catalogue of our most important habitats and species;
- a summary of the wider benefits and services nature provides and the main pressures and threats;
- **24 habitat priorities** and **160 priority species** with **detailed measures (or actions) that can support their recovery**, building on **seven key principles**;
- a **Local Habitat Map** showing where action can best deliver **the greatest benefit** (though there are many actions that can be taken, regardless of location, that will benefit nature even if not mapped).

 Crowborough Wildlife Group volunteers clearing scrub from damp meadows on land owned by Servomex.  
© Paul Gaterell



**This LNRS brings together expertise and knowledge of existing projects and initiatives for nature** that are already underway and acts as an ‘umbrella’ for them – providing a wider context and a mechanism through which to coordinate and direct action at all scales. In an era of scarce funds and resources for nature, it shows us where we should be strategic in focusing our effort and why. For those working at a more localised level, its measures are designed to be as practical and as relevant to local conditions as possible.

**Nearly a thousand people across East Sussex and Brighton & Hove were involved in the development of this LNRS**, from leading species experts and large estate owners, to residents and representatives from community groups and parish councils. Locally led, and developed through a collaborative process, it sets out a consensus about how and where our actions will deliver the most benefit for nature and people.

**But this LNRS cannot deliver nature’s recovery on its own and is not intended to do so.** It is limited in its legal scope, focusing primarily on where and how we can create and enhance habitats or support species. It cannot confer added protections to land or tackle pressures on nature that are covered by other regulatory mechanisms, such as pollution or development. It cannot force anyone to deliver what it sets out or includes on its maps and it does not come with direct sources of government funding for implementation on the ground.

What it does though, is for the first time, provide all those interested in nature’s recovery in East Sussex and Brighton & Hove with **a single set of priorities and actions for nature’s recovery to rally behind, seek funding for and work together to deliver on the ground**. With its statutory footing and collaborative, participative approach, it provides confidence for funders, investors, landowners and delivery partnerships on the actions and locations that will deliver the greatest benefits for nature.

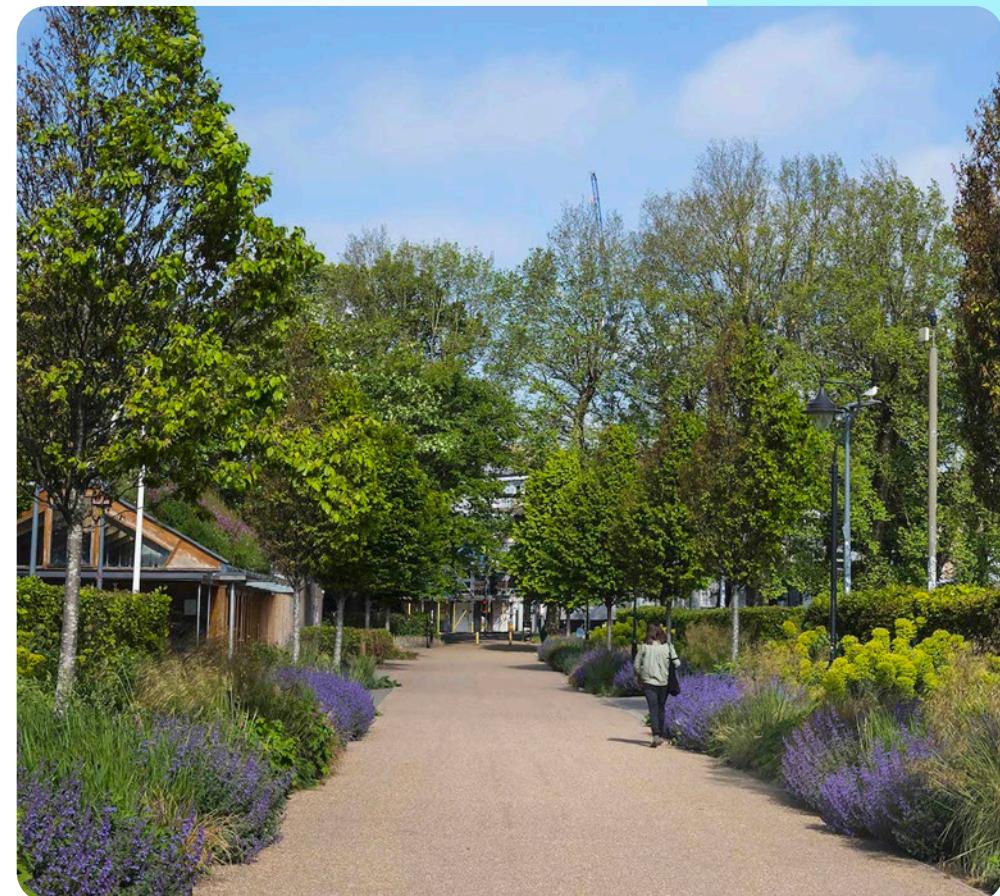


**Formally, it has an important role to play as a new source of evidence for local planning and local government decision-making processes.** It also helps to direct new habitat creation from Biodiversity Net Gain to where this would be most beneficial in terms of restoring, expanding, buffering and connecting existing habitats. More informally, it provides a guide for any interested organisation, community group or individual (at whatever scale) to understand how their actions could make an important contribution to a wider county-wide ambition for nature. It specifically highlights the importance of urban nature and seeks to encourage actions which individuals, local authorities and businesses can take to bring more nature into our villages, towns and cities.

**This is the first LNRS to be prepared for East Sussex and Brighton & Hove** and has been prepared alongside the LNRS for West Sussex to reflect the long-standing 'Sussex-wide' approach to nature and the common stakeholders that work across this wider area. It is part of a suite of 48 LNRSs across the country, they are intended to guide action for nature over the short to medium term (8-10 years). But for East Sussex and Brighton & Hove, this LNRS also provides us with an important benchmark for our 'state of nature' against which we can measure future trends and the effectiveness of our actions. Whilst not a delivery plan, it does provide a sound basis for one and that will be our next step.

**We all can and need to do more for nature. This Local Nature Recovery Strategy helps us do that. It sets out the journey for realising the recovery of nature across East Sussex and Brighton & Hove and the wider benefits this will provide for people, society and our economy.**

► The Level, a large, restored urban park in central Brighton.  
© The Living Coast



# Section 2.

## About Local Nature Recovery Strategies

 Torpid dormouse in nest  
© Kate Ryland



## 2.1 Nature needs our help

Wildlife across the world is in crisis. Between 1970 and 2020, populations of amphibians, birds, fish, mammals and reptiles plummeted by 73% on average (2024 WWF Living Planet Index). Over the same time frame, it is estimated that we have lost 50% or more of our insects.

When species populations fall, whole ecosystems can weaken and even collapse. This not only impacts the species within that system, but the benefits these ecosystems<sup>◊</sup> provide to people which we often take for granted, such as clean air and water, pollination<sup>◊</sup>, carbon storage<sup>◊</sup> and the positive impact that the natural environment has on our health and wellbeing<sup>◊</sup>.

In the UK, trends in our wildlife have been measured by the State of Nature Partnership. Their reports provide a comprehensive review of our biodiversity<sup>◊</sup>.

### Why is nature declining?

Space for nature is being squeezed or is deteriorating across the world.

The habitats<sup>◊</sup> on which species depend are increasingly:

- **Lost** – replaced by urbanisation, industrial farming or infrastructure development.
- **In poor condition** – pollution, climate change, invasive species<sup>◊</sup>, more intensive agriculture<sup>◊</sup> and a decline in traditional land management practices<sup>◊</sup> are some of the pressures on habitats, reducing their health and their ability to support wildlife.
- **Fragmented**<sup>◊</sup> – pockets of habitats become smaller and more isolated from each other, so are less able to cope with pressures. Fragmentation also means many species<sup>◊</sup> can no longer move safely across the landscape, which limits their ability to find food, breeding partners, shelter and escape from predators.

### The 2023 State of Nature report revealed:

- **1 in 6 UK species is at risk of extinction**
- **A 55% decline in farm birds since monitoring began in the 1970s**
- **More than half of our plants have decreased their distribution<sup>◊</sup>**
- **The UK is one of the most nature depleted countries in the world**

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Words underlined in purple with a diamond symbol <sup>◊</sup> are defined in the Glossary



## 2.2 Some of the habitats and species in decline in East Sussex and Brighton & Hove

### Habitats



#### Chalk grassland

80% of the UK's chalk grassland has been lost since WWII making South Downs chalk grassland one of the rarest habitats in the country ([South Downs National Park](#)).



#### Elm tree cover

Brighton & Hove's National Elm Collection of 17,000 trees is threatened by Dutch elm disease with 850 trees felled in 2023 alone ([Brighton & Hove City Council](#)).



#### Hedgerow

Hundreds of miles lost since WWII ([Hedgerows – British Habitats – Woodland Trust](#)).



#### Vegetated shingle

Virtually the whole of the Crumbles – a 160ha shingle foreland at Eastbourne, and one of only six sites over 100ha in the UK – has been lost to development<sup>1</sup> ([Coastal vegetated shingle – Buglife](#)).

### Species



#### Corn bunting

82% decline since the 1960s and considered lost in neighbouring Surrey ([Sussex Ornithological Society](#)).



#### Spiked rampion

An endangered and legally protected plant. Only found at eight sites in the UK, all in East Sussex ([The Species | The Species Recovery Trust | spiked rampion](#)). 85% of its population is on a single site.



#### Grayling

Single population in East Sussex is the only one on chalk in the UK. In imminent danger of extinction.



#### Hedgehog

Vulnerable to extinction – between 30-75% of UK hedgehogs lost since 1950s ([Hedgehogs – People's Trust for Endangered Species](#)).

<sup>1</sup> Doody, P. and R. Randall, 2003. *A Guide to the Management and Restoration of Coastal Vegetated Shingle*. Natural England.

 **Habitats (top to bottom):** Chalk habitat © D Alcroft; Elm tree © iStock.com/Ban Yue Rong; Hedgerow © D Alcroft; Vegetated shingle © Ben Rainbow  
**Species (top to bottom):** Corn bunting © iStock.com/Wirestock; Spiked rampion © Kate Cole; Grayling © Derek Middleton/Sussex Wildlife Trust; Hedgehog © Darin Smith



## 2.3 What we need to do

We need to make our natural environment healthier, more plentiful, and more resilient. That means creating more of the habitats that support our species, and making existing habitats bigger, better, and more connected to each other.

Our land has multiple uses. It supports nature and the wider benefits that healthy ecosystems provide, such as improved air and water quality, carbon storage, temperature regulation and flood protection. It is also where we grow our food, where we live and work; it provides space for our recreation and is vital to our economy.

All of these things are important, so we need to work more collaboratively and with better coordination at the local level to identify where we can work with nature, and where action for nature can be delivered that is both achievable and will have most impact.

**Local Nature Recovery Strategies are a new way to help us do that.**



 Poppies, South Downs  
© Ben Rainbow



## 2.4 What are Local Nature Recovery Strategies?

The Environment Act 2021<sup>6</sup> contains plans and policies for improving our natural environment. It includes the production of Local Nature Recovery Strategies<sup>6</sup>, a new initiative to drive more collaborative action for nature.

48 strategies are being produced to cover the whole of England, each led by a Responsible Authority<sup>6</sup> chosen by the Secretary of State.

**East Sussex County Council was appointed to produce the first Local Nature Recovery Strategy (LNRS) to cover the area of East Sussex and Brighton & Hove.**



 © iStock.com/Paul Bradbury

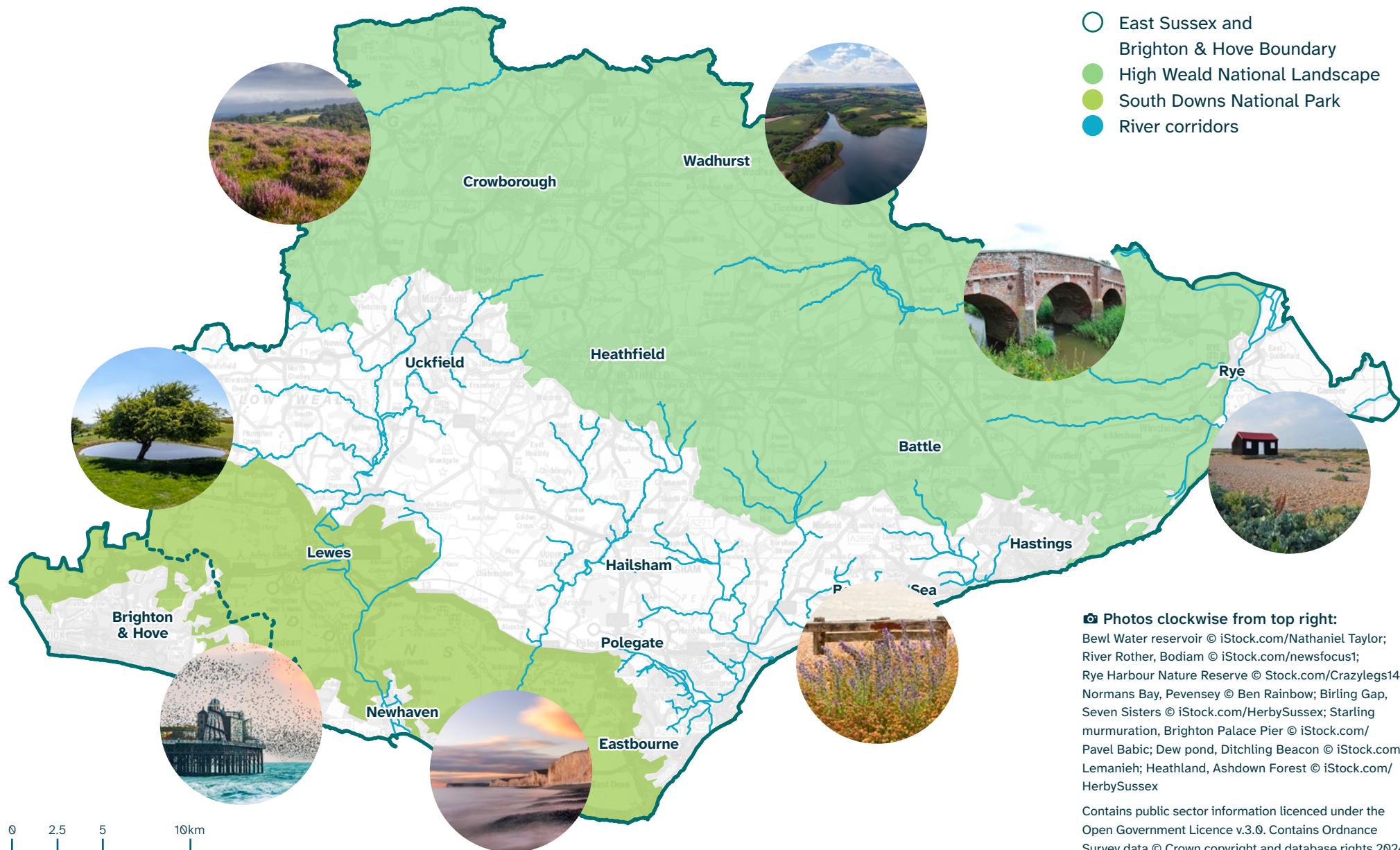
## 2.5 Our LNRS area

The East Sussex and Brighton & Hove LNRS area covers about 1809.2km<sup>2</sup> and lies along the south coast of England. It is bordered by West Sussex to the west, Kent to the east, and Surrey to the north, with the English Channel to the south. The largest settlements are concentrated along the coast, including Brighton & Hove, Eastbourne and Hastings. The centre and north of the LNRS area are largely rural, with Hailsham being the largest inland settlement. In terms of governance, there are two upper tier authorities covering the area: East Sussex County Council and Brighton & Hove City Council, with East Sussex being further divided into three districts (Rother, Wealden and Lewes) and two boroughs (Hastings and Eastbourne).

Nearly two thirds of the LNRS area is designated for its natural beauty: 49% lies within the High Weald National Landscape<sup>6</sup>, and nearly 16% is within the South Downs National Park. Many of our landscapes are considered iconic and are internationally recognised - Beachy Head is the tallest chalk sea cliff in Britain at 162m. Two main rivers, the Ouse and the Cuckmere, drain from north to south into the English Channel, as well as the smaller Brede and eastern Rother rivers which drain out at Rye Harbour.



## Map 1: East Sussex and Brighton & Hove LNRS area



## 2.6 What LNRSs aim to do

Local Nature Recovery Strategies are designed to be **evidence-based, locally led and collaborative**. They follow statutory guidance and meet Regulations.

Each strategy describes the area's current biodiversity in terms of the habitats and species found in our terrestrial and coastal environments. They highlight the pressures on biodiversity in the area, and the opportunities<sup>◊</sup> and priorities<sup>◊</sup> for enhancing it.

**Crucially, they also set out how and where action can be taken across the LNRS area that will make a particular contribution to achieving the priorities.**

By doing so, Local Nature Recovery Strategies will:

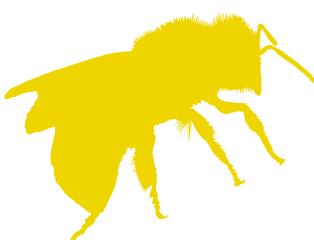
- Focus future effort and funding into local priorities for nature, including Biodiversity Net Gain (BNG)<sup>◊</sup>;
- Aid collaboration by enabling public, private and voluntary sectors to work more effectively together;
- Guide local planning, informing public authorities' strengthened duty to conserve and enhance biodiversity;
- Identify opportunities for 'nature-based solutions'<sup>◊</sup> to wider environmental problems like flooding, climate change or poor water quality;
- Improve targeting – ensuring the right things are done in the areas where they will be most effective.

© Martin Hole shares actions for nature taken by Pevensey Farmers Cluster in the internationally important Pevensey Levels. © D Alcroft

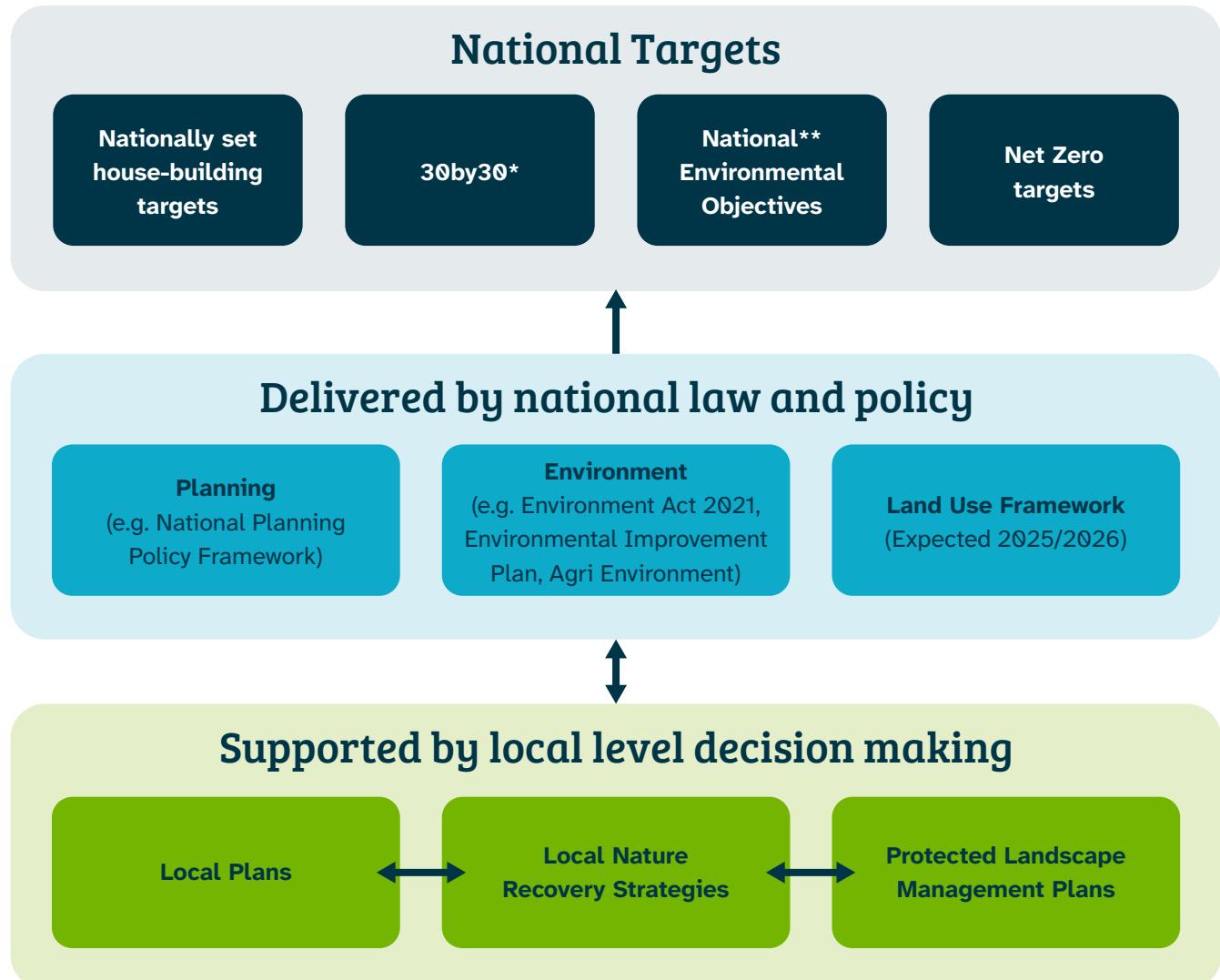


## 2.7 The scope of Local Nature Recovery Strategies

This strategy sits alongside a wider set of policies and strategies that cover the environment, but doesn't override them or any other existing plans, policies or best practice. Nor does it change any protections that are already in place for nature, nationally or locally.



**Figure 1. How LNRS fits within the existing policy framework**



\*The UK has committed to protect 30% of land and sea for nature by 2030 (30by30), to support the global 30by30 target agreed at the UN Biodiversity Summit (COP15) in 2022 (source [gov.uk](https://www.gov.uk)).

\*\* How this LNRS helps to deliver National Environmental objectives is set out in Part 4.

## It is important to understand what an LNRS can and cannot do.

While every effort to recover nature is necessary to restore our environment, Local Nature Recovery Strategies seek to identify *which* efforts will have the greatest impact and *where* they are best concentrated.

They do not and cannot cover everything that is required to recover nature, so if areas, species and aspects are not included in this strategy, that does not mean that these things are not important or should not be undertaken. This LNRS does not prevent nature conservation work from taking place in areas that are not prioritised by it.

The seas of East Sussex and Brighton & Hove are just as diverse and species-rich as habitats on land, but fall outside the scope of the LNRS. We recognise their vital importance and the urgent need to support their recovery. Our opportunities, priorities and measures<sup>4</sup> have been developed recognising that activity on land can impact marine habitats. We are working closely with Sussex Bay who are developing a Seascape Restoration Strategy for our marine and coastal waters, which will complement this LNRS.



 Farmland in the Ouse catchment which has been supported by Wilder Ouse project. © D Alcroft

### Some key aspects of Local Nature Recovery Strategies

- They *cannot* dictate how land will be used and place no obligations on landowners or any other organisation to carry out actions.
- Areas that are mapped in the LNRS for habitat creation or improvement do not prevent other legitimate land uses, do not place new restrictions on developing land, and do not identify areas to be given legal protection.
- While they highlight the pressures such as pollution and housing development are putting on our natural environment and wildlife, they cannot tackle the sources of these pressures if they are covered by other frameworks.

It is also important to note that the preparation of this Local Nature Recovery Strategy has been limited by the data, resources and capacity available to East Sussex County Council as the Responsible Authority.



## 2.8 Their legal implications

Local Nature Recovery Strategies *do* have legal implications within the planning system.

The Environment Act establishes the following key mechanisms to support their implementation:

### Mandatory Biodiversity Net Gain (BNG) for developments

Since April 2024, all new developments must show a 10% uplift in nature. This aims to ensure biodiversity is in a measurably better state than before the development took place.

Developers must first assess if they can create biodiversity on-site, within the area of development itself, but if they cannot achieve all of their BNG there, they can deliver some or all of the BNG off-site. Local Nature Recovery Strategies play a key role in BNG by encouraging off-site BNG is delivered in areas most beneficial for nature recovery.



© The Iford Biodiversity Project

### A Strengthened Biodiversity Duty<sup>◊</sup> on Public Authorities

The Environment Act strengthens a duty that local planning authorities already have to consider what they can do to conserve and enhance biodiversity in carrying out their functions.

“Local planning authorities should be aware of those areas mapped and identified in the relevant Local Nature Recovery Strategy and the measures proposed in them and consider how these should be reflected in their local plan. In doing so, they should consider what safeguarding would be appropriate to enable the proposed actions to be delivered, noting the potential to target stronger safeguarding in areas the local planning authority considers to be of greater importance. This will enable local planning authorities to support the best opportunities to create or improve habitat to conserve and enhance biodiversity, including where this may enable development in other location.”

### For planning decisions

“The Local Nature Recovery Strategy is an evidence base which contains information that may be a ‘material consideration’ in the planning system, especially where development plan documents for an area pre-date Local Nature Recovery Strategy publication. It is for the decision-maker to determine what is a relevant material consideration based on the individual circumstances of the case.”  
(source: [gov.uk](https://www.gov.uk))

## 2.9 How this LNRS was developed

The following steps, outlined in the statutory guidance were followed to create this strategy.

### Step 1



#### Baseline evidence was created

Data was compiled and analysed to inform a description of our key habitats and species, the pressures they face, and any ecological opportunities to improve or create them (see *Part 1 Section 4*). Data was also used to map where a prescribed list of our important areas for nature, such as designated sites, are found (*this map, formally called Areas of Particular Importance for Biodiversity (APIB)*<sup>6</sup> can be found in *Part 2 Section 5*).

### Step 2



#### Local priorities were gathered and shortlisted

Over 150 published plans and strategies for our area were reviewed and priorities for nature collated (*for a full list see Part 4*). Everyone living and working in East Sussex and Brighton & Hove was invited to share their priorities for nature's recovery through surveys. These inputs informed a longlist of priorities which were then shortlisted using set criteria.

### Step 3



#### Potential measures were identified

Key organisations involved in nature and land management in East Sussex and Brighton & Hove helped us identify practical and achievable actions (called measures) that can be taken to deliver our shortlisted priorities. (*Read the habitat priorities and measures in Part 2 of our Statement of Biodiversity Priorities. Species priorities and measures are in Part 3*).

### Step 4



#### Measures were mapped

Where possible, maps have been created to show where individual measures would be best targeted and can feasibly be delivered. Mapped areas that fall outside of the APIB create Areas that Could become of Importance for Biodiversity (ACIB)<sup>6</sup> (see *Part 2 Section 5*). Mapped measures show the optimal, but not only, opportunities for nature recovery in our LNRS area. Combined, the APIB, ACIB and Measures maps are referred to as the Local Habitat Map<sup>6</sup>.

### Step 5



#### Public consultation and publication

Information gathered through steps 1 to 4 has been drawn together with supporting detail about our approach and methodologies, into the four documents that comprise this LNRS. These along with an interactive Local Habitat Map are reviewed by the public before publication.

#### What happens next?

The strategies will be reviewed every 3-10 years to assess what actions for nature have been taken since the strategy was last published. All 48 strategies across England will be reviewed simultaneously, at a time to be announced by the Secretary of State.



## 2.10 Who has been involved in this LNRS?

### An LNRS must be evidence-based, locally led and collaborative.

In the production of this East Sussex and Brighton & Hove strategy, farmers and land managers, local community groups, organisations, residents and businesses were consulted and invited to participate via surveys, meetings, workshops and interactive tools on our website (for full details, see Part 4).

In addition, East Sussex County Council has been supported by:

- **West Sussex County Council.** Our sister council was appointed as the Responsible Authority for the West Sussex area. As many habitats, species and stakeholders are shared across the whole of Sussex, the two councils collaborated closely and developed aspects of their strategies together under the banner of 'Sussex Nature Recovery'.
- The **Sussex Nature Partnership** (representing over 30 of the key enabling and delivery organisations for nature in Sussex);
- A **Supporting Authority Group** comprising all local planning authorities in our strategy area, including the South Downs National Park Authority and Natural England.
- A **Sussex LNRS Working Group** of key sectors including local and national nature, farming and land management organisations and bodies, such as Sussex Wildlife Trust, the National Farmers' Union and Forestry Commission.

In addition, we have been supported by a Technical Review Panel, species experts and key delivery partners.

Dr Kate Cole from East Sussex County Council talks to members of the Nature Friendly Farming Network about the Local Nature Recovery Strategy. © D Alcroft



## 2.11 Some of the ways local people were engaged

We are incredibly thankful to everyone who attended an event, completed a survey, visited the website, and shared their views, knowledge, creative expressions and pins – they have all helped to shape this LNRS!

### Farmers and land managers

- 353 people attended or watched a recording of our webinar for the agricultural sector in November 2023.
- 63 people completed our dedicated survey.
- 200+ people attended our in-person presentations with farmer clusters, the [Nature Friendly<sup>®</sup> Farming Network](#) and other farmer-led initiatives.
- We also presented online and in person to golf courses, large estates and regional representatives from the National Farmers' Union, the Country Land and Business Association and Savills, had a presence at ploughing matches and produced dedicated case studies and other materials.

### Community groups, local experts and smaller environmental charities

- 307 people attended or watched the recording of our webinar for the sector in February 2024.
- We had 102 responses to our dedicated survey.
- 100s of people attended in-person presentations.
- c.100 pins plotting projects and ideas added to our interactive map.

### Key delivery and enabling organisations for nature in Sussex

- 50+ representatives attended three all-day workshops to input into detailed aspects of the strategy as it developed.

Right: Experts from the key nature and land management organisations in Sussex review existing priorities in an LNRS workshop in April 2024.

© Ruth Anslow

Below: An artwork by Abe, 12, Brighton & Hove – “Hedgehogs are my favourite species”.

Below right: The Local Nature Recovery Strategy is presented at the Nature and Climate event at Seven Sisters Country Park.

© D Alcroft



## Residents

- 1,800 people completed our Sussex-wide public survey.
- 700+ people attended or watched recordings of our public webinars in June 2024 which shared updates on progress and interim survey results.
- 500 people signed up to receive our Sussex Nature Recovery newsletters.
- Over 12k views on our map plotting residents' 'favourite places to experience nature in Sussex' (see 3.1).

## Children and young people

- 68 drawings, photos and poems were submitted to our nature prize draw.
- 9 ambassadors attended our workshop with the West Sussex Youth Cabinet (who for our purposes represented the views of young people across Sussex).

## Local councillors and delegated authorities

- 290 councillors and clerks attended or watched our webinars in February 2023 and December 2024.

## Local species experts and biodiversity recorders

- 27 were convened and consulted to create longlists and shortlists of our important and rare species.

## Developers and local authority planners

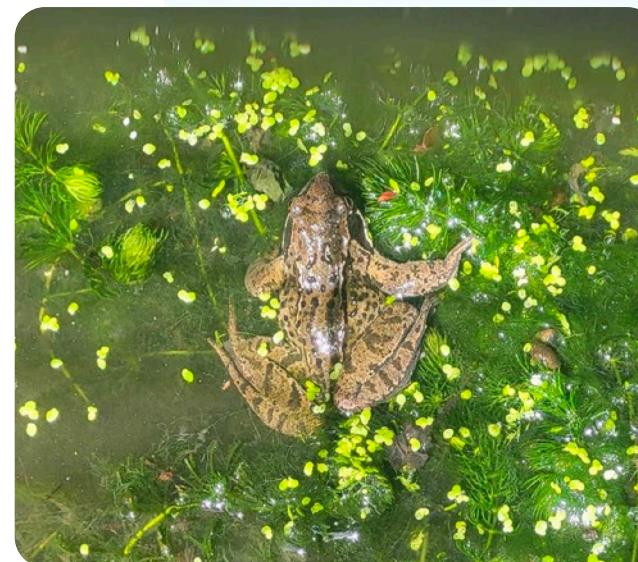
- 30+ developers and many planning officers were briefed at forums and via supporting authority teams.

## Health & Wellbeing sector

- 20 sector groups and organisations including NHS and Public Health Sussex attended a workshop and completed a survey.



Above: Sussex Nature Recovery stand at the West Grinstead Ploughing Match.



Left: A photo of a frog by Isla, 5, from Lewes.

## 2.12 Who can use this LNRS?

### Everyone in East Sussex and Brighton & Hove can take part in helping to recover nature.

Different organisations and groups of people will be able to use this strategy in different ways:

- **Farmers and land managers** can use this strategy to help make decisions about habitat creation and improvement on their land and to access a range of measures, case studies and further guidance about habitat creation and improvement.
- **Environmental organisations** can use this strategy to drive more coordinated and collaborative action for nature and to benchmark future trends and the effectiveness of actions.
- **Residents and community groups** can use this strategy to understand what the priorities for nature are in their local area and to find actions they could take forward.
- **Local authorities** can use this strategy to understand how development can fit within the context of local nature recovery and to inform and evidence local policies and plans, including those related to planning, minerals and waste, national parks and national landscapes.
- **Protected landscapes** can use this strategy to support and inspire their efforts to drive the recovery of nature within their boundaries, sitting alongside and informing the Management Plans for these areas.
- **Businesses** can use this strategy to inform their own corporate plans for their contribution to nature recovery and to create or enhance green space on their premises.
- **Developers** can use this strategy to create and sustain biodiversity rich developments that deliver multiple benefits for nature and people, and to refer to when planning habitat creation as part of development through Biodiversity Net Gain.
- **Institutions such as the NHS and schools** can use this strategy to inform how they create or enhance green space or gardens on their premises, such as a therapeutic or sensory gardens and to build and inspire nature-based educational or health programmes, such as green social prescribing programmes.
- **Government agencies** can use this strategy to view their sites within the strategic environmental context and identify how they can achieve 'bigger, better, more and joined-up' habitats and sites.

 **Friends of Waterhall survey amphibians and reptiles at the Wilding Waterhall site, Brighton & Hove in May 2025.**  
© Wilding Waterhall



# Section 3.

What does nature recovery mean to people in East Sussex and Brighton & Hove?

 South Downs Way  
© iStock.com/Jonathan Wilson



SussexNatureRecovery.org.uk



# 3.1 Where do local people go to enjoy nature in East Sussex and Brighton & Hove?

To inform this strategy we canvassed the views of Sussex residents about nature, including their favourite places to experience it.

1,834 people responded

A map was created to plot the location of respondents' favourite places for nature. Each pin on the map represents a different place mentioned. Click on a pin to see the reasons given by respondents as to why their nominated place is special – the more comments, the more popular the place.

The South Downs National Park received the highest share of nominations (10%) by East Sussex and Brighton & Hove residents who also love spending time at their favourite beach (collectively 8% of nominations). Cuckmere Haven, Seaford Head Local Nature Reserve and Ashdown Forest also featured highly. 2% of nominations were for residents' own garden or allotment, demonstrating how local people have made space for nature at home.

## What is it about these places that survey respondents enjoy?

- 19% of free text comments provided by respondents refer to “wild”.
- 13% refer to “bird/s” (with many other comments listing specific species).
- 12% mentioned “view/s”.
- 18% use one of the following words to describe their favourite place: “stunning”, “fantastic”, “beautiful”, “amazing”, “special” or “unique”.

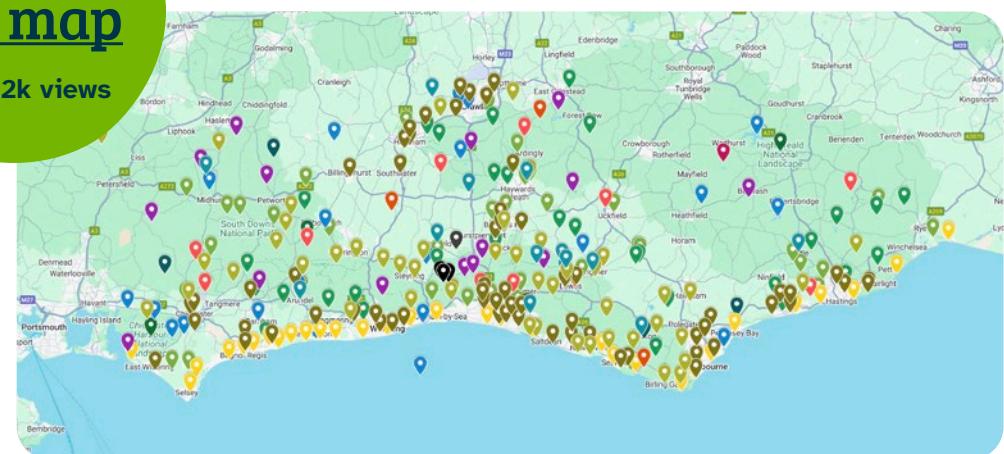
Respondents' comments also highlight the inextricable link between our enjoyment of nature and our health and wellbeing.

- 10% of answers use words like “peace”, “tranquillity” or “quiet”, suggesting that spending time in natural places is restful and a necessary escape.
- 19% include the word “walk”, a reminder that being in nature is often important time spent taking exercise outdoors.

Finally, proximity is a key factor. 17% of free text answers included the word “near”, “close”, “local” or “access” highlighting the importance of having nature nearby.



Map of respondents' favourite places for nature  
Map data © 2025 Google



## 3.2 The habitats East Sussex and Brighton & Hove residents love

We asked people about the habitats they value locally and what they like about them. Below is a snapshot of their answers. Woodland was the most mentioned habitat by East Sussex and Brighton & Hove residents.



### Woodland

“Feel and smell of the woods and earth”  
 “Beautiful in all seasons, birdsong, bluebells & primroses”  
 “An invaluable wildlife habitat and an intrinsic part of our local heritage”



### Coastal habitats

“Shingle specific species”  
 “Birds – oystercatchers, curlews, egrets, terns and cormorants”  
 “Dynamic. A sense of wonder at life's adaptability”



### River systems

“My local river has kingfishers, herons, coots, ducks and an array of plant life along its banks”  
 “With my dad we enjoy this for fishing and quiet reflection”  
 “Bring life to the rest of the environment”



### Fields and hedgerows

“Farming's important to our country's way of life”  
 “Hedgerows – Great nature corridor. Love seeing the birds, mice and caterpillars”  
 “Habitat for so much important wildlife”



### Chalk habitats and grassland

“One of the country's richest habitats floristically”  
 “Wonderful walking, and rich with wildlife in places”  
 “Rare habitat, wildlife, amazing views, peace”



### Urban

“Buildings – Habitat for swifts and house martins”  
 “Having tree-lined streets is a real joy, especially for those of us living in flats with no garden”  
 “Contributes to natural diversity and public mental health”



### Heathland

“For their Dartford warblers and redstarts and woodlarks”  
 “Ashdown Forest is a brilliant example of this unique habitat which is under threat”  
 “Rare birds, sense of space, something a bit different”



### Wetlands

“Great bird habitats”  
 “My favourite habitat and they are biodiverse and a useful tool in the climate crisis”  
 “Mixture of water and land, overflowing with endangered wildlife”

Top to bottom: Woodland © D Acroft; Coastal habitat © D Acroft; Railway Land Lewes © iStock.com/Lemanieh; Castle Hill NNR & Kingston © Ben Rainbow

Top to bottom: Chalk Grassland, Seaford to Birling Gap © Ben Rainbow; Preston Park, Brighton © iStock.com/TWPhotography; Heather, Ashdown Forest © iStock.com/HerbySussex; Flock of geese © Ian Cumming/unplash.com



## 3.3 The species East Sussex and Brighton & Hove residents love

Survey respondents also shared their favourite species found locally and why. Birds were by far the most popular answer (whether mentioned as a specific species e.g. 'skylarks' or generally as 'birds'). The popularity of birds may be due to how visible they are, including as visitors to our own gardens.

### Top 10 most mentioned bird species (Most popular one to ten)

#### 1 Skylarks



“Singing on the downs”

“Their songs and flight”

#### 2 Buzzards



“Exciting and majestic”

“To watch the flight, hover and descent for prey”

#### 3 Swifts



“Spend most of their lives on the wing”

“Magical birds that we’re encouraging with boxes”

#### 4 Nightingales



“Song is such a privilege to hear”

“A few left in Barcombe”

#### 5 Kingfishers



“An iconic bird”

“A glimpse brings lasting joy”

#### 6 Owls



“Love to hear the hooting”

“See them hunting in the long grass”

#### 7 Gulls



“The sound of Brighton”

“Super intelligent and cheeky!”

#### 8 Woodpeckers



“Echoing sound in the wood”

“Unusual to see but can always hear”

#### 9 Kites



“Brought back from extinction”

“Increased numbers since ban of DDT”

#### 10 Starlings



“Amazing murmuration”

“Beautifully dance by the Pier”

1: © iStock.com/MikeLane45; 2: Common buzzard © iStock.com/Carl mckie; 3: © iStock.com/Yuriy Balagula; 4: © iStock.com/VictorTyakht; 5: © Hans Veth/unsplash.com; 6: Barn owl © iStock.com/M-Reinhardt; 7: Herring gulls © iStock.com/Lemanieh; 8: Lesser spotted woodpecker © iStock.com/tuomovaa; 9: Red kite © iStock.com/Cathy Rose; 10: Gurjit Sandhu/unsplash.com



## Top 10 most mentioned species excluding birds (Most popular one to ten)

### 1 Butterflies



“Spotting the rare ones”

“Emblematic of the downs”

### 2 Bees



“Pollinating our plants”

“A priority to keep them alive”

### 3 Hedgehogs



“Very lucky to spot one”

“Good for the garden”

### 4 Orchids



“Iconic plants of the Downs”

“An indicator of wider biodiversity”

### 5 Foxes



“Friendly visitors to my back yard”

“To see foxes and cubs in the spring”

### 6 Bluebells



“Beautiful harbinger of spring”

“Beautiful carpets of blue”

### 7 Deer



“Graceful animals”

“Love to see them in their herd”

### 8 Badgers



“Large charismatic animals”

“Much maligned”

### 9 Bats



“Love seeing them flit about”

“Indicator of dark skies”

### 10 Seals



“Curious and playful”

“Healthy marine environment”

1: Adonis blue © Paul Marten/Sussex Wildlife Trust; 2: Bumblebee © Anya Chernik.unsplash.com; 3: © Darin Smith/Sussex Wildlife Trust; 4: Fly orchid © Ben Rainbow; 5: © iStock.com/Clark Warren;

6: © Jez Timms.unsplash.com; 7: © Arthur, 12, Oldland Willmill, Hassocks; 8: © iStock.com/Ondrej Prosicky; 9: Brown long-eared bat © iStock.com/Gucio\_55; 10: Common seals © Hugh Clark FRPS/Sussex Wildlife Trust

## 3.4 What East Sussex and Brighton & Hove residents have noticed

### Noticed a decline in habitats (% of mentions)

33%	<b>Loss and fragmentation of habitats due to development</b>	<p>“Habitats being isolated by developments” “Development on green spaces and AONB” “Too many new houses = too much concrete, too many sterile gardens”</p>
25%	<b>Poor management (especially hedgerows)</b>	<p>“The constant removal of wild plants in our neighbourhoods” “Hedges flailed too hard, too often” “Chalk grassland not being grazed properly” “Hedgerows turning to lines of trees”</p>
21%	<b>Pollution including sewage</b>	<p>“Increased light pollution resulting in less birds, bats and insects” “Sewage in rivers and seas is a disgrace” “Killing of streams and rivers due to sewage discharges and runoff”</p>
12%	<b>Litter in habitats (especially verges)</b>	<p>“Plastic litter pollution on verges” “Litter on roadsides dangerous to wildlife” “Fly tipping/littering is ruining habitats all over the city and country”</p>
9%	<b>Loss of trees</b>	<p>“Loss of trees and not enough re-planting” “Loss of woodland due to disease or water stress.” “Loss of ash trees in woodland”</p>

We asked East Sussex and Brighton & Hove residents whether they had noticed any changes to habitats and species locally, whether positive or negative.

**73%** of respondents had noticed negative changes to habitats (e.g. damage, loss, poor management, pollution etc).

**23%** had noticed positive changes.

### Noticed an improvement to habitats (% mentions)

6%	<b>Areas managed for nature</b>	<p>“Areas like chalk grassland and wetlands that are being managed and looked after” “The dew ponds look well looked after and it's important for animals up on the Downs”</p>
4%	<b>Wildflowers planting and verges</b>	<p>“Grass verges allowed to grow” “Wild flowers in Lewes church cemeteries” “I really liked the NO MOW initiative”</p>
4%	<b>Large habitat creation initiatives</b>	<p>“Creation of Rye Harbour NR has been fantastic” “Projects such as Cockshut Wetland” “Waterhall wilding project”</p>
3%	<b>Individual or community action</b>	<p>“Local groups litter picking and improving their parks” “Many local groups working hard to improve habitat” “Local farmer creating hedgerows, fields left for skylarks”</p>



### Noticed a decrease in species (% of mentions)

43%	<b>Insects (especially bees and butterflies)</b>	<p>“Huge losses of insects like bees, butterflies and other pollinators”</p> <p>“Car windscreen no longer plastered with dead insects” “So few butterflies and other insects.”</p>
42%	<b>Birds (especially small/garden or farmland birds)</b>	<p>“Bird life has dramatically decreased”</p> <p>“Swallow and house martin populations decimated” “Decline in bird species e.g. greenfinch, sparrow” “Decline in swifts”</p>
13%	<b>Hedgehogs</b>	<p>“A lot less hedgehogs”</p> <p>“As a child we used to see hedgehogs all the time. I haven’t seen one in years”</p> <p>“Disappearance of hedgehogs”</p>
7%	<b>Small mammals (e.g. hares, rodents, bats)</b>	<p>“Decrease in bats due to lights”</p> <p>“Decrease of protected mammal species such as dormice, water voles”</p> <p>“I miss seeing the hares”</p>
6%	<b>Larger mammals (e.g. badgers, foxes etc)</b>	<p>“I haven’t seen an otter for 40 years”</p> <p>“Less ground animals such as badgers, foxes etc”</p> <p>“I never see badgers locally now”</p>

**67%** of respondents had noticed a decrease in the amount or distribution of wildlife/species.

**10%** had noticed an increase.

We then asked residents to provide more detail about what they have noticed. This is a snapshot of what they told us. [Read the full reports.](#)

### Noticed an increase in species (% of mentions)

4%	<b>Birds of prey</b>	<p>“More birds of prey”</p> <p>“Now I see buzzards, peregrines, even white-tailed eagles”</p> <p>“Kestrels seem to be doing well”</p>
3%	<b>Species adapted to urban environments</b>	<p>“See more foxes in urban areas”</p> <p>“More seagulls and rats”</p> <p>“Increase in gulls, pigeons, magpies”</p>
2%	<b>Deer</b>	<p>“Deer are increasing with no effective control”</p> <p>“In the 18 years I’ve lived in Herstmonceux I’ve seen a decline in most species especially mammals (except deer)”</p>
2%	<b>Larger birds</b>	<p>“More jackdaws in garden and nesting locally”</p> <p>“Lots more corvids”</p>



## 3.5 What do residents want to see happen?

- East Sussex and Brighton & Hove survey respondents are worried by the loss of all types of habitats and/or their declining condition and the impact this has on species abundance and diversity<sup>6</sup>, as well as to human health and wellbeing.
- Development pressure was cited most frequently as a reason for the above. Climate change, pollution, disturbance, predation (by pets), poor management practices, diseases and non-native species were also mentioned.
- They want to see **more of all types of habitats** and **better care of those we have now**. Many respondents also cited the **need for more wildlife corridors such as hedgerows** that connect habitats and allow species to move safely across the landscape.
- Other actions respondents mentioned include the implementation of additional protections, reduced pesticide use, hedgerows and verges left to grow, the installation of nesting boxes and hedgehog highways, and more educational and awareness campaigns for the public.



 Hedgehog © Andy Willis / unsplash.com



### Key findings from the survey include

• 97% of respondents are concerned or very concerned about the state of nature in Sussex	• Species: respondents are most concerned about birds, insects and hedgehogs	• 86% of respondents want to know that positive action for nature is taking place	• Habitats: respondents are most concerned about woodland, coastal, riverine and hedgerows	• 83% of respondents want cleaner air or water as a result of functioning ecosystems
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## For habitats (sample of comments)

“Popular bluebell woods need urgent protection – too many people trample on them, cyclists ride over them”

“Woodlands need to be managed – not just left for brambles and invasive species to take over”

“Subsidise coppice management”

“Bigger woodland to replace the ancient forest”

“Marine habitats in general need increased full habitat protection – HPMAs”

“Properly managed species-rich grasslands”

“We need more meadows”

“I want to see permanent pasture on downland and marshes. These areas should not be ploughed”

“Field margins and headlands restored”

“Recovery of hedgerows in particular as they are so important to wildlife”

“Chalk streams need cleaning up and protecting from pollution”

“More reed beds for wildlife and for flood prevention”

“Wildlife ponds – would love to see more!”

“Cut and collect system for wildlife verges, to break the nitrogen cycle”

“Urban tree cover is ever more important for moderating heat and pollution. More scrub cover for birds in pastures”

“Natural regeneration of scrubby woodland edges”

“More wildlife corridors linking existing natural habitats”

“Connectivity habitat (hedgerows/woodland) between local reserves and pockets of woodland”

## For species (sample of comments)

“More habitats for bats”

“Bats especially rare Sussex bats e.g. Barbastelle, Bechstein and others need more protection”

“Species such as sea trout need fish bridges and cleaned up rivers”

“Recovery of native fish and seaweed”

“We need to be culling deer, especially the non-native species”

“Hazel dormice require agricultural land to be rewilded to protect them, which I would love to see (especially more woodland)”

“Would love to see the re-introduction of beavers”

“Folks need to create hedgehog highways by making gaps in their garden fencing at ground level... Hedgerow fruits/nuts should be left to grow to provide food for wild creatures”

“More butterfly friendly vegetation on field edges and allow the backs of verges to also support this vegetation”

“For insects: less use of pesticides, herbicides and nitrogen”

“Dandelions and other ‘weeds’ provide insects with much food”

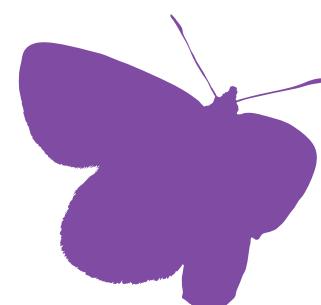
“Red listed birds such as swifts, house martins, house sparrows, starlings and others are desperately in need of nesting opportunities to halt their decline. We need far more large scale nesting bricks/cups/boxes installed”

“People need to be encouraged to do things on their own land and gardens, like leaving piles of leaves, feeding birds, creating wild ponds etc”

“House sparrows need hedges”

“Owls are heritage birds and need protecting”

The high number of responses received, and the level of feeling and concern expressed in the survey demonstrate how important nature is to the local community as well as to our tourist and visitor economy.



# Section 4.

## Nature in East Sussex and Brighton & Hove – description

In this section of our strategy, we take a more detailed look at the environmental and ecological features of our LNRS area and describe our geology, National Character Areas<sup>6</sup> and the extent and condition of our diverse habitats. We also look at the wider benefits that functioning ecosystems provide us with (our natural capital<sup>10</sup>) and the pressures facing nature in East Sussex and Brighton & Hove.

 Ancient woodland & wood anemone, Diplocks Wood, Polegate © Ben Rainbow



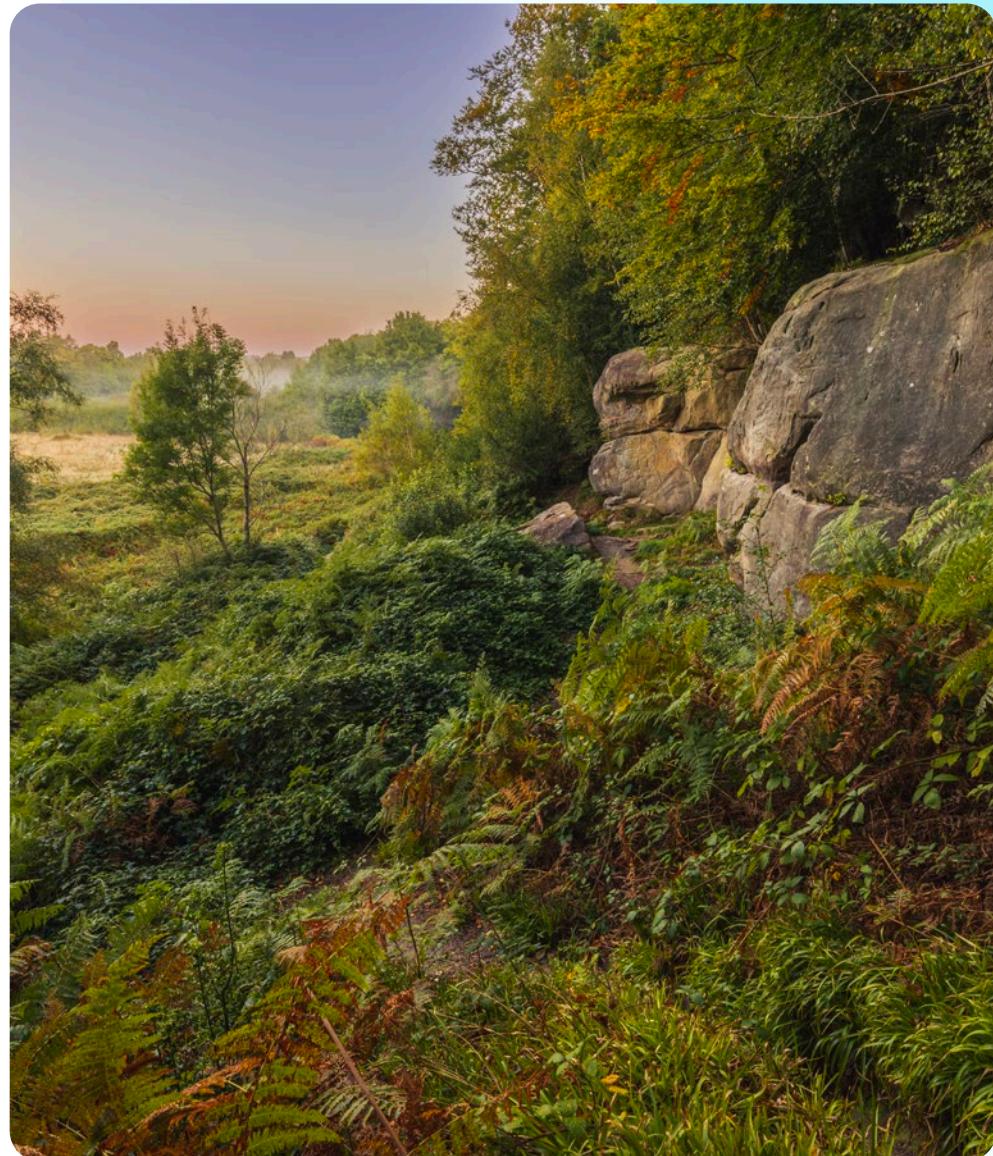
## 4.1 Underlying geology and soils

The distribution of habitats in East Sussex and Brighton & Hove depends largely on the underlying rocks and soils, as these provide the conditions for different types of vegetation to grow, and so ultimately provide the foundations for our natural environment.

The chalk of the South Downs is a soft sedimentary rock laid down in a warm shallow sea, between 100-70 million years ago. This chalk layer covered the older rocks that now outcrop in the High and Low Weald, so that what we see today are the remnants of a once continuous sheet. Plate movements in southern Europe folded the chalk and older rocks into a dome. Over time, the chalk forming the central and highest parts of the dome was eroded to expose the older rocks beneath; the sandstones and siltstones of the High Weald, the clays of the Low Weald and the Wealden greensands.

Further uplifting and folding along with rising and falling sea levels resulted in a variety of sands and clays being deposited on top of the chalk. There is a layer of clay-with-flints along the ridge of the South Downs, with relatively recent clays, sands and gravels to the south within the south coast plain. The east of the LNRS area is characterised by siltstones, mudstones and sandstones, with Weald clay in Pevensey Levels. Clays, silts and sands were brought down onto our floodplains by rivers, with some bogs depositing peat in the case of Pevensey Levels, and the shingle cuspatate foreland of Dungeness which continues into Rye. Behind the shingle ridges, siltation from these alluvial deposits filled the shallow bay between Dungeness and the ancient shoreline. Over time this was drained, giving rise to East Guldeford and Pett Levels.

The relationship between the geology, topography and soil type determines the dominant natural or semi-natural habitats found across East Sussex and Brighton & Hove, and therefore the natural character of the landscape.



 **Harrison's Rocks, High Weald, Eridge Rocks Nature Reserve** © iStock.com/HerbySussex

## 4.2 National Character Areas

National Character Areas (NCAs) share similar landscape characteristics<sup>1</sup> and follow natural lines in the landscape rather than administrative boundaries. Identified and described by Natural England, they provide a framework for decision-making around land management and other activities to help strengthen landscape character and resilience<sup>2</sup> to pressures such as climate change. Six NCAs lie within the East Sussex and Brighton & Hove LNRS area: Low Weald (no. 121); High Weald (no. 122); Romney Marshes (no. 123); Pevensey Levels (no. 124); South Downs (no. 125); and South Coast Plain (no.126)<sup>2</sup>.

2 <https://nationalcharacterareas.co.uk/>



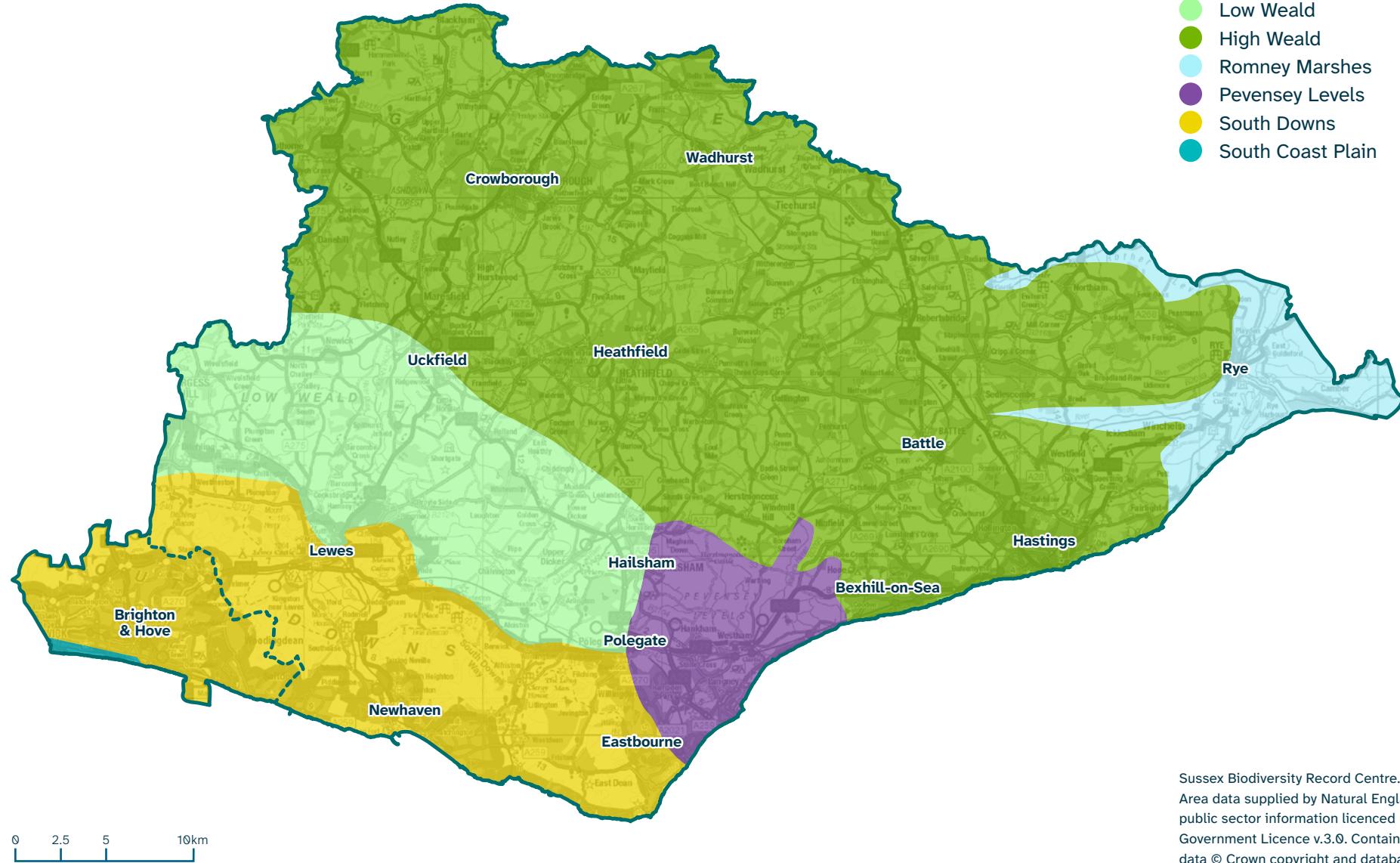
Little owls, Pevensey Levels © iStock.com/suerob



## Map 2. Map of National Character Areas in the East Sussex and Brighton & Hove LNRS area

### Key

- East Sussex and Brighton & Hove Boundary
- Low Weald
- High Weald
- Romney Marshes
- Pevensey Levels
- South Downs
- South Coast Plain



Sussex Biodiversity Record Centre. National Character Area data supplied by Natural England. Contains public sector information licenced under the Open Government Licence v.3.0. Contains Ordnance Survey data © Crown copyright and database rights 2024.

## ● Low Weald NCA

The Low Weald is a low-lying clay vale with localised outcrops of limestone and sandstone. The soil is mainly slowly permeable heavy clay which is seasonally wet and slightly acid. Dominant habitats are slightly acid but there is base rich pasture and deciduous woodland with some scrubby commons. The landscape is a gently undulating vale containing a patchwork of fields, tall hedgerows and woodland. There are many small streams and ponds, often surrounded by wet woodlands of willows and alder, with the valuable gill woodland being a particular feature. Grass grows well on clay soils, so livestock farming is common, with arable cropping on the higher, lighter soils<sup>3</sup>.

The Low Weald NCA is important for biodiversity, and is one of the most important NCAs in the country because of the number of bat species it supports, as well as lesser-spotted woodpeckers, a variety of rare lichens and several plants, including the nationally rare spiked rampion. It remains largely rural with small villages amongst woodland and many traditional farm buildings.



## ● High Weald NCA

The High Weald is a densely wooded area, with a high proportion of ancient woodland. The many small fields are surrounded by thick hedgerows, copses and woodland shaws. Wildflower meadows are now rare here, but the medieval patterns of small pastures are fundamental to the landscape character. The underlying geology is a mix of sands, sandstones and clays. As a result, the soil is poor in agricultural terms, so farming is predominantly livestock with some limited arable crops. A series of sandstone ridges run east to west and are deeply incised by streams running north to south, feeding the Ouse and Cuckmere rivers. These steep-sided valleys or gills are often well wooded with a very sheltered microclimate and rare species of lower plants. Similarly, sandstone outcrops support an array of bryophytes<sup>4</sup>, ferns and lichens. The Weald meets the sea at Fairlight, with the Hastings Cliffs internationally important for their actively eroding soft cliff faces. Ashdown Forest lies in the west and is one of the largest single blocks of lowland heath in England, and internationally important for its populations of Dartford warbler and nightjar.

© Above: Ancient woodland, Green Wood, Rother & Wealden © Ben Rainbow

© Left: Low Weald  
© iStock.com/Matthew J Thomas

<sup>3</sup> Sussex Ornithological Society, 2014. *The Birds of Sussex*.



## ● Romney Marshes NCA

The Romney Marshes is an open landscape of reclaimed, low-lying marshland, bounded to the south and east by the English Channel and to the north and west by an ancient cliffline. At the coast, Dungeness and Rye Harbour comprise the largest cuspatc shingle foreland in Europe, one of a few such large examples in the world<sup>4</sup> and of international importance for its geomorphology, plants, invertebrates and birds. The western end of Dungeness (The Midrips and The Wicks) lies in East Sussex. Windblown sand has formed the dunes at Camber. Landward lie the marshes of Pett Level, Rye Harbour and East Guldeford Level. Here the soils are loamy and clayey with impeded draining, forming extensive marshes, dissected by an extensive network of ditches and watercourses, supporting a rich flora and fauna. Farming is a mix of livestock, arable and horticulture<sup>5</sup> with field patterns varying from irregular small and medium sized fields to a few larger, more rectangular fields that indicate more organised reclamation. The rivers Brede and Eastern Rother drain into the Channel at Rye Harbour.



## ● Pevensey Levels NCA

Pevensey Levels is the largest area of wetland in East Sussex and is a flat, low-lying landscape between Eastbourne and Bexhill, intersected with numerous reed-fringed ditches and isolated patches of raised land known as 'eyes'. Waller's Haven is the main river. The wetland is of national and international importance, with 37% of the NCA being a Site of Special Scientific Interest and Ramsar site. The Levels are predominantly rural and mostly grazed pasture and consist of extensive drainage networks and flood plain. There is a small area of arable on slightly higher ground and where the fields are under-drained (drains beneath the soil). The underlying geology is siltstone, mudstone and sandstone, with small areas of Gault Clay, Lower Greensand and chalk towards the western boundary with the South Downs. There are also relatively recent superficial deposits of marine and estuarine silts, clays, gravels and sands. Shingle beaches stretch along the length of the area, punctuated by settlements, historic military buildings and sea defence structures<sup>6</sup>. The NCA includes the town of Eastbourne, with a population of over 100,000 and up to 5 million visitors every year.

4 Romney Marshes – National Character Area Profiles ([nationalcharacterareas.co.uk](http://nationalcharacterareas.co.uk))

5 Sussex Ornithological Society, 2014. *The Birds of Sussex*.

6 Pevensey Levels – National Character Area Profiles ([nationalcharacterareas.co.uk](http://nationalcharacterareas.co.uk))

● Above: Swans, Pevensey Levels © iStock.com/suerob

● Left: Romney Marsh © iStock.com/Petra Eujane



Castle Hill, South Downs, Woodingdean © iStock.com/HerbySussex

## ● South Downs NCA

The South Downs is a ‘whale-backed’ spine of chalk stretching from the Hampshire Downs in the west to the Beachy Head in the east. The complex landscape arises from local physical, historical and economic influences, with much formed and maintained by human activity, especially agriculture and forestry. Within the LNRS area, two main rivers – the Cuckmere and the Ouse – cut through the chalk ridge, separating it into blocks. The broad valley floors and low-lying floodplains of the Lewes Brooks and Cuckmere comprise wet grazing marsh that support a variety of wildlife. The soils on the Downs are thin and alkaline. Where there are areas of clay-with-flints, the soil is more acidic and can support areas of gorse. Much of the remaining species-rich chalk grassland lie on the steep north-facing scarp, with these slopes also supporting scrub providing an important habitat for breeding birds. The gentler dip slopes are predominantly arable farmland with very few hedges and little woodland. Along the coast there is vegetated shingle and chalk cliffs, the latter being scarce in the county, and providing nesting sites for fulmar, kittiwake and peregrine falcon. There is a Heritage Coast between Eastbourne and Seaford and the majority of the NCA is within the South Downs National Park. A relatively small area is urban and includes Brighton & Hove, with the chalk aquifer supplying water to the city and the surrounding areas.

## ● The South Coast Plain NCA

The South Coast Plain is a flat coastal landscape with an intricately indented shoreline between the dip slope of the South Downs and the English Channel, extending into the LNRS area to include parts of Brighton & Hove. The area is heavily defended against flooding and erosion at the coast.



## 4.3 Habitats

This East Sussex and Brighton & Hove LNRS has identified eight broad categories as priorities for nature recovery:

- coastal habitats;
- farmed landscape and soils;
- species-rich grasslands;
- woodland, hedgerow and scrub;
- lowland heathland and sandstone outcrops;
- rivers, streams and aquifers;
- wetlands and standing water bodies;
- urban nature.

Each of these categories often include a variety of habitat types, many of which are among the country's most important and threatened. Just as important as these broad habitat types are the mosaics<sup>◊</sup> they create together and the graduated boundaries or ecotones<sup>◊</sup> that link one to another. To recognise these wildlife-rich areas, which often play a vital role in providing corridors and stepping stones for wildlife, we have also identified Nature Networks as a priority for our LNRS. A broad description of these habitats in East Sussex and Brighton & Hove is provided below.

### Yellow horned poppy

© Hugh Clark FRPS/Sussex Wildlife Trust



## Coastal Habitats

We have a predominantly south-facing coastline (although from Beachy Head the coast is southwest to northeast) with a variety of habitats including intertidal mudflats and saltmarsh, hard (chalk) and soft (sandstone and clay) cliffs, shingle, coastal lagoons and sand dunes. Map 1 ([Appendix 1A](#)) shows the distribution of coastal habitats in East Sussex and Brighton and Hove. Much of the coastline is developed and constrained by sea defences and many of our shingle beaches are actively managed and heavily modified. However, the chalk cliffs between Splash Point in Seaford and Holywell in Eastbourne are undefended and allowed to erode naturally. There are also no sea defences at the foot of the cliffs between Newhaven Western Arm and Peacehaven, or between Peacehaven and East Saltdean, except for a short stretch of defences at Portobello Works, Telscombe. This and the sandstone cliffs at Fairlight provide an important supply of sediment for the rest of the coast.

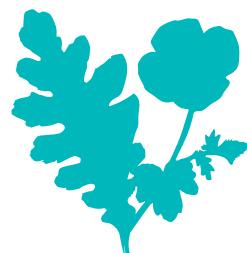


## Intertidal Mudflats and Saltmarsh

As rivers reach the sea and flow out over coastal plains, their flow decreases and the muddy sediment they transport is deposited. This sediment has a high organic content and is exposed and covered with each tidal cycle, making it nutrient-rich. Saltmarshes are the upper, vegetated portions of intertidal mudflats, lying between mean high water neap and mean high water spring tides.

These habitats are exceptionally rich in biodiversity, supporting large numbers of invertebrates, and providing feeding, roosting and breeding areas for birds throughout the year. They also provide sheltered nursery sites for several species of flatfish. Vegetation is limited to salt-tolerant species that can cope with regular immersion by the sea, and natural systems show clear zonation depending on how frequently they are inundated by the tide. A high proportion of our saltmarsh comprises *Spartina* or other pioneer plants, more so than in the rest of the country. It plays a significant role in coastal flood defences, acting as a natural wave break, reducing the risks of overtopping and protecting defence structures. Priority species supported by these habitats include slender hare's-ear, saltmarsh goosefoot and sea aster bee.

We have 1254ha (hectares<sup>8</sup>) of **intertidal mudflat**, the majority of which (82%) is designated for its nature conservation interest. Rye Harbour is our key site, but there are also small amounts at Newhaven and Cuckmere Haven. Similarly, **saltmarsh** is a rare habitat in East Sussex and Brighton & Hove, covering only 1% of our coastline, extending to just over 68ha, with nearly 93% lying within designated sites. Most is found at Rye Harbour and along the tidal reaches of the River Cuckmere, with some small areas at Newhaven and Pevensey. The saltmarsh at Rye is in good condition and extension of areas has taken place through projects such as managed flooding. In general, our intertidal



mudflats and saltmarshes are small and isolated, making them vulnerable to change. Coastal realignment offers opportunities for the restoration of intertidal mudflats, as does the reconnection of rivers with their floodplains within estuaries.

© Sea kale and Mary Stanford lifeboat house at Rye Harbour Nature Reserve.  
© Sussex Wildlife Trust

## Coastal Vegetated Shingle

Shingle closest to the sea is often mobile due to wave action, but as conditions stabilise further from the shore, mixed communities of flowering plants, grasses, mosses and lichens develop, some being specific to shingle. This **coastal vegetated shingle** is an internationally rare habitat occurring mainly in northern Europe, Japan and New Zealand. Whilst shingle beaches are widely distributed around the UK coast, structures sufficiently stable to support vegetation are rare, with around 5800ha of vegetated shingle nationally. Our vegetated shingle is therefore of very high significance and supports highly specialised plants that are very restricted in their distribution. Most of the shingle beaches along our coast are made up of flint eroded out of the chalk cliffs.



Classic pioneer species on the seaward edge include sea kale, sea pea, Babington's orache and sea campion, all of which can withstand salt spray and some degree of burial or erosion. Further from the shore, vegetation can develop into mature grassland, lowland heath, moss and lichen communities, or even scrub. Shingle structures can support breeding birds including little tern and ringed plover, and diverse invertebrate communities, with species including the rare toadflax brocade moth.

We have 181ha of coastal vegetated shingle, according to best available data, with c. 94% lying within designated sites. However, large areas are in poor condition, primarily as a result of recreational pressure. Measures to reduce such impacts mean that some areas are recovering, but where there is coastal squeeze (where the natural retreat of the coastline is prevented by development), the condition



 Salt marsh, Rye Harbour © Sussex Wildlife Trust



is declining. Our most extensive areas are at Rye Harbour, and otherwise it is found in relatively small, isolated strips and pockets at Pevensey, Normans Bay and Sovereign Park (remnants of the former Crumbles cuspatate foreland), Cuckmere, Newhaven (Tide Mills) and Brighton & Hove.

### Saline Lagoons

**Saline Lagoons** are natural or artificial bodies of water that are partially separated from the sea by some sort of barrier. They can be brackish<sup>6</sup> (partially saline), fully saline or hyper-saline. They are rare and highly transient habitats. Many are shallow and will naturally succeed to fen, carr or reed swamp. Under natural conditions, losses would be compensated for by lagoon formation in other areas. They often support filamentous green and brown algae, charophytes and tasselweeds, as well as invertebrates rarely found elsewhere, and provide important feeding and roosting habitat for many birds. They cover just 5% of Europe's coastline and 13% of coastlines globally.

We have 137ha of saline lagoons in East Sussex and Brighton & Hove, all of which are within designated sites. This includes lagoons at Rye Harbour and Pett which were created as compensation for sea defence works by the Environment Agency. Important lagoon species in East Sussex and Brighton & Hove include spiral and beaked tasselweeds and birds such as avocet.

### Sand Dune

**Coastal sand dunes** develop where sand is blown landward and trapped by specialised dune-building grasses, the key species in East Sussex and Brighton & Hove being marram grass and lyme grass. Vegetation forms zones relating to the time over which sand has been deposited, how stable it is and local hydrology. Mobile dunes occur on the seaward side and support few plants other than marram. Semi-fixed dunes occur inland and additional plants such as sand sedge and dune fescue are found.

Fixed dune grasslands occur on the landward side where the surface is stabilised with some soil formation occurring. They provide an important flood defence for the village of Camber and are a refuge for many lowland species lost due to agricultural improvement<sup>7</sup>. They support locally and nationally important plant and animal communities, and are particularly notable for moths, wintering birds including short-eared owl and beetles. Some of our important species found on dunes include margined colletes, silvery leafcutter bee, henbane and the sand running-spider.

Our dunes are restricted to Camber Sands at the mouth of the River Rother, and cover just over 53ha with 98% designated, lying almost wholly within the Dungeness, Romney Marsh and Rye Bay Site of Special Scientific Interest, with Camber Sands Local Wildlife Site covering most of the dunes which fall outside. The dunes formed within the last 350 years and are now restricted by urban development, with the natural process of retreating inland prevented. The dunes are accreting (growing), but as they cannot move inland, they are getting higher. The dunes are in 'unfavourable declining' condition due to the coverage of invasive species including sea buckthorn, hottentot-fig, Japanese rose and Canadian fleabane. Trampling and erosion from the huge number of visitors is also damaging the dunes.

Sand dunes are listed as the habitat most at risk in Europe and since 1900 the UK's sand dunes have declined by a third<sup>8</sup>. Major dune systems are widely distributed within the UK, but scarce on the English Channel Coast. The limited extent of this habitat type in East Sussex and Brighton & Hove makes it of high conservation significance<sup>9</sup>. Scrub invasion and invasive species can be an issue in our dunes.

<sup>7</sup> Understanding sand dunes | UK Centre for Ecology & Hydrology (ceh.ac.uk)

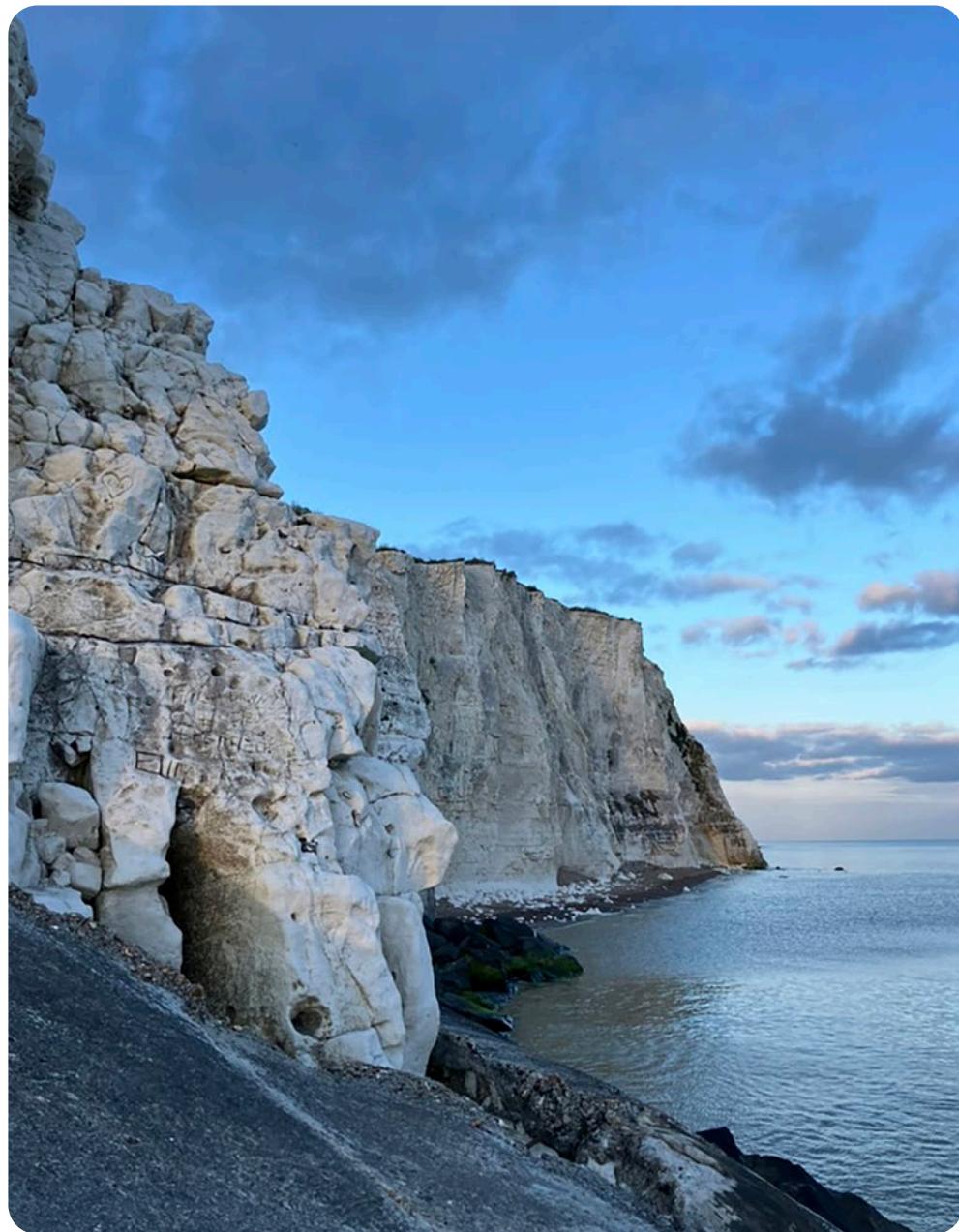
<sup>8</sup> Stats and facts – Dynamic Dunescape

<sup>9</sup> Gillespie, F.M. undated (c. 2008). *Sand dune sites in the Beaches At Risk Area and their major management issues*. University of Sussex. BAR Report 1 (sussex.ac.uk)



Sand dunes, Camber Sands © iStock.com/BethAmber





Chalk cliffs © D Alcroft



## Maritime Cliff and Slope

We have both hard chalk cliffs and soft sandstone cliffs, with chalk cliffs between Brighton and Eastbourne eroding to a vertical profile, and softer sandstone cliffs between Bexhill and Hastings forming less steep slopes and being prone to frequent slumps and landslips. Hard cliffs support few plants other than on ledges and in crevices, but soft cliffs are particularly interesting for plant species and invertebrates due to the soft slumps. Cliffs are found in association with other important habitats, for example cliff-top chalk grassland influenced by salt spray, and shingle beaches and wave-cut chalk platforms at the bottom.

We have nearly 109ha of cliffs extending to just over 50km, the vast majority of which (104ha/c. 96%) are designated for their biological and/or geological interest. We have chalk cliffs between Black Rock in Brighton and Castle Hill in Newhaven, and from Seaford to Beachy Head, with the Seven Sisters making up more than 14% of the European chalk exposure. Some rare and uncommon plants grow both on the cliff face and in the narrow strip of cliff-top chalk grassland, and the northern slope of Castle Hill Local Nature Reserve is dominated by hawthorn, blackthorn and gorse scrub with sunny glades. The chalk cliffs support a diverse community of beetles and Splash Point in Seaford supports the largest breeding kittiwake colony in the South East, as well as fulmar, gulls, sparrowhawk, flycatchers and finches. They are also sometimes home to one of the new natural house martin colonies in Britain. Our key sites for soft cliffs are at Fairlight Cove, largely undefended apart from a 250m rock revetment and characterised by rapidly eroding soft cliffs. Fairlight Glen is of international environmental, geological and ornithological importance with high landscape value and no significant cliff top developments.



## Farmed Landscape & Soils

A combination of soil type and topography strongly influences farming practices, and in turn the wildlife that is found there. Our varied geology is reflected in our soils, which can be free-draining or waterlogged, acid or alkaline, rich loams, or thin, sandy and nutrient poor.

East Sussex and Brighton & Hove is not generally an agriculturally intensive landscape, especially by the standards of the South East, but rather a farmed landscape with rich pockets of wildlife. The countryside is ‘ancient’ – a patchwork of small enclosures with old hedges, shaws and lanes that are still markedly intact in the High Weald. Of the 150,710ha of agricultural land (Grades 1-5) in the LNRS area<sup>10</sup>, 109,055ha (72%) is farmed with 1,646 land holdings. The majority of our agriculture is grazing livestock, cereals and general cropping. The average farm size is 66ha, lower than the South East (87ha) and England (85ha) averages. The distribution of farms by size is fairly even, with 57% sized between 5 and 20ha. Map 2 (Appendix 1A) shows the distribution of agricultural land (Grades 1-3) and arable land cover in East Sussex and Brighton & Hove.

Whilst our farmed landscape includes mostly grazing and agriculture created grassland habitats, it is essentially a mosaic of a range of different habitat types including grassland, woodland, hedges, heathland and freshwater. Grasslands vary, depending on the soil with marshy grasslands also occurring on damper soils. Improved grasslands are areas that have been ploughed, reseeded or heavily fertilised.

Arable field margins are strips or blocks around arable fields that are managed specifically to provide benefits for wildlife. They are usually on the outer 2-12m margin of the arable field, although blocks occasionally extend further into the field centre<sup>11</sup>. They include cultivated, low-input margins which may be sown to provide seed for wild birds, with wildflowers or agricultural legumes (peas or beans that fix nitrogen in the soil) and managed to provide pollen and nectar resources for invertebrates, or managed as grass strips with mixtures of tussocky and fine-leaved grasses<sup>12</sup>.



⌚ Mob grazing © High Weald National Landscape Partnership

<sup>10</sup> Defra, 2024. *Structure of the agricultural industry in England and the UK at June*.

<sup>11</sup> JNCC, 2016. *UK Biodiversity Action Plan Priority Habitat Descriptions. Arable Field Margins*.

<sup>12</sup> Natural England, 2020. *Climate Change Adaptation Manual. Arable Field Margins*.



Nationally, more than 120 species of threatened, rare and scarce wildflowers grow in arable habitats and together they are the fastest declining suite of plants in the UK<sup>13</sup>. Annual knawel and shepherd's needle are closely associated with farming but have become scarce. Similarly, populations of some farmland birds such as grey partridge and corn bunting have declined significantly<sup>14</sup>. Targeted habitat support for farmland birds, arable plants and other farmland biodiversity through initiatives such as Environmental Stewardship has encouraged farmers and landowners to create arable field margins on their land. 22,189ha of farmland in East Sussex and Brighton & Hove are currently under Environmental Stewardship (c. 20% of farmed land)<sup>15</sup>.

13 [Managing Arable Farm Land – Plantlife](#)

14 Sussex Wildlife Trust, 1995. *Vision for the Wildlife of Sussex*.

15 Defra, 2024. [Structure of the agricultural industry in England and the UK at June](#).

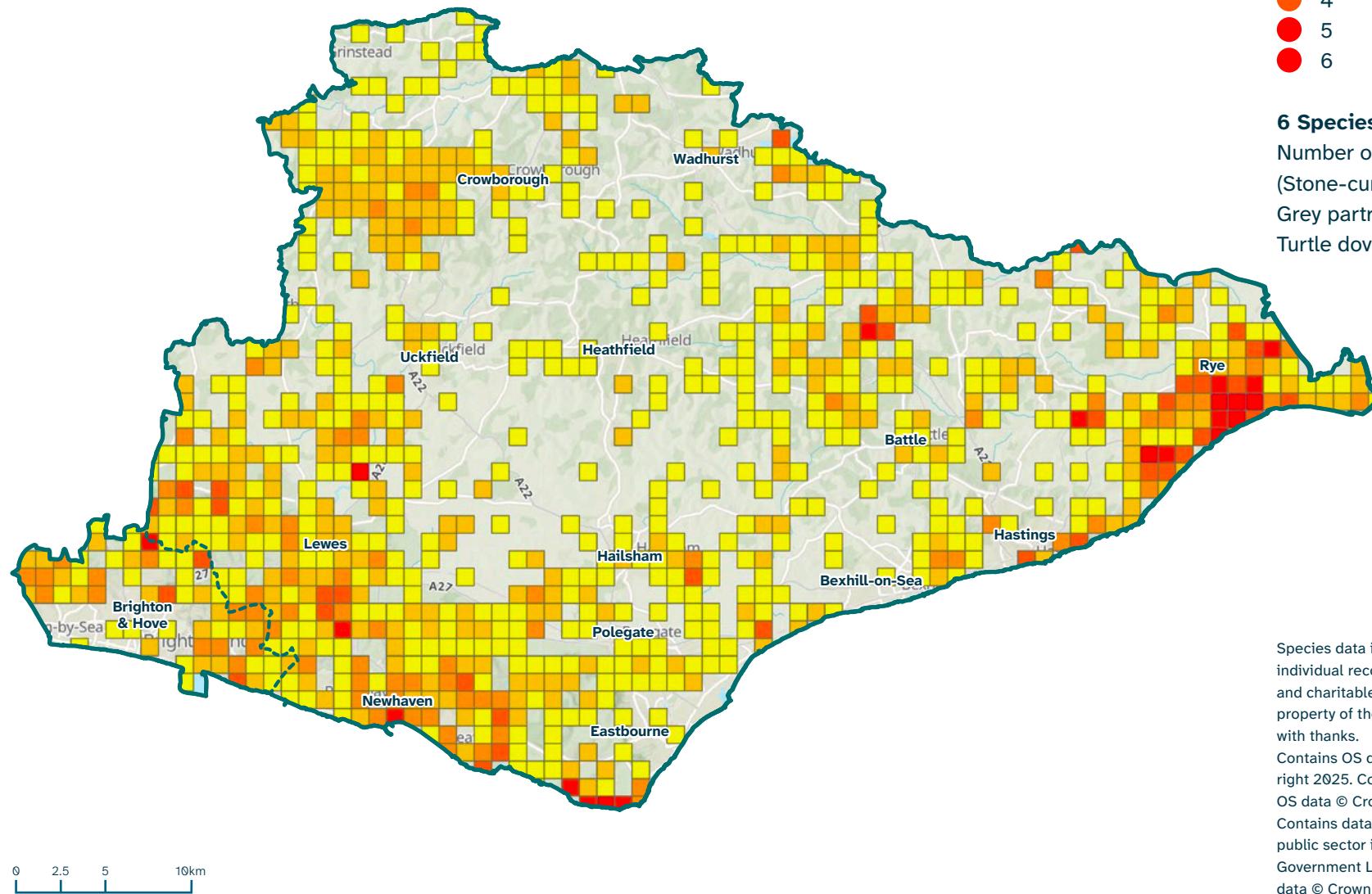


 Farmland & South Downs, Castle Hill NNR & Kingston © Ben Rainbow



### Map 3: Heat map showing the number of farmland bird assemblage species

(for more detail, see Part 3: Species Priorities and Measures) per 1km square across East Sussex and Brighton & Hove. The darker the colour, the greater number of species present.



#### Key



#### 6 Species

Number of species per 1km square  
(Stone-curlew, Cuckoo, Corn bunting,  
Grey partridge, Tree sparrow,  
Turtle dove).

Species data is provided to SxBRC by a range of individual recorders, recording groups, private, public and charitable sector organisations. Data remains the property of the original recorder and is reproduced with thanks.

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## Species-rich Grassland

Our species-rich grasslands include **lowland calcareous grassland** (chalk grassland), **species-rich meadows** (including lowland meadows) and pastures, **waxcap grasslands**, and **neutral grasslands**. We also have acid grassland but as that is most commonly found in association with heathland habitats, it is covered in that section of the description. Similarly, wet grassland and grazing marsh are covered in the wetland section. Map 3 (Appendix 1A) shows the distribution of chalk grassland and lowland meadows in East Sussex and Brighton & Hove.

These grasslands are rich in wildlife and provide important ecosystem services but they depend on continuity of appropriate and sympathetic management to maintain their ecological value. Ongoing agricultural “improvement” of semi-natural grassland (through re-seeding, use of fertiliser and herbicides to increase productivity), neglect, land use change and urban development are key threats that continue to reduce and fragment the remaining areas of ecologically important grassland both across the UK and in East Sussex and Brighton & Hove.

Unimproved chalk grassland occurs along the length of the South Downs, and unimproved hay meadows and pastures are concentrated on more traditionally managed farms in the High Weald. Waxcap grasslands can be found in cemeteries and churchyards in towns and villages across the county as well as within unimproved grassland on undisturbed soils with a range of pH values. Diverse, semi-natural grassland is usually associated with the farmed landscapes and nature reserves but also occurs in mosaics with other habitats, such as scrub (in transitional<sup>6</sup> vegetation), on woodland rides, in wetlands, on road verges and sometimes in urban greenspaces. The extent of the different species-rich grasslands found in our LNRS area is shown on the right.



Grassland Type	Extent (ha)	% LNRS area
Lowland calcareous grassland	2400	1.3
Lowland meadows	622	0.3
Waxcap grasslands	835	0.5
Unimproved neutral grassland	480	0.3
<b>TOTAL</b>	<b>4337</b>	<b>2.4</b>

Common rock-rose and salad burnet are among the many species of native wildflower which will benefit from the project.

© Wilding Waterhall



The priority habitat categories encompasses the best of the wildlife-rich grassland in Sussex, but the line between 'priority' and 'non-priority' but species-rich grassland is sometimes indistinct. Grassland of all types lies on a continuum that is influenced by different factors such as the underlying geology and soils, drainage, degree of waterlogging and management history. Some species-rich grassland does not meet the quite rigid botanical threshold to qualify as priority habitat but can nevertheless be very important for other species groups and function as vital connective tissue for landscape scale ecological function. Grassland that supports an abundance of flowering plants can buffer the most important species-rich grassland sites and link other priority habitats<sup>16</sup>. The mapping of non-priority habitat species-rich grassland on [MAGIC](#)<sup>17</sup> underlines its importance for biodiversity.

## Lowland Calcareous Grassland

Nationally, this grassland type has declined sharply over the last 50 years. The South Downs represents one of the major areas of this habitat type in the UK, but due to historic losses, it is estimated that it now covers only around 3% of the South Downs where it is largely confined to steeper north facing slopes. It supports a very rich flora, one of the highest species densities of any habitat in north-west Europe.

Species include many nationally rare and scarce species such as burnt orchid (the colony at Lewes Downs Special Area of Conservation is one of the largest in the UK), early-spider orchid and round-headed rampion – the 'Pride of Sussex'. The invertebrate fauna is also diverse and includes scarce species such as the Adonis blue, silver-spotted skipper and the wart-biter cricket, and

south facing grasslands are important for snails including the rare Carthusian snail. It is an important pollen and nectar resource and bare ground provides nesting habitat for ground nesting bees, wasps and ants.

## Lowland Meadows

Of particular interest are the increasingly rare species-rich old meadows and pastures that have a long history of traditional management by hay cutting and/or grazing. Hay meadows are especially important for the range of often uncommon plant species they support, which in turn support large numbers of invertebrate and bird species<sup>16</sup>. The High Weald supports nearly 20% of the entire resource of lowland meadow in England, with nowhere else in the country having such a concentration<sup>17</sup>. Lowland meadows are fragile and vulnerable to changes or cessation of management practices, but are important fragments of a once more extensive habitat.



Round-headed Rampion © iStock.com/phalder

<sup>16</sup> Sussex Biodiversity Partnership, February 2010. Lowland Meadows Habitat Action Plan.

<sup>17</sup> High Weald National Landscape website: [Wildlife – High Weald](#), accessed 22/02/24.



## Waxcap Grassland

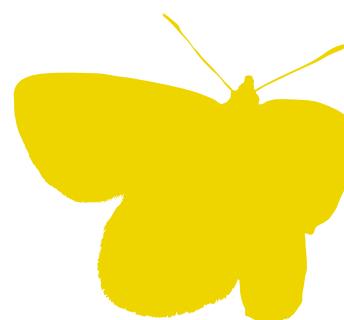
Waxcaps are indicators of undisturbed, nutrient-poor grasslands like ancient pasture and other land that has never been ploughed or fertilised, and often thrive in short, moss-rich, sometimes highly grazed swards, which may be of low interest for flowering plants. Waxcap grasslands are seriously threatened throughout the UK and Europe and local experience shows us that these sites are vulnerable to changes in land use and encroachment from development. Our LNRS area supports several areas known to be mycologically rich, with over 853ha of waxcap grasslands recorded. Recent surveys of an Uckfield cemetery recording a species diversity of Special Scientific Interest quality. Despite the crucial role fungi plays in our habitats, their ecology and overall diversity is poorly understood.

## Neutral Grassland

Neutral grassland is a feature of soils with a pH between 5 and 6.5 and which are neither very wet nor very dry. These grasslands can be very variable in appearance and plant communities due to differences in their underlying geology, but are essentially species-rich grasslands and meadows. Crested dog's-tail and black knapweed are constants in this habitat in East Sussex and Brighton & Hove, and our sites support a number of nationally rare or scarce plant species including green-winged orchid and meadow thistle as well as significant vertebrate and mammal fauna. Most of our sites are smaller than 5ha and tend to be evenly distributed along a broad swathe from Ditchling in the north-west to Hastings in the east, with notable concentrations around Crowborough. There is an additional and uncalculated contribution to the overall resource on roadside verges, in churchyards, along arable field edges, paths, woodland rides and river banks which may contain relic grassland communities.



Blackening waxcap © iStock.com/suerob





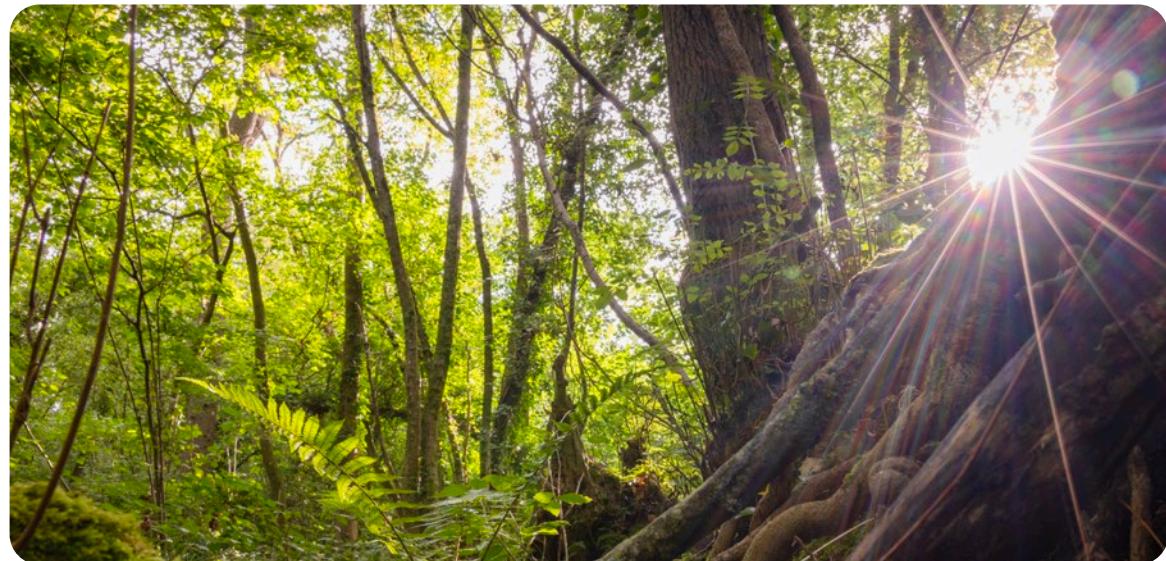
## Woodland, Hedgerows & Scrub

### Woodland

East Sussex and Brighton & Hove is one of the most wooded areas in lowland Britain, with the High Weald having the greatest woodland cover in Britain. Map 4 ([Appendix 1A](#)) shows the distribution of woodland in East Sussex and Brighton & Hove. Most of our woodland is under 2ha in area and most is **deciduous** where at least 80% of the canopy is made up of native species, but there are some large forestry estates which are planted with species including Scots pine, Corsican pine, Norway spruce and Douglas fir.

We have several distinct types of woodland. The species composition of the canopy and the ground layers varies greatly, and edges and rides may grade into grassland and scrub. Where soils are poorly drained or seasonally wet, such as on floodplains, along wet flushes, as successional habitat<sup>6</sup> on fens, mires and bogs, and in peaty hollows, wet woodland occurs, usually with alder, birch and willows being dominant. Many of our woodlands are **ancient**, i.e. have been continuously wooded since at least 1600 AD. Some of these semi-natural, consisting primarily of native and not obviously planted species, and some plantations on ancient woodland sites, which have been planted, often with non-native species.

**NB** Some of these woodland types overlap, so the total extent is not a direct sum.



Woodland Type	Extent (ha)	% LNRS area
Ancient woodland	20,998	11.6
Deciduous woodland	25,264	14.0
Gill woodland	6552	3.6
Traditional orchards	148	0.01
Wet woodland (deciduous woodland within Flood Zone 3)	459	0.3
Wood pasture and parkland	4231	2.4

© Woodland in the Lost Woods of the Low Weald and Downs project.  
© James Ratchford/WTML



Of particular importance are our **gill woodlands**, found in steep-sided, narrow stream valleys, which are not found anywhere else in eastern or central Britain. They have a humid microclimate and lush growth of ferns, mosses and liverworts, some characteristic of the warmer, moister conditions that existed during the Atlantic period. **Wet woodland** is scattered on our floodplains, more often found higher up river catchments. Stands are often small, forming strips alongside streams, but can be extensive. A key species of such woodland is the native black-poplar *Populus nigra* ssp. *betulifolia* which is probably our rarest tree; there are currently 45 known mature trees scattered throughout Sussex, all around 100-150 years old. In East Sussex and Brighton & Hove these are found from Lewes in the west to Hastings in the east.

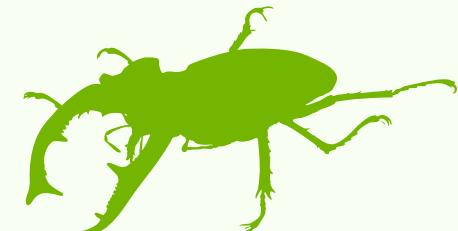
**Wood pasture and parkland** represents a vegetation structure rather than a particular plant community, managed by a long-established tradition of grazing allowing survival of multiple generations of trees, characteristically with at least some ancient or veteran trees or shrubs. These woodland communities often form a mosaic with other habitats including grassland, heath and scrub. This habitat type can be of outstanding interest for bats and birds, and they are frequently of national historic, cultural and landscape importance. Important sites include Eridge Park, noted for its epiphytic<sup>18</sup> flora, and urban parks in Brighton retain some of the largest remaining Sussex elms, providing important bat roosting and feeding habitats. Brighton & Hove is the custodian of the National Elm Collection, with over 17,000 trees including 125 different varieties – more than any other city in the world<sup>19</sup>. The remaining ‘Preston Twin’ in Preston Park is considered to be the largest and

oldest (400 years old) surviving English elm in Europe and is home to the elm-dependent white-letter hairstreak butterfly, a species that has been in decline as a result of Dutch Elm Disease.

Habitat structure is also the defining feature of **traditional orchards**, with planting density and management being the main distinguishing features<sup>20</sup>. Traditional orchards comprise large trees planted in rows at a low density (150 per ha) with a grass sward underneath and are often grazed by livestock. They are valuable for the local landscape and community enjoyment as well as for wildlife<sup>20</sup>. The Brighton City Downland Estate includes 11 planted orchards, the most notable being at Racehill and Stanmer, the latter hosting the National Collection of Sussex Apples<sup>21</sup>.

Nationally, the coverage of deciduous woodland has declined significantly since the 1960s as a result of clearance and replanting with non-native species, with the area of ancient woodland declining in area by 30-40% in the same period. The quality of woodland in East Sussex and Brighton & Hove is also thought to be in decline. Sweet chestnut is particularly abundant in East Sussex and Brighton & Hove, and is one of the few woodland types still under active coppice management.

Many species of conservation concern rely on woodland, including hazel dormouse, the six-spotted longhorn beetle and pearl-bordered fritillary. Sandstone outcrops are occasionally found in woodlands in the High Weald. These rare features hold water, creating damp, humid conditions that are ideal for rare communities of ferns, mosses and liverworts such as Dumortier’s liverwort.



18 An introduction to Brighton and Hove’s elm trees – Urban Tree Festival

19 Traditional orchards (UK BAP Priority Habitat description) (jncc.gov.uk)

20 Orchards (highweald.org)

21 City Downland Estate Plan, 2023.

## Hedgerows

A hedgerow is any continuous boundary line of trees or shrubs over 20m long and less than 5m wide at the base. It includes 'classic' shrubby hedgerows, lines of trees, hedgerows with trees and very gappy hedgerows (where the gaps are less than 20m). All hedgerows consisting predominantly (80% or more cover) of at least one woody UK native species are priority habitats<sup>22</sup>.

As well as their biodiversity importance, hedgerows have farming, landscape, cultural and archaeological interest. In East Sussex and Brighton & Hove, they were historically important to the iron industry with a strong correlation between hedges with slow, hot-burning hornbeam and areas where iron ore was melted down.

We have about 4,700km of hedgerows in East Sussex and Brighton & Hove comprising 30 woody species. A significant proportion of our hedgerows, particularly in the north, are likely to be both ancient and species-rich<sup>23</sup>, a result of scrub and woodland converted to arable use. Smaller fields in the High Weald lead to a greater density of hedgerows, and the mosaic of interconnecting hedgerows, shaws and woodlands provide the visual structure of the High Weald landscape. Historically, mature trees have been grown in hedgerows, mainly ash and pedunculate oak, the latter grown for timber for shipbuilding. Mature trees greatly enhance the wildlife benefits of a hedgerow.

Hedgerows are particularly important for butterflies and moths, farmland birds, dormice and bats, the latter using them for commuting from roosts to foraging areas. They are similar to woodland edges, and are an essential component in maintaining

wildlife corridors between areas of woodland which are becoming increasingly fragmented. Other species that depend on hedgerows include the brown hairstreak butterfly and linnet, both of which are in national decline. Our characteristic hedgerow species include hawthorn, blackthorn, field maple, hazel, hornbeam and pedunculate oak.

Modern management practice, including flailing, severely limits the opportunities for mature tree regeneration, and failure to replace lost or damaged trees will alter the landscape and greatly reduce biodiversity. It is estimated that about 45% of hedgerows were lost in England and Wales between 1945 and the mid 1980s. It is also estimated that 42% of hedgerows in Sussex are unmanaged; many are very gappy and reverting to tree-lines, thus providing a different habitat and ceasing to be protected under the Hedgerow Regulations. Removal of hedgerows can also lead to soil erosion.



22 Sussex Biodiversity Partnership, 2010. Hedgerow Habitat Action Plan.

23 Wealden GI Study, 2017.



## Scrub

Scrub is hugely valuable for wildlife, providing food, shelter, breeding and roosting sites. It may be scattered bushes or closed canopy vegetation, occasionally with a few scattered trees. Good scrub has a diverse structure with different heights, but is usually less than 5m tall<sup>24</sup>. Many scrub plants are pioneers, which grow fast and can colonise open habitats quite rapidly.

Most scrub in Britain is seral, forming a stage in the transition from open vegetation to woodland, and it can grow in a range of environments including coastal wetlands, grasslands and heathlands, forming a mosaic<sup>25</sup>. For example, mixed scrub and chalk grassland are often adjacent to each other and have a symbiotic relationship. As a common and dynamic habitat, we do not know exactly how much we have in East Sussex and Brighton & Hove, but best estimates are that there is 500-600km<sup>2</sup> of scrub in England<sup>26</sup>.

Tall herbs at the scrub edge are vital to many grassland invertebrates that need nectar-rich shrubs to complete their lifecycles. Hawthorn, blackthorn, bramble and herbs provide early pollen and nectar and foraging habitat for herbivorous and predatory invertebrates in their adult and larval stages. Reptiles use south facing scrub for basking and hibernation, for example heathland gorse scrub edges are perfect for basking adders, and scrub provides a corridor for linking wetland habitats for amphibians.

Scrub is hugely important for birds and the fruit and seeds provide autumn and winter food for resident and migrant birds<sup>6</sup> and mammals. Yellowhammer and linnet nest in low, dense scrub edges, and nightingale and turtle dove need thickets of dense scrub with a margin of rough grass. Other key species dependant on scrub in East Sussex and Brighton & Hove include black hairstreak, juniper, marsh fern, fly orchid, round-leaved dog rose and eared willow.



<sup>24</sup> Defra farming blog: [create scrub and scrub mosaics](#).

<sup>25</sup> Defra farming blog: [create scrub and scrub mosaics](#).

<sup>26</sup> Mortimer, S.R. et al, 2000. *The nature conservation value of scrub in Britain*. JNCC Report No. 308.

 Black hairstreak © iStock.com/Tomasz Klejdysz



## Lowland Heathland & Sandstone Outcrops

Map 5 (Appendix 1A) shows the distribution of lowland heathland and sandstone outcrops in East Sussex and Brighton & Hove.

### Heathland (including dry acid grassland)

A heathland is an open landscape dominated by low-growing plants, mainly heather and gorse as well as bracken, grasses, herbs and mosses. These are interspersed with areas of bare ground and scattered trees, providing important habitat for a diverse range of invertebrates, birds and reptiles. Wetter heath areas and acidic ponds provide important habitat for dragonflies and damselflies. Soils are acidic and free-draining with very low nutrient levels.

Ashdown Forest contains the largest area of **lowland heathland** remaining in south-east England and is considered one of the best areas in the UK for **wet heath**, supporting several species of bog mosses, bog asphodel, deergrass, common cotton-grass, marsh gentian and marsh clubmoss. The Forest supports internationally important populations of nightjar, Dartford warbler and the Eurasian hobby, with other notable birds including woodlark, hen harrier and great grey shrike. The site also supports important **assemblages**<sup>27</sup> of beetles, dragonflies, damselflies and butterflies, including the nationally rare silver-studded blue, important lichen assemblages and the most inland remaining population of hairy greenweed<sup>27</sup>.

Other key sites include Chailey Common, and within the High Weald, there are pockets of heathland found within the remnants of other large medieval forests, including Bedgebury, Broadwater, St Leonard's and Worth<sup>28</sup>.

The South Downs retain areas of **chalk heath**, a rare habitat that develops on acidic deposits overlying chalk on which an interesting mix of chalk grassland and heathland plants are found. For example, there is a very small area (c. 0.8ha) of chalk heath on the south-western boundary of the Eastbourne Downland Estate<sup>29</sup>.

In East Sussex and Brighton & Hove, **acid grassland** is characterised by low growing wildflowers and grasses, heather and gorse, with communities differing depending on local and regional variation in soil and moisture, but always including specialised species. They often have a high cover of bryophytes and lichens



Heather © Wim van 't Einde.unsplash.com

27 Lewes Biodiversity Study.

28 HWOANB Unit, undated. [Heathland in the High Weald Landscape](#).

29 Eastbourne Downland Estate.



and support a number of specialist invertebrates that are not found in other types of grassland. Acid grasslands are uncommon in lowland Britain and often form a mosaic with heathland. All sites in East Sussex and Brighton & Hove are relatively small – all below eight hectares and most less than five. Ditchling Common contains a range of grassland types resulting from the wide variation in drainage conditions and past management, but acidic heath grassland dominates, with ungrazed areas consisting of bracken, scrub and woodland. The flora includes a number of locally uncommon plants. Butterfly and moth populations are of importance and the site is locally valuable for breeding birds<sup>30</sup>.

In total, we have 1,465ha of heathland and acid grassland in East Sussex and Brighton & Hove, of which 1,206ha (c. 82%) lies within designated sites. The total extent has decreased by approximately 70% in the past 100 years and the average size of heathland patches has declined from 11.1ha to 2.4ha, indicating significant habitat fragmentation. Despite this, our resource across Sussex represents about 5% of the national area. These areas are important for reptiles, amphibians and birds and are important for invertebrates, many of which depend on warm, sheltered positions, with areas of bare earth and a good source of nectar or prey. Key species include tree pipit, redpoll, heath potter wasp, small red damselfly, keeled skimmer, black darter, heath lobelia, upright chickweed and sundews.

## Sandstone Outcrops

The High Weald is one of Europe's most important sandstone landscapes and one of only three in England<sup>31</sup>. The physical shape and configuration of outcrops, including vertical walls, ledges,

crevices, caves, cracks and gullies, means that they support a wide variety of microhabitats<sup>32</sup> which in turn support specialised species, most notably liverworts and mosses. These microclimates allow species that are normally found in the damp west of the UK to survive in the relatively dry south-east; the High Weald is a stronghold for species such as Dumortier's liverwort, a species normally found in the west of England and the Atlantic coast of Ireland. As such, they are of considerable importance for biodiversity, as well as being of significant geological and often cultural interest. Sandstone outcrops show greater species diversity than other exposed rocks, such as abandoned quarries.

Most of our sites are small and fragmented and total 34ha, of which 29ha (c. 87%) lies within designated sites. These include Hastings Cliffs which are of national importance for their bryophyte flora. Key species include slender thread-moss and ribbonwort.



• Eridge Rocks Nature Reserve © Sam Roberts/Sussex Wildlife Trust

<sup>30</sup> Lewes Biodiversity Study.

<sup>31</sup> HWAONB Unit, November 2012. [The High Weald Sandstone Project](#).



## Rivers, Streams & Aquifers

Our wetlands are a major wildlife resource covering a huge portion of East Sussex and Brighton & Hove. There are many different types, each with its own particular environmental characteristics, vegetation and suite of species adapted to using it. Freshwater habitats include rivers and streams, lakes and ponds, grazing marsh and wet grassland, reedbed, fen, aquifers and springs and bogs. Map 6 (Appendix 1A) shows the distribution of wetland habitats in East Sussex and Brighton & Hove.

### Rivers & River Systems

Our **river** systems include our main rivers – the Ouse, Cuckmere, Brede and Eastern Rother – and their network of tributaries, streams and channels. We have 3608km of rivers of which 775km (nearly 22%) receive some degree of protection from designation. They change greatly in character from their source, ranging from fast-flowing headwater streams to slow-flowing meandering rivers in our broad valleys and floodplains. Our major catchments drain to low-lying coastal plains at Pevensey and Pett Levels with smaller rivers, locally known as Havens and Rifes, draining through them.

Most of our main river floodplains are isolated from the rivers which support them and so do not function naturally. Man-made flood embankments separate the majority of our estuaries and main rivers from their floodplains which results in there being very limited natural estuarine habitat. Large parts of our coastal plains are already below sea level, and are protected by man-made sea defences and pump drainage which contributes to the lowering of land levels in the face of rising sea levels. Some rivers and streams have been entirely destroyed, drained or filled in. The majority have suffered less detectable changes through centuries of management,

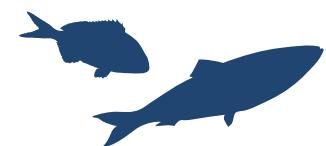


exploitation, dredging and development, and through the cumulative effects that the changing land use around them has caused in flow, sediment, erosion and pollution levels. During the last 100 years, there has been a substantial loss of good quality river channel and riparian habitat due to the straightening, diversion, over-deepening, widening, obstruction, pollution, and reduction in water flows due to abstraction and continual dredging and management of the majority of the County's rivers and streams. It is unlikely that there is any truly untouched stream or river in Sussex.

At least 80% of the rivers in the South East are failing the Water Framework Directive's 'Good Ecological Status', so it can be extrapolated that over 2,800km of rivers and streams in East Sussex are in need of ecological rehabilitation or restoration. Of all the river estuaries, Cuckmere Haven is the least developed, but is still almost entirely engineered and managed.

**Damselflies**

© Clément Falize/unsplash.com



Gravel riffles and pool sequences along with large woody debris structures, natural rock formations and gullies along our rivers support plants such as water crowfoot as well as freshwater invertebrates including mayflies, willow flies, freshwater shrimps, and pea mussels as well as some rare water beetles. Key river species include water vole, sea trout, European eel and white-clawed crayfish.

## Chalk Streams

**Chalk rivers or streams** flow across or are influenced by chalk bedrock. They are usually fed by underground or seasonal springs and often have winterborne stretches which dry in late summer. Chalk geology is rare worldwide and England has most of the chalk rivers in Europe. There are only about 35 chalk rivers in the whole of the UK, with one in East Sussex and Brighton & Hove – the Lewes Winterborne – making our chalk rivers and streams of global importance.

South Downs chalk streams are set apart from others in that they have their source high in the hills, making the gradient steeper. They are small, steep and fast flowing channels, which often run through small wooded valleys. Being fed by groundwater, they are clean and clear and have a relatively stable temperature. These unique conditions support an unusual diversity of wildlife including important fish populations and many specialist insects. They harbour some of the most specialised communities of plants, insects and other wildlife in the LNRS area, including rare mosses and lichens<sup>32</sup>.

There are nearly 31km of chalk streams in East Sussex, of which only 2km (7%) are designated. Across Sussex, there remains at

least 100km of potential chalk streams which could be added to this resource if surveyed. Less than 20% of our chalk streams are deemed near natural. Many are heavily impacted by surface water run-off from surrounding land use, sedimentation, obstructions such as weirs, invasive species, water abstraction and climate change.

## Aquifers

Water that permeates into the ground and is stored within the rock is referred to as an **aquifer**. The chalk aquifer of the South Downs is one of the major aquifers in the UK supplying groundwater to the urban areas of Brighton & Hove and Eastbourne in East Sussex, as well as Worthing and Chichester in West Sussex and Portsmouth in Hampshire. It is susceptible to pollution from a variety of sources including leachate migration<sup>30</sup> from landfill sites, diffuse pollution from agriculture, and point source pollution from urban environments. The restoration and expansion of priority habitats such as chalk grassland will help protect our aquifer<sup>33</sup>.



⌚ Mallard and brown trout in chalk stream © iStock.com/Paul Colley

32 Southgate, F, 2012. *The Wetland Potential of Sussex*. Sussex Wildlife Trust.

33 Jones, H.K. and N.S. Robins (Eds), 1999. *The Chalk Aquifer of the South Downs*. British Geological Society.



# Wetlands & Standing Water Bodies

## Wetlands

Our rivers and river systems support the hydrological function of our wetlands. These are many and varied and include reedbeds, floodplain grazing marsh and wet grassland, peatland habitats including bogs, mires and fens, as well as standing water bodies ranging from reservoirs and lakes to ponds and ditches.

**Peatlands** receive water and nutrients from the soil, rock and groundwater as well as from rainfall. They can be groundwater fed (basin and floodplain fens) or rain and run-off fed (valley mires, springs and flushes. There are 34ha of fen in East Sussex, of which nearly 84% are within designated sites. However, there is little accurate survey information and small, fragmented sites are often found alongside other types of wetland habitat. Whilst it is likely that all the major areas of true fen in our LNRS area have been mapped, there may be other valuable fragments surviving, so the true distribution and location is not known. The majority is found within Combe Haven with smaller areas at Pett Level. Across Sussex there are only 18 fen sites recorded with an area of over 1ha, and only seven have an area of over 2ha. These peatlands support a diversity of animal and plant communities including higher plants, such as oblong and round-leaved sundew, fen bedstraw and marsh fragrant-orchid, dragonflies and other insects such as variable damselfly, and a range of aquatic beetles including the king diving beetle and *Hydrochus ignicollis*.

**Reedbeds** are 'single species' wetlands dominated by over 60% cover of common reed – a perennial, flood tolerant grass that grows to over 2m high. In the UK, the majority are found in river floodplains and low-lying coastal areas. Drainage, development and pollution has led to the loss of huge areas of reedbed, and most of the reedbeds in East Sussex and Brighton & Hove are small and fragmented. Many occur around the silty margins of ponds and lakes, with their size fluctuating depending on water levels and pond management.



Bearded tit, Pett Level © iStock.com/suerob



The total area of reedbed in East Sussex and Brighton & Hove is 120ha, 93% of which lies within designated sites. Our largest reedbed, at just over 15ha, is at Filsham with other large areas in the Pannal Valley and Rye Harbour, the biggest stand being over 11ha. Reedbeds naturally filter and clean water and trap sediments, and are fantastic habitats for wildlife, especially birds. Some of our key reedbed species include marsh harrier, bearded tit and bittern.

**Grazing marsh** is pasture or meadow that is occasionally flooded, with a network of drainage ditches with fresh or brackish standing water. The **ditches** are usually manmade, originally installed to drain marshland and low-lying fields for farming. Sites may contain seasonal water-filled hollows and permanent ponds with emergent swamp communities. Grazing marshes are particularly important for breeding waders such as snipe, lapwing and curlew and some of ours support internationally important populations of wintering Bewick swans. The ditch network tends to support the majority of its biodiversity, with these and other more natural wetland features supporting a wide variety of emergent and submerged plants, and often important for invertebrates including dragonflies and water beetles.

We have about 9,810ha of grazing marsh of which nearly two thirds lies within designated areas. Pevensey Levels is one of the largest and least fragmented lowland wet grassland systems in the south-east. The Levels support the largest known population of little whirlpool ram's-horn snail in the UK as well as an outstanding assemblage of rare, vulnerable and endangered species including the fen raft spider. It is one of the best sites in Great Britain for freshwater molluscs, one of the five best sites for aquatic beetles



 Dyke, Brede Valley, Winchelsea © iStock.com/asmithers

and supports an outstanding assemblage of dragonflies. It also supports 68% of the 160 aquatic vascular plant species in Great Britain. Eastbourne Levels support some uncommon species tolerant of brackish conditions which also reflect a saltmarsh heritage in the southern marshlands. The recent construction of shallow lakes and ponds has added to this and as a result, Eastbourne marshes not only have the rich biodiversity typical of Pevensey Levels, but they also have much additional assemblages making them important within the South East<sup>34</sup>. Despite this, it is estimated that only 20% of our grazing marsh is of high enough quality for wildlife<sup>35</sup>.

34 The Biodiversity of the Eastbourne Grazing Marshes.

35 [Floodplain meadow and washland | Sussex Wildlife Trust](#)

## Standing Waterbodies

**Ponds** are small waterbodies between 1m<sup>2</sup> and 2ha which usually hold water for at least four months of the year<sup>36</sup>. Even very small waterbodies can have high conservation value, as can semi-seasonal and temporary ponds which may dry up in the summer, as these can support both specialised and ecologically valuable communities. We estimate that we have more than 10,500 ponds in East Sussex and Brighton & Hove. They are an important open water resource, as well as refuge habitats<sup>37</sup> for amphibians and reptiles, dragonflies and damselflies, aquatic plants, mammals and birds. We are a stronghold for great crested newts, and other important species include the pondweed leafhopper which nationally is only found in six ponds in south-east England, variable damselfly, orange foxtail and water violet.

**Lakes** are waterbodies greater than 2ha which hold water permanently. They are usually ancient ecosystems formed by geomorphological processes, while **reservoirs** are relatively young environments constructed to meet human needs<sup>37</sup>. They are highly productive because plant nutrients are plentiful and are characterised by having dense, long-term populations of algae in mid-summer, often making the water green. Their beds are often covered by dark anaerobic<sup>38</sup> mud, rich in organic matter. Bottom dwelling invertebrates are abundant, and the plentiful supply of food can support large populations of wildfowl. We have no data on the extent of our lakes but we have five water storage reservoirs: Bewl Water, located near Lamberhurst on the East Sussex/Kent border; Weir Wood Reservoir, East Grinstead; Darwell Reservoir, Battle; Powdernill Reservoir, Battle; and Arlington Reservoir, Polegate.

Bewl Water is the largest stretch of open water in the South East<sup>38</sup> and is important for large numbers of waders and wildfowl during the winter and as a stopping point during migration. A total of 171 species have been recorded including rare visitors such as great northern diver, smew and black-winged stilt and high wintering numbers of great crested grebe, little grebe, wigeon and teal. The reservoir also provides habitat for dragonflies with 20 species regularly recorded<sup>39</sup>. Weir Wood Reservoir is also important for dragonflies, damselflies and butterflies<sup>40</sup> as well as for birds including kingfisher and osprey, and during the summer, grey heron regularly breed there. Darwell Reservoir supports pike, perch and eels, with occasional brown and rainbow trout. Powdernill Reservoir is used by numerous bird species<sup>41</sup> and Arlington Reservoir provides a sanctuary for thousands of over-wintering birds including wigeon, shoveler, great crested grebe, Canada geese and barn owl.



36 Pond Conservation Group, 1993. *A Future for British Ponds. An agenda for action*. Pond Conservation Group.

37 Freshwater Research News: reservoirs as biodiversity hotspots.

38 Bewl Water – Southern Water

39 Sussex Biodiversity Partnership, 2009. *Bewl Water Biodiversity Opportunity Area*.

40 Weir Wood Reservoir Local Nature Reserve | East Sussex County Council

41 Sussex Biodiversity Partnership, 2009. *Rother, Brede and Tillingham Woods Biodiversity Opportunity Area*.





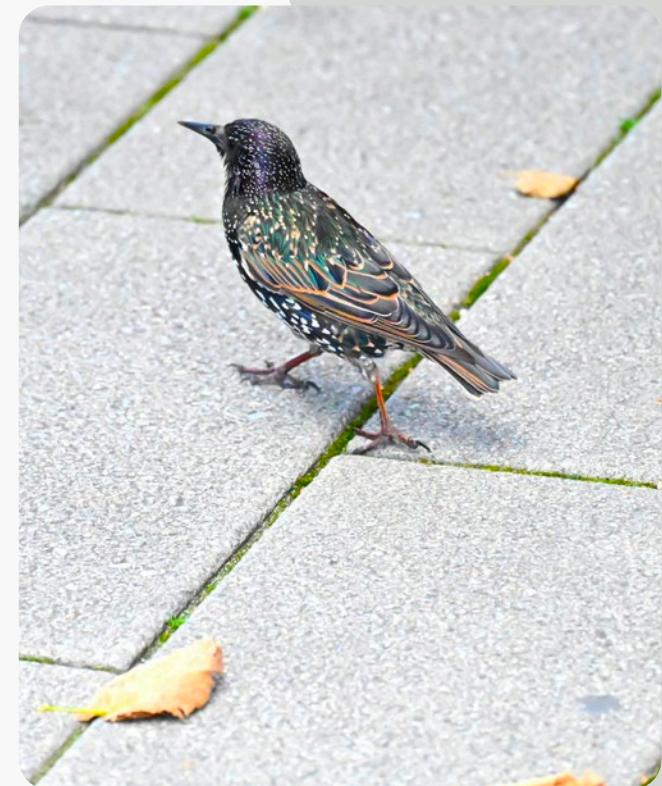
## Urban Nature

Over 820,000 people live in East Sussex and Brighton & Hove, with about 80% of the population in urban areas, currently estimated to cover about 7% of our LNRS area. Urban nature is important for a number of reasons: lots of our wildlife is now dependent on urban areas, e.g. house sparrows and hedgehog; being in or close to nature is important for our health and wellbeing; and urban nature provides a vital link between our towns and cities and the countryside. Peregrine falcons nest on buildings in Brighton & Hove while the piers, and now Brighton Marina, are renowned for their starling murmurations and winter roosts. Towns and cities are also a stronghold for breeding swifts.

Urban greenspace can include green roofs, street trees, verges, urban parks and gardens. Landscape around buildings can be designed to include green infrastructure<sup>41</sup> such as tree planters, ponds, grass and lawn areas, green roofs and sustainable urban green drainage systems (SuDS). Private gardens can also offer a significant resource for urban wildlife. These greenspaces offer multiple benefits like providing shade, reducing urban run-off and pollution, and regulating temperatures, but they also provide important wildlife corridors and stepping stones to help species move across the landscape.

Urban greenspaces in East Sussex and Brighton & Hove include:

- Allotments and community gardens;
- Amenity greenspace (e.g. areas used for informal recreation and village greens);
- Cemeteries and religious grounds;
- Civic space and market squares;
- Green and blue corridors and cycleways;
- Natural and semi-natural greenspace;
- Parks and gardens;
- Outdoor sports grounds (e.g. playing fields and golf courses);
- Provision for children and young people.



Our best estimate is that about 57% of our urban areas is green space, although not necessarily all of this will be good for biodiversity. There may also be as much as 7,000ha of private gardens in the City of Brighton & Hove alone<sup>42</sup>. The Living Coast (Brighton to Lewes Downs UNESCO Biosphere Reserve<sup>43</sup>) is one of only a handful of such reserves worldwide that includes a major urban area, and one of its fundamental aims is to pioneer ways to balance the daily needs of people and nature.



<sup>42</sup> The Brighton & Hove Habitat Audit 2007-2009 (unpublished report).

## 4.4 Species

The East Sussex and Brighton & Hove LNRS area is rich in biodiversity, with 14,382 species recorded in the last 20 years, including everything from diatoms (single celled algae) to mammals. 20% of these are of conservation concern, meaning they are rare, threatened or declining, and 3.5% are legally protected. Our most diverse groups are fungi, flowering plants, beetles, moths and flies, with the number of species recorded in each of these groups close to or exceeding 1500. We have 15 of the 18 native species of bats, and nearly 42% of our birds are either Red or Amber Birds of Conservation Concern. Whilst only 0.8% of the species recorded are invasive non-natives, the fact that we have 118 of these species within the LNRS area highlights the need for targeted action.

The species longlist for East Sussex and Brighton & Hove, made up of species of national conservation concern, included nearly 900 species, ranging across all the major species groups. Shortlisting in line with LNRS guidance resulted in 160 species being identified as priorities for nature recovery, of which 125 were grouped into 19

assemblages (groups of plants and animals that would benefit from similar management measures). Priority species include some of our rarest species, some that are considered iconic of the area, and some that are relatively widespread but that resonated strongly with the local community. For the full list of Priority Species and associated measures, see Part 3.

**Spiked rampion** is one of our rarest plants, found at only eight sites across the whole of the UK, with 85% of the UK population at just one site. The Species Recovery Trust leads an ongoing partnership project for the species, including East Sussex County Council, Kew at Wakehurst, Forestry Commission and the Sussex Biodiversity Record Centre. With such a small and localised distribution, it is essential that the LNRS supports the continuation of this work. **Grayling** is notable as the single population in East Sussex and Brighton & Hove is the only one in the UK found on chalk. That population is in imminent risk of extinction, but early signs from a collaborative project between Butterfly Conservation and the South



Bumblebee on spiked rampion  
© iStock.com/Tanja Nik



Grayling  
© Derek Middleton/Sussex Wildlife Trust



Round-headed rampion  
© Ben Rainbow



Glow-worm  
© Don Baker



Downs National Park Authority to expand its range are promising, so the LNRS is keen to support the continuation of this partnership. Arguably, the species most iconic of the LNRS area is **round-headed rampion** – a chalk grassland plant that is found on Downs in Wiltshire, Hampshire and Surrey, but nowhere so frequent as it is here, so much so that it is known as the ‘Pride of Sussex’.

Other priority species which are not so restricted in their distribution are the hedgehog and the glow worm. **Hedgehog** populations have undergone a significant decline in recent decades, and are now largely restricted to our urban areas, where they are becoming strongly dependent on networks of private gardens. Hedgehogs were the third most popular species from our public surveys, with 14% of our respondents mentioning them, and are considered to be a champion species for urban habitats. The **glow-worm** is another iconic species which, although well distributed and relatively common in East Sussex and Brighton & Hove, is declining and has been lost from some sites, and therefore has been prioritised.

Species that have not been shortlisted but that will be supported by habitat measures include the barn owl, marsh gentian and adder. East Sussex and Brighton & Hove is important for all of these species, but they will benefit from our measures to enhance, expand and recreate their core habitats. Also amongst this list is the great silver water beetle, the UK’s largest insect. Although nationally scarce and restricted to grazing marshes in the south and east, it has been frequently recorded in ditches and ponds in a number of wetland sites in East Sussex and Brighton & Hove and it will benefit from nature recovery action in these areas.

Another species that has not been shortlisted is the native black-poplar. This is a rare and declining species in the UK, and is most frequent in parts of East Anglia and some central areas but very scarce in the South East. Despite that, about 45 mature trees are known across Sussex, and a hugely successful restoration programme has seen about 8000 saplings planted across both counties. In addition to our priority species, the LNRS will support at least 326 species of conservation concern.



**Female hedgehog with hoglets**  
© iStock.com/slowmotiongli



**Adder**  
© iStock.com/MikeLane45



**Barn owl**  
© Oliver Walters



**Black-poplar**  
© Kate Ryland



## 4.5 Nature Networks & Wildlife-rich Habitats

The above habitat descriptions relate to specific habitat types. In reality, these habitats rarely exist in isolation, but more often occur together to form a mosaic. Natural succession means that many habitats will develop into others over time – grassland will become scrub, scrub will become woodland. Part of nature conservation is to manage these changes, but often our most valuable areas are those transitions or ecotones where one type of habitat grades into another. It is also seldom the case that nature recovery projects will concentrate on creating a single habitat. Indeed, lots of the positive actions already being taken for nature recovery in East Sussex and Brighton & Hove, such as Rewilding Waterhall, restoration of mineral sites or the creation of habitat banks for biodiversity net gain, are aimed at creating a range of different habitat types.

Many of our priority species are not restricted to one habitat type, but rather need a mosaic of different habitats in close proximity to flourish. A good example is the turtle dove which needs dense scrub for nesting, seed rich arable margins with patches of bare ground and a nearby source of water. Similarly, grey long-eared bats often roost in farm buildings, but they rely on grassland meadows and woodland edge for foraging. As many of our habitats are fragmented by development, farming and infrastructure, nature recovery must consider how and where we can better connect our semi-natural habitats. Providing green or blue corridors, like hedgerows or ditches, or improving and expanding existing habitats, helps wildlife to move through the landscape, building resilience and expanding into new areas.

Because of this, some of our priorities relate to the creation and strengthening of nature networks and wildlife-rich areas. Such projects are absolutely fundamental to nature recovery at scale, and are firmly embedded in our guiding principles around habitats needing to be bigger, better, more and joined-up for wildlife.



 **Turtle dove** © Neale Ambrose/Sussex Wildlife Trust



# 4.6 Protected Sites

## Designations

The value of East Sussex and Brighton & Hove for wildlife and beauty is recognised by the areas designated for their nature conservation interest. Some are protected under international agreements or national legislation and some under local policies. The following table shows the extent of these **protected sites** in East Sussex and Brighton & Hove.

SSSIs support habitats and/or species of national importance, and represent our best sites for wildlife and geology. Within these nationally important areas, some are additionally designated as NNRs – these recognise some of our most important habitats, species and geology and are considered to be the ‘jewel in the crown’ of our SSSIs. SACs are internationally important sites for habitats and species, SPAs are internationally important sites for birds, and Ramsar sites<sup>◊</sup> are internationally important wetlands. All of these sites are protected by law.



Pevensey Levels © Kai Hilton/Sussex Wildlife Trust



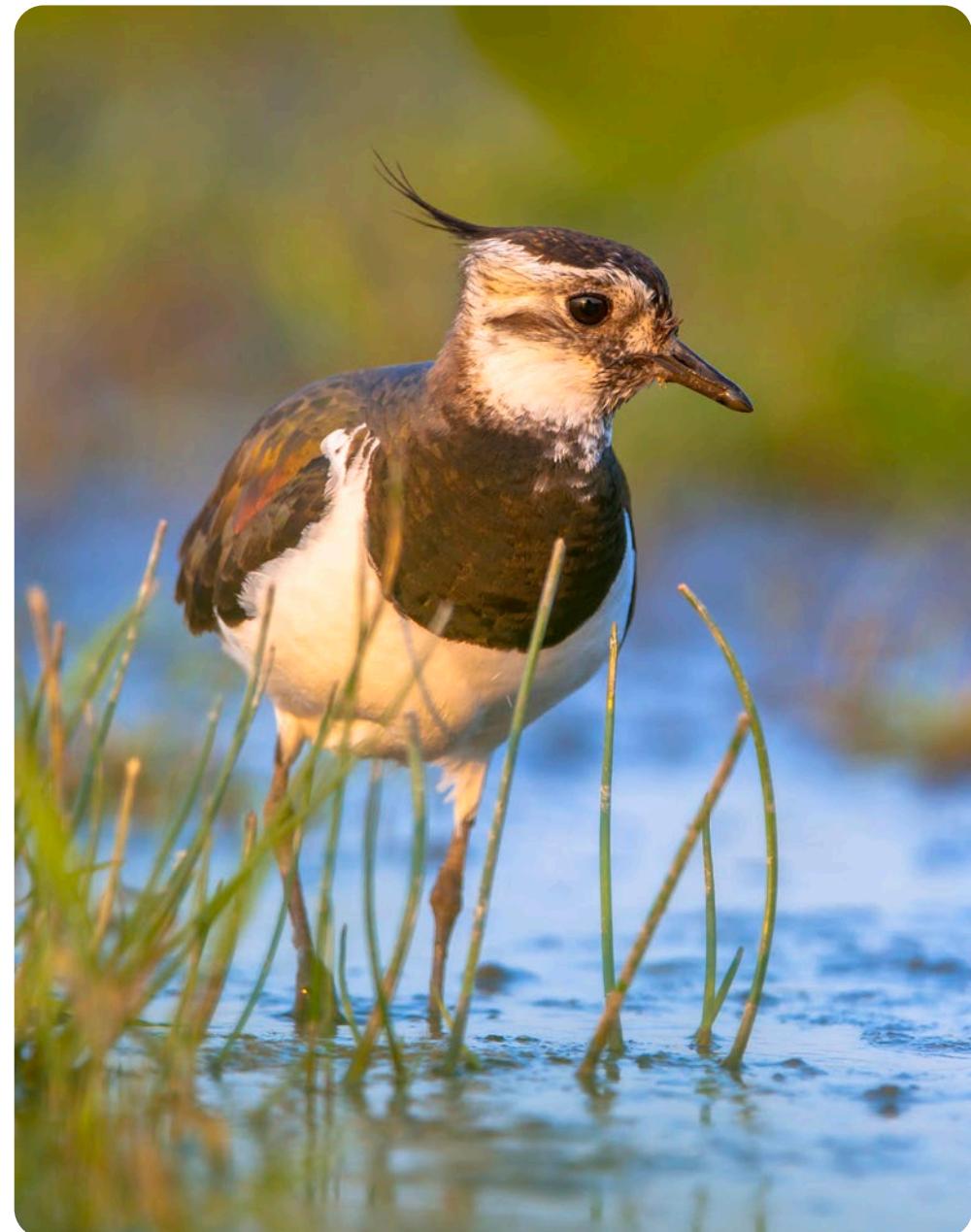
Designation	No. of Sites	Extent (ha)	% of LNRS Area
Ramsar wetlands	2	6,442	3.7
Special Areas of Conservation (SAC) <sup>◊</sup>	6	7,624	4.2
Special Protection Areas (SPA) <sup>◊</sup>	2	5,546	3.2
Sites of Special Scientific Interest (SSSI) <sup>◊</sup>	65	15,519	8.5
National Nature Reserves (NNR)	4	342	0.2
Local Nature Reserves (LNR)	28	2,029	1.1
Local Wildlife Sites (LWS) <sup>◊</sup>	368	10,408	5.7
<b>Total extent of national &amp; international designations*</b>	<b>15,547</b>		<b>8.6</b>
<b>Total extent of all designations*</b>	<b>26,004</b>		<b>14.4</b>

\*NB designations can overlap so total extents are not a direct sum.

Locally important sites can also be designated and protected through policy. LNRs are locally important for wildlife, geology, education and enjoyment, and LWSs contain features of substantive wildlife value, and are meant to provide more comprehensive coverage of important areas for wildlife than SSSIs.

Some sites can have multiple designations due to their importance for a range of wildlife. For example, Ashdown Forest is one of the largest single continuous blocks of lowland heath, semi-natural woodland and valley bog in the South East. It is a SSSI for its habitats, uncommon plants, rich invertebrate fauna and important populations of heath and woodland birds, an SAC for its wet and dry heaths and its population of great crested newts, and an SPA for its internationally important populations of nightjar and Dartford warbler. Part of the site (Old Lodge) is also a LNR managed by Sussex Wildlife Trust.

Pevensey Levels is one of the largest and least fragmented lowland wet grassland systems in the South East. It is a SSSI for its nationally rare and nationally scarce aquatic plants, nationally rare invertebrates and nationally important populations of wintering lapwings, an SAC for its population of little ram's-horn whirlpool snail and a Ramsar site for its wetland invertebrate and plant assemblages. It also contains a NNR.



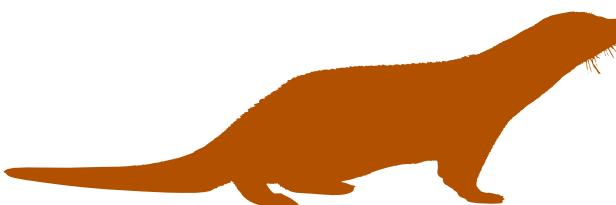
 Lapwing © iStock.com/CreativeNature\_nl



## State of Nature

There is no comprehensive view of the State of Nature in East Sussex and Brighton & Hove due to a lack of resources and investment. We therefore have to use the condition of our protected sites as a proxy measurement for the state of our most important wildlife sites.

Designation of sites for nature conservation does not necessarily always mean that these sites are in good condition. The condition of SSSIs is assessed by Natural England, and East Sussex County Council and Brighton & Hove City Council both regularly report to Defra<sup>6</sup> on the condition of our LWS in positive management. In both cases, East Sussex and Brighton & Hove exceeds the national average, with about 90% of our SSSIs in either favourable or recovering condition. The condition of our LWS is less certain as these values have been calculated based on our best available information, such as whether or not LWS are under environmental stewardship or have management plans for biodiversity rather than on-the-ground assessments. However, more than 40% of our LWS are being managed positively for biodiversity.



Castle Hill in the City Downland Estate SSSI.

© The Living Coast UNESCO Biosphere

Protected site	Condition	% England	% of LNRS Area
SSSI	Favourable	33.56	36.48
	Unfavourable – recovering	45.15	53.99
	Unfavourable – no change	8.74	1.25
	Unfavourable – declining	12.44	8.14
LWS	Site in positive management	39	40.76
	Site not in positive management	-	3.53
	Site has insufficient evidence	-	55.71

## 4.7 Irreplaceable Habitats

Some of our habitats would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity<sup>43</sup> – these are collectively called **irreplaceable habitats**<sup>4</sup>. Within East Sussex and Brighton & Hove they include ancient woodland, ancient and veteran trees<sup>5</sup>, coastal sand dunes, saltmarsh (spartina saltmarsh swards and mediterranean saltmarsh scrub) and lowland fens<sup>44</sup>. Ancient woodland includes ancient semi-natural woodland (ASNW), plantations on ancient woodland sites (PAWS), ancient wood pasture and parkland (AWPP) and infilled ancient wood pasture and parkland (IAWPP).

The exact extent of irreplaceable habitat within the East Sussex and Brighton & Hove LNRS area is not known, as our habitat mapping is not refined enough to distinguish between the different types of saltmarsh, not all of which are classed as irreplaceable. Similarly, the extent of ancient wood parkland and pasture is not known, nor is the or area covered by ancient and veteran trees, and there are many of these trees which are as yet unrecorded.

Within East Sussex and Brighton & Hove, we consider that chalk streams and sandstone outcrops would meet the definition of being irreplaceable, although they are not formally recognised as such.



Yew Tree, Wilmington © iStock.com/Matthew J Thomas

Irreplaceable Habitat	Area (ha)	% of LNRS area
Ancient woodland (ASNW + PAWS)	20,998.1	11.6
Ancient woodland (AWPP + IAWPP)	Unknown	Unknown
Ancient & veteran trees	Unknown	Unknown
Lowland fens	33.8	0.02
Coastal sand dunes	53.5	0.03
Spartina saltmarsh swards	Unknown	Unknown
Mediterranean saltmarsh scrub	Unknown	Unknown

43 National Planning Policy Framework, December 2023.

44 The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024.



## 4.8 What nature does for us

### The 'natural capital' of East Sussex and Brighton & Hove

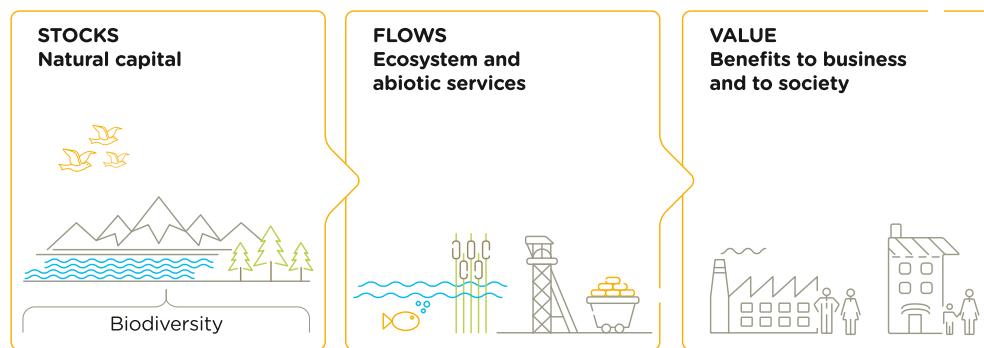
#### What is natural capital?

Our ecosystems, habitats, species and soils deliver a range of 'ecosystem services' that are essential for human life. These include food, fuel, clean air, clean water, pollination, carbon storage and sequestration<sup>6</sup>, nutrient cycling<sup>6</sup>, and opportunities for recreation which in turn supports our health and wellbeing. Nature acting in this way can be thought of as 'natural capital', with each element (habitats, species, soils etc) acting as a natural capital **asset**.

**Figure 2. Natural Capital flow diagram**

(Adapted from Natural England, 2021. 2nd edition.

How to start using your natural capital atlas).



For nature to deliver the benefits we depend on, three factors are important:

- How **much** we have (quantity/area of habitats, soils etc);
- How **healthy** it is (habitats, soils etc. must be in good ecological condition and able to function in a way that can provide services and benefits);
- **Where** it is (is it located where we need it to be in order to deliver specific services?).

#### Natural Capital and Local Nature Recovery Strategies

When developing an LNRS, it is important to understand *how* nature can help to deliver vital benefits and services and *where*. This helps to direct action and investment to where it will support wildlife but also deliver additional benefits that are of value to our local society and economy. Two approaches are particularly important:

- Creating more effective 'nature networks' of bigger, better, more and joined-up habitats, supported by healthy soils and more natural processes<sup>6</sup> in our landscape. By doing this we will bring our natural capital into better health, and as a result deliver more benefits and services for people.
- Using nature in very specific ways to deliver benefits where we need them most, for example planting trees or grassland buffers along our

rivers to support water quality or reduce flood risk. These sorts of approaches are known as ‘nature-based solutions’.

## Benefits and services provided by natural capital assets in East Sussex and Brighton & Hove

Table 1 gives an indication of the likely benefits/services that each habitat type (or asset) provides, as actual levels will depend on their quality, quantity and location. However, it is a useful checklist to have in mind when creating or enhancing habitats with a view to delivering benefits for nature and people.

Across Sussex, the pressure on some of our natural capital is such that we risk losing not just the habitats, but also the benefits they provide.

In 2019, the Sussex Nature Partnership identified our *‘natural capital at risk’*, habitats that are:

- Not adequately protected under existing mechanisms;
- Fragile or vulnerable and/or already highly fragmented;
- Of particular significance in a Sussex context;
- Irreplaceable or not easily re-created if destroyed (either on-site or elsewhere).



The habitat types included in this list are:

- Lowland heathland
- Mudflats and saltmarsh
- Coastal vegetated shingle
- Reedbed, fen and grazing marsh
- Floodplain woodlands
- Species-rich grassland

These habitats have been prioritised within this LNRS for enhancement and expansion, as a means to support wildlife and increase the resilience of these ‘at risk’ natural capital assets.



 Wildflower meadow, South Downs © iStock.com/Lemanieh



**Table 1. Ecosystem services and benefits provided by natural capital in East Sussex and Brighton & Hove**

	Food/Fibre	Water Supply	Climate Regulation	Clean Water	Pollination	Wild Species Diversity	Hazard Regulation (flooding and erosion)	Cultural
<b>Coastal Habitats</b>	✓ Grazing (saltmarsh)	✗	✓ Carbon storage & sequestration	✓ Water purification & detoxification (saltmarsh)	✓ Pollinator habitat (saltmarsh and sand dunes)	✓ Wildlife habitat, feeding and roosting, nursery grounds for fish	✓ Coastal flood & erosion mitigation	✓ Aesthetic value, sense of place and accessible nature
<b>Farmland</b>	✓ Food production; timber; fibre (wool)	+/- Depends on management Management of land and habitat creation can assist with flow regulation (storage and recharge) However, impact may be negative when poor soil management increases run off	+/- Depends on management Negative impacts come from emissions of GHG and depletion of soil carbon This can be improved or reversed through farming system and soil management	+/- Depends on management and location Negative impacts come from run-off from farmland which is a common source of diffuse pollution and sedimentation This can be improved through farming system, soil management and creation of vegetation buffers along water courses	+/- Depends on management Habitats created on farmland can provide vital habitats for pollinators However, negative impacts on pollinators come from the use of pesticides and loss of habitats	+/- Depends on management Semi-natural habitats on farmed land provide important habitats for wildlife; farmland may be particularly important for specialist species Farmland may offer few opportunities for wildlife if areas of habitat are small or not managed for nature	+/- Depends on management Farmland can provide positive benefits for surface and fluvial flood mitigation However, it may also be a contributor to soil erosion and increase in potential for downstream flooding	✓ Aesthetic value, sense of place and accessible nature (where available via footpaths, access land etc)
<b>Species-rich Grassland</b>	✓ Meat (grazing, hay)	✗ Water quantity	✓ Carbon storage and sequestration	✓ Detoxification and purification	✓ Supports pollinators	✓ High value wildlife habitat	✓ Surface and fluvial flood mitigation	✓ Aesthetic/ sense of place; accessible nature

**Table 1. Ecosystem services and benefits provided by natural capital in East Sussex and Brighton & Hove**

	Food/Fibre	Water Supply	Climate Regulation	Clean Water	Pollination	Wild Species Diversity	Hazard Regulation (flooding and erosion)	Cultural
<b>Woodland &amp; Hedgerows</b>	✓ Timber	✓ Water quantity and flow regulation – especially from floodplain woodland	✓ Carbon storage and sequestration	✓ Detoxification and purification	✓ Supports pollinators	✓ High value habitat (value varies with woodland type and condition)	✓ Surface and fluvial flood mitigation (especially floodplain woodland)	✓ Aesthetic/sense of place; accessible nature
<b>Lowland Heath</b>	✓ Timber: woodland on heathland sites	✗	✓ Carbon storage and sequestration	✓ Detoxification and purification	✓ Supports pollinator species	✓ High value wildlife habitat	✓ Surface and fluvial flood mitigation (particularly headwaters)	✓ Aesthetic/sense of place; accessible nature
<b>Rivers, Streams &amp; Aquifers</b>	✓ Fish (non-commercial)	✓ Water quantity and flow regulation	✓ Temperature regulation	✓ Detoxification and purification of water	✗	✓ High value wildlife habitat	✓ Surface and fluvial flood mitigation	✓ Accessible nature; aesthetic/sense of place
<b>Wetland &amp; Standing Water Bodies</b>	✗	✓ Flow regulation and recharge	✓ Carbon storage and sequestration	✓ Detoxification and purification of water	✗	✓ Support biodiversity; bird breeding, wintering and feeding grounds	✓ Surface and fluvial flood mitigation	✓ Accessible nature; aesthetic/sense of place
<b>Urban Habitats</b>	✓ With the exception of allotments and some private gardens	✓ SuDS and other habitats: provide flow regulation and recharge especially on aquifer	✓ Carbon storage and sequestration – although small area may make this negligible	✓ Detoxification and purification of water	✓ Important sources of pollinator habitat in urban areas	✓ Wildlife habitat: important refuges of habitat in urban areas	✓ SuDS and other habitats: Surface and fluvial flood mitigation	✓ Accessible nature; aesthetic/sense of place; health and wellbeing



## 4.9 Pressures on nature in East Sussex and Brighton & Hove

Nature across the UK is in trouble, with more than 50% of species in decline. Some causes of this are historic, some are current and ongoing while others are emerging and have impacts that are hard to predict. Changing the trajectory from decline to ‘nature’s recovery’ requires action to reduce these pressures but also to ensure habitats and species are more resilient in the face of change.

Many of the pressures on nature are complex ‘system’ problems that can only be tackled through collaboration across sectors, from government, policymakers and conservation organisations to community groups, farmers and land managers. Examples include climate change, air pollution, water pollution, loss of wildlife habitat and urbanisation. Despite their obvious impact on nature, tackling these is beyond the scope of a LNRS.



 Rural flooding © iStock.com/bunsview

The strategies **can**, however, help to identify where and how habitats and species can be supported to become more resilient to the changes which come from these pressures. They can also identify where ‘nature-based solutions’ can be used as part of the toolkit for minimising impacts on the wider environment.

### Long-term trends

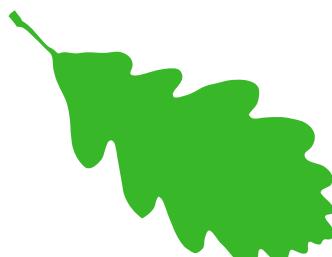
Decline in biodiversity in the UK is related to a number of specific trends that have been ongoing for many decades:

- Loss of wildlife-rich habitat;
- Reduction in the size of areas of habitat, so that in many cases they are too small to support species or function ecologically;
- Greater fragmentation of wildlife-rich habitats – sites are separated across a landscape and not well connected, which provides barriers for species which need to move between areas of habitat for survival;
- Reduction in the quality, species composition and/or structure of habitats – making it less wildlife-rich and less resilient to further change;
- Direct loss of species and/or reduction in their abundance or distribution, via pests, disease, pollution, climate change, changes to habitats etc;
- Reduction in environmental quality (e.g. poor air, water or soil quality) which has knock-on effects on both habitats and species;
- Loss of natural processes and functions, which means that the potential of nature to deliver the range of wider benefits and services we rely on is reduced.

The principles, priorities and measures set out in Parts 2 and 3 of this Statement of Biodiversity Priorities, directly respond to these sorts of impacts on nature and build on the actions and experiences of landowners, conservation organisations and other practitioners in addressing these trends in East Sussex and Brighton & Hove over many years.

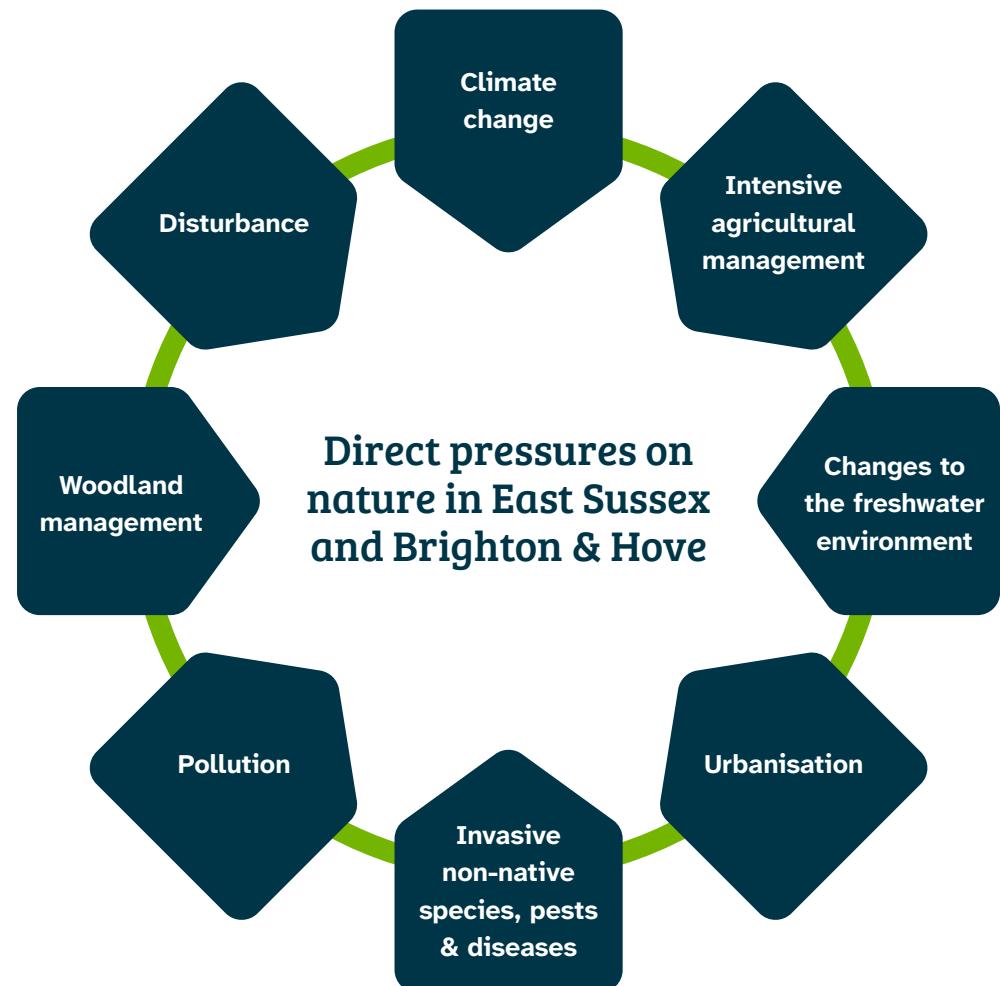
The trends above are a result of pressures which can be thought of as either 'direct' or 'indirect'. Indirect pressures (such as our growing disconnection from nature and decrease in the value and importance of nature within society and key decision-making processes) are not dealt with here but must be part of a wider cross-sectoral approach to achieving nature's recovery.

The direct pressures on nature in East Sussex and Brighton & Hove fall broadly into eight categories, many of which are inter-related<sup>45</sup>.



<sup>45</sup> These categories are taken from State of Nature Report for the UK (2019).

**Figure 3. Direct pressures on nature in East Sussex and Brighton & Hove**



# Climate change

Human-driven climate change has had a significant impact on nature in the UK over the last 40 years and this is projected to continue for decades or even centuries to come.

The key climatic changes affecting nature now and into the future in East Sussex and Brighton & Hove are **increasing temperatures, changing rainfall patterns and sea level rise**. The south-east of England is expected to see the greatest rise in summer temperatures in the UK. At the same time, summer rainfall is projected to decrease while winter rainfall is expected to increase, characterised by a higher frequency and intensity of storms. This will create an increased risk of both drought and flooding events. Sea levels are predicted to rise along with changes to tides and waves, and again this rise is expected to be greatest in the south of England.

These changes are already having a direct effect on species, affecting their abundance (populations decrease or increase depending on whether they can cope with the conditions) and distribution (species may be forced to move to more favourable conditions if they can). They also affect the timing of important seasonal events (for example, when birds lay eggs or plants flower) which can have a critical impact on populations of species and the complex inter-relationships between them that are vital for their survival.



Stormy seas © iStock.com/Ceri Breeze



## Our habitats face a range of challenges from a changing climate

*Specific impacts are related to habitat types and how resilient these are to factors such as precipitation and temperature.*

For example, drier summers will result in significant reductions in water levels in our **rivers, chalk streams, wetlands, ponds and aquifers**. This will be compounded by abstraction of water for human use (existing and in the future), in our already ‘water stressed’ region. The result is greater risk of these habitats drying out with clear impacts for species and the range of other environmental benefits we receive from our freshwater environment (most notably our water supply). Higher temperatures across the year will drive increases in water temperature, reducing oxygen levels in these habitats and leading to greater concentrations of nutrients and pollutants and exacerbating poor water quality where this is already an issue.

**Lowland heathland and species-rich grasslands** will also be affected by changes in rainfall and temperature, with increased risk of wildfire and a change in species composition. Heathland, like wetland, will also be more likely to dry out in summer months.

**Woodlands** will be more likely to experience stress due to drought, with some tree species such as beech likely to be more vulnerable than others. Higher temperatures and drier summer conditions will mean that the choice of species for new woodland may have to change to ensure that new woodland can survive in more challenging conditions. More intense winter storms with higher winds are likely to cause increased damage to trees and woodlands in winter months. The changing climate is also increasing the risk to our woodland from pests and diseases, with ash dieback a current example of a pest which is radically impacting the species composition of our woodlands.



Sea defence work © iStock.com/FitchyImages

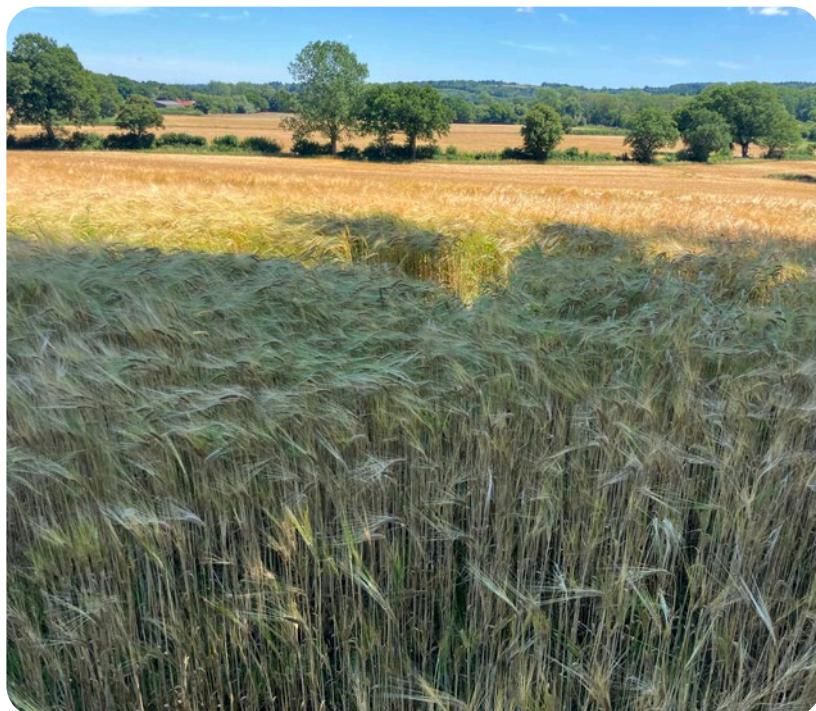
Along the coastline of East Sussex and Brighton & Hove, sea level rise and increased frequency and intensity of storms is already leading to significant losses of **coastal habitats**. For these habitats to survive, they need to be able to expand inland, out of reach of the rising seas and coastal erosion. However, the coastline of East Sussex and Brighton & Hove is characterised by extensive areas of hard infrastructure located very close to the shoreline (hard flood defences, roads, railways and urban areas). This results in ‘**coastal squeeze**’ leaving these coastal habitats with nowhere to go.

Managing and defending our coastline for the benefit of coastal habitats and wildlife as well as people will therefore be a significant challenge in the future. Where they are possible and feasible, some approaches to coastal defences such as ‘**managed realignment**’ can offer both – the space for the creation of more coastal habitats which themselves can help to buffer areas inland from storms and sea level rise. Harbours and tidal reaches of rivers will also remain of vital importance as key areas for expansion of threatened coastal habitats.



## Intensive agricultural management

Around two thirds of land in East Sussex and Brighton & Hove is farmed. Our most iconic and valued habitats, such as ancient woodland and species-rich grasslands, were shaped by 'traditional' agricultural management practices over centuries (typically low intensity stocking levels, rotational cropping patterns and low/no inputs of agricultural chemicals). Specialist farmland species such as arable weeds and farmland birds also co-evolved with these traditional practices and habitats and came to rely on them for their survival.



 Farmland, Bodium © D Alcroft



## Farmed landscape losses since WWII

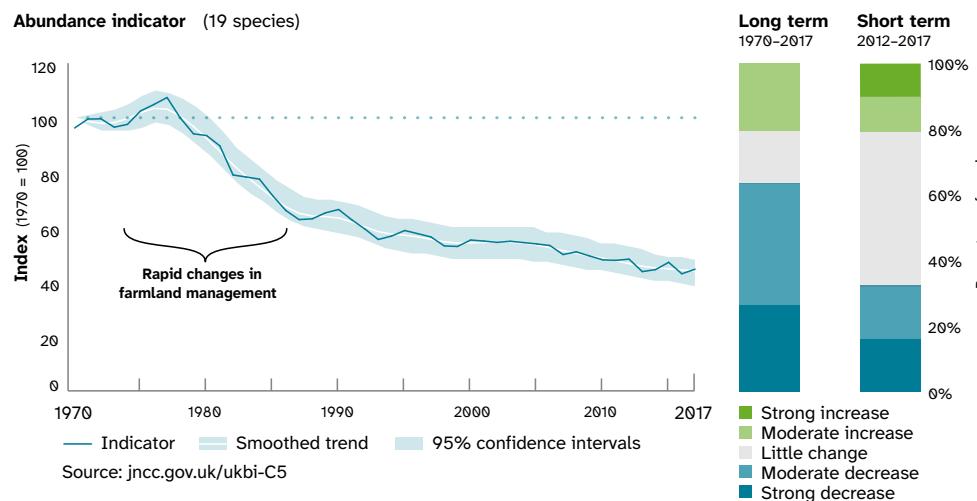
During the last century, changes in agricultural policy incentivised a drive towards greater productivity from the farming sector, which in turn led to more intensive practices and the over-use of chemicals. The result was less space for nature across our farmed land as hedgerows and field margins were removed (to increase field sizes) and wetlands were drained (to make way for grazing). Habitat loss was coupled with degradation of habitat condition as traditional practices such as hay making, hedge laying and low-intensity grazing practices were replaced by modern and more intensive farming methods. The over-use of pesticides led to a degradation in soil health and reduction of pollinator and insect populations while excess use of fertiliser dramatically increased the impact of agricultural run-off on our water courses and aquatic habitats.

The result was a dramatic loss of habitats and species from the farmed landscape across the UK. Most dramatic was the decline in farmland bird species – those dependent on the more traditional habitats and practices on farmland and unable to adapt as these habitats have been lost. These species, which include corn bunting, grey partridge, turtle dove and tree sparrow experienced declines of more than 80% between the 1970s and 2010s. In contrast, some of our more 'generalist' species such as jackdaw and woodpigeon proved to be more resistant to agricultural change and numbers have remained healthy.



## Figure 4. UK Biodiversity Indicator: Trends in breeding farmland birds in the UK, 1970 to 2017

(source: State of Nature 2019, p20)



## Looking ahead: a more nature-positive future

This historic impact of agriculture has been widely acknowledged as significant and mostly negative. However, over recent decades, agricultural policy has moved towards a much more sustainable and nature-positive approach. Specific funds for agri-environment schemes<sup>6</sup> and a strong commitment from farmers and landowners to create or improve wildlife habitats has led to positive change. Policies and practices on reduced use of agri-chemicals have been adopted by the sector and approaches such as 'regenerative farming' have started to become more commonplace. Within protected landscapes in East Sussex and Brighton & Hove, specific funding and resources have helped to support farmers adopt nature-friendly methods and many farmers within the LNRS area are working individually and together through 'farmer clusters' to create habitats and support species across the farmed landscape.

## Support for our farmers and land managers

Progress, however, remains very dependent on government policy and funding and the wider economic pressures on farm businesses. Funding for environmental actions by farmers remains limited and uncertain, as government environmental land management schemes<sup>6</sup> continue to change. Creating and managing habitats can be costly and although funding from schemes may help, a loss of local abattoirs and small local markets for products such as wood and venison make it more difficult for farmers to derive financial benefits from conservation management.

There also remains a need for well-coordinated advice and support that makes financial sense for farmers, to help them deliver the types of nature positive actions they want to. Meanwhile, issues such as diffuse agricultural pollution and run-off from farmed land continue to cause significant impacts on nature, and new forms of land use change (such as conversion of grasslands to vineyards and horse paddocks) may have impacts on wildlife that are not yet fully understood.



# Changes to the freshwater environment

Population growth and development increases the demand for water. In East Sussex and Brighton & Hove most of our water comes from groundwater and is abstracted from chalk aquifers. These aquifers also supply our springs, streams, wetlands and rivers. We are reliant on their ability to recharge in periods of rainfall, yet this function is impacted by development and inappropriate land use above the aquifer.

Water is also directly abstracted from some of our rivers. Many of the rivers and streams in East Sussex and Brighton & Hove are experiencing pressures due to low flows and these are likely to become more severe as drier, hotter summers exacerbate the impacts of abstraction. Some of the most acute problems of low flows have occurred in our chalk rivers and streams and fragile wetlands systems.

Water quality, in our rivers and streams but also in our groundwater, is also under increasing pressure in East Sussex and Brighton & Hove. The greatest threat to the water quality of our rivers and streams comes from wastewater (discharge of waste from sewage, agriculture or trade) and diffuse pollution from the land (nutrients, pesticides and herbicides finding their way into water courses through soil and water run-off from fields). Ground water quality is most at threat from poor nutrient management of rural and agricultural land. (See also 'pollution').

Freshwater habitats have also been directly impacted by land use and agricultural change in recent decades. Wetlands have been drained to support grazing and there has been a significant loss of ponds across Sussex, through neglect or direct human intervention.

Those freshwater habitats that remain face increasing pressure due to agricultural land drainage, pollution, isolation and urban development.

Finally, many of our rivers and streams have been physically changed to enable the water environment to be used for a variety of purposes. These have introduced structures such as weirs, culverts and flood banks and have straightened meanders and altered the width of river channels. The result has been a reduction in the ability of our river systems to function naturally, both hydrologically and ecologically. However, innovative river restoration schemes are emerging in East Sussex and Brighton & Hove as an approach to tackling this issue where landowners, flood risk authorities and local residents are supportive.

 The Cockshut Stream Restoration Project realigned the Cockshut chalk stream into a new channel flowing through 6.8ha of wetland habitat, boosting biodiversity and climate resilience of the Lewes Brooks habitats and beyond.  
© D Alcroft



# Urbanisation

The demand for new housing and infrastructure has led to increasing urbanisation across the UK, particularly around existing centres of population. Urbanisation directly affects wildlife by changing land use and causing habitat loss. New settlements, roads and infrastructure also increase fragmentation of the landscape, creating barriers between habitats and species populations.

In East Sussex and Brighton & Hove, urbanisation has typically led to the loss of habitats such as grassland, arable farmland, hedgerows, woodland and trees and caused notable fragmentation of valued priority habitats such as lowland heath and chalk grassland. In coastal areas it has also resulted in the loss or fragmentation of already pressured coastal habitats such as coastal vegetated shingle and saltmarsh<sup>46</sup>. While the impacts on habitats are most obvious from large development or infrastructure projects, the cumulative habitat losses and fragmentation from small developments must not be underestimated and can gradually diminish and fragment important areas of habitat over time.

Within urban areas, increased light pollution, air and noise pollution and predation by domestic animals has a significant impact on wildlife. Other impacts include the creation of impermeable surfaces which cause damage to soil function and promote run-off. The result is increased surface water flooding and diffuse pollution of

water courses and groundwater. Water quality is also compromised by increased levels of wastewater from septic tanks and sewage discharges. A greater demand for water from a growing population will place greater strain on our water supply and thus on the water flows within our aquifers and rivers.

## However, urbanisation need not always lead to biodiversity loss.

Changes in legislation now mean that many types of development must create ‘biodiversity net gain’ (BNG) – ensuring that they result in at least 10% more biodiversity than was present before the development. Schemes like District Licensing for great crested newts also create habitat for this protected species, paid for through development. Greenspaces, verges and gardens within urban areas provide important urban habitats for biodiversity but are often designed for human use rather than for wildlife. However, with a shift in emphasis they all hold potential for improvement for wildlife and can host habitat creation projects which will deliver multiple benefits for nature and people at the local scale.

It is worth noting that in East Sussex and Brighton & Hove a large proportion of our LNRS area sits within our Protected Landscapes (South Downs National Park, High Weald National Landscape). These areas have tighter controls on development which has the result of squeezing most new development into the areas beyond their boundaries. This is creating a distinct area of the LNRS that is expected to absorb the greatest impacts of urbanisation. This will have impacts on nature and the wider environment, making the role of the LNRS and BNG in driving nature’s recovery in this area even more important.

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<sup>46</sup> In 2019, Sussex Nature Partnership identified those habitats most at risk from further losses to development (natural capital at risk). See the Natural Capital Investment Strategy for Sussex for more information.



# Invasive non-native species and pathogens

Invasive non-native species (INNS)<sup>6</sup> are plants or animals that have established and spread outside their natural range. Whether introduced deliberately or by accident, they are often free from the selection pressures of their natural enemies and establish and spread rapidly. They outcompete our native flora and fauna for space, light, food and pollinators and can alter the composition and function of habitats and entire ecosystems. They may predate on native species and spread disease. In some cases, they play a direct role in the local extinction of species. Thus, they are one of the greatest threats to global biodiversity.

Over 3200 non-native species have been recorded in Great Britain and of these, approximately 2000 are established and reproducing in the wild. More than two hundred of these have had a documented negative ecological or human impact. In East Sussex and Brighton & Hove, invasive non-native species are found across all our ecosystem types. Rivers, steams, ponds, wetlands and transitional waters are particularly affected, both by species which establish in the water or on the banks. Grassland, heathland and woodland are also affected. The species that pose the most risk are shown in Table 2.

**Table 2. Invasive non-native species that pose the greatest risk in East Sussex and Brighton & Hove**

Invasive Species	Main habitat/species impacted
Grey squirrel	Red squirrel
Rhododendron ( <i>Rhododendron ponticum</i> )	Woodland
Cherry laurel	
Oak processionary moth	
Himalayan balsam	Rivers and streams
American skunk cabbage	
Giant hogweed	
Floating pennywort	
Parrot's feather	
Water fern	
New Zealand pygmyweed	
Curly waterweed	
Canadian and Nuttall's waterweed	
Asian clam	
Signal crayfish	White-clawed crayfish
Chinese mitten crab	White-clawed crayfish, salmon, trout
American mink	Water vole
Cotoneaster	Grassland



Once established, INNS are very difficult to eradicate although it is possible to reduce their impact. In most cases, **control of their impact** is therefore the strategy adopted for dealing with INNS. Preventing the establishment in the first place is also vital and relies on good biosecurity<sup>6</sup> and awareness raising. In East Sussex and Brighton & Hove, eradication is an ambition limited to American mink, a species that was released into the countryside from fur farms in the 1950s and which has decimated Sussex water vole populations. Eradication is a feasible aim for this species and has already been achieved in areas of eastern England.

Pathogens and diseases can also affect our native flora and fauna, with significant impacts on the organisms affected and to the wider ecosystems of which they are a part. High profile examples that have affected the woodlands of East Sussex include Dutch elm disease (*Ophiostoma novo-ulmi*) and ash dieback (*Hymenoscyphus fraxineus*). Dutch elm disease, a fungus spread by elm bark beetles, has had a particularly significant impact on elms in and around our coastal towns including Brighton & Hove which holds the National Elm Collection.

Ash dieback, another fungus, is devastating the population of European ash across the UK. Carried on the wind, this pathogen has had the greatest impact in the south-east of England. Killing trees from the inside, it creates safety issues for all local authorities as affected ash must be felled along roads and paths at significant cost. Other pathogens that are emerging in the woodlands of East Sussex and Brighton & Hove include oak processionary moth and the spruce bark beetle. These are being monitored carefully to provide more information on their spread, impact and implications for woodland owners.



© Himalayan Balsam © iStock.com/Jonathan Repp



# Pollution

Pollutants threaten our biodiversity and have an impact on all habitats. They come in a diverse range of forms including but not limited to: plastic waste; chemicals in water, soil and air; noise and light from cities and transport; and nutrient enrichment of sensitive habitats.

## Poor water quality

Poor water quality places significant pressure on the habitats and species within our freshwater, coastal and marine ecosystems and is being driven primarily by pollution. Pollution from agriculture, land use and development (including sewage discharges) is causing increased levels of sediment, nutrients (phosphates/nitrates) and other chemical pollutants (such as pesticides and veterinary chemicals) in our water courses, standing water bodies and aquifers. Climate change is also a significant part of this problem, with high intensity rainfall events in the winter months contributing to greater levels of run-off from the land reaching our water courses, and bringing with it larger volumes of sediment and pollutants. Decreased rainfall patterns in spring and summer months lead to lower water levels in rivers, streams and other water bodies, concentrating levels of pollutants.

High levels of nutrients in ponds, lakes, estuaries and harbours (nutrient enrichment) combine with higher water temperatures to encourage the growth of algae. This changes the chemical and oxygen composition of these environments (a process called eutrophication<sup>4</sup>) and further decreases water quality. Many of our most fragile freshwater, coastal and marine habitats and sites are at significant risk from eutrophication. More generally, most of the surface water, ground water and coastal parts of our catchments (called 'water bodies' under the Water Framework Directive) fail against indicators for water quality and none are in 'good ecological condition'.

## Light, noise and air pollution

Caused by development and infrastructure, light pollution impacts moths, bats and other nocturnal species, affecting breeding and feeding patterns. It is thought to be having a particularly detrimental impact on the population of glow worms found in East Sussex and Brighton & Hove where very few breeding sites of these rare insects remain. Noise pollution on land and at sea affects the survival of birds and animals by reducing their ability to navigate, find food, mate, and avoid predators.

Air pollution from vehicle emissions can lead to soil acidification<sup>4</sup> and eutrophication; nitrogen deposition is a particular issue for the important heathland found in Ashdown Forest and is creating a reduction in species diversity found within this internationally important lowland heath ecosystem.

## Plastics

Plastic pollution is found in all types of ecosystems and includes microplastics and microbeads which are too small to be filtered out by water treatment works. Plastic pollution in an area causes habitats to degrade, disrupting their natural balance and function. It can also cause starvation, injury and death to wildlife who ingest it or get trapped or tangled in it. This is a particular concern in our coastal and marine habitats.



# Woodland management

Nature within woodlands throughout the UK is under pressure from a lack of management, overgrazing by deer, increasing levels of recreational disturbance, and nitrogen pollution. The prevalence of tree disease is also of increasing concern (See Invasive Non-Native Species and Pathogens above).

Ancient woodland, which makes up only 2.4% of total land cover in the UK is of great importance for biodiversity, supporting a range of specialist species. Despite its classification as an ‘irreplaceable habitat<sup>47</sup>’, it is at particular risk from these pressures and faces ongoing risk of loss to development and infrastructure. Due to the poor ecological condition of much of this woodland, specialist woodland bird and butterfly species are also in decline across the country, despite an overall increase in woodland cover. This signals the need to prioritise the quality of these ancient woodlands as part of any nature-recovery effort. East Sussex and Brighton & Hove contain high areas of ancient woodland relative to other counties in England and therefore tackling these pressures and bringing this habitat type back into healthy ecological condition is noted as a particular priority for woodland within this LNRS area.



Deer

© iStock.com/JMrocek

## Deer pressure

The presence of very large numbers of deer in East Sussex is having a significant impact on the health of our habitats and is one of the most pressing and significant impacts on our woodlands. Fallow deer have been in the UK for many centuries and are now considered ‘naturalised’ but they have increased to unsustainable levels across the south-east of England. A more recent introduction, the muntjac deer, is also expanding in numbers at an alarming rate. These deer overgraze woodland, removing plant life growing beneath the canopy and preventing woods from naturally regenerating. As they destroy new plants, they also have a significant impact on new woodlands or hedgerows, making their establishment almost impossible in some areas. If deer numbers are not tackled, they will have a very detrimental impact on our woodlands’ future health and resilience, with knock on impacts on the specialist woodland species already in decline. Grey squirrels also impact on the ability of woodland to thrive and regenerate and their management is a specific priority in some parts of the LNRS for this reason.

<sup>47</sup> Irreplaceable habitat is a habitat that is very difficult (or takes a long time) to restore, create or replace once it has been destroyed. <https://www.gov.uk/guidance/irreplaceable-habitats#what-irreplaceable-habitat-is>



## The decline of traditional woodland management practices

Traditionally, woodland in East Sussex and Brighton & Hove would have been managed through coppicing, grazing and systematic rotation of cutting and felling. However, these practices have declined significantly as demand for wood for fuel, crafts, and other traditional woodland products has waned. As a result, many woodlands have been left unmanaged for many years or have been managed for timber. This has led to structural changes within our woods, a lack of trees at different stages of growth, over-shading and a general lack of opportunities for wildlife to thrive<sup>48</sup>. Sensitive woodland management supports much more biodiversity than unmanaged woodland. The diversity of height, structure and open spaces that management creates provide a mosaic of habitats capable of supporting both light and shade tolerant species<sup>49</sup>.

Traditional orchards, more often associated with Kent are also found across East Sussex and Brighton & Hove but particularly in areas of the High Weald. Countrywide, there has been significant loss of the more biodiversity-rich traditional orchards since the 1950s (90%) due to lack of management and a change in demand for their products<sup>50</sup>.



 Coppiced woodland  
© iStock.com/Chris Page

**“The State of Nature Report 2018 highlights mixed, but predominantly negative, long-term trends in woodland including: that 53% of woodland species have declined and 47% have increased; a 24% long-term decline in the index of change in the abundance and occupancy of woodland species; a 20% decline in the UK woodland bird indicator since 1970; and that 11% of woodland species are threatened with extinction from Great Britain”**

(Woodland Trust, 2018<sup>51</sup>).

48 <https://www.wildlifetrusts.org/habitats/woodland>

49 <https://highweald.org/document-library/guidance/woodland-1/high-weald-land-management-guidance-woodlands/?layout=default>

50 <https://highweald.org/document-library/guidance/orchards/high-weald-land-management-guidance-orchards/?layout=default>

51 <https://www.woodlandtrust.org.uk/media/1704/current-state-of-ancient-woodland-restoration.pdf>

## Disturbance

Our natural sites are visited by huge numbers of residents and tourists each year. However, in some places, recreational access is having a detrimental impact on nature. Types of disturbance include trampling, erosion, litter, noise and dogs off leads (which have a particularly negative impact on ground-nesting birds). Sites at the edges of urban areas and those with bigger tourist numbers face particularly high levels of disturbance.

Disturbance is a key pressure on internationally important sites in our LNRS area including coastal sites which support breeding and nesting coastal birds, the Ashdown Forest (where 1.5 million visitors per year are having an impact on rare bird species the Dartford warbler and nightjar) and at Camber Sands SSSI, where more than 25,000 visitors per day in peak season are damaging rare vegetation and the dune system itself\*.

While the impact of disturbance depends on how vulnerable the habitats and species are at a particular site, it can be reduced through actions to manage access and by increasing visitor awareness and understanding.

More information on all of these pressures and how they impact habitats and species nationally across the UK can be found in the UK State of Nature Reports for [2019](#) and [2023](#).

Ground nesting birds like Dartford warblers are easily disturbed by dogs off leads.  
© iStock.com/Ian Newell



# Section 5.

## What is happening already?



Planting new hedgerows

© CPRE Sussex



SussexNatureRecovery.org.uk

## 5.1 Landscape-scale initiatives for nature

Though there are many pressures facing our natural world, there is much to be hopeful about in East Sussex and Brighton & Hove.

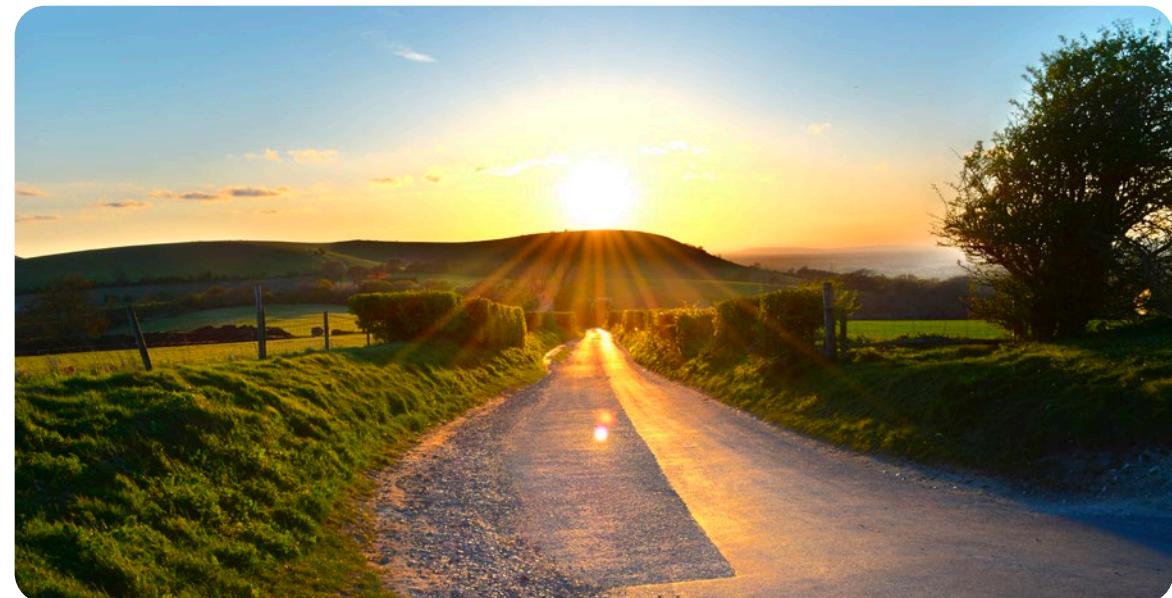
Delivering nature's recovery at scale is a **long-term and complex undertaking, requiring** collaboration and shared goals to mobilise landowners, policy makers, environmental experts and community groups to work together. Fortunately, several established and emerging initiatives are enabling just that in our LNRS area, and crucially they already have momentum, projects and resources in place.

The following are a few examples of the many projects and partnerships in East Sussex and Brighton & Hove.

As Protected Landscapes, the South Downs National Park and High Weald National Landscape are home to some of our most iconic habitats and species. They are also where over 200,000 people live and work. To achieve their ambitious environmental targets (the South Downs National Park for example, aims to increase land managed for nature from 25% to 33% by 2030), they provide leadership, coordinate large scale habitat improvement projects, offer support, advice and funding to landowners, and educate and engage local people.

© Volunteers moving brash as part of the Wilder Ouse initiative. Wilder Ouse is a partnership between Woodland Trust, Sussex Wildlife Trust and Environment Agency, with funding from Lewes District Council.

© Roz Bassford/Sussex Wildlife Trust



© A view of Woltonbury Hill in the South Downs National Park. © iStock.com/Inner\_Vision



Two exciting recent initiatives include [Weald to Waves](#), whose vision of establishing a 100-mile nature recovery corridor across Sussex is galvanising farmers, organisations and residents to pledge their land, and [Sussex Bay](#), which aims to unlock funding for marine and coastal recovery through 'radical collaboration'.

Other initiatives are focused on specific habitats within our LNRS area and encouraging local participation in their recovery. [Changing Chalk's](#) mission is to restore the biodiversity of our precious chalk grassland, and inspire connection between the nature, people and heritage of the Downs. The [Lost Woods of the Low Weald and Downs](#) project seeks to restore, expand and reconnect forgotten ancient forests and bring together local people to help care for them.

Working to improve our water environments are the [Adur and Ouse Catchment Partnership](#) and [Cuckmere & Pevensey Levels Partnership](#) which bring a wide range of stakeholders together to improve biodiversity, reduce flood risk and increase river health. Meanwhile, [Wilder Ouse](#), a partnership hosted by Sussex Wildlife Trust, provides free advice and support to landowners and communities with the aim of creating a Nature Recovery Network across the Ouse Catchment.

Innovative collaboration in East Sussex and Brighton & Hove also takes the form of farmer clusters such as [Pevensey Farmers](#) and other farmer-led initiatives, that see land managers working together to achieve broader environmental aims over their collectively larger areas. These can include improving soil health or supporting the return of farmland birds like grey partridge and turtle doves. The City Downland Estate Plan (CDEP) covers over 5000ha of rural downland owned by Brighton and Hove City Council, with the vision of a carbon negative and climate resilient biodiverse landscape. The estate aims to be a leader in sustainable farming, where local food production flourishes.



© An event for the Lost Woods of the Low Weald and Downs project. © James Ratchford/WTML



© Discussing the Sussex Bay vision of a thriving seascape in Jan 2025 - Kelly Smith, Black Tri Tribe, Councillor Andrew Harvey, Paul Brewer, Adur & Worthing Councils and Dean Spears, Sussex Bay.

© Sussex Bay

Pioneering land management at large estates such as [Montague Farm](#), [Iford](#), [Wilderlands](#) and [Wadhurst Park](#) has made these demonstrator sites for how to restore lost habitats, revive traditional practices and advocate for a more sustainable and biodiverse future.

Larger landowners in East Sussex and Brighton & Hove additionally include conservation charities (such as Sussex Wildlife Trust, The Woodland Trust, RSPB and National Trust) who manage nearly 3,000ha for nature between them, including some of our most loved nature reserves. Local Authorities also collectively own and manage land including our parks and other green spaces, and are working to improve these areas for wildlife and people. Brighton & Hove City Council's [Wilding Waterhall](#) project has transformed a 90ha golf course into a rich mosaic of downland habitats including chalk grassland, biodiverse native scrub, woodland, and dew ponds. The [Cockshut Stream Restoration Project](#) supported by Lewes District Council, the [Ouse and Adur Rivers Trust](#) and others has turned a degraded chalk stream into a thriving wetland, improving flood resilience, and revitalising a muchloved SSSI. Recognised regionally and nationally, it is a shining example of **local partnership delivering hands-on nature recovery**.

The [Sussex Nature Partnership](#) provides strategic leadership to the sector including a lead role in the production of this LNRS, and convenes over 30 organisations in service of its aim to 'protect and expand our natural capital and everything it gives us'.

Finally, a significant part of our LNRS area is covered by the designated UNESCO [Living Coast Biosphere Reserve](#). Recognising that our coast and downs are also home to thriving urban hubs, this partnership supports education and awareness-raising around the role of nature in our local economy, connecting conservation and sustainable development.

Achieving our nature recovery ambitions requires **more than aspiration** – it demands collaboration, momentum, **well-designed projects** and **adequate resources**. Without these, our nature recovery efforts risk being fragmented, short-lived, or misaligned with local and national priorities. Our **existing landscape-scale initiatives** offer the most effective foundation for delivering future nature recovery objectives because they already operate at the right scale, have strong partnerships, align with national strategy, and command local trust. Using them means we can move faster, go further, and do better – for nature and for people.



Friends of Waterhall ready for action! © Wilding Waterhall



## 5.2 Our building blocks for large-scale nature recovery

### Protected landscapes

Iconic havens for wildlife, *South Downs National Park* and *High Weald National Landscape* have legal frameworks for conservation and restoration, delivered via projects and partnerships, and contribute to national climate and biodiversity targets.

### Catchment partnerships

*Adur & Ouse Catchment Partnership* and *Cuckmere & Pevensey Levels Partnership* work to improve water quality and quantity, enhance biodiversity and reduce flood risk in our river catchments.

### Estates and farmer led initiatives

Whether on their own or collaboratively in clusters, farmers, landowners and land managers across the region are working to restore and create habitat, support species and improve soil health and water quality.

### Living Coast UNESCO Biosphere

The *Living Coast* is a designated UNESCO Biosphere Region, working in partnership from Worthing to Seaford, connecting people and nature from the South Downs to the sea. It promotes conservation, sustainable development and environmental awareness.

### Habitat creation and improvement projects

*Lost Woods of the Low Weald and Downs*, and *Changing Chalk* seek to bring back and enlarge key habitats and restore connectivity.

### Nature-based solution focused initiatives for land and water

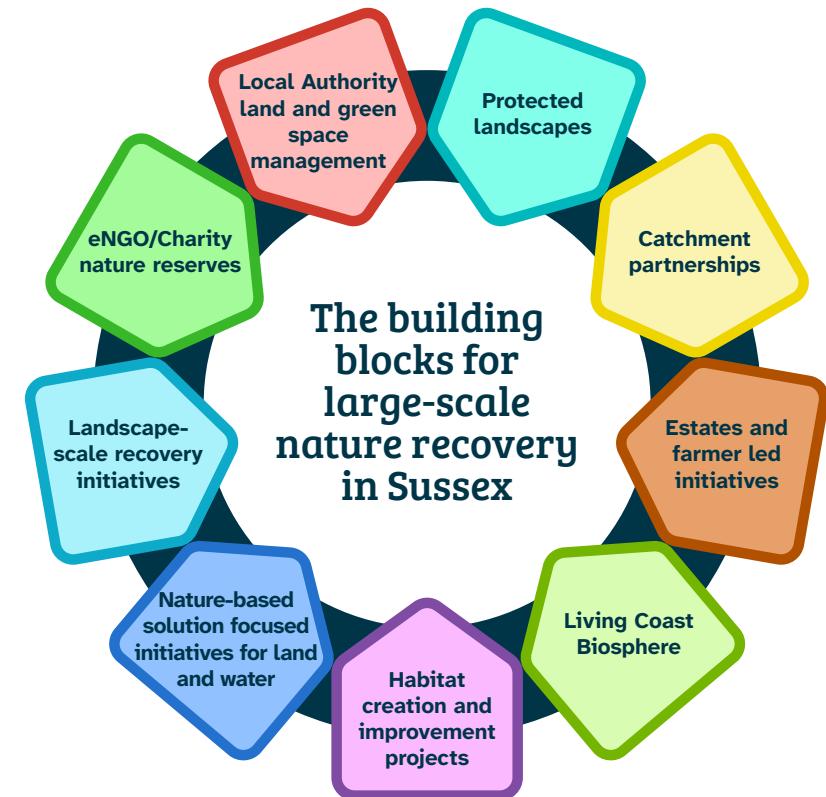
*Sussex Bay* is raising funds, ambitions and hopes for marine and coastal recovery. *The Aquifer Project (TAP)* is dedicated to protecting the chalk aquifer and improving groundwater quality and quantity.

### Landscape-scale recovery initiatives

*Weald to Waves* aims to establish a 100-mile nature recovery corridor across Sussex with pledges from farmers, community groups, schools, organisations and residents. *Big Chalk* enables its vision of creating thriving chalk and limestone landscapes across southern England by connecting, funding and supporting local activities. Meanwhile, *Wilder Ouse* works on the ground with landowners to restore ecological networks and systems across the whole Ouse catchment.

### eNGO/Charity nature reserves

*Sussex Wildlife Trust*, *Woodland Trust*, *RSPB*, *National Trust* and others, actively manage our nature reserves to enhance biodiversity and ecological health.



### Local Authority land and green space management

Collectively managing thousands of hectares of land including parks, public rights of way and coastal areas our Local Authorities at all levels can help to boost biodiversity and create green networks.

## 5.3 Community action

**At the local level, hundreds of community groups, volunteers and smaller organisations are undertaking vital work to improve and enrich our natural environment.**

East Sussex and Brighton & Hove has a vibrant conservation community with a myriad of different groups focused on protecting and conserving local wildlife and habitats.

'Friends of' groups maintain our parks and other green spaces while species-specific groups monitor and campaign for species such as bats or swifts. Area-based community groups of all sizes maintain ponds, plant wildflower strips, undertake ecological surveys or organise beach cleans.

Coordinating these smaller groups are networks of highly active and organised hubs, [Transition Towns](#)<sup>6</sup> and alliances who support a diverse programme of activities from conservation and education to sustainability fairs and climate cafes. Parish and town councils can also be key enablers of grassroots action, delivering local biodiversity projects and designating areas for nature in their neighbourhood plans.

In February 2025, following a sustained campaign by Love Our Ouse, Lewes District Council agreed to recognise the Rights of the River Ouse, including 'the right to be free from pollution... and a right to native biodiversity' – a pioneering and historic first. Wealden Council followed suit in July 2025, agreeing to support the idea of giving rivers a set of basic rights under the law and to support community action for the Cuckmere, Medway, Ouse and Uck.

In 2020, through work by passionate individuals, groups and organisations, Brighton & Hove City Council introduced planning rules requiring new builds to include bee blocks and swift boxes. Lewes was formally declared 'Swift Friendly' after action from Lewes Swift Supporters in 2023.

Trees for Seaford has planted over 3,000 **native trees and hedgerows** in public spaces, farms, and schools. The [Sussex Biodiversity Record Centre](#) supports local citizen scientists and has collected thousands of biological records, informing local **planning and conservation efforts** including this Local Nature Recovery Strategy. Multiple 'Wild About' groups, meanwhile, have helped host the High Weald National Landscape's [Wild About Darker Skies festival](#).

These examples and those overleaf, illustrate how hyper-local action in East Sussex and Brighton & Hove has delivered **tangible gains for wildlife, restored habitats, engaged thousands of residents, and shaped local policy**. This work shows that **grassroots action is central to nature's recovery** especially when supported by councils, landowners, and partnerships.

 Lewes Town Council formally agrees to Lewes Swift Supporters' proposals to declare the town as swift-friendly. Audrey Jarvis of Lewes Swift Supporters seen here with the Mayor of Lewes, Councillor Imogen Makepeace. © Nick Jarvis



## And residents?

Outside of volunteering, many East Sussex and Brighton & Hove residents are finding new ways to engage with our natural environment. In recent years, the number of sea swimming groups has exploded and these are now present in all our coastal towns, often becoming champions for the marine environment in the process and acting as eyes on the ground for pollution events.

Walking and hiking have also increased in popularity, especially with young people, with recognition of their health and wellbeing benefits and of our world-class landscapes. Rewilding courses, forest bathing, mindfulness retreats and forest schools are offered at many of our nature-rich places. Meanwhile nature-friendly gardening and practices such as No Mow May<sup>®</sup> have been embraced by local people, part of a wider cultural shift toward supporting nature in everyday life.

Whilst there is a lot we need to do in East Sussex and Brighton & Hove to restore nature, we can be confident that we are not starting from a blank canvas.



Wilding Waterhall ranger, Paul Gorringe shows moths to visiting school children.  
© Friends of Waterhall



## 5.4 Local achievements

A few of the fantastic local nature projects delivered by community groups and councils across East Sussex and Brighton & Hove. Read about many more in [our community group survey results](#).

**Bexhill Friends of the Down** – working with Trees for Cities, the group planted 1,500 native tree whips in January 2023 on what was previously mown grass. The land is now a young woodland.

**Woodingdean Wilderness Group** – in partnership with South Downs National Park Authority, 65 volunteers planted a hedgerow and enhanced a wildlife area with 1,000 mixed native species and 40 Elms to help boost pollinators, wildflowers, lizards and birds.



Woodingdean Wilderness Group planting 950 trees to create a wildlife hedge

**Growing Hollingdean** – planted and care for the Hollingdean Park Orchard, to create a community space and provide community food, as well as wildlife habitat. They added a pond in 2024.

**Lewes Swift Supporters** – successfully campaigned for Lewes – where an estimated 10% of Sussex swifts nest – to be declared a swift-friendly town to raise awareness of the species and encourage actions to help them flourish.

**Love Our Ouse** – successfully coordinated the development of the Charter of Rights for the River Ouse by convening experts and stakeholders and engaging catchment communities to promote a culture of care for the river. This pioneering approach has inspired many other rivers across the UK to progress charters.

**Seaford Action for Nature CIO** – worked with the council to change the management of verges at numerous sites so they were left to grow ensuring a safer environment for wildlife. 65 species of flowering plant, including bee orchids, have since been found at one site, Pump Field.

**Plastic Free Seaford** – every month volunteers pick up litter and debris from Seaford beach permanently removing it from the habitat and ensuring a safer environment for wildlife.



River Ecology 101 training day © Love our Ouse

**Telescombe Town Council** – planted 700+ trees (a mix of 30 UK species) in Chatsworth Park with the help of volunteers, school children and the Forest School to encourage birds and other wildlife to the area. Once matured, residents can enjoy the glade.

**Peacehaven Town Council** – protected a historic orchard by deeds in Trust.

**Combe Valley Countryside Park** – removed an invasive species – carp – where it was practical from ponds to improve numbers of dragonfly and damselfly, other pond creatures and water birds.



**Crowborough Wildlife Group** – worked with Wealden District Council to undertake conservation management of the Triangle Field within Walshes Park SANGS and secured an end to regular mowing. A huge increase in scarcer species has been seen since, including devil's-bit scabious, sneezewort, angelica, orchids and butterflies such as brown argus, dingy skipper and marbled white.

**Chailey Commons Society** – introduced and support an Exmoor Pony herd on Red House Common to improve the condition of the heathland, mire and acid grassland site and stop gorse taking over.

**Friends of Combe Valley** – transformed an unloved, uniform grassy area into the Bulverhythe Community Garden by creating a wildflower meadow, planting trees and hedgerows, and installing raised beds. Wildflowers have since established (including bee orchids and Jack-go-to-bed-at-noon), and insects including the wasp spider.

**CPRE Sussex** – worked with residents, groups and Brighton and Hove City Council to facilitate the planting of more city street trees as part of their 'Plant Your Postcode' project.



© Lewes Urban Arboretum Project: planting trees in Hounslow © Duncan Armstrong

# Section 6.

## Opportunities for nature's recovery in this LNRS

 Black darter  
© Ben Rainbow



Over the past few years, various organisations have produced statements, plans and strategies that between them have identified a range of **opportunities** for nature's recovery in East Sussex and Brighton and Hove. These include:

- National Character Area statements (Natural England);
- Management Plans for protected landscapes (South Downs National Park and High Weald National Landscape);
- Local Plans and their supporting documents (such as Green Infrastructure Strategies);
- In addition a suite of BOAs (Biodiversity Opportunity Areas<sup>9</sup>) exist to identify where specific habitats could be expanded or enhanced.

**These opportunities play an important role in linking key actions to specific places where they are most needed or will make the biggest difference.** They reflect a general consensus on high-level spatial priorities for nature's recovery for the LNRS area and are important context for the mapping of measures within the LNRS (Part 2 Section 5).



## Key nature recovery opportunities within the LNRS area

(as set out in National Character Area statements and other existing plans and strategies)

### Low Weald

#### **Natural Flood Management**

Deliver natural flood management<sup>6</sup> techniques in focus areas upstream of settlements, particularly Lewes, Uckfield, Eastbourne and Hailsham.

#### **Woodland habitats**

Significantly enhance the network of ancient woodland, gill woodland, shaws, hedgerows and trees – through woodland management and small-scale woodland creation. New woodland creation can help to link the National Park to the High Weald and provide a setting for recreation.

#### **River systems and wetlands**

Enhance the quality, state and structure of all Wealden rivers, streams, standing water bodies, wetlands and floodplains. Key river catchments: Ouse, Cuckmere, Brede, Rother & Medway.

#### **Farmed Landscape**

Expand and connect semi-natural habitats across farmland. Expand and enhance areas of unimproved grassland and meadows and restore degraded neutral grassland.

### South Downs

#### **Farmed landscape**

Create additional habitat to support farmland birds and arable plants; expand and connect semi-natural habitats on farmed land; manage farmed land and its habitats to support the function of the aquifer below.

#### **Chalk grassland**

Restore, expand and re-link chalk grassland habitats along the length of the chalk spine, scarp and dip slopes and dry valleys.

#### **Coastal habitats and tidal reaches of Ouse and Cuckmere**

Create and enhance coastal habitats and retain natural coastal processes where possible. Take opportunities to reconnect rivers to their floodplains and improve natural river function.

#### **Seven Sisters and Lullingstone Heath**

A specific focus on habitat creation and enhancement in this area will support biodiversity and the function of the aquifer.

### Pevensey Levels

#### **Wetland habitats**

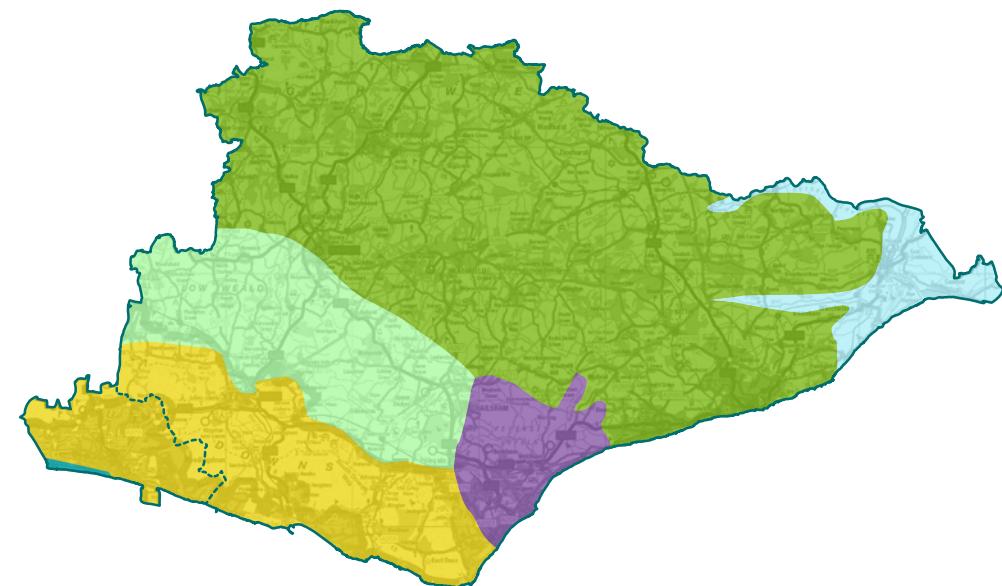
Enhance the network of wetland habitats on the Levels, planning for change and resilience to climate change.

#### **Coastal habitats**

Create and enhance coastal vegetated shingle habitats.

### Key

- East Sussex and Brighton & Hove Boundary
- Low Weald
- High Weald
- Romney Marshes
- Pevensey Levels
- South Downs
- South Coast Plain



## High Weald

### Woodlands and Grasslands

Restore and enhance ancient woodland, gill woodland and species-rich grasslands, expanding and connecting these where this supports the historic field pattern of the area.

### Lowland heath

Restore and enhance the ecological function of lowland heathland as part of the complex matrix of High Weald habitats. Key site: Ashdown Forest.

### Sandstone outcrops

Protect and maintain sandstone outcrops and the rare plant communities they support.

### Routeways and road verges

Protect and enhance the ecological function of these historical linear corridors.

### River systems and wetlands

Enhance the quality, state and structure of all Wealden rivers, streams, standing water bodies, wetlands and floodplains. Key river catchments: Ouse, Cuckmere, Brede, Rother and Medway.

## Romney Marshes

### Rother and Brede river corridors

Enhance ditches, wetlands and natural floodplain function of these river corridors.

### Romney & Walland Marshes

Enhance coastal floodplain grazing marsh and wetland habitats of this area.

### Camber

Manage and enhance sand dune habitats.

### Rye Harbour and

### Dungeness complex

Maintain and enhance the coastal environment, shingle habitats and dynamic nature of this area of the coastline.

## Key

- East Sussex and Brighton & Hove Boundary
- Low Weald
- High Weald
- Romney Marshes
- Pevensey Levels
- South Downs
- South Coast Plain

## Urban areas

### Urban greenspaces across the LNRS area

Opportunities exist across all urban areas in East Sussex to enhance existing greenspaces for nature and to create new opportunities for access to nature. Action should be focused in areas of low current provision of greenspace and guided by Natural England's Green Infrastructure Standards. Existing public parks, greenspaces and private gardens can all play a role in supporting more urban nature.

### Brighton & Hove

#### - Nature Improvement Area

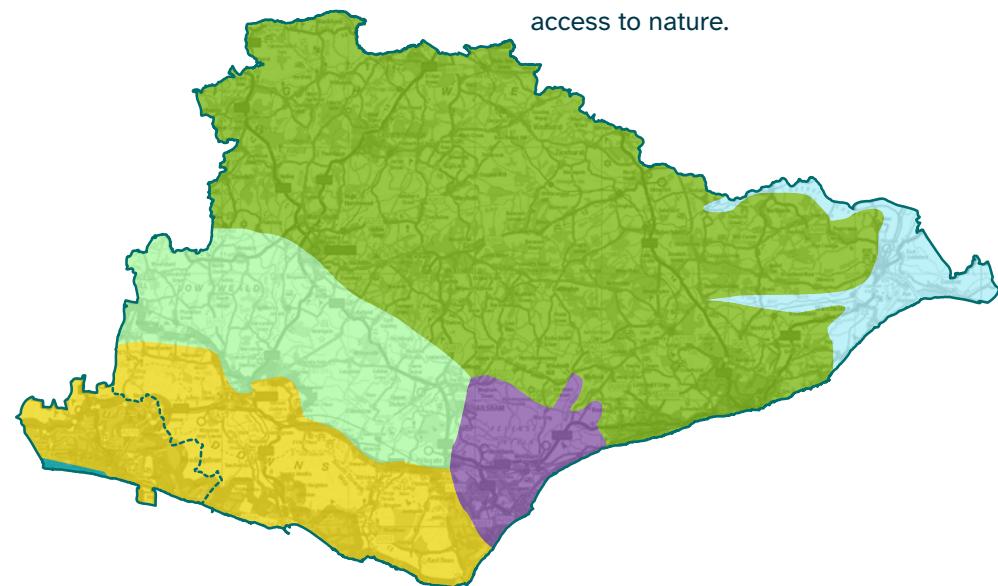
Create a network of accessible natural greenspaces and corridors throughout the city; create and enhance green and accessible corridors to the South Downs beyond. Support the national Elm collection in the city.

### Eastbourne – green spaces

Enhance provision of accessible natural greenspace and support the urban Elm population. Reconnect Eastbourne Levels via ecological networks.

### Hastings

Create a green network of open spaces and green corridors throughout the town, supporting biodiversity and access to nature.



# Section 7.

Looking ahead  
to Parts 2 and 3  
of this Strategy



Small blue butterfly  
© Ben Rainbow



# East Sussex and Brighton & Hove Local Nature Strategy: Parts 2 and 3

This document provides a description of the geology and habitats in our LNRS area, the pressures impacting nature, a snapshot of local concerns and some of the organisations and groups already working for nature's recovery in East Sussex and Brighton & Hove. It therefore serves as context to the recommendations made later in this strategy.

Please see Part 2 of this Statement of Biodiversity Priorities to read the principles guiding our approach, our priorities for nature's recovery and the measures (actions) that can bring them about. Maps contained in this section show where habitat measures are best located across the LNRS area and how, when combined together provide a view of the **Areas that Could become of Importance to Biodiversity**. Part 2 also provides guidance on how to use this strategy if you are a community group, resident, environmental organisation, local authority or business. Part 3 lists our Priority Species and the measures needed to support their recovery.



# LNRS Glossary

## Abundance and diversity (of species)

In simple terms, species abundance refers to the number of individuals of a species in a given area. Species diversity refers to the number of different species found in an area. For example, a field of only one type of flower may have high abundance but low diversity, whereas a forest with many different kinds of plants and animals showcases both high abundance and high diversity.

## Agri-environment schemes

A general term for government programmes set up to help farmers manage their land to support biodiversity, enhance landscape and improve the wider environment (e.g. quality of air, water and soil). The current framework in the UK is provided by **Environmental Land Management Schemes (ELMS)** which include Sustainable Farming Incentive (SFI), Countryside Stewardship Higher Tier (CSHT), Landscape Recovery, plus various funding sources for capital items. Farming in Protected Landscapes (FiPL) is an additional scheme open to farmers and land managers within national parks and national landscapes. <https://www.gov.uk/guidance/funding-for-farmers>

## Anaerobic

Living, active, occurring or existing in the absence of free oxygen.

## Ancient and veteran trees

An **ancient** tree is one that has passed beyond maturity and is old, or aged, in comparison with other trees of the same species. The exact age at which a tree is considered ancient depends on the species. **Veteran** trees can be any age but show ancient characteristics such as wounds or decay. These may be a result of natural damage, management or the tree's environment. Ancient trees are all veterans but not all veterans are ancient. <https://www.woodlandtrust.org.uk/media/1836/what-are-ancient-trees.pdf>

## Areas that Could become of Importance for Biodiversity (ACIB)

These are areas where the responsible authority and local partners propose that effort should be concentrated to restore habitat, to achieve the most for biodiversity and the wider environment. They are areas which would have the greatest impact on achieving priorities and which would achieve greater connectivity of similar biodiverse habitats across the landscape. Some measures could feasibly be done in many locations, but the ACIB maps those that would benefit biodiversity or the environment the most.

## Areas of Particular Importance for Biodiversity (APIB)

These are tightly defined in the statutory guidance as all national conservation sites and local nature reserves, all existing local wildlife sites and areas of irreplaceable habitat.

## Assemblage (of species)

A group of species that would benefit from the same recovery measures.

## Biodiversity (short for biological diversity)

The variety of natural life and habitats on earth. It includes all plants, animals and fungi, and the places and spaces in which they live.

## Biodiversity Duty

A legal obligation imposed on public bodies in England to consider and integrate biodiversity conservation and enhancement into their activities, policies and decision-making processes.

## Biodiversity Net Gain (BNG)

A way of creating and improving natural habitats to make sure development has a measurably positive impact on biodiversity compared to what was there before development. <https://www.gov.uk/government/collections/biodiversity-net-gain>



## Biodiversity Opportunity Areas (BOAs)

Landscape scale areas where conservation action is likely to have the most benefit for biodiversity based on existing biodiversity interest and physical opportunities for enhancement. They are referred to within many local plans in Sussex. BOAs were identified in Sussex in 2009 as part of a wider regional process across the South East. Their boundaries and description can be found on the Sussex Nature Partnership website. [BOAs – Sussex Local Nature Partnership](#)

## Biosphere Reserve (or biosphere region)

An area designated by UNESCO to inspire a positive future for people and nature, by considering everything that's needed to make life sustainable. Biospheres exist to help us learn how best to balance biodiversity and sustainable development. The Living Coast is an urban Biosphere Reserve in Sussex which includes the stretch of the South Downs and Sussex coast between the River Adur at Shoreham-by-Sea and the River Ouse at Newhaven. <https://thelivingcoast.org.uk/>

## Biosecurity

A set of precautions that aim to prevent the introduction and spread of harmful organisms, such as insects, and disease-causing organisms (called pathogens) such as some bacteria and fungi.

## Brackish water and habitats

Areas that are influenced by both saline and freshwater. Brackish water is saltier than freshwater but not as salty as seawater. Brackish water habitats are found in estuaries, coastal lagoons, river mouths and tidal reaches of rivers. They support a range of specialised species that are adapted to a range of salinity levels and can be diverse and ecologically significant.

## Bryophytes

A group of plants that includes mosses, liverworts and hornworts. They are non-vascular plants, which means they have no roots or vascular tissue.

## Carbon sequestration

The process by which carbon is removed from the atmosphere and stored. Natural habitats such as woodlands, peatlands and grasslands can sequester carbon and store it, either above ground or in their roots and soil. It plays a crucial role in limiting climate change by reducing the amount of carbon dioxide in the atmosphere

## Carbon storage

Some natural habitats can store carbon they have captured, e.g. through the absorption of carbon dioxide.

## Coastal squeeze

The loss or deterioration of coastal habitats where manmade structures prevent their landward movement in response to sea level rise.

## Defra

Department for Environment, Food and Rural Affairs.

## Distribution (of species)

Where individuals of a particular species are found and how they are spread across their habitat or range.

## Ecosystems

All of the living things (plants, animals, and organisms) in a given area, as well as the non-living parts (weather, earth, sun, soil, climate, atmosphere) that interact with them. The different components of an ecosystem are linked together through nutrient cycles and energy flows.

## Ecotone

The transitional area where two different ecological communities meet and integrate. For example, where grassland grades into scrub, or where scrub grades into woodland. Ecotones are characterised by features and species from both bordering communities as well as unique species that may not be found in either. As a result they often exhibit high biodiversity.

## Environment Act 2021

This Act sets clear statutory targets for the recovery of the natural world. It prioritises four areas, air quality, biodiversity, water quality and waste and includes targets to reverse the decline in species abundance by the end of 2030. It provides the statutory framework for Local Nature Recovery Strategies.

## Environmental Land Management Schemes

See above under 'Agri-environment schemes'.

## Epiphytic

Means 'on the plant'. Epiphytes are organisms (plants and micro-organisms like mosses, liverworts, lichens, algae and micro-fungi) that grow on other plants or objects, using them for physical support, but not feeding from them. Epiphytic communities can take decades or centuries to develop and large, old, open-grown trees support rich epiphyte communities. These communities are also good indicators of air quality.

## Eutrophication

The over-enrichment of soil and water by nutrients such as nitrogen and phosphorus, leading to the excessive growth of a few dominant plant species, loss of habitat diversity, deterioration in important soil biochemical functions, and oxygen depletion in aquatic environments. Eutrophication can occur naturally but is often accelerated by human activities, such as agricultural run-off and sewage discharge.

## Fragmentation (of habitats)

This occurs when a large, continuous natural habitat is broken into smaller, isolated patches, often due to human activities like urbanisation, agriculture, or infrastructure development.

## Green infrastructure (also green and blue infrastructure)

The network of multifunctional green spaces, landscapes and features, both urban and rural, which can deliver multiple benefits for the economy, wildlife and communities. Blue infrastructure relates to water.

## Habitats

An environment inhabited by living organisms. Or a place where plants or animals normally live, characterised primarily by its physical features (topography, plant or animal physiognomy, soil characteristics, climate, water quality, etc.) and secondarily by the species of plants and animals that live there. There are a range of systems for classifying habitats into categories.

## Health and wellbeing

Mental and emotional health, physical health and a healthy lifestyle all contribute to an individual's health and wellbeing.

## Hectare (ha)

A metric unit area, equal to 10,000 square metres, and the equivalent of 2.471 acres in the imperial system.

## Irreplaceable habitat

Habitats that would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. Irreplaceable habitats found in East and West Sussex (as defined by the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024) are: ancient woodland (including ancient semi-natural woodland, plantations on ancient woodland sites, ancient wood pasture and parkland, and infilled ancient wood pasture and parkland), ancient and veteran trees, coastal sand dunes, spartina saltmarsh swards, mediterranean saltmarsh scrub and lowland fens.

## Intensive agriculture

Farming that uses a lot of machinery, labour, chemicals, etc, to grow as many crops or keep as many animals as possible on the amount of land available.

## Invasive Non-Native Species (INNS)

Animals or plants, introduced by human activity, outside their natural range, that spread rapidly and cause harm to the environment, economy, or human health.

## Landscape character

The distinct, recognisable and consistent patterns in the landscape, and what makes one landscape different from another. Including natural and human elements, such as geology, landform, soils, vegetation, land use, and settlement patterns.

## Leachate migration

The movement of leachate (a liquid formed when water percolates through solid waste) from its source (often a landfill) into the surrounding environment. It can potentially lead to soil and water contamination, impacting ecosystems and human health.

## Local Habitat Map

A key component of the Local Nature Recovery Strategy, which maps the areas that have been identified as being the most important for nature recovery, or where measures would deliver the greatest benefits to nature recovery and wider environment benefits.



## Local Nature Recovery Strategy (LNRS)

New statutory spatial plans underpinning a National Nature Recovery Network, produced by 48 responsible authorities across England. Introduced by the Environment Act 2021, they are intended to reverse the decline of biodiversity and improve ecological connectivity and functionality across England. They aim to identify opportunities and priorities for nature recovery.

## Local Wildlife Sites

Non-statutory sites that contain features of substantive nature conservation value. They are amongst the best sites for wildlife in Sussex. They contain species and habitats that are uncommon and rare in Sussex and sometimes further afield, and form an important component of our nature network, helping to connect and buffer statutory designated sites. Local Wildlife Sites Systems aim to establish an up to date comprehensive suite of sites. In Sussex, the Local Wildlife Sites system is maintained by the Sussex Local Wildlife Sites Initiative.

## Managed realignment

The controlled inundation of land by the sea by deliberately removing or breaching existing sea defences and creating new flood defences further inland. This approach provides more sustainable flood and erosion risk management by using newly created intertidal habitats like saltmarshes to absorb wave energy and protect inland areas.

## Measures

In Local Nature Recovery Strategies, measures are the official name for the set of practical actions that can deliver each LNRS's locally agreed priorities for nature's recovery.

## Microhabitats

A small, localised habitat within a larger ecosystem that has conditions that support a limited range of animals and plants. Examples include a decomposing log within a woodland or a rockpool within a wave cut chalk platform.

## Migrant birds

Birds that travel to a different place to take advantage of seasonal resources, especially food, so that they can breed successfully or simply survive. In the UK, we have spring migrations when summer visitors like swifts and cuckoos arrive, then autumn migrations when waders, wildfowl and other visitors return to feed and summer visitors leave.

## Mosaics (Mosaic habitat)

A landscape composed of a diverse mix of different habitat types in close proximity, creating a patchwork-like structure. This variety supports a wide range of species with varying ecological needs, as the juxtaposition of habitats allows for greater biodiversity. Examples include a combination of woodlands, grasslands, wetlands, and hedgerows within a single area. Mosaic habitats are particularly valuable for wildlife that depends on multiple habitat types throughout their lifecycle.

## No active intervention

Policy option decision not to invest in providing or maintaining defences against flooding or erosion, whether or not coastal defences have existed previously.

## National Character Areas

Areas with similar landscape, biodiversity, geodiversity, and economic activity in England that have been divided into 159 distinct zones by Natural England. They follow natural geographical lines rather than administrative boundaries. <https://nationalcharacterareas.co.uk/>

## National Landscapes

Formerly called Areas of Outstanding Natural Beauty, there are 46 National Landscapes in the UK. These are places with national importance, designated under the 1949 National Parks and Access to Countryside Act for their habitat and biodiversity, protected for the nation's benefit and each managed locally by expert teams. Area of Outstanding Natural Beauty remains the legal designation.

## Natural capital

The elements of nature that produce value, either directly or indirectly, to people, such as stock of forests, rivers, land, minerals and oceans. We depend on it for the air we breathe, the water we drink and the food we eat. It boosts our health and wellbeing. It captures and stores carbon and has a vital role to play in helping us adapt to the impacts of climate change. Natural capital is also an economic concept. It considers nature as a stock of assets, which we have to invest in.



## Natural Flood Management

Natural Flood Management, or NFM, involves working with nature to reduce the risk of flooding for communities. It uses various techniques to restore or mimic the natural functions of rivers, floodplains and the wider catchment. NFM aims to store water in the catchment and slow the rate at which water runs into rivers, to help flooding downstream.

## Natural processes

A process existing in or produced by nature (rather than by the intent of human beings) that shape our environment and support nature, e.g. weathering, erosion, flooding, deposition etc.

## Nature-based solutions

Actions which support and draw on nature to provide wider environmental or societal benefits. For example, planting trees in cities for cooling, or wet woodland planting for natural flood management.

## Nature friendly

Not harmful to nature or helping to protect it. Incorporating features and practices that increase opportunities for wildlife alongside established land uses.

## No Mow May

Plantlife's annual campaign to avoid mowing the lawn during May, to allow wildflowers to grow and help nature. [Plantlife's No Mow May Movement](#)

## Nutrient cycling

A continuous process where dead plant material breaks down and provides nutrients to the soil that are absorbed by plant roots so that plants grow. Microorganisms play a crucial role in this cycling.

## Nutrient offsetting

An approach to ensure new residential development will not cause increased nutrient pollution (nitrates and phosphates) to specific protected sites. There are three main types of offsetting site: land taken out of agricultural use and managed as grassland, e.g. wildflower meadow; land taken out of agricultural use to create woodland; and wetland created to filter nitrates. [Nutrient Neutrality Principles – TIN186](#)

## Opportunities

Local Nature Recovery Strategies must include a statement of biodiversity priorities which must include a description of the opportunities for recovering and enhancing biodiversity in the Strategy area. Opportunities may be a specific action (or measure), a funding mechanism, a project or partnership, or a specific location.

## Parliamentary enclosures

Enclosure is a term used in English land ownership that refers to the appropriation of 'waste' or 'common land' by enclosing it and depriving commoners of their traditional rights or access and usage. Originally this was done through informal agreement, but from the 1750s, enclosure by parliamentary Act became the norm.

## Pollination

The process by which flowering plants reproduce. To produce offspring, a plant must first be fertilised with pollen which allows it to develop seeds that will grow into new plants. Pollination occurs when pollen is moved within flowers, or carried from flower to flower by pollinating animals such as birds, bees, moths or beetles, or by the wind.

## Priorities

In Local Nature Recovery Strategies, priorities are the most important habitats and species which have been identified locally as needing support for their recovery or enhancement, taking into account the contribution they can also make to other environmental benefits.

## Priority habitats

A wide range of semi-natural habitat types that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan. The UK list of priority habitats remains an important reference source and has been used to help draw up statutory lists of habitats of principal importance for the purpose of conserving or enhancing biodiversity as required under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

## Ramsar sites

Wetlands of international importance under the Ramsar Convention on Wetlands. Their purpose is conservation and promotion of sustainable development through local, national, and global cooperation. There are currently 73 Ramsar sites in England covering 400,000 ha. They are often also designated as SSSIs and afforded statutory legal protection.



## Refuge habitats

A safe place that offers protection or shelter, such as an area (for example a nature reserve) that has been set aside for the purpose of conserving species and their habitats.

## Resilience

Ability to absorb, resist or recover from disturbances or damage from both natural influences and human activities (including climate change).

## Responsible Authority

Local Authorities, appointed by the Secretary of State to lead the preparation of the Local Nature Recovery Strategy for their area. In England, there are 48 Responsible Authorities, including East Sussex County Council leading the LNRS for East Sussex and Brighton & Hove, and West Sussex County Council leading the LNRS for West Sussex.

## Sites of Special Scientific Interest (SSSI)

A Site of Special Scientific Interest (SSSI) is the land notified as such by Natural England under the Wildlife and Countryside Act (1981). SSSIs are some of the finest sites for wildlife and natural features in England, supporting many characteristic, rare and endangered species, habitats and natural features. There are over 4000 SSSI sites in England, covering over 8% of the country.

## Special Areas of Conservation (SAC)

This international designation made by the UK Government protects the habitat of important species and those habitats considered to be most in need of conservation at a European level set out in the Conservation of Habitats and Species Regulations 2017 (as amended). There are 256 SACs covering 2,115,880ha in England.

## Special Protection Areas (SPA)

SPAs are selected to protect one or more rare, threatened or vulnerable bird species listed in Annex I of the Birds Directive, or certain regularly occurring migratory species. There are 87 SPAs covering 1,926,816ha in the UK. Like Ramsar and SAC sites, they are often also designated as SSSIs and afforded statutory legal protection.

## Species

Commonly defined as a group of organisms that can successfully breed to produce fertile offspring.

## Successional habitats

Temporary habitats that are in transition between one habitat and another. For example, scrub is often described as a successional habitat between one habitat, like grassland or heathland, to another, like woodland.

## Soil acidification

A natural process where the soil pH decreases (becomes more acidic) over time. It can be accelerated by certain plants or human activities, or slowed down by sustainable management practices.

## Traditional land management practices

Farming and other land management activities that have been used for many years and that often define and conserve landscape character. They are often low-intensity practices that are adapted to local climatic, geographic and environmental conditions, and often enhance the diversity and biomass of characteristic wildlife, improve soil quality and the functioning of natural systems.

## Transitional habitat

Areas that serve as an intermediary zone between different ecosystems or land uses, often undergoing natural or managed changes. These habitats provide a mix of characteristics from adjacent ecosystems, supporting a diverse range of species and ecological processes. Examples include wetlands forming between aquatic and terrestrial environments or grasslands transitioning into forests. Transitional habitats are crucial for biodiversity, offering refuge, feeding grounds, and migration corridors for various species.

## Transition towns

A community-led response to the pressures of climate change, fossil fuel depletion and increasingly, economic contraction. For example, Transition Town Lewes is working to transform the town into a community that is not reliant on fossil fuels, and that can live, work and feed itself in ways that support rather than damage the natural world.

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**Don Baker,  
West Sussex County Council**

**Julie Middleton,  
Sussex Nature Partnership**

## LNRS BOARD

- East Sussex County Council
- West Sussex County Council
- Brighton & Hove City Council
- Natural England

## SUPPORTING AUTHORITY GROUP

- Adur & Worthing Councils
- Arun District Council
- Brighton & Hove City Council
- Chichester District Council
- Crawley Borough Council
- Lewes & Eastbourne Councils
- Hastings Borough Council
- Horsham District Council
- Mid Sussex District Council
- Rother District Council
- Wealden District Council
- South Downs National Park Authority
- Natural England

## LNRS WORKING GROUP (REPRESENTATIVES)

- Brighton & Hove City Council
- Chichester Harbour National Landscape
- Crawley Borough Council
- Complete Land Management (CLM)
- Country Land and Business Association (CLA)
- Environment Agency

## Farming & Wildlife Advisory Group

- Forestry Commission
- High Weald National Landscape
- Horsham District Council
- Iford Estate
- Knight Frank
- Mid Sussex District Council
- National Farmers Union (NFU)
- Natural England
- Rother District Council
- South Downs National Park Authority
- Sussex Inshore Fisheries and Conservation Authority
- Sussex Wildlife Trust
- Weald to Waves/Knepp Wildland Foundation
- Wealden District Council

## SPECIES TASK & FINISH GROUP

- Alice Parfitt, Buglife
- Bob Foreman, Sussex Biodiversity Record Centre
- Cath Jackson, South Downs National Park Authority
- Clara Lehmann, East Sussex County Council
- Damon Block, Environment Agency
- Lorraine Boast-Millar, Natural England
- Matt Phelps, Sussex Wildlife Trust
- Peter Hughes, Chichester Harbour Conservancy
- Peter Taylor, Environment Agency
- Sarah Brotherton, High Weald National Landscape Team
- William Maiden, Forestry Commission

## SUSSEX BIODIVERSITY RECORD CENTRE

## SPECIES EXPERTS

- Alan Stewart (True Bugs)
- Brad Scott (Mosses)
- Chas Holt (Birds)
- Chris Bentley (Flies)
- Colin Pratt (Butterflies & Moths)
- Damon Block (Fish & Crustaceans)
- Fiona Baker (Amphibians & Reptiles)
- Frances Abraham (Stoneworts)
- Helen Smith (Spiders)
- James Power (Ants, Bees & Wasps)
- Laurie Jackson (Mammals)
- Mark Mallalieu (Birds)
- Martin Allison (Fungi)
- Mike Edwards (Ants, Bees & Wasps)
- Nikki Gammans (Ants, Bees & Wasps)
- Nick Aplin (Fungi)
- Martin Willing (Molluscs)
- Nevil Hutchinson (Higher Plants)



- Peter Hodge (Beetles)
- Ralph Hobbs (Crickets & Grasshoppers)
- Ruth Eastwood (Higher Plants)
- Sally Ann Hurry (Bats)
- Steven Lofting (Butterflies & Moths)
- Steven Linington (Dragonflies & Damselflies)
- Sue Rubinstein (Mosses)
- Sylvia Davidson (Lichens)

#### **KEY DELIVERY PARTNERS FOR NATURE**

- Aimee Felus, Western Sussex Rivers Trust
- Alex Briggs, Weald to Waves
- Alice Parfitt, Buglife
- Aline Cerqueira, Sussex Bay
- Andrew Lawson, Sussex Biodiversity Record Centre
- Angela Marlow, Sussex Bay
- Anna Clare, Lewes & Eastbourne Councils
- Anthony Smith, RSPB
- Anthony Weston, CLM
- Ben Rainbow, West Sussex County Council
- Ben Taylor, Iford Estate
- Bob Epsom, Woodland Trust
- Bridget Fox, Woodland Trust
- Cath Jackson, South Downs National Park Authority
- Catherine Kerr Smith, Woodland Trust
- Charlotte Owen, Sussex Wildlife Trust

- Chas Holt, Sussex Ornithological Society
- Chloe Clark, Western Sussex Rivers Trust
- Chloe Rose, RSPB
- Chris Jones, Adur & Worthing Councils
- Chris Sandom, University of Sussex
- Colin Hedley, Farming & Wildlife Advisory Group
- Coral Bridgen, West Sussex County Council
- Crispin Scott, National Trust
- Chryssa Brown, Sussex Wildlife Trust
- Claire Kerr, South Downs National Park Authority
- Cloe Alper, South East Rivers Trust
- Craig Steenhoff, Wealden District Council
- Dan Fagan, National Trust
- Dan Osborn, CPRE Sussex
- Dan Ross, Southern Water
- Dean Spears, Sussex Bay
- Ed Santry, Brighton & Hove City Council
- Elizabeth Bridgen, Crawley Borough Council
- Fay Pasini, RSPB/Three Harbours
- Gavin Holder, Coastal Partners
- Gareth Williams, Weald to Waves
- Grace Olsson, Natural England
- Gerry Sherwin, High Weald National Landscape Team
- Georgina Jones, NatureSpace
- Helen Peacock, Horsham District Council
- Helen Pennington, Brighton & Hove City Council
- Henri Brocklebank, Sussex Wildlife Trust
- Holly Harrison, Rother District Council
- Isabel Swift, Knight Frank
- James Woodward, Brighton & Hove City Council
- Jane Cecil, National Trust
- Jane Goodall, Lewes & Eastbourne Councils
- Jenna Dewhurst, Portsmouth Water
- Jennie Shea, NatureSpace
- Jennifer Hollingum, Mid Sussex District Council
- Jill Sutcliffe, Manhood Wildlife & Heritage Group
- Jonathan Best, Arun District Council
- Joseph Geall, Woodland Trust
- Josh Bowes, South East Rivers Trust
- Karen Laver, Action in Rural Sussex
- Kate Bull, Natural England
- Kathy Troke Thomas, Natural England
- Kerry Culbert, Hastings Borough Council
- Kier Smith, Western Sussex Rivers Trust
- Kirstie Speed, CLM
- Laura Brook, Sussex Wildlife Trust
- Lewis Campbell, South East Rivers Trust
- Lewis White, Sussex Bay

- Libby Drew, Knepp Wildland Foundation
- Lily Whittaker, Chichester Harbour Conservancy
- Lois Mayhew, Ouse & Adur Rivers Trust
- Lorraine Boast-Millar, Natural England
- Lou Parker, Environment Agency
- Lucy Charman, CLA
- Lydia Baxter, Sussex Wildlife Trust
- Lyndsey Neale, Natural England
- Mark Infield, Ashdown Foresters
- Mark Mallalieu, Sussex Ornithological Society
- Melanie David-Durand, Living Coast
- Michael Blencowe, Action in Rural Sussex
- Millie Brand, Sussex Biodiversity Record Centre
- Niall Walkden, Natural England
- Nick Grey, Environment Agency
- Oliver Gammon, Chichester District Council
- Patricia Randall, Sussex Butterfly Conservation
- Paul Brewer, Adur & Worthing Councils
- Paul Steedman, CPRE Sussex
- Peter King, Ouse & Adur Rivers Trust
- Pippa Reece, National Trust
- Polly Eason, Action in Rural Sussex
- Polly Lawman, National Farmers Union



- Rebecca Fry, Horsham District Council
- Richard Austin, Chichester Harbour Conservancy
- Richard Black, Sussex Wildlife Trust
- Richard Cobb, Forestry Commission
- Richard Dyer, South East Water
- Richard Edwards, National Trust
- Robert Pearson, Sussex IFCA
- Rowenna Baker
- Peter Hughes, Chichester Harbour Conservancy
- Roger Smith, CPRE Sussex
- Sam Pottier, South East Water
- Sarah Brotherton, High Weald National Landscape Team
- Sarah Chatfield, Chichester Harbour Conservancy
- Sarah Dobson, Living Coast
- Sean Ashworth, Southern Water
- Shivani Thevar, RSPB
- Sophie Gibert, Crawley Borough Council
- Steph Evans, Chichester District Council
- Steve Tillman, Sussex Wildlife Trust
- Stuart Harris, Nature Friendly Farming Network
- Suzie Robson, Farming & Wildlife Advisory Group
- Tom Day, Chichester District Council
- Tom Ormesher, Southern Water
- Tom Warder, Action in Rural Sussex
- Wez Smith, RSPB
- Will Maiden, Forestry Commission

- Will Proctor, South East Rivers Trust
- Viola King-Forbes, University of Sussex
- Yianni Andrew, RSPB

#### **TECHNICAL REVIEW PANEL**

- Phil Belden
- Henri Brocklebank
- Kate Ryland
- Tony Whitbread

#### **NEIGHBOURING RESPONSIBLE AUTHORITIES**

- West Sussex County Council
- Hampshire County Council
- Kent County Council
- Surrey County Council

#### **WAY FORWARD**

- Diana Alcroft
- Rob Alcroft

#### **RHINOBYTES**

- Ryan O'Hara

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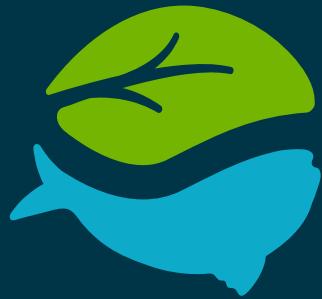
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 **Ditchling Beacon**  
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# Sussex Nature Recovery

A collective blueprint for targeted action



East Sussex and Brighton & Hove Local Nature Recovery Strategy Statement of Biodiversity Priorities Part 1 – Context & Description of Strategy Area



East Sussex and Brighton & Hove Local Nature Recovery Strategy Statement of Biodiversity Priorities Part 2 – Priorities, Measures and the Local Habitat Map



East Sussex and Brighton & Hove Local Nature Recovery Strategy Statement of Biodiversity Priorities Part 3 – Priority Species



West Sussex, East Sussex and Brighton & Hove Local Nature Recovery Strategy Statement of Biodiversity Priorities Part 4 – Technical Methods

View all the documents at:

[SussexNatureRecovery.org.uk](http://SussexNatureRecovery.org.uk)

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