



Nature Recovery Opportunities in the parish of Kingston near Lewes



Contents page

- Introduction
- Section 1) Green & Blue Infrastructure in Kingston near Lewes
- Section 2) Nature recovery opportunities
- Section 3) Nature recovery and climate change
- Summary

This report has been produced by Wild Business Ltd for Kingston near Lewes Parish Council, with the support of the South Downs National Park Authority. The report provides a broad assessment of the current green and blue infrastructure in the parish, the nature recovery opportunities, and the potential impact of climate change. It has been produced using a desk-based approach, using data and resources that are publicly available and that have been obtained from the Sussex Biodiversity Records Centre. These data have not been ground truthed for this report. The report is intended for the use of the Parish Council to develop a nature recovery strategy for the Parish. The report and content within should not be used, distributed, or published for purposes beyond the intended use.

This report has been produced and written by Chris Sandom, Ellen Rotheray, and Talitha Bromwich.



Introduction

Kingston Parish Council has commissioned this report, funded by the South Downs National Park in 2022, to begin the process of exploring how it can help support the nature recovery ambitions of the region and nation for the benefit of people and nature, as well as serving as an exemplar for other parishes in the Park.

The UK is one of the most nature depleted countries in the world, and recently introduced government policy has made nature recovery a national priority. For example, the [Environmental Targets \(Biodiversity\)\(England\) Regulations 2023](#) came into force on 30th January 2023 and set the legally binding targets of: 1) the restoration or creation of 500,000 ha of wildlife-rich habitat by 2042, 2) halting the decline in species abundance by 2030, and 3) reversing the decline in species abundance by 2042.

To achieve these targets, as well as help tackle climate change and improve human wellbeing, a national [Nature Recovery Network](#) is being established by developing [Local Nature Recovery Strategies](#) (as required by the [Environment Act 2021](#)). In Sussex, the Local Nature Recovery Strategy is being developed by the [Sussex Local Nature Partnership](#) hosted by the East Sussex County Council.



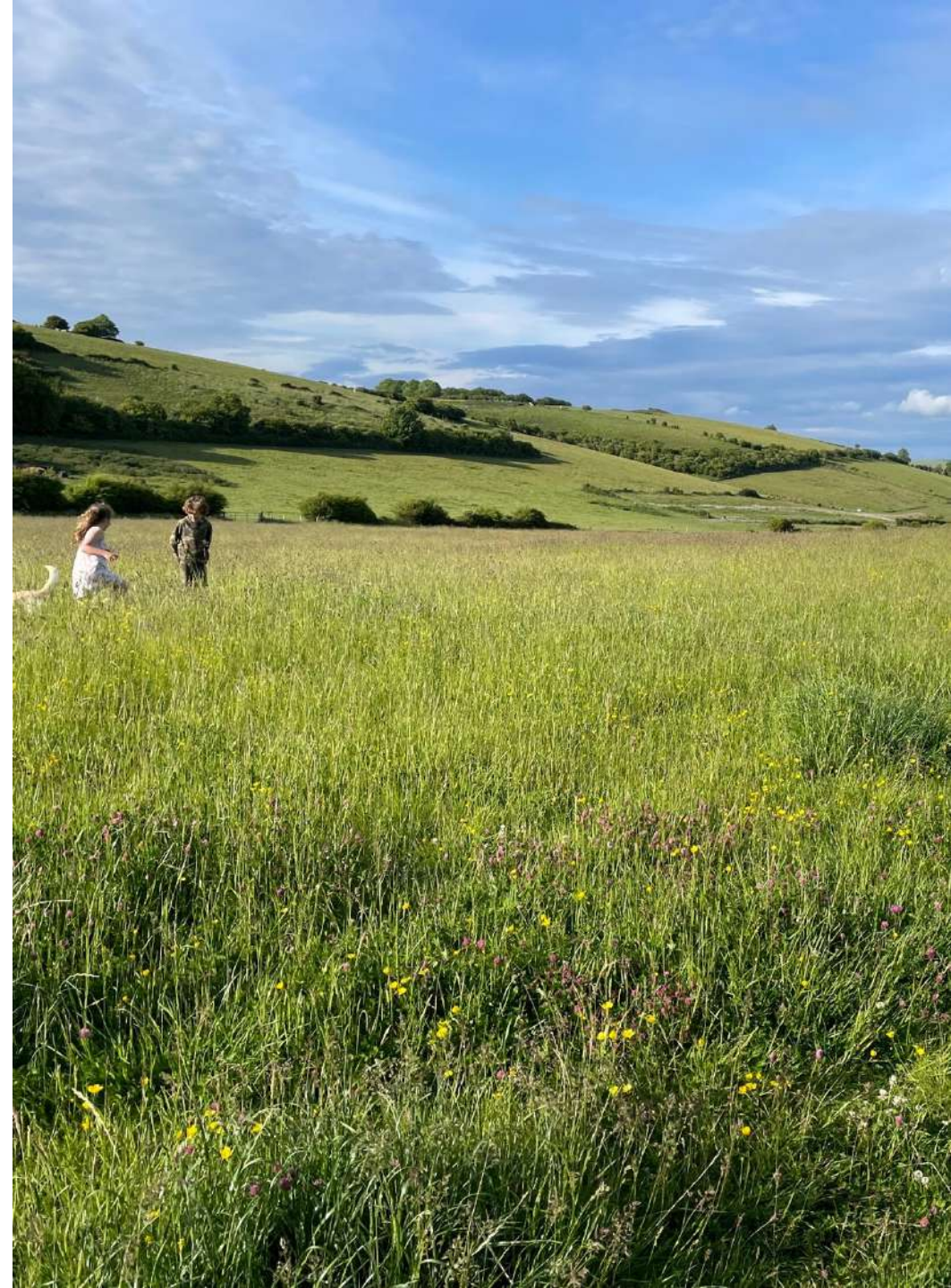
South Downs

The South Downs National Park Authority is also taking a leading role in supporting nature recovery and improving the connection between people and nature. In 2020, it established the [People and Nature Network](#) with the aim:

“To protect, enhance and create a connected nature network of green and blue spaces which sustainably meet the needs of local communities, supports natural ecosystem services and respects the special qualities of the South Downs National Park by proposing the strategic principles for planning, delivery and management of natural capital assets in the area.”

Currently 25% of the National Park is managed for nature, and the goal is to increase that to 33% by 2030 (an extra 13,000 ha) as well as managing the remaining 67% in a nature friendly way.

Furthermore, Kingston is within the [UNESCO Living Coast Biosphere](#) which stretches from Newhaven to Shoreham-by-Sea. Biosphere reserves are situated in areas of high nature value but where we need to learn how to balance the needs of people and nature.

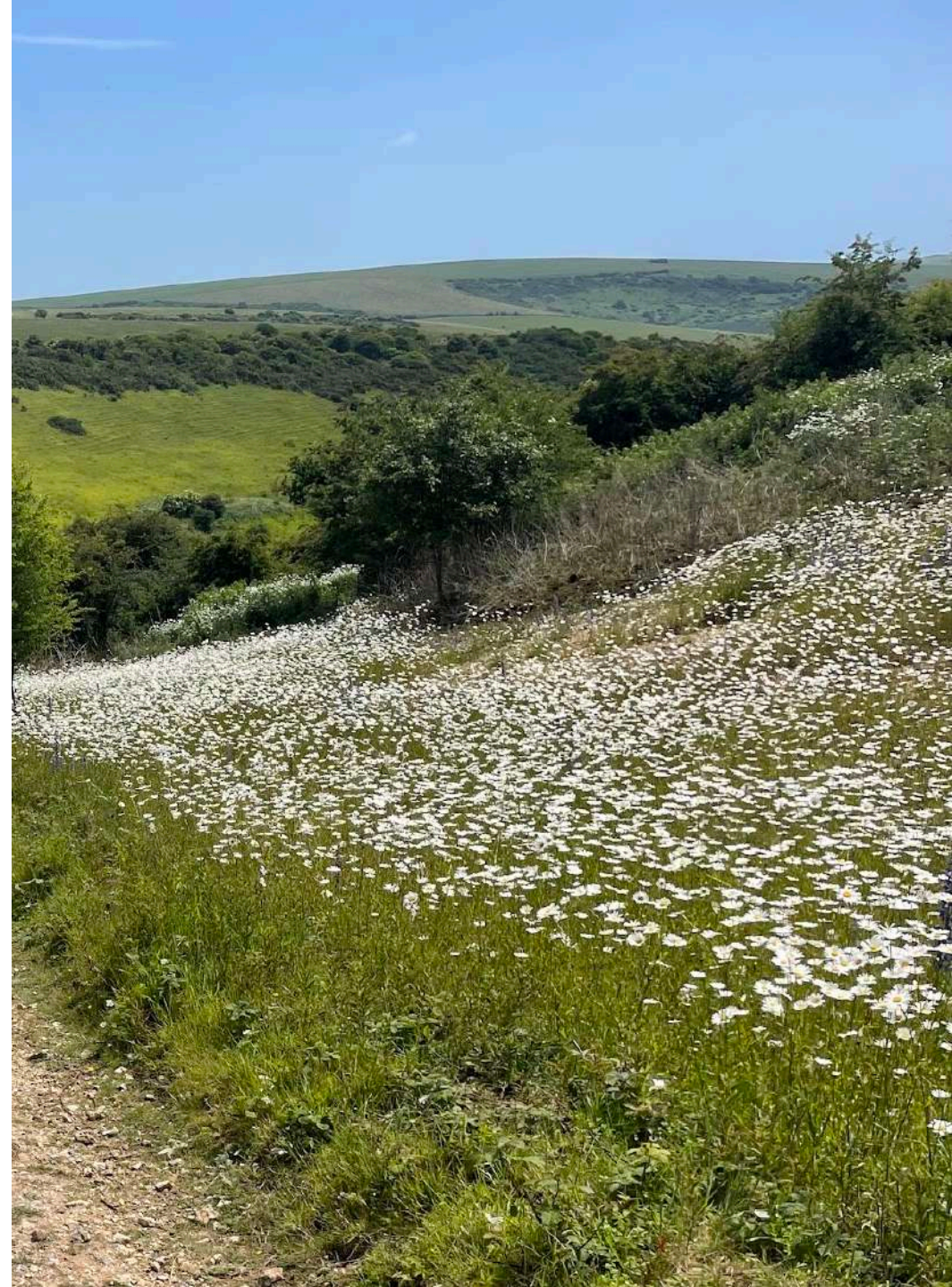


Nature recovery

Nature recovery is the process of assisting the return of a greater diversity of life (biodiversity) and focusing on species native to the area and of conservation concern. The recovery of biodiversity can also benefit people through, for example: carbon sequestration, climate change adaptation, and improving health and wellbeing.

Different nature recovery strategies can be applied from regenerative agriculture and sustainable afforestation to targeted habitat restoration and rewilding. But selecting an approach depends heavily on stakeholder needs and local circumstances. Ultimately, the decision to implement a nature recovery strategy is made by the landowner and manager in consultation with the wider community.

In Section 1 of this report, we present a situation analysis of the green and blue infrastructure in Kingston near Lewes parish and collate relevant data to inform the nature recovery strategies we propose in Section 2. Finally, Section 3 considers climate change and nature recovery.



Section 1) Green and Blue Infrastructure in Kingston near Lewes Parish



THE SITE

Kingston near Lewes

Area of Kingston parish identified from the historic parish boundary. The map includes land registry parcels within the Kingston boundary, local buildings, rivers, chalk streams, surface water, ancient trees, reedbeds, and green space, which includes public parks, allotments, cemeteries, and other community green spaces.

Total site area: 571 ha

Length of roads: 8.077 km

Area of recreational green space: 2.3 ha

St Pancras Green: 1.5 ha

The Village Green: 0.48 ha

St Pancras Church cemetery 0.22 ha

Tennis courts: 0.12 ha

Additional green areas:

Snednore: ~0.3 ha

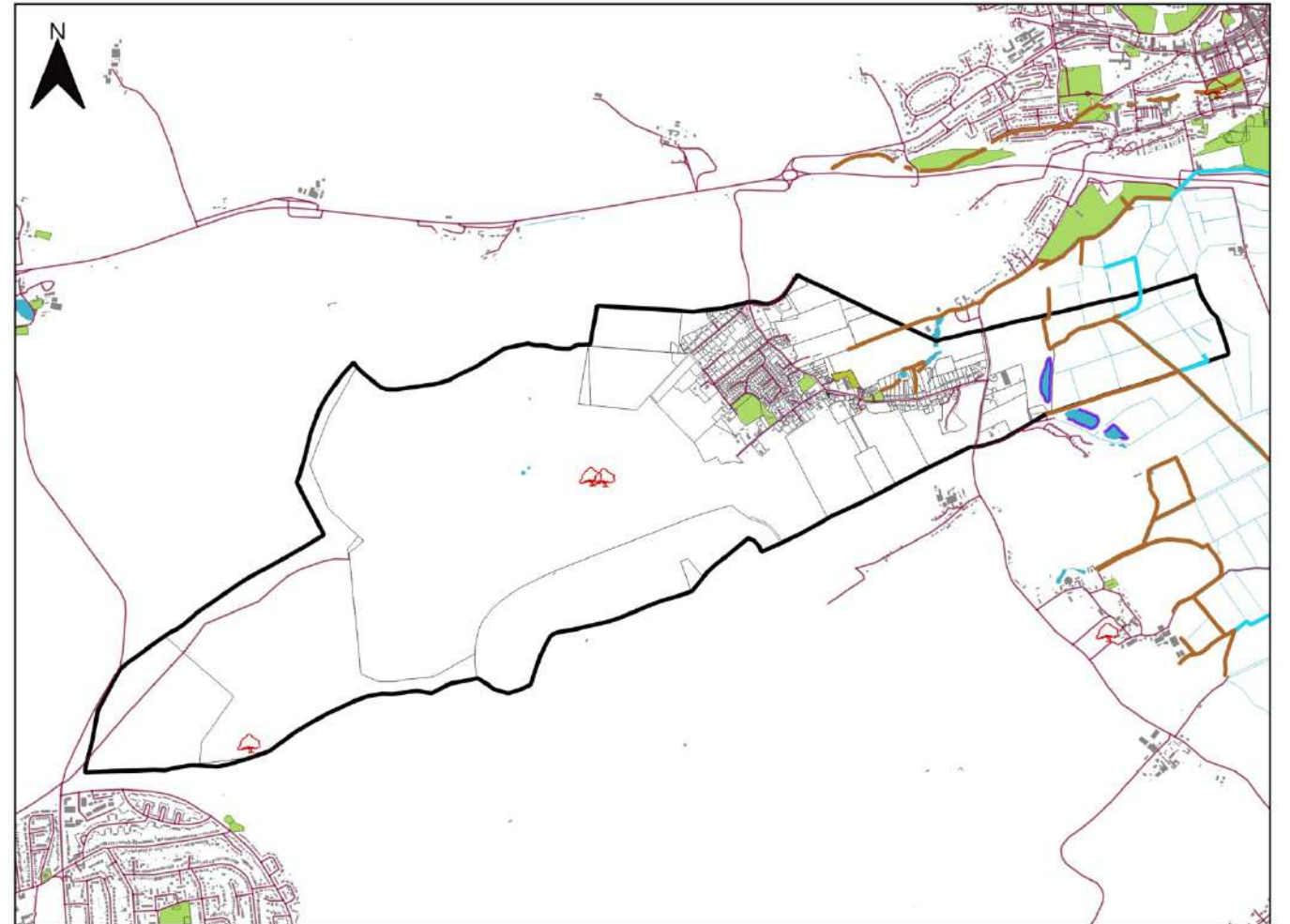
Community Wildlife Garden: 0.03 ha

School Playing Fields: ~0.5 ha

Area of blue space: 2.5 ha

Length of rivers: 665 m

Length of chalk streams: 1246 m



KEY

□ Parish Outline

□ Land Registry Parcels in Kingston

■ Local Buildings

— Roads

🌳 Ancient/veteran tree

— Chalk Streams

— Rivers

— Surface Water

— Green Space

— Reedbed

■ Community Garden

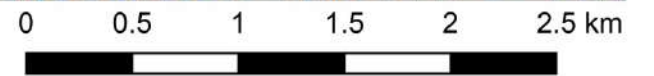
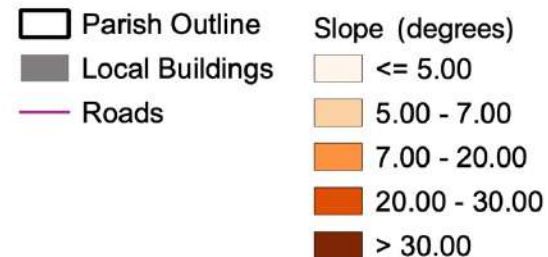
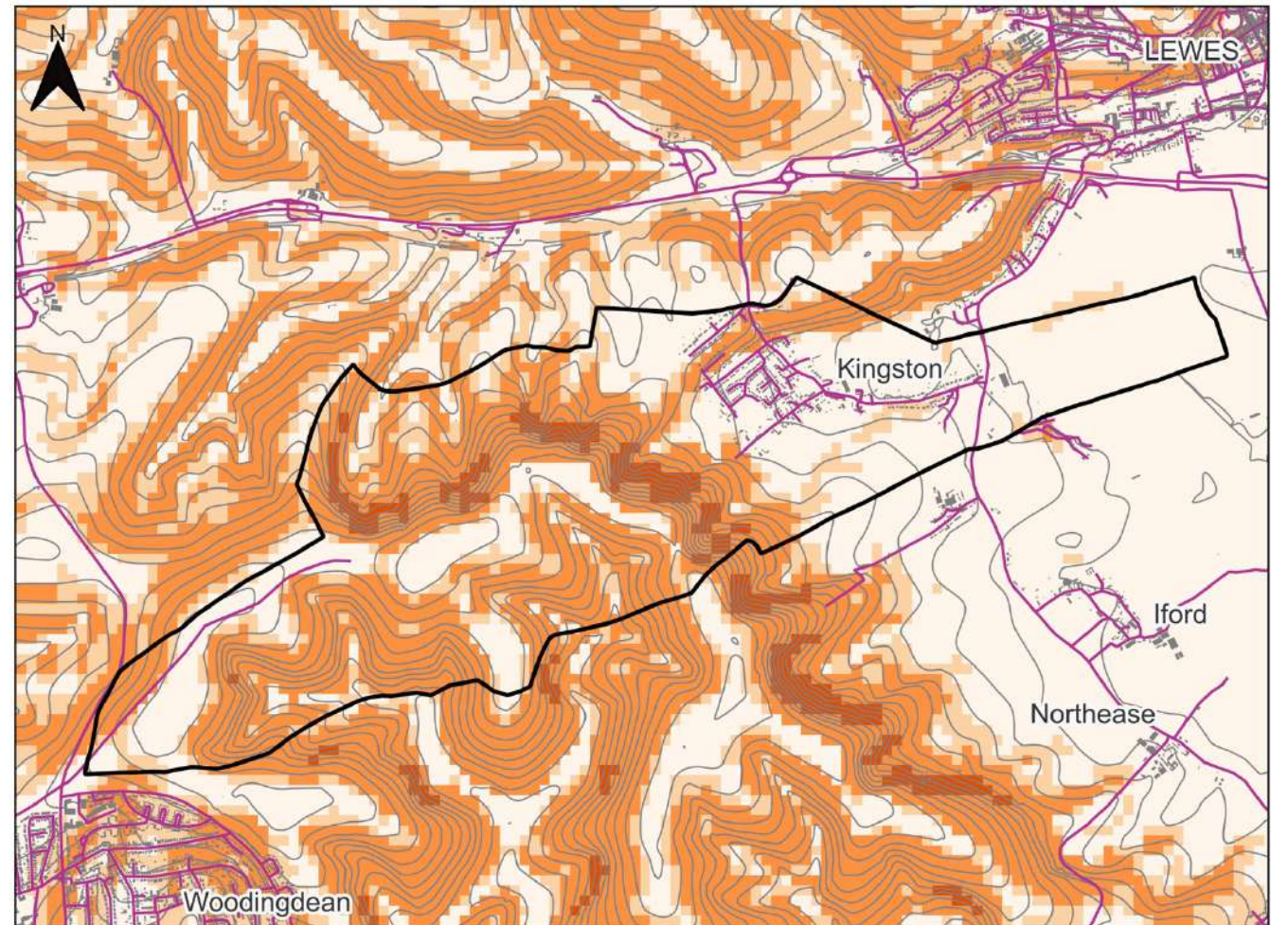
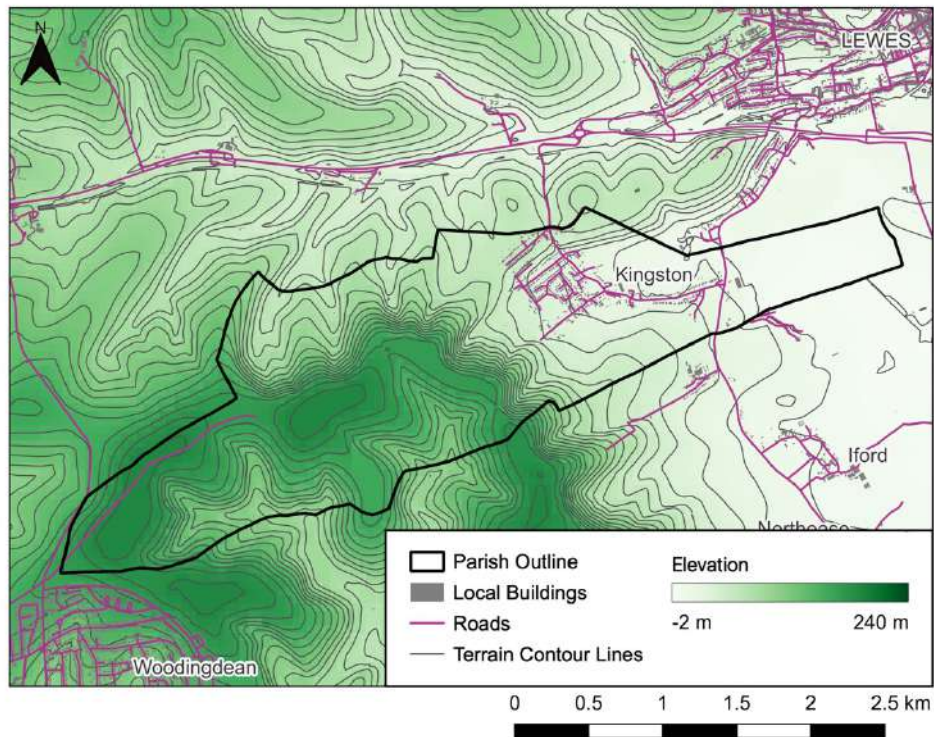
■ School Playing Fields

Ancient/veteran trees and reedbed data supplied by Sussex Biodiversity Record Centre. Land Registry Parcels from The Land App. Chalk Rivers supplied by Natural England Open Data. Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

THE SITE

Slope

The varied topography of the parish supports a variety of conditions. Steep slopes make agriculture difficult so are often less disturbed and areas of higher conservation value. The escarpment running through the parish is characteristic of the region and important for conservation. Steep slopes (>25 degrees) can be particularly suitable for calcareous grassland restoration.



Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

THE SITE

Geology & Agricultural Land Grades

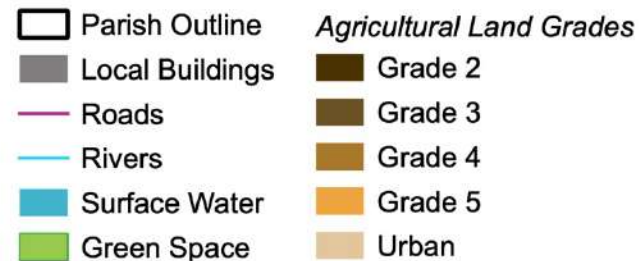
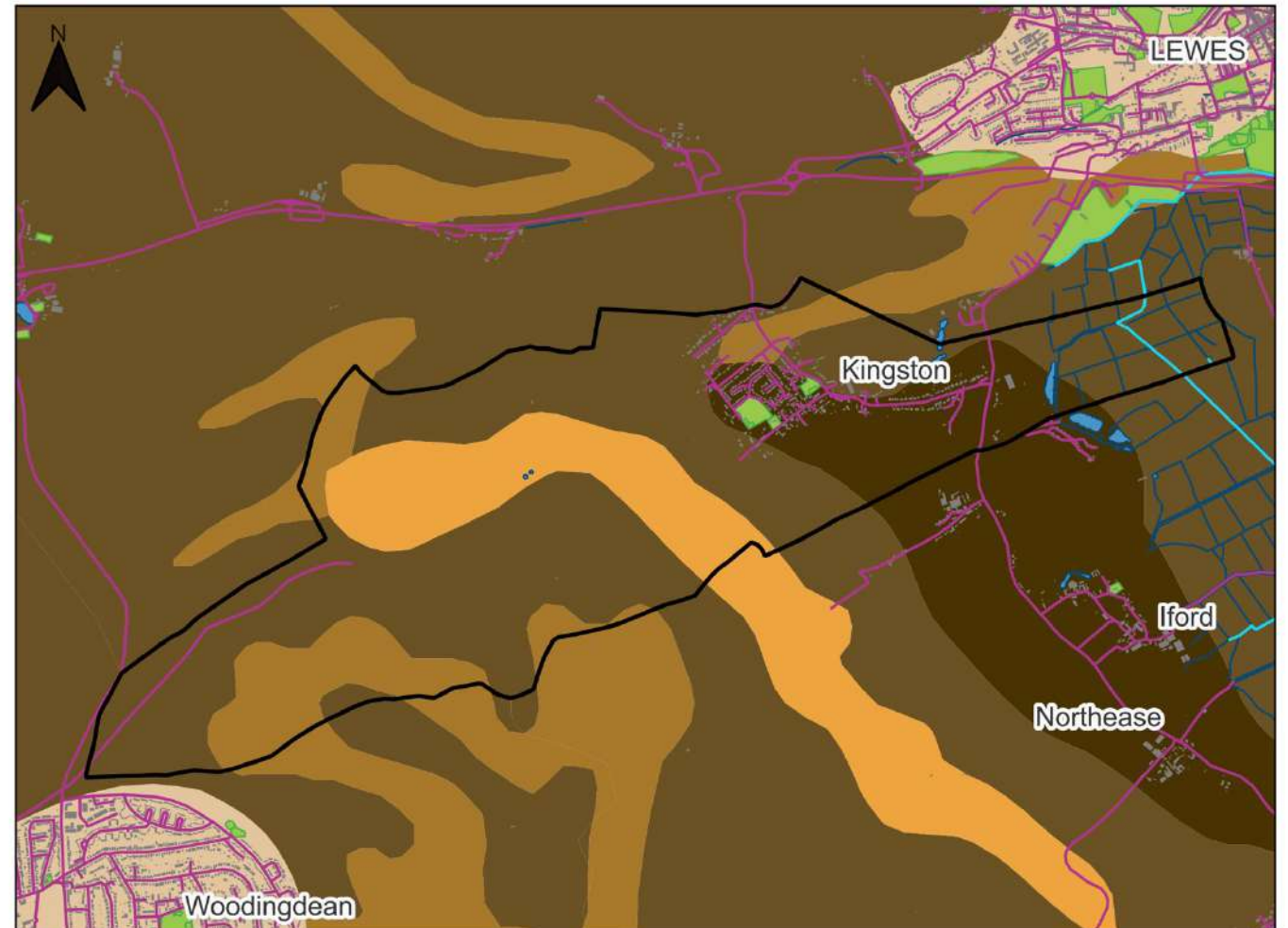
'Soilscape' data is available on MAGIC Maps but is not available for us to reproduce in this report. The West region of the parish has shallow, lime rich soils over chalk, which are particularly important for supporting calcareous grassland. However, within this area are freely draining and possible slightly acidic soils, supporting lowland meadows (that grow on more neutral soils). Kingston village and immediately surrounding it has freely draining, lime-rich soils and are better for agriculture. The East of the parish has soils which are clay-based and associated with the flood plain system.

Kingston parish classified using the Natural England Agricultural Land Classification (ALC) system (2019). This system classifies land according to the extent to which physical or chemical characteristics impose long-term limitations on the agricultural use of a site for food production.

The grades are numbered 1 to 5, where Grade 1 is excellent quality agricultural land and Grade 5 is very poor quality agricultural land.

See [here](#) for more information on land grades.

Grade 2:	77.2 ha	13.5 %
Grade 3:	339.8 ha	59.5 %
Grade 4:	72.9 ha	12.8 %
Grade 5:	81.3 ha	14.2 %



Agricultural Land Classification data supplied by Natural England.

Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

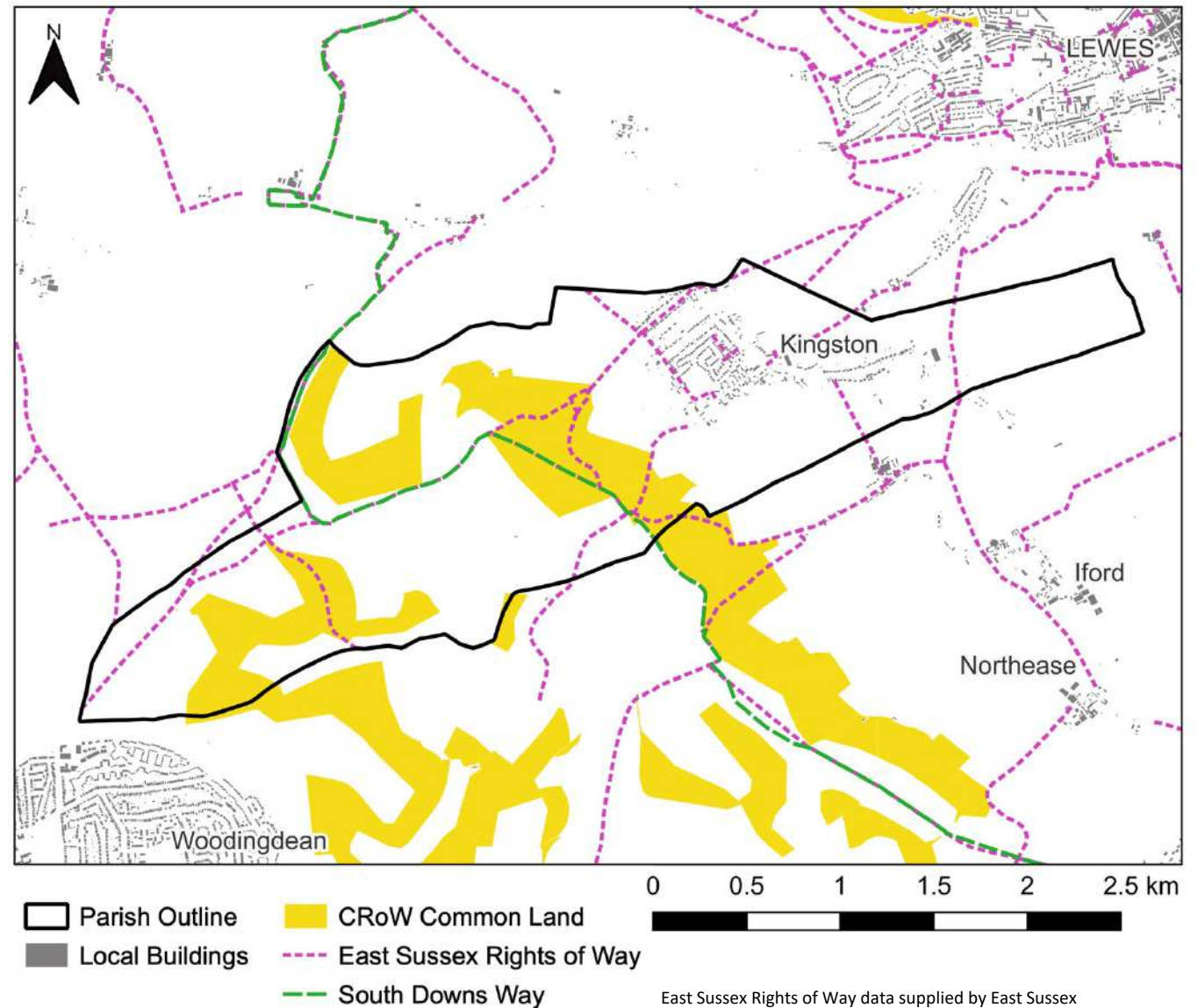
THE SITE

Access

East Sussex Rights of Way network is legally recorded public highways across privately owned land including footpaths, bridleways and byways.

South Downs Way National Trail follows the old routes and droveways along the chalk escarpment and ridges of the South Downs.

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land mapped as 'open country' (mountain, moor, heath and down) or registered common land.



East Sussex Rights of Way data supplied by East Sussex County Council GIS Open Data. National Trails and CROW Act 2000 Access data supplied by Natural England.

Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

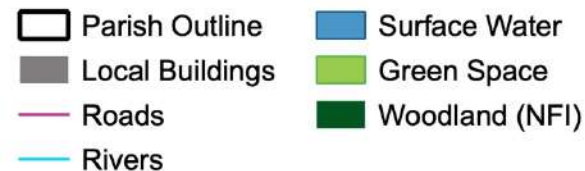
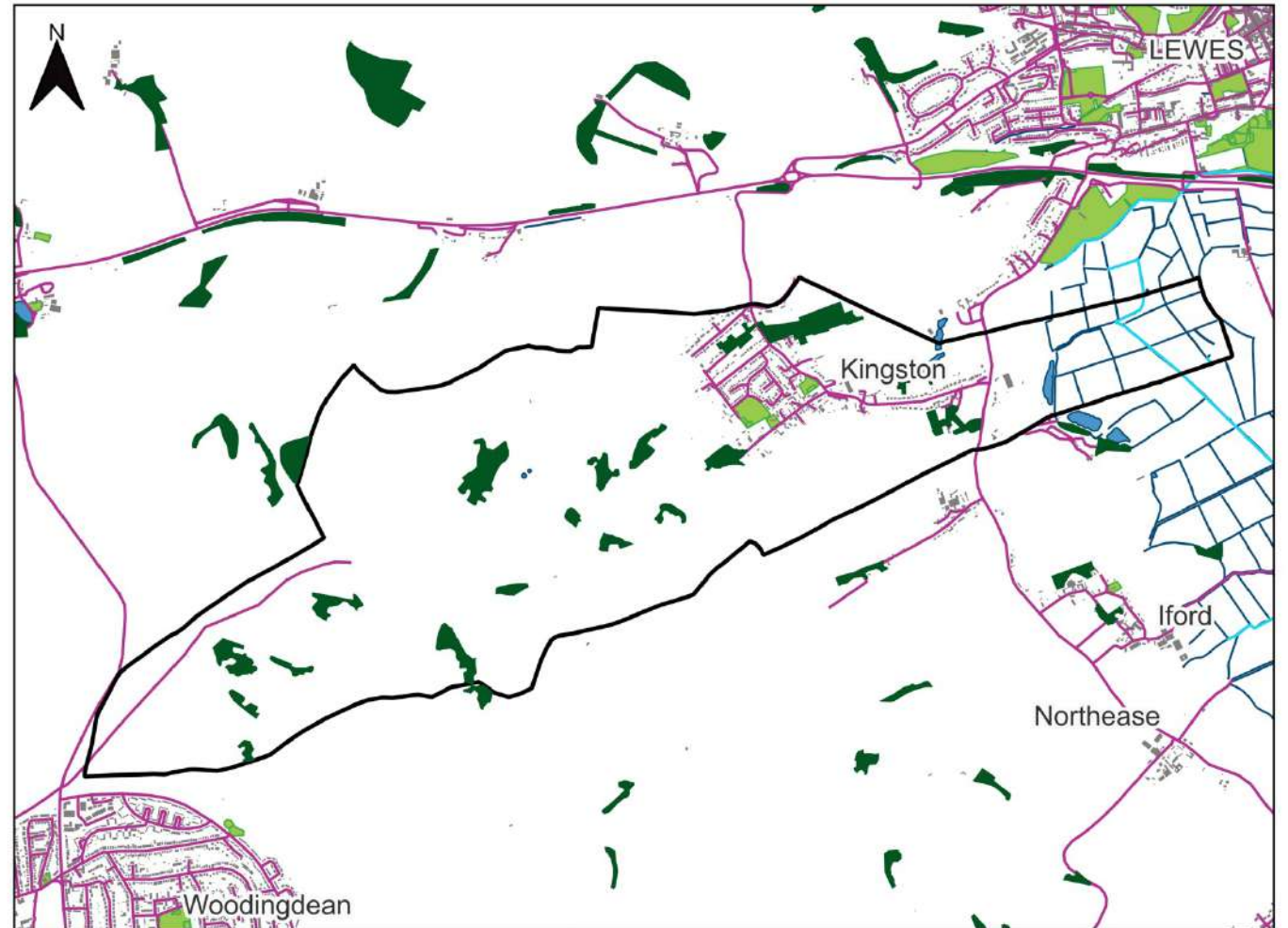
THE SITE

Existing Woodland

Woodland areas in the parish are identified in the National Forest Inventory (2020). Some very small woodland areas may not be shown.

All the existing woodland areas in Kingston parish are currently classified as broadleaf woodland.

Areas of woodland total 28.082 hectares, which is 5% of the total parish area. The low percentage cover means protecting broadleaved woodland is important for conservation to maintain habitat diversity, support dependent species, and provide ecosystem services including carbon storage.



0 0.5 1 1.5 2 2.5 km



National Forest Inventory (NFI) woodland contains information supplied by the Forestry Commission. © Crown copyright and database right 2022 Ordnance Survey [100021242]

Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

THE SITE

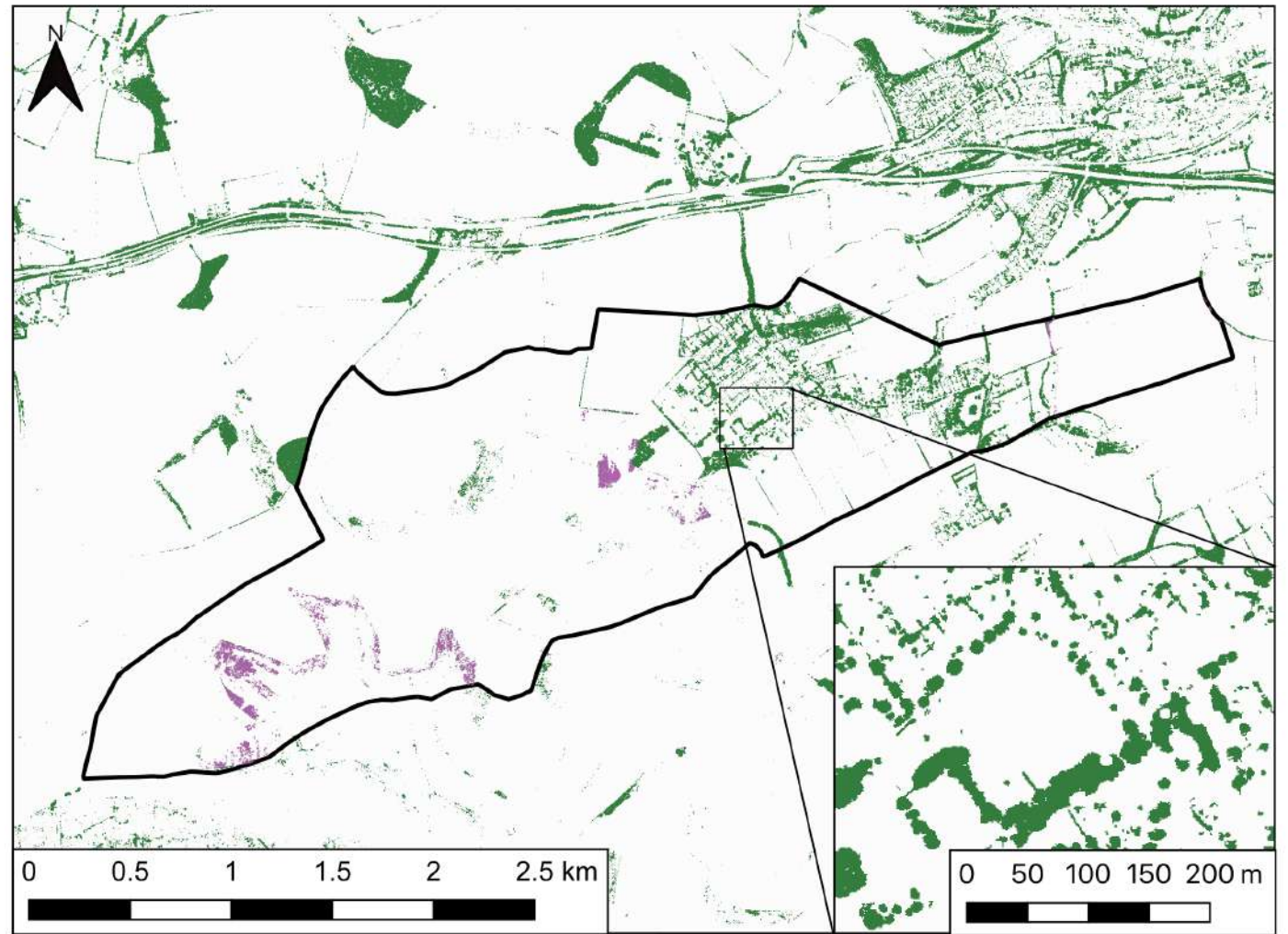
Vegetation

The Vegetation Object Model (2019) maps the height of the top of the canopy, for all above ground vegetation over a threshold of 2.5 metres.

A magnified section in a populated area of Kingston is included to demonstrate the individual tree and hedgerow-level detail.

Vegetation patches associated with protected areas (SSSI) are highlighted in purple.

Total area of vegetation over 2.5m:
40.8 ha (7% of Kingston parish area).



National LIDAR Programme Vegetation Object Model
supplied by the Environment Agency.

Contains public sector information licensed under the
Open Government Licence v3.0. and Ordnance Survey
data © Crown copyright and database rights 2023.

THE SITE

Living England Habitat Probability

The Living England project uses satellite data and machine-learning approaches to classify habitats. This map is from Phase IV of the project launched in April 2022, which achieved an average habitat classification accuracy of 88%.

Future phases of the project will be released in coming years with updated data and improved habitat prediction capabilities.

Interestingly the northern half of Kingston village is classified as scrub because of the more extensive vegetation here compared to the southern half of the village.



Living England Project Habitat

- Acid, Calcareous, Neutral Grassland
- Arable and Horticultural
- Bare Ground
- Bare Sand
- Bracken
- Broadleaved, Mixed and Yew Woodland
- Built-up Areas and Gardens
- Coastal Saltmarsh
- Coastal Sand Dunes
- Coniferous Woodland
- Dwarf Shrub Heath
- Fen, Marsh and Swamp
- Improved Grassland
- Scrub
- Unclassified
- Water

□ Parish Outline

0 0.5 1 1.5 2 2.5 km

Living England Habitat Map (Phase 4) supplied by Natural England.

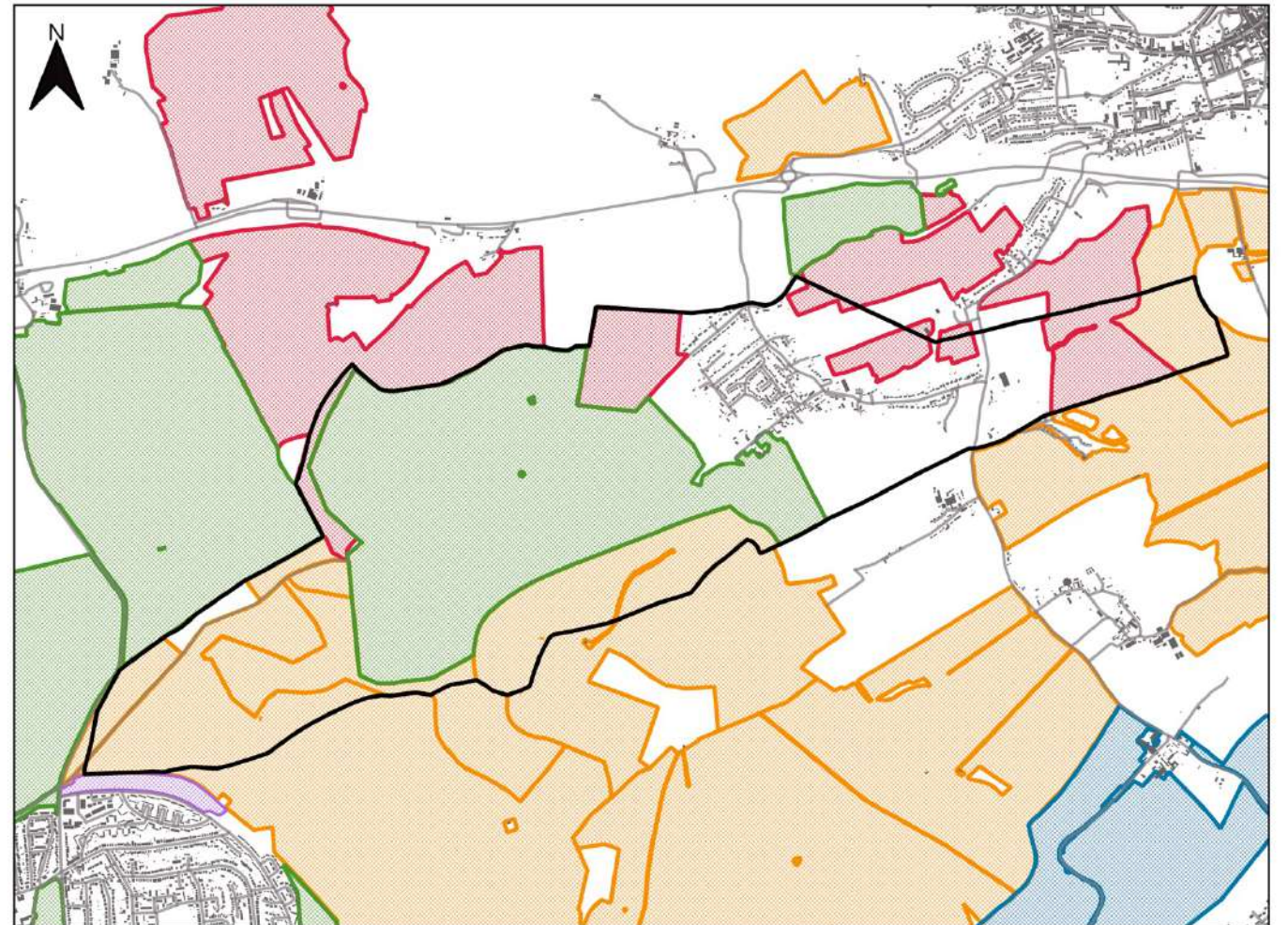
Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

THE SITE

Stewardship

This map includes all land under management within the Countryside Stewardship Agri-Environment Scheme from 2016 onwards and the Environmental Stewardship scheme. These schemes provide financial incentives for farmers, foresters and land managers to look after and improve the environment. More information is available [here](#).

The Countryside Stewardship Scheme is being transitioned into the new Environmental Land Management scheme (ELMs). Within ELMs Countryside Stewardship is the second tier grant of a 3 tier system and “will pay for more targeted actions relating to specific locations, features and habitats. There will be an extra incentive through CS Plus for land managers to join up across local areas to deliver bigger and better results.” More information about ELMs is available [here](#).



0 0.5 1 1.5 2 2.5 km



Countryside Stewardship Scheme and Environmental Stewardship Scheme Agreements (England) data supplied by Natural England.

Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

- Parish Outline
- Local Buildings
- Roads

Countryside Stewardship Scheme 2016 Management Areas

- Higher Tier
- Mid Tier

Environmental Stewardship Scheme Agreements

- Entry Level plus Higher Level Stewardship
- Higher Level Stewardship
- Organic Entry Level plus Higher Level Stewardship

THE SITE

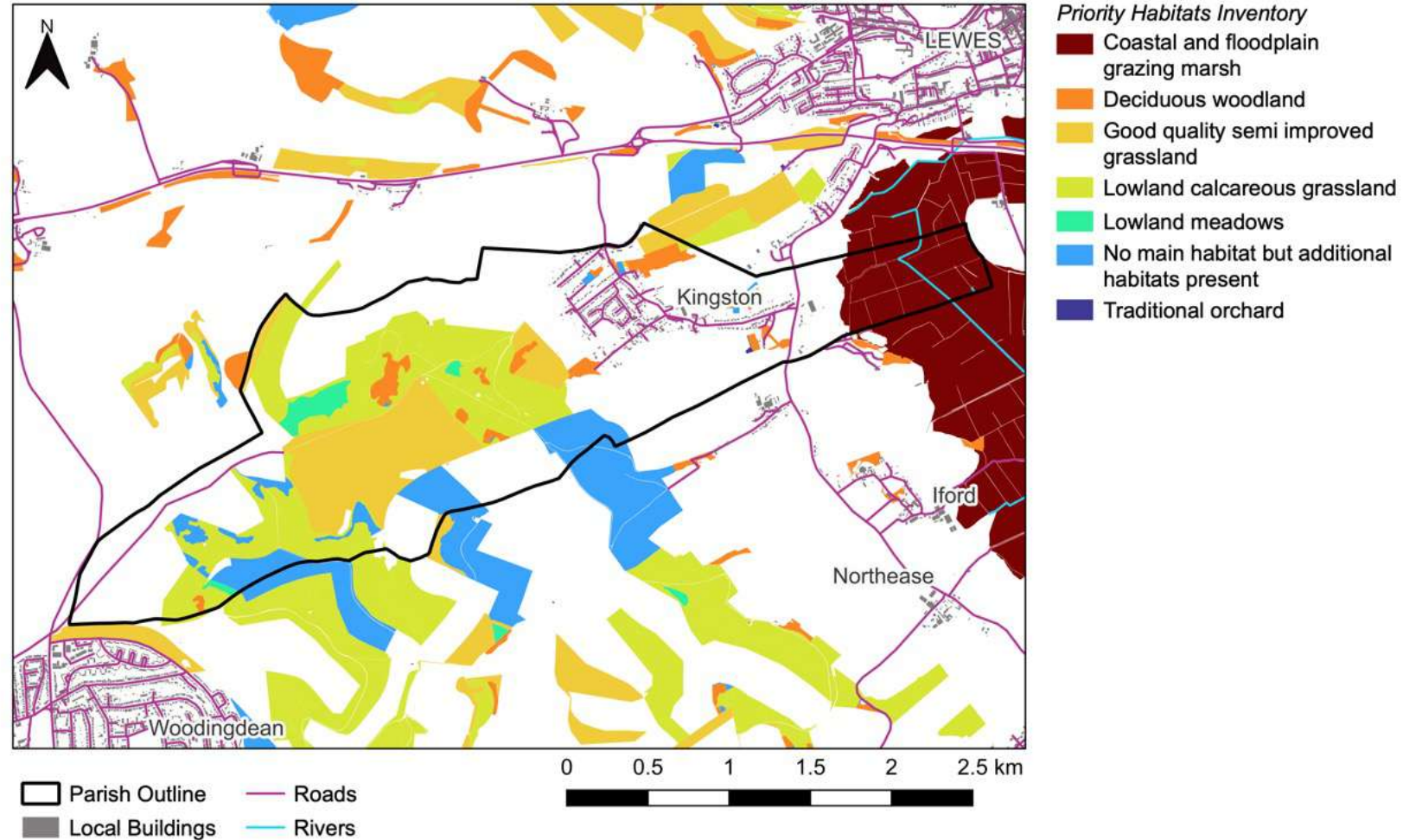
Priority Habitats

This map shows the Natural England Priority Habitats Inventory (2022) with the geographic extent and location of habitats of principal importance.

There is 273 ha of priority habitat in Kingston, making up 48% of the parish.

Lowland calcareous grassland	109.0 ha
Good quality semi improved grassland	69.2 ha
Coastal and floodplain grazing marsh	37.6 ha
No main habitat but additional habitats present	34.1 ha
Deciduous woodland	15.5 ha
Lowland meadows	7.7 ha
Traditional orchard	0.1 ha

Note: The area of deciduous woodland captured in the priority habitat map is less than the area of woodland captured in the National Forest Inventory. These differences are due to some woodland areas here being placed in the “no main habitat, but additional habitats present” category.



Priority Habitats Inventory supplied by Natural England.

Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

Priority Habitats

DESCRIPTIONS

Lowland Calcareous Grassland

This habitat is found on shallow lime-rich soils over limestone rocks such as chalk, most often on escarpments or dry valley slopes, but can also occur on roadside verges. Typically, it's managed as pastoral systems, supporting sheep or cattle, or cut for hay.

Lime-loving plants are characteristic of lowland calcareous grassland, but the communities are shaped by the conditions and location. In the UK, this habitat is largely restricted to warm and dry climates in southern areas of England.

The cover of lowland calcareous grassland has declined over the last 50 years (evidence drawn from between 1966 and the 1990s).

[UK Biodiversity Action Plan Priority Habitat Descriptions, Lowland Calcareous Grassland](#) (2016) originally from UK Biodiversity Group Tranche 2 Action Plans - Volume II: Terrestrial and freshwater habitats (December 1998, Tranche 2, Vol II, p57)



Priority Habitats

DESCRIPTIONS

Coastal Floodplain Grazing Marsh

Grazing marsh is inundated pasture, or meadow with ditches which maintain the water levels. The ditches can be brackish or fresh water and are especially rich in plants and invertebrates. This habitat is normally grazed and some are cut for hay or silage. Sites may contain seasonal water-filled hollows and permanent ponds with emergent swamp communities, but not extensive areas of tall fen species like reeds.

England holds the largest proportion of grazing marsh in the UK with an estimate of 200,000 ha of a possible 300,000 ha UK-wide. However, only ~3% of this grassland is semi-natural supporting a high diversity of native plant species.

Grazing marshes are particularly important for the number of breeding waders such as snipe *Gallinago gallinago*, lapwing *Vanellus vanellus* and curlew *Numenius arquata* they support, and Internationally important for wintering wildfowl including Bewick swans *Cygnus bewickii* and whooper swans *Cygnus cygnus*.

[UK Biodiversity Action Plan Priority Habitat Descriptions, Coastal and Floodplain Grazing Marsh](#) originally from Biodiversity: The UK Steering Group Report - Volume II: Action Plans (December 1995, Tranche 1, Vol 2, p251)



Priority Habitats

DESCRIPTIONS

Lowland meadows

This habitat includes most forms of unimproved neutral grassland, primarily including “*Cynosurus cristatus* – *Centaurea nigra* grassland, *Alopecurus pratensis* - *Sanguisorba officinalis* floodplain meadow and *Cynosurus cristatus* - *Caltha palustris* flood-pasture”. These grasslands are cut for hay and livestock grazed, but they’re also found in recreational sites, church-yards, roadside verges and a variety of other localities.

“Unimproved neutral grassland habitat has undergone a decline in the 20th century, due to changing agricultural practice. It is estimated that by 1984 in lowland England and Wales, semi-natural grassland had declined by 97% over the previous 50 years to approximately 0.2million ha. Losses have continued during the 1980s and 1990s and have been recorded at 2 -10% per annum in some parts of England. Recent conservation survey findings in Britain and Northern Ireland reveal that the impact has been pervasive, and an estimated extent of less than 15,000 ha of species-rich neutral grassland surviving today in the UK is given in the Habitat Statement.”

[UK Biodiversity Action Plan Priority Habitat Descriptions, Lowland Meadows](#). Originally published in: UK Biodiversity Group Tranche 2 Action Plans - Volume II: Terrestrial and freshwater habitats (December 1998, Tranche 2, Vol II, p39)



THE SITE

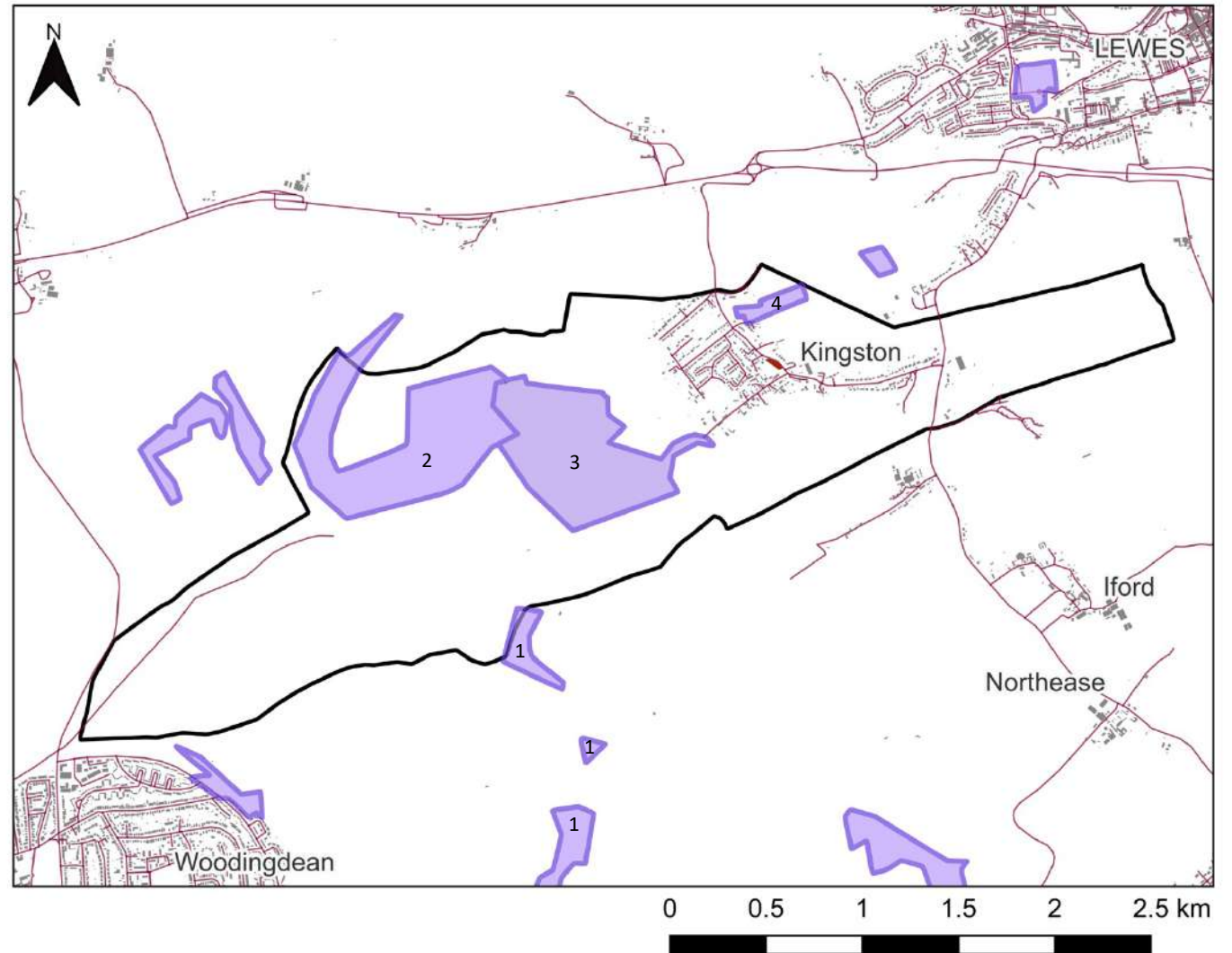
Recognised Local Wildlife Sites

This map shows Local Wildlife Sites (formerly known as SNCIs - Sites of Nature Conservation Importance). These are wildlife-rich sites that are recognised by the Sussex Local Wildlife Sites Initiative for their local nature conservation value. They can contain important, distinctive and threatened habitats and species. However, their designation is non-statutory and their only protection comes via the planning system; they are not protected by law like SSSIs.

Local Wildlife Sites in Kingston:

1. Balsdean Bottom Downs (10 ha)
2. Cold Coombes (56.8 ha)
3. Kingston Escarpment (14.4 ha)
4. Kingston Hollow (2 ha)

Designated Road Verge: Ashcombe Lane.



- Parish Outline
- Local Wildlife Sites
- Designated Road Verge

Local Wildlife Sites and Designated Road Verges data supplied by Sussex Biodiversity Record Centre on behalf of Sussex Local Wildlife Sites Initiative and local authorities. Polygons have been created by Wild Business Ltd.

Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

THE SITE

Current protected areas

This map shows the currently designated protected areas within and around the Parish boundary.

Kingston parish is totally contained within both the South Downs National Park and Brighton and Lewes Downs UNESCO Biosphere Reserve.

Castle Hill Nature Reserve is classified as both an SSSI and SAC, and part of it is a National Nature Reserve as well, hence the different regions overlay each other.

Total site area: 571 ha

SSSI areas: 107 ha (19% of Kingston)

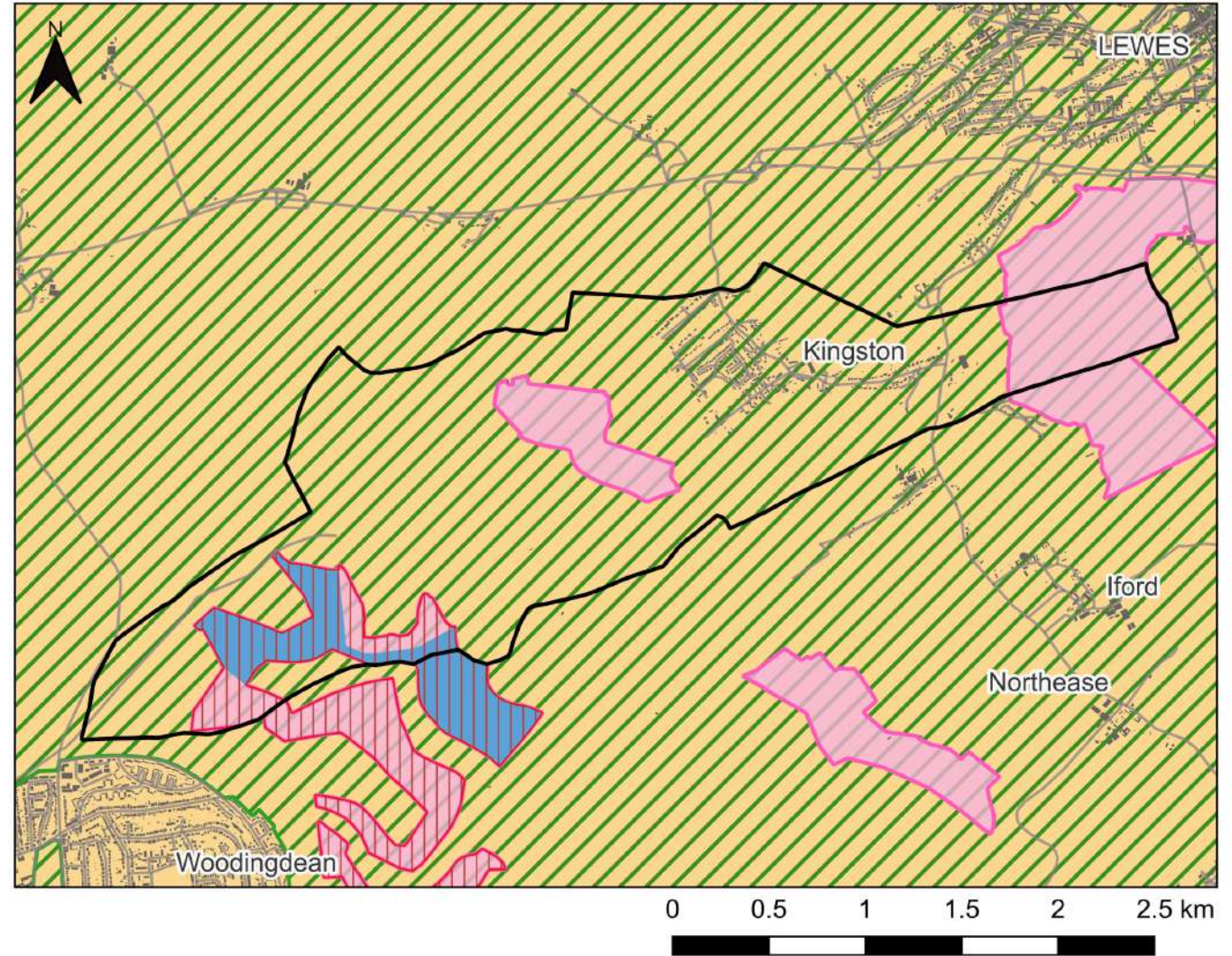
Castle Hill: 43 ha (Total SSSI: 115 ha, 38% in Kingston)

Kingston Escarpment & Iford Hill: 26.5 ha (Total SSSI: 63 ha, 42% of SSSI in Kingston)

Lewes Brookes: 37 ha (Total SSSI: 339 ha, 11% in Kingston)

SAC areas: 43 ha (7.6% of Kingston)

National Nature Reserve: 26 ha (4.5% of Kingston)



National Nature Reserves, Local Nature Reserves, National Parks, UNESCO Biosphere Reserves, SSSI, SAC and SPA data supplied by Natural England.

Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.



THE SITE

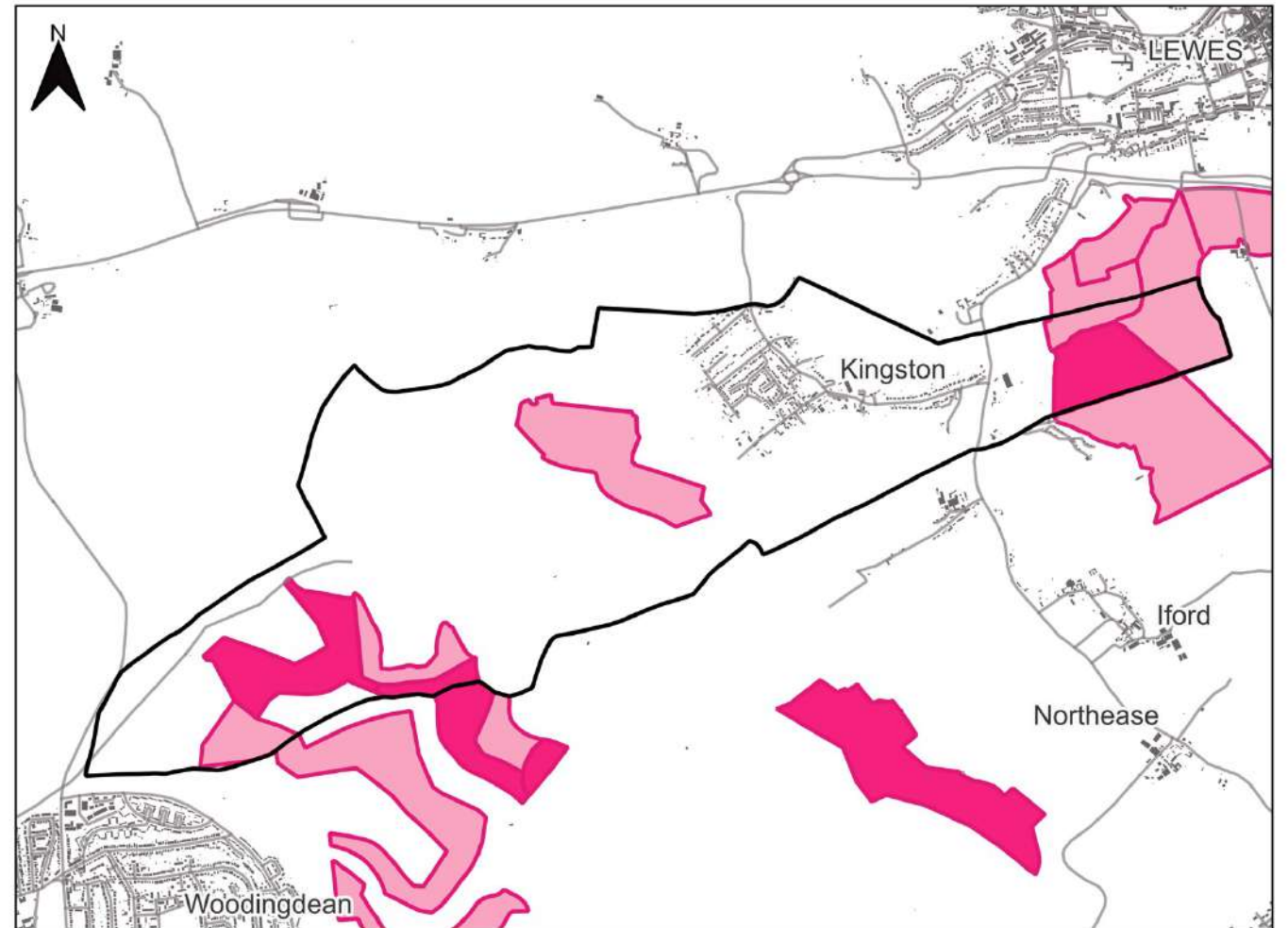
SSSI Condition

Sites of Special Scientific Interest (SSSI) are the richest sites for wildlife and natural features in England, supporting characteristic, rare and endangered species, habitats and natural features.

Natural England categorises the condition of SSSIs as:

- Favourable - habitats and features are in a healthy state and are being conserved by appropriate management.
- Unfavourable (recovering condition) - if current management measures are sustained the site will recover over time.
- Unfavourable (no change) or unfavourable (declining condition) - special features are not being conserved or are being lost, so without appropriate management the site will never reach a favourable or recovering condition.
- Part destroyed or destroyed - there has been fundamental damage, where special features have been permanently lost and favourable condition cannot be achieved.

All SSSI areas in Kingston are currently classified as 'favourable' or 'unfavourable (recovering condition)'.



SSSI data supplied by Natural England.

Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

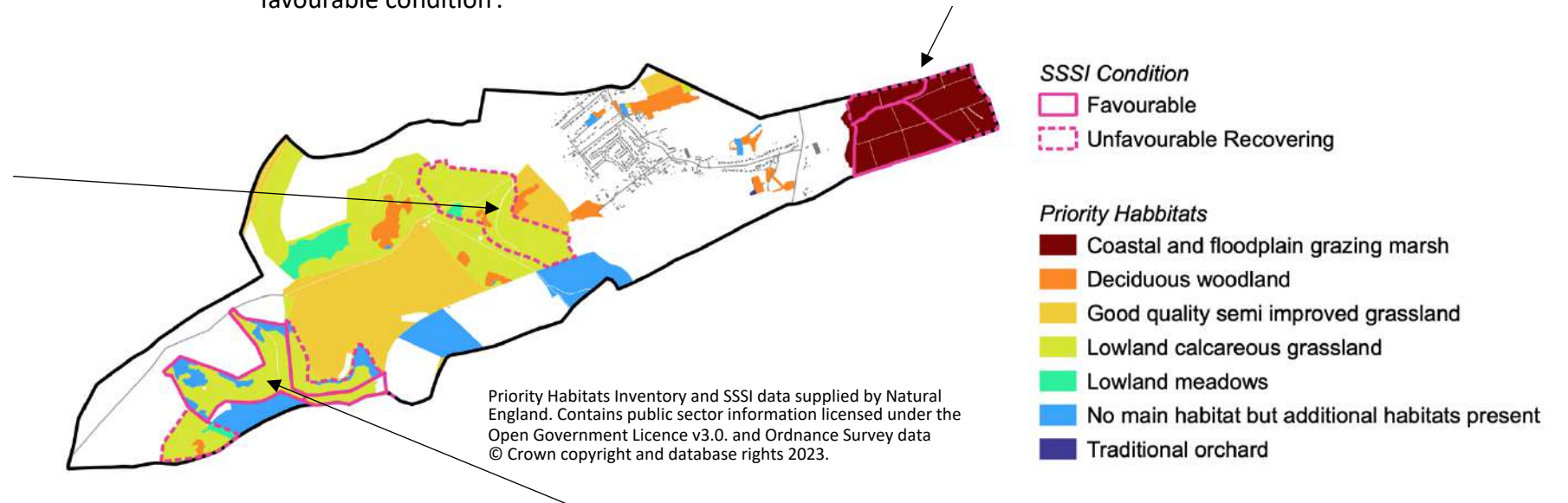
THE SITE

SSSI Condition

Kingston Escarpment & Iford Hill

SSSI: Was designated in 1986 for its Calcareous grassland and site is monitored for the Wart-biter cricket (*Decticus verrucivorus*) and Adonis Blue butterfly (*Polyommatus bellargus*) in particular. In 2019 it was assessed to be in 'Unfavourable condition' but recovering. The assessor indicates a potential problem with scrub development and would like to see 'more extensive clearance'. Otherwise, the grazing management is viewed as keeping the grassland in good condition.

SSSI Lewes Brooks SSSI: Was designated in 1988 to protect its neutral grassland, with its ditches, invertebrate assemblages on open water and reed-fen & pools, as well as the nationally rare and scarce dragonflies – Hairy Dragonfly (*Brachytron pratense*), Variable Damselfly (*Coenagrion pulchellum*), as well as supporting a particularly diverse community of water beetles. The site is particularly diverse because fresh water from springs feed pools and ditches to the west, while brackish water from the tidal River Ouse feeds into ditches to the East. When last assessed in 2013, most of the site was considered to be in 'unfavourable condition', but for the most part recovering as part of the Higher Level Stewardship agreement. However, one of 3 regions of the site that fall in the Kingston Parish was considered to be in 'favourable condition'.



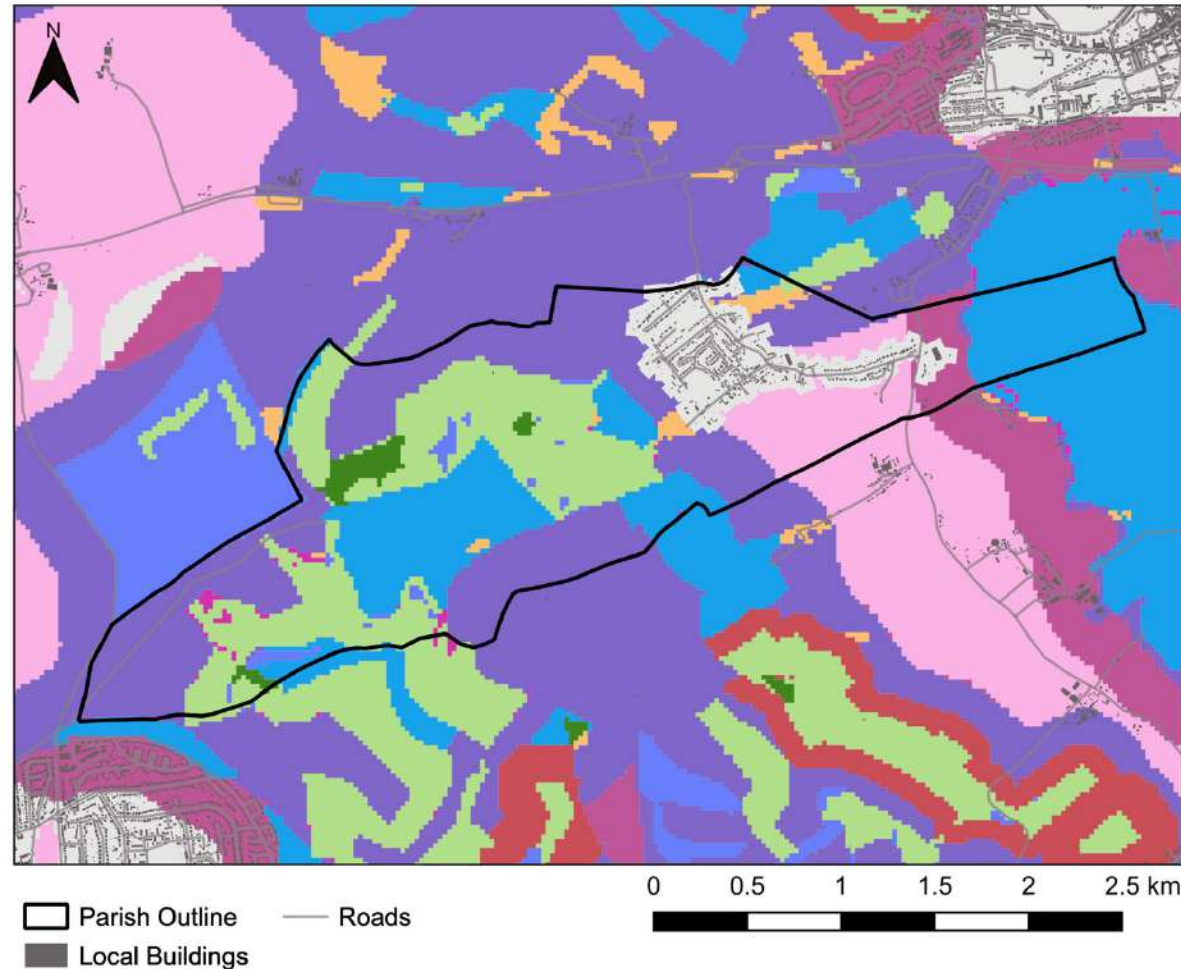
Castle Hill SSSI/SAC: Was designated as an SSSI in 1965 and is also an SAC for its calcareous grassland, considered to be of international importance, particularly for its orchid community including Early Gentian (*Gentianella anglica*) and Early Spider-Orchid (*Ophrys sphegodes*), as well as the Wart-Biter Cricket (*Decticus verrucivorus*). The warm south-facing slopes support an unusual community including Nottingham Catchfly (*Silene nutans*), Burnt Orchid (*Orchis ustulata*), and Round Headed Rampion (*Phyteuma tenerum*). The main central region within the parish is in 'favourable condition', with all the monitored species of importance present. Some of the areas of the site are considered to be in 'unfavourable condition' but recovering, with additional grazing needed to improve sward height and control the expansion of scrub in places. Although the scrub patches are also valuable as they provide shelter for invertebrates, support autumn-ladies tresses orchid, and downland breeding birds such as yellowhammer, corn bunting, linnets and whitethroat, to name a few.

THE SITE

Habitat Networks

This map shows the Natural England Habitat Networks (2021) with the geographic extent and location of Habitat Networks for 18 priority habitats in relation to habitat restoration-creation, restorable habitat, plus fragmentation action, and network enhancement and expansion zones. Details of these zones are available [here](#).

Habitat Network Class:	Area (ha):
Network Enhancement Zone 1	181.7
Lowland calcareous grassland	127.2
Restorable Habitat	122.9
Network Expansion Zone	38.9
Network Enhancement Zone 2	11.7
Lowland meadows	10.1
Habitat Restoration-Creation	9.1
PHI_Other	6.5
SSSI (within SSSI + no other class)	3.6



Habitat networks data supplied by Natural England.

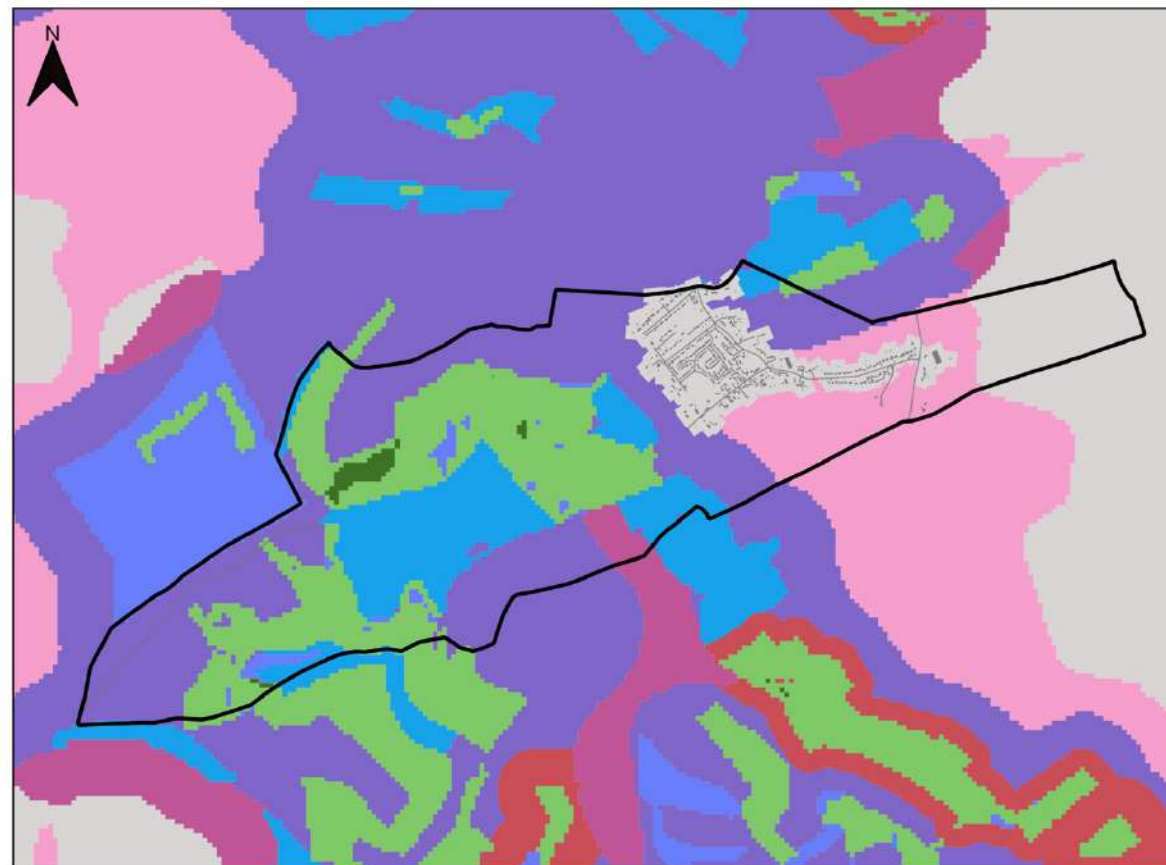
Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

THE SITE

Habitat Networks: Lowland Calcareous Grassland

This map shows the Natural England Habitat Networks (2021) specifically for Calcareous grassland.

Habitat Network Class:	Area (ha)
Network Enhancement Zone 1	184.2
Primary Habitat	131.7
Restorable Habitat	83.3
Network Expansion Zone	53.7
Habitat Restoration-Creation	9.5
Network Enhancement Zone 2	6.5
Associated Habitats	5.3

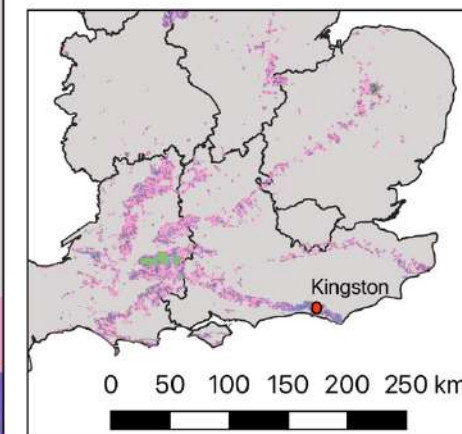


Parish Outline — Roads
 Local Buildings

0 0.5 1 1.5 2 2.5 km

Habitat Networks
Lowland Calcareous Grassland

- Associated Habitats
- Fragmentation Action Zone
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2
- Network Expansion Zone
- Primary Habitat
- Restorable Habitat
- Other / Unclassified



Habitat networks data supplied by Natural England.

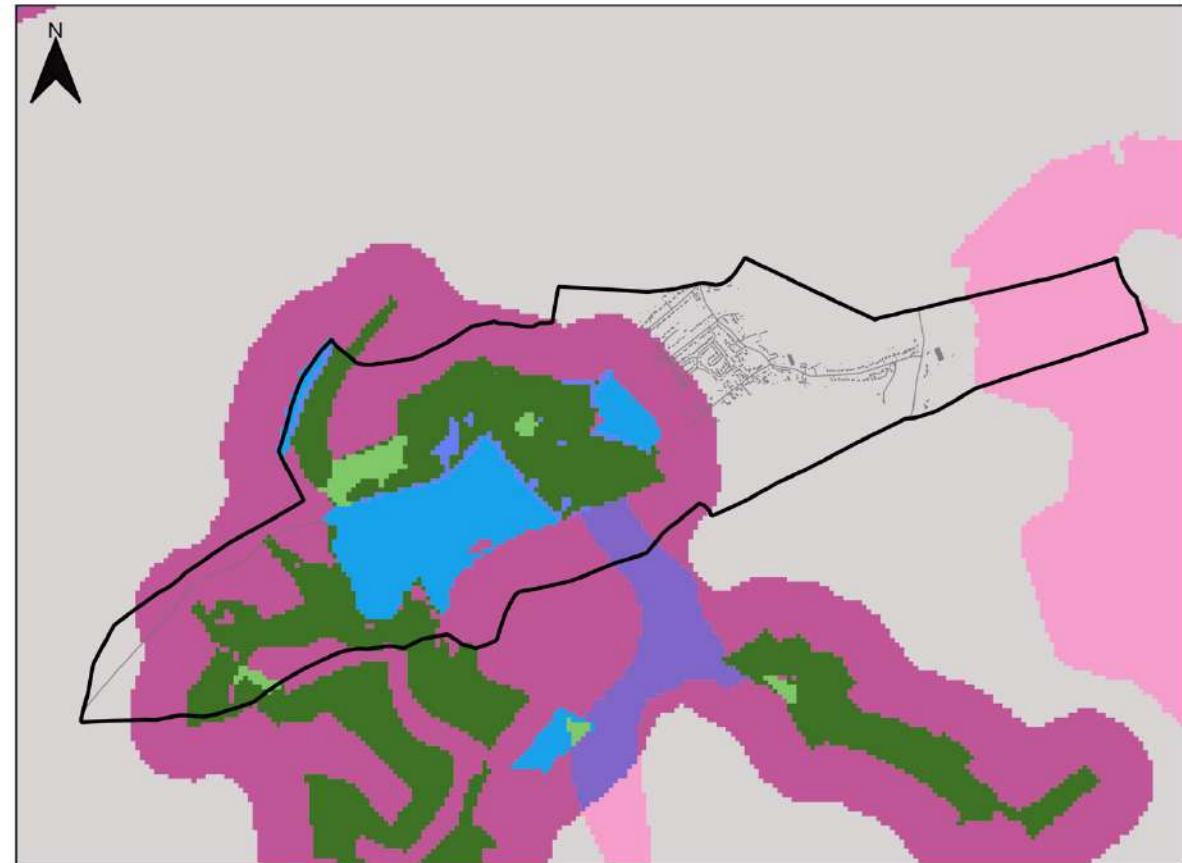
Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

THE SITE

Habitat Networks: Lowland Meadow

This map shows the Natural England Habitat Networks (2021) specifically for Lowland Meadow. The overlap in restorable habitat between the previous map for Calcareous grassland and this one indicates either uncertainty of suitability for each habitat type at this resolution of analysis or that multiple outcomes are possible. Any nature recovery decisions will also require on the ground assessment.

Habitat Network Class:	Area (ha)
Network Enhancement Zone 2	168.3
Associated Habitats	118.4
Restorable Habitat	68.0
Network Expansion Zone	38.7
Primary Habitat	10.1
Habitat Restoration-Creation	9.0
Network Enhancement Zone 1	8.2

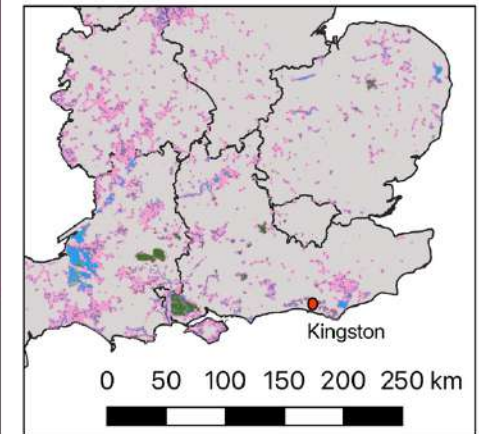


▭ Parish Outline — Roads
■ Local Buildings

0 0.5 1 1.5 2 2.5 km

Habitat Networks
Lowland Meadows

- Associated Habitats
- Fragmentation Action Zone
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2
- Network Expansion Zone
- Primary Habitat
- Restorable Habitat
- Other / Unclassified



Habitat networks data supplied by Natural England.

Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

Biodiversity records

The Sussex Biodiversity Records Centre have recorded the species and number of records of protected and designated species, from 15 designations (regional, national and international). This excludes records of badgers as local badger groups have requested that badger records remain confidential. Separately, they have also collated species records referred to as invasive non-native species of concern since 1980.

Protected and designated species		
International designations	42 species	599 records
National designations	145 species	9,672 records
Other designations	370 species	16,234 records
Total	391 species	16,838 records
Species of concern		
Non-native species	30 species	337 records

Data supplied by Sussex Biodiversity Record Centre.



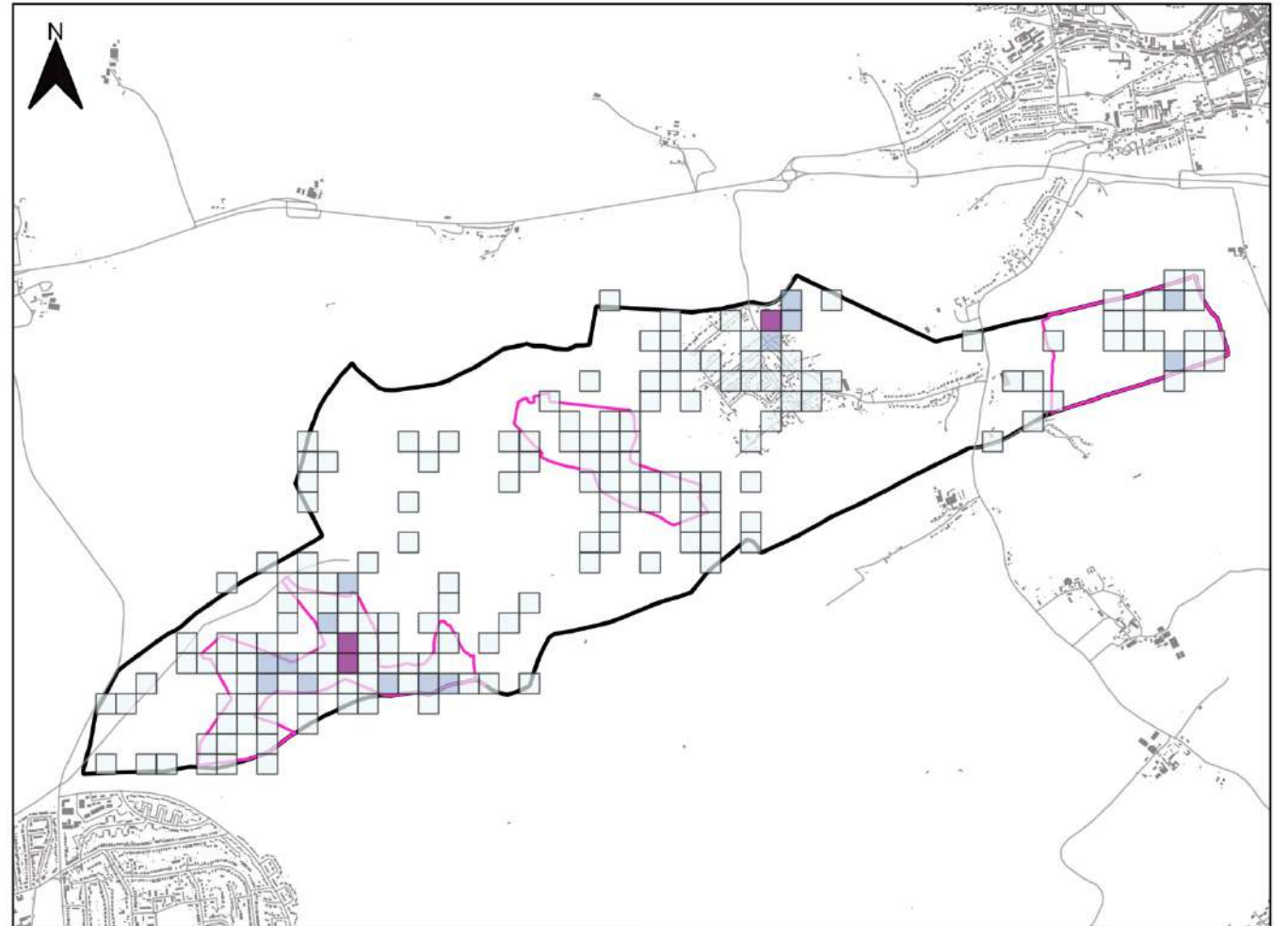
THE SITE

Species Richness

The number of different protected or designated species recorded and sent to the Sussex Biodiversity Records Centre between 1980 and 2022 in 100m² grid areas across Kingston parish (excluding birds and bats).

These records include invertebrates, fungi, lichens, amphibians, reptiles, terrestrial mammals and reptiles.

These records are not part of a systematic survey, and so are an indication of where designated and protected species are being found and being looked for and recorded. As a result, records are concentrated in the protected areas where recorders are likely to focus their efforts, but also in Kingston village itself where recorders might be spending more time.



- Parish Outline
- Local Buildings
- Roads
- SSSI

Designated and protected species richness

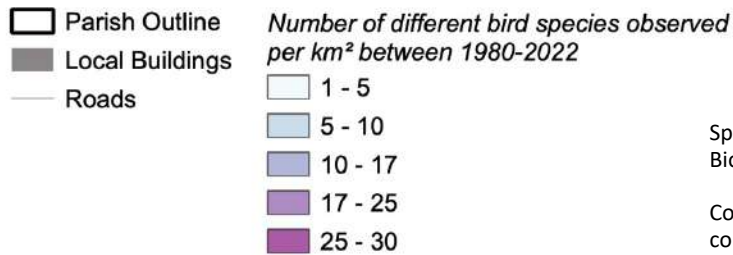
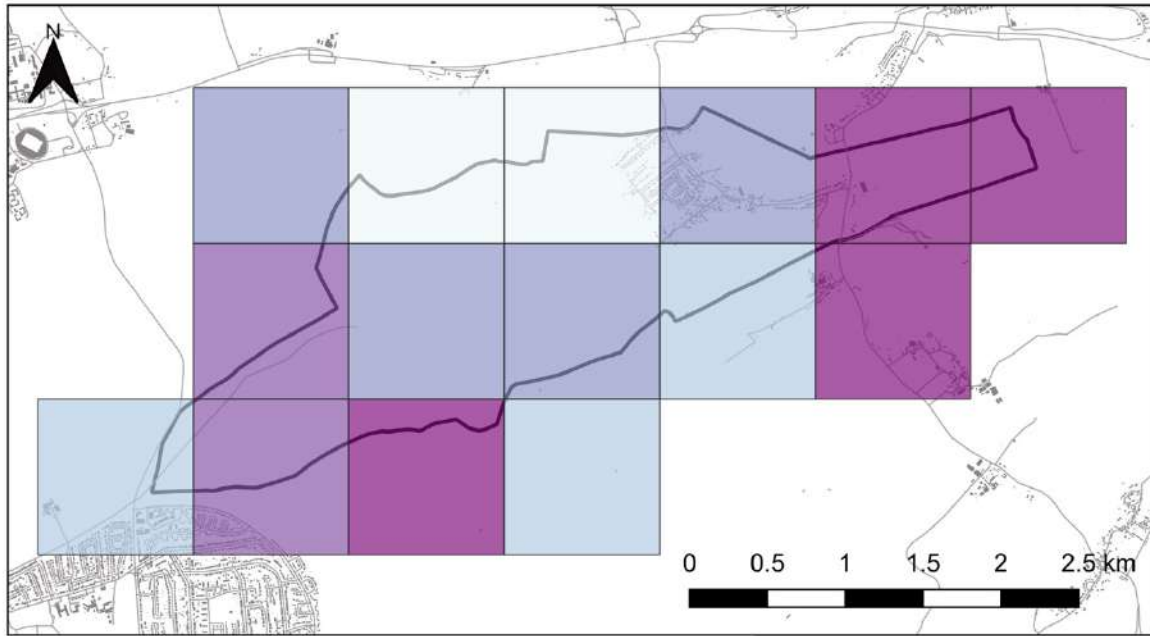
- 1 - 10
- 10 - 20
- 20 - 30
- 30 - 38

0 0.5 1 1.5 2 2.5 km

Species data supplied by Sussex Biodiversity Record Centre.

Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

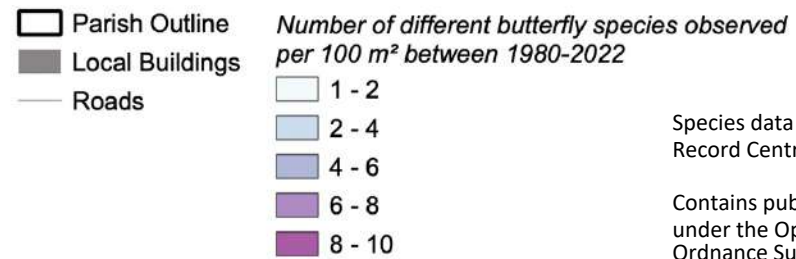
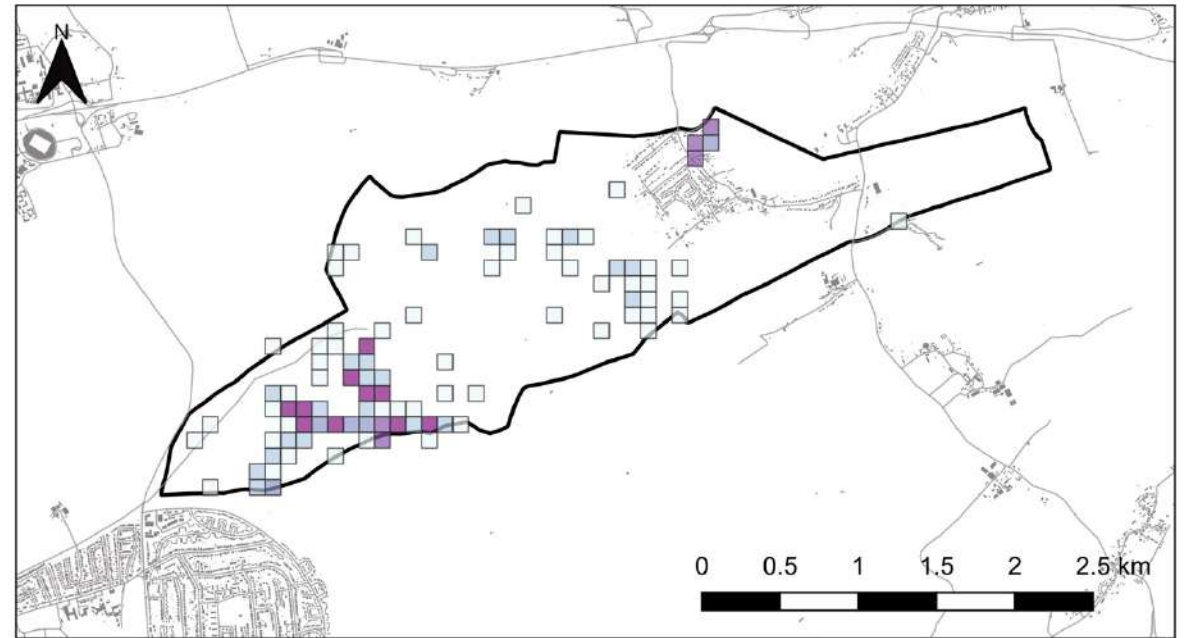
Bird species richness



Species data supplied by Sussex Biodiversity Record Centre.

Contains Ordnance Survey data © Crown copyright and database rights 2023

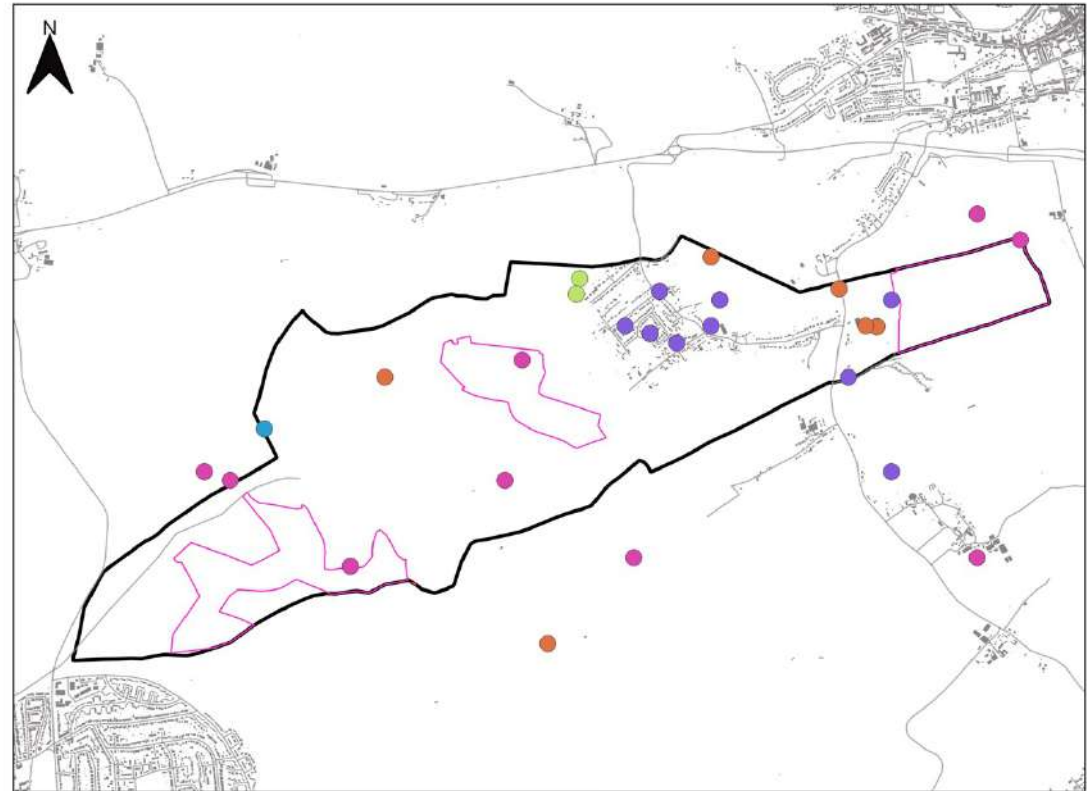
Butterfly species richness



Species data supplied by Sussex Biodiversity Record Centre.

Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

Protected or designated mammals



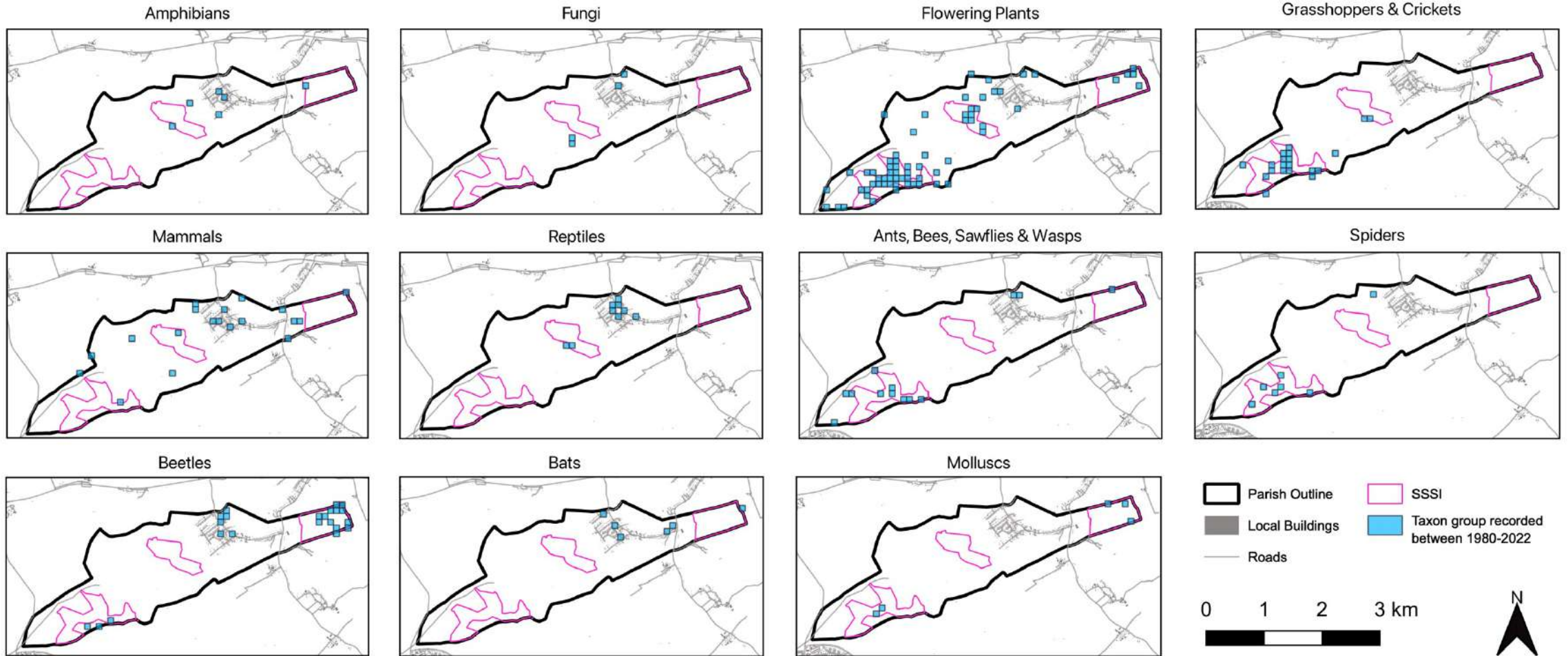
- | | |
|-----------------|-------------------------|
| Parish Outline | <i>Species observed</i> |
| Local Buildings | Brown Hare |
| Roads | European Rabbit |
| SSSI | Harvest Mouse |
| | West European Hedgehog |
| | Wild Boar |

0 0.5 1 1.5 2 2.5 km

Species data supplied by Sussex Biodiversity Record Centre.

Contains public sector information licensed under the Open Government Licence v3.0. and Ordnance Survey data © Crown copyright and database rights 2023.

Presence of different taxon groups



GREEN SPACE

The Village Green

Permanent grassland 0.48 ha owned and managed by the Kingston Parish Council. Images illustrate islands of grassland re-seeded or left to grow.



GREEN SPACE

St Pancras Green

Permanent grassland 1.5 ha owned and managed by the Kingston Parish Council. Grassland is extensively mowed throughout, there is a green roof on the pavilion building and a line of mature trees along the NW edge.



GREEN SPACE

St Pancras Church cemetery

Permanent grassland 0.22 ha, extensively mowed areas with flora-rich planted and semi-natural habitats chiefly around the borders, including mature ivy.



GREEN SPACE Snednore

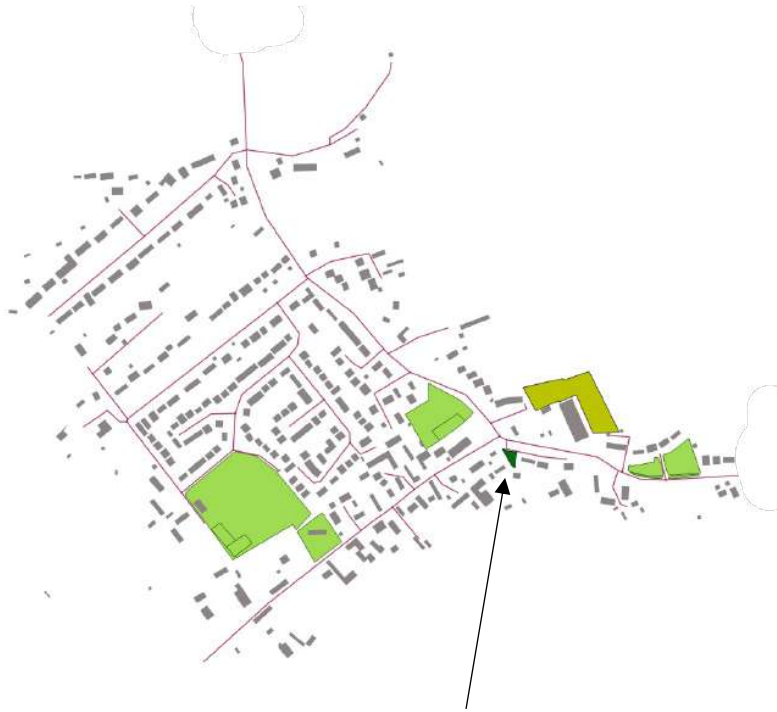
Large permanent grassland verge ~0.3 ha owned and managed by Lewes District Council.
Images show mowed (top) and in spring and summer left to grow (bottom).



GREEN SPACE

Community Wildlife Garden

Kingston community allotment 0.03 ha owned by Lewes District Council, leased and managed by the Kingston Action Group. Managed for wildlife by volunteers in the village for the benefit of interest groups, villagers, and wildlife.



GREEN SPACE

Iford and Kingston Primary School playing fields

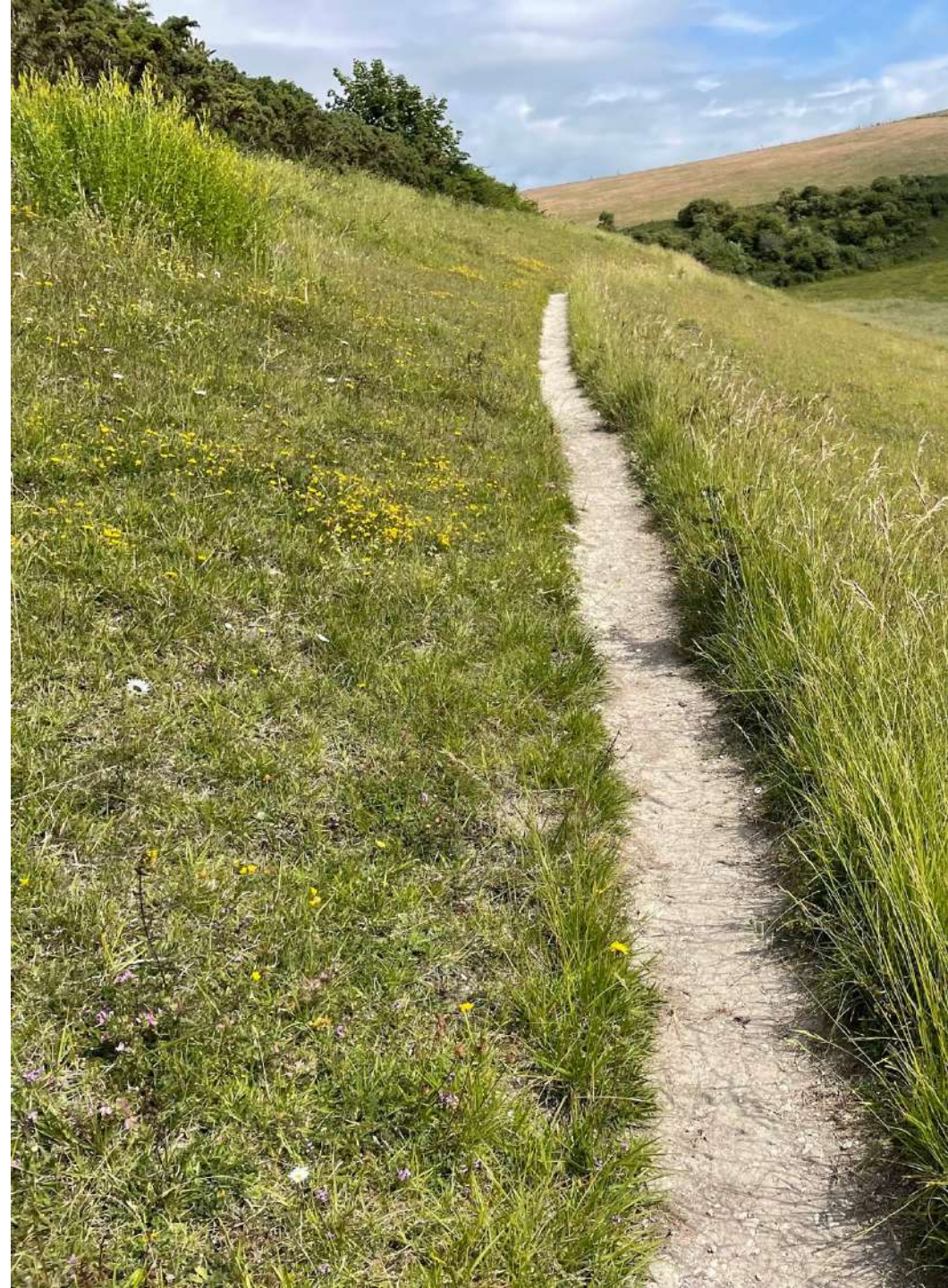
Iford and Kingston primary school playing fields are ~0.5 ha chiefly extensively mowed grassland but includes an allotment space and wooded 'forest school' area.



Situation analysis

Kingston near Lewes is an important place for nature conservation and recovery. It is already home to three important Sites of Special Scientific Interest (SSSIs) protected for their calcareous grassland or coastal floodplain grazing marsh, and associated species such as Early Spider-Orchid, Adonis Blue Butterfly, Wart-Biter Cricket and Hairy Dragonfly. Furthermore, Castle Hill SSSI is an internationally important site for its calcareous grassland and particularly rich community of orchids that is also protected as a Special Area of Conservation (SAC).

These protected areas have been assessed to be either in 'favourable condition', that is, meeting its nature conservation targets, or 'unfavourable but recovering condition', that is, not currently achieving its conservation targets but is judged to have a suitable management plan in place to return it to 'favourable condition'. Reviewing that progress and ensuring adaptive management is applied to these sites will help ensure all the sites will return to 'favourable condition' and help support the [Nature Recovery Network target](#) of 75% of protected areas being in 'favourable condition'.



Situation analysis

With these protected SSSIs providing an important starting point, helping nature recover in the surrounding landscape will help the threatened and rare species expand their populations making them more resilient to disturbance and climate change in the future. Even in protected areas, species may still be in decline and projected to go extinct in the future. This time lag between land use change and species extinction is known as extinction debt, which can take 50-100 years. Evidence suggests that networks of habitats, connecting protected areas has the greatest benefit to species persistence. The nature recovery project [Kingston Hill Fields](#) has already made considerable progress since it started in 2005. It is also notable that a large proportion of the open ground in the parish is or has been covered by Countryside Stewardship scheme agreements and is being managed with nature in mind. However, the habitat network data also illustrates the potential for further nature recovery that could see the expansion of calcareous grassland and lowland meadow – two priority habitats: calcareous grasslands form part of the Natura 2000 network, and lowland meadows are designated as Special Protected Areas (SPAs) under the EC Birds Directive and as Wetlands of International Importance under the Ramsar Convention.



Situation analysis

In the village there are 2.5 ha of recreational green space in St Pancras Green, The Village Green, St Pancras Green Cemetery, and the Community Wildlife Garden. The greens are primarily mown lawn with low biodiversity value. Trees and scrub are found on the boundaries, particularly in The Village Green. This provides important habitat variation; it increases the variety of resources, including nectar, food, and shelter, for wildlife. The recent creation of mini wildflower meadows in The Village Green has dramatically increased plant diversity in these patches, which will also improve invertebrate diversity as well as helping people engage with nature. St Pancras Cemetery offers greater vegetation structure in the winter months compared to other green spaces in the Village. St Pancras Green is the largest green space, but it is also the most homogenous with a very large area of mown lawn. Both Greens have diverse uses including sports, dog walking, picnics, and children's play areas. Maintaining these diverse uses is important, but there are also opportunities to support nature recovery for the benefit of people and a wide variety of species.

Roadside verges and green spaces bordering footpaths in the village also offer habitat and nature recovery opportunities. A small patch of roadside verge along Ashcombe Lane is designated for its wildlife interest. While the parish has a wealth of nature, much of this is in the background and accessible via paths on steep slopes. Nature recovery in the village could support greater human – nature connection.





Section 2) Nature Recovery Opportunities

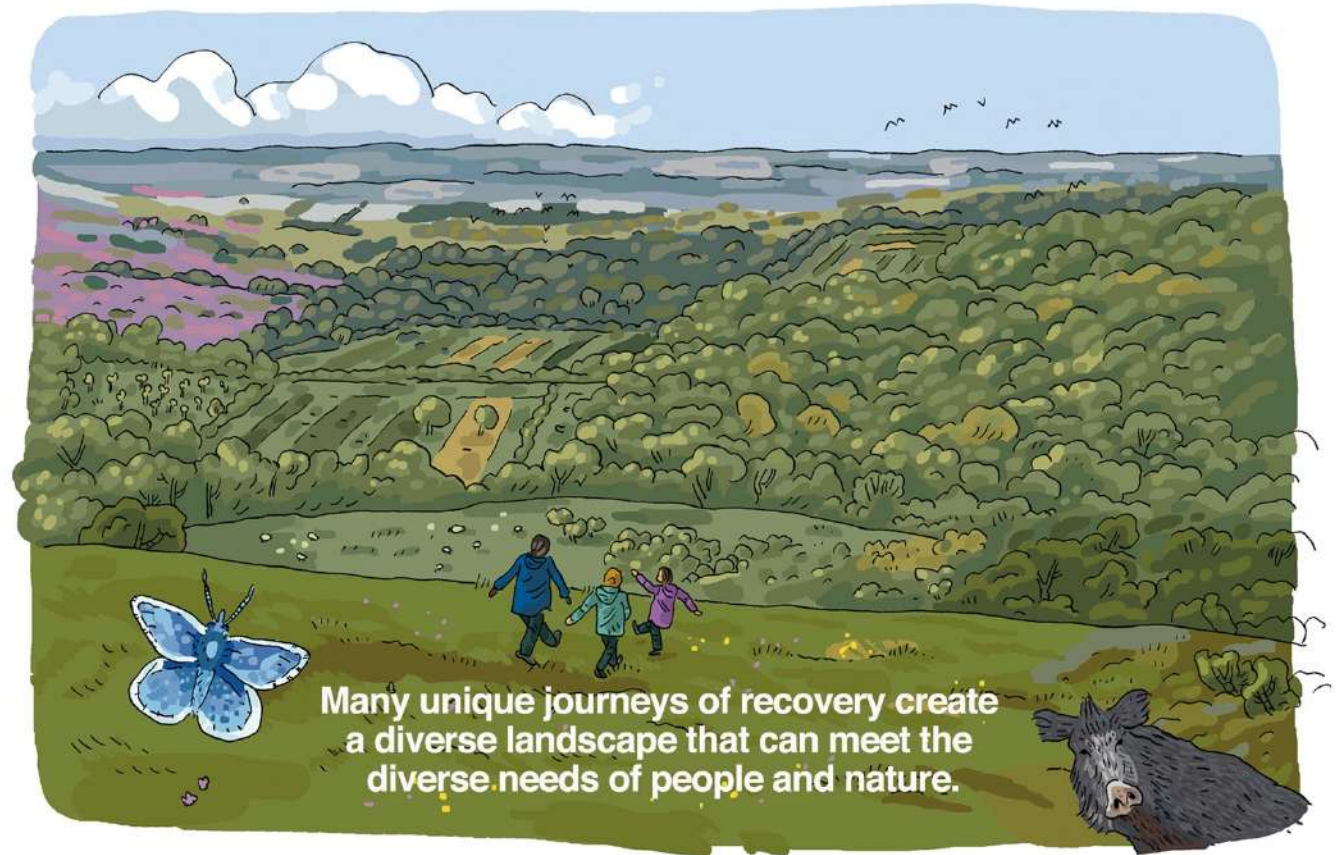
Introduction to Nature Recovery

Nature recovery seeks to change conditions to increase the richness and abundance of species, target the recovery and preservation of particularly valued species, and create an ecosystem that is more resilient to change and beneficial to people.

Nature recovery approaches can be applied in different ways to achieve different goals. Diverse approaches over the broader landscape will help support the diverse needs of people and nature, but the right approach need to be chosen for the right place.

In this section we introduce four nature recovery strategies: targeted habitat restoration, regenerative agriculture, rewilding, and sustainable forestry. We believe targeted habitat restoration and regenerative agriculture are the strategies that are likely to best align with the current situation in the parish of Kingston near Lewes. But awareness of the other strategies and what they offer is useful and may apply to some places in the parish now or in the future.

A Landscape of Diversity and Opportunity



Targeted ecological restoration



Targeted restoration is the process of using human intervention (i.e. nature recovery actions) to recreate or accelerate the recovery of a specific community of species. If nature is considered to be degraded in a particular place, an assessment is made to determine which communities of species could be present and which would be the most valuable to restore. For Kingston, the restoration of calcareous grassland is an important goal, but restoration of lowland meadows, coastal flood plain grazing marsh, hedges, traditional orchards, and broadleaved woodland would be appropriate as well.

Extensive guidance for applying targeted ecological restoration is available from the [Society for Ecological Restoration guidelines](#). There are also regional projects and campaigns supporting the recovery of specific habitats and species, for example, led by the National Trust the [Changing Chalk](#) project is supporting the recovery of chalk grassland around Brighton and Hove, Eastbourne and Lewes. The Kingston Hill Fields chalk grassland restoration project provides an example of what can be achieved in the parish.

Targeted ecological restoration is a good strategy for supporting species and communities of high conservation value. But it comes at the costs associated with needing human management, including the funding and resources needed to carry out the management, and the carbon emissions typically associated with human interventions. For calcareous grassland, this includes managed grazing and scrub clearance, both of which come with greenhouse gas emissions.

Regenerative agriculture

Local and sustainably produced food will provide for sustainable and seasonal diets



[Regenerative agriculture is a diverse concept](#), but primarily aims to produce food with lower costs, or broader net benefits to people and nature. Typically, regenerative farming systems focus on increasing soil quality and biodiversity in farmland while producing nourishing farm products profitably. Key actions often include: (1) abandoning tillage (or actively rebuilding soil communities following a tillage event), (2) eliminating periods of bare soil, (3) fostering plant diversity on the farm, and (4) integrating livestock and cropping operations on the land.

The loss of nature from our landscape threatens future food production; biodiversity within soil is particularly important. Healthy soil is alive with thousands of species, including earthworms, spiders, insects, fungi and bacteria. This abundant and diverse community is responsible for many natural processes that ultimately support growth and decomposition within ecosystems. Intensive farming practices, including tilling, disrupt the soil and can have a negative impact on soil biodiversity and so natural processes.

Regenerative agriculture aims to improve soil health using techniques like no-till, and growing cover crops to prevent soil erosion and minimising soil disturbance. Healthier soil contains a whole ecosystem of micro-organisms that is better able to retain water, nutrients, and carbon. Regenerative agriculture is a way of moving from an extractive, reductive, and destructive form of agriculture towards a nutrient equilibrium; balancing multiple symbiotic life forms to create rather than destroy ecosystems.

The agricultural land in Kingston is primarily used for livestock, which is associated with higher carbon storage on soils overlaying chalk. While the livestock produce greenhouse gases, grazing is important for the conservation of biodiversity on calcareous grassland, lowland meadows, and flood plain marsh, so producing meat and biodiversity conservation goals are aligned.

Rewilding



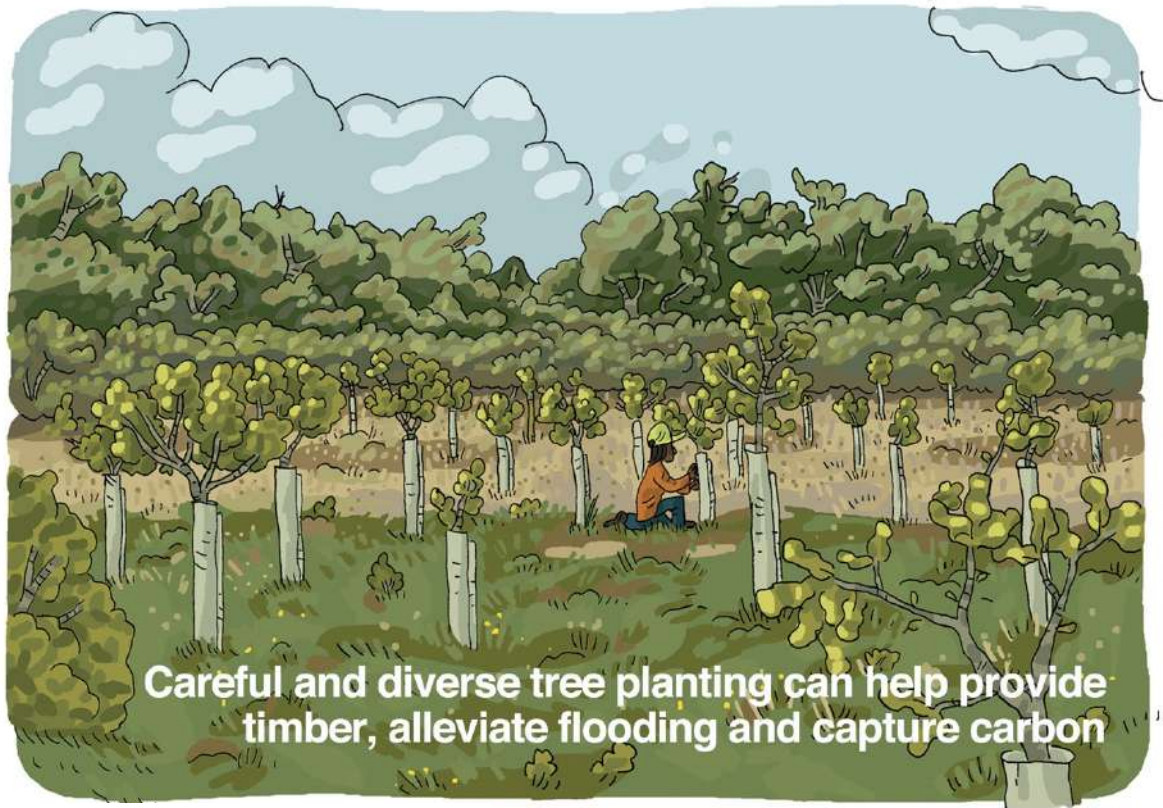
Rewilding is a nature recovery strategy that prioritises the restoration of a diverse, resilient, and self-sustaining ecosystem without aiming to support specific species or habitats. It is an approach that focuses on the restoration of ecological processes (e.g. pollination and grazing), allowing nature to take care of itself, reducing the need for human management of nature. It differs from targeted restoration by focusing on how the ecosystem works (i.e. the interactions between species) rather than targeting the recovery of specific species or communities. Rewilding can lead to a greater diversity of species being supported, and as its ultimate goal is a self-sustaining ecosystem, this brings more benefits to people.

Rewilding can be done simply by reducing the control people exert over nature in a specific place, e.g. simply stop mowing, planting, fertilising, and ploughing a site, this is known as Passive Rewilding. Alternatively, a more active approach can be taken where key actions are taken to kick-start the recovery of nature such as reintroducing key species like large herbivores, reducing soil fertility, or planting missing plants to return a seed source.

Rewilding is best suited to large areas, 100s of km² ideally, as this allows more complete ecosystems to be restored. However, projects such as [Knepp Wildlands](#) offers an example of a wilder approach to nature restoration that can be applied at the scale of ~200 ha and above, so still a large area in practical terms. And passive rewilding can be applied at any scale, for e.g. allowing scrub to develop in a garden or park which provides important shelter and habitat for many species, particularly song birds.

Rewilding has the potential to benefit from reduced costs of human management, meaning where nature bounces back by itself, bigger net benefits are possible, but it also comes with greater uncertainty in what might be restored.

Sustainable afforestation



Careful and diverse tree planting can help provide timber, alleviate flooding and capture carbon

Sustainable afforestation is the creation of woodland that benefits people and nature in the long term. In appropriate places, planting diverse communities of native tree species (or simply allowing trees to grow where they plant themselves), that are adapted to the current and future environment, can provide important habitat for wildlife and a wide variety of benefits to people, from timber to carbon sequestration and storage. Like regenerative agriculture, sustainable forestry seeks to balance the diverse needs of people and nature.

Growing native tree species, monitoring disease and pests, thinning smaller trees to allow light to reach the woodland floor, leaving dead wood and allowing trees to grow for longer before felling are all processes of sustainable forestry which provide services and goods to society as well as healthy habitat for woodland species. Some of the profits from timber and wood fuel sales can also be put towards the preservation of ancient woodlands and restoration of native woodland.

It is important to note that tree planting is not always a benefit to biodiversity and can cause the loss of important habitat like the calcareous grassland in Kingston.



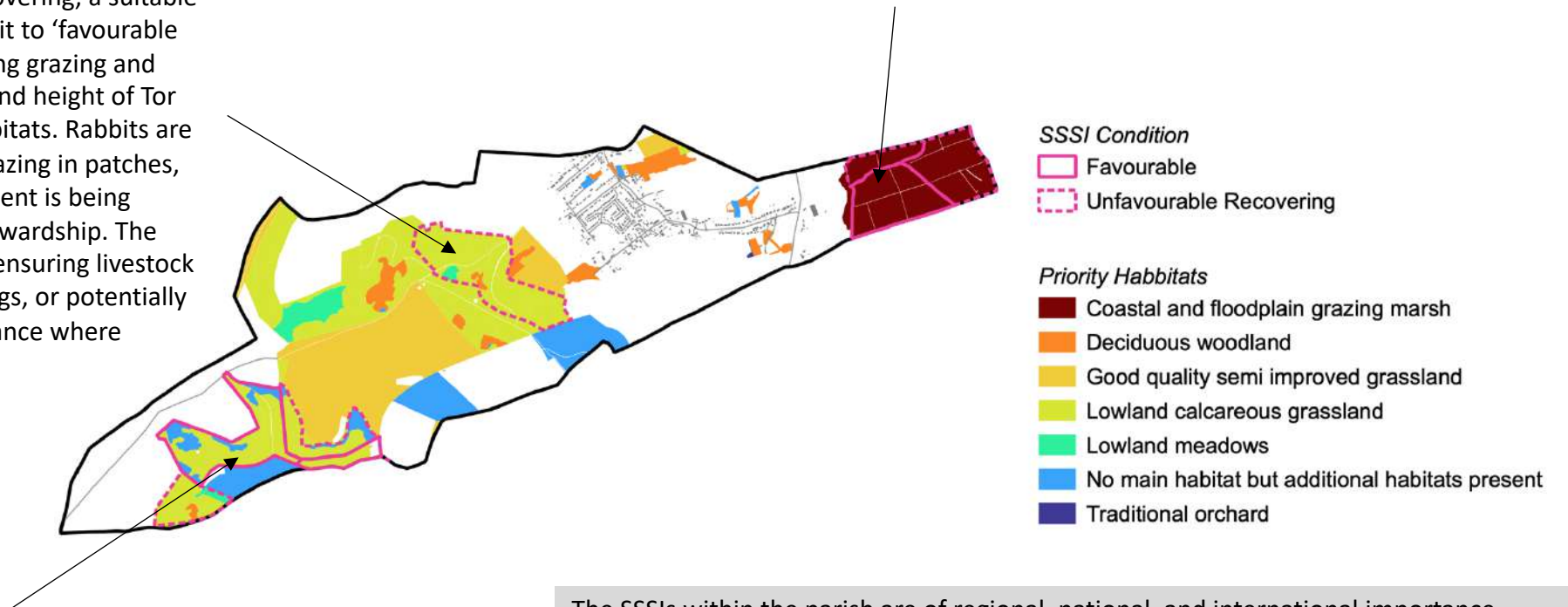
Nature conservation and recovery priorities for Kingston near Lewes

- Conservation and restoration in protected areas
- Conservation and restoration in expansion zones
- Regenerative agriculture
- Nature recovery in Kingston near Lewes village
 - Proposal for St Pancras Green
 - People & Nature Recreation Zones
 - Wilder boundaries, verges and gardens
 - Principles for nature recovery for the village

Conservation and restoration in protected areas

Kingston Escarpment & Iford Hill SSSI: This part of the SSSI is considered to be in 'unfavourable but recovering condition'. The other half of the SSSI, found to the South along the escarpment outside of Kingston parish, is in 'favourable condition' offering an indication of the target state. As the site is recovering, a suitable management plan is already in place to return it to 'favourable condition'. This management includes increasing grazing and browsing pressure, to reduce the dominance and height of Tor grass, and help prevent expansion of scrub habitats. Rabbits are also thought to be supporting more intense grazing in patches, helping to reduce sward height. This management is being supported by funding through Higher Level Stewardship. The local community can support this recovery by ensuring livestock aren't disturbed or distressed by walkers or dogs, or potentially supporting measured and planned scrub clearance where necessary.

Lewes Brooks SSSI: Most of the SSSI was reportedly in 'favourable condition' at the last inspection in 2013, having recovered from being in 'unfavourable condition' in 2006. There is little information regarding the specific requirements of the site, but a stewardship management plan is reportedly in place to return the site to 'favourable condition'.



Castle Hill SSSI/SAC: The majority of Castle Hill SSSI that is within the parish is already in 'favourable condition', and so meeting its conservation targets in these areas. Some peripheral areas are in 'unfavourable but recovering condition'. These regions are being grazed by cattle and there is a plan to clear some of the scrub that is currently expanding in this area.

The SSSIs within the parish are of regional, national, and international importance, particularly for the calcareous grassland and associated species. Most of these habitats are in 'favourable condition', and those that aren't have been assessed to be recovering. Supporting this recovery and the conservation efforts in these places is a top priority for nature conservation and recovery in the parish.

Conservation and restoration in expansion zones

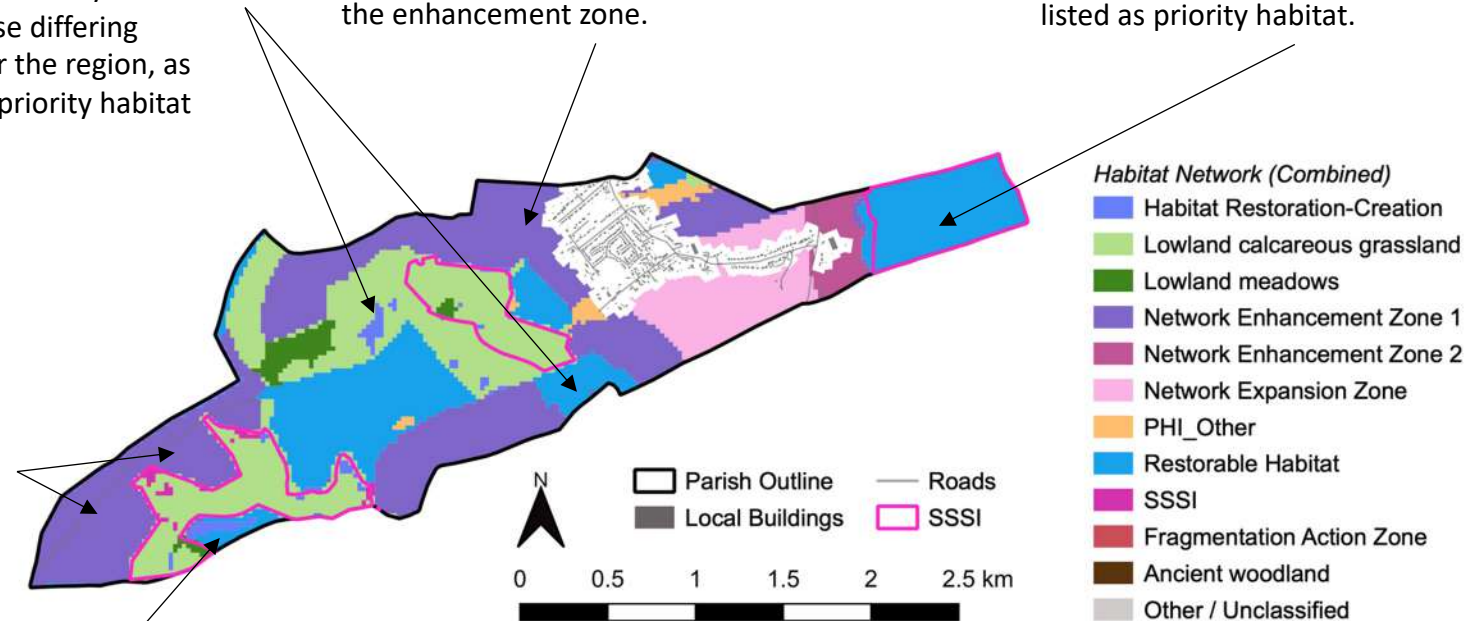
Lowland Meadow restoration: Within the calcareous grassland and improved grassland are pockets of acid grassland, associated with area of slightly acidic loamy soils. This will support a different community of species and help increase overall biodiversity in the region. Targeted restoration should account for these differing conditions and target an appropriate community for the region, as available from the other areas of lowland meadow priority habitat (dark green in this map).

Network Enhancement Zone 1: “Land connecting existing patches of primary and associated habitats which is likely to be suitable for creation of the primary habitat.” This land is currently likely used for crop and livestock production. It’s proximity to both Castle Hill and Kingston Escarpment & Iford Hill SSSIs would make it a valuable area to restore, connecting these two important sites. It would be considered to have high potential for recovery to calcareous grassland if the soil depth is less than 10cm or phosphorus levels are below 16mg/l and the sward is not dominated by species such as creeping buttercup or white clover.

Restorable Lowland Calcareous Grassland Habitat: South of Castle Hill is a shallow sloping arable field, which is part of a larger field separating sections of the SSSI. If it was restored to calcareous grassland, it would reduce the edge effects on the SSSI and diversify the habitat overall.

Kingston Hill Fields: This targeted ecological restoration project is already demonstrating the potential for calcareous grassland recovery in the enhancement zone.

Lewes Brook SSSI: This region is designated as ‘recoverable’, however, it is now classified as in ‘favourable or recovering condition’ and should be listed as priority habitat.

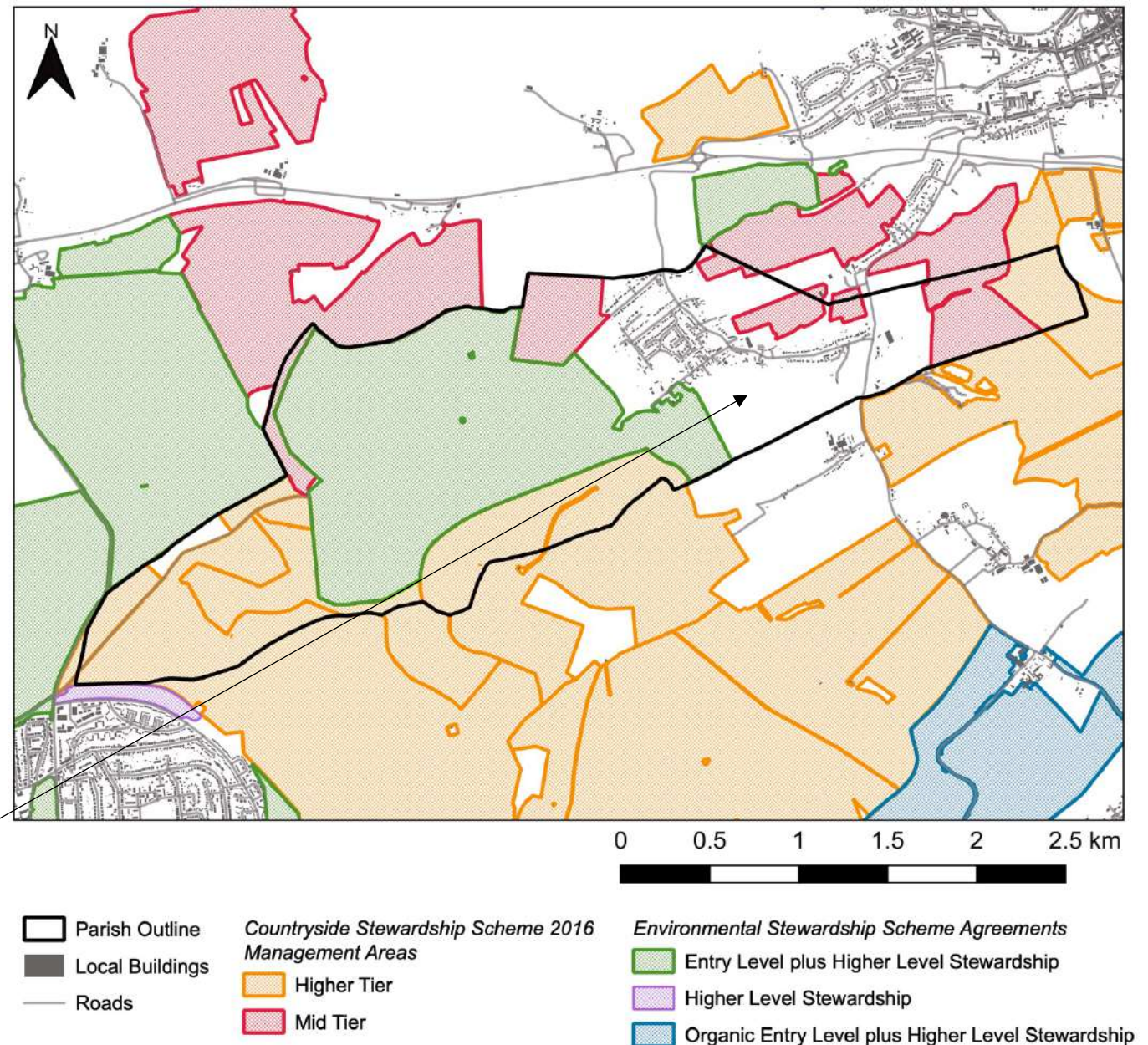


Kingston near Lewes has considerable potential to expand the coverage of nationally important calcareous grassland. However, it should be noted that nature recovery is already under way at the Kingston Hill Fields restoration project and through farmland in Stewardship schemes. Balancing the value of nature recovery against food production, as well as ensuring the land management selected is financially viable is important. If it is decided more can be restored, a collaboration between landowners across multiple parishes could allow for an application to [the Landscape Recovery scheme](#), Tier 3 in ELMs, that aims to support long-term and large-scale (500-5000ha) land use change and restore wilder landscapes with the potential to considerably benefit threatened biodiversity.

Regenerative agriculture

Countryside and Environmental Stewardship Schemes support nature conservation and recovery, typically on farmed land. In this sense, it is funding that supports what can be called nature friendly farming or regenerative agriculture. The majority of the land in the parish either is or has been under some form of Stewardship scheme. Assuming the schemes are being implemented well, this is an excellent indication that nature conservation and recovery is already under way over most of the parish. The Countryside Stewardship scheme is going through transition as it becomes part of the new overarching funding scheme called the Environmental Land Management Scheme (ELMs). The hope is that by incorporating Countryside Stewardship into ELMs schemes can be efficiently continued or improved. More information is available [here](#).

This region is classified as a priority habitat expansion zone and there is the potential to restore this land to calcareous grassland. However, it is also the region of the parish with the highest grade agricultural land (Grade 2) and so most suited to agricultural production. As a result, this area might be best suited to seeking funding to support sustainable farming through the [Sustainable Farming Incentive](#) (which is Tier 1 of ELMs) which supports farmers to go beyond regulatory requirements to improve the environment.



PROPOSAL FOR St Pancras Green

Sports pitch: The whole area will largely remain unchanged and be used as it is now, for sports and dog walking throughout the year.



St Pancras Green is the largest public green space in the village (1.5ha), but also the most homogenous, with mostly mown lawn. There is the potential to diversify the use to introduce more nature to aid more human-nature connection in the spring and summer while still maintaining its recreational uses. Here we propose a zoning approach as illustrated by the map and associated images.



Wild boundary: In autumn the whole green will be cut, but an uncut wild boundary will remain along the tree line, which will improve soil drainage and provide woodland edge habitats.



People & nature zone: In spring and summer, the sports pitch zone will be maintained, and paths will be mowed in the 'people and nature recreation zone' to encourage access and provide areas for recreation, otherwise the grass will be left to grow.



Wilder gardens: wildlife friendly gardens can support greater connectivity between the Green and throughout the village, helping animals like hedgehogs and bees.



ST PANCRAS GREEN

People & Nature Recreation Zone

Nature recovery in the People & Nature Recreation Zone is focused on improving the connection between people and nature. This is a multiple use space that provides mown paths and picnic areas amongst planted wild-flower meadow and/or mini-rewilded areas. Allowing some areas to grow creates space and resources for nature to thrive. Wild plants can flower, and they provide pollen and nectar for pollinating insects, which in turn support insectivores and associated communities.



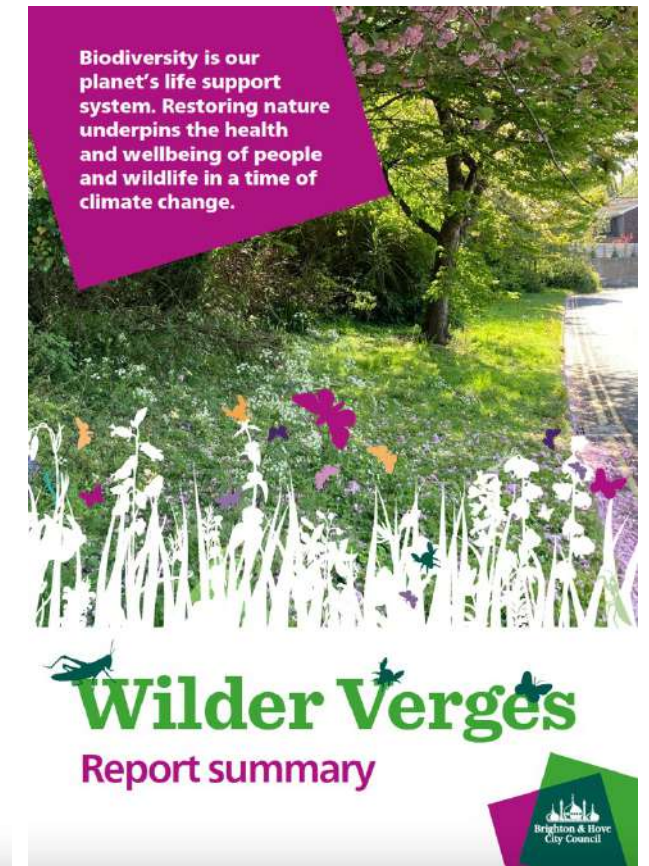
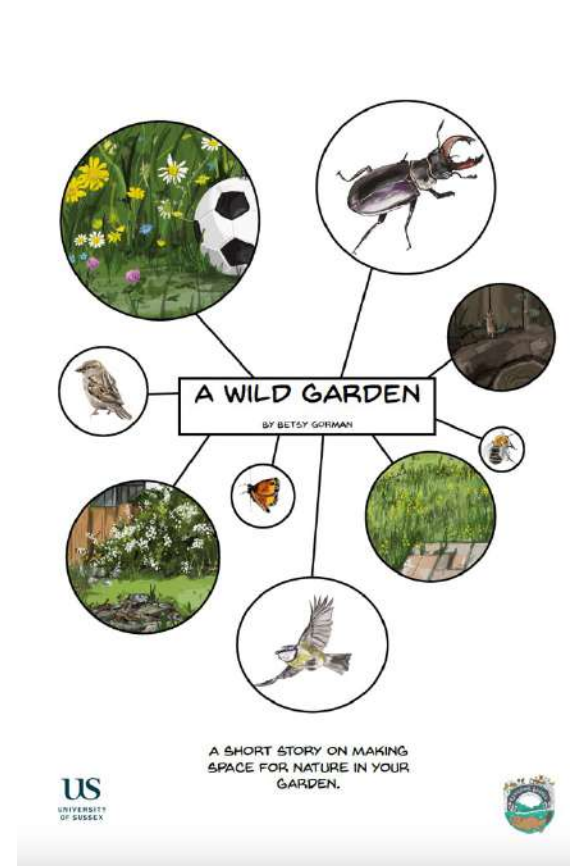
Simply mowing paths and a picnic patch network during spring and summer and letting the rest grow before cutting everything back in late summer, is the simplest and cheapest approach. Plants already in the sward or seed bank will grow and flower, however, common lawn grasses will dominate (grass pollen is also an important resource for many insects, which also visit and pollinate flowers).

Alternatively, wildflower meadows can be created by removing turf and seeding locally sourced seeds. The turf removal removes dominant species and reduces the fertility of the soil allowing a greater variety of plants to thrive, creating a more diverse bloom and so support a greater variety of species up the food chain. This approach is more expensive but increases the chance of creating a more diverse and attractive meadow. Both approaches have already been applied to patches in the Village Green, and there is advice on how to create wildflower meadows from the [RSPB](#), [RHS](#), [Natural England](#), the [Conservation Handbook](#), and the [Wildlife Trusts](#). As the whole area is cut back in the late summer, utilization for sports and dog walking over autumn and winter will remain largely unchanged.

Wilder boundaries, verges and gardens

Increasing vegetation structure, i.e. having vegetation with different heights and densities such as areas of short and long grass, as well as patches of shrubs and trees, typically supports a richer diversity of species overall. Areas of native shrubs are often considered untidy and undesirable and cut back, reducing the diversity of habitats. But this makes the habitat less suitable for species that need the shelter and protection of taller and denser vegetation, such as hedgehogs and songbirds.

There are some valuable dense patches of scrub habitat along some of the edges of the Village Green. The 'Wilder boundary zone' proposed for St Pancras Green could be a region that is passively rewilded, allowing shrubs to establish. This low intervention approach could also be applied to edges of road verges and pathways to improve connectivity of this habitat within the village and beyond – success with this approach is evidenced in Brighton & Hove through their [Wilder Verges](#) project. Wilder gardens are another opportunity to increase vegetation structure, habitat diversity and connectivity. Rewilding Sussex offers this guide to creating a [wilder garden](#).



Principles of nature recovery for the village

Along with explicit nature recovery projects, the Parish Council could encourage villagers to adhere to biodiversity positive principles. The following are recommended and are adapted from the University of Sussex's Good Practice Biodiversity Principles:

- 1. Plan for net gain:** Ensure that nature is recovering in the Parish by minimizing negative impacts and offsetting any negative impacts with nature recovery elsewhere.
- 2. Aim to be a pesticide, peat and synthetic fertilizer free village:** Avoid these products to support biodiversity in the Village and beyond.
- 3. Use water conscious planting practices:** Plant select species that do not have high water requirements.
- 4. Leave deadwood:** Where safe to do so, leave standing and fallen deadwood, a vital resource to support biodiversity.
- 5. Promote wildlife highways:** Encourage the use of hedges and create holes and gaps in fences to allow wildlife to move through the Village and beyond.
- 6. Promote joined-up nature recovery projects:** For biodiversity bigger is better, so work together to create bigger wildlife gardens and spaces.



Nature recovery under a changing climate



Mitigating climate change

The Intergovernmental Panel on Climate Change (IPCC) has just published its [Sixth Assessment Report](#). It highlights that the climate has already warmed by 1.1°C and this is driving sea level rise, more extreme weather events, ecological changes resulting in the loss of biodiversity and more. The negative effects of climate change on people are already more severe than expected and additional warming is already inevitable and will exacerbate these problems. The report calls for 'deep, rapid and sustained global greenhouse gas emissions reduction' to minimize further warming, and clearly states that these changes must occur this decade to limit warming to 1.5°C and even to limit it to 2°C.

Ultimately, we must transition to net zero greenhouse gas (GHG) emissions rapidly to limit climate change. The only way this can be achieved is by dramatically reducing emissions. This is primarily the responsibility of societies living carbon intensive lifestyles (now and supported by emissions in the past) such as is typical in the UK. While nature recovery is no substitute for dramatically reducing GHG emissions, it does have the potential to sequester some carbon that may help to offset the GHG that cannot be avoided.

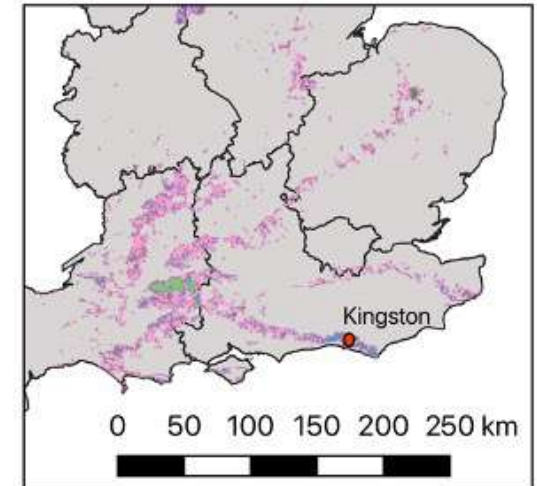
Nature stores carbon in soil, plants and animals. The majority of carbon is stored in soil, followed by the vegetation, and lastly animals. Intensive arable farming can reduce the carbon stored in soils, including the shallow soils sitting on chalk found in Kingston near Lewes. Using regenerative farming practices, in particular including stocking livestock for a part of the year, can increase soil carbon on arable land. Converting the land use from arable to pasture, scrubland, and woodland would also increase the amount of carbon stored in the soil. The establishment of woodland is likely to increase carbon sequestered and stored the most as it increases soil carbon but also maximises the amount of carbon stored in the vegetation as well.

The area of arable land is limited in the parish and unlikely to provide considerable carbon mitigation potential. Some carbon would likely be sequestered, and some emissions avoided, if more areas of grassland were allowed to become scrubland and woodland. However, if too extreme this would threaten the important biodiversity associated with the open calcareous grassland currently present.

Adapting to climate change

The climate is already changing, further change is inevitable, and we need to adapt to these changes. In the UK, the climate is getting warmer in both the winter and summer, with fewer frost days. The winters are expected to be wetter, with more extreme rainfall events, while the summers are likely to be drier. Under medium emissions scenarios, the summers in the south of England might be on average 4°C warmer. These changes in climate will influence species range, habitat preference, phenology and timing of reproduction, length of the growing season, timing of migration, and the frequency of pest and disease outbreaks.

While these changes will cause considerable ecological disruption, there are opportunities to help adaptation. Species will be moving, and for conservation habitats in the south this means new species to Britain, that can cross the channel, are likely to colonise. While species currently only found in habitats along the south coast, such as the Silver-spotted Skipper, will try to move north. Ensuring species have corridors of habitat to be able to move as the climate changes will be essential for their conservation. Illustrated in the inlaid map (from page 24), the calcareous grassland in Kingston is an important part of a wider network of primary and restorable habitat that stretches north-west from Kingston and then further north. Another important aspect of adapting to climate change is to ensure a variety of microhabitats, from open bare soil to well shaded. Management to support this diversity of conditions is important. This means cover in the form of scrub and trees is important, and the low tree cover and woodlands in the parish should be protected.



Lowland calcareous grassland potential network that could help species move north with climate change.

Trees and climate change

Nature can also help people adapt to climate change. Trees provide shade in streets and parks that can reduce local temperatures. It is notable that the more southerly half of Kingston village has fewer mature trees and lower vegetation coverage (over 2.5m; see page 13).

Trees are also only found around the edges of St Pancras and the Village Greens, limiting the amount of shade available. Planting trees, that are well adapted to forecasted climate conditions (tree suitability for the South-east under climate change listed [here](#)), within the Greens and planting more trees in the southern half of the village could provide valuable shade in the future.

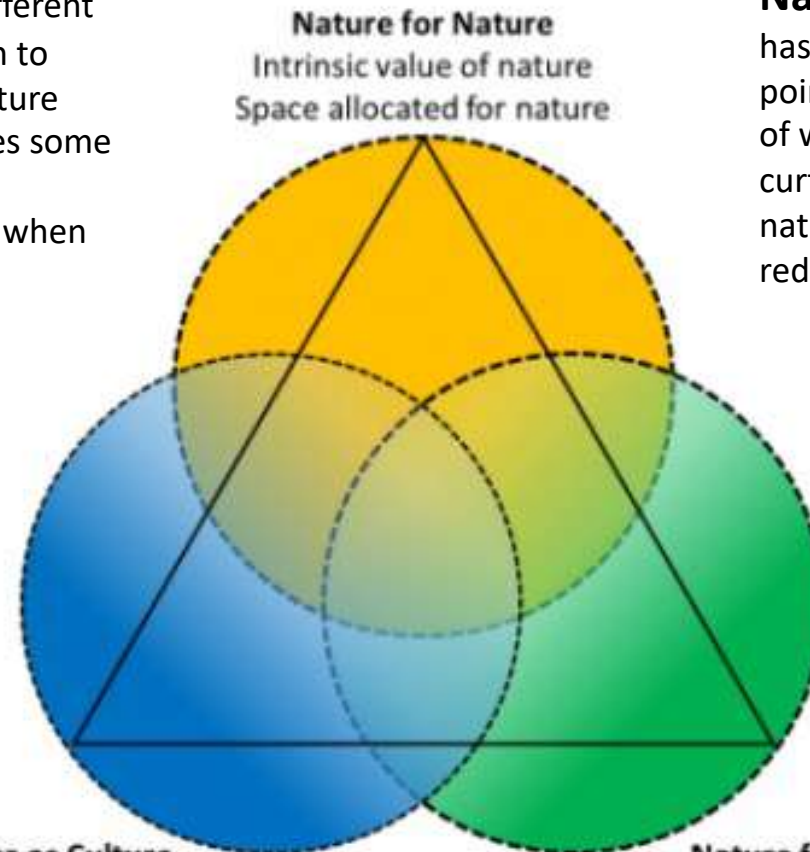


The Nature Futures Framework

Introduction: People value nature in different ways, and so will differ in the way they wish to interact, manage or recover nature. The nature futures framework presented here describes some of those differences. Understanding these differences will help to reach compromises when planning nature recovery.

Nature as Culture: While in many respects people have separated and distanced themselves from nature, in other respects humans are just another species amongst many. We are part of nature. In this respect, many feel connected to nature, want to interact with nature, and want to feel that they are living in harmony with nature. This is often enhanced with diverse nature being close to everyday lives.

Nature as Culture
Living in harmony
People one with nature



Nature for Nature: Many people believe that nature has its own intrinsic value and right to exist. Under this point of view, nature conservation should occur regardless of whether it benefits people or not. It would also support curtailing human activity and benefits for the benefit of nature. This could include leaving areas undisturbed or reducing disturbance such as keeping dogs on a lead.

Nature for Society: People need nature. Nature provisions us with the resources we need to survive and regulates the environment around us. We are completely dependent on these processes to feed us, provide clean water, prevent extreme flooding, and maintain a stable climate. Those focusing on Nature for the benefit of Society can also be less willing to accept the costs associated with nature.

Funding nature recovery

There are a number of opportunities to fund nature recovery initiatives in the UK, examples include:

1. [Environmental Land Management \(ELM\) Scheme](#): The ELMs scheme is being brought in to replace EU's Common Agricultural Policy (CAP). ELMs aims to support land managers to provide the environmental goods and services people need alongside producing food, and help grow and maintain a resilient agricultural sector. There are three tiers of payments 1) The Sustainable Farming Incentive to improve sustainable farming practices, 2) Countryside Stewardship to restore and enhance specific habitats, and 3) Landscape Recovery to promote landscape scale nature recovery with substantial benefits for biodiversity.
2. [Biodiversity Net Gain](#) (BNG): Biodiversity Net Gain policy aims to allow for development and nature recovery. The policy requires developers, particularly in the housing sector, to leave nature in a better state than it was at the start of the development. This can be by improving habitat quality on site or by investing in biodiversity offsets off site.
3. [Green Investment](#): There is increasing effort to mobilise private finance to support nature recovery. The Green Finance Institute has recently released the Investment Readiness Toolkit to help get nature recovery projects ready for investment.
4. Charitable trusts and foundations: funding for nature conservation and restoration initiatives may include organizations such as the [National Lottery Community Fund](#), and the [Esmée Fairbairn Foundation](#).
5. Crowdfunding: platforms such as Crowdfunder and Kickstarter can be used to raise funds for nature recovery initiatives including projects such as the restoration of a local wetland, the creation of a community orchard, or the installation of bird nesting boxes.

These are just a few examples of the opportunities available to fund nature recovery initiatives in the UK. Other sources of funding may also be available depending on the specific nature of the project and the geographic location.



Summary

- Nature recovery is important for halting and reversing biodiversity decline and to combat and adapt to climate change. In the parish, nature recovery will restore, expand and connect wildlife-rich habitats, with adjacent parishes and beyond, to meet regional and nation-wide goals.
- While Kingston near Lewes is fortunate to have protected and internationally important habitats and wildlife in the parish, and already in the process of restoring natural spaces in and around the village, there is also a lot of potential for further nature recovery.
- The most impactful nature restoration action might be connecting the wildlife rich areas by focusing on the expansion zones for calcareous grassland, intermittent with scrub or hedgerow habitat, and preserving, expanding, and restoring lowland meadow.
- The most achievable action in Kingston village is allowing sections of the grassland areas to grow, and introducing more diverse habitats in the Greens, the verges, and in gardens, in conjunction with recreation and people & nature areas.
- Retaining existing woodland and planting suitable, climate adaptable trees is key to help mitigate inevitable climate change i.e. employ natural solutions to reduce carbon and provide shade.
- Finally, while some good species records exist, more rigorous species distribution mapping and monitoring across the parish will form an important baseline, to know what's present, and upon which to measure the impact of restoration action.

Mapping resources

- The [Land App](#): software aimed at land managers. Kingston near Lewes parish data layers included in this report have been added to the Land App, for exploring, developing, editing, collaborating, and project creation
- [Defra, Magic Map](#)
- Natural England, [Green Infrastructure](#)
- [Restor.eco](#): Global initiative to map nature recovery
- [Kingston Google Map Project](#) with images of the parish habitats
- [Sussex Nature Partnership \(SxNP\)](#)
- [South Downs National Park plan for nature recovery](#) across the South East
- [South Downs National Park People and Nature Network \(PANN\)](#)
- [South Downs National Park Conservation Area Character Appraisal and Management Plan](#)

