

Burghclere Green Infrastructure and Nature Recovery Report December 2022



# Contents

1. The purpose of this Report	
-------------------------------	--

- 2. What is Green Infrastructure and Nature Recovery? 4
- 3. Planning Policy and Biodiversity Net Gain 5
- 4. Burghclere Biodiversity Assets 6
- 5. Identifying the Network Enhancement Opportunities 7
- 6. Mapping the 'Ecological Network' 8
- 7. Using the 'Ecological Network' Map to inform decision making 9
- 8. References

Appendix A - HBIC Maps



All photographs © Richard Carrow

Adbury Field Oak

## 1. The Purpose of this Report

This report sets out how by working together; developers, landowners, Parish and Borough Councils, and the Hampshire Local Nature Partnership, can plan positively for nature and the natural services nature provides within and surrounding the protected landscape of Burghclere. This is in recognition that nature, and the provision of natural ecosystem services do not follow administrative boundaries.

The natural services we get from nature such as clean air, clean water, healthy soils, pollination, biodiversity, food and recreation are vital to our survival. Many land use decisions and policies have an impact on the natural provision of these services and this is being increasingly taken into account in decision making.

Despite nature's essential value, ensuring that these natural systems can function and have the capacity needed is increasingly being re-evaluated. The government's 25 year Environment Plan published in 2018 sets out how the use of natural capital accounting will be used as a gold standard decision making tool in the UK in the future.

Healthy ecosystem services are described in the Plan as essential to sound economic growth and productivity, whilst green infrastructure is seen as a key delivery mechanism for issues such as flood mitigation; improving health and well being and air quality, reducing the impacts of climate change, extending habitat networks and providing space for nature.

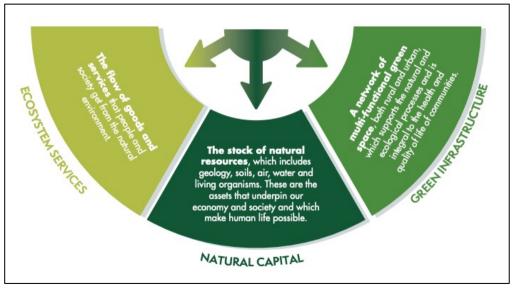
The outcome of the research undertaken for the Burghclere Parish Neighbourhood Plan Modification is the Green Infrastructure and Nature Recovery Map that underpins the modified Policy B10.

This report also responds to the parish council's biodiversity duty under Section 40 of the Natural Environment and Rural Communities Act 2006.

This research could not have been completed without the expert advice and support of the Hampshire Biodiversity Information Centre.



View over the disused railway line from Brenda Parker Way



Relationship between Natural Capital, Ecosystem Services and Green Infrastructure. (Source: SDNPA)

## 2. What is a Green Infrastructure and Nature Recovery?

**Green infrastructure** is a network of multi-functional green space and other green features, urban and rural, which can deliver quality of life and environmental benefits for communities.

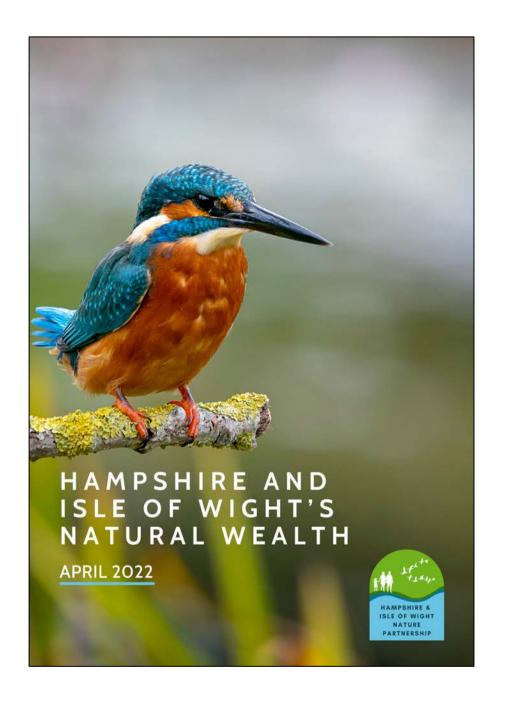
Green infrastructure is not simply an alternative description for conventional open space. It includes parks, open spaces, playing fields, woodlands – and also street trees, allotments, private gardens, green roofs and walls, sustainable drainage systems (SuDS) and soils. It includes rivers, streams, canals and other water bodies, sometimes called 'blue infrastructure'.

Green infrastructure is a key delivery mechanism for issues such as flood mitigation; improving health and well being and air quality, reducing the impacts of climate change, extending habitat networks and providing space for nature to thrive.

**Nature Recovery** means leaving nature in a better state than we found it and is typically achieved by:

- Restoring protected sites to favourable condition.
- Creating or restoring habitats outside of protected sites the "stepping stone" habitats.
- Supporting the recovery of species.
- Increasing woodland cover in appropriate locations.

All of the above are the ingredients which contribute towards a Green Infrastructure and Nature Recovery Network, of which the network defined for Burghclere parish will form a small part of what eventually will become a national network of connected wildlife-rich places to address the 'climate and ecological emergency' including the declaration by Basingstoke and Deane Borough Council.



## 3. Planning Policy and Biodiversity Net Gain

Since the first neighbourhood plan was prepared, both legislation and national planning policy have evolved with an ever increasing focus on the importance of nature recovery driven, in part, by the 'ecological emergency' we face and the need to make more space for nature to reverse species decline.

This principle was described by Professor Sir John Lawton in his 2010 report 'Making Space for Nature' (Ref 1) which informed the then Environment White Paper and the subsequent 25 Year Environment Plan published by Government in 2018.

The Environment Act 2021 includes a requirement for Local Nature Recovery Strategies - to be prepared by Hampshire County Council in conjunction with existing Hampshire and Isle of Wight Nature Partnership. The Act established the requirement for mandatory biodiversity net gain (BNG), currently proposed to become law in late 2023.

The Act includes the following key components:

- A minimum 10% gain required calculated using a Biodiversity Metric and approval of a 'net gain' plan
- Habitat secured for at least 30 years via planning obligations/ conservation covenants
- While Habitat can be delivered on-site, off-site or via statutory biodiversity credits, the mitigation hierarchy still applies of avoidance, mitigation and compensation for biodiversity loss (see mitigation hierarchy to the right)
- · Does not change existing legal environmental and wildlife protections

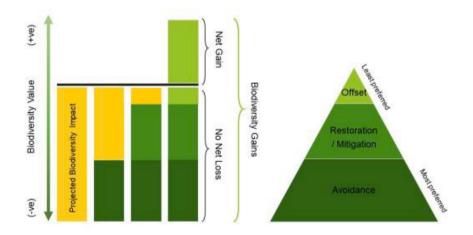
The requirement is that developers ensure habitats for wildlife are enhanced and left in a measurably better state than they were predevelopment. They must assess the type of habitat and its condition before submitting plans, and then demonstrate how they are improving biodiversity - such as through the creation of green corridors, planting more trees, or forming local nature spaces.

In addition, the National Planning Policy Framework (Paragraph 179) states that to protect and enhance biodiversity and geodiversity, plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats.....
- b) Promote the conservation and enhancement of priority habitats, ecological networks and the protection and recovery of priority species....

Similarly, Local Plan Policy EM4 and EM5 seek to protect and enhance biodiversity and green infrastructure assets.

Basingstoke and Deane Borough Council (BDBC) have anticipated this requirement through the preparation of 'Interim Guidance on Biodiversity Net Gain' to ensure that each development will make provision for biodiversity improvements onsite. Off-site measures will only be required where 10% on-site BNG cannot be delivered. In such cases, the location of off-site BNG within strategic areas to 'meet wider nature recovery objectives' is encouraged.



Mitigation hierarchy of biodiversity value (Source: BDBC Biodiversity Net gain Interim Guidance for Development.

## 4. Burghclere Biodiversity Assets

Burghclere Parish is a rich area for wildlife and contains a range of highquality natural environment assets that are greatly valued by the local community and visitors.

The western edge and south of the parish lies within the North Wessex Downs Area of Outstanding Natural Beauty (AONB) with extensive views to Ladle Hill and Beacon Hill to the south and south-east. To the north is flatter terrain, commons and fragmented parcels of ancient woodland. The northern boundary runs along the River Enborne into which a number of streams and watercourses flow.

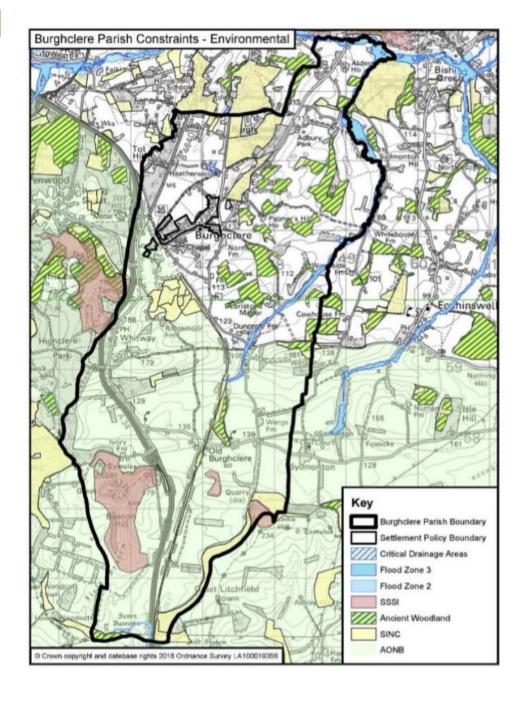
The parish contains 4 Sites of Special Scientific Interest (SSSI):

- Duncroft Farm Pit (geological SSSI)
- · Burghclere Beacon (more commonly known as Beacon Hill)
- Old Burghclere Lime Quarry (geological SSSI)
- Ladle Hill

The parish also contains 56 Sites of Importance for Nature Conservation (SINCS) and numerous priority habitats and woodlands.

The entire parish area is covered by biodiversity opportunity areas





## 5. Identifying the Network Enhancement Opportunities

Many habitats in England are now far more fragmented than they were 50 years ago, with patches smaller and more isolated. Fragmentation is a significant cause of species decline. Lawton's independent review of England's wildlife sites and ecological networks, concluded unequivocally that England's collection of wildlife areas does not represent a coherent and resilient ecological network capable of responding to the challenges of climate change and other pressures.

On average, well-managed, semi-natural habitats that are in good ecological condition need to cover at least 30% of the landscape to provide an ecologically coherent and functioning network. (Ref 2 @ Appendix 3)

The parish is fortunate in having a number of designated areas; the North Wessex Downs Area of Outstanding Natural Beauty, Ancient Woodlands, Sites of Special Scientific Interest (SSSI), an extensive network of Sites of Importance for Nature Conservation (SINC), commons, copses and amenity greenspaces. The parish also contains a number of streams and brooks that flow north to the Enborne river.

#### **Ecological Network Mapping**

The Hampshire Biodiversity Information Centre (HBIC) have supplied a series of maps of the parish (see Appendix A) to enable the the Burghclere Green Infrastructure and Nature Recovery Network map to be prepared. The network is hierarchical and based on the following:

- Biodiversity Opportunity Areas (BOAs) the Strategic Network
- Core Statutory Sites
- Core Non-statutory Sites
- Network Opportunity Areas

These form key components of the 'local habitat map' and nature network design which 'responsible authorities' will create countywide to fulfil their duty to prepare 'Local Nature Recovery Strategies' under the Environment Act subsection (1) (b).

#### **Biodiversity Opportunity Areas**

Burghclere is also fortunate in having two Biodiversity Opportunity Areas (BOA) which cover the entire parish.

#### Northern Escarpment: West Woodhay to Watership Down BOA 03

'The steep north facing chalk scarp extending from West Woodhay SSSI on the western county border to Watership Down SINC and White Hill/Stubbington Down SINC in the east. The area supports many relic areas of unimproved calcareous grassland, in particular Burghclere Beacon SSSI and Ladle Hill SSSI and numerous downland SINCs, some of which once formed part of the once more extensive Cannon Heath Down, Great Litchfield Down and Upper Woodcott Down. The area is important for birds including stone curlew and lapwing'.

#### East Woodhay to Headley - BOA 07

'This area derives from the old Forest of Freemantle which originally formed a complex belt of forest lying across the north of the County, and may once have been part of the Great Forest of Windsor. It extends almost to the chalk escarpment where there are a number of medieval deer parks. The area contains a complex series of ancient commons which would once have been covered by heathland and acid grassland with a scatter of small woods. The BOA includes Highclere Park SSSI and an exceptionally high concentration and ancient woodland and unimproved grassland SINCs.'

Source: Hampshire BOA Statements (HBIC)

## 6. Mapping the Ecological Network

#### Core Areas

These comprise statutory designated sites include: Sites of Special Scientific Interest Local Nature Reserves

#### **Stepping Stones**

These comprise non-statutory sites and may include: Sites of Importance for Nature Conservation, Priority Habitats and Woodland

Within towns and villages they also include amenity greenspace, parks and gardens, playing fields, cemeteries and allotments.

#### **Network Opportunity Areas**

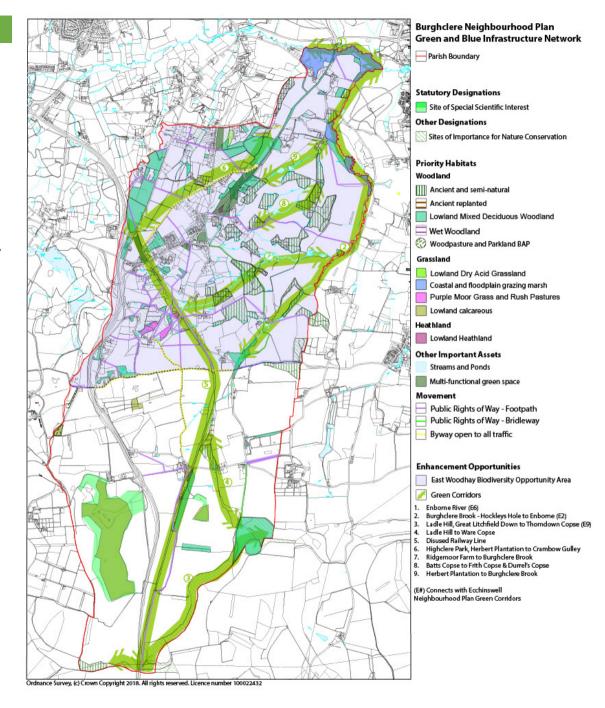
These may be areas of woodland, neutral or calcareous grassland and other linear features such as hedgerows and watercourses which also offer network opportunities.

The Report by HBIC on Mapping the Hampshire Ecological Network (Ref 4) states:

"The Ecological Network Map should not be viewed as a barrier to development; instead it can be used to guide the location, layout and design of development to enable habitat and species mitigation, restoration and re-creation to inform green infrastructure and achieve biodiversity net gain."

The report also confirms that the 'Network Opportunities' component of the HBIC mapping (in the Appendix) can also be used to inform planning proposals in order to:

- promote the restoration and re-creation of priority habitats including increasing the size of existing wildlife sites,
- enhance connections between sites, either through physical corridors or through 'stepping-stones'
- enable the recovery and enhancement of priority species populations



## 7. Using the Ecological Network Map to inform decision making

#### 'Network Enhancement Opportunities'

With regard to the Core statutory and Core non-statutory mapping the usual distinctions should be made between the hierarchy of international, national and locally designated sites, so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to the ecological network as set out in Para 175 of the NPPF.

In the case of Burghclere, the 'Network Opportunities' component of the HBIC mapping has been used as the basis to identify the enhancement opportunities and the nine 'Green Corridors'. In the main, the corridors follow existing linear features such as the watercourses and the disused railway line, which in turn connect core areas, SINC's and areas of priority habitat (i.e. corridors 1, 2, 5, and 6). Other corridors define connections between SINC's and other important landscape features (corridors 3 and 4), while the remaining corridors (7, 8 and 9) were additionally identified by HBIC as opportunities to re-connect the fragmented Ancient Woodland south of Adbury Park. The corridors were validated by HBIC and reflect their evidence base (Ref 4 - Mapping the Hampshire Ecological Network, March 2020).

The network enhancement opportunities and 'green corridors' should not be misinterpreted as either land allocations or having precise boundaries. Buffering of statutory/non-statutory sites and priority habitat is not included in the network mapping on the basis that any planning proposal would need to consider measures to mitigate impacts on biodiversity on a case by case basis, depending on type and size of development, the designation status, the habitat type, and the presence of notable species in the area.

The approach to the Green and Blue Infrastructure Network map adopts the similar schematic approach taken by the Cambridgeshire Wildlife Trust and partners in defining the Cambridge Nature Network Area Map a Government Nature Recovery Pilot. (Ref. 6)

#### **Decision Making**

It is expected that for a planning proposal in proximity to the network applicants will, as a starting point, apply the principals and 'ecological rules of thumb' described by Natural England in their Nature Network Evidence Handbook (Ref. 2)

The expectation is that developers ensure habitats for wildlife are enhanced and left in a measurably better state than they were predevelopment. They must assess the type of habitat and its condition before submitting plans, and then demonstrate how they are improving biodiversity - such as through the support and enhancement of the green corridors, planting more trees or, or forming local nature spaces.



Foxgloves in the Herbert Plantation

## 8. Reference Documents

1. Making Space for Nature. Professor Sir John Lawton (2010)

https://webarchive.nationalarchives.gov.uk/ukgwa/20130402170324mp /http:/archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf

2. Nature Networks Evidence Handbook (NERR081 Crick et al 2020)

http://publications.naturalengland.org.uk/publication/5144804831002624

3. Hampshire and Isle of Wight's Natural Wealth Report (2022)

https://hantswightlnp.wordpress.com/projects/

4. Mapping the Hampshire Ecological Network (HBIC March 2020)

https://documents.hants.gov.uk/biodiversity/MappingtheHampshireEcologicalNetworkFinalReport.pdf

5. Nature Recovery Network Handbook (WWT, 2020)

https://www.wildlifetrusts.org/sites/default/files/2020-10/Nature Recovery Network Handbook LO SINGLES.pdf

6. Cambridge Nature Network Area Map (2021)

https://cambridgenaturenetwork.org/

7. Basingstoke and Deane Living Landscapes (2014)

https://www.basingstoke.gov.uk/content/page/48902/Living%20landscapes%20strategy.pd

8. Basingstoke and Deane Green Infrastructure Strategy (2018 – 2019)

https://www.basingstoke.gov.uk/content/page/50939/Final%20GI%20Strategy%20approved%20131118.pdf

9. Basingstoke and Deane Landscape, Biodiversity and Trees SPD (2018)

https://www.basingstoke.gov.uk/content/page/59292/Landscape,%20Biodiversity%20and%20Trees%20SPD.pdf

10. Basingstoke and Deane Landscape Character Assessment (2021)

https://www.basingstoke.gov.uk/content/doclib/3246.pdf

11. Basingstoke and Deane Interim Guidance on Biodiversity Net Gain (2021)

https://www.basingstoke.gov.uk/ENV07#:~:text=Biodiversity%20Net%20Gain%20%2D%20Interim%20Guidance,10%25%20net%20gain%20for%20biodiversity

12. HBIC Monitoring Change in Priority Habits, Species and Designated Areas (2021)

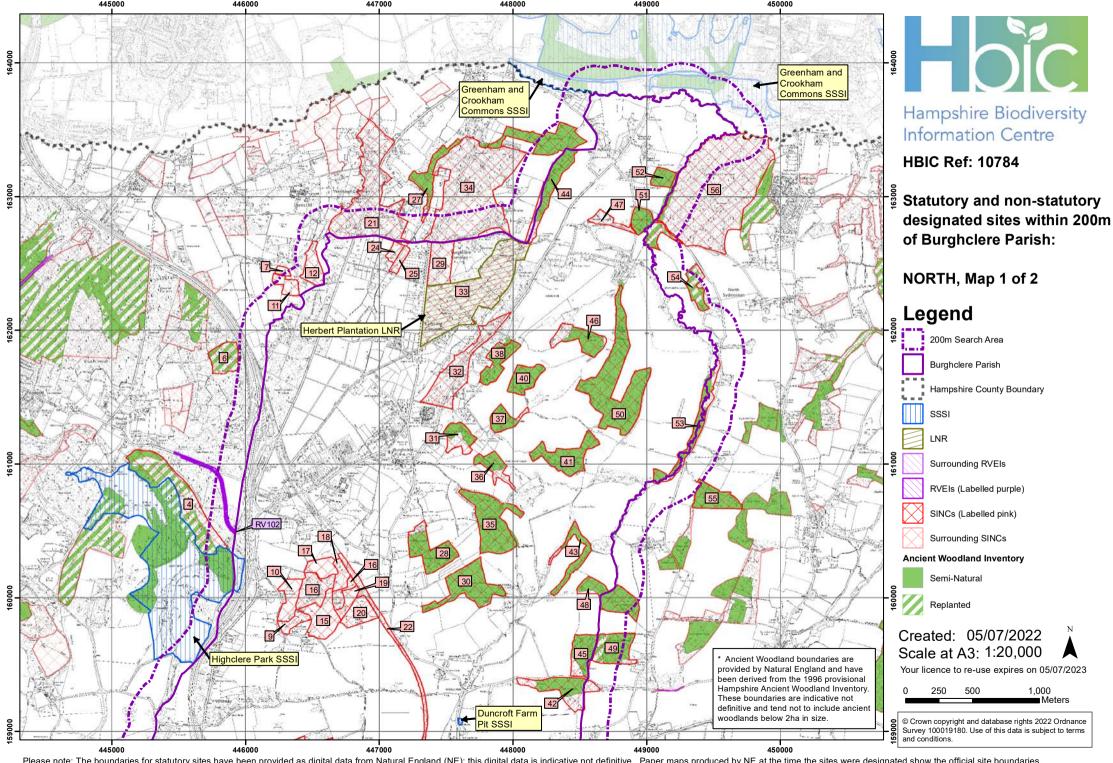
 $\underline{https://documents.hants.gov.uk/biodiversity/HBICAnnualBiodiversityMonitoringReport2020-2021.pdf}$ 

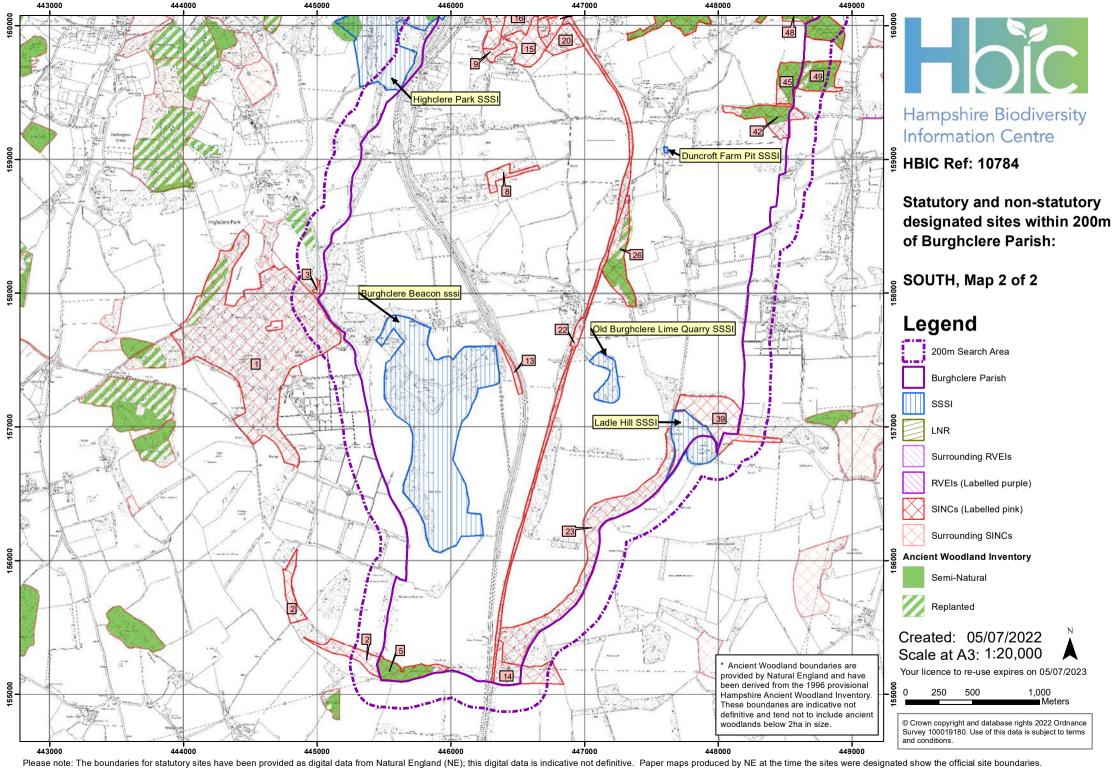
# Appendix A

# Hampshire Biodiversity Information Centre Maps



View of Ladle Hill from West Street





## Hampshire Biodiversity Information Centre

## Details of Sites of Importance for Nature Conservation (SINCs) within the search area:

Map Label	Status	SINC Ref	SINC Name	Central Grid Ref.	SINC Criteria	Species supported that meet Section 6 of SINC Selection Criteria	Area (ha)
1	SINC	BD0113	Sidown Hill Wood & Grasslands	SU44705780	1B/1D/2D*		0.65
2	SINC	BD0119	Highclere Bank	SU44805580	2A/6A	Neotinea ustulata	0.27
3	SINC	BD0122	Great Wilderness (remnant grassland)	SU45005803	2B		0.03
4	SINC	BD0134	Highclere Park Woods North	SU45506080	1A/1B/2B/5B		0.25
5	SINC	BD0138	Thorndown Copse	SU45605520	1A/1B/6A	Cephalanthera damasonium	0.13
6	SINC	BD0143	Balls Copse	SU45806180	1B		0.08
7	SINC	BD0152	Glebe Place Meadow	SU46286243	2A/5B		0.03
8	SINC	BD0154	Windbolts Hill	SU46305890	2D*		0.12
9	SINC	BD0155	Ridgemoor Farm Field D	SU46305980	2B/5B		0.07
10	SINC	BD0156	Ridgemoor Farm Field C	SU46306000	2B		0.11
11	SINC	BD0157	Fordfields Meadows	SU46306235	2B/5B		0.07
12	SINC	BD0158	Deadmoor Lane Meadow, Newtown Common	SU46406240	2A		0.09
13	SINC	BD0160	A34 Roadside South of Beacon Hill Car Park	SU46455750	2D*		0.09
14	SINC	BD0162	Great Litchfield Down South	SU46505520	2A		0.16
15	SINC	BD0164	Ridgemoor Farm Field E	SU46605980	2A/2B		0.13
16	SINC	BD0165	The Alders & Goslings Copse	SU46606010	1A/1Cii		0.19
17	SINC	BD0166	Ridgemoor Farm Field B	SU46606020	2B		0.07
18	SINC	BD0169	Ridgemoor Farm Field A	SU46706020	2A		0.07
19	SINC	BD0172	Ridgemoor Farm Field F	SU46806000	2A		0.07
20	SINC	BD0174	Ridgemoor Farm Field G	SU46905990	2A/6A	Carex pulicaris	0.08
21	SINC	BD0175	Newtown Common (West)	SU46906300	1D/3A/3Bi/6A	Satyrium w-album, Anarta myrtilli	0.34
22	SINC	BD0177	Disused Railway Line, Burghclere	SU47005680	2A		1.14
23	SINC	BD0178	Great Litchfield Down	SU47105620	2A		0.50

Sharing information about Hampshire's wildlife

The Hampshire Biodiversity Information Centre Partnership includes local authorities, government agencies, wildlife charities and species recording groups



## Hampshire Biodiversity Information Centre

Map Label	Status	SINC Ref	SINC Name	Central Grid Ref.	SINC Criteria	Species supported that meet Section 6 of SINC Selection Criteria	Area (ha)
24	SINC	BD0179	Sheepwash Farm Meadow 1	SU47106260	2B/5B		0.05
25	SINC	BD0180	Sheepwash Farm Meadow 2	SU47146250	2B		0.05
26	SINC	BD0181	Ware Copse	SU47305840	1A/1B		0.19
27	SINC	BD0182	Newtown Grange	SU47306310	1A/1Cii/1D/6A	Viola palustris, Equisetum sylvaticum	0.18
28	SINC	BD0184	Hastridge & Windbolts Gasson Copses	SU47406030	1B/1Cii		0.14
29	SINC	BD0187	Burghclere Common	SU47506250	3A/3Bi		0.10
30	SINC	BD0188	Great Gasson Copse	SU47606020	1A		0.19
31	SINC	BD0189	Gardenground Copse	SU47606120	1A/1Cii		0.09
32	SINC	BD0186	Earlstone Common	SU47606170	1D/3A/3Bi		0.23
33	SINC	BD0190	Herbert Plantation	SU47606220	1A/1B/1Cii/6A	Limenitis camilla, Apatura iris, Argynnis paphia	0.28
34	SINC	BD0192	Newtown Common (East)	SU47706300	1D/3A/3Bi/6A	Hydnellum concrescens, Metrioptera brachyptera	0.34
35	SINC	BD0193	Clay Copse & Woodground Copse	SU47806060	1A		0.19
36	SINC	BD0196	Batts Lower Copse	SU47906100	1A/1Cii		0.11
37	SINC	BD0197	Batts Copse	SU47906130	1A/1Cii		0.09
38	SINC	BD0198	Gravel Copse	SU47906170	1A/1Cii		0.12
39	SINC	BD0199	Ladle Hill Grasslands	SU48005700	2A/2B		0.22
40	SINC	BD0200	Doveys Copse	SU48106170	1A		0.09
41	SINC	BD0204	Badmore Copse	SU48306110	1A/1Cii		0.16
42	SINC	BD0207	Caveley Copse	SU48405930	1A		0.16
43	SINC	BD0208	Longmeadow Row	SU48406050	1A/1Cii		0.20
44	SINC	BD0209	Arbuthnot Wood & Crambow Gully	SU48406340	1A/1Cii		0.36
45	SINC	BD0210	Hobb's Copse, Burghclere	SU48505950	1A		0.10
46	SINC	BD0211	High Wood, Burghclere	SU48506200	1A/1Cii		0.12

Sharing information about Hampshire's wildlife

The Hampshire Biodiversity Information Centre Partnership includes local authorities, government agencies, wildlife charities and species recording groups

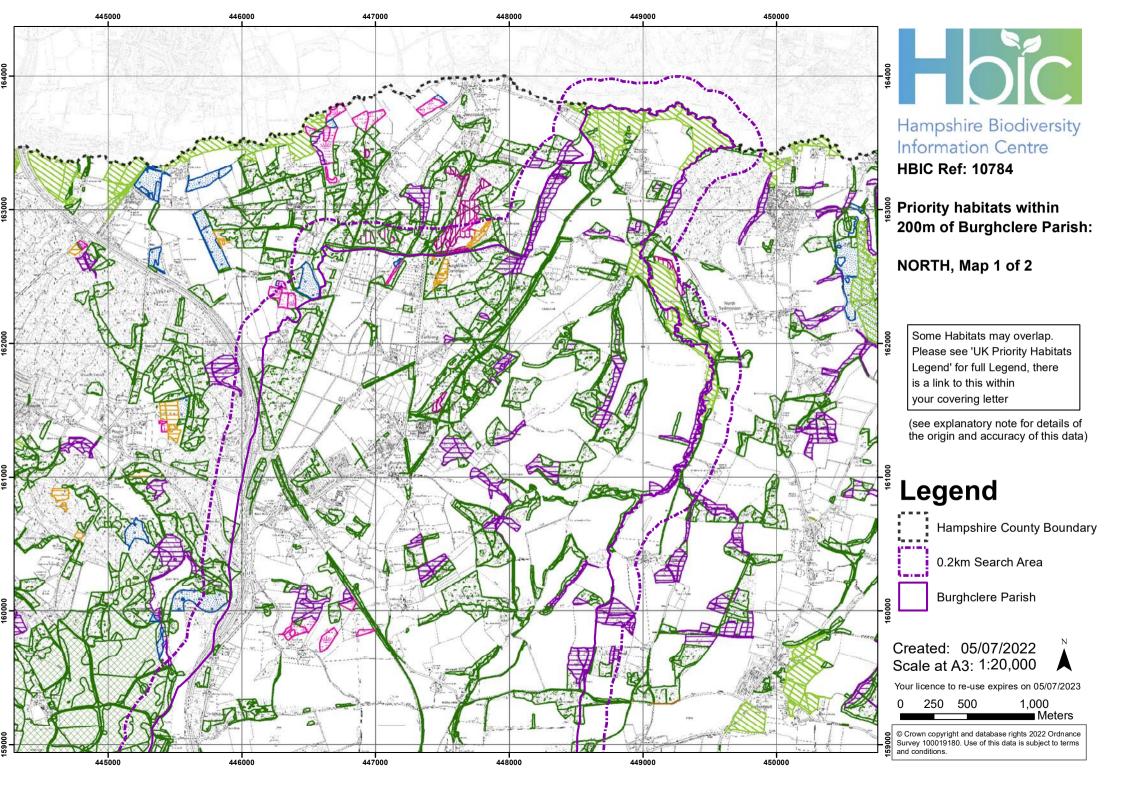


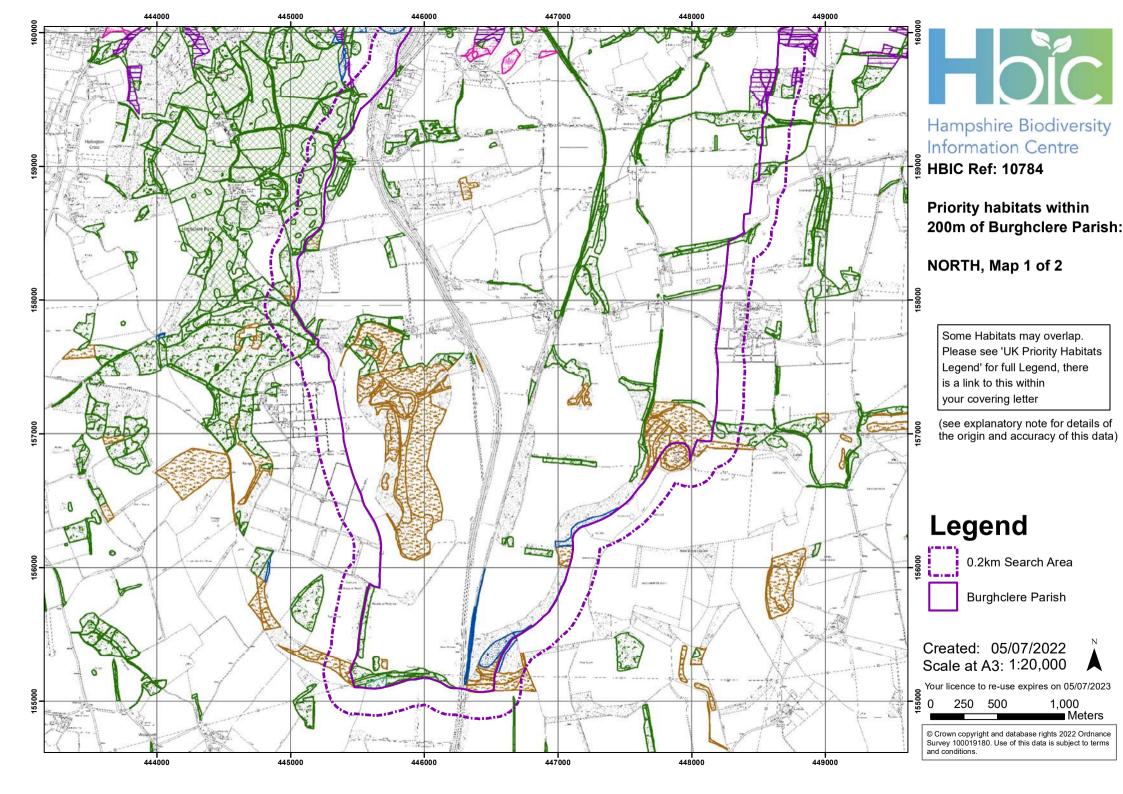
## Hampshire Biodiversity Information Centre

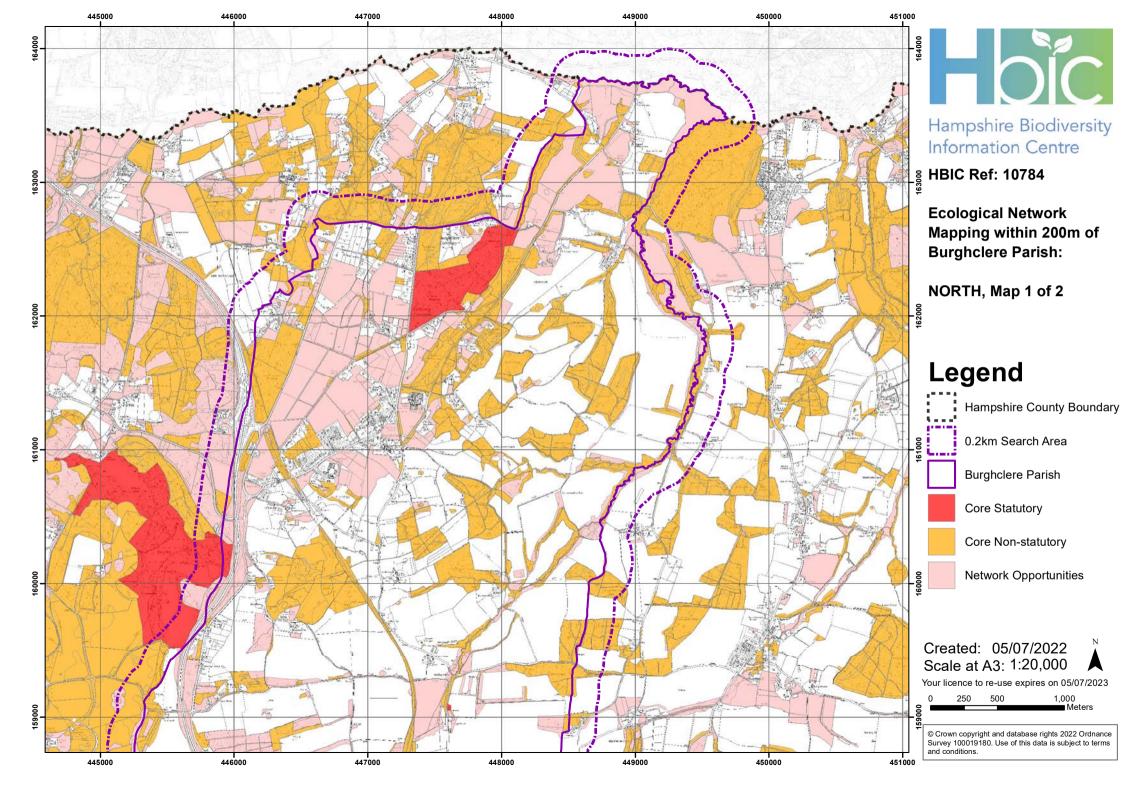
Map Label	Status	SINC Ref	SINC Name	Central Grid Ref.	SINC Criteria	Species supported that meet Section 6 of SINC Selection Criteria	Area (ha)
47	SINC	BD0212	Rosemoor Copse	SU48606280	1A/1Cii		0.09
48	SINC	BD0214	Lower Berry Copse	SU48706000	1A/1Cii		0.14
49	SINC	BD0217	Upper Berry Wood	SU48805960	1A/1B		0.11
50	SINC	BD0218	Frith Copse & Durrel's Copse	SU48806170	1A/1Cii		0.36
51	SINC	BD0219	Burntcroft Copse	SU49005280	1A/1B/1Cii		0.14
52	SINC	BD0223	Lillismoor Copse	SU49206310	1A/1B/1Cii		0.06
53	SINC	BD0227	White House Farm Gully Copse	SU49306140	1A/1Cii		0.24
54	SINC	BD0228	Short Bushes Copse	SU49306230	1A/1B/1Cii		0.10
55	SINC	BD0234	Waterleas Copse	SU49506070	1A/1B/1Cii		0.11
56	SINC	BD0235	Sydmonton Common & Lower Burnoak Copse	SU49506300	1A/3Bi/6A	Viola palustris	0.32

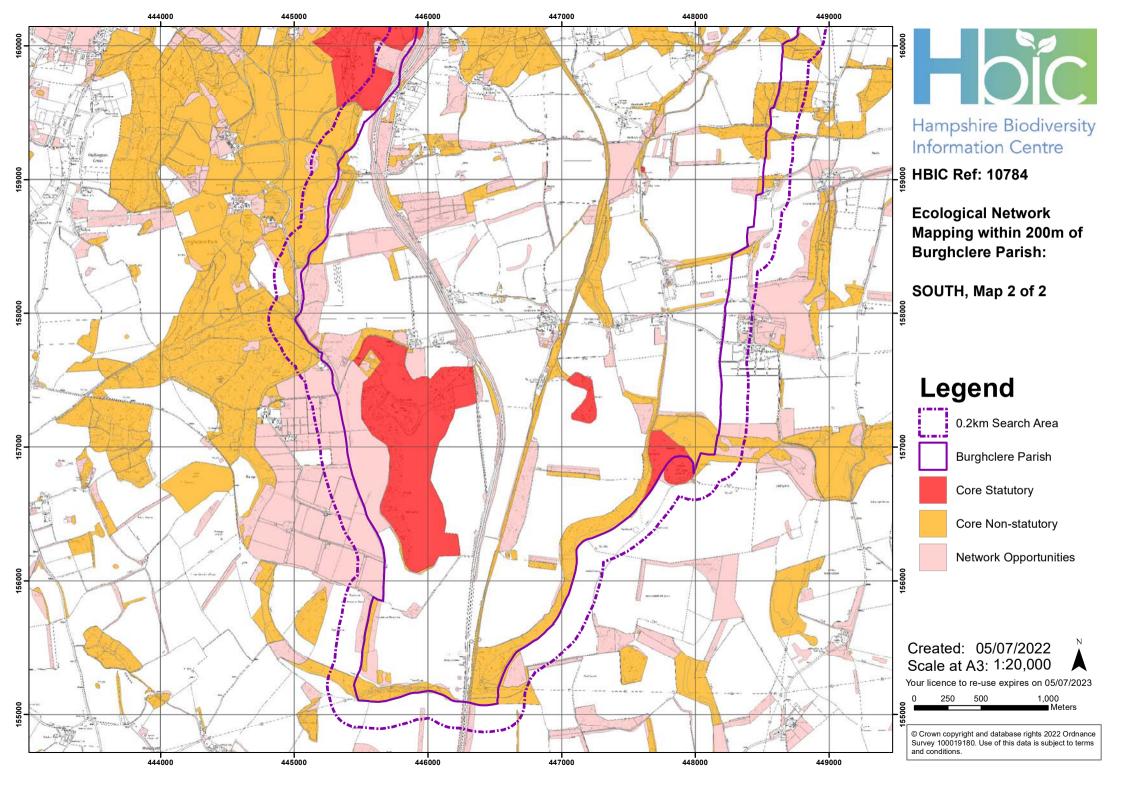
<sup>\*</sup> Please note SINC criteria 2D is no longer valid, however it is being retained on existing SINCs until they are re-evaluated. 2D SINCs are Grasslands which have become impoverished through inappropriate management, but which retain sufficient elements of relic unimproved grassland to enable recovery.











# oneill homer planning for good