



North Kent Woods and Downs  
National Nature Reserve

Management Framework 2025-2030

# North Kent Woods and Downs



## Plan Production

Plan agreed by the North Kent Woods and Downs NNR Steering Group (confirmed in MoU). This Management Framework has been compiled following NNR meetings where the vision, priorities and collaborative ambition of partners was discussed. These meetings took place between 2023 and 2025. This information has been supplemented by a series of strategies and implementation plans developed by the partnership over the same period.

Plan Author: Mike Phillips (White Horse Ecology) – with assistance from NNR partners, authors of NNR strategies, implementation plans and taxon reports



## Our 25-year vision

By 2050, The North Kent Woods and Downs National Nature Reserve (NNR) consists of a mosaic of nationally and internationally important habitats that provide contiguous, connected spaces for nature on an expanding landscape scale. It will be at least 25 km<sup>2</sup> in area. From the chalk grasslands of the south to the acid and neutral grasslands of the north, encompassing vineyards, orchards and arable wildlife, the area is bound together by ancient woodland on the high slopes of the downs and the clays of the north, and a high-quality network of hedgerows and trees connect these habitats. It contains one of the finest collections of veteran trees anywhere in the country.

At the heart of the NNR will be a partnership of organisations working to deliver nature conservation on a landscape scale. The boundaries between sites will become blurred and even disappear in some cases as barriers to cooperation have been broken down. The partnership will have a well coordinated and well resourced, collaborative approach to their work that draws in other local landowners and begins to influence land management beyond the boundaries of the NNR. The partnership will work with farm clusters and other partnerships. It will be a high profile area known by policy makers and will be an active contributor to county and regional strategies for nature conservation, research and public engagement with nature. There will be integrated land management across the landscape that

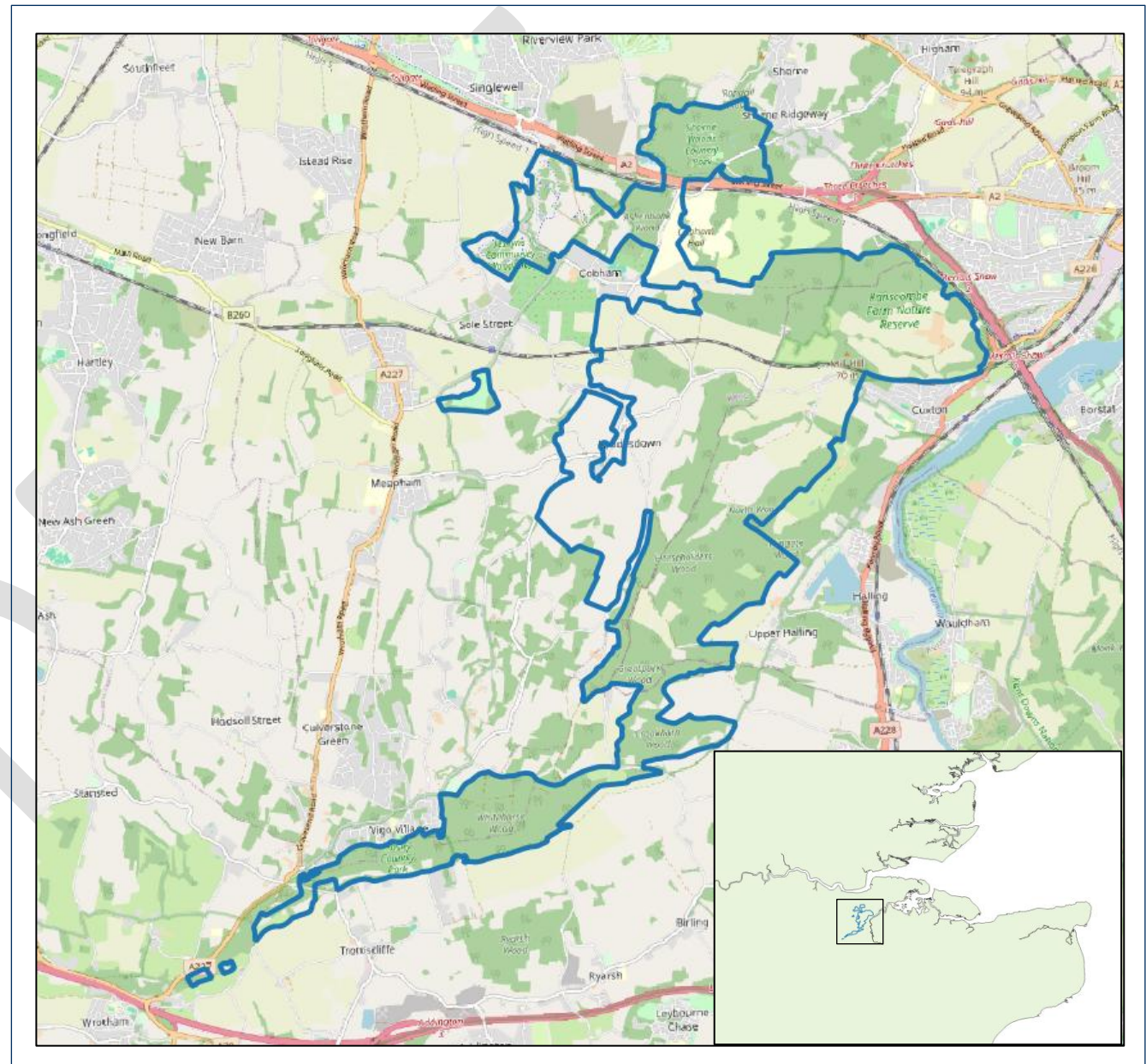


strikes a balance between food security, nature recovery, respect for heritage and recreation.

Growth and development, whilst creating pressures on the NNR, will provide opportunities to engage local and regional communities and impetus to do more. Public access is promoted and directed towards areas appropriate for the levels of access anticipated. Opportunities to promote sustainable visits will be maximised and volunteering will be well established for land management, public engagement and citizen science across the area. Engagement programmes will ensure that local people have a greater understanding of the work of the NNR including when tree felling, deer management and farming initiatives are undertaken.

A shared, comprehensive understanding of our landscape and habitats will be driven by high quality, consistent and innovative research projects. This will assist our work to enhance the area for landscape and nature and to become resilient to future challenges including climate change and plant and animal diseases. This vision is shared across the partnership, core and affiliates alike. The partnership will act jointly to pursue initiatives to enhance, expand, create and connect existing high quality habitats in line with the Lawton Principles laid out in Making Space for Nature. This National Nature Reserve is managed collectively and collaboratively, with an ambition to extend and connect new areas for landscape, nature and for people.

## North Kent Woods and Downs National Nature Reserve - location



# North Kent Woods and Downs National Nature Reserve



**NKWD**

North Kent  
Woods  
and Downs



# Contents

1	Introduction .....	7
2	Description of the NNR.....	26
2.1	What’s important about the NNR.....	26
2.2	Site features summary.....	30
2.3	People and nature .....	35
2.4	Ecosystem services .....	37
2.5	Climate change vulnerability assessment .....	39
3	Management policy: Desired outcomes, principles and shared actions.....	40
3.1	Development of the Management Framework .....	40
3.2	Nature .....	43
3.3	Science .....	51
3.4	People.....	58
4	Resourcing .....	66
5	Governance .....	68
6	List of annexes to the Management Framework .....	71

This report and the research that underpins it has been supported by funding from National Highways



# 1 Introduction

## The Scope of the plan

The North Kent Woods and Downs NNR Management Framework covers the whole NNR and is agreed by each of the managing partners. It sets the direction and desired outcomes for the NNR's core purposes of conservation, science, and people. It provides a framework for each partner's operational plan.

The Framework does not prescribe the detail of partners' management plans, nor does it provide consents or licences for works affecting designated sites or protected species – these remain the responsibility of the partner responsible for their management.

## Partnership NNR

The North Kent Woods and Downs NNR is the first recognised Partnership NNR in Kent. "Partnership NNR" is not a formal status, but a shorthand term to describe multiple land owner NNRs managed in partnership and which can realise the ambitions of the [NNR Strategy](#).

## The guiding principles of Partnership NNRs

- Application of the Lawton Principles: more, bigger, better, more joined up
- Extensive NNRs operating at a landscape scale that can catalyse and drive nature recovery

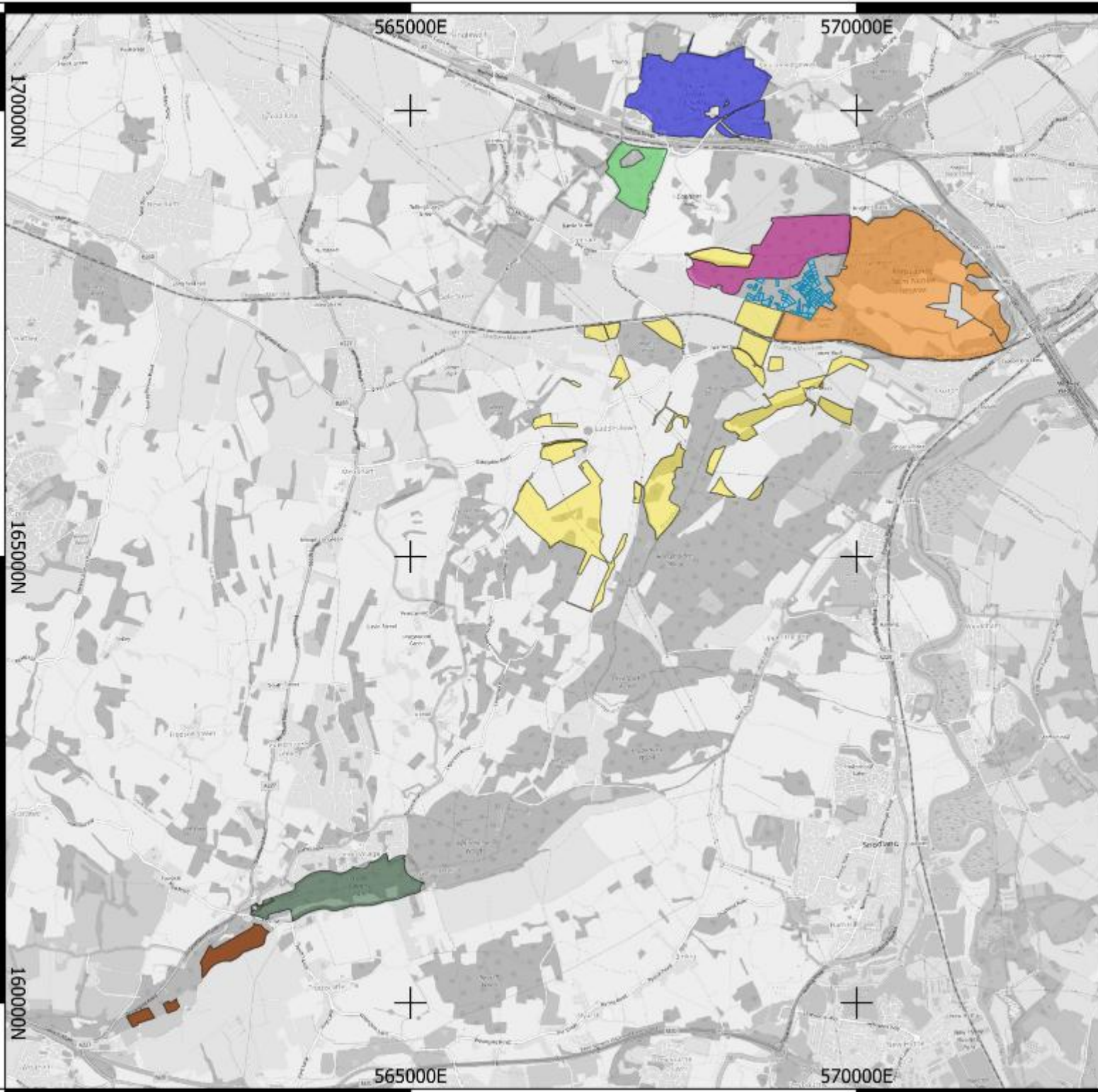
## NNR Managing Bodies & Steering Group Members

Core partners		
Kent County Council	Tim Bell	Shorne Woods and Trosley Country Parks
Vineyard Farms Ltd	Will Moreno	Silverhand Estate
National Trust	Jonathan Ireland	Cobham Wood and Wrotham Water
Plantlife	Ben Sweeney	Ranscombe Farm
West Kent Downs Countryside Trust	Andrew Baylis	The 'Leisure Plots'
Woodland Trust	Andy Goodwin	Ashenbank Wood
Co-ordinating bodies		
Kent Downs National Landscape	Nick Johannsen	
Natural England	Jim Seymour	
Affiliate partners		
Birling Estate	Guy Nevill	
Forestry England	Simon Fowler	Jeskyns Community Woodland
Gravesham Borough Council	James Young Sian Morley	West Park Camer Park
Shorne Parish Council	Pauline Clifton	Crabbles Bottom and Shorne Common Rough
Tarmac	Michael Charlton	Holborough Woodlands

- Management at scale that enables restoration of ecological processes and innovative techniques
- Bringing new land into conservation led management
- Exemplifying the NNR Strategy and the core purposes of NNRs:
- NNRs at the heart of resilient landscapes and nature recovery
- NNRs as outdoor laboratories
- NNRs connecting people and nature
- Partnership working within/beyond the NNR, with a shared vision

- Management Framework for the whole site, including whole-NNR objectives that shape partners' operational plans, and specific plans for whole-site issues/activities (e.g. people engagement, visitor management; research and monitoring; deer management)
- Coordinated resourcing and delivery to achieve more across the whole NNR





# North Kent Woods and Downs NNR

## Core partners

- Woodland Trust - Ashenbank Wood
- National Trust - Cobham Wood
- Plantlife - Ranscombe Farm
- Kent County Council - Shorne Woods Country Park
- Vineyard Farms Ltd - Silverhand Estate
- Kent County Council - Trosley Country Park
- National Trust - Wrotham Water
- West Kent Downs Countryside Trust - The 'Leisure Plots'

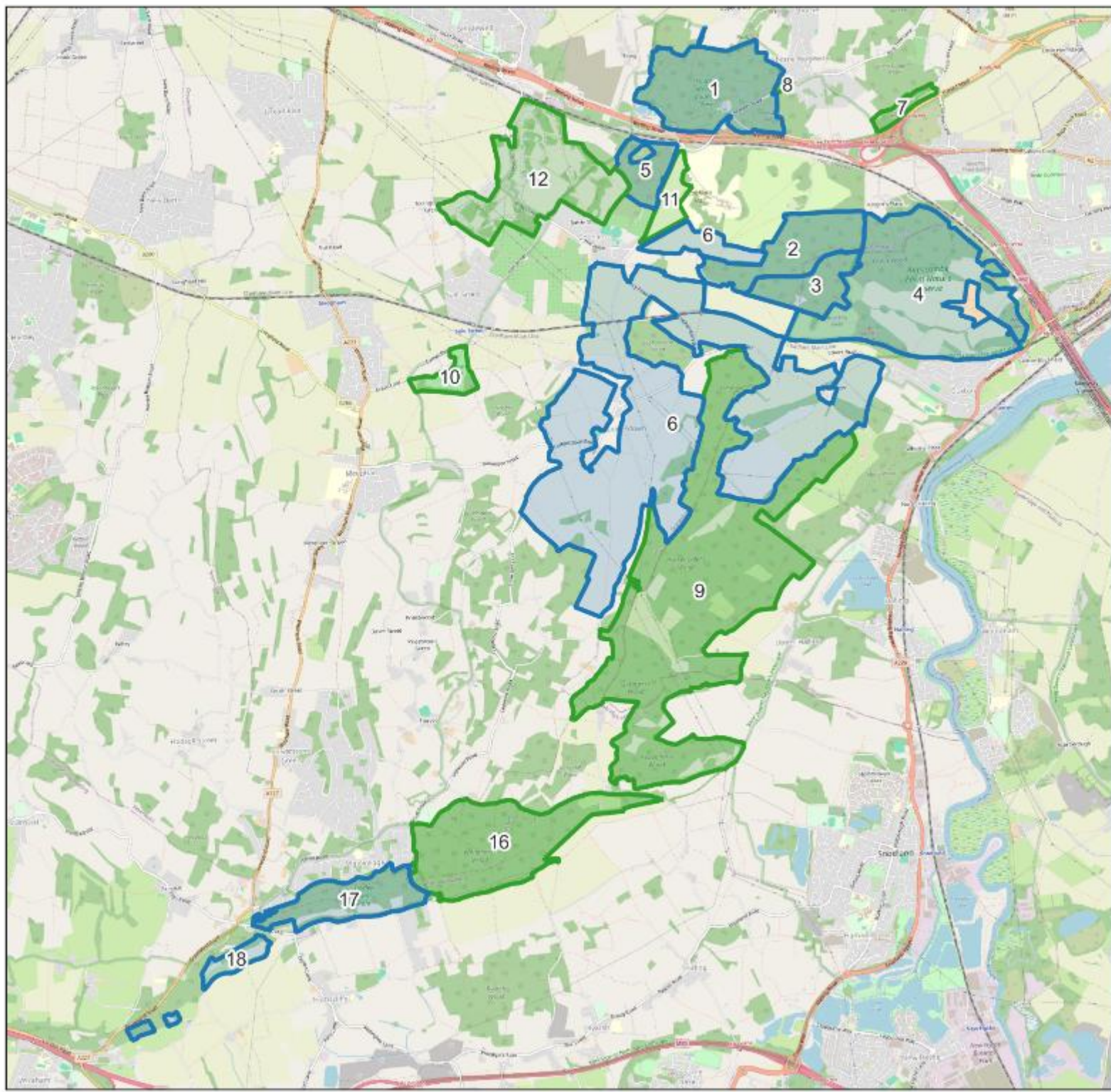


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**North Kent Woods and Downs** 

Halborough Woodlands

# North Kent Woods and Downs NNR



## NNR sites

-  Core partners
-  Affiliate partners

1. Shorne Woods Country Park
2. Cobham Woods
3. The 'Leisure Plots'
4. Ranscombe Farm
5. Ashenbank Wood
6. Silverhand Estate
7. Crabbles Bottom
8. Shorne Common Rough
9. Holborough Woodlands
10. Camer Park
11. West Park
12. Jeskyns Community Woodland
16. Birling Estate
17. Trosley Country Park
18. Wrotham Water



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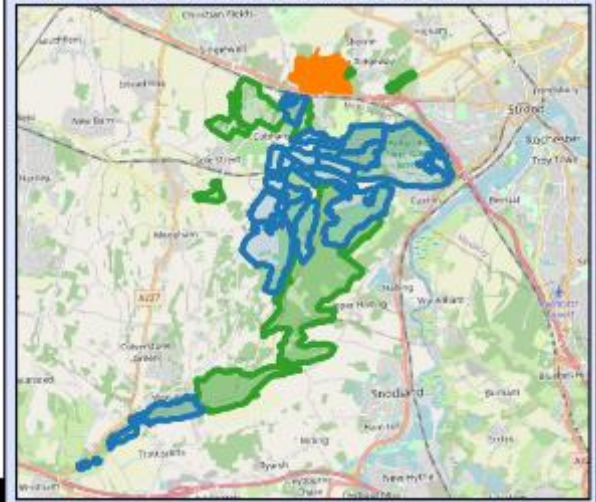
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Woods  
and Downs**





# Shorne Woods Country Park

North Kent Woods and Downs NNR



Shorne Woods shown in orange in map above

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and Downs**



0 0.25 0.5 km

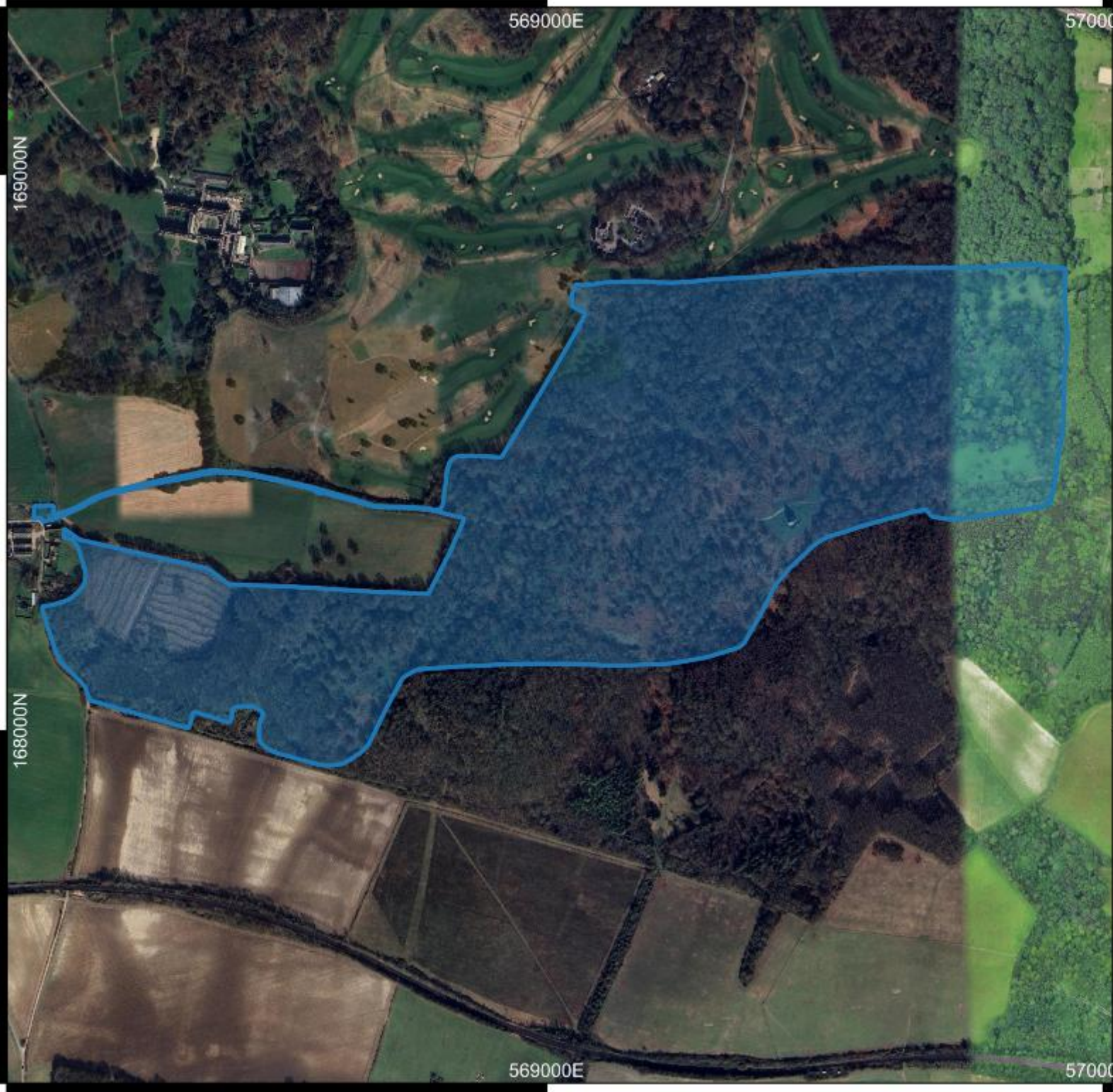


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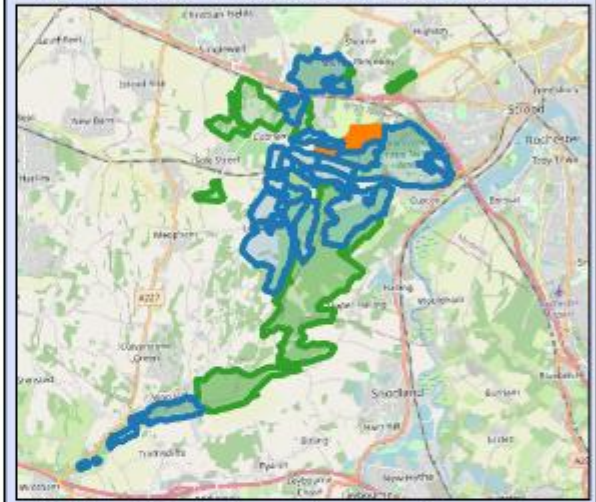


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# Cobham Woods

North Kent Woods and Downs NNR



Cobham Woods shown in orange in map above

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Woods  
and Downs**



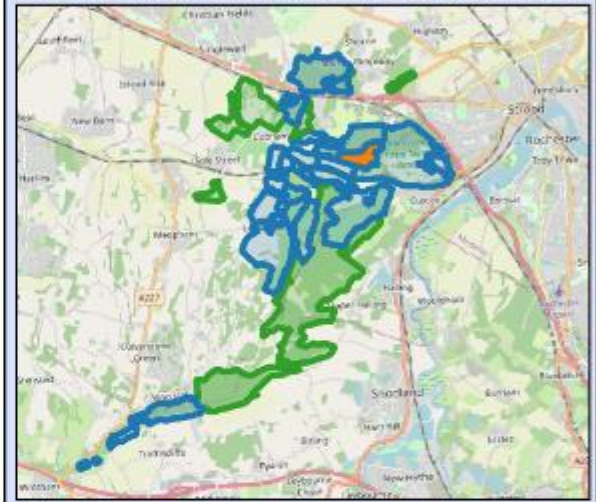
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# The 'Leisure Plots'

North Kent Woods and Downs NNR



The 'Leisure Plots' shown in orange in map above

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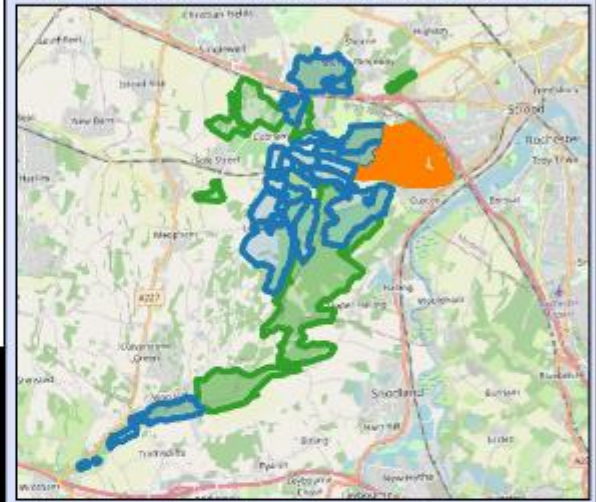
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# Ranscombe Farm

North Kent Woods and Downs NNR



Ranscombe Farm shown in orange in map above

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0 0.25 0.5 0.75 km

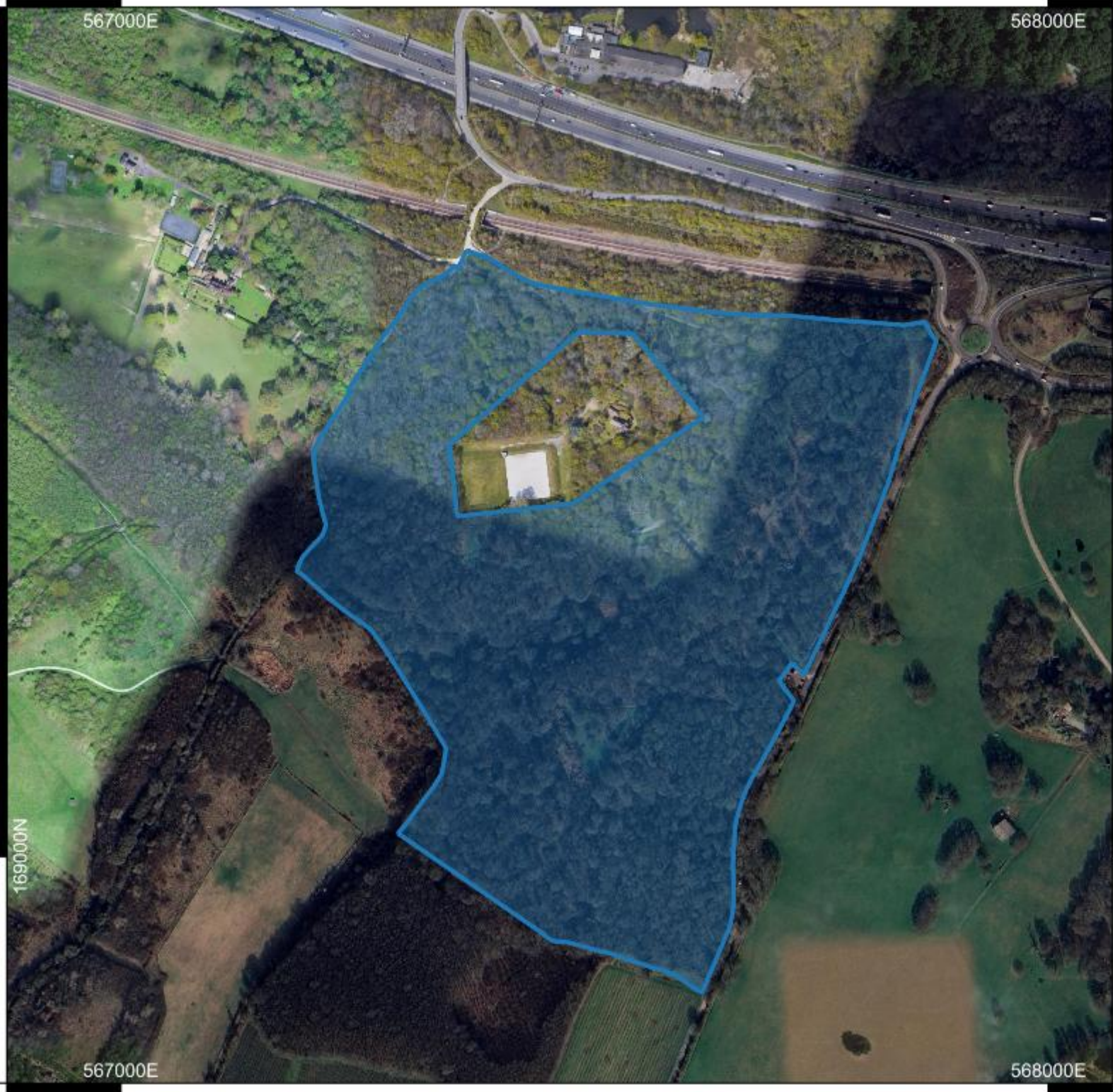


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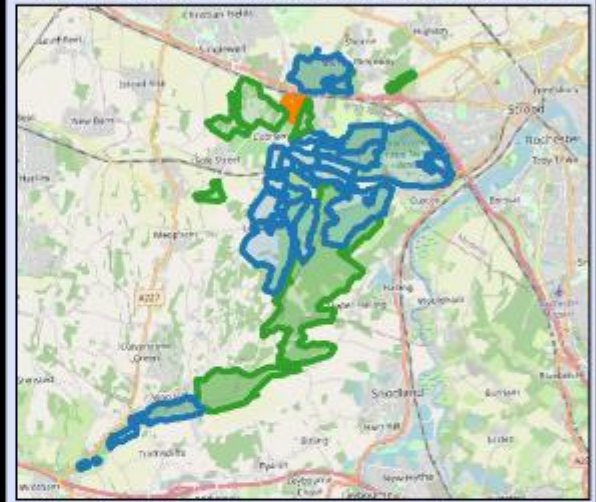


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# Ashenbank Wood

North Kent Woods and Downs NNR



Ashenbank Wood shown in orange in map above

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and Downs**



0 100 200 300 m



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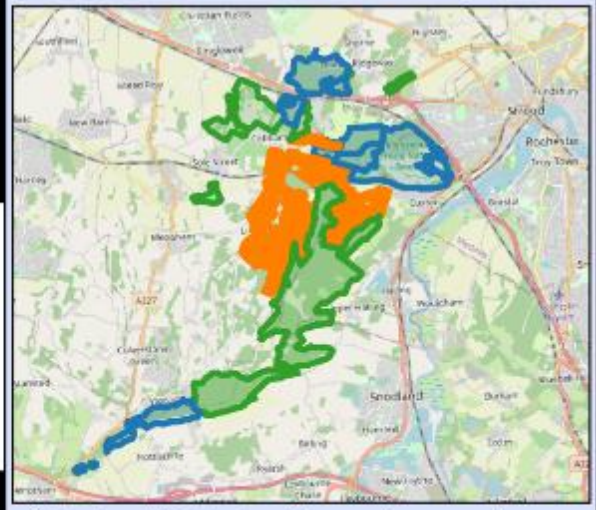
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# Silverhand Estate

-  Core NNR
-  Affiliated land

## North Kent Woods and Downs NNR



Silverhand Estate land shown in orange in map above

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and Downs**

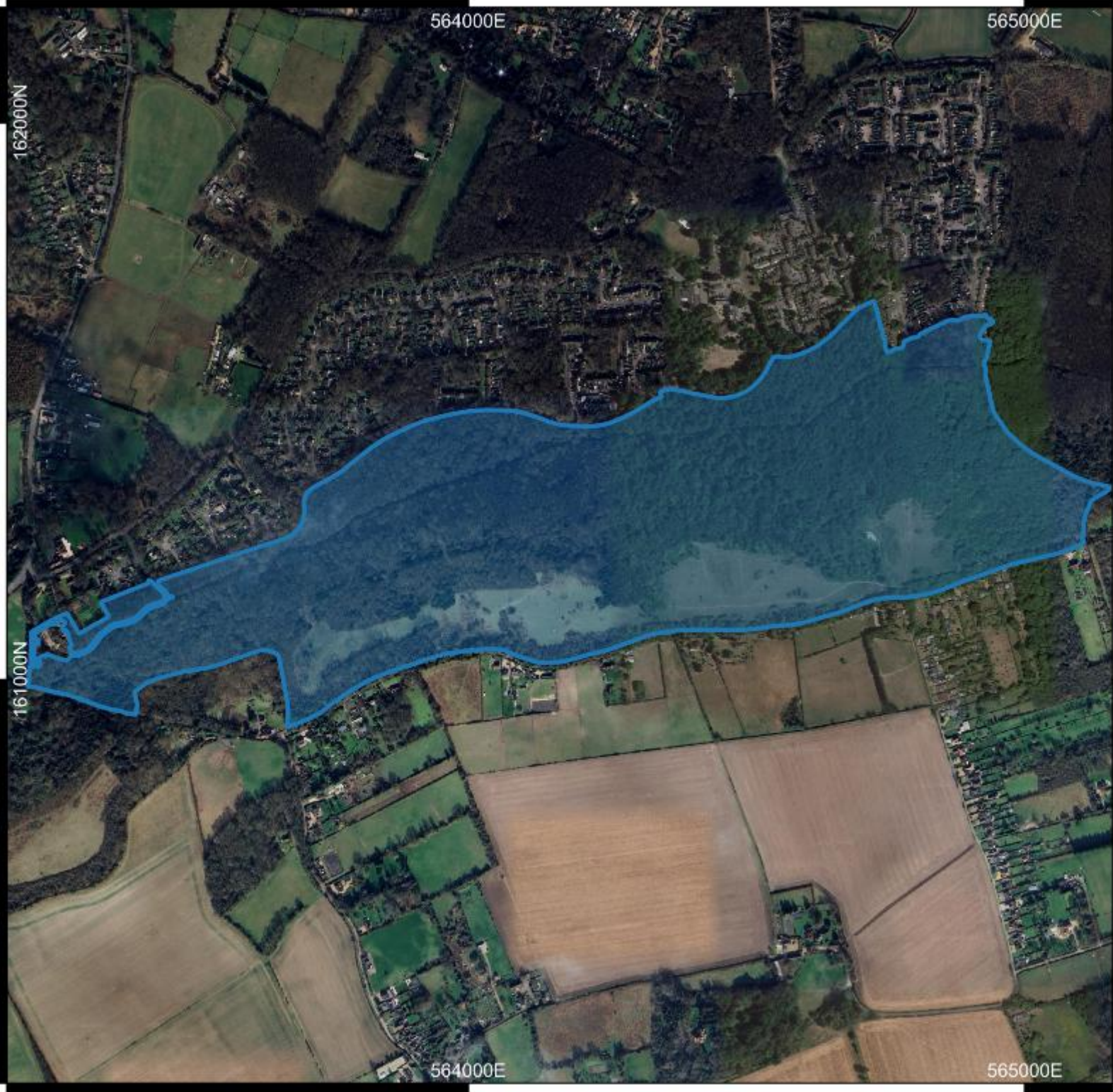


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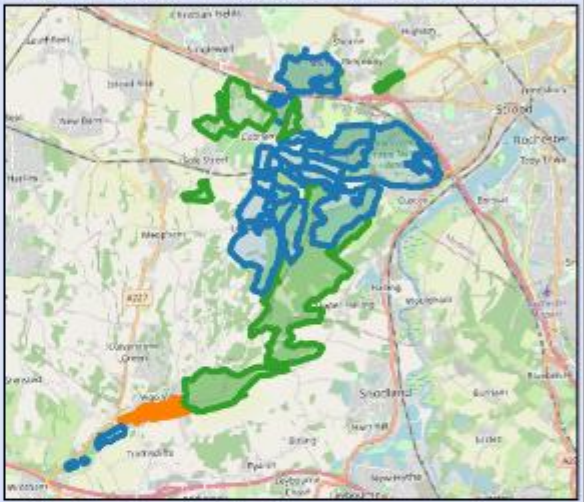


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# Trosley Country Park

North Kent Woods and Downs NNR



Trosley Country Park shown in orange in map above

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and Downs**



0 100 200 300 400 500 m



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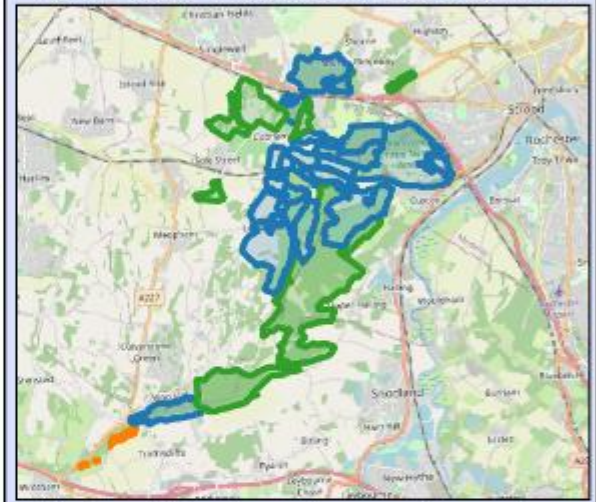


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# Wrotham Water

North Kent Woods and Downs NNR

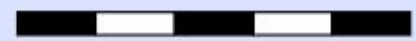


Wrotham Water shown in orange in map above

**North Kent  
Woods  
and Downs**



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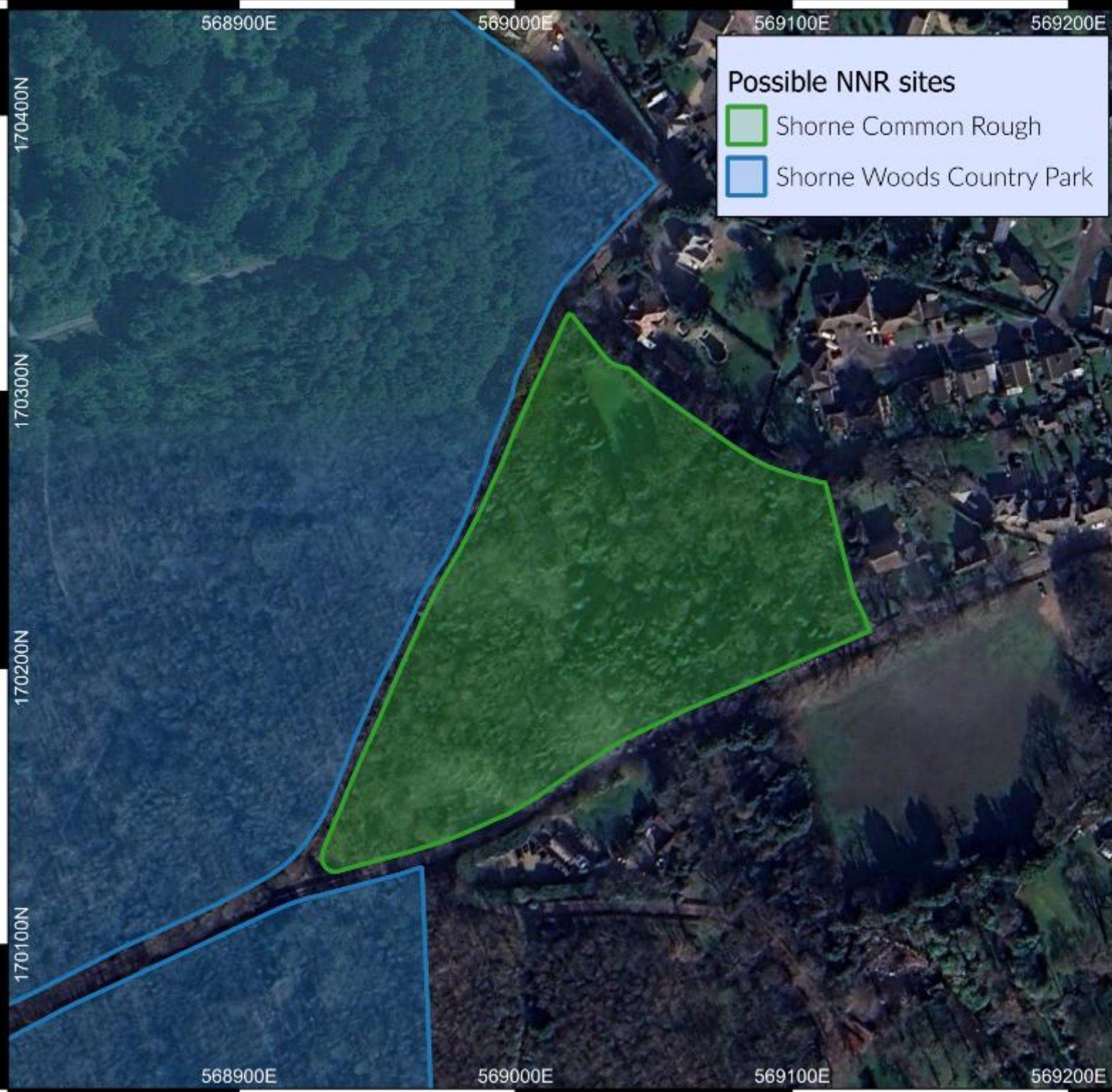


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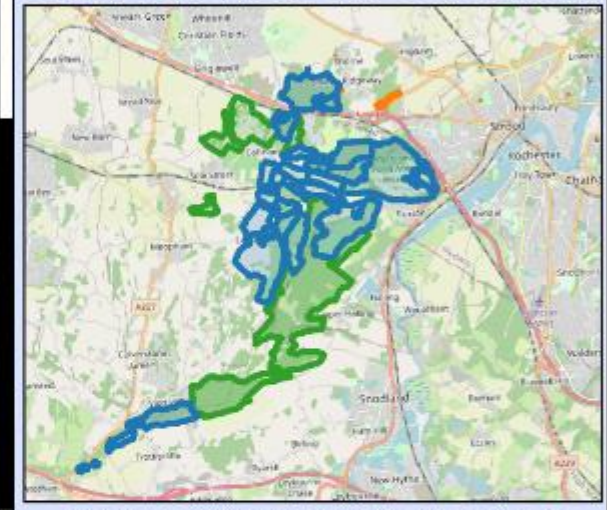


**Possible NNR sites**

- Shorne Common Rough
- Shorne Woods Country Park

# Shorne Common Rough

North Kent Woods and Downs NNR



Shorne PC holdings shown in orange in map above

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# Crabbles Bottom

North Kent Woods and Downs NNR

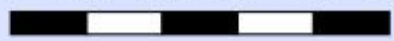


Shorne Parish Council holdings shown in orange in map above

## North Kent Woods and Downs



0 100 200 300 400 500 m



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565000E

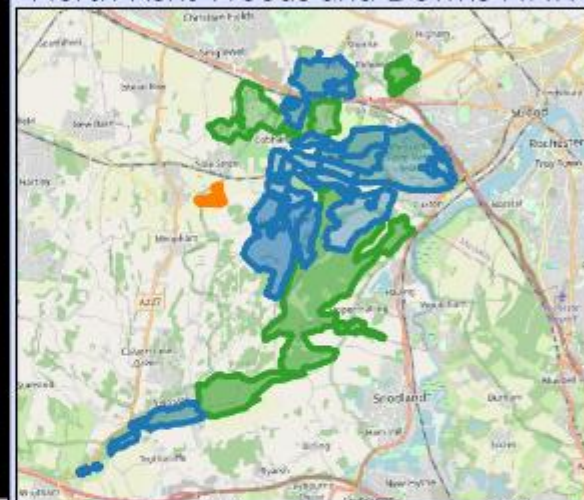
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565000E



# Camer Park

North Kent Woods and Downs NNR



Camer Park shown in orange in map above

## North Kent Woods and Downs



0 75 150 225 m



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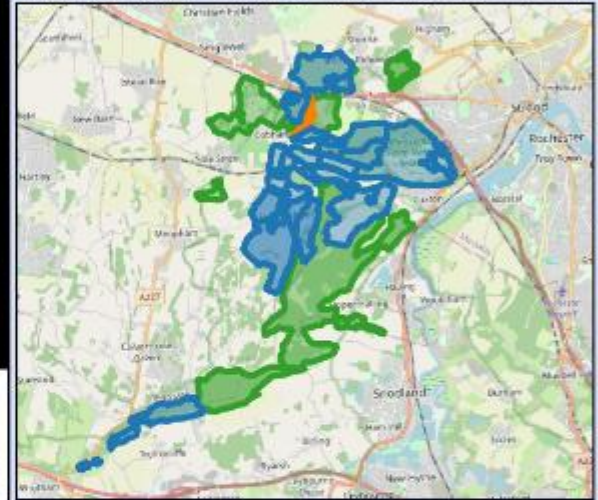


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# West Park

North Kent Woods and Downs NNR

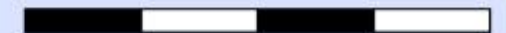


West Park shown in orange in map above

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0 100 200 300 400 m



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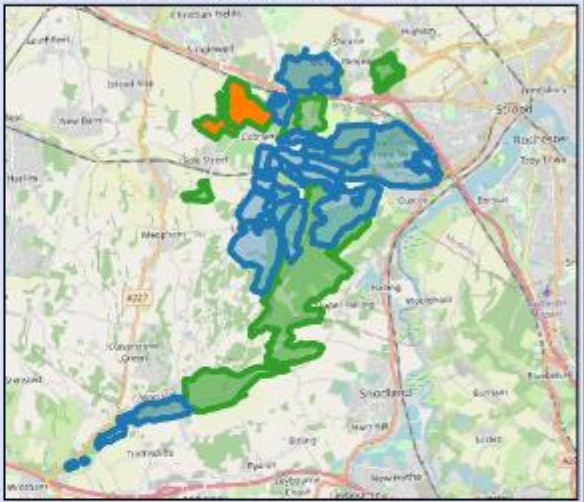


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# Jeskyns Community Woodland

North Kent Woods and Downs NNR



Jeskyns Community Woodland shown in orange in map above

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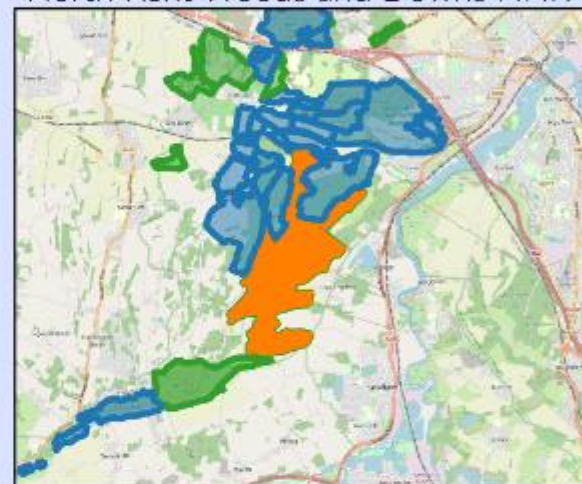
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# Holborough Woodlands

North Kent Woods and Downs NNR



Holborough Woods shown in orange in map above

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0 0.5 1 1.5 km



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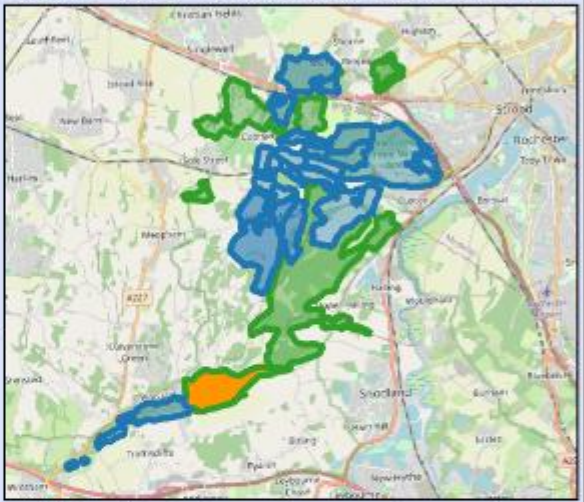


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# Birlinging Estate

## North Kent Woods and Downs NNR



Birlinging Estate shown in orange in map above

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## 2 Description of the NNR

### 2.1 What's important about the NNR

#### Overview

The NNR's primary habitats are ancient woodland, wood pasture and grassland with substantial areas dedicated to the cultivation of rare arable plants. The broad habitats of the NNR are shown in the map overleaf.

The NNR is situated in the north of Kent between the Medway Towns and Gravesend. The core area of the NNR is 780 hectares with the total area of both core and affiliate partners being 2075 hectares. This combined area is bigger than any other NNR in Kent, all the more remarkable due to the level of urban development and competition for land in this part of Kent.

The North Kent Woods and Downs NNR is a special part of the landscape. The combination of habitats, nearly all a product of the underlying chalk geology, provide some of the finest examples of their type anywhere in the country. From the chalk grassland with its unique orchid rich-flora and associated invertebrates to the magnificent stock of veteran and ancient trees that provide homes for a diverse range of saproxylic organisms, this landscape is unique. This special geology also encourages

arable weeds that are of international significance. Complementing these nationally important habitats are the ancient woodlands and pockets of acid grassland that characterise the area. This complex of woodlands and rolling downland combine to form a nature-rich landscape providing opportunities to work at scale to enhance, conserve and build upon the efforts of multiple organisations.

The NNR boundary includes three Sites of Special Scientific Interest (SSSIs) and two Local Wildlife Sites (LWS). The affiliate sites include land that is part of a Special Area of Conservation (SAC) and a further three LWSs. All of the core partner sites and most of the sites affiliated to the NNR are within the Kent Downs National Landscape.

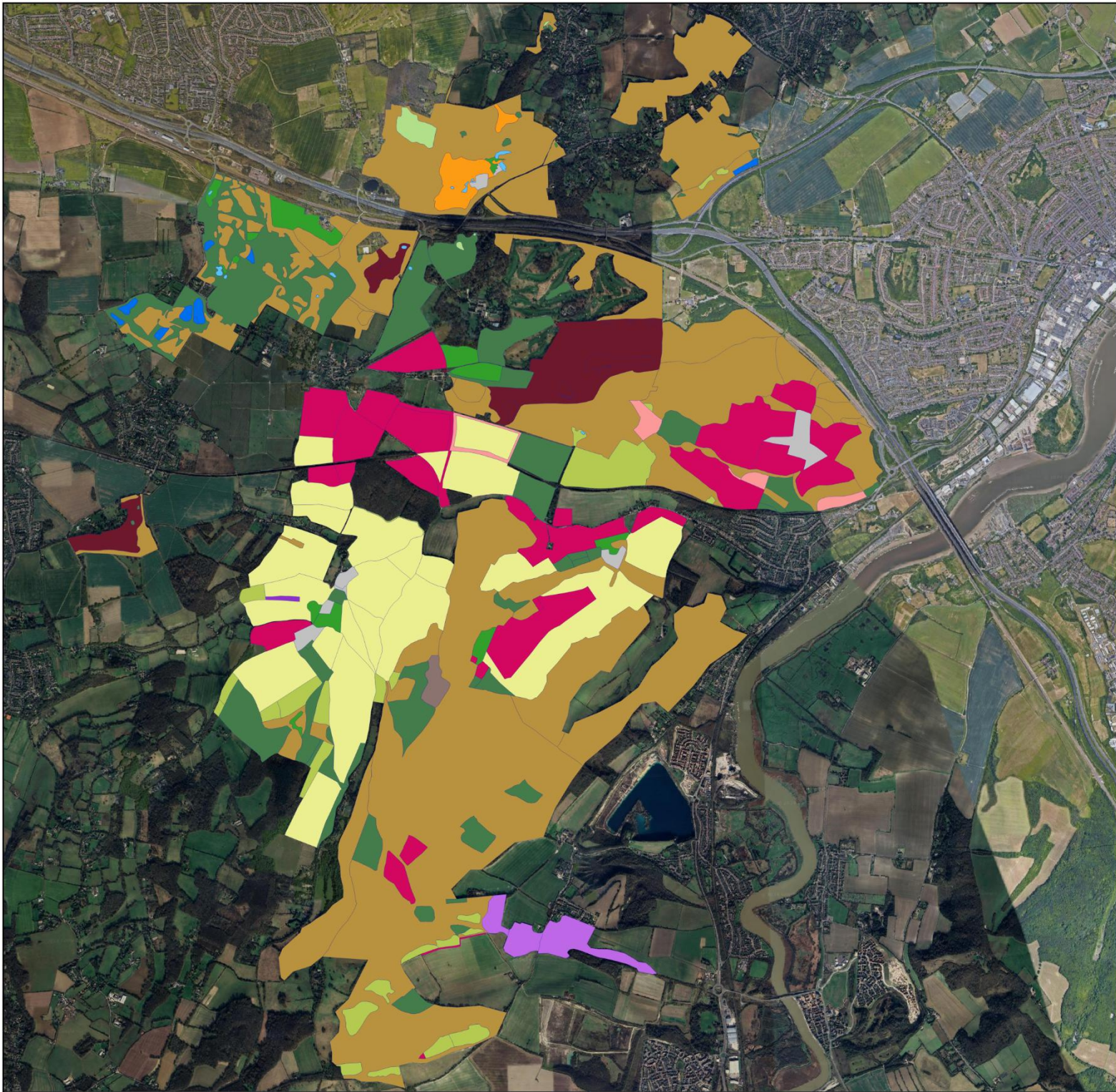
#### Land affiliated to the NNR

In addition to the core, declared areas of the NNR, partners outside of the core group have committed to another 1295 hectares of land to become affiliated to the NNR with ongoing discussions about a further 400 hectares becoming affiliated. There is an ambition to grow further over time. The vision is that affiliated status will perform multiple functions. The first will be to include land not managed solely for nature conservation to help effect change at a landscape scale. Affiliated status can also be used as a stepping stone towards future full core partner status. One of the most exciting things about the NNR is the potential to draw together the work of a


larger partnership of landowners with the aim of better co-ordinating the work of landowners across well over 2000 hectares. It is for this reason, that the prescriptions within this management framework will cover all NNR partners, not just the land owned by core partners.

#### The evolution of a special landscape

A combination of human, geomorphological and geological processes have created this exceptional landscape. The historical human impact on the NNR has been crucial to the development of the current habitats. Nowhere is this more evident than in the nationally significant stock of veteran and ancient trees that the area now contains. These remarkable specimens have been nurtured by generations of the former Darnley Estate and even used by Humphry Repton as part of his landscaping of the estate. Today, much of the former estate is owned and managed by non-governmental organisations and local, though some of the land is in private ownership, including one area of ancient woodland that is still owned by the Darnley family. These exceptional trees are only part of today's landscape because of this human manipulation of the landscape. They are now valued as much for their decaying wood microhabitats and being host to saproxylic invertebrates as their age, form and beauty.



# Broad Habitats

 Site boundaries

## Broad Habitat

-  Chalk Grassland
-  Acid Grassland
-  Neutral Grassland
-  Modified Grassland
-  Quarry
-  Broadleaved Woodland
-  Coniferous Woodland
-  Wet Woodland
-  Wood Pasture
-  Scrub
-  Freshwater
-  Arable Plants
-  Vineyard
-  Traditional Orchard
-  Arable and Horticulture
-  Built

0 0.5 1 1.5 2 2.5 km



Base maps© Open Street Map 2023

## Nature and wildlife

The NNR includes some of the finest of the country's habitats. This includes chalk grassland with musk orchids, fly orchids, wild liquorice and many other specialist plant species and associated invertebrates. The area is also characterised by ancient woodland, particularly on the clay capped ridges of the area. These woodlands support significant assemblages of fungi, particularly in the oak dominated areas. Wood pasture and internationally significant arable plant populations are also present within the NNR. In addition, some of the cultivated areas of the NNR and its surrounds contain an important assemblage of rare arable plants including the largest population of broad-leaved cudweed in the UK.

The area also has a significant number of veteran trees; 1,700 of them are currently being surveyed in detail to understand their ecological requirements and associated species assemblages. These trees are under increasing stress from climate change, pests and diseases. The partnership aims to implement the recommendations that are identified in the veteran tree strategy. Part of safeguarding the nation's cultural and biological heritage involves identifying where future veteran trees can grow and flourish.

## Science and Research

Science, research, and importantly, the dissemination of this information is an emerging theme of NNR partners. This includes trialling the introduction of new tree species into SSSI wood pasture to help develop resilience amongst the future veteran tree communities. Also, innovative large scale tree spades have been used to move trees from within the halo of existing veterans to places where they can develop into the next generation of veterans.

The Silverhand Estate is trialling different inter row seed mixes that can promote invertebrate biodiversity, soil health and encourage predatory invertebrates whilst not competing with vines for nutrients or creating humid conditions where vine pests can thrive. Plantlife is also monitoring the performance of around 15 key species annually to monitor the impact of management regimes as well as the impact of weather and climate change. Several of these studies have been published in the Conservation Evidence journal.

## Access - Connecting People with Nature

There are approximately 400,000 people within a 5 mile radius of the NNR. In addition, Central London is within 25 miles of the NNR making the area accessible to 8 million potential visitors living within 25 miles of the NNR.

Both Gravesham and Medway (the two local authorities in the NNR) are in the most deprived third of all local authorities in England. The health and wellbeing benefits the NNR can bring to those communities with insufficient coherent local greenspace and minimal connection with nature is a central theme for the NNR. One of the key aspirations of the NNR is to provide opportunities for deprived communities and underserved groups to access the NNR. This will require better and more inviting access routes to the NNR from urban areas.

## Connecting nature recovery sites

The NNR, as well as being an important area of land managed for nature conservation and contributing to nature recovery in its own right, the NNR is part of an emerging cluster of initiatives across the landscape. Working at scale and acting collaboratively, the NNR will help to deliver the Lawton principles of more, bigger, better and more joined up at a landscape scale. With the Kent Downs to the south, the lowland marshes of North Kent to the north of the NNR and emerging farm clusters in the area, there are a number of encouraging initiatives in this part of Kent.

Creating an exemplar NNR is just the beginning. The ambition is to connect the landscape, delivering against the Environmental Improvement Plan, the Local Nature Recovery Strategy and emerging Kent

Downs Nature Recovery Plan. The NNR will also form a keystone Big Chalk project. The NNR will strategically enhance areas of land to provide the stepping stones required for our endangered species, enabling healthy food production, and providing additional green space for our communities' health and wellbeing. Survey data already coming through is exceeding expectations with a number of very rare species identified, some of which are the first records for this area, verifying just how special this landscape is. Creating stepping stones for these species will ensure their survival, increase their populations and extend their range.

### Threats to the status of the NNR

North Kent is under climatic, biological and ecological stress. Population growth in North Kent is one of the fastest in the country, with significant pressure on infrastructure and green spaces. The issues are exacerbated by coastal squeeze, drought, falling water tables, pests and diseases, and erratic weather. The NNR sits firmly in the centre of the large populations of Gravesend, Strood and Rochester, whose population have very little open green space in their own right and thus their access to countryside often includes travelling to the NNR to experience nature. This additional pressure requires the NNR to work collaboratively to both accommodate visitors and maintain the high quality wildlife habitats. Good access with surfaced

paths that help minimise the impact on soils and habitats is provided at some sites, with others maintaining a more tranquil and undisturbed feel where access is limited and often requires a lengthy walk.

The Lower Thames Crossing, a tunnel and associated road infrastructure connecting Essex and Kent has recently been approved. This will result in the loss of a section of Ashenbank Wood, one of the core sites within the NNR. It will also result in significant disturbance to the area during the construction phase and increased traffic on a larger A2/M2 as well as an additional junction adjacent to the NNR.

There were several NNR partners who were opposed to the Lower Thames Crossing scheme and made their opposition clear through the consultation and examination process. The NNR partnership recognises the Government's decision and now it has been made, will continue to work positively with the Lower Thames Crossing team, their contractors and consultants to get the best scheme possible and do our best to reduce the impact of the scheme and achieve positive outcomes for nature, the wider landscape and communities. The National Nature Reserve partnership is an excellent vehicle to take forward this work.



## 2.2 Site features summary

### Biodiversity Overview

The National Nature Reserve is protected by national and international designations.

Designation	Area of core sites (ha)	Percentage of core sites	Area of core and affiliate sites (ha)	Percentage of core and affiliate sites
North Kent Woods and Downs NNR	779.83	100	2075.54	100
Site of Special Scientific Interest (SSSI)	409.86	52.56	832.43	40.11
Special Area of Conservation (SAC)	0	0	138.14	6.66
Local Wildlife Site (LWS)	29.51	3.78	133.78	6.45
Kent Downs National Landscape	778.21	99.79	1784.32	85.97

#### Sites of Special Scientific Interest (SSSIs)

Over half of the core area of the NNR is designated as a SSSI and over 40% of the entire area of core NNR and affiliated land. This includes three SSSIs:

##### Shorne and Ashenbank Woods SSSI

There are two features monitored within this SSSI: invertebrate assemblage W211 open water on disturbed sediments (favourable, 2010) and lowland mixed deciduous woodland (unfavourable, 2010).

##### Cobham Woods SSSI

There are seven features monitored for the SSSI Assemblages of breeding birds - Mixed: Scrub, Woodland (unfavourable recovering, 2013)  
Lowland mixed deciduous woodland (unfavourable recovering, 2022)  
Lowland wood pasture and parkland (unfavourable recovering, 2022)  
Four features related to Schedule 8 protected species, Ground-pine, Rough marsh-mallow, Meadow clary and Broad-leaved cudweed (all favourable post 2020)

##### Halling to Trottscliffe Escarpment SSSI

There are seven features monitored for this SSSI. Only one of them (lowland mixed deciduous woodland) is relevant to the units within the candidate NNR. Although this feature is recorded as unfavourable, the feature is in favourable condition for the NNR units.

The aim of the NNR is to ensure that all SSSIs within the NNR are in favourable condition and that those areas that are not designated are managed to the same high standards.

## Other designations

Local Wildlife Sites cover another 6.45% of the NNR and affiliated land and nearly 86% of the entire area is within the Kent Downs National Landscape.

Part of the Halling to Trottiscliffe Escarpment SSSI is designated as a Special Area of Conservation due

to the lowland beech and yew woodland as well as some of the high quality chalk grassland.

The land that is not designated includes ancient woodland, areas of neutral and chalk grassland as well as some areas of scrub and areas of land cultivated for their arable plants.

Survey work carried out during 2023 and 2024 has identified a number of habitats and species that are considered to be a priority under section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

## Table of conservation priorities

Priority Habitats	Summary	Notes
Lowland dry acid grassland	Largest area found at Shorne Woods Country Park but small areas of sand can be found across the north of the NNR of sand. Approx 10 ha.	Supports a distinct range of plant species and associated invertebrates.
Arable field margins	Largest area found at Ranscombe Farm where entire fields are devoted to arable plants. Margins are also found at Silverhand Estate and Birling Estate.	Supports some of the rarest plants in the NNR including Meadow clary, Broad-leaved cudweed and Rough marsh-mallow.
Hedgerows	Found across the NNR and a key target for working with neighbours and connecting areas of woodland.	Supports a wide range of species and creates corridors to assist the dispersal of some species.
Lowland beech and yew woodland	This rare habitat is often found on steep chalk slopes and is a characteristic habitat of the Kent Downs National Landscape. It is found at Holborough Woodlands and other sites on the Halling to Trottiscliffe Escarpment SSSI.	A rare habitat dominated by yew and beech and often with a diverse ground flora in areas where light reaches the woodland floor.
Lowland mixed deciduous woodland	A large part of the NNR is covered by lowland mixed deciduous woodland and much of it is also ancient woodland. Found across the whole of the NNR but particularly on the higher ground in the downs and across most of the north of the NNR.	Particularly species rich for plants and a range of invertebrates and fungi. This is especially the case when the underlying geology is chalk.
Wood-pasture and parkland	A legacy of the former management of the NNR and particularly of Cobham Park. A fine example of the habitat is found at Cobham Woods as well as parts of Ashenbank Wood and Shorne Woods Country Park.	Valuable for the trees themselves abut also the range of saproxylic invertebrates and other species that are hosted by the trees.

Wet woodland	Some areas of wet woodland are found in Shorne Woods Country Park but these are increasingly being impacted by climate change.	Specialist species are found in wet woodland, in particular invertebrates dependent upon standing freshwater
Traditional orchards	A nearly century-old Bramley apple orchard can be found at Crabbles Bottom and traditional varieties of fruit trees have been planted at Jeskyns Community Woodland.	Like veteran and ancient trees, traditional orchards host their own assemblage of varied invertebrates and can be managed for species rich grassland through grazing.
Lowland calcareous grassland	Another of the iconic habitats of the North Kent Woods and Downs, found across the south and east of the NNR from Wrotham Water in the south to Ranscombe Farm in the north.	Host to an internationally significant range of plants and invertebrates from musk orchid to the rare Maidstone mining bee
Lowland meadow (neutral grassland)	Neutral grassland can be found across the NNR where soils are not dominated by chalk.	Whilst not as rare as chalk grassland, these grasslands are valuable in their own right hosting a range of plants, invertebrates and other species
Ponds	Most of the ponds in the NNR are found in the north, particularly at Shorne Woods Country Park.	Home to as host of aquatic invertebrates as well as an exceptional population of Great crested newts.

As well as the priority habitats found at the North Kent Woods and Downs NNR, there are also many organisms found on the list of species of principle importance. Others are found on the red data book lists and other specialist lists of priority species. Not all of them are listed here but some of the species listed in taxon reports produced for the NNR are found here as well as species assemblages where these are considered more important than an individual species itself. These species are considered to be the primary focus of conservation efforts but have been chosen for the range of other species their conservation will also enhance.

Species group	Priority species	Notes
Plants	Ground pine Musk orchid Lady orchid Broad-leaved cudweed Basil thyme Meadow clary	Chosen from a range of important plants of chalk grassland, chalk woodlands and cultivated arable areas. These species and their associated habitats are considered to be of international significance.
Birds	Honey buzzard Goshawk Hobby Lesser spotted woodpecker Hawfinch Long-eared owl	Holborough Woodlands are still home to Hawfinch and Lesser spotted woodpecker and the scarp slope and associated habitats make this an area well suited to some of Kent's rarer raptors.

Moths	Liquorice piercer Straw belle Rest harrow Chalk carpet Scabious leaf-miner	The NNR has a range of chalk specialists including the very rare Straw belle found in the south of the NNR.
Butterflies	White-letter hairstreak White admiral Adonis blue Brown hairstreak	The Adonis blue is one of the iconic chalk grassland butterflies but other rarities such as the white-letter hairstreak has been found in scrubby woodland at Crabbles Bottom.
Coleoptera	Six-spotted pot-beetle Saproxylic beetle assemblage <i>Ischnodes sanguinicollis</i> <i>Triplax lacordairii</i> <i>Hypulus quercinus</i>	As well as some rare species associated with dead wood, the Six-spotted pot-beetle has been found at Crabbles Bottom, one of only a handful of locations that it has been observed in the UK.
Mammals	Hazel dormouse Hedgehog Harvest mouse Brown hare	The hazel dormouse is well-established in a number of woodlands within the NNR and the open fields, hedgerows and long grasses being well suited to Brown hares and Harvest mice.
Hemiptera	<i>Iassus scutellaris</i> <i>Asiraca clavicornis</i> Cryptic Leatherbug	<i>Iassus scutellaris</i> , often known as Elm leaf hopper has been found in the hedgerows of the NNR.
Aculeate hymenoptera	Maidstone mining bee Fringe-horned mason bee	The Maidstone mining bee was recently found at Trosley Country Park after for the first time in several decades.
Herpetofauna	Common toad Great crested newt Adder	The ponds of the north are a stronghold for the Great crested newt with the Kent Red Data Book species, adder found occasionally in the south of the NNR.
Fungi	Waxcap grassland community Oak associated dead wood fungi Hedgehog or toothed fungi	Some significant oak associated fungi have been found in Shorne Woods and Cobham Woods with the potential for waxcap communities good in some areas, though requiring specialist management.

Bats	Brown long-eared Leisler's Nathusius' pipistrelle Noctule Serotine Soprano pipistrelle Myotis spp.	A wide range of bats have been recorded in the NNR using the woodland, wetlands and hedgerows in invertebrate rich meadows.
Orthoptera, dictyoptera & dermaptera	Short-winged Earwig Lesne's Earwig Woodland Grasshopper Rufous Grasshopper	Several unusual species have been recorded but more survey work is required.
Molluscs	Roman Snail <i>Backeljaia gigaxii</i>	An unusual air breathing land snail as well as the introduced Roman snail.

### Geodiversity Overview

The North Kent Woods and Downs candidate NNR is defined by its geology. The underlying rock is chalk and this is an important part of the Wealden anticline. Whilst the chalk is the reason for many of the scarce species in the NNR, the clays and sands that overlay the chalk provide the subtle nuances to the habitats of the area. Clay capped valley tops are covered by woodland and sand lenses laid down during flood events give rise to the small areas of acid grassland.

It is thought that one of the unintended consequences of the nearby cement industry is a fascinating impact on the geology of soils. Not only has the industry exposed chalk in the many quarries in the area, but the cement manufacturing process has caused decades of dust to be spread across the area, increasing the pH of soils across the NNR, resulting in a flora that is not always typical of the soil type.

The area is currently deemed to be so important geologically that it is part of a candidate Global Geopark being considered by UNESCO. This Geopark stretches through the North Downs in Kent and across the English Channel to the corresponding chalk landscape in Northern France.

## 2.3 People and nature

The cultural heritage and landscape character of the North Kent Woods and Downs are integral to the natural heritage and the importance of the National Nature Reserve. The impact of people on the landscape is ongoing and will shape the future of the NNR.

It is this cultural and historic connection that people and communities have to the NNR that makes it an attractive place to visit and connect with nature.

### Heritage

The NNR has a remarkably rich and diverse heritage to support Natural England's strategic vision. While some of its heritage assets are instantly recognisable like Cobham Hall and Park there are many more that are less well known but that play a major role in the area's historic sense of place. At a wider scale, the area contains different historic landscapes moulded by natural and human processes that provide the distinct character that is valued by those who live, work in and visit the area. The heritage assets, from individual finds and features to the wider landscapes, can all play a role in shaping the NNR development and identity.

The NNR contains an exceptional wealth of heritage, and these span thousands of years from early prehistory to the present day. The area has

archaeological finds, historic structures and landscapes that are of outstanding significance having national importance and international relevance.

Alongside these and other nationally important sites there are numerous sites of regional or local importance, less well known perhaps but treasured and valued by the local communities as markers of their own history and that of the villages and rural communities. Furthermore, there are important visitor sites that are open to the public that make a substantial contribution to the public's understanding of the area's heritage and to its tourism potential. These sites, buildings and objects are known as 'heritage assets' and are exactly that – places and artefacts of value to the NNR, and to its unique sense of identity.

The wealth and importance of this heritage is reflected in the Kent Historic Environment Record (HER) which lists c.200 HER records of heritage assets and finds. Alongside those recorded there will be many more that are not yet included in the HER.

The geology and geography of the area plays an important role in its heritage and history. The survival of important archaeological remains, above and below ground, is also in part a result of the protection from cultivation that has been afforded

by the extensive areas of woodland and parkland, and as noted above, from burial by colluvium in valleys.

The NNR contains an exceptionally rich and varied historic landscape which has been clearly characterised and described in the Landscape Character Assessment (LCA) which includes a thorough consideration of the more recent historical trends.

A heritage strategy and implementation plan were produced in 2024 that give detailed reports on the heritage of the area, and this can be found in the annexes to this report.



*Artist' reconstruction of Mesolithic activity within the NNR Area – Alan Marshall*

## Landscape

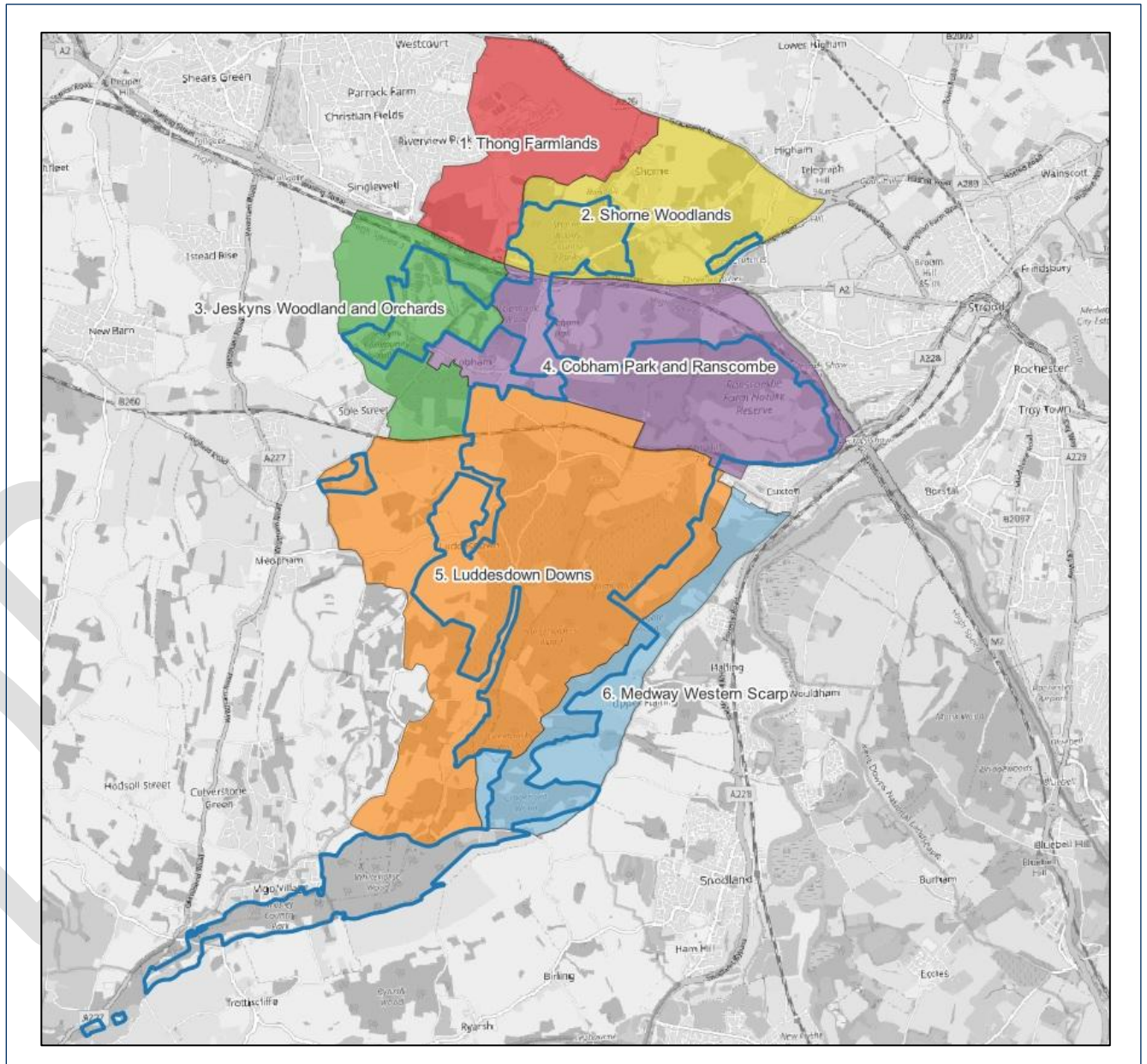
The majority of the NNR falls within the Kent Downs National Landscape. This is an area characterised by rolling downs and woodland and this is mirrored within the North Kent Woods and Downs NNR.

As part of the work carried out during the development of the NNR, a landscape character assessment (LCA) was carried out by Fiona Fyfe Associates (2024). This assessment can be found in the annexes to this report.

This work identified six landscape character areas within the NNR area. Although the NNR has increased in size beyond the existing character areas, the Luddesdown Downs LCA and Medway Western Scarp LCA largely extend southwards covering the woodland and scarp slope respectively of Trosley Country Park, Birling Estate and Wrotham Water.

The LCAs reflect the geology, land use, settlements and human history of the area. The rolling downs, scarp slope, parkland and farmed landscapes are all represented within the LCAs, providing a context for current land use.

## North Kent Woods and Downs NNR – Landscape character



## 2.4 Ecosystem services

The NNR provides a wide range of benefits to society. The key services are summarised below.

### Provisioning services

- Food: Extensive beef cattle: grazing animals provide meat and contribute to the local farming economy, as well as being used as a management tool. Arable food production also occurs in the NNR relating to the cultivation of arable plant margins.
- Deer and game: The management of deer as well as recreational game shoots provide food that is sold locally.
- Fruit and wine: The area has a rich heritage of fruit growing and traditional orchards are maintained as well as viticulture being developed in the land affiliated to the NNR.
- Wild plant and animal species: Nature reserves are important reservoirs for UK wild plant species which hold genetic resources of significant potential value.
- Timber provision: Woodland, hedgerow and scrub management produces wood that can be used and/or sold locally as a sustainable fuel. Nowhere is this better exemplified than at Shorne Woods Country Park where wood coppiced by the team is sold on site.
- Water availability: Although most of the NNR is devoid of surface freshwater, wet

woodland and future management of the northern woodlands provides the opportunity to retain significant amounts of standing freshwater. In addition, the chalk bedrock provides the porous rock required to create and store the freshwater required by the large populations of South-East England.

### Regulating services

- Carbon sequestration and retention: Low levels of tillage on cultivated arable fields increase soil depth and carbon storage as does extensive management of grasslands. The sustainably managed woodlands also provide a carbon store as do the stock of veteran and ancient trees.
- Regulating water quality and water flow: The semi-natural vegetation of the NNR, in particular the wetter woodland areas, is an important water-retaining and regulating system for the area.
- The land management practices, including the retention of high quality inter-vine grassland, helps to retain soil within the landscape and improve the carbon levels in soils. Soil quality is likely to be stable under permanent vegetation and under appropriate management e.g. suitable stocking densities and timings.

- Nitrogen cycling & contaminant removing – The high levels of woodland cover removes huge amounts of nitrate via denitrification, as well as emerging contaminants such as microplastics, benefiting soil, air and water quality.

### Cultural services

- The woodlands, particularly those around the transport infrastructures, provide valuable services providing a visual screen as well as blocking some noise. This is over and above the removal of airborne pollutants.
- Health and wellbeing: There is a growing body of evidence that contact with nature is linked to better mental and physical health, and to people's wellbeing. The NNR already provides many opportunities for people to connect with nature, both informally and through activities such as guided walks, volunteering and citizen science.
- Access and Recreation: The partners are increasingly working together across the whole NNR to improve the provision for visitors and management of access and recreation [see section 3.4].
- Heritage: There is a wealth of cultural heritage within the area with many opportunities provided to explore and

investigate the many layered history of the landscape.

## Economic services

- Direct employment: each of the partners directly employs people managing the NNR
- Supporting local economy\*:
  - Local farm and grazing businesses operate across the NNR.
  - Other aspects of NNR management are contracted to local firms (e.g. habitat management, construction and maintenance of infrastructure, ecological surveys).
  - Access to high quality natural landscapes of the NNR is a key contributor to Kent's local tourism economy, including wildlife tour operators.
  - Knock-on benefits to the local economy through use of B&Bs, local shops, cafes.
- Apprenticeships & training: Provision of apprenticeships, work placements and field skills training contribute directly to improving employability of students and life-long learners.



## 2.5 Climate change vulnerability assessment

The impact of climate change is both clear and obvious across the NNR. Some of the largest and oldest trees have recently, succumbed to Acute Oak Decline, a complex set of pathogens that are exacerbated by drought stress. The distribution of some of the rarest chalk grassland and arable plants have shifted and are no longer found as readily on south facing slopes. Woodland in the north of the NNR that was once classified as wet woodland is increasingly completely dry for large parts of the year.

The NNR partners have completed a Climate Change Vulnerability Assessment (CCVA). This assessment can be found in the Environmental and Ecological Strategy and Implementation Plan, annexed to this document.

The high risk habitats identified as part of this process include:

- Chalk grassland
- Lowland deciduous woodland
- Wood pasture
- Arable plants

In addition, multiple taxa were identified as at high risk from the impacts of climate change.

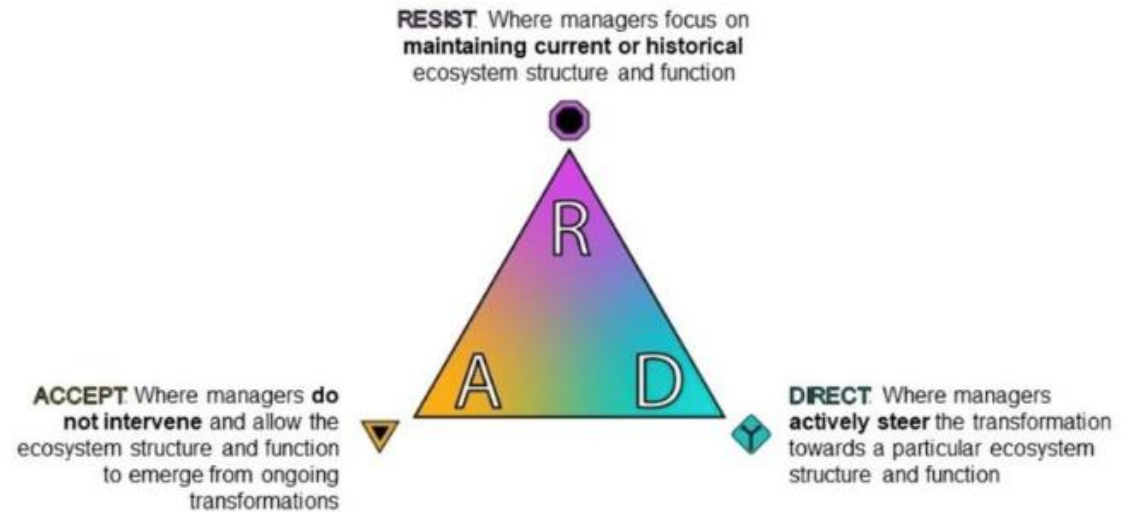


Figure: RAD Decision Framework

The Vulnerability Assessment has identified a range of actions that use the RAD decision framework of resist, accept or direct.

Some of the key actions taken from the CCVA include:

- Targeted water management to alleviate issues of erosion, channelling etc.
- Apply creative solutions and experimentation with regards to grazing livestock on all grasslands.
- Save some trees by moving them to more suitable areas, using tree spade.

- Continue to plant local *Quercus robur* as those growing in the new conditions may be more adapted to the changed climate.
- Plant a versatile, wide range of tree species including conifers.
- Explore/trial other ways to create annual disturbance required by many rare arable plants - find more sustainable or more suitable options under a changed climate.
- Exploit opportunities to pass on our learning/experience about the impacts of climate change and implications for the NNR and land and woodland management.

### 3 Management policy: Desired outcomes, principles and shared actions

#### 3.1 Development of the Management Framework

This Management Framework was developed between 2023 and 2025 at all-partner NNR meetings that took place both in person and online. This included members of both core partners and of partners holding land affiliated to the NNR. In addition, other stakeholders were invited to participate in workshops from Forestry Commission, Kent County Council, Medway Council and a number of staff representing Natural England from the protected sites teams, community engagement team and from the land advisory team.

Regular monthly meetings and email communications were used to keep the process moving but there were three key elements to identifying, refining and prioritising collaborative actions.

#### Visioning exercises

- February 2023 – all partners asked to identify areas that they felt they could work more closely with neighbours, what their priorities



were for nature conservation and where strategies and plans would be useful. This workshop was used as the basis for planning the strategies and implementation plans that form the annexes to this report.

- November 2023 – all partners were asked to identify what they thought the immediate priorities for the emerging NNR partnership were and what their vision for the area for 2050 was.
- April 2024 – all partners asked to identify flagship species for the NNR as well as areas of work that were best suited to collaborative working.

## Organisations represented at visioning exercises and Management Framework Workshops

Core partners	Affiliate partners
Kent County Council (KCC)	Gravesham Borough Council
Vineyard Farms Ltd	Shorne Parish Council
National Trust	Birling Estate
Plantlife	Forestry England
West Kent Downs Countryside Trust	Tarmac
Woodland Trust	
Co-ordinating bodies	Other stakeholders
Kent Downs National Landscape	South Ashenbank Wood
Natural England	Forestry Commission
	KCC Public Rights of Way
	KCC Heritage
	KCC Natural Environment and Coast
	Savills

### Strategies and implementation plans

Throughout 2024, seven strategies and implementation plans were planned and delivered by the NNR partners with the assistance of contractors. As well as this, a community consultation exercise was carried out by the Kent Countryside Management Partnerships. All of these form annexes to this Management Framework. All of the strategies involved at least one workshop attended by partners and stakeholders and often one-to-one interviews with partners. The seven strategies and implementation plans developed through 2024 are as follows:

- Landscape character assessment and implementation plan
- Heritage assessment and implementation plan
- Deer management strategy and implementation plan
- Grazing strategy and implementation plan
- Visitor access and community engagement strategy and implementation plan
- Veteran and ancient tree strategy and implementation plan
- Environmental and Ecological strategy and implementation plan (including)
  - Climate change vulnerability assessment
  - Taxa assessments
    - Amphibians and reptiles
    - Spiders and flies
    - Fungi
    - Bats
    - Terrestrial mammals
    - Saproxylic invertebrates
    - Butterflies and moths
    - Lichens
    - Bryophytes
    - Beetles

- Birds
- Bugs
- Molluscs
- Bees, wasps and ants
- Grasshoppers and crickets

actions formed the basis for the desired actions and outcomes in the following sections.

### Management Framework workshops

Following the completion of the strategies and implementation plans, all of the actions and recommendations were added to a master spreadsheet that allowed these emerging actions to be sorted by theme and by site.

Partners were invited to take part in an all day workshop in February 2025 to help refine the actions that had been identified in the strategies and implementation plans. The most important actions were identified and several activities that stemmed from each action were recorded. A lead partner for each action was identified and some simple next steps.

Once this had been completed a set of actions were brought forward to an all partner workshop where prioritisation activities took place to score each of the actions. The most popular activities scored 5 and the least popular scored 0. However, it should be noted that even those with low scores are still considered to be priorities for the NNR as they have all been identified and refined by both expert contractors and partners. This final list of prioritised

### Prioritised actions from Management Framework workshops

Action	Score	Action	Score
Collaborative grazing	5	Healthy hedgerows	2
Chalk grassland restoration	5	Industrial heritage research	2
Grazing Animals Project (GAP)	5	Historic Environment Record audit	2
Woodland connectivity	5	Better byways (antisocial behaviour)	2
Veteran tree plan implementation	5	Agricultural heritage	2
Future tree species	5	Apprenticeships	2
Sustainable woodland management	4	Green bridges	2
Wet woodlands, ponds and rewetting	4	Urban access gateways	2
Network of NNR routes and trails	4	Integrated interpretation	2
Accessible trails for all	4	Breaking down barriers	2
Countryside skills hub	4	The youth voice	2
Seeing the wood pasture from the trees	4	Air pollution research and monitoring	2
Climate change impact research	4	A towering success	1
Species research and monitoring	4	Traditional orchard restoration	1
Keystone species reintroduction	3	Indicators of change	1
Extend arable plant areas	3	Learning and engagement lead post	1
Harnessing citizen science	3	Health and wellbeing projects	1
Vistas and viewpoints	3	Harnessing multiple media	1
Woodland skills	3	Marvellous Mesolithic	1
Wood marketing & best practice	3	Natural capital and green finance	1
Engagement with schools	3	Forest school development	0
Collaborative volunteer programmes	3	Engagement events calendar	0
Academic institution partnerships	3	Dormice studies	0
Hydrology and soil research	3	Invertebrate translocations	0
Mammal management	3	NNR in 3D	0
Celebrate historic environment	3	Going underground (cables)	0

## Collaborative actions and core purposes

The collaborative actions and principles are grouped by the three core purposes of NNRs, nature, science and people. However, the kind of collaborative actions identified by partners straddle the three core purposes. To make the collaborative projects identified easier to understand, each one has been allocated to a single core purpose.

## 3.2 Nature

### Rationale

The NNR includes a range of terrestrial habitats. From the ancient woodland in the north to the rolling chalk downs of the south of the NNR and including some of the most significant areas of wood pasture and arable plants in the country, this network of priority habitats is already a reserve for some of the country's most valuable and rare wildlife.

The establishment of nature reserves in the NNR area began in the 1980s and progressed at pace through the next 20 years as Woodland Trust, National Trust, Plantlife, Forestry England, Gravesham Borough Council and Kent County Council started managing land within the NNR. These actions helped to secure areas of important habitat that had been designated as SSSI land and arrested the decline that had been happening since the breakdown of the Darnley Estate. Private businesses, such as Tarmac (and the previous

commercial owners of the land) and Birling Estate have also made great strides in the management of their land for biodiversity and have been joined more recently by West Kent Downs Countryside Trust, Shorne Parish Council and Silverhand Estate.

The result has been a mosaic of land holdings, all managed largely independently securing parcels of land throughout the landscape. This has proven to be a very successful model that has prevented the loss of swathes of high quality land for wildlife. However, there is more that can be done by working more closely together to implement the Lawton Principles of more, bigger, better and more joined up. This is the fundamental principle of nature recovery that underpins the Government's 25-Year plan enacted under the Environment Act 2021.

By acting at scale, partners will be able to take a holistic view around land management issues and act in a strategic rather than opportunistic way. From grazing, through deer management and restoring hydrological function, by collaborating, partners can achieve more than they could individually.

By working together, other landowners can be supported in their efforts to restore natural processes and help nature recover. The NNR will be able to work with other groups of landowners

including farm clusters and emerging initiatives such as Chalk to Coast and the Local Nature recovery Strategy.

The aim is that these habitats and the rare and threatened species for which the area is designated will increase, as well as becoming more resilient to climate change. With new species arriving all the time, some revived from the past, some new and on the move due to climate change, we know that the North Kent Woods and Downs NNR is a vital refuge for wildlife.

### Nature Outcome A - Increased Connectivity of Habitats

#### Aim:

For all of the sites within the NNR to be managed effectively and coherently with their neighbours and to extend best land management practice to adjoining landowners.

#### Principles:

- The concept of connectivity is critical to ecosystem function – with bigger, well-connected areas of healthy, natural habitat able to support larger and more diverse ranges and populations of species.
- The improvement of the ecological management of different habitats to ensure

connectivity through habitat creation and/or restoration

- The veteran tree resource is critical to the connectivity of multiple saproxylic invertebrates. Management of existing resource, veteranisation, placement of rotting wood piles and strategic planting of future veterans will all play a part in maintaining connectivity.
- In particular, the management of a mosaic of scrub as well as grassland with different sward lengths will be critical for maintaining the ecological connectivity of habitats from grassland butterflies through to reptiles. This is of particular importance to species with very specific habitat requirements as well as those with poor powers of dispersal.
- Work with landowners on between and around NNR sites will also be important, to positively influence land management in the wider landscape.

#### 5-Year Targets:

- All linkages between different areas of woodland have been reviewed and additional hedgerows/tree planting planned and planted
- Review of veteran and ancient trees plus veteranisation of trees to assist connectivity between hotspots for veterans.

## Nature Outcome B - Restoration of Ecological Function

### Aim:

Essentially the 'better' part of the Lawton Principles. This outcome will focus on improving the quality of the existing habitats but also enlarging them if necessary to ensure they provide the function required by species that inhabit them.

### Principles:

- Woodland management through coppicing is used throughout the NNR. However, there are areas where the rotational management is not being maintained. Even where it is being maintained, ride management and the maintenance of a mosaic of woodland structures is not always a priority.
- Grazing needs to be improved in areas, particularly where the land is marginal for graziers or the size of grazing units make management difficult. By improving infrastructure, creating larger management units and working more closely with graziers the NNR will address this issue.
- The use of and purchase of suitable grazing animal breeds as well as reviewing stewardship options and how these are distributed amongst those who manage

land, will allow grazing to be more effective and attractive to graziers.

- Explore the use of introduced animals and the management of hydrological features to rewet woodland.
- Identify new areas for the cultivation of arable plants and use countryside stewardship options to promote their uptake both within and beyond the borders of the NNR.

### 5-Year Targets:

TBC

## Nature Outcome C - Resilience to Climate Change

### Aim:

Improved management of water levels allows retention of more winter water where possible, to ensure preparedness for and increase resilience to summer drought. In addition, soil management and woodland management will be used to sequester carbon within the environment.

### Principles:

- Choice of tree species and management of existing veteran trees will be used to ensure a more climate resilient stock of trees within the NNR. This may include planting conifers.

- Save some trees by moving them to more suitable areas, using tree spade.
- Continue to plant local *Quercus robur* as those growing in the new conditions may be more adapted to the changed climate.
- Plant a versatile, wide range of tree species including conifers.
- Vegetation management should be achieved primarily through large herbivores, augmented with machinery where grazing is not possible.
- Apply creative solutions and experimentation with regards to grazing livestock on all grasslands.
- Targeted water management to alleviate issues of erosion, channelling etc.
- Explore/trial other ways to create annual disturbance required by many rare arable plants - find more sustainable or more suitable options under a changed climate.
- Exploit opportunities to pass on our learning/experience about the impacts of climate change and implications for the NNR and land and woodland management. Embed management options from the Climate Change Vulnerability Assessment into management plans for individual NNR sites.

#### 5-Year Targets:

TBC

## Nature Outcome D - Thriving Wildlife

### Aim:

A mosaic of healthy habitats in the landscape has allowed both existing species, and those shifting ranges due to climate change, to thrive.

Robust visitor management enables people's enjoyment of the landscape and wildlife, whilst species vulnerable to disturbance are well-protected.

### Principles:

- As a National Nature Reserve, conserving and increasing biodiversity is our core objective and needs the supporting conditions of well-functioning and well-managed priorities at a quality and extent suitable for the needs of species.
- Ensure that generic approaches to land management do not compromise the specialist niches of some of the rarest and most important species.
- Acceptance of new species moving in due to climate change.
- Species that are part of functioning ecosystems within the NNR may be reintroduced, by agreement of all partners.
- SSSI features are considered in the context of the whole site, rather than in management units. SSSI condition assessment criteria will need to change.

- Priority species have been identified in a series of taxon reports. The needs of these species will be considered when management planning for specific areas of the NNR.
- Invasive, non-native species that impact the ecosystem negatively will have management plans developed on a case-by-case basis.
- Visitor Management Plans, include zoning of ecologically vulnerable areas, where visitors are re-routed and signposted to more appropriate areas, where good visitor infrastructure is provided, should cover all areas.

#### 5-Year Targets:

TBC

## Nature: collaborative actions

Action	Lead	By when	Priority score	Progress
<p><b>N1: Collaborative grazing</b></p> <ul style="list-style-type: none"> <li>• Creating infrastructure across the NNR to support small graziers and make grazing easier</li> <li>• Explore and establish NNR/conservation meat marketing and branding opportunities</li> <li>• Purchase of stock either for partners or local graziers</li> </ul> <p><b>Research Links</b>  <a href="#">Grazing Strategy</a> – particularly recommendations on p15 <a href="#">Landscape Implementation Plan</a> – particularly fencing design information on p33</p>	National Trust, Birling Estate, Kent County Council CP		5	
<p><b>N2: Chalk grassland restoration</b></p> <ul style="list-style-type: none"> <li>• Use of green hay to enhance chalk grassland restoration sites</li> <li>• Draw up and implement scrub removal/management programme</li> <li>• Collaborate with Big Chalk initiative</li> </ul> <p><b>Research Links</b>  <a href="#">Grazing Strategy</a> – particularly recommendations on p15  <a href="#">Environmental and ecological strategy</a> – particularly recommendations on p47  <a href="#">Botanical and habitat assessment</a> <a href="#">Herpetological assessment</a> – particularly reptile recommendations on p44 <a href="#">Orthoptera, mollusc, bug and hymenoptera assessment</a>  <a href="#">Fungal assessment</a> – particularly recommendations for waxcap communities on p12</p>	National Trust, Kent County Council CP, Kent Downs NL		5	
<p><b>N3: Cluster collaboration</b></p> <ul style="list-style-type: none"> <li>• Maintain and develop strong links with farm clusters and other collaborative initiatives</li> <li>• Develop, fund and deliver joint projects with other clusters/initiatives</li> </ul> <p><b>Research Links</b>            No specific links to strategies and implementation plans but <a href="#">Chalk to Coast</a> is an obvious example</p>	Birling Estate		5	

**N4: Woodland connectivity**

- Map areas to be targeted for woodland connectivity improvements
- Plan and deliver specific actions e.g. hedgerow planting, softening woodland edges, connecting isolated woodland
- Plan and implement ride management for wildlife and fire management
- Monitor for species likely to benefit from actions such as dormice

National Trust,  
Plantlife,  
People's Trust  
for Endangered  
Species

5

**Research Links**

[Environmental and ecological strategy](#) – particularly recommendations on p47  
[Botanical and habitat assessment](#) plus habitat mapping to identify gaps in linkage –  
[Bat assessment](#) – particularly table 9 on p17 [Mammal assessment](#) – particularly opportunities section on p22 [Saproxlic assessment](#) – particularly recommendations on p31  
[Landscape Implementation Plan](#) – particularly distinctive landscape patterns on p16

**N5: Veteran tree plan implementation**

- Implement veteran tree management plan developed for the NNR including haloing, retrenchment pruning and soil improvement
- Veteranisation of selected trees
- Plan for and plant areas with no future veterans
- Implement plan to retain hornbeam within the landscape

National Trust,  
Woodland Trust

5

**Research Links**

[Ancient and veteran tree survey and strategy](#) – particularly recommendations on p25 as well as individual tree management plans (not available online but in files sent by Treework Environmental Practice)

**N6: Sustainable woodland management**

- Find host site and create shared tree nursery
- Target and map areas for regeneration (restoration of coppice regime, increase tree species diversity, access enhancements for timber extraction).
- Implement plan

Silverhand  
Estate, Plantlife

4

**Research Links**

[Environmental and Ecological Strategy Strategy](#) – particularly recommendations on p47

**N7: Wet woodlands, ponds and rewetting**

- Map all wet areas and ponds
- Identify and implement pond creation and rewetting areas
- Identify areas to improve connectivity of wetland areas

**Research Links**

[Botanical and habitat assessment](#) plus habitat mapping to identify wet woodland  
[Herpetological assessment](#) – particularly amphibian recommendations on p34  
 Climate Change Vulnerability Assessment found in annex 2 of the [Environmental and ecological strategy](#) – as well as pond creation mapping created by White Horse Ecology (unpublished but GIS mapping available from Kent Downs or White Horse Ecology)

Kent County  
 Council CP, Kent  
 Downs NL,  
 National  
 Highways

4

**N8: Keystone species reintroduction and other reintroductions**

- Explore feasibility of reintroduction programmes. Specifically for beaver and pine marten

**Research Links**

Not explored in detail in any of the strategies but info available online and refer to KWT/Wildwood Trust Pine Marten reintroduction project

Birling Estate

3

**N9: Extend arable plant areas**

- Identify areas to encourage arable plants
- Establish trial plots to explore management techniques
- Expand areas where arable plant agri-environment scheme options are in place

**Research Links**

[Botanical and habitat assessment](#) plus habitat mapping to identify areas where arable weeds can be promoted

Plantlife

3

**N10: Mammal management**

- Continue and refine joined up deer and grey squirrel management
- Investigate and trial non-lethal deer management methods
- Monitor and react in areas of NNR where no management takes place
- Engage with the public

**Research Links**

National Trust,  
 Silverhand  
 Estate

3

[Deer strategy and management plan](#) but also [Landscape Implementation Plan](#) – particularly deer fencing design on p32

**N11: Healthy hedgerows**

- Agree and deliver co-ordinated programme of planting and layering (link to woodland connectivity action)
- Run training events for hedgerow skills for staff and volunteers
- Organise volunteering input

**Research Links**

[Environmental and ecological strategy](#) – particularly recommendations on p47  
[Botanical and habitat assessment](#) plus habitat mapping to identify gaps in linkage –  
[Bat assessment](#) – particularly table 9 on p17 [Mammal assessment](#) – particularly opportunities section on p22 [Saproxylic assessment](#) – particularly recommendations on p31 [Landscape Implementation Plan](#) – particularly distinctive landscape patterns on p16

2

**N12: Green bridges**

- Proactively work with Lower Thames Crossing to maximise biodiversity/access opportunities resulting from the bridges

**Research Links**

No specific links in strategies but refer to individual taxon assessments where necessary over design

Kent County Council CP, Gravesham Borough Council, Medway Council

2

**N13: Traditional orchard restoration**

- Map all areas of traditional orchard in the wider NNR area
- Explore the need for restoration and fund restoration
- Carry out surveys of invertebrates and fungi
- Engage volunteers

**Research Links**

[Environmental and ecological strategy](#) – particularly recommendations on p47  
[Botanical and habitat assessment](#) plus habitat mapping to identify orchards

1

**N14: Dormice studies**

- Study of biodiversity enhancement corridor for dormice (either woodland or hedgerow)

People’s Trust for Endangered

0

<ul style="list-style-type: none"> <li>• Monitor rate of population expansion</li> </ul> <p><b>Research Links</b></p>	<p>Species, Natural England</p>	
<p><b>N15: Invertebrate translocations</b></p> <ul style="list-style-type: none"> <li>• Review actions and measures from invertebrate studies</li> <li>• Identify and map donor sites for translocations</li> <li>• Monitor hotspots and relocation sites for key species</li> <li>• Make full use of engagement opportunities</li> </ul> <p><b>Research Links</b></p> <p>Taxon studies, in particular <a href="#">saproxylic invertebrates</a>, <a href="#">orthoptera</a>, <a href="#">molluscs</a>, <a href="#">bugs and hymenoptera</a>, <a href="#">lepidoptera</a>, <a href="#">coleoptera</a>, <a href="#">araneae</a>, <a href="#">diptera</a> and <a href="#">odonata</a></p>		
<p><b>N16: Going underground (cables)</b></p> <ul style="list-style-type: none"> <li>• Identify and pursue overhead cable undergrounding opportunities</li> </ul> <p><b>Research Links</b></p> <p><a href="#">Landscape Implementation Plan</a> – particularly visual landscape enhancements on p17</p>	<p>Kent Downs NL</p>	<p>0</p>
<p><b>N17: Holistic land management of the 'Leisure Plots'</b></p> <ul style="list-style-type: none"> <li>• Secure commitment from key stakeholders</li> <li>• Pursue options for securing the holistic management of the land</li> </ul> <p><b>Research Links</b></p> <p>No specific links in strategies but documents supporting the proposal and minutes of meetings available from Kent Downs NL.</p>		
	<p>Kent Downs NL, Gravesham Borough Council, Medway Council, National Trust, West Kent Downs Countryside Trust</p>	<p>5</p>

## 3.3 Science

### Rationale

The North Kent Woods and Downs NNR has a range of priority habitats, many of which are designated and are home to some of the most important populations of some of the rarest species in the country. Fundamentally, the science and research will aim to maximise the benefit to biodiversity whilst maintaining the current range and populations of existing key species.

### Monitoring existing species and habitats

Monitoring will inform the management of the NNR, in particular by developing an understanding of the effects of changes to management made by the focus on restoration of ecological function and directing interventions where necessary to safeguard key species.

Significant amounts of baselining have been done in the development of the NNR, both for habitat condition and priority species. A list of priority species for conservation has been established which will be the focus of long-term monitoring.

### Innovation and supporting businesses to restore ecological function

The Silverhand Estate is a core member of the NNR but also has several hundred hectares of vines that are a new addition to the landscape. The NNR will

support the vineyard to monitor the impact of their activities, their organic status and the research into inter-vine grassland management to most benefit the connectivity and quality of landscape without compromising the production of grapes.

### Valuing new nature gains

As ecological complexity increases and new niches are created, ecological dynamics will change, along with increasing numbers of 'climate refugees'. 'New' wildlife will colonise – and there will be unexpected nature gains, as well as potential losses. Success will therefore also be seen in terms of richer and more diverse wildlife in general, not just the status of the species for which the SSSIs and SACs were originally designated.

### Researching the past

The NNR contains a rich tapestry of heritage, some of which has been researched in detail but much of which has yet to be explored. Close links with the Kent County Council Heritage team will ensure that prioritising heritage research, the mitigation of negative impacts of development and land management and the best way to promote this work to the public will all be addressed to a high standard.

Alongside the monitoring programme, the NNR provides opportunities for research into both ecological and social elements, and both the

research and monitoring programmes will provide evidence that will be shared across the conservation sector.

### Science Outcome A: - Understanding the NNR

#### Aim:

Research that helps partners to understand the requirements of wildlife within the NNR and how management of habitats is and could impact on the priority species.

#### Principles:

- We will work collaboratively across the whole NNR.
- Seek to better understand the dynamics and impacts of both natural processes and management in a large, connected landscape; what is happening to the habitat mosaic, and what effect this has on species.
- Seek to understand the condition of the biological and other features for which the North Kent Woods and Downs NNR have recognised importance, at a landscape (NNR-wide) scale rather than a SSSI unit scale.
- To inform how and where specific management interventions are needed.

Data will be organised at three levels:

1. Understanding the natural and anthropogenic ecological and physical processes that shape the habitat mosaic and the species it supports.
2. Understanding habitat and microhabitat distribution, structure and connectivity, and how these change over time in response to (1).
3. Understanding species distribution and populations, in particular the species that are a priority for the North Kent Woods and Downs NNR, and how they respond over time to (1) and (2).

By creating a suite of research priorities, the NNR will be well placed to both influence academic research priorities and make the most of any opportunities to work with academic institutions.

- Prioritise research that is locally applicable and will help partners make better decisions about land management, including those businesses that operate within and around the NNR.
- Encourage more informal experimentation among partners, and a culture of innovation in land management systems and techniques, with best practice and learning shared among partners and the wider conservation community.
- The landscape will be made available to the wider research community across all academic disciplines and at all levels, from undergraduate students to funded research projects, so long as research does not compromise the conservation and access aims of the NNR.

**5-Year Targets:**

TBC

**Science Outcome B – Partnership building and developing innovation**

**Aim:**

The partnership is building evidence to inform management decisions and policy in an ongoing and iterative process. North Kent Woods and Downs NNR is at the forefront of academic research and practitioner-led innovation in ecology, land management and nature conservation.

**5-Year Targets:**

TBC

**Principles:**

- Develop research partnerships with academic institutions based on existing relationships that partners have developed.

## Science: collaborative actions

Action	Lead	By when	Priority score	Progress
<p><b>S1: Future tree species</b></p> <ul style="list-style-type: none"> <li>Conduct research including trials to identify appropriate new species for the area and build resilience to climate change</li> <li>Produce report and share across and beyond the NNR</li> </ul> <p><b>Research Links</b> No specific research but see Climate Change Vulnerability Assessment found in annex 2 of the <a href="#">Environmental and ecological strategy</a> and use research carried out by National Trust at Cobham Wood to inform strategy as well as <a href="#">Woodland Trust research into tree provenance</a></p>	Woodland Trust		5	
<p><b>S2: Seeing the wood pasture from the trees</b></p> <ul style="list-style-type: none"> <li>Explore the historic landscape through trees and produce report</li> <li>Work with Forestry Commission to combat veteran tree losses</li> </ul> <p><b>Research Links</b> <a href="#">Heritage theme 1: landscape and environment</a> <a href="#">Landscape Implementation Plan</a> – particularly heritage landscape on p30 and Climate Change Vulnerability Assessment found in annex 2 of the <a href="#">Environmental and ecological strategy</a> plus <a href="#">veteran and ancient tree survey</a></p>	National Trust, Birling Estate		4	
<p><b>S3: Climate change research and monitoring</b></p> <ul style="list-style-type: none"> <li>Ongoing monitoring of impact using citizen science and experts</li> <li>Monitor impact of management interventions</li> <li>Monitor carbon storage and sequestration of land management techniques in NNR</li> <li>Monitor colonisation of species and record losses of vulnerable species (e.g. adder)</li> <li>Review and update Climate Change Vulnerability Assessment</li> </ul> <p><b>Research Links</b></p>	All		4	

Climate Change Vulnerability Assessment found in annex 2 of the [Environmental and ecological strategy](#) though this action requires in depth monitoring of priority species and others that are particularly sensitive to climate change. These are identified in the [taxon reports](#)

**S4: Species research and monitoring**

- Action priority measures from species reports
- Plan recording and monitoring programme using volunteers and experts including Bioblitzes
- Share results with the public and other research institutions
- Set up data sharing agreement with KMBRC (Mike Phillips has mentioned this to KMBRC and it was not dismissed – needs to be pursued)

All

4

**Research Links**

[All taxon reports](#) and Community Engagement Plan on p 77 of [Visitor Access and Engagement strategy and implementation plan](#)

**S5: Wood marketing and best practice**

- Review current marketing practices
- Identify new avenues for marketing wood products and adding value
- Share learning and best practice

Birling Estate,  
Savills

3

**Research Links**

No specific links in strategies but relevant to implementation of recommendations within [Environmental and ecological strategy](#) and all taxon reports.

**S6: Academic institution partnerships**

- Develop and foster NNR wide, long-term relationships with academic institutions building on existing links
- Create a list of research briefs to share with institutions around management regimes and conservation of key species

Plantlife

3

**Research Links**

No specific links to strategies but an overarching approach to recommendations in [taxon reports](#) in particular

**S7: Hydrology and soil research**

- Baseline soils and hydrological processes across NNR

3

- Use to help mitigate climate change impact

**Research Links**

Climate Change Vulnerability Assessment found in annex 2 of the [Environmental and ecological strategy](#)

**S8: Archaeological sensitivity mapping**

- Develop GIS based archaeological sensitivity mapping for NNR
- Use mapping to guide potentially harmful management activities
- Use mapping to support a research framework for the NNR

KCC Heritage,  
Kent Downs NL,  
National  
Highways

3

**Research Links**

Information in the [Heritage strategy](#) and its [implementation plan](#)

**S9: Air pollution research and monitoring**

- Monitor baseline
- Monitor changes during construction of Lower Thames Crossing
- Identify hotspots and possible methods of minimising impact

Kent Downs NL,  
National  
Highways

2

**Research Links**

No direct links to strategies though relevant to the Climate Change Vulnerability Assessment and the pollution sections of the [Environmental and ecological strategy](#)

**S10: Historic Environment Record audit**

- Full audit of HER across the NNR
- Clear the archaeology backlog. Project research from the area already undertaken to be added to the HER
- Create GIS based sensitivity mapping to guide archaeological mitigation and research
- Link with KCC Heritage Public Access and Community Engagement (PACE) strategy to engage with public

KCC Heritage

2

**Research Links**

Information in the [Heritage strategy](#) and its [implementation plan](#)

**S11: Industrial heritage research**

- Research programme to detail industrial heritage – build on work by Chris Down
- Archaeological investigations

Tarmac, KCC  
Heritage

2

- Use to guide site specific management guidance

**Research Links**

Recommendations in the [Heritage strategy](#) and in particular the [industry appendix](#)

**S12: Agricultural heritage audit**

- Research history of farming and wood pasture within the NNR supported by research being carried out by Geoff Baker
- Document why landscape looks as it does today
- Create interpretation and engagement resources

KCC Heritage,  
Plantlife, National  
Trust

2

**Research Links**

Recommendations in the [Heritage strategy](#) and in in the agriculture appendix when completed by Geoff Baker (ex Gravesham Borough Council)

**S13: Marvellous Mesolithic (plus Palaeolithic and Neolithic)**

- Additional research into the potentially significant findings at Ranscombe Farm
- Expand other areas of Holocene research
- Identify opportunities for engagement

Plantlife, KCC  
Heritage

1

**Research Links**

Information in the [Heritage strategy](#) and its [implementation plan](#)

**S14: A towering success**

- Measure the impact of 'wildlife towers' at Silverhand Estate
- Share learning and experience including various methods of replicating what has worked
- Create engagement opportunities around the towers

Silverhand  
Estate

1

**Research Links**

No specific links to the strategies

**S15: Indicators of change**

- Develop set of metrics to measure change using CS option indicators, SSSI common standards monitoring
- Link to LNRS habitat targets

Natural England,  
Kent County  
Council Natural  
Environment and  
Coasts

1

**Research Links**

No specific links to the strategies

**S16: Natural capital and green finance (to include NE agri-environment schemes)**

- Research potential of options available and report to NNR partners and neighbours
- To include the possibility of combining, or at least harmonising the start and end dates, of all NNR agri-environment schemes
- Develop strategy to maximise benefit of green finance

Kent Downs NL,  
Natural England

2030

1

**Research Links**

No specific links to the strategies

DRAFT

## 3.4 People

### Rationale

The North Kent Woods and Downs NNR contains a variety of different kinds of sites, some of which are well suited to receiving visitors and others are tranquil spaces that are difficult to get to except on foot following a lengthy walk. There are a diverse range of communities within the NNR's hinterland including Kent's largest Sikh community in Gravesend to the deeply urban population of Medway. This provides excellent opportunities to engage with audiences that are often underrepresented within green spaces. This will build on some excellent work already being done by Gravesham Borough Council and the North Downs Way National Trail. Kent County Council have well developed education programmes at Shorne Woods Country Park but educational and engagement opportunities at many other sites are currently underdeveloped.

There are 400,000 people within 5 miles of the NNR and 8 million people within 25 miles. Pressure on green spaces in South-East England is high and ongoing development and more active lifestyles will only increase the demand for high quality places for people to enjoy landscape and wildlife. As a consequence of these pressures, visitor management, communications and community engagement need to be carefully managed.

Already in Kent, National Trust do not proactively advertise White Cliffs as a destination due to the pressure that so many visitors place on habitats sensitive to high levels of disturbance. As a consequence, visitor access and engagement will be focused on diversifying audiences and creating high quality experiences that allow people to learn about and respect the countryside and provide opportunities to volunteer and engage with the NNR's partners.

Even the sites with good facilities and large car parks, Shorne Woods Country Park and Jeskyns Community Woodland, are over capacity during peak times so visitor access will focus on the use of public transport, walking to the NNR and promoting use outside of the peak times.

Expanding the volunteering experience will be key to the engagement strategy and diversifying the offer across the NNR to include wildlife recording, archaeological investigations, learning countryside crafts, being guides within the NNR as well as the more traditional volunteering opportunities provided by conservation organisations.

The commercial activities of partners also attracts people to the NNR including camping, running events and providing vineyard tours. The NNR will support its partners' activities as an important part of the financial sustainability of the NNR, where this

does not compromise the three core purposes of the NNR.

### People Outcome A - People Engagement

#### Aims:

The North Kent Woods and Downs NNR provides outstanding connections with nature.

#### Principles:

- Partners work together to provide a complete engagement journey across the NNR and organisations within the framework of awareness → experience → connection → understanding → action.
- North Kent Woods and Downs communities are proactively engaged with, within the NNR.
- The NNR will actively engage those communities that are underrepresented within the wider countryside.
- Partners will provide a wide range of activities to help encourage deep engagement in the work of the NNR and the organisations that it works with.
- The activities of partners will develop the skills of the local community to help them take part in the activities of the partners and improve the employment prospects of those that are engaged.

**5-Year Targets:**

TBC

**People Outcome B - Communication****Aim:**

The North Kent Woods and Downs NNR has a clear and well-recognised identity, whilst allowing the unique character and identity of each partner to remain.

**Principles:**

- Clear, shared messages support the identity of the North Kent Woods and Downs NNR. This will extend to a website, shared signage and promoted trails that help to develop the identity of the NNR.
- Comms and promotion will encourage the opportunity to volunteer across the NNR and opportunities to visit multiple sites and walk between them rather than visit a single site.
- Branding will be developed and used by all partners where appropriate.
- Shared communication protocols will be developed that respect each partner's identity and membership needs.

**5-Year Targets:**

TBC

**People Outcome C - Visitor Management****Aims:**

The North Kent Woods and Downs NNR provides an excellent visitor experience whilst protecting the features of the NNR.

**Principles:**

- Each area of the NNR provides a high-quality visitor experience, while protecting vulnerable areas from disturbance. This will be well-planned based on the Visitor Access Strategy and Implementation Plan.
- To create a series of routes that are advertised and branded as NNR walks that link key sites, car parks and public transport networks.
- To have a consistent common approach to dealing with impacts of visitors such as anti-social behaviour, fly tipping, dog walking and disturbance of wildlife.
- To have improved sustainable transport links to local towns and villages, through bus routes and cycleways.
- To have landscape-wide buy in to these plans from communities/ tourism/ land use/ wider statutory bodies.

**5-Year Targets:**

TBC

## People: collaborative actions

Action	Lead	By when	Priority score	Progress
<b>P1: Grazing Animals Project (GAP)</b>				
<ul style="list-style-type: none"> <li>Raising awareness of grazing animal projects and education around human/dog/grazing animal conflict</li> <li>Identify priorities for footpath and signage maintenance</li> <li>Could link with N1: collaborative grazing</li> </ul>			5	
<b>Research Links</b>				
<a href="#">Grazing strategy</a> including recommendations section from p15 onwards				
<b>P2: Network of NNR routes and trails</b>				
<ul style="list-style-type: none"> <li>Manage access appropriately maintaining tranquil areas and signposting official camping etc.</li> <li>Plan and map improvements</li> <li>Monitor visitor numbers (including using new technology)</li> <li>Monitor impact of visitors on biodiversity</li> <li>Coherent and consistent interpretation and signage</li> <li>Shared usage opportunities and circular routes linking to public transport</li> <li>Access and marketing campaign</li> </ul>	Kent County Council CP and PROW, Medway Council	Ongoing	4	
<b>Research Links</b>				
Plans C to H on pages 71 to 76 of the <a href="#">visitor access and engagement strategy</a> as well as the Visitor Access Implementation plan on p85 onwards				
<b>P3: Accessible trails for all</b>				
<ul style="list-style-type: none"> <li>Appropriate access for all paths where feasible</li> <li>Accessibility audits of major routes and upgrades</li> <li>Ensure links with and carried out at the same time as P2</li> </ul>	Kent County Council CP		4	
<b>Research Links</b>				
Plans C to H on pages 71 to 76 of the <a href="#">visitor access and engagement strategy</a> as well as the Visitor Access Implementation plan on p85 onwards. Also consult the				

[Outdoor Accessibility Guidance](#) from Paths for All and The Sensory Trust as well as work undertaken by the North Downs Way

**P4: Countryside skills hub**

- Develop centre of excellence to develop skills in:
  - Ecological skills
  - Countryside skills
  - Heritage skills
  - Apprenticeships
- Link to local colleges where appropriate and to secure funding

4

**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the community engagement implementation plan on p77 onwards

**P5: Harnessing citizen science**

- Plan and deliver suite of monitoring activities and link to P9: Collaborative volunteer programmes
- Develop training for volunteers and input from species specialists

3

**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the community engagement implementation plan on p77 onwards. Ideas for how volunteering recording can be harnessed in most of the [taxon group reports](#)

**P6: Vistas and viewpoints**

- Public engagement in identifying favourite views in the NNR
- Use Landscape Character Assessment implementation plan to guide promotion and interpretation of viewpoints

Kent Downs NL

3

**Research Links**

[Landscape Implementation Plan](#) – particularly community consultation section starting on p20

**P7: Woodland skills**

- Organise training to ensure woodland skills survive possibly as part of P4: Countryside skills hub

Kent County Council CP

3

**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the community engagement implementation plan on p77 onwards

**P8: Engagement with schools**

- Create NNR 'schools pack'
- Identify barriers to schools (e.g. pool of outdoor clothing/transport)
- Link to curriculum around countryside usage
- Funding for outreach to promote NNR within schools

Kent County Council CP

3

**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the community engagement implementation plan on p77 onwards

**P9: Collaborative volunteer programmes**

- Co-ordinated NNR wide volunteer opportunities (e.g. looking)
- Identify and create mechanism to communicate and recruit volunteers
- Set up roving volunteer group
- Volunteer co-ordinator role

3

**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the community engagement implementation plan on p77 onwards

**P10: Better byways**

- Map weak points in the Byway network where antisocial behaviour likely to occur
- Secure weak points
- Raise awareness of acceptable byway usage

Silverhand Estate

2

**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the visitor access implementation plan on p85 onwards

**P11: Apprenticeships**

- Scope potential for apprenticeships across the NNR including shared training of apprentices
- Identify routes for funding apprenticeships

2

**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the community engagement implementation plan on p77 onwards

**P12: Urban access gateways, hubs and transport**

- Identify sites for improvements/enhancements as gateways to the NNR with particular consideration for car parking
- Map opportunities for enhanced connectivity to transport hubs and urban areas
- Consider new greenspace, open areas which are part of potential mitigation for other development (SANGS) and how they could best fit with the NNR
- Links to Cyclopark and new Gravesham Borough Council site near Ifield
- New visitor hub

Kent County Council CP, Medway Council, Gravesham Borough Council, Plantlife

2

**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the visitor access implementation plan on p85 onwards

**P13: Integrated interpretation**

- Tailored approach for different sites that provides cohesion for NNR message while respecting the current brands
- Community participation in interpretation

Kent County Council CP

2

**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the visitor access implementation plan on p85 onwards

**P14: Breaking down barriers**

- Identify barriers to access for the NNR (experts/consultations) though some already identified in Visitor Access and Community Consultation reports in annexes
- Implement findings

2

**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the community engagement implementation plan on p77 onwards

**P15: The youth voice**

2

- Set up NNR Youth Forum
- Implement actions recommended by forum and provide opportunities to get involved
- Ensure forum has a voice in governance of the NNR

**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the community engagement implementation plan on p77 onwards

**P16: Learning and engagement lead post**

- Expand on Plantlife plan to develop post at Ranscombe Farm and make the initiative NNR wide

Plantlife

1

**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the community engagement implementation plan on p77 onwards

**P17: Harnessing multiple media**

- Use wide range of media from Countryfile to TikTok and Instagram to promote the NNR
- Recruit someone to lead this work and fund the post

1

**Research Links**

No specific links in strategies to this action

**P18: Health and wellbeing projects**

- Commission report to look at potential NNR initiatives to align with the health agenda
- Be more active in engaging with green prescribing

Natural England,  
NHS, local  
authorities

1

**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the community engagement implementation plan on p77 onwards

**P19: Forest school development**

- Explore opportunities to expand Forest School initiatives
- Designate drop off points to broaden access of Forest Schools to more than just nearby villages

Plantlife, Birling  
Estate

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**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the community engagement implementation plan on p77 onwards

**P20: Engagement events calendar**

- Develop year-round calendar of events across the landscape
- Include wider partnership events
- Canvas target audiences to identify need for events

Kent Downs NL

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**Research Links**

Information in the [visitor access and engagement strategy](#) and in particular the community engagement implementation plan on p77 onwards

**P21: NNR in 3D**

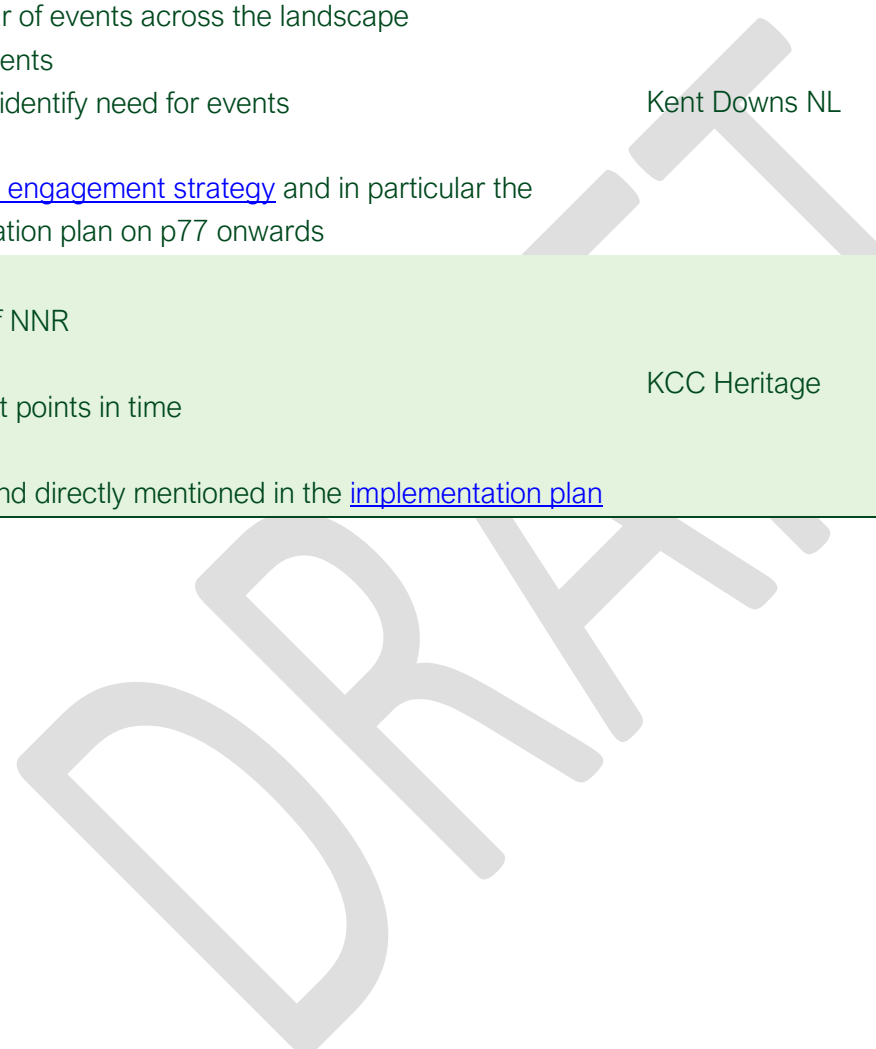
- Extensive LIDAR Mapping of NNR
- Develop fly through of NNR
- Allow fly throughs at different points in time

KCC Heritage

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**Research Links**

Alluded to in the [heritage strategy](#) and directly mentioned in the [implementation plan](#)



## 4 Resourcing

### Introduction

The NNR managers have been working in partnership across the North Kent Woods and Downs NNR in some capacity for over 20 years. The establishment of nature conservation organisations after the break up of the Darnley Estate has led to several projects where current partners have worked together. Examples include the Cobham and Ashenbank Management Scheme, which had a huge impact on restoring the landscape from the neglect it had been suffering. However, these projects had significant amounts of funding attached to them and once the projects ended, the level of partnership work reduced.

The success of partnership work within the NNR will be dependent upon several factors, some of which will rely upon resources being both applied for or provided by partners

### Co-ordination of NNR activities

The Kent Downs National Landscape have provided much of the co-ordination staff time during the development phase of the NNR, with incredible support from officers of partner organisations.

Kent Downs National Landscape has committed to support the NNR after declaration and will lead on some funding applications to help support NNR

activities and provide guidance or partners to do the same. In the long term, the partnership will need to decide how the NNR co-ordination is financed and supported, building on and making best use of the exceptional skills within the partner organisations but without overstretching existing operational delivery staff.

### Funding for activities, actions and staffing

Many of the prioritised actions identified in section 3 of this plan will require external funding. Four sources of funding are being investigated for 2025-26 and beyond and these are:

- National Lottery Heritage Fund's Landscape Connections. The NR is well placed to benefit from a bid supported by the Kent Downs National Landscape
- Compensation funding from the lower Thames Crossing. Permission has been granted for the crossing that will trigger payments, although the timescale and value of these payments have not been finalised
- Farming in Protected Landscapes (capital funding in 2025-26)
- Access and innovative research funding through the Kent Downs National Landscape

Other joint fundraising initiatives in the future could include:

- Combined ELMS applications
- Grant and trust funding
- Visitor management/ zoning (SANGS type funding)
- Nutrient mitigation funding
- Carbon sequestration funding
- Biodiversity Net Gain funding
- Engagement with local industry

### Collaborative actions that can be at least partially self-funded

Whilst external funding can assist with some of the capital works and activities, sustainable, collaborative change can also be achieved by changing the way that organisations work and collaborate. By sharing the resources already spent on delivering activities and actions, more effective, unified and collaborative actions can be achieved. This will require a shift in organisational thinking for many but the NNR development process has shown that these shifts can happen.

The main areas for consideration are:

Site management resourcing, for example:  
Staffing:

Shared visitor experience staff  
Shared site management staff  
Task force approach  
Shared volunteer teams  
Joint training and development  
Shared equipment  
Common recording and mapping software and initiatives, joint data agreements for example with Kent and Medway Biological Records Centre.

Operational income generation, for example:

Wildlife tourism  
Events programmes  
Schools' programmes  
Wood products generated from woodland management

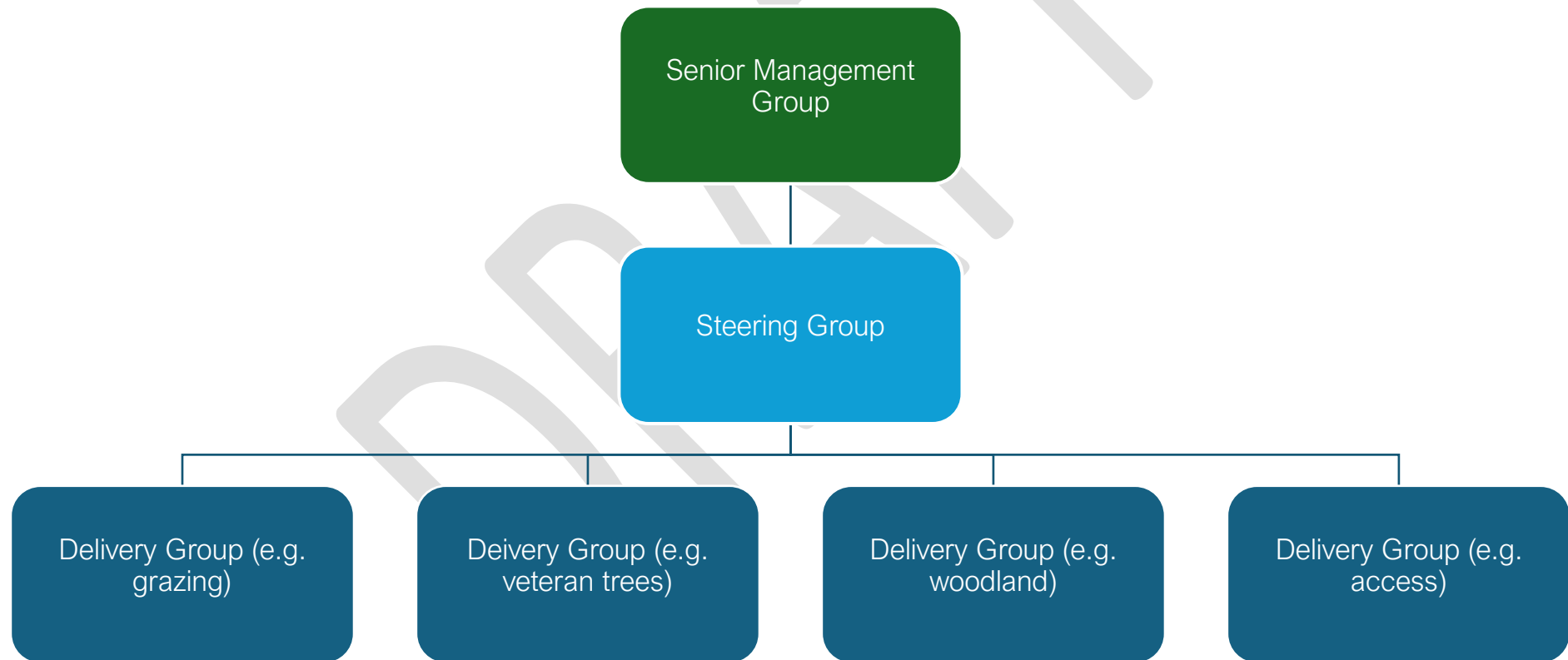
### Costings

The strategies and implementation plans have costed plans for many of the actions identified in this Management Framework. These plans can be found in the annexes to this report.



## 5 Governance

### North Kent Woods and Downs NNR management structure overview



N.B. Delivery groups just examples – (to be decided by the steering group)

## What are the different groups?

The proposed management structure of the North Kent Woods and Downs NNR aims to provide support for all aspects of the development and delivery of the NNR. Advice has been sought from others who manage partnership based NNRs and the proposed structure reflects best practice and, we hope provides a fit with our local circumstances. The proposed structure seeks to ensure that there is an appropriate level of senior management support and understanding of the work of the NNR whilst allowing those involved in the operational management of sites to make decisions about the work of the NNR on the ground.

### Senior Management Group

#### Purpose

A group that meets occasionally (suggested twice a year) and usually online. The primary purpose of this group is to provide oversight, policy links, and direct resources rather than take decisions about what happens on the ground or the day to day running of the NNR as a whole or individual sites.

This enables senior management to keep up to date on the work of the NNR and provide oversight of the Management Framework. It can also seek strategic influence and resources in support of the NNR and guide where investment is required either through external funding or by redeployment of existing resources.

#### Membership

Each of the Steering Group member organisations nominates one person to be on the senior management group – it is expected that these will be senior within the organisation (e.g. Area or Regional Director)

#### Role requirements

This person should be in a position to have a strategic overview of their organisation in the region and be able to take decisions that guide this strategy.

#### Management arrangements

The NNR coordination organisation (currently the Kent Downs National Landscape) will arrange meeting dates and times as well as work with the members of the Steering Group and Senior Management Group to arrange agendas.

It is suggested that Senior Management Group Members will liaise with their Steering Group colleagues in preparation for a meeting and Steering Group members will be welcome to join Management Group meetings to provide necessary details to assist the discussion and decision making.

## Steering Group

#### Purpose

A group that meets at least quarterly and has responsibility for site and NNR collaborative management decisions within the NNR. This group makes decisions about:

- Appointing affiliate partners
- Developing, reviewing and implementing the Management Framework
- Priorities for work programmes

Although it is anticipated that most decisions will be made by a consensus opinion, this group can also vote on decisions if needed.

#### Membership

Each partner (core and affiliate) to provide one voting member to the Steering Group. Natural England (declaring body) and Kent Downs National Landscape (co-ordinating body) will also have voting rights. Additional non-voting members can be invited to steering group members as required.

#### Role requirements

This person should be senior enough to take decisions at a site level and have regular communication with the member of the senior management group so that consent for bigger decisions can be gained easily if needed.

### Management arrangements

The NNR coordination organisation (currently the Kent Downs National Landscape) will arrange meeting dates and times as well as work with the members of the Steering Group to arrange agendas.

## Delivery Groups

### Purpose

A group that works on the ground to deliver cross-partnership work as guided by the Management Framework, Management and Steering Group. These groups may be task and finish groups or ongoing as deemed necessary by the steering group. Their work will be directed by the steering group and the groups will seek clarification from the steering group where needed. The groups should meet as often is necessary to effectively deliver their work programmes and will report to Steering Group meetings.

### Membership

These groups will be agreed by the Steering Group and may well include Steering Group members or whoever else is involved in the delivery of the work area and can include core/affiliate personnel, guest organisations, contractors as necessary.

### Role requirements

The members of these groups should be responsible for the implementation of elements of

the NNR Management Framework and any additional projects outside the Management Framework that may have arisen as agreed by the Steering Group.

### Management arrangements

Each working group will be self organising but will provide update reports to the Steering Group.



## 6 List of annexes to the Management Framework

Throughout 2024, a series of strategies and implementation plans were created that underpin the actions that have been proposed by partners. These are listed here and can be provided by the North Kent Woods and Downs through the website: <https://nkwdnr.org.uk/>

Annex 1a - North Kent Woods and Downs NNR Landscape Character Assessment May 2024

Annex 1b - North Kent Woods and Downs NNR Landscape Implementation Plan

Annex 2 - North Kent Woods and Downs NNR Veteran Tree Strategy and Implementation Plan

Annex 3a - North Kent Woods and Downs NNR Heritage Strategy

Annex 3b - North Kent Woods and Downs NNR Heritage Strategy Implementation Plan

Annex 3c - North Kent Woods and Downs NNR Heritage Strategy - Theme 1 - Landscape and Environment

Annex 3d - North Kent Woods and Downs NNR Heritage Strategy - Theme 6 – Industry

Annex 3e - North Kent Woods and Downs NNR Heritage Strategy - Theme 9 - Military and Defence

Annex 3f - North Kent Woods and Downs NNR Heritage Strategy - Theme 10 - Public Heritage Audit

Annex 4 - North Kent Woods and Downs NNR Visitor Access and Community Engagement Strategy and Implementation Plans

Annex 5 - North Kent Woods and Downs NNR Grazing Strategy and Implementation Plan - Jan 2025

Annex 6 - North Kent Woods and Downs NNR Deer Strategy and Management Plan

Annex 7a - North Kent Woods and Downs NNR Environmental and Ecological Strategy and Implementation Plan

Annex 7b - Araneae Diptera and Odonata assessment of the North Kent Woods and Downs NNR

- Annex 7c - Bat assessment of the North Kent Woods and Downs NNR
- Annex 7d - Bird assessment of the North Kent Woods and Downs NNR
- Annex 7e - Botanical and Habitat assessment of the North Kent Woods and Downs NNR
- Annex 7f - Bryophyte assessment of the North Kent Woods and Downs NNR
- Annex 7g - Coleoptera assessment of the North Kent Woods and Downs NNR
- Annex 7h - Fungal assessment of the North Kent Woods and Downs NNR
- Annex 7i - Herpetological assessment of the North Kent Woods and Downs NNR
- Annex 7j - Lepidoptera assessment of the North Kent Woods and Downs NNR
- Annex 7k - Lichen assessment of the North Kent Woods and Downs NNR
- Annex 7l - Mammal assessment of the North Kent Woods and Downs NNR
- Annex 7m - Orthoptera, Mollusc, Bug, Aculeates assessment of the North Kent Woods and Downs NNR
- Annex 7n - Saproxyllic Invertebrates assessment of the North Kent Woods and Downs NNR
  
- Annex 8 - North Kent Woods and Downs NNR Community Consultation —Summary Report