



Derbyshire Wildlife Trust

High Peak Borough Council: A Plan for Nature 2024

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1 Executive Summary

This report has been created by Hollie Fisher, Nature Recovery Advice Lead within the Wild Solutions team at Derbyshire Wildlife Trust, working in collaboration with High Peak Borough Council (HPBC) and the High Peak Biodiversity Group to deliver *A Plan for Nature*.

The primary goal of this document is to form the basis of a formal biodiversity strategy following the release of the County Councils Local Nature Recovery Strategy, providing ecological expertise on the key opportunities and challenges facing biodiversity within High Peak.

The report includes:

- A desk-based assessment of the current state of nature within the borough, including evaluating species trends, distribution of priority habitats, and the condition and extent of designated sites for wildlife;
- The extent of the existing habitat network for open, wetland and woodland species, gaps and barriers for species dispersal within the landscape and an assessment of Derbyshire Wildlife Trusts Nature Recovery Network Map. The map identifies key areas for the creation and restoration of open, wetland and woodland habitats to expand and create corridors;
- Targets for species and habitat expansion;
- An overview of key opportunities for biodiversity recovery including changes in land management, an overview of funding and grant opportunities, and proposed changes to planning and policy frameworks. All recommendations are intended to both support biodiversity and encourage the delivery of key ecosystem services, ensuring the landscape is of intrinsic value to both the community and the environment;
- A feasibility assessment of 15 council owned sites, to evaluate their suitability for a potential habitat bank (for Biodiversity Net Gain); and,
- Guidance documents on habitat creation and management methods, provided in the appendix.





2 Introduction

This report has been prepared by Hollie Fisher, Nature Recovery Advice Lead at Wild Solutions, Derbyshire Wildlife Trust (DWT) on behalf of High Peak Borough Council (HPBC). The aim of this report is to provide HPBC with a detailed action plan, intending to guide policy making and facilitate an integrated approach to delivering biodiversity enhancements across the borough. Using the Lawton Principles of *Bigger, Better, More and Joined Up* (Lawton *et al.*, 2010), the report will identify strategic opportunities for new habitat creation and restoration to create a connected, functioning Nature Recovery Network (NRN) across the borough.

Nature is essential to the long-term provision of ecosystem goods and services (Catchpole, 2006). Loss of nature is directly linked to increased natural ecological disturbances, threats to pollination, and climate change, with habitat fragmentation being the leading cause of species decline worldwide (McCallum, H., & Domdon, A., 2002). Whilst there is a legal requirement to consider biodiversity in local planning, outlined below, the dependency of humans on nature for quality of life means it is a fundamental issue across all areas of planning. This document aims to provide a road map for nature's recovery, ensuring that projects are strategically planned and target key areas to increase connectivity. The action plan, if integrated into policies, procedures and partnerships, could deliver significant benefits for both nature and society, through a range of vital ecosystem services including flood reduction, pollination, water filtration, carbon storage and access to nature for health and wellbeing. The report is designed to complement the countywide Local Nature Recovery Strategy being developed by Natural England and Derbyshire County Council, with HPBC's Plan for Nature offering a more focused, borough specific approach.

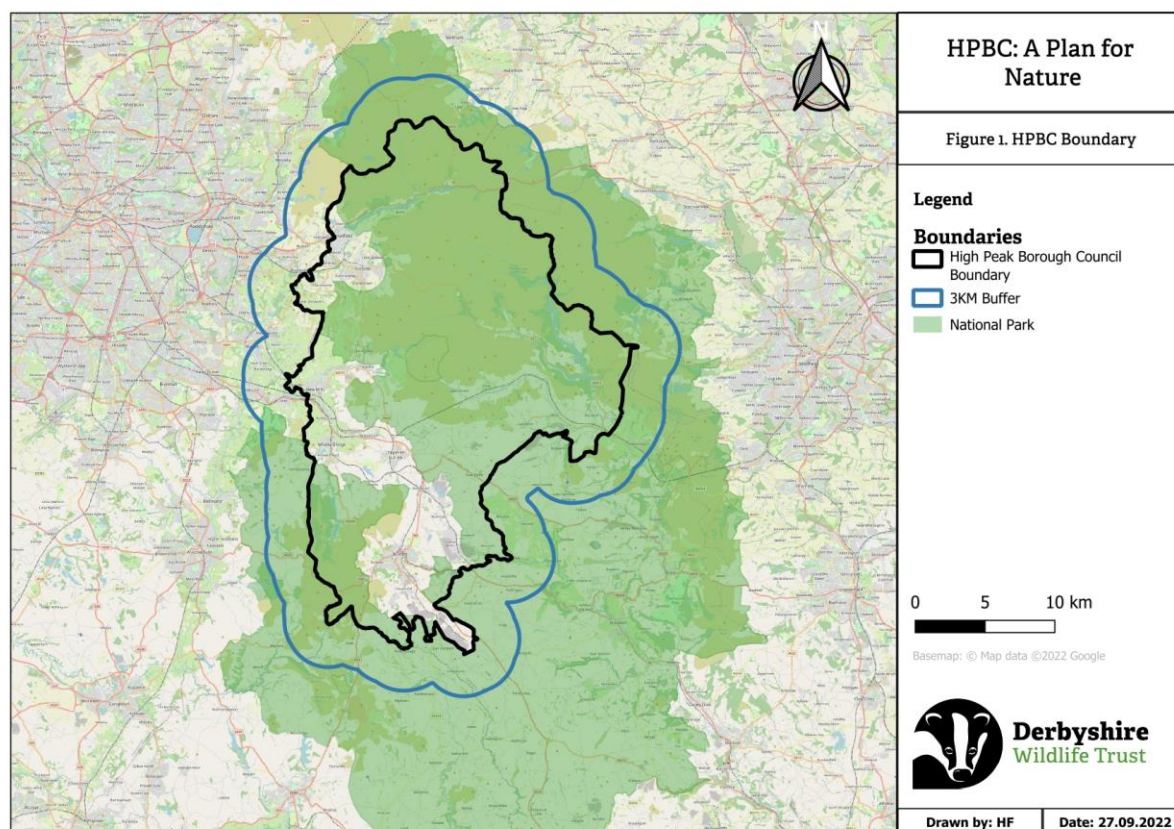
2.1 Context

The UK has suffered major declines in the health of nature over the past 50 years, with 44% of all species decreasing in abundance (State of Nature, 2019). Fragmentation, degradation, and habitat loss is widespread and linked to development pressures and intensification of agricultural practices (Jongman, 2004). In the Peak District, threats to biodiversity are primarily driven by peatland deterioration, agricultural intensification and urbanisation.

The borough is approximately 54,025 hectares in size, located in the far north of Derbyshire¹, see Figure 1 below for borough boundary, the majority of which sits within the Peak District National Park (PDNP). The landscape is highly varied and unique, containing the gritstone and blanket peat of the Dark Peak, the rolling limestone plateaus and dales of the White Peak and the mosaics of moorland and rush pastures of the South West Peak. Each of these characteristic landscapes are facing longstanding pressures, reducing both the quality and quantity of space for nature.

¹ To accurately evaluate current opportunities in the context of the wider landscape, an additional buffer of 3KM is included where possible. Please note, both Derbyshire Biological Records Centre and the Nature Recovery Network map do not hold any data for the surrounding counties; as HPBC sits on the boundary of Derbyshire, data for the north and west of the borough is lacking within this report.



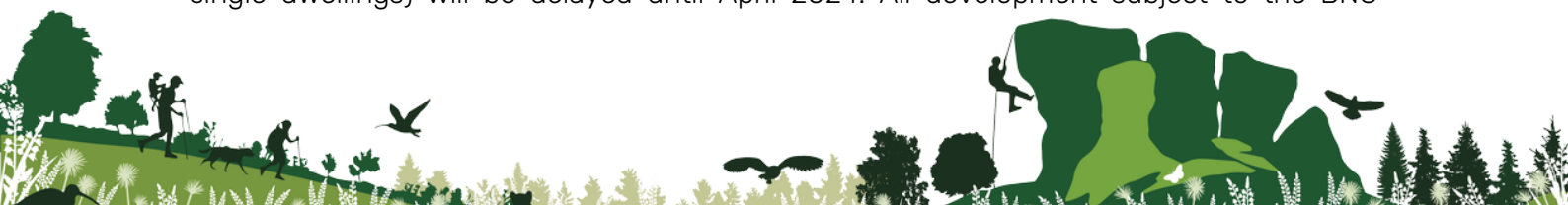


2.2 Policy

The requirement for Nature Recovery Networks stemmed from the Lawton review (2010) 'Making Space for Nature' which identified the need for 'Bigger, Better, More and Joined Up' wildlife sites to reverse habitat fragmentation and create an ecological network in which habitats and species are protected and resilient. From this, the Government set out targets of 'creating or restoring 500,000 hectares of wildlife-rich habitat' across the UK in the 25-Year Environment Plan (2018) and identified the need to put the conservation of biodiversity through a spatial planning system on a statutory footing in the Environment Act (2021). Further emphasis on the protection and conservation of biodiversity through the National Planning Policy Framework (NPPF) guidance and the promotion of Biodiversity Net Gain (BNG) schemes further drives the need for an NRN map to identify where habitat creation or enhancement would be best placed to improve connectivity and strategic networks.

2.3 Biodiversity Net Gain

BNG is an approach to land management that aims to deliver measurable improvements for biodiversity by creating or enhancing habitats, watercourses and hedgerows in association with development (Planning Advice Service, 2021). Most forms of development will require developers to provide an increase in natural habitats (either in the form of Habitat, River and Stream or Hedgerow units, or a combination) requiring a net gain in biodiversity of 10%. Mandatory BNG as set out in the Environment Act 2021 applies across England and, following a Government announcement in September 2023, is due to become law in January 2024 (under secondary legislation) for most forms of development requiring planning permission, but the requirement for more minor forms of development (such as single dwellings) will be delayed until April 2024. All development subject to the BNG





requirement **must** provide for a 10% gain in biodiversity which must be delivered *either on-site or off-site* (or a combination). The Government directs that this calculation be determined using a naturally determined metric (Natural England’s Biodiversity Metric 4.0), which ‘scores’ on-site provision more favourably than off-site, hence encouraging on-site before off-site provision. Given that developers from January 2024 may require locations for provision of off-site BNG (probably through purchased ‘credits’ for this purpose), this study includes a feasibility assessment of potential (Council-owned) sites within the Borough that could be repurposed as ‘habitat banks’ for this purpose. More generally given national and local planning policies, developers must demonstrate that they’ve taken all reasonable steps to integrate biodiversity into their site plans, through a process called the mitigation hierarchy. All developments should first try to avoid, then mitigate or, as a last resort, compensate for biodiversity loss. Natural England’s biodiversity metric assesses habitat loss, habitat condition and habitat distinctiveness to determine relative biodiversity loss or gain. The assessment of distinctiveness informs relative biodiversity value of habitats which can be used to identify priority areas for protection. Using habitat distinctiveness allows the Local Planning Authority to make quick assessments of areas that might be more suitable for development (low distinctiveness habitats) or areas that are best avoided or would require higher levels of compensation (medium/high distinctiveness habitats).

This report is conducted in adherence with BNG Good Practice Principles stated in *Biodiversity Net Gain Good Practice Principles for Development, A Practical Guide* (Baker *et al.*, 2019) which states that BNG should not be provided on designated sites or irreplaceable habitat, the mitigation hierarchy must be applied, and that the positive outcome be additional to existing obligations.





3 Methodology

3.1 Mapping

An overview of mapping methodologies used within the document are included below, full methods are provided in *Appendix A. Mapping Methodology*.

Given the size of the maps associated with this report, their clarity will be reduced when assessed within the document. All maps are therefore available separately which will allow the reader to zoom in, as well as a GIS workspace available on request.

3.1.1 Baseline Habitat Maps

Existing habitat data sets (Table 1) were collated and reviewed using QGIS and Anaconda Python, a coding program, to form an aggregated habitat inventory. The inventory was created by merging all existing habitat data into a single digital file, using OS Master Map as a base and sorting datasets based on their reliability. For each land parcel, any overlapping layers that covered at least 40% of the parcel were compared using a dataset hierarchy, based on the general reliability and dataset age. See Table 1 below for overview of reliability, the lower the score the higher the relative reliability. The scores are an ordinal scale, currently spanning 0 – 11 as this covers the number of categories the present dataset is required to distinguish between. Any data identified as 0 does not classify that data as 100% reliable, it indicates it as the most reliable source of data within this set.

Data Source	Reliability Score
Ancient Woodland Inventory	11
Countryside Stewardship Options	9
Environmental Stewardship Options	0
Land Cover Map	10
National Forest Inventory	7
National Trust Phase 1 Data	2
Peak District National Park Phase 1 Data	2
DWT Phase 1 Data	8
Priority Habitat Index	5
Wood Pasture and Parkland Index	6
Traditional Orchard Inventory	3
Master Map	0
LWS Habitat Data	1

Table 1. Reliability of Datasets Used in Creating a Baseline Habitat Layer





3.1.2 Habitat Distinctiveness

Habitat distinctiveness was mapped using QGIS, based on the final habitat layer, as described in the above section. Each of the three key ecological networks (open, woodland and wet) have important, core habitats that comprise the central part of the networks and are of the highest value to their associated species. These core habitats can act as a population source for species, from which further habitat creation and network expansion will allow these species to disperse across the landscape.

3.1.3 Nature Recovery Network Modelling

The NRN was created by using baseline and core habitat data files and assigning every habitat a permeability score for the three networks, *i.e.* an estimated cost of movement to a generic species; the higher the score, the less permeable the habitat is for the representative species. The habitats are scored on a scale of 1 (core habitat) to 50 (major barrier, impermeable habitat).

At this stage, additional datasets were input to identify key ecological and physical factors to create opportunities and constraints layers. This includes:

- OS Terrain 50 (Digital Elevation Model);
- Agricultural Land Classification;
- EA Flood Zones (1-3);
- Soil Drainage; and,
- Heritage sites / Historical Environmental records.

The model included figures on the standard dispersal distances for species representative of open, wetland and woodland habitats. Using the original Forest Research methodology (Watts, *et al.*, 2010), the standard dispersal distance for each of these network types was set at 500m. This methodology is based on using generic focal species. A generic focal species is described in Eycott *et al.* (2007) as '*a conceptual species, whose profile consists of a set of ecological requirements reflecting the likely needs of real species should encompass the needs of most (but not all) real species that need to be considered in the landscape plan or evaluation*'. Further, the standard dispersal distances were then combined with an opportunity buffer around the core habitats. For the open and woodland networks, land within a certain distance of a core habitat was considered higher opportunity for expansion. For open networks this was set at 500m and woodland was set to 1000m.

The habitat data was ranked by its relative opportunity or constraint and was input into a python script alongside the above parameters. This created raster files of all available opportunity and constraint data for each network. Finally, these outputs were input into a final python script which added all opportunity rasters together, multiplying the result by each constraint raster in turn for all three networks. For the open and woodland network opportunity rasters, each is split into three categories, high, medium, and low opportunity for expansion, for the wetland network, the opportunity raster is split by threshold values to give high priority opportunities.





3.2 Assessment of Potential Biodiversity Net Gain Sites

3.2.1 Desk Based Assessment

The Royal Society of Wildlife Trusts draft principles for the delivery of BNG state that BNG should be used to create net gain in space for nature through securing additional and permanent gains, ensuring BNG is strategically targeted to contribute to nature's recovery. The overarching goal is to create new habitats, as opposed to enhancing existing ones.

The criteria assessment for evaluating the council owned sites utilises the above draft principle, as well as integrating the Lawton principles, awarding sites with a higher score if their restoration would work towards the creation of an NRN, as it is designed to highlight sites that are in a strategically significant location within the landscape. All sites put forward by the council as being suitable for a change in land use were assessed against a range of criteria, including data from the NRN map, the site's proximity to designated sites and priority habitats as well as a range of different opportunity maps including the Natural England Habitat Network Map.

See *Appendix B. Criteria Assessment Methodology for HPBC A Plan for Nature* for detailed methods.

3.2.2 Field Survey

Following the criteria assessment, the sites were ranked by score and professional judgement was used to identify which sites to prioritise for further survey.

A total of 15 sites were subject to a high-level UKHabitat survey, as per the UKHAB Classification guidelines (Butcher *et al.*, 2020), using UKHAB 2.1 to identify the broad habitat type. Additionally, Habitat Condition Assessments were carried out using the guidance set out in Natural England Joint Publication JP039 'The Biodiversity Metric 3.0 auditing and accounting for biodiversity. Technical Supplement' (Panks *et al.*, 2021) to identify suitability for BNG.

3.2.3 Calculations

The Biodiversity Units present on each site were calculated using Natural England's Biodiversity Metric 4.0. The Biodiversity Metric 4.0 calculation tool was also used to calculate an estimate of the potential uplift in Biodiversity Units which could be generated as a result of habitat enhancement works at each site.

3.3 Limitations

Although key species were considered throughout the project and species recommendations have been made, the mapping assessment focused on habitat distribution rather than the distribution of species, with hypothetical species used in the modelling. This is due to the availability and accuracy of species information - mapping based on species can risk under or over representation due to sampling biases, whereas habitat data, particularly from aerial imagery, tends to be more accurate. Regardless, there are a number of limitations to habitat data, described below:

- Whilst measures were taken to create an accurate baseline habitat layer based on existing records, no ground truthing was completed during this project due to the scale of the area. Before any alterations in habitat management is carried out, the area in





question must first be subject to a walkover survey to confirm recommendations are appropriate.

- Features such as hedgerows are poorly recorded and so connective corridors through agricultural landscapes are often under-represented.





4 Baseline Biodiversity Data

4.1 Peak District Biodiversity Action Plan

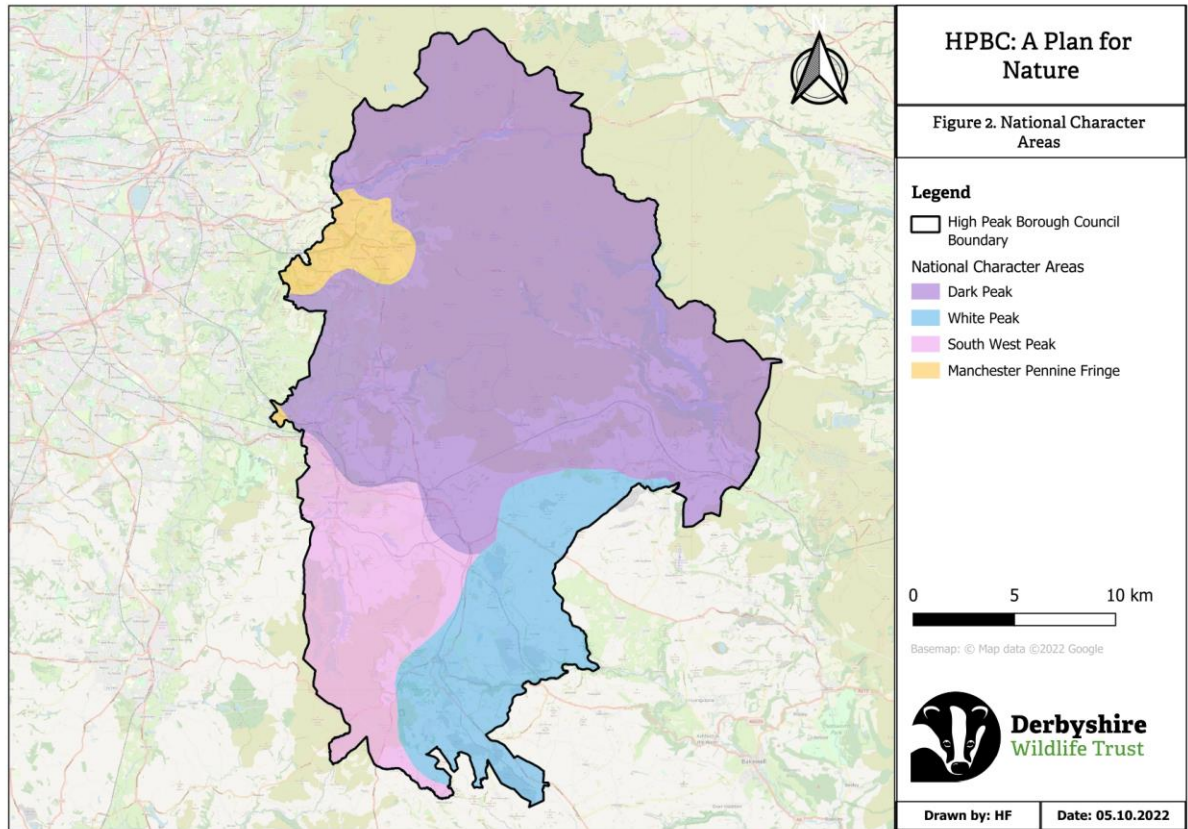
HPBC has previously been covered by two historic Local Biodiversity Action Plans (LBAP), *A Living Landscape; A Biodiversity Action Plan for the Peak District 2001-2010* and the *Peak District Biodiversity Action Plan 2011-2020*. The most recent LBAP aims to enhance the landscape and habitat to support a range of species. *A Plan for Nature* aims to build on the existing work of the historic LBAPs, updating and combining the baseline data and using updated methodologies at a more local scale to target spatial priorities.

The area covered by HPBC within the 2011 LBAP is covered by three broad priority areas, largely based on the existing National Character Areas (NCA); The Dark Peak, The White Peak and The South West Peak. Each of these key areas contain their own priorities, actions and vision. The LBAP vision for The Dark Peak is one of '*a wild and remote landscape with large expanses of upland heathland and blanket bog... where degraded moorland habitats will be restored... associated habitats such as wet heath... will be safeguarded and enhanced... straight edge boundaries between habitats will be discouraged, and transitional habitats such as scrub and rush pastures will form mosaics.*' In comparison, the vision for The White Peak is one '*of diverse grassland habitats, natural river corridors and wooded dales... species rich pastures and hay meadows, with water-holding dew ponds... ashwoods, species rich grassland and lead rakes... providing essential refuges for species such as skylarks and brown hares... the network of dew ponds... provides an important habitat for species... a landscape where the needs of farmers can be met alongside the needs of wildlife.*' Finally, the vision for the South West Peak is of '*an intimate mosaic of heathland, blanket bog, woodland, grassland and wetland habitats... sensitively managed to support fringe species... botanically-rich rush pastures and hay meadows will be enhanced and expanded... river corridors will be enhanced through safeguarding existing habitats of value.*' (Peak District National Park Biodiversity Action Plan 2011-2020).

4.2 National Character Areas

HPBC is covered by a total of four NCAs, The Dark Peak, The White Peak, The South West Peak and The Manchester Pennine Fringe, the extent of which is shown in Figure 2. Each NCA has their own strategic environmental opportunities which are summarised below in Table 2. The information included in the table are taken from the relevant NCA Profiles (Natural England, 2012, 2013 & 2014). Full details are provided in *Appendix C. National Character Areas*.







NCA Name	Environmental Opportunities
Dark Peak	<ul style="list-style-type: none"> • Manage and enhance the moorland fringes and valleys to improve ecological networks. • Safeguard, manage, restore and enhance large areas of moorland. • Increase the extent of native woodland.
White Peak	<ul style="list-style-type: none"> • Protect and enhance limestone rivers, streams and springs. • Enhance the limestone grasslands, woodlands and scrub of European importance. • Maintain the farmed pastoral landscape including hay meadows and limestone heath.
South West Peak	<ul style="list-style-type: none"> • Protect, manage and enhance the moorlands. • Manage and enhance the moorland fringes and valleys to improve ecological networks. • Protect and manage water courses and reservoirs.
Manchester Pennine Fringe	<ul style="list-style-type: none"> • Manage and enhance the network of green infrastructure within urban areas. • Sustainably manage and enhance the mosaic of farmland and upland fringe habitats. • Manage and enhance the watercourses, reducing flood risk and improving water quality. • Manage existing woodlands and extend broadleaf woodland cover.

Table 2. Strategic Environmental Opportunities of the National Character Areas

4.3 Core Habitat Areas

The borough is extensively covered with statutory designated sites, consisting of Special Protection Areas (SPA), Special Areas of Conservation (SAC), Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and Local Nature Reserves (LNR), each designated for a range of ecological and geological features. See Figure 3 below for extent of statutory designated sites cover. An estimated total of 21,985 hectares are currently designated at statutory level, meaning that around 40% of the area is protected and considered to be of either national or international value².

A total of seven LNRs are recorded: Bluebell woods, Brookfield Pond, Ferneydale Grassland, Goytside Meadows, Mousley Bottom, Stubbins Park and Watford Lodge. As LNRs their condition is not regularly assessed however, each of these sites are also designated as a Local Wildlife Site (LWS). Recent surveys identify Bluebell Wood, Brookfield Pond and

² Many sites are classified under multiple designations, in these instances the land area is not double counted.





Stubbins Park to be in favourable condition, and Ferneydale Grassland, Goytside Meadows, Mouseley Bottom and Watford Lodge all as unfavourable.

Two NNRs are present; Kinder Scout and Derbyshire Dales NNR. Both sites are also classified as SSSI's, the areas under which are unfavourable recovering.

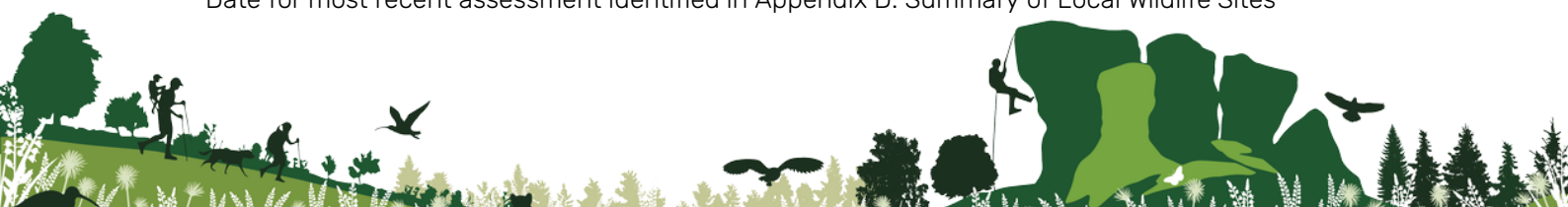
A total of 23 SSSIs are located within the borough, the largest of which makes up the heathlands of the Dark Peak. Of the 346 SSSI Unit areas assessed for their condition within the borough, only 87 are currently shown to be in favourable condition, meaning that only 25% of the SSSI coverage is favourable. As much of this is blanket bog and heathland, this outlines the extent to which the Peak District peatlands are damaged.

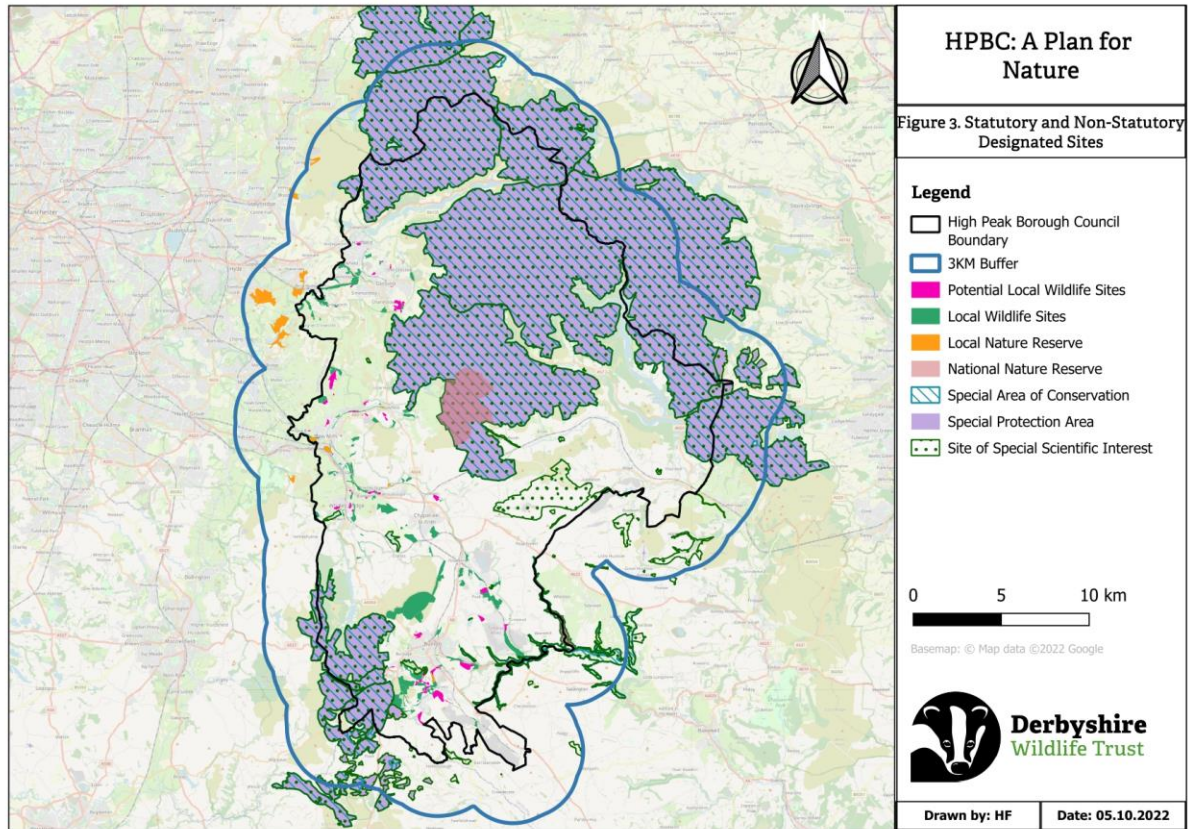
The network of designated sites further develops once Local Wildlife Sites (LWS) and potential Local Wildlife Sites (pLWS) are considered. LWS's are non-statutory designated sites of county importance, selected based on their habitat type and quality. They are often of high ecological value but are not afforded statutory protection. Likewise, pLWS's are often of high ecological value and likely to meet the selection guidelines but have not undergone the formal selection process.

Existing LWS's make up a total of 1086ha over 122 sites. These sites should be regularly resurveyed and assessed if they are in favourable condition and management. Of the 122 sites, 26 are currently in favourable condition, with 16 unfavourable recovering, 37 unfavourable maintained, 24 unfavourable declining and 19 currently unknown³. The sites are designated for a variety of reasons, including presence of priority habitats such as heather moorland, acid grassland and ancient woodland as well as protected species assemblages.

The figure below provides a visual representation of the spatial cover of designated sites. See *Appendix D. Summary of Local Wildlife Sites* for detailed list of LWS and their quality.

³ Date for most recent assessment identified in Appendix D. Summary of Local Wildlife Sites





Designated sites are often considered as ‘core’ areas of habitats – indicating the areas of the highest nature conservation value. The above maps suggest that based on the existing area of land already designated, a wide and diverse Nature Recovery Network is already present. However, when the relative quality of these sites is further assessed, the network becomes fragmented. See Figure 4 for visual representation of site quality.



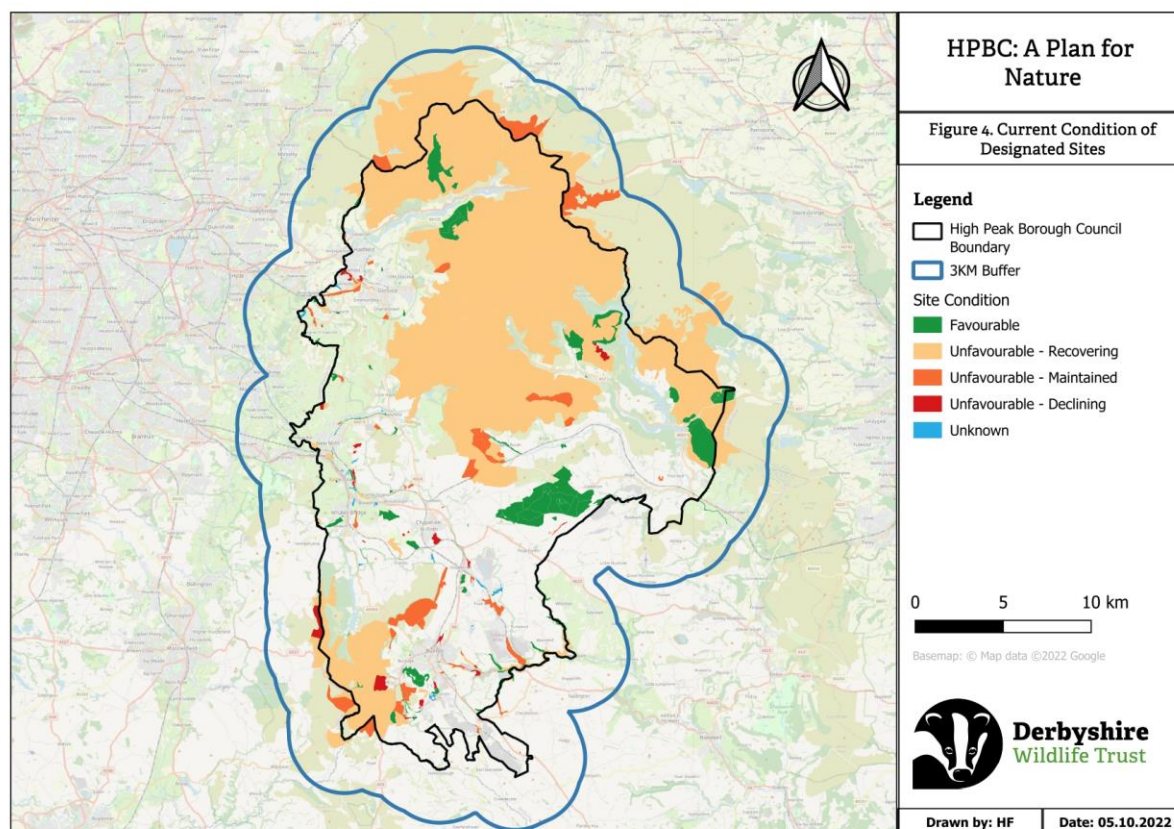


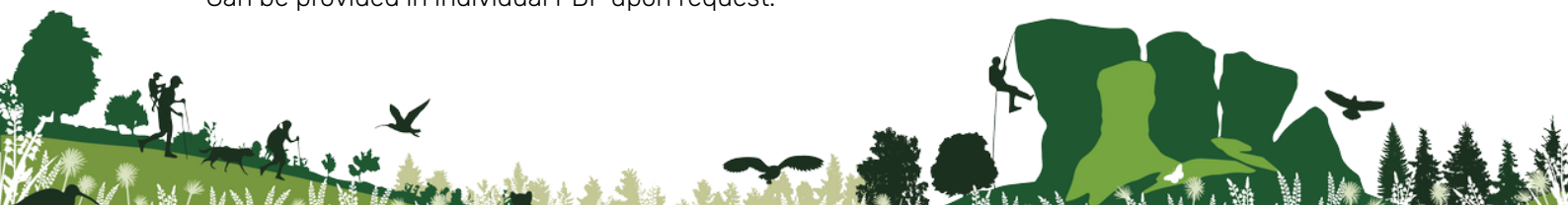
Figure 4 identifies that the existing, protected wildlife network of high quality spaces is sparse with, small, isolated sites scattered throughout, with favourable sites making up only 4% of the total area within the borough boundary. When comparing the figure of 4% in favourable condition compared to the 40% of the site designated, it reveals that the existing network is extremely fragmented, despite initial appearances suggesting otherwise. The key drivers for the declining condition of designated sites include moorland and peatland degradation through poor management including over grazing, burning and trampling, as well as the intensification of farming leading to a loss of woodland and hedgerows and a reduction in species diversity within grasslands.

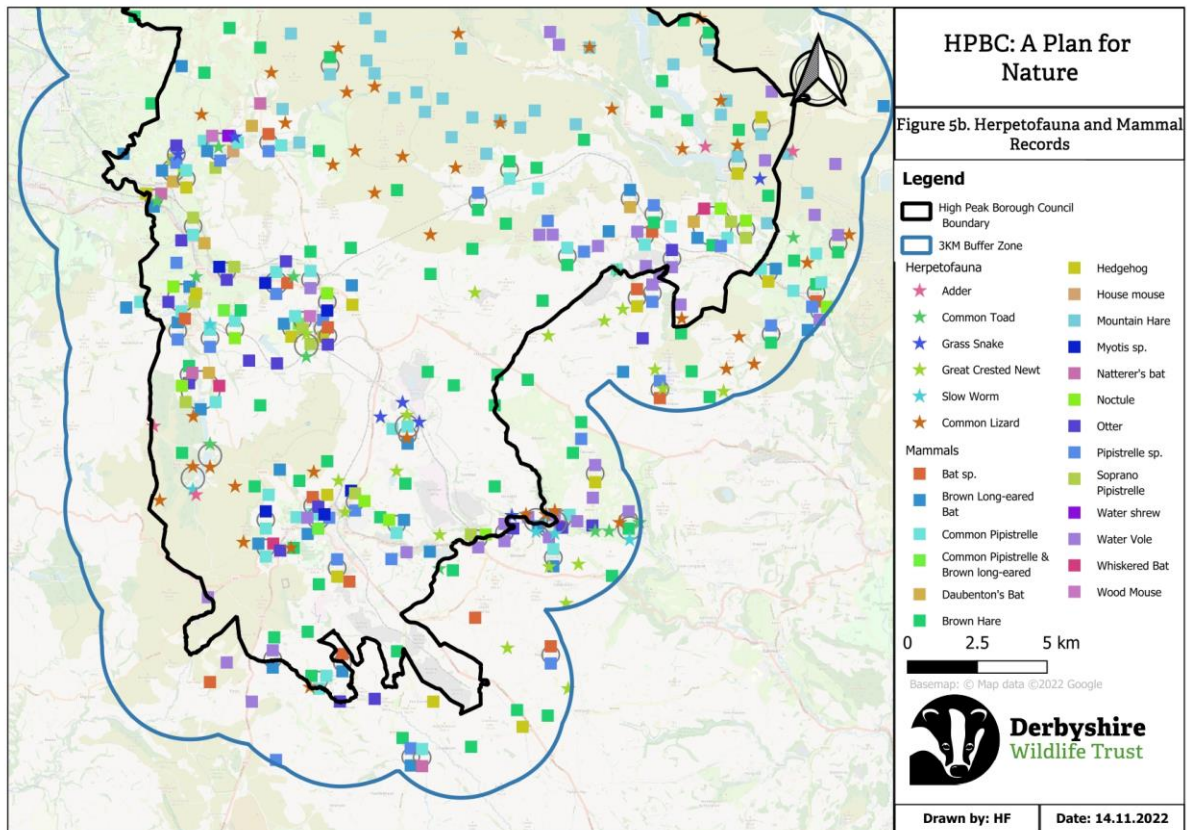
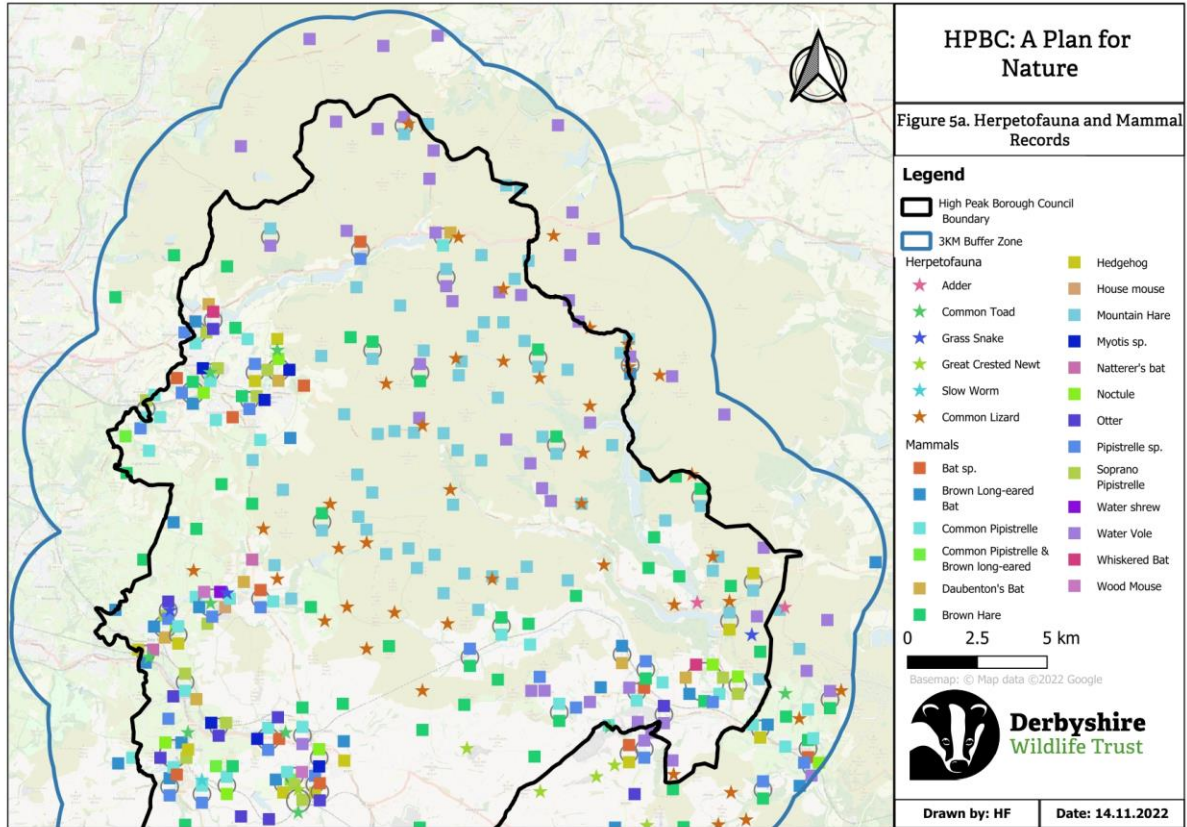
4.4 Priority Species Records and Population Trends

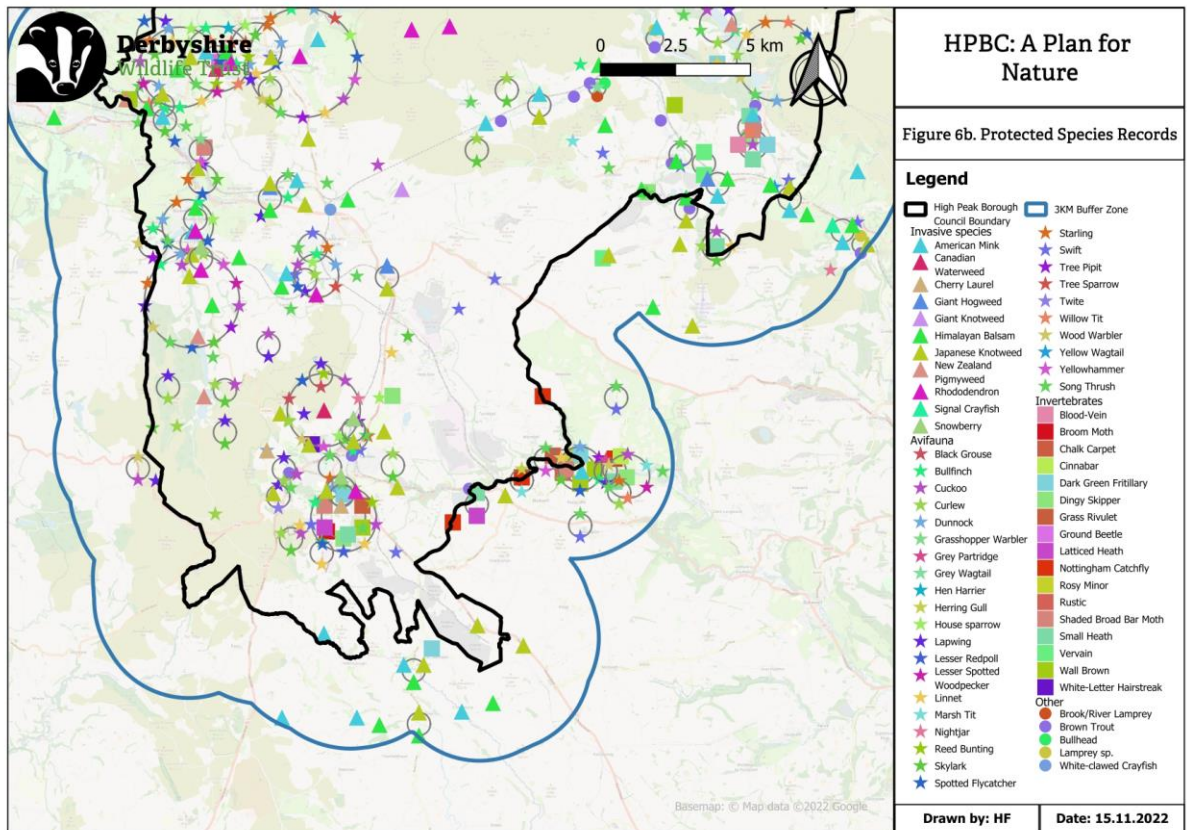
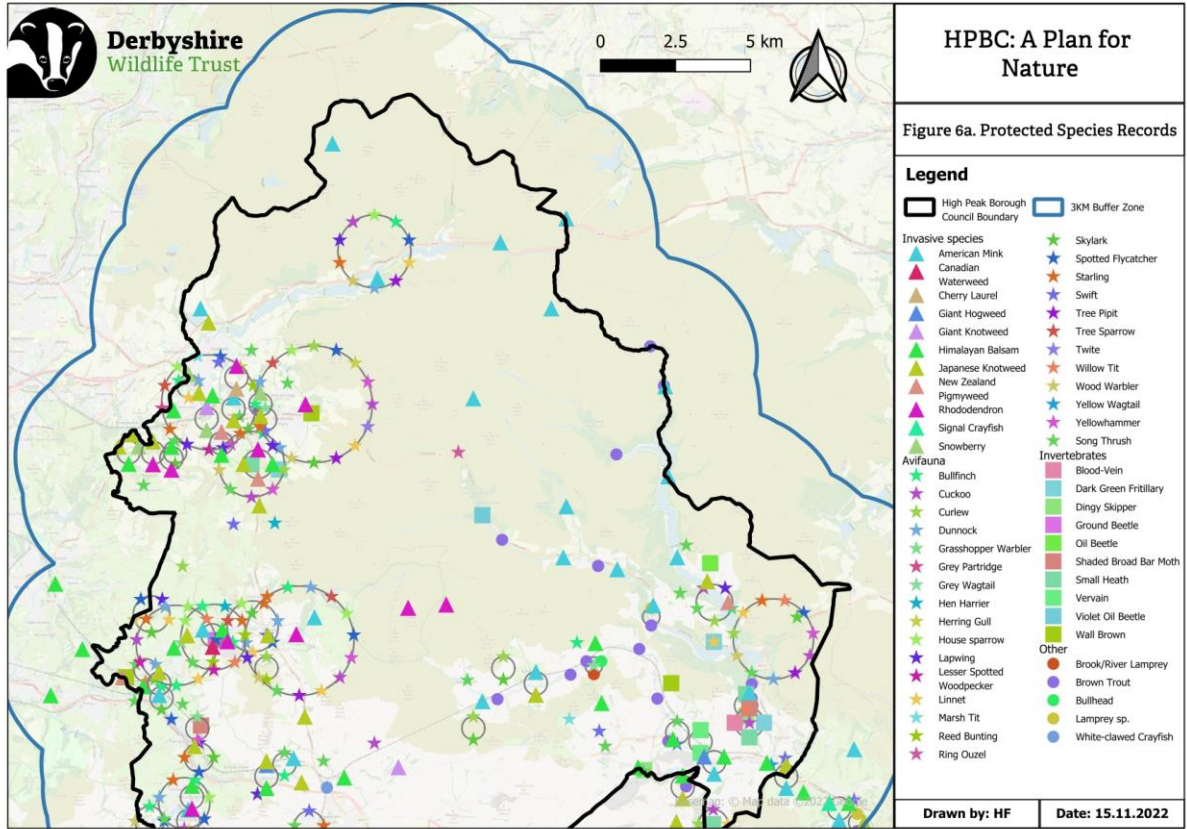
This section describes the trends and fluctuations in species populations recorded within the borough, using data held by Derbyshire Biological Record Centre between 2003-2023.

It should be noted that the species described are not the result of consistent species monitoring schemes and therefore, trends and records presented may be subjective and are unlikely to show the full picture. Figures 5 and 6⁴ provide an overview of species distribution over the past 20 years, the results of which are discussed in further detail below. Where multiple species are recorded in the same area, this is shown through 'point displacement', which displays the records in a circle around the centre point.

⁴ Can be provided in individual PDF upon request.









4.4.1 Herpetofauna

Sightings of common lizard *Zootoca vivipara* are frequent across most of the area, with both recent and historic records present, indicating a stable population. Common lizards will use a range of habitats, favouring heathland habitats. The habitats present within the borough are therefore highly suitable for common lizard, with large expanses of appropriate habitats available.

Adders *Vipera berus* are also reliant on heathland however, recorded sightings have decreased in recent years. It is likely that the records held are not a true representation of the population as the PDNP is known to hold an established, albeit, threatened and steadily declining population. Burning, overgrazing and predator control are all thought to be the main limiting factors in adder populations (Jofré & Reading, 2012) and without intervention the species may become locally extinct.

A small number of grass snake *Natrix natrix* records are found in the south of the borough. Grass snakes primarily use grasslands, hedgerows and woodland edges, interspersed with waterbodies such as ponds and lakes to rest, commute, bask and hunt. As shown in the figures below, the current woodland network is relatively fragmented, likely limiting species dispersal.

Slow worms *Anguis fragilis* can be found in a range of habitats including heathland, open mosaic, tussocky grassland, woodland edge and rides (clearings within woodlands). Records show they are present, with the largest number being recorded around Millersdale, likely due to the mosaic of habitats and habitat transition zones found within this area.

Great crested newts *Triturus cristatus* are known to be in the High Peak, with a small population within the Dark Peak and a more established population within the White Peak. This is primarily due to habitat availability and accessibility of the neighbouring habitats.

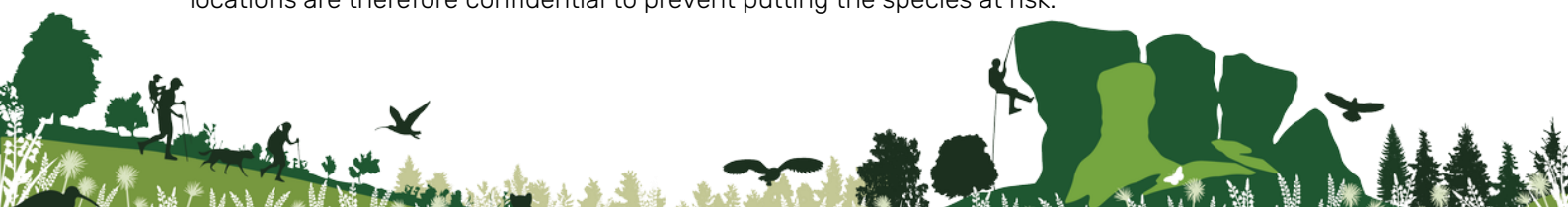
4.4.2 Mammals

The distribution of recorded mammals is clearly split by the broad habitat types typical of the north and south. There are numerous mountain hare *Lepus timidus* records across the Dark Peak, suggesting a stable population. In other areas of the borough, brown hare *Lepus europaeus* are recorded as present. This is to be expected as mountain hares are typical of moorland and heathland whereas brown hares are more often found in grasslands and farmlands.

A large number of badger *Meles meles* records⁵ are recorded in all areas outside of the moorlands, this includes both sightings and setts. The mixture of farmlands, grasslands and scrub provides ample foraging habitats for the species however, the lack of connecting features such as hedgerows, woodlands and tree lines may be limiting on the population.

Bat records are found in all areas outside of moorland, with a particular focus around the urban areas of Buxton, New Mills and Glossop and include a mixture of both sightings and recorded roosts. The species recorded includes brown long-eared *Plecotus auratus*,

⁵ Badger records are not shown on the map as the species is still threatened by persecution, sett locations are therefore confidential to prevent putting the species at risk.





common *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus*, daubentons *Myotis daubentonii*, noctule *Nyctalus noctule* and natterers *Myotis nattereri*. The mixture of grasslands, waterbodies, small woodlands and old buildings around the urban areas is of high suitability.

A small number of hedgehog *Erinaceus europaeus* sightings have been recorded, with numbers reducing over time. This is a trend that has been seen across the UK with hedgehog numbers falling by an estimated 8.3% annual decline in population numbers over the past two decades, primarily driven by a loss of hedgerows and connecting features.

A number of otter *Lutra lutra* and water vole *Arvicola amphibius* records are spread across the waterbodies within the borough, with the majority of the water vole records found to the east. Water vole populations have seen substantial declines across much of the country, now being locally extinct in many areas, largely driven by habitat loss and rising American mink *Neovison vison* populations, many of which have been recorded in the area, with increasing frequency.

4.4.3 Avifauna

The Peak District is known to hold numerous populations of specialist birds, with records of priority moorland, wetland and grassland species present including curlew *Numenius arquata*, grasshopper warbler *Locustella naevia*, yellowhammer *Emberiza citrinella*, skylark *Alauda arvensis* and meadow pipit *Anthus pratensis*. In addition, there are several historic records of species that are known to be locally extinct or close to becoming extinct including black grouse *Tetrao tetrix*, twite *Linaria flacirostris* and hen harrier *Circus cyaneus*. Birds are particularly susceptible to environmental changes and are often used as bioindicators of ecosystem health. Many species are seeing serious decline in the area, driven by agricultural intensification, burning of moorland, reduction in active woodland management and the impact of invasive species / mesopredator release.

4.4.4 Invertebrates

Invertebrate sightings are frequent across the entire area; high priority invertebrate species which have been recorded in the Dark Peak are the white-letter hairstreak *Satyrium w-album*, associated with the declining Elm tree; the increasingly rare dingy skipper *Erynnis tages*; the grass rivulet moth *Perizoma albulata* of calcareous grasslands; latticed heath moth *Chiasmia clathrata*; the nationally scarce chalk carpet moth *Scotopteryx bipunctaria*; and wall brown butterfly *Lasiommata megera* of open grasslands. Sightings of the scarce *Bembidion assimile* ground beetle have been recorded in the east of the Dark Peak. This beetle is associated with wet grasslands, stagnant or slow-moving water, and gravelly or sandy soils. The violet oil beetle *Meloe violaceus* which inhabits woodland edge habitats, glades and rides, upland moorlands and on flower-rich grasslands and is in significant decline has been recorded in Ashop Clough.

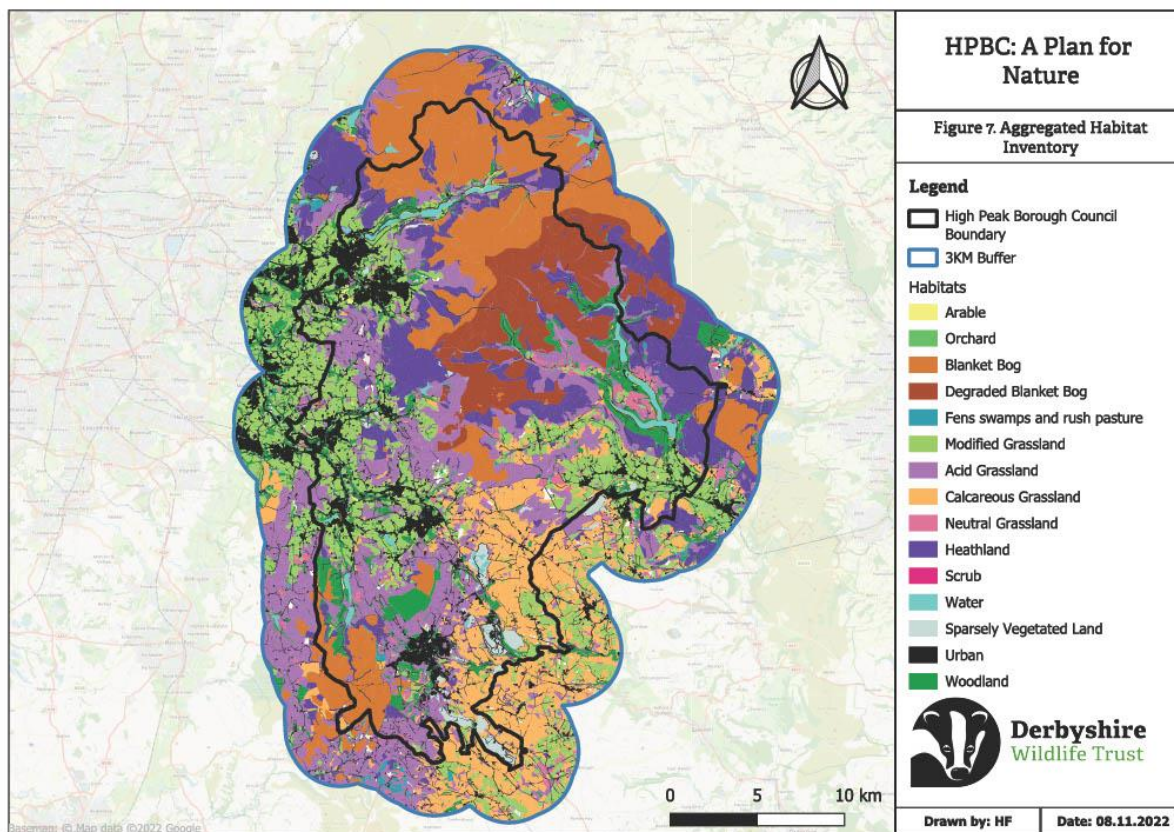
Small heath butterflies *Coenonympha pamphilus*, of high conservation priority in the UK, have also been recorded in Glossop. Their habitat of diverse grassland and heathland also faces threats from agricultural intensification.





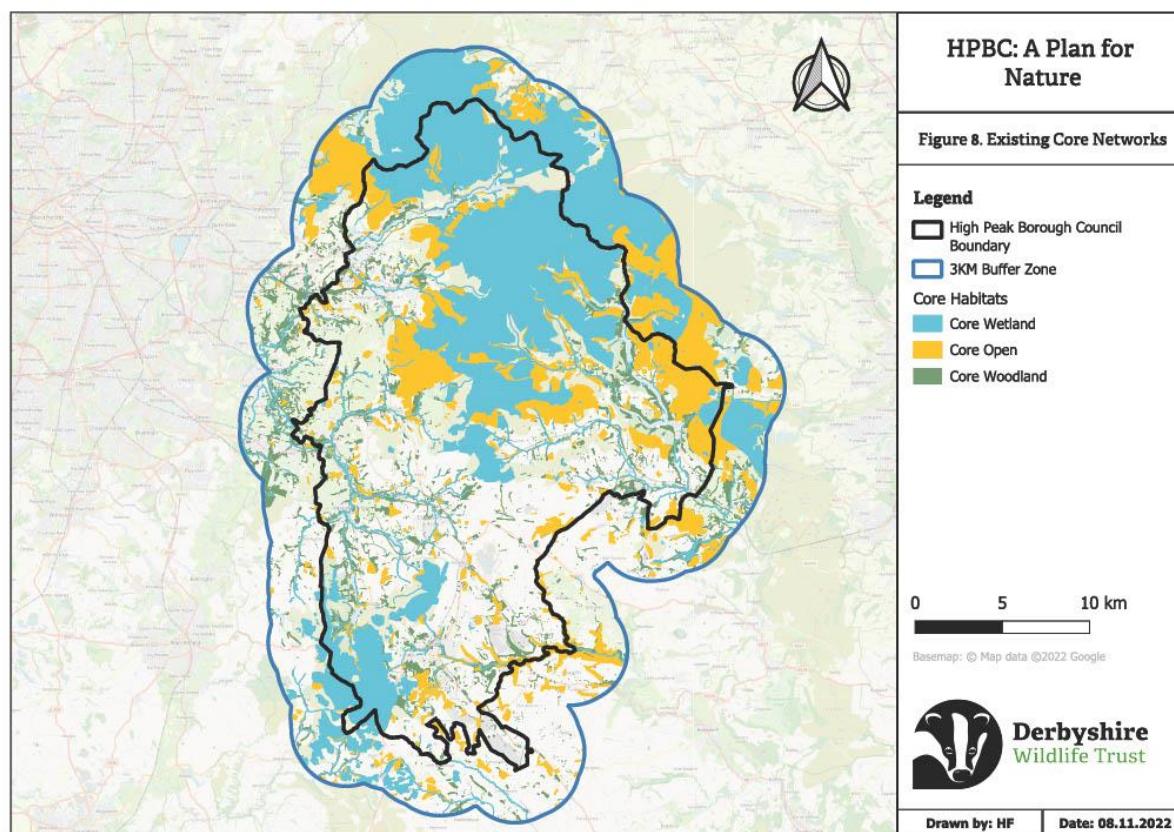
5 Existing Networks and Habitat Distinctiveness

The Peak District is widely known for its characteristic landscape, with large expanses of heathland, blanket bog and the differing floristic complexity between the calcareous White Peak and the acidic Dark Peak. When looking at the aggregated habitat inventory in Figure 7, the existing networks of broad habitats are clear, with a sprawling mosaic of grasslands, bogs and waterbodies. Based on this high-level overview, a connected network is present, however, this map does not consider the relative quality of these habitats. This map is intended to provide an overview of habitats present and should not be used as an accurate representation.



Beyond the designated sites there are other core areas of habitat that are large enough to support viable species populations and small land parcels that act as corridors or discrete 'stepping-stones', these core habitats are identified in Figure 8. Based on this imagery, the wetland network appears to be the most substantial, with the woodland network being notably absent. From these figures, the baseline of a NRN is apparent, with clear sections and corridors of broad habitat types spanning across the area. However, many of these habitats are poor and moderate in quality, reducing the carrying capacity of the ecological network.





5.1 Existing Woodland Network

The existing woodland network is sparse, consisting of small stands of ancient woodland, wood pasture parkland, broadleaf woodland and conifer plantations. Their size and isolation mean that the woodlands are likely unable to viably support large populations, particularly of predatory species which typically require expansive, connected networks for hunting. The small sites may act towards creating population ‘sinks’ in which species are dispersing from larger habitats into the small areas and subsequently failing due to lack of resources, reducing the overall population size.

Woodlands in general are of high biodiversity value, with broadleaf, native woodlands in good condition capable for supporting a wide range of species groups which have coevolved with the trees – resulting in native woodland supporting a quarter of the UK’s priority species for conservation (DEFRA, 2022), as well as working to store carbon and reduce flood risk. Research by Friends of the Earth, using the National Forest Inventory dataset (data updated in 2019) shows that the average tree cover for Local Authorities within the UK is 10.3%, High Peak are currently below this national average, with the most up to date data suggesting 7.9% is wooded.

The core areas of existing wooded habitat are primarily focused around Ladybower, Glossop and Buxton, creating several narrow connective corridors between the urbanised areas and their surrounding landscapes. Of the core woodland network, only 489ha is recorded as





being ancient⁶, suggesting just over 10% of woodland within High Peak is ancient. The majority of currently designated ancient woodland is focused around Ladybower Reservoir, creating a scattered network along the water edge. Ancient woodlands are the richest and most complex terrestrial habitat we host in the UK, supporting specialist birds, insects, mammals, plant and fungi communities.

5.2 Existing Open Network

The network of core open habitats is focused on the centre of the borough, with the largest expanses being made up of heathland associated habitats that surround the blanket bogs, characteristic of the PDNP. Heathlands are unique habitats, supporting numerous specialist species as well as being important for several ecosystem services, including carbon sequestration and flood alleviation.

The PDNP is covered by both the White and the Dark Peak NCA, meaning that it supports both acidic and calcareous grassland, as shown in Figure 7. The current areas of high quality species rich grasslands are limited; at present the existing network to the south of the borough is not substantial enough to create connected corridors, with the gaps between habitats too large for species dispersal (standard dispersal distance for a species representative of open habitats being 500m (Watts, *et al.*, 2010)). There may be additional areas of species rich grasslands that are not recorded within the borough or, alternatively, areas of recorded high-quality habitat that are now in poor condition. Species rich grasslands are key habitats for pollinators, invertebrates, birds, foraging bats, commuting reptiles and amphibians and botanical communities, further, their value is increased when they form a mosaic of habitats with woodland and wetland sites, as can be seen around Millersdale, along the southeast boundary of the borough.

5.3 Existing Wetland Network

A high-level review of the existing wetland network indicates that the network of wetland sites identifies substantial coverage of core wetland habitats, primarily made up of the wide expanses of designated blanket bog, whereas the network outside of this is made up of small patches of reedbeds, wet grassland, rivers and streams. The apparent lack of these additional habitats may be exaggerated due to under recording of wetland habitats including ponds and wet grassland however, historically many wet, marshy areas have been drained to improve agricultural condition and ponds have been removed in margins, fields and gardens.

SSSI sites are split into separate units, these are divisions of the site based on habitats, tenure and management. Not a single SSSI unit designated for its biological value of blanket bog is currently in favourable condition and therefore, whilst the basis of the wetland network may be present, the relative quality of this and therefore, its capability in supporting species is unknown. In the UK, peatlands hold the largest carbon stores of all habitats and are unique in that they can continue to store carbon indefinitely, if in favourable condition,

⁶ The Ancient Woodland Inventory is currently under review, following a change in requirements of the size of site for allocation, leading to a significant rise in designated smaller ancient woodlands. This figure is therefore likely to change following the release of the data.





having a net long-term ‘cooling’ effect on the climate (Bain et al. 2011). They are of extremely high importance for many specialist species including wading birds such as golden plover *Pluvialis apricaria*, curlew and snipe *Gallinago gallinago*, as well as black grouse, adders, lizards, amphibians and mammals such as hares and stoats *Mustela erminea*.

Many of the core wetland sites are linked together through networks of rivers and streams, the relative quality of which is unknown, these may form key linkages for species to commute through.





6 Strategic Gaps, Considerations and Existing Bottlenecks within the Landscape

Fragmentation and habitat loss are the primary causes of biodiversity decline worldwide, leading to reduction in species movements as well as a loss in both species richness and abundance, with human actions being the primary driver behind this change (Haddad *et al.*, 2015). Fragmented habitats impact the biotic ecosystem through a reduction in available resources, reduction in gene pools and a lack of environmental stability, reducing the plasticity and resilience of the species within it. In a modern landscape, large expanses of unbroken habitats are rare and therefore, the relative permeability of habitats surrounding core areas for representative species are of high importance.

Where large expanses of uninhabitable environments occur, particularly when present between areas of core habitats, populations of immobile or slow migrating species are at risk of local extinction. The lack of connecting features and migratable habitats isolate populations of amphibians, reptiles, plants, invertebrate and small mammal communities, – meaning that as their climatic niche moves up the county as a result of climate change, the individuals are unable to follow, eventually leaving them in uninhabitable, hostile environments.

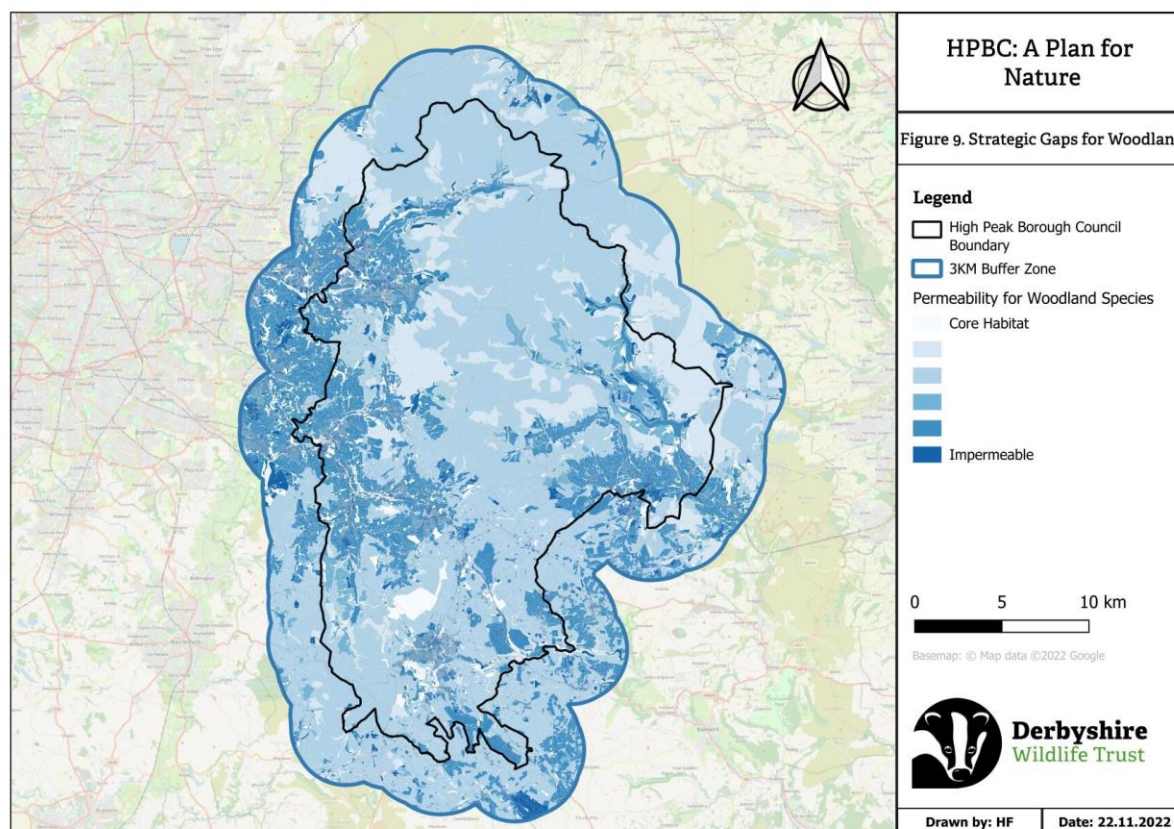
6.1 Strategic Gaps within the Woodland Landscape

Figure 9 illustrates the current gaps and barriers in the woodland network. The map is represented on a scale, from a core, highly permeable habitat (*i.e.* woodland, shown in white) to impermeable (*i.e.* hardstanding, in dark blue). These scores correspond to Table 3. in Appendix A. As explained in the Appendices, every habitat is assigned a permeability score, *i.e.* an estimated cost of movement to a generic species; the higher the score, the less permeable the habitat is for the representative species. the habitats are scored on a scale of 1 (core habitat) to 50 (major barrier, impermeable habitat).

The wooded network is the least substantial network type in the borough, meaning dispersal opportunities for woodland species is low. Primary barriers within this network include urban and suburban landscapes such as Buxton and Glossop, as well as large areas of modified and arable fields *i.e.* much of the land around Hope and Chapel en le Frith. Some species typical of woodland will commute through an open habitat if the conditions are suitable, for example, if the sward is varied and tussocky, integrated with hedgerows and tree lines. However, many modified habitats do not contain this sward variation, moreover, much of the Peak District is devoid of hedgerows, further reducing migration opportunities for species.

Finally, much of the woodland present in the borough is conifer plantation. Whilst conifers are of value to some species such as goshawk *Accipiter gentilis*, the rigidity and uniformity of the habitats often results in a monoculture, reducing niche availability. In addition, many of the conifer plantations in this area are located on peat and bog soils, with an estimate that around 18% of the UK peatlands have been converted to forestry (Arts *et al.*, 2019). Planting trees on peat soils impacts the carbon store of the peat and typically requires draining the peatland, because of this there are calls to re-wet and restore the peatlands when it reaches time to harvest (Joosten *et al.*, 2012).



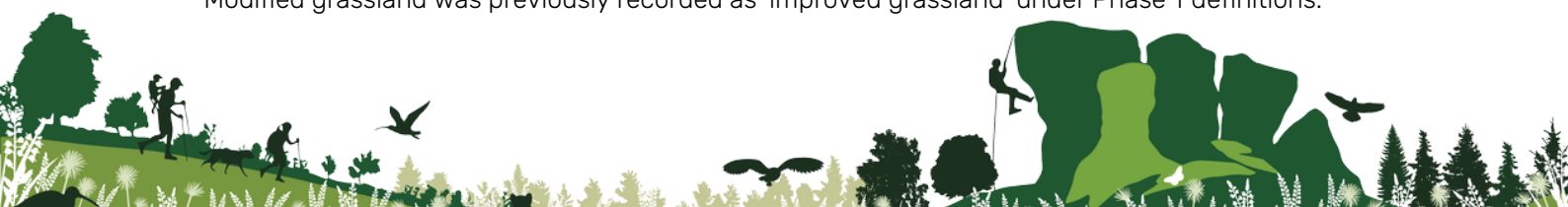


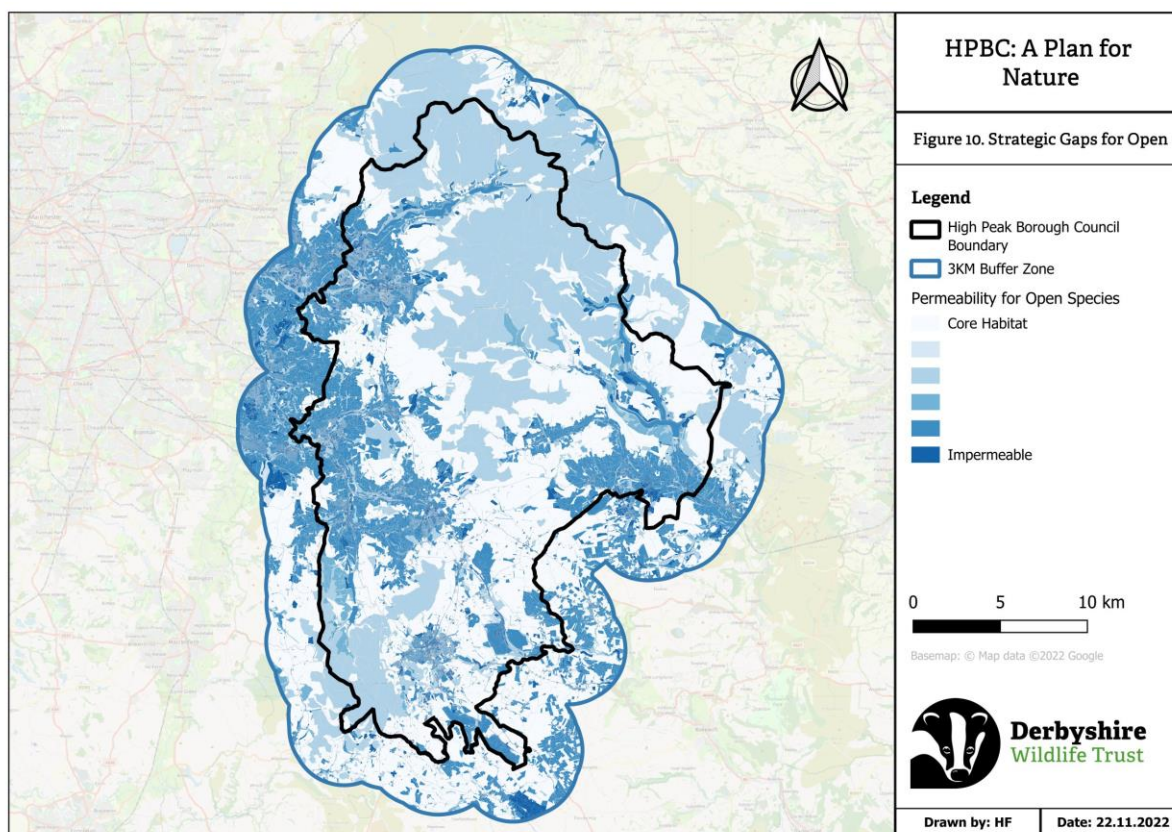
6.2 Strategic Gaps within the Open Landscape

Figure 10 illustrates the gaps and barriers in the open habitat network. The map is represented on a scale, from a core, highly permeable habitat (*i.e.* species rich grassland, shown in white) to impermeable (*i.e.* hardstanding, in dark blue). As explained in the Appendices, every habitat is assigned a permeability score, *i.e.* an estimated cost of movement to a generic species; the higher the score, the less permeable the habitat is for the representative species. The habitats are scored on a scale of 1 (core habitat) to 50 (major barrier, impermeable habitat).

A large proportion of land within HPBC is of high suitability for species typical of open habitats, with several stands of calcareous, acid, and neutral grassland. However, a key limitation within this analysis is that the relative quality and current management of these habitats is largely unknown. Clear corridors are present across the entire borough and major barriers are limited due to a connecting route of grassland and moorland throughout the centre, with notable barriers being made up of the urbanised areas, particularly Buxton and Glossop. Hardstanding and modified grassland⁷ habitats are not suitable for grassland species due to a lack of structural diversity, limiting species ability to commute, shelter and hunt / forage.

⁷ Modified grassland was previously recorded as 'improved grassland' under Phase 1 definitions.



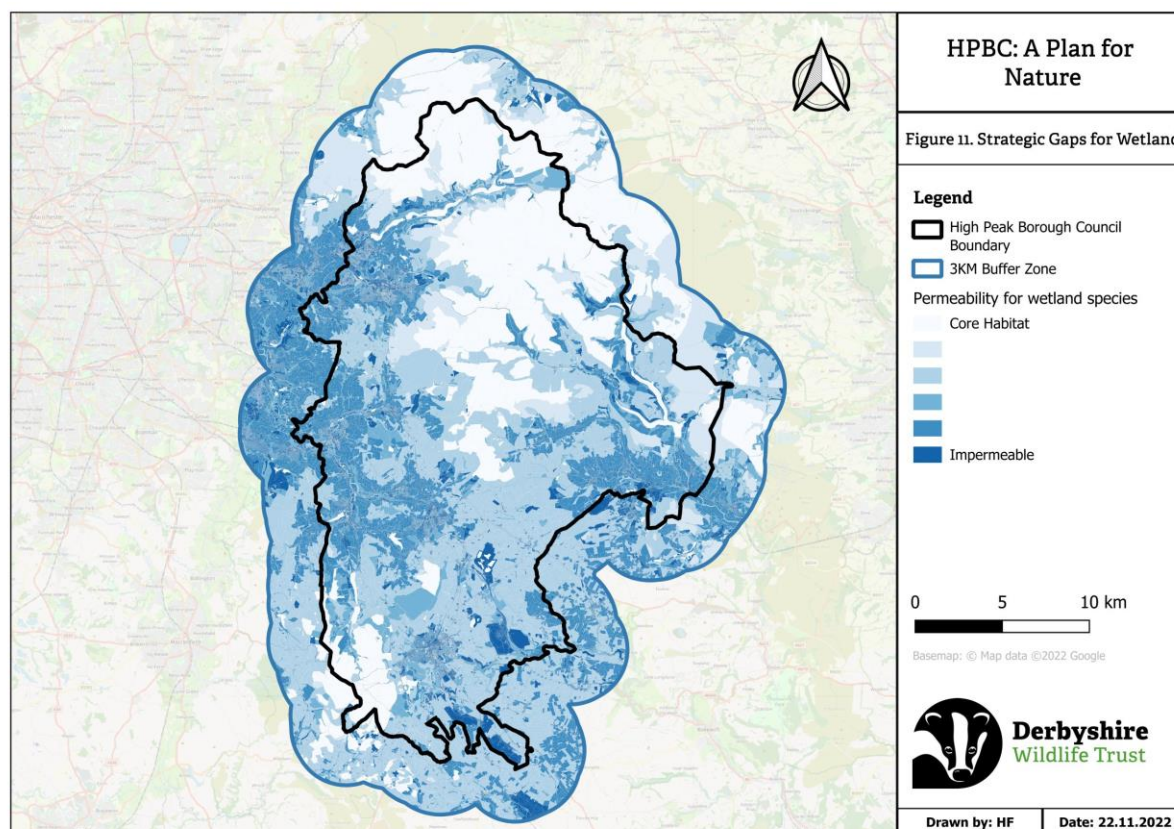


6.3 Strategic Gaps within the Wetland Landscape

Figure 11 illustrates the gaps and barriers in the wet habitat network. The map is represented on a scale, from a core, highly permeable habitat (*i.e.* blanket bog, shown in white) to impermeable (*i.e.* hardstanding, in dark blue). As explained in the Appendices, every habitat is assigned a permeability score, *i.e.* an estimated cost of movement to a generic species; the higher the score, the less permeable the habitat is for the representative species. The habitats are scored on a scale of 1 (core habitat) to 50 (major barrier, impermeable habitat).

Similar to both the woodland and open networks, the primary barriers for the movement of wetland species are largely focused around the urbanised areas, as well as the sections of managed farmland which are typically drained with ponds often removed to increase agricultural productivity. Ponds, ditches and small streams are often under recorded and therefore, relative permeability may be under represented however, unrecorded ponds and wetland habitats would need to be supported by a cohesive network of other connecting features such as hedgerows, tree lines and tussocky grass verges to be effective.





6.4 Agricultural Land Classification

The quality of land for agricultural purposes is a key determining factor when considering strategic spatial opportunities and BNG. The Agricultural Land Classification classifies land into five grades according to the extent to which physical or chemical characteristics impose long term limitations on a site for food production. Factors include climate (temperature, rainfall, aspect, exposure, frost risk) and site (gradient, micro-relief, flood risk) and soil (depth, structure, texture, chemicals, stoniness).

- Grade 1: Excellent quality agricultural land
- Grade 2: Very good quality agricultural land
- Grade 3: Good to moderate quality agricultural land
 - Subgrade 3a: Good quality agricultural land
 - Subgrade 3b: Moderate quality agricultural land
- Grade 4: Poor quality agricultural land
- Grade 5: Very poor quality agricultural land.

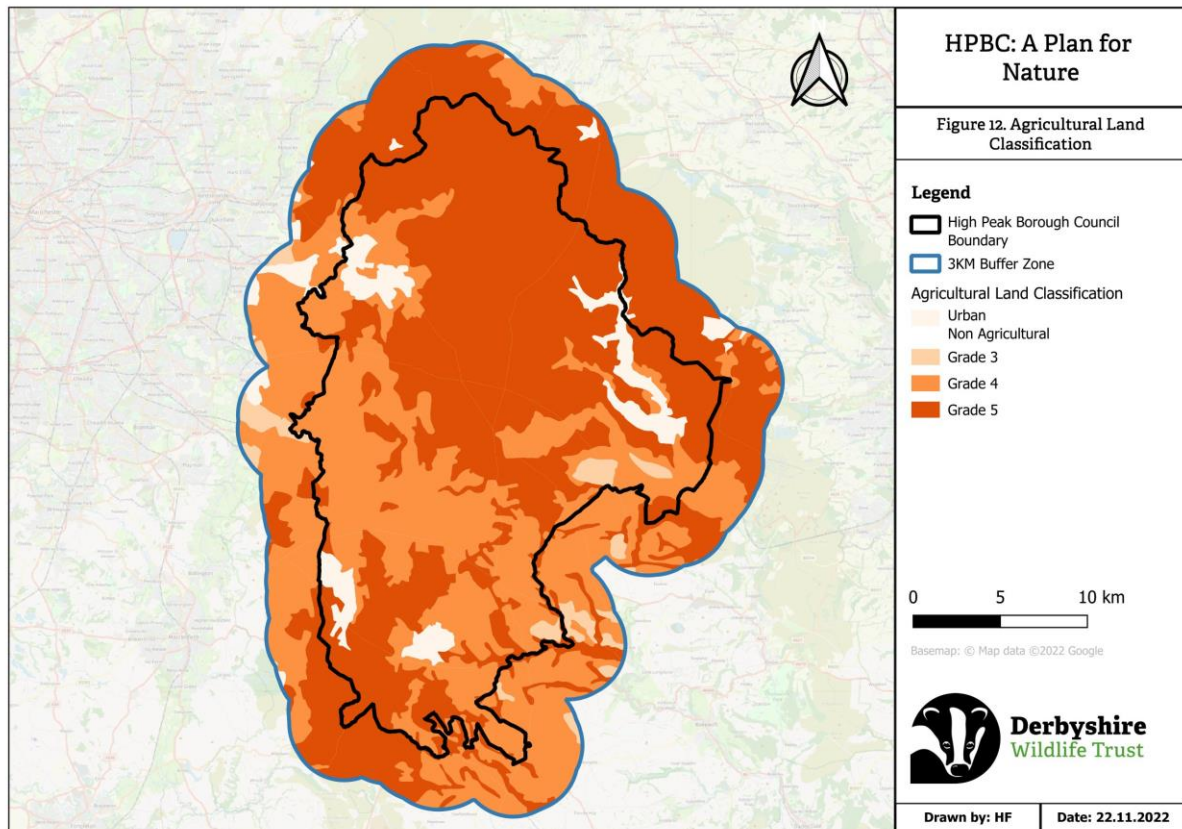
Grades 1 to 3a are classified as Best and Most-versatile land and the NPPF guidance prioritises keeping these areas for agricultural production. Where agricultural land is less productive there is a higher likelihood of uptake of the BNG system by farmers.

As shown in Figure 12, much of the borough is of poor agricultural quality, with no land identified as Grade 1 or 2. This means that an alteration of land use from farming to alternative enterprises focused on nature-based economies, including BNG, is more attractive here than other areas of the county. Farming in areas of lower agricultural quality is often reliant on government schemes and subsidies, with an estimated 42% of UK farms





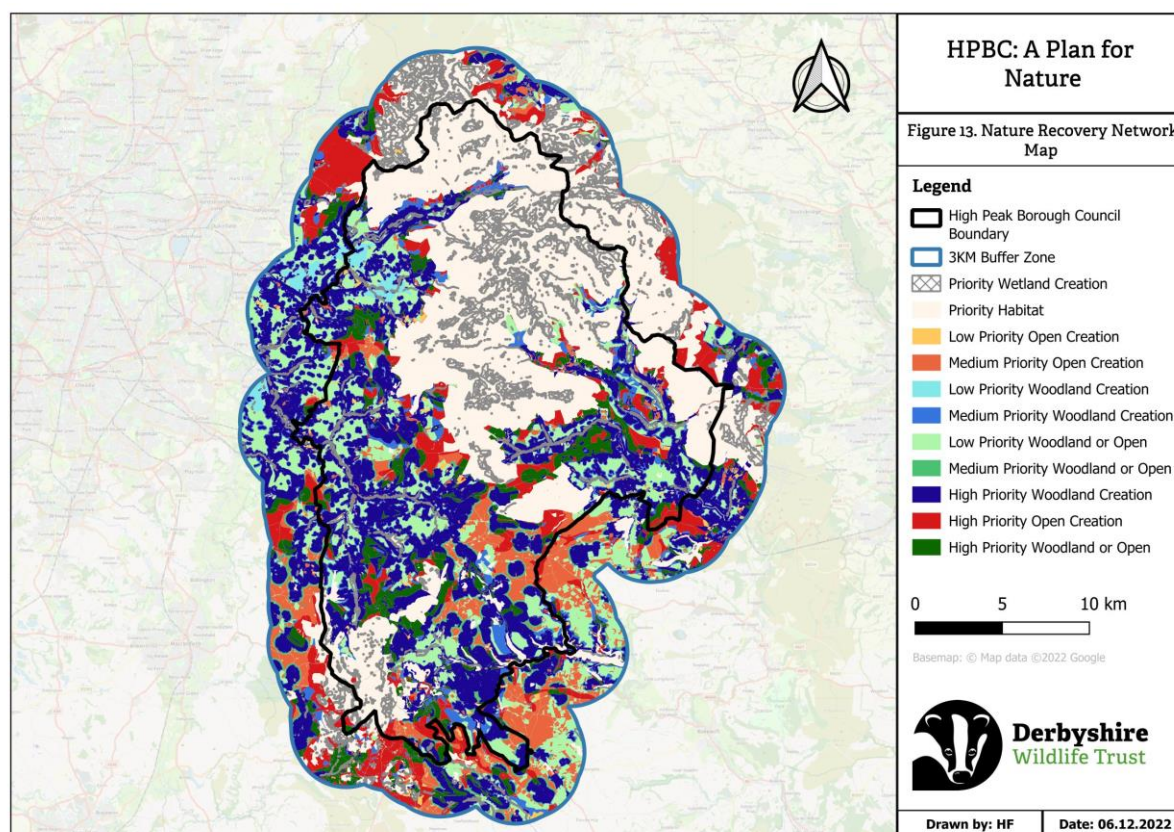
making a loss without subsidy support (National Audit Office, 2019). Recent studies suggest that the least productive 20% of UK farmland produces only 3% of calories and therefore, removing 9% of this low-quality farmland and returning it to nature would see a reduction in calorie production of just 1% (National Food Strategy, 2020).





7 Biodiversity and Network Opportunities

The final output of the NRN modelling is shown in Figure 13 and identifies low, medium and high priority areas for the creation of open and woodland habitats. The wetland network forms one blanket layer of recommended wetland creation to be paired with the woodland and open creation layers. This identifies key areas for wet open habitats such as wet grassland, marsh and reedbeds and wet woodland habitats.



Referring to the habitat network modelling detailed above, this section of the report will identify key areas and opportunities for habitat recreation and restoration, outlining important habitats, areas and proposed methods of delivery. Habitat creation and restoration will support in species recovery by aiding in dispersal and population expansion. It will also improve the overall stability of the environment, increasing resistance against the impacts of climate change and supporting the delivery of numerous ecosystem services including carbon sequestration, Natural Flood Management (NFM) and public wellbeing.

7.1 Creation of an Open Nature Recovery Network

To increase flow of grassland species, the creation and restoration of open habitats should be prioritised in several key areas. The following areas are identified as priority sites for the creation and expansion of bog and heathland habitats: Peak Naze above Glossop (central W3W location silk.beamed.worthy), land surrounding Torside Reservoir (central W3W location fatherly.speeches.overhaul), fields north of Mossy Lea (central W3W location impulses.positive.neckline), land next to Kinder Reservoir (central W3W location (input.privately.fortnight), fields surrounding Kinder (central W3W location guard.splinters.ever and nickname.driftwood.minus) and fields surrounding Hollinshill

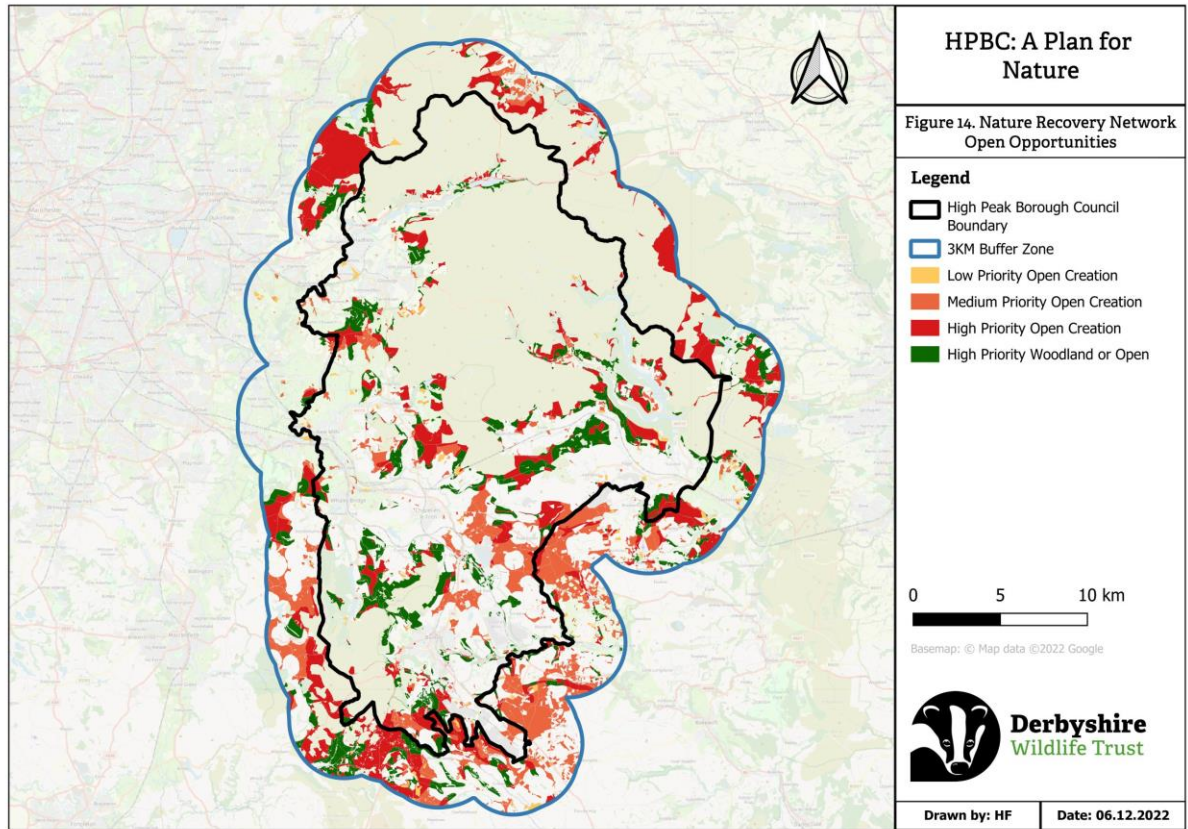




industrial area (central W3W location shame.gliders.rating). Key restoration measures for these areas include rewetting fields and moorland through blocking drains and gullies, restoration of sphagnum, and seeding of key species for the creation of moorland and grassy moor including common, cross leaf and bell heather, bilberry, common and harestail cotton grass and cowberry. This will aim to expand the existing designated sites and priority habitats, allowing for these important sites to increase their carrying capacity. See Figure 14 for visual guide.

Other open habitats to be prioritised include hay and wildflower meadows, species rich calcareous and acidic grasslands and field margins as well as encouraging open habitats in urban areas through appropriate management of public open spaces, grass verges and nature friendly gardens. These habitats can be created through various interventions including appropriate grazing or cutting and seeding of suitable flora species, as well as nature friendly farming, such as regenerative farming schemes. See figure below for an overview of these priority areas, they include: land adjacent to Arden Quarry in Birchdale (central W3W location assembles.requests.splits), land surrounding Gamersley estate (central W3W location refusals.mentioned.pyramid) and land adjacent to Start Lane above Todbrook Reservoir (central W3W location lollipop.flaunting.mammoths) for acid grasslands; a large number of the fields north of HSE land at Harpur Hill (central W3W location switched.beefed.strutting), land north of Doveholes quarry (central W3W location neater.trend.excavated) and land north west of Doveholes (central W3W location truck.stamp.dried) for calcareous grasslands; and, land surrounding Furness Vale (central W3W location kidney.gather.already) and land surrounding Broadhurst Edge Plantation (central W3W location stability.novelists.baked) for meadow and neutral grassland. Where possible, land within these areas of high strategic significance should be restored for nature, with the council supporting and encouraging this work wherever possible, through planning policy, funding support, information exchange, increasing awareness and community action.







7.2 Creation of a Woodland Nature Recovery Network

Due to the low woodland cover, large areas are identified as priority for woodland creation to connect the sparse, disjointed network. This would allow for an increase in the south – north flow for species typical of woodland habitats, which would be of high benefit to species susceptible to climate change; allowing them to follow their climatic niche and creating a more flexible, stable landscape. Key areas of work must include a range of features, including increasing cover and quality of hedgerows and tree lines, creating open parkland and deciduous woodlands as well as scrub and scattered trees.

Many of the priority areas are focused around an existing near continuous woodland corridor from the south, below Buxton, through Chapel-en-le-frith to Glossop and Tintwistle. An additional key corridor is through the Derwent valley.

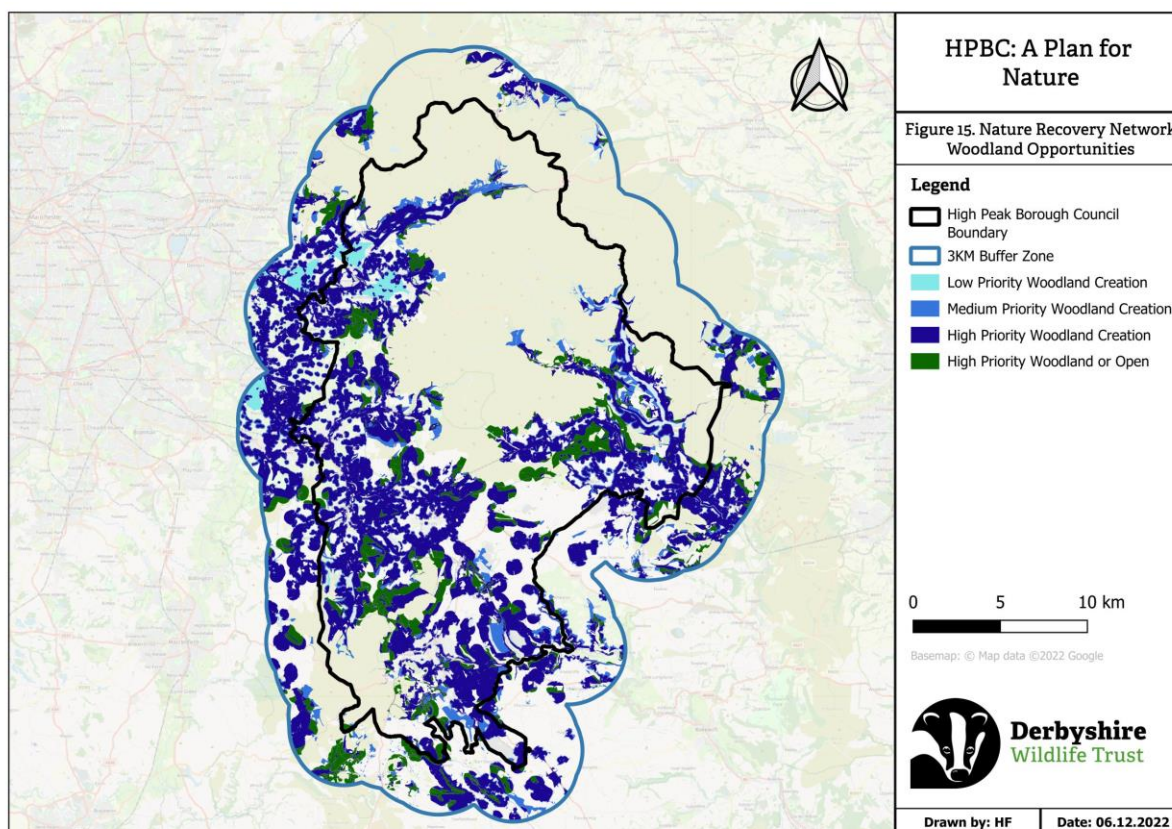
Key areas for the creation of woodland to expand existing corridors and connect up ancient woodland fragmented networks include; the banks of the River Wye (the section below Buxton, central W3W location quote.initial.spud), land between the River Goyt and Long Hill (central W3W location brink.cheering.removals), land above Sheffield Road, North East of Chapel (central W3W location teacher.punctuate.drips), the majority of land surrounding the existing woodlands of Ladybower Reservoir (central W3W location thirsty.freshest.mash), land between Long Lane and Marple Road in Charlesworth (central W3W location replace.worms.burst), and land above Valehouse Wood in Tintwistle (central W3W location conjured.toned.slate). Ancient woodlands are of extremely high biodiversity value however, many of these spaces are now small and isolated – by targeting native woodland creation surrounding these sites, species typical of woodland habitats will be able to move between high quality spaces with greater ease.

Wood pasture parkland is a habitat that has seen huge reductions through agricultural intensification, however this is a habitat that would have once been abundant in the White Peak. Key target areas for the creation of this habitat include: land between Buxton Road and Cowdale (central W3W location craftsmen.smug.beams), land north of Bagshaw (central W3W location lobby.heartache.champions) and the fields between Hope and Thornhill (central W3W location dictation.gifted.encodes).

There is a high priority for woodland creation and restoration around the urban and residential areas as well as around the many waterbodies – both of which would serve to reduce flood risk and improve water quality. This can be created by an increase in street trees and scattered trees within open parkland as well as the creation of riparian woodlands.

See figure below for overview of priority areas for woodland creation and restoration.

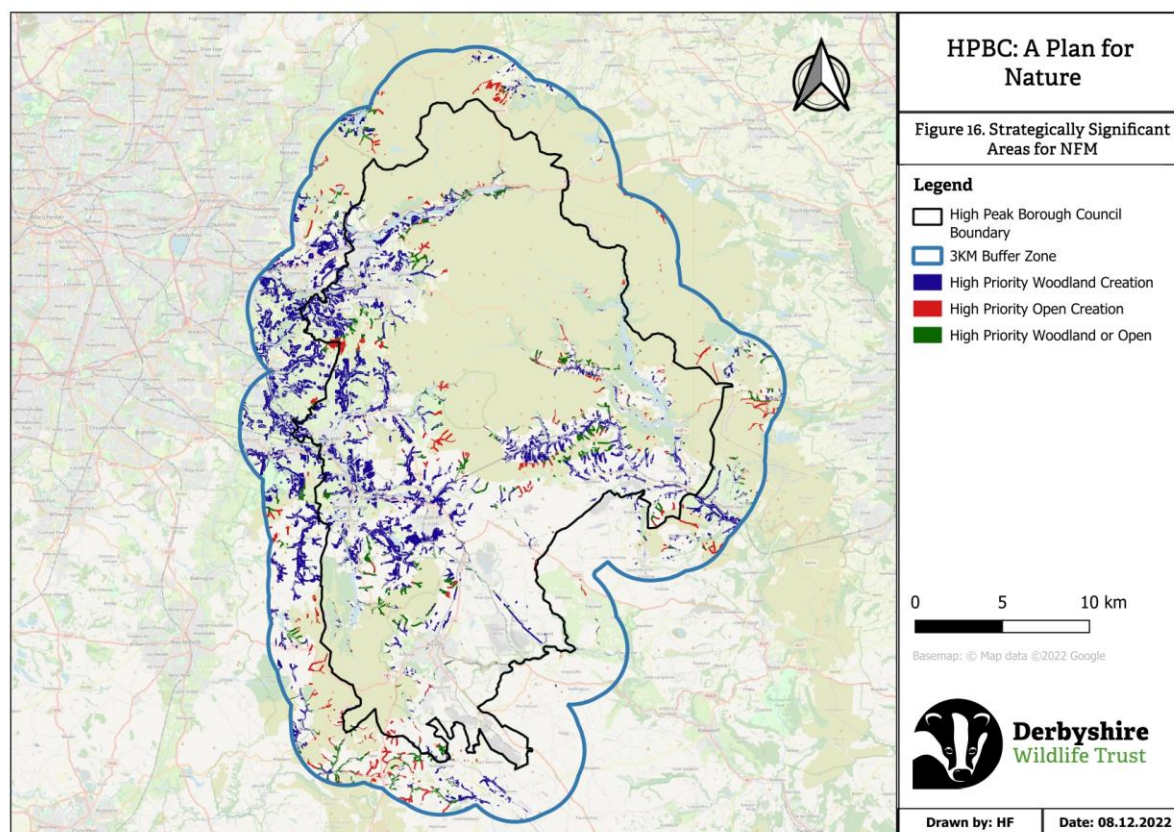




In addition to the existing NRN map created by DWT, the Environment Agency have created a map which identifies priority areas to create woodland and alleviate flood risk (Working with Natural Processes). This map has been overlaid with DWT's NRN to identify the areas of the highest strategic significance for creating tree cover and other natural flood management (NFM) schemes to improve ecosystem services within the area, shown in Figure 16 below.

This map identifies that the key focus areas for wet woodland are along the majority of the waterbodies and tributaries. Actions within these areas will aim to improve the quality of both the banks and the floodplain and include planting of riparian woodland as well as increasing surface roughness and restoring habitats.





7.3 Creation of a Wetland Nature Recovery Network

Figure 17 identifies areas of high strategic significance for wetland habitat creation and restoration, it should be noted that not shown on this map is the high priority for rewetting the designated blanket bogs that cover much of the Dark Peak – this should involve liaison with the relevant landowners and bodies such as the National Trust to push for blocking gullies, reestablishment of sphagnum moss and the prevention of burning which causes lasting damage to the peat.

Priority areas for the creation of wet woodland include the valley which runs through Upper Booth and Edale (central W3W location textiles.newlyweds.tougher) with a focus on the fields between the River Noe and the base of Mam Tor, expanding the small patches of woodland that are interspersed across Castleton and Hope, including land around Peveril Castle (central W3W location freed.gathering.beards); much of the land surrounding the river Goyt, particularly around New Mills, Whaley Bridge and Chapel-en-le-Frith and surrounding the major reservoirs, with a focus on Combs Reservoir (central W3W location windows.decide.relished), Toddbrook Reservoir (central W3W location trace.stalemate.bitter) and the eastern edge of Fernilee Reservoir (central W3W location corporate.monks.people). Wet woodland habitats consist of broadleaved wet tolerant species include willow and alder, interspersed with woodland ponds and ditches as well as allowing the development of successional scrub, creating a patchy mosaic with phased edges and ecotones⁸.

⁸ An Ecotone is a transition zone between two habitats, often identified as areas of high ecological value to several specialist species.

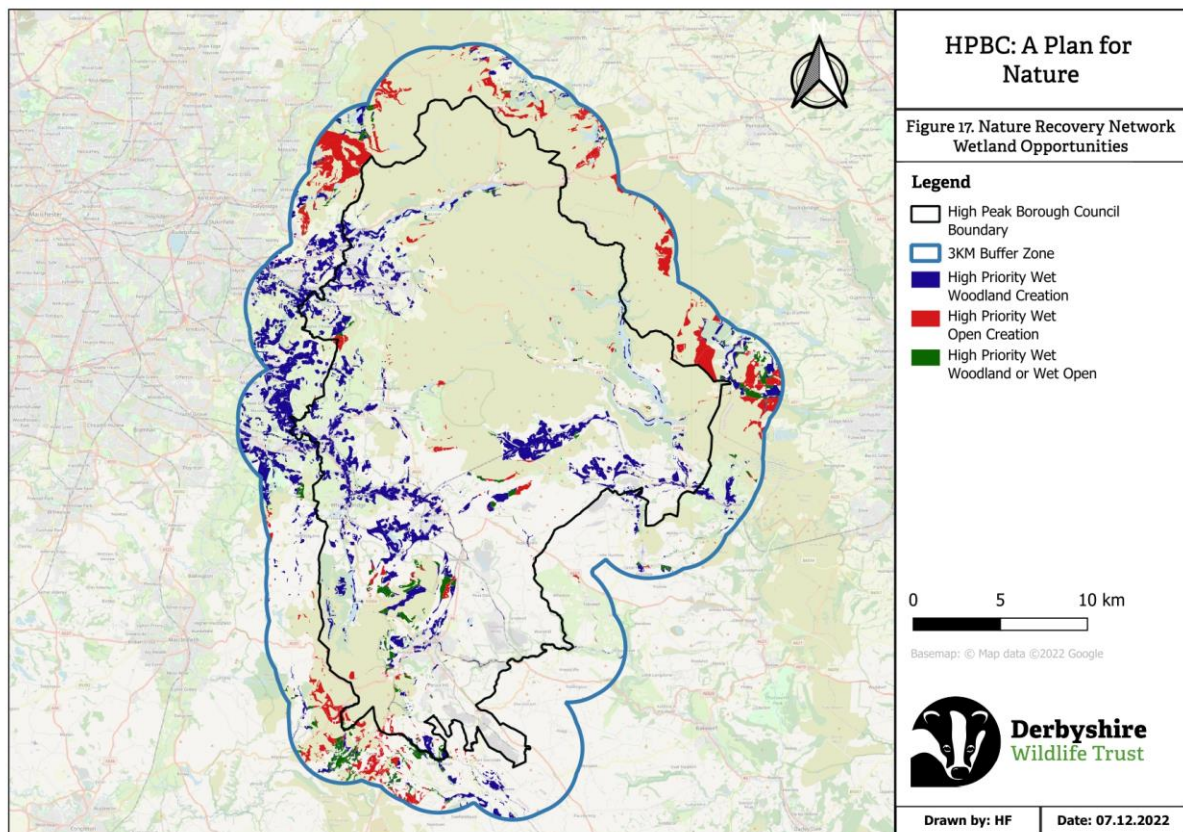




The area to the immediate north of Eldon Hill disused quarry but south of Sheffield Road (central W3W location gentlemen.musically.credit) is identified as being of high priority for the creation of a mosaic of wet woodland and open habitats which should contain a mixture of grasslands, flushes, rush pasture and small waterbodies.

Wet open habitat restoration should focus on sympathetic management of wet grassland and moorland, allowing peat soils to restore back to wetlands through blocking ditches and creating leaky woody dams as well as the restoration of the floodplains and the creation of ponds and scrapes. Most areas identified to be of high priority for wet open habitat creation and restoration is the land immediately surrounding the designated blanket bog. Much of these habitats may already be moorland or wetland and should therefore be assessed for quality with the aim of improving. Further areas are detailed above in section 7.1.

There are a handful of small areas within the urban environments that are identified as being of high priority for wet open habitats and should be sought to create wet grassland and ponds. These areas are focused around Buxton and its surrounding villages and Hayfield (central W3W locations of key fields are: regrowth.octopus.hill, tens.reshape.covertly, and hardly.quilt.contracts).





8 Strategic Biodiversity Opportunities for Key Habitats and Species

This section identifies expansion targets for key habitats and species for HPBC, as has been previously identified within the preceding BAPs, giving updated goals and targets for the borough.

The first table provides a target for habitat creation or restoration for 2050. The long-term focus to ensure 30% of the borough is managed for wildlife is ambitious but achievable and in line with Government targets to manage 30% of land for nature. The designated sites currently in favourable condition make up 4% of the borough in total (2175ha), this is combined with the known priority habitats which are assumed to be in favourable condition⁹ outside of the designated sites that makes up an additional 10% (5671ha). The figures covered in table 3, make up a total of 8360 hectares of land, proposed for creation or restoration of key habitats, if this is achieved, it would bring the coverage of good quality spaces for nature up to the targeted 30% (around 16000ha).

The table includes a column for 'key targets'; for many of the habitats, particularly the more complex habitats, the council's main involvement in driving creation and restoration will be through continued partnership with relevant organisations such as DWT, Moors for the Future and Natural England as well as improving communications with farmers and landowners through hosting and supporting knowledge shares and events. An additional measure in which the council can support directly in the creation and enhancement of these habitats is through improving landowner accessibility to surveying and advice through LWS funding, considering partially funding expert advice and surveys for non-designated land and providing financial incentives for people with designated LWS areas to maintain the site in favourable condition.

⁹ Priority habitats within a current designation were removed, as was all known degraded blanket bog.





Habitat	2050 Target	Key Targets
Blanket Bog	2500ha	<ul style="list-style-type: none"> • Raise awareness and use of the Peatland Carbon Code through communications, newsletters and events. • Restoration, not creation of sites through appropriate management, utilising NFM opportunities through blocking gullies and rewetting areas. • Restoring 30% SSSI units to good condition by engaging with NE and large landowners.
Upland Heathland	1000ha	
Upland Flushes, Fens and Swamps	100ha	
Upland Mixed Deciduous	820ha	<ul style="list-style-type: none"> • Raise awareness of the Woodland Carbon Code and the English Woodland Creation Offer as well as woodland maintenance grants for restoration and creation. • In relevant areas signpost DWTs Nature Based Solutions Project. • Increase landowner accessibility to ash dieback surveys through grants. • Plant new woodlands on council managed land and survey / improve management of existing council woodlands. • Increase availability for professional survey and assessment through LWS work.
Upland Oakwoods / Birchwoods	600ha	
Wet Woodland	300ha	
Wood-Pasture and Parkland	600ha	<ul style="list-style-type: none"> • In relevant areas signpost DWTs Nature Based Solutions Project. • Identify potential Public Open Spaces that can be enhanced to create WPP.
Hedgerows	100km	<ul style="list-style-type: none"> • Launch a campaign to reinstate garden hedgerows. • Create more hedgerows within the towns and villages to improve connectivity. • Improve management of existing hedgerows and increase number LWS designated.
Traditional Orchard	60ha	<ul style="list-style-type: none"> • Create and appropriately manage traditional orchards within Public Open Spaces, in partner with biodiversity groups and the community.
Ponds	NA	<ul style="list-style-type: none"> • Create wildlife ponds in residential areas. • Launch a project to inspire the reinstating of garden ponds.





		<ul style="list-style-type: none"> • Support and promote DWT Team Wilders ‘Pond in a Pot’.
Rivers and Streams	25km	<ul style="list-style-type: none"> • Restoration plans, removal of weirs, reduction in pollution.
Calcareous Grassland	700ha	<ul style="list-style-type: none"> • Improve management of council managed land through surveys and renewal of management plans. • Seed / create species rich grassland on existing amenity. • Create green verges and change mowing regimes. • Increase availability for professional survey and assessment through LWS work.
Acid Grassland	750ha	
Lowland Meadow	600ha	
Purple Moor-grass and Rush Pasture	250ha	<ul style="list-style-type: none"> • Restoration of wet grasslands, working with farmers to block up drains and gullies. • Increase availability for professional survey and assessment through LWS work.
Lowland Fens	30ha	
Open Mosaic Habitats	50ha	<ul style="list-style-type: none"> • Evaluate council owned brownfield sites and consider retaining for wildlife as opposed to future developments. • Create focus for natural regeneration of disused quarries within their restoration plans as opposed to creation of large waterbodies as is often the standard.

Table 3. Priority Habitat Expansion Targets for 2050





Table 4 provides an overview of key methods to expand the range of local priority species, as listed in the original BAP. This is intended to give an up-to-date assessment of range expansion methods and considerations for future projects and funding. Similar to the above, direct council involvement will be best placed through continued partnership with relevant stakeholders, raising awareness through communication and signposting landowners to relevant projects and prioritising habitat connectivity.

There are a range of additional species not covered within this report that are of high local value and are currently under threat or locally extinct, these species include but are not limited to; adder, common lizard, hen harrier, slow worm, dingy skipper, brown long-eared bat, common cuckoo *Cuculus canorus* and lesser stag beetle *Dorcus parallelipedus*. As with most native species, key methods to support the recovery and longevity of the populations is through the creation of connected wildlife corridors, improving the naturalness and plasticity of the landscape and creating larger, healthier spaces.

Species	Range Expansion Methods.
Water Vole	<ul style="list-style-type: none"> • Catchment wide mink control. • Increase survey effort to establish where populations currently remain of both water vole and mink. • Habitat restoration and bank vegetation reinstatement. • Remeandering of modified channels and removal of weirs. • DWTs Water Vole Reintroduction Project.
Curlew	<ul style="list-style-type: none"> • Increase surveying to establish where populations currently remain. • Improve communications with farmers on appropriate time for cutting / managing fields. • Restore moorland fringe, varied grassland and heather moorland. • Create scrapes and wet grasslands within fields. • Generalist predator control in selected areas to replicate top line predators regulating mesopredator populations. • Wildlife Trusts joint Curlew Project.
Lapwing	
Twite	<ul style="list-style-type: none"> • Increase survey effort to establish where populations currently remain. • Create hay meadows focusing within 3.5km of known populations. • RSPB Twite Project.
White Clawed Crayfish	<ul style="list-style-type: none"> • Increase survey effort to establish where populations currently remain. • Borough wide removal of signal crayfish. • Creation of ark sites¹⁰.

Table 4. Priority Species Range Expansion Targets for 2050

¹⁰ An Ark site is an isolated, self-contained site which can support healthy, self-sustaining populations of crayfish.





In addition to these species, it is recommended that the council pick a focus species to target their efforts and to raise awareness. This species will act as an umbrella species, meaning that conservation efforts focused on this project will not only benefit the species in question but also a wide range of additional habitats and species groups. This report recommends Eurasian otter as the primary species for consideration.

8.1 Otter

Otter are a charismatic and shy species, and many populations are under recorded due to their elusiveness. The Peak District is known to have a moderate population of otter but there are a range of actions that the council can undertake to improve and protect them. Otter are an umbrella species for a range of populations including water vole, white clawed crayfish, aquatic invertebrates, dragonflies, fish and many birds species, meaning actions to improve habitat for otter also enhance the overall condition of the river.

Many HPBC landholdings border waterbodies and so, direct action can be easily taken. In addition, the council can support other landowners by providing appropriate information, signposting for further help and incentives for landowners who take appropriate action.

Key actions include:

- Encourage local groups and the public to increase monitoring efforts with camera traps and submitting their records to speciesrecords@derbyshirewt.co.uk;
- Increase formal survey efforts;
- Create an advisory group for interested landowners to share knowledge ;
- Remove weirs or remainder rivers around weirs as this prevents movement of fish across the rivers (requires an Ecological Impact Assessment);
- Create and appropriately manage terrestrial habitats adjacent to rivers including wet grassland, woodland and scrub to provide supporting niches for otter populations;
- Ensure underpasses are provided on new and (where possible) on existing roads to prevent accidental killings;
- Encourage buffer zones on farmland by fencing off stock from the river to prevent damage to the bank and reduce risk of run off;
- Use otter as a key species to promote and raise awareness of the issues facing water courses;
- Appropriate management of bankside trees to create new habitats; and,
- Ensure new developments have a focus on minimising and mitigating pollution and nutrient leaching.





9 Strategic Biodiversity Opportunities for Habitat Creation and Enhancement

There are several key opportunities and methods for HPBC to consider which will lead to the creation and restoration of the NRN detailed above. This includes BNG, the establishment of key habitat corridors within urban and residential areas, and partnership working with existing projects and initiatives to drive habitat creation.

9.1 Urban Connection Zones and Wilder Communities

Improving biodiversity links to urban areas and bringing wild spaces into towns and cities provides numerous ecosystem services and biodiversity benefits, including; species dispersal, reducing fragmentation, improving community wellbeing, and NFM. Key methods of integrating wildlife corridors within urban and residential settings includes engaging, establishing and consulting with local biodiversity groups, implementing green infrastructure, creating new site designations such as ‘Local Green Spaces’ in the planning system, utilising NFM as a driver to increase tree cover, changing management of existing council owned land and POS and creating community wide movements of ‘Team Wilder’ actions such as *Grow Don’t Mow*.

The Peak District is one of the most easily accessible national parks in the UK containing countless links to surrounding urban areas including settlements in the High Peak such as Buxton and Glossop, and other population centres such as Greater Manchester and Sheffield.

9.1.1 Priority Target Areas within the Urban Landscape

Buxton, New Mills, Whaley Bridge and Chapel-en-le-Frith all indicate a high priority for the creation of woodland corridors and increasing tree cover. Primary locations within these urban sites include: St Johns Road, Bakewell Road and the land surrounding Hogston Rec and Buxton Golf Club in Buxton, the North of Whaley Bridge along Buxton Road, land surrounding the railway north of Chapel-en-le-Frith as well as along Hayfield Road, also in Chapel. Methods to achieve this include integration of street trees and community orchards, identifying and targeting areas of POS and disused land for tree planting, as well as the establishment and restoration of native, species rich hedgerows *i.e.* within parks and gardens and surrounding industrial and retail areas, such as the roads along Harpur Hill Business Park (south of Grin low Road). Focus must be paid to expanding and connecting existing wooded habitats as well as appropriate management of existing woodland, including regular reviews of current management strategies to ensure best practice and utilising current funding schemes such as the English Woodland Creation offer and MoreWoods.

Throughout many of these areas are small spaces identified to be high priority for open habitat creation. This can be achieved through sympathetic management of grass verges and existing open spaces, as detailed in *Appendix E. Habitat Creation and Management Guides*. Focus areas include identifying existing areas of open space and subjecting them to full survey and management plans, creating nature rich spaces within urban areas to create steppingstone habitats and improving public access to nature, raising awareness and improving wellbeing. Where management plans already exist, review management in line





with best practice for biodiversity, ensuring to integrate access to nature with ecological value. Key areas to initially consider are Pavillion Gardens, High Peak Golf Club at Fairfield and Hartington Gardens; many of the current public gardens within HPBC management are primarily driven for aesthetic value, resulting in extensive cover of non-native or inappropriate species, manicured lawns and low levels of floristic diversity. Urban green spaces such as these can be managed for both wildlife and the public, however, public consultation must be carried out to ensure community engagement. Additional important focus points for restoration of open habitats in urban areas include Lismare Fields in Buxton (central W3W location sweetener.lyricism.flopped) and fields south of Swallow House Lane in Hayfield (central W3W location blink.timing.brush)

Where possible, links to the external urban centres should be prioritised, creating dispersal corridors for species. The urban connection zone to Manchester indicates a high level of suitability for woodland and wet woodland creation, creating corridors through Glossop into the surrounding areas.

9.1.2 Natural Flood Management

Due to climate change and urban sprawl, flood risk is increasing. Through targeting areas for NFM, the long-term risk of flooding can be reduced, providing numerous additional ecosystem services including increasing catchment resilience to climate change, increasing carbon sequestration and improving water quality. Methods of NFM include: leaky dams, remeandering of modified rivers and streams, restoring floodplains, planting and appropriately managing wet woodland and increasing tree cover, particularly in areas of flood risk and along waterbody edges. An additional key measure which is crucial to NFM within the Peak District is the restoration of peatlands.

The majority of land within the borough is identified as being of high priority for the creation and restoration of wetland habitats, with high focus on Whaley Bridge, Fairfield, Buxton and Glossop.

To deliver NFM and restore wetlands, prioritise the following:

- Identify man-made weirs or extensively straightened waterbodies and seek ecological advice to remeander the watercourse¹¹. First steps would be a review of all waterbodies on council owned land, following this, partnering with organisations such as DWT to identify priority privately owned sites for reconnection and restoration, taking into account flow of aquatic species and flood risk. These areas include land adjoining Glossop Brook which includes several parcels of land along Dinting Lane in Glossop, Manor Park in Glossop, Land adjoining the River Sett including New Mills cemetery, Memorial Park in Whaley Bridge and Pavilion Gardens in Buxton.
- Review council management practices on land that borders waterbodies (key areas listed in bullet point above) and assess pollution risk and nutrient neutrality, including current use of chemicals, creation of vegetated buffer strips along the edges of waterbodies and assessing litter and waste in the area, creating focus volunteer days to remove pollutants.

¹¹ Remeandering of waterbodies would require permission from external bodies (Environment Agency) and would require an ecological appraisal to identify constraints.





- Use figures 16, 17 and 18 to identify priority areas for woodland and wet woodland creation. If these areas fall into the Derwent Connections boundary, DWT can support the landowner in receiving financial support for woodland creation through the English Woodland Creation Offer (EWCO) and the Woodland Carbon Code (WCC). Increase cover of wooded habitats within town and village planning, this can be a mixture of woodland strips, hedgerows, shrubs, tree lines or just standing street trees. Land owned by or under the council management of high priority for woodland and wet woodland include Pavillion gardens in Buxton, recreation ground to the east of Brown Edge Road, Land at Hockerley Lane in Whaley Bridge, grazing land off Bowden Lane in Chapel, Manor Park in Glossop, Howard Park, and the land surrounding Gamesley.
- Use figure 18 to identify priority areas for wet open creation and create / restore wetlands including ponds and wet grassland and increase surface roughness through the creation of scrub and tussocky grasslands in other areas.
- Consider the installation of leaky dams and the creation of wetlands within existing areas.
- Support peatland restoration projects such as the Lowland Peat Discovery Project or Moors for the Future and raise public awareness.
- Raise awareness within the farming community of the importance of not draining wetlands and slowing the flow of fast-moving waterbodies through leaky dams. This will involve linking with farming clusters, engaging in direct face to face contact and workshops as opposed to signage and fliers and assessment of how the council may be able to financially support these groups.

9.1.3 Green Infrastructure

Green infrastructure (GI) is an innovative way of bringing wild spaces into urban settings, increasing carbon sequestration, reducing flood risk, improving mental health, cooling urban areas, building economic growth by attracting businesses and investors, and providing ecological steppingstones. GI initiatives vary in scale and nature, including the incorporation of street trees and green roofs as well as larger GI corridors such as canals, rivers and parks. The towns of HPBC already see high levels of tourism, the historic character of these towns can be further enhanced through increasing greenspace, creating pollinator corridors by planting native flowers throughout the built-up areas and bringing the countryside into these increasingly urban sites.

The importance of both green and blue infrastructure is already recognised within HPBC following the Derbyshire Dales and High Peak Green Infrastructure Strategy 2010 in which it was identified that the towns within this area each hold a number of existing green spaces including public gardens and footpaths which can be further utilised to create a connected network of habitats.

In addition to the subsections below, a primary goal should be to improve and solidify statutory guidance within the area for new developments, ensuring green infrastructure is





appropriately implemented in all new developments, implementing the Wildlife Trust ‘Homes for People and Wildlife’ guidance documents¹² into statutory guidelines.

A number of key considerations for GI are listed in the subsections below, these are all strategies to be considered in both new developments and enhancing existing built structures and advice listed in applicable to all HPBC premises throughout the Borough. Buildings owned by the council are to be prioritised for an assessment for suitability for the implementation of GI, aiming to reduce the council’s own emissions and carbon footprint. Things to consider for implementation on existing buildings include the age and stability of buildings.

9.1.3.1 Green Roofs and Living Walls

Green roofs and living walls can be used to reduce water runoff and lower temperatures of the surrounding environment, as well as providing additional insulation to the buildings, thereby reducing flood risk and energy costs, simultaneously improving mental health and increasing property value. New developments should aim to incorporate these systems wherever possible, following the lead of larger cities such as Derby who, in partnership with DWT will roll out of their ‘green bus shelters’ on which the council will put living roofs on 45 new bus shelters, creating food sources for habitats and pollinating insects. Buxton Crescent and the Pavilion Gardens buildings are primary candidates for assessment, due to them being central to Buxton and areas of existing community value.

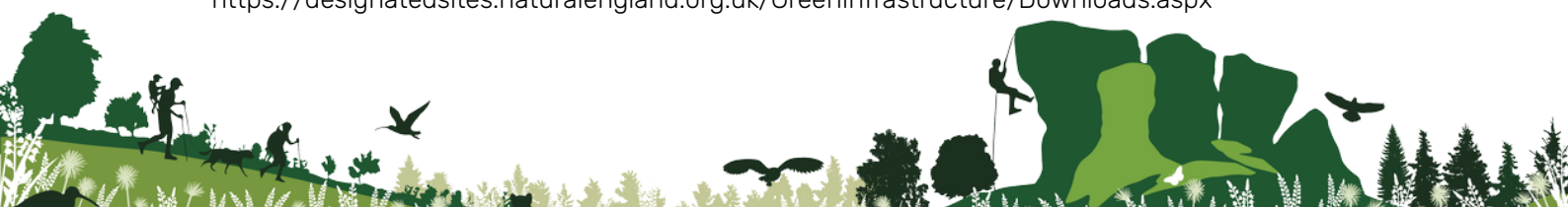
9.1.3.2 Community Allotments

Allotments provide an interesting and diverse habitat for many species, providing both late and early resources for pollinators, wildlife ponds and hedgehog routes as well as increasing community wellbeing. Where possible, consider disused land or amenity grassland for the creation of community allotments, encouraging the involvement of local groups and schools. Some of these opportunities have been identified within the BNG assessed sites. An achievable aim is to ensure all residential areas have a community allotment, consider using the NE Good Quality Greenspace¹³ targets of all residents living within a 15minute walk of a good quality greenspace for the creation of community allotment sites, prioritising areas of poorer socio-economic backgrounds within the first five years. Fairfield, Gamesley and Glossop are all areas in which the council owns large expanses of land, all of which would benefit from the creation of additional allotments.

As the council already maintains ownership over a small number of allotment sites, they have a responsibility to influence operations on these sites, such as implementing bans on chemicals, reviewing allotment rules on hedgerow maintenance, supporting in the implementation of wildlife ponds. Where allotments are present, consider maintaining one plot for the wider community, such as allowing the plot to be managed by the school, carrying out wellbeing activities on site and increasing education within the younger generation on sustainable food production, pollination and pollution.

¹² <https://www.derbyshirewildlifetrust.org.uk/news/new-guidelines-call-homes-people-and-wildlife>

¹³ <https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Downloads.aspx>





9.1.3.3 *New Developments*

As well as utilising BNG (covered in section 9.4) and implementing green infrastructure such as green roofs and species rich grass verges, new developments can create wildlife friendly spaces in their landscaping through the implementation of native, appropriate species as opposed to ornamental plants. Broad measures to include within statutory guidance include for all new developments:

- Provision of low-level lighting on all sites to reduce impact on bats;
- Above and beyond measures around landscaping such as native trees and scrub in onsite greenspaces (such as parks, SuDs features and verges), as many landscape designs within planning proposals have a focus on non-native, ornamental species which has little to no value for wildlife. By setting a standard of not including non-native, ornamental species in the design and only incorporating native, appropriate plants, nature can be more effectively integrated within ongoing developments;
- Gardens to include a mixture of native grasses and plants including fescues, bents, buttercups and clovers as opposed to dominance of perennial rye, seed mixes for gardens that are typically included within planning and landscaping documentations (it should be noted that the planning system generally have no control over the actions of subsequent occupiers in altering grass types of planting non-native species, after development completion);
- Create hedgehog tunnels throughout garden fences;
- Inclusion of swift and bat bricks to provide nest spaces and roost locations; and,
- An appropriate mix of bird and bat boxes in suitable locations.

Finally, lead by example by going above and beyond in BNG requirements for developers, implementing a minimum 20% uplift in units as opposed to 10%. 10% Net Gain provides a suitable enough buffer to ensure there is no net loss, accounting for errors or assumptions within the calculator, but by going above and beyond this, HPBC set a precedent, joining other LPAs leading the way in this area including Maidstone in the South East. This ensures all developments are achieving real, notable benefits for nature, vastly reducing the threat development poses to wildlife. By implementing this change, it will incentivise developments to be more ecologically conscious onsite due to the structure of the mitigation hierarchy and the flow of works. As a borough that already has large amounts of cultural and ecological value, development within High Peak comes with extensive threats and challenges that other Authorities may not face, thereby increasing the pressure to ensure that use of BNG in planning is both effective and appropriate.

9.1.4 Brownfield Sites

Brownfield sites are often high priority for re-development as they offer accessible land in urban areas, and are frequently favoured in national and local planning policy over greenfield sites, due to encouraging effective use of land or preventing urban sprawl. However, when brownfield sites have been disused for a number of years they often hold high biodiversity value. The lack of fertilisers and thin soils make them a haven for diverse plant communities, with the abundance of invertebrates, amphibians, reptiles, bird and mammals that is associated with these diverse habitats.





Many brownfield sites are allocated in Local Plans, however, Councils should be aware of pre-existing ecological characteristics of such sites and their contribution to the wider biodiversity network. It is recommended that where brownfield sites are currently allocated within the local plan, or during the process of Local Plan preparation when considering new land use allocations generally, brownfield and greenfield sites are pre-emptively reviewed (with appropriate evidence) for their biological characteristics as well as wider planning factors such as financial viability and deliverability, prior to being proposed for allocation.

The open mosaic habitats often found on brownfield sites is an extremely difficult habitat to manually create and so once lost, cannot be restored elsewhere. Including such sites for land use allocation, or determining planning proposals on such non-allocated sites would require appropriate consideration of their ecological characteristics against local/national planning policy (which may include the need for the undertaking of appropriate ecological surveys and resultant mitigation/compensation by a developer linked to survey recommendations) which in the case of acceptable schemes, may impact on the developable site area (yield) of schemes and their financial viability. The introduction of mandatory BNG within planning will exacerbate development costs which in some cases may mean developments will be more financially sustainable on poorer quality habitats.

9.1.5 Council Owned and Managed Land

The council either own or have influence over many land parcels, intervening on these sites and changing management is one of the simplest and most effective ways that the council can have direct and immediate impact on the landscape.

Where there are large parcels of land that are not suitable for BNG, *i.e.* the habitats present are already of moderate value; these sites should be systematically surveyed and provided with a long term management plan focused on creating a balance between the local community and wildlife; additionally, as discussed above, where management plans exist, review the biodiversity value and alter to create diverse, visionary sites of high biodiversity and community value. Any sites surveyed for this project that were not deemed to be suitable for BNG have been provided with guidance on alternative management practices that would benefit by being delivered through partnership with the community and can be found within the appendices and section 9.4.

Many of the council owned areas considered of high priority for restoration in accordance with the NRN are listed within this document and can be observed in Figures 14 – 18. There are several broad land use categories that these sites fall into which should be prioritised, as listed below.

Additional measures for the council to take within their own practices include becoming a pesticide free borough, leading by example and stopping all use of chemicals both on their own land and on land under their management, as well as undertaking an audit of all departments within the council, identifying how the council themselves can be greener, including reducing unnecessary waste and carbon footprints.

9.1.5.1 Recreational Facilities

Several of the land parcels owned or managed by the council have community and recreational value and significant changes to their management for nature conservation purposes is not feasible. However, where possible there may be small-scale actions that are





viable and should be prioritised, particularly around the edges of recreational sites which will mean that the areas can be functional for both the public and nature. Key methods include:

- Reducing mowing regime where possible to a two-cut management approach (March and September), only retaining key areas as short, amenity grassland;
- Plant unused field corners with native shrubs, trees and flowers;
- Creation of microhabitats such as log piles and hibernacula; and,
- Create hedges and tree lines as boundaries as opposed to fences and walls or change management of these existing habitats, including rotational cuts every two – three years (outside of nesting bird season) and ensuring buffer strips of vegetation of at least 2m.

9.1.5.2 Road Verges and Amenity Grasslands

Some road verges across Derbyshire have been formally recognised as being of high biodiversity value and through appropriate management there are likely to be many more that can be designated LWS status.

Several areas within Derbyshire are currently in the process of trialling a green verge initiative. Where possible, the council must consider rolling out this initiative as a borough wide '*Grow Don't Mow*', following management recommendations provided in Appendix E. In order to be successful, this must be supported through extensive engagement and communication to ensure the community is aware that this is an intentional change, potentially inspiring change within their own homes. Areas to prioritise for these actions in the first instance are areas of high usage *i.e.* verges that surround the towns and villages, allowing it to be used as an engagement and education tool to the public, as well as focusing on areas that already have high engagement with biodiversity, utilising links with the High Peak Working Biodiversity Group to achieve greater networking.

Much of this work will need to be done in partnership with the county council in their role as Local Highways Authority (and given that highways verges are often owned / managed by the LHA), calling for a need to address these issues collaboratively.

9.1.5.3 Parks and Gardens

There are several public parks and gardens within council ownership such as Buxton Pavilion, Whaley Bridge Memorial Park and Manor Park in Glossop. Many of these sites are unlikely to be suitable for BNG and should therefore be subject to a full ecological survey by a suitably qualified ecologist and an updated management plan created. It is important that the sites are surveyed prior to a management plan being created as this will ensure that the right management is happening for the right habitats, preventing loss of existing quality habitats. Management plans will also need to take wider environmental considerations into account where they apply. Pollution levels in the River Wye have reached such a dangerous level that because of the applicability and interpretation of the Habitats Regulations (which apply to designations such as Special Areas of Conservation), the Government has effectively banned any development involving overnight accommodation (such as housing) within the Peak Dales SAC catchment that cannot demonstrate 'nutrient neutrality' (pertaining to phosphate concentrations). The river flows through Buxton Pavilion and Ashwood Park so their management plans should not include anything that risks adding further nutrients (or chemicals of any kind like pesticides and herbicides) into the catchment.





9.1.5.4 Residential Estates

The council has ownership over several residential areas including much of Buxton, Gamesley, Hadfield and Tintwistle. There are many initiatives that could be trialled within these areas, several of which are covered within section 9.2 and include supporting Team Wilder initiatives and aiming to create a greener community. A project is set to be trialled between HPBC and DWT on one of these areas which will aim to create a flagship area, identifying how residents can create a substantial impact for their local wildlife. Key opportunities to include in this project are:

- Pollinator friendly and native flowerpots and beds, working closely with local groups that have successfully implemented this into their own areas including Hartington Biodiversity Group;
- Creating community ponds with interpretation boards, prioritising pond creation in school grounds and in public parks;
- Green verges;
- Increasing the extent of street trees and hedges; and,
- Inspiring initiatives such as ‘most nature friendly garden’ within the communities.

9.1.5.5 Golf Clubs

Golf clubs are excellent places to improve for wildlife as they are existing, large open spaces that typically support several different habitats. Within the council’s owned landholdings is Buxton and High Peak Golf Club in Fairfield. The club has been identified by the NRN as being of high priority for habitat restoration; it is highly recommended that the club is supported by HPBC to undertake an ecological survey by a qualified ecologist and provided with a renewed management plan, identifying areas that can be improved for nature, without negatively impacting the course’s revenue. DWT have successfully worked with a number of golf courses within the county including Cavendish Golf Club in Buxton which should be used as an exemplary case study of best practice.

9.1.5.6 Living Churchyards

Living Churchyards are based on the idea of using the existing greenspace of churchyards to create space for wildlife, adjusting the mowing regime and planting appropriate species to create habitats and niches. Largely, this can be carried out through supporting community action and engaging the local churches with biodiversity groups and projects such as ‘Eco Church’ which aims to connect churches with nature and award those that are delivering good work.

Both Buxton and Thornsett cemeteries are owned by the council. The community associated with the church should be consulted, putting these sites forward as flagship ‘Living Churchyards’ aiming to be designated by Eco Church and designated as LWS by creating a nature friendly, inviting churchyard, acknowledging other churches in the area as examples of best practice such as the Parish Church of All Saints in Glossop.

Actions suitable for maintaining a balance between wildlife and churchyard include planting native shrubs and flowers around the boundaries, reducing hedgerow management, creating ‘wild’ areas, reducing mowing regimes, supporting the youth groups to create bug boxes, hedgehog homes, bird boxes *etc.*, sowing wildflower seeds along footpaths and





moving away from ornamental church yards to pollinator rich sites. Many churches are mown by the council regardless of ownership, therefore facilitating a meeting between the management teams and representatives of the church as well as individuals with ecological expertise to implement new methods of management is to be considered as a priority.

9.1.5.7 *Footpaths and Walkways*

Footpaths and their associate verges are often excellent means of connecting habitats and creating continuous corridors between areas. Some footpath verges and embankments within Derbyshire are already of high ecological value due to the quality of the hedgerows and grasslands that line them, identifying them as designated wildlife sites.

Where the management of these verges are under council influence, it is highly recommended that current management protocols are evaluated and changed where possible, aiming to survey and improve entire networks and identifying areas where hedgerow, tree and woodland strip planting would be appropriate as well as possible areas for either alteration of mowing or the inclusion of green hay or appropriate seeds may create species rich grasslands. Many of these areas, such as the paths along Longdendale reservoirs have lost floristic diversity in recent years, being subject to trampling and inappropriate mowing, increasing nutrient enrichment of the grasslands and reducing suitability for specialist species. Further consultation may be needed with the county council on many of these areas, working collaboratively to make changes.

9.2 Community Action

Local biodiversity groups typically have a large amount of influence within the community, as they are made up of local landowners and residents and often hold strong personal links to the wider community. These groups can deliver on the groundwork, engaging with local landowners, taking over management of key sites and collecting important data. The joined efforts of biodiversity groups into one central committee, as is seen within High Peak is relatively unique in its nature; this has allowed the group to be more effective, creating a cohesive voice and central contact point between the community, the council and DWT. The creation and support of both existing and new local biodiversity groups should be prioritised, particularly to support the appropriate management of land within private ownership. It is imperative to involve the local community in what is happening within their own area with thorough consultation as local projects must have public support to ensure success and longevity.

Different communities and groups of differing socio-economic backgrounds require different approaches and it cannot be delivered through a one size fits all mentality. Best practice examples include the HPBC and DWT facilitated workshop in community action, allowing the community to feel empowered to deliver the work whilst providing them with appropriate support and guidance. This includes face to face workshops and consultations when implementing a change in land use, allowing groups to lead on the delivery of key tasks and considering key demographics of the area before taking action.

9.2.1 Team Wilder

DWT currently support mobilisation of action groups through Team Wilder, a campaign to support local groups and individuals in acting for wildlife, including campaigning for *Grow*





Don't Mow and creating new action groups. There are a number of ways in which the borough could utilise Team Wilder, including:

- Maintain contact between the council and the biodiversity groups, retaining an open line of communication and ensuring the community's thoughts and opinions are heard in what they feel to be important;
- creation of a skills matrix for the different groups, allowing councils to consider what projects may be able to be delivered or supported by these groups and therefore, which areas of the borough particular projects will have higher success rates and which need further support;
- Regular workshops and events, the themes and focuses of which are influenced through online surveys, meaning the groups can get further support in areas they deem appropriate;
- Advertising for parish or borough wide *Grow Don't Mow* campaigns;
- Utilising Team Wilder to set up a new community action group where needed by identifying current gaps;
- Using local knowledge to identify priority landowners for restoration;
- Support small landowners in the start-up of projects by ensuring funding streams are available and accessible;
- Monitor biodiversity on key sites through citizen science, working alongside the Derbyshire Biological Records Centre and the biodiversity groups to create clear, effective data collection methods;
- Plant community orchids, hedgerows and tree lines using Derwent Connections, Derbyshire County Council Tree Scapes and MOREwoods funding for financial support;
- Implementing bat and bird boxes, insect houses and wildlife ponds in public spaces; and,
- Create and support a campaign to implement hedgehog gaps in fences between gardens.

Priority areas for the creation of community action groups is within the residential areas, aiming for each village or town to hold their own group as well as well as ensuring areas of existing high priority are either covered by these groups or have their own dedicated team. At present, many areas within the borough are well supported through active local groups, with active members in Buxton, New Mills, Hayfield, Hope Valley and Whaley Bridge, with smaller movements occurring within Glossop and Chapel-en-le-Frith. It is recommended that the council support further establishing these groups through advertising their work in newsletters, social media and signage.

9.2.2 Local Groups and Wild Spaces

There are several ways in which these groups can be further utilised in achieving nature's recovery, these include leading on the management of key sites such as public open spaces, local wildlife sites *etc.*, increasing data collection capacity through recording species records and submitting these to the Derbyshire Biological Record Centre, improving the accuracy of the nature recovery network map by ground truthing the results, delivering biodiversity days to engage the public as well as supporting in 'Team Wilder' events such as *grow don't mow*, *go potty for wildlife* and supporting the community in having a more nature friendly garden.





Finally, as discussed above, local groups often have a high level of understanding of where locally important sites are for wildlife. Engagement with existing local groups has led to the identification of several sites that had not previously been recorded within existing data sets as being of high value for nature and the existing network. These sites include:

- Fields behind Lightwood Road, Buxton (OS Grid Ref SK058745) identified as high quality neutral grassland.
- Fields along Bishops Lane, Buxton (OS Grid Ref SK042731), identified as rush pasture
- Lightwood Reservoir, Buxton (OS Grid Ref SK055745) identified as lowland calcareous grassland and lowland fen.

9.2.3 Schools and Youth Groups

The importance of introducing children to wildlife and allowing them space to be in nature is becoming increasingly recognised within the UK. As a result, there is a rise in the popularity of forest schools and outdoor classes.

Several schools within HPBC that are already actively rewilding their fields and encouraging nature learning, working closely with DWT and their Wild Peak Programme such as Hadfield CofE Primary. Where possible, provisions should be made available to support schools in undertaking this work, through funds, knowledge sharing, loaning of equipment and raising awareness. For schools to successfully deliver these, they need council buy in; through grants to kickstart projects, evaluating mowing regimes in areas managed by the council and access to advise and engagement opportunities.

9.3 Additional Strategic Opportunities

9.3.1 Ancient Woodlands

As a county, Derbyshire is below the UK average for woodland cover, to achieve the best results for wildlife, it must be ensured that not only is woodland cover increasing, connecting up sites, but existing habitat stands are being well managed, restoring and enhancing what is already present. Assessment of HPBC's landholdings identified a number of existing designated ancient woodland sites, as well as a large number of potential ancient woodland sites, which are being assessed under the ongoing update of the Ancient Woodland Inventory. To ensure the council are complying with their statutory duty to maintain and enhance biodiversity sites, these areas are to be prioritised for updated surveys (possibly under the SLA agreement) and their current quality assessed. Following this, appropriate management techniques must be implemented, including removal of non-native species, protection of ancient and veteran trees, possible thinning / supplementary planting as well as protection from heavy grazing, management must be done on a site-by-site basis however general guidance can be found in Appendix E.

Important existing corridors and spaces for ancient woodland that should be the focus for condition assessments, review of existing management and seek for expansion of sites through new woodland creation are: the Monsal Trail between HPBC and Derbyshire Dales (central W3W location fluctuate.complies.freezing), Corbar woods in Buxton (central W3W location steam.dumplings.call), the section of the River Goyt between Whaley Bridge and Fernilee Reservoir (central W3W location folds.stocky.recruiter), Kinder Bank and Elle Bank woods to the east of Hayfield, Ladybower and the land surrounding Shire Hill Quarry near Glossop (central W3W location friday.polite.weary).





9.3.2 Local Wildlife Sites

Local Wildlife Sites are extremely important in Derbyshire’s network of habitats and sites. However, one of the major limiting factors of this is that landowners of LWS do not get support for maintaining their sites in good condition or improving them, nor is there negative consequences for landowners who damage or even destroy these important sites. A key recommendation moving forward would be for the council to not only increase their current understanding of existing condition of LWS and increase the number of designated sites through a rise in survey efforts, but to consider providing a grant or support for landowners to encourage appropriate management of these sites. Furthermore, the same should be considered for landowners or local groups who want to kickstart new habitats, with small scale grants for those landowners to establish wildflower grasslands, rent appropriate kit or pay for expert support and advice.

The Wildlife Trusts have put forward a suggestion for LPAs to create the designation of a ‘Wild Belt’ as opposed to Green Belt¹⁴. A Wild Belt designation would aim to provide recognition and designation to areas of land that are important to the creation of an NRN but, would not currently qualify for LWS designation by formally identifying these areas within planning and policy. It is proposed that this designation could be used to identify land shown as high priority for creation within the NRN that is not currently of high ecological value, utilising a targeted Call for Sites to engage landowners in these priority areas. As a non-statutory designation, this would allow the land to be formally recognised within the planning system, at a minimum ensuring that developments in these areas account for the loss of strategically significant land for biodiversity, or potentially, that they could be designated in Local Plans as areas for future habitat creation (possible linked to off-site BNG provision) to augment existing nature recovery networks. At present, the Wildlife Trusts aim for the designation of Wild Belt to be integrated into national policy, HPBC involvement at this stage would therefore be implementing voluntary, non-statutory designations that will play a crucial role within the protection of important connecting routes.

There are several clusters of LWS already present within the area, forming an important basis for habitat corridors, with the most densely designated area being the land surrounding Harpur Hill, creating a corridor of sites that expands up to Cowdale Quarry below Buxton. Seeking to connect up these sites with the next cluster of LWS near Dove Holes would be of high ecological value. Key locations for exploring this are Cavendish Golf Club and its surrounding fields, as well as well as fields surrounding Nun Brook.

9.4 Funding and Support

In the UK we are currently at a turning point in terms of funding for habitat creation and restoration, with new schemes such as BNG and Environmental Land Management (ELMS) currently in trial and an expansion in other green finance initiatives, allowing ecological restoration to become a financially viable option for landowners. The below section provides

¹⁴ <https://www.wildlifetrusts.org/blog/sue-young/planning-changes-england-needs-wildbelt-protect-land-recovery>





an overview of green finance opportunities that may be suitable for the council, including an assessment of the suitability for BNG within council owned land.

9.4.1 Carbon Capture

The buying and selling of carbon credits is a government led initiative to increase woodland cover and peatland protection within the UK. This is led by the Woodland Carbon Code (WCC) and the Peatland Code (PC), which adhere to core global standards but are tailored to suit the UK's domestic legislation to ensure compliance with relevant UK regulation. Both the WCC and PC are voluntary markets aiming to market the financial value of ecosystem services provided by woodland and peatlands including carbon capture and flood alleviation. The schemes aim to financially support the creation and restoration of these habitats, increasing their capacity to carry out ecosystem services as currently, peatlands in the UK are so degraded that they are now emitting 16 million tons of carbon dioxide equivalent each year as opposed to sequestering it.

Both codes work by allowing private investors and companies to offset their carbon emissions by committing long term investment in the creation and restoration of these two diminishing habitats. It provides the investors with a guarantee of a certified, viable project, whilst creating a financial incentive for landowners to carry out the work.

The PC is of high suitability for use within HPBC due to the large number of existing peatland sites; whilst the current state of peatland designated as a statutory site is known and is largely shown to be in unfavourable condition, there is also extensive shallow peat across Derbyshire that is not designated and is likely in unfavourable management. Through using the PC, appropriate habitat management can be made financially viable, areas to target include the existing areas of open habitat and farmland outside of the designated SSSI's.

WCC is an ideal opportunity for large and medium sized landowners looking to manage their land for nature, without a financial loss as it supports woodland creation on all land over 1ha in size. This scheme can be layered on top of the English Woodland Creation Offer which funds the creation and maintenance of woodlands for the first ten years, with WCC providing financial support over a longer timeframe. The WCC is to be used as a key part of DWT's Derwent Connections Project (some of which falls within the HPBC boundary) in which landowners can receive support from DWT in applying for the relevant grant applications free of charge and may be used as an incentive for local landowners. To identify key areas to prioritise for woodland creation, use the data provided in section 7.2.

9.4.2 English Woodland Creation Offer (EWCO)

EWCO is a new initiative to fund woodland creation and natural regeneration on land over 1ha. The scheme provides funding for capital items, ten years of maintenance payments, contribution towards actual cost of installing infrastructure and optional additional grants where the woodland will deliver public benefits such as flood management, up to a limit of £10,200 per hectare. Similar to WCC, EWCO is to be used as a key part of the Derwent Connections Project and could potentially incentivise landowners to create woodland. Where Derwent Connections is not available, the scheme can still be applied for by individual landowners and help and advice can be sought from both DWT and the Forestry Commission.





In addition, the scheme does not need to be for one solid ha of woodland, it can be for small parcels of woodland within one land holding that collectively make up to 1 ha, meaning this can be a good opportunity for farmers or landowners that need to use their land for production and may only have small sections available, allowing the creation of small corridors.

9.4.3 Biodiversity Net Gain

BNG is likely to be a key aspect of habitat restoration in the UK over the coming years because of the Environment Act (2021). BNG is an approach to developments that aims to leave biodiversity in a better state through requiring an (at least) 10% uplift in biodiversity on development schemes in England requiring planning permission, when measured against the Government's prescribed metric. The 10% uplift can be achieved on-site, or off-site (or a combination), with the application of the prescribed metric making it more favourable to the developer to provide biodiversity uplift on-site, over off-site. The functioning of the metric ties in with 2010 "Lawton Principles" which sets out principles for enhancing strategic-scale nature recovery networks (for example across Boroughs and Districts) – Planning authorities should consider how locations for off-site BNG provision could most optimally enhance existing NRNs. In addition to the BNG process, more generally given national and local planning policies, developers must demonstrate that they've taken all reasonable steps to integrate biodiversity into their site plans, through a process called the mitigation hierarchy. All developments should first try to avoid, then mitigate or, as a last resort, compensate for biodiversity loss. The BNG process is to:

- Quantify development impacts on biodiversity of the development site and ensure that (after application of the mitigation hierarchy) there is an (at least) 10% uplift of biodiversity score when compared with the original site; and,
- Manage and maintain the biodiversity compensation for a period of thirty years.

For further information see section 2.3 within the Introduction.

9.4.3.1 Section 106 and Conservation Covenants

Local Planning Authorities will need to secure BNG for future developments through an appropriate legal framework, this may be either Section 106 of the Town and Country Planning Act (1990) or a Conservation Covenant under the Environment Act 2021.

Section 106 is a legal agreement between Local Authorities and developers which set out planning obligations to mitigate against the impact of unacceptable development impacts; they consist of financial contributions made prior to the development to benefit the local community and area. Potential payments set out within these obligations may include payments towards the creation or restoration of habitats, reserves and public open spaces and could be used by the council to secure financial contributions from developers for habitat creation.

9.4.3.2 HPBC Owned Land

Land in public ownership submitted by HPBC has been assessed for suitability for restoration and subsequently surveyed for their potential for BNG. The council own a wide variety of land including open green space, ancient woodlands, housing and amenities. As part of an initial sort, the council reviewed their own land holdings, removing any deemed





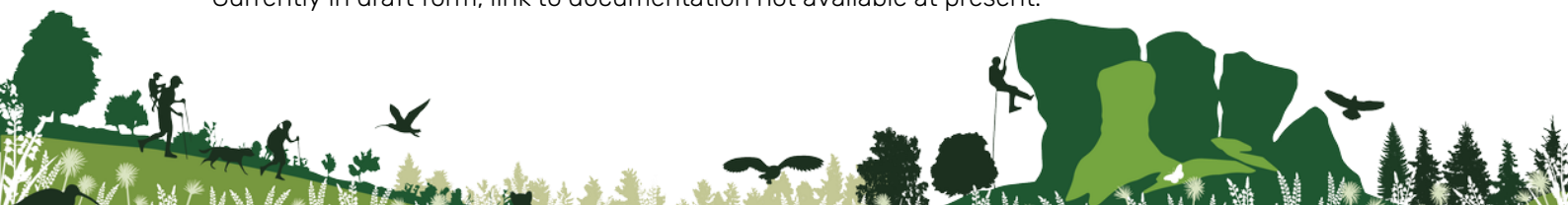
by the council as unsuitable and identifying those that fall within their own priorities; this identified a list of 28 sites for review. These 28 sites were then assessed by DWT staff under the guidance outlined in Appendix B.

The full list of sites and their relative scores from the desk based assessment are shown in *Appendix F. Desk Results of Potential BNG Sites*. Of the 28 sites, a total of 15 sites were surveyed for their BNG potential, based on preliminary scoring and an understanding of BNG requirements and the landscape as a whole. A few notable exceptions were removed from the survey list despite having high scores, based on BNG guidelines and following the Royal Society of Wildlife Trust BNG Principles¹⁵. This includes Ferneydale LNR as it is already a designated site and instead should be subject to a full survey and its existing management plan reviewed. Similarly, Glossop cemetery was not surveyed as there was limited space available for BNG, Ashwood park in Buxton was deemed to be too wooded from aerial imagery and Manor Park in Glossop was similarly not surveyed as the existing mosaic of woodland and sports grounds are not suitable for BNG as they are of high existing quality.

The 15 sites surveyed are identified in Figure 18, an overview of recommendations are covered in Table 6, with full details provided in *Appendix G. Detailed BNG Assessments*. These recommendations and their associated scores are indicative and intend to outline which sites have the highest suitability to be taken forward for BNG and used to create a biodiversity bank. Where a site is selected for BNG, if the area is currently POS, the community must be involved in guiding the decision making around the design and implementation of the habitat creation. The BNG system is purposefully designed to prevent the loss of high-quality habitats and therefore, higher uplift is observed when creating or enhancing nonpriority habitats; in addition, offsets are delivered through a like for like basis, meaning that a lost habitat should be replaced by something similar or of high value. This means that when creating habitat banks, a larger area of the land will be used to offset habitats more likely to be lost through development, with open spaces and grasslands being one of the primary habitats impacted. Larger habitat banks can integrate more complex habitats within ‘safer’ habitat stands, whilst still receiving a net gain in units.

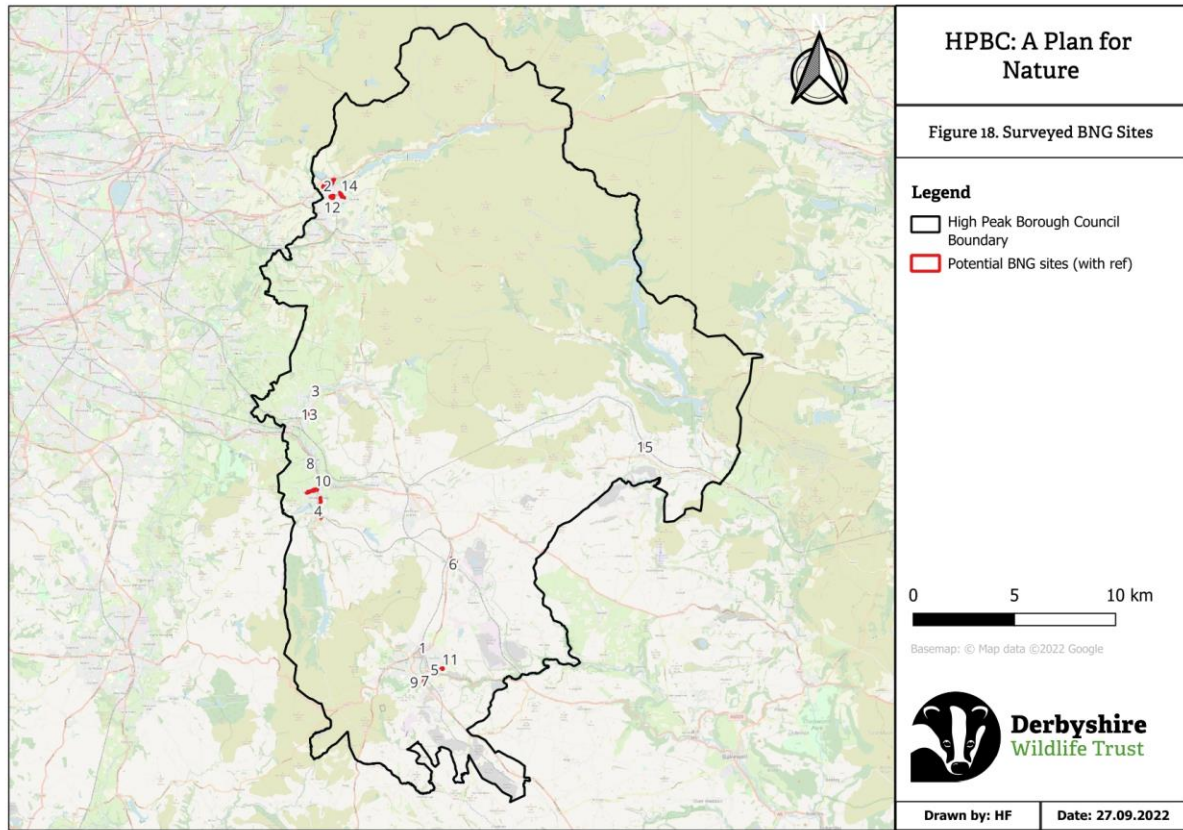
Of the surveyed sites, those considered most suitable for the creation of Biodiversity Bank sites are Hogshaw Recreation Ground (site 1), Temple Fields in Buxton (site 9), Granby Road in Buxton (site 11), and Land off Woolley Bridge Road in Hadfield (site 12). These sites are identified as the most suitable to be taken forward based on their strategic location within the landscape, the quality of baseline habitats and therefore, the opportunities available for uplift, providing a financially viable opportunity for nature's recovery on these sites. Proposals for these sites are outlined in the table below, with further details contained in Appendix G. It is proposed that an internal review of these sites is carried out, and those considered the most appropriate to deliver the councils objectives are then taken forward for the next stage, engaging in stakeholder and community engagement to create and finalise the masterplan for the site, taking into account information from the planning team on what habitats are the most sought after from a BNG perspective in these specific areas.

¹⁵ Currently in draft form, link to documentation not available at present.





Final calculations and uplift of units will then be able to be confirmed, registering the sites for BNG.





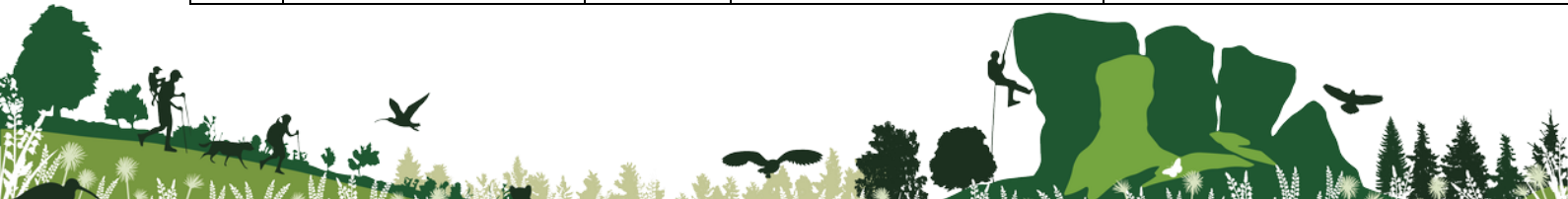
Map Ref.	Site Name	Potential Uplift Units	Suitability for BNG	Recommended Habitat Created	Additional Notes
1	Hogshaw Recreation Ground, Buxton	+5.98	High, the existing quality is low.	Restoration of existing woodland through retaining deadwood and introducing smaller, shrubbier species to enhance structure as well as removal of non-natives. Creation of approximately 1.28ha of wet woodland, planting alder, willow and birch in an appropriate structure.	Public access must be maintained and so footpaths should be integrated throughout. Desk based data and onsite assessment suggests suitability for wet woodland but further assessment should be carried out to ensure water table is appropriate.
2	West Drive, Tintwistle	+4.87	Moderate, the useable area for BNG is small, meaning that possible uplift units are low.	Enhancing the existing other neutral grassland ¹⁶ to good condition acidic or neutral grassland dependent on pH results and uplifting some areas of modified grassland to moderate other neutral.	An area of grassland contained a small number of acidic indicators, test the soil pH to ensure correct seeds sown. Much of the site is not usable for BNG, this land has been removed from all calculations.
3	Thornsett Cemetery, New Mills	NA	Not suitable, BNG would not be able to occur on an established burial ground as HPBC will not have control over the	A wide array of enhancements are able to occur on churchyards, see associated areas of wider report for details.	

¹⁶ Other neutral grassland is a habitat type defined within UKHAB, defined as a neutral grassland that typically has >20% cover of herbs and sedges and >8 species per m².





			management of each individual grave.		
4	Linear Park, Whaley Bridge	NA	Not suitable, the site is entirely wooded and therefore any possible uplift would be minimal.	Whilst BNG is not appropriate for this site, existing management should be reviewed to ensure the site is being maintained appropriately.	
5	The Launt off Granby Road, Buxton	+3.43	Moderate, an existing area of the site is identified as good quality acid grassland and expanding this is of high value however, public disturbance is extremely high.	Enhance the other neutral grassland to good quality other neutral or acidic dependent on pH test results of the soil and ensure scrub encroachment is monitored and effectively managed.	Public disturbance is high and extensive public engagement would likely be needed to have a positive impact and prevent destruction, additionally the site has numerous constraints that will make management difficult, see associated table in appendix for further details.
6	Dove Holes Bull Ring, Dove Holes	+6.27	Moderate, the available area makes up a fraction of the park however, wildflower rich areas can still be created here, providing a potential uplift.	pH of the soil should first be assessed and the site then used to create either other neutral or acidic grassland in good condition based on the results. This will be achieved through seeding and a sympathetic mowing regime.	There is a scheduled ancient monument on the site, the enhancement of this has not been included as it is assumed that there will be restrictions on the maintenance of this area.
7	Sherwood Road, Buxton	+1.5	Moderate, a small unit uplift can be achieved, creation of a community orchard would also have high community value.	Expanding and establishing the existing orchard that exists to cover the whole site. Must include appropriate management of grassland, removal of invasives and allocation to a community group for long term management.	





8	Community Field, Furness Vale	NA	Not suitable, the small area of land available for BNG is not adequate to allow enough uplift as the most appropriate habitat is deemed to be wet woodland.	Consider using other funding schemes to plant appropriate woody species within these areas, enhancing the wildlife value and working to reduce natural flood risk.	
9	Temple Fields, Buxton	+12.61	High, the site is large and mainly dominated by poor quality habitats.	The woodland can be improved through diversification of structure and species. Additional measures include creating community allotments and enhancing the remaining grassland to good quality other neutral grassland, including scattered broadleaf trees.	Community allotments are of high value for both biodiversity and community wellbeing, if this is implemented, consider allocating a plot to the local school which is a close neighbour to the site.
10	Jodrell Meadow, Whaley Bridge	NA	Not suitable, the area of land appropriate for BNG is small and efforts would be better placed elsewhere.	Small scale changes to the site will positively impact biodiversity, initial steps would be to review the existing management plan.	
11	Granby Road, Buxton	+4.19	High, the site is of low ecological value and is one of the only available greenspaces within the surrounding area, however the size of the site is a limiting factor.	Enhancing a section of the land to create a traditional orchard, to include good quality grassland in its understorey and a mixture of fruit bearing trees. A pond is proposed in the centre of the site, with a viewing platform, with the remaining land enhanced to good quality other neutral grassland.	Any footpath inclusion would need to be accounted for within the final BNG calculations.





12	Land off Woolley Bridge Road, Hadfield	+5.74	High. Much of the site is woodland, leaving only approximately 0.7ha of land as grassland, the neutral grassland was on the cusp of becoming 'good quality'. Slight changes in management could uplift this to good quality.	Restoration of the existing grassland to good condition lowland meadow through management of the encroaching scrub, reducing it to below 5% of total area and implementing appropriate management either through low level grazing or appropriate cutting and collecting as well as possibly seeding appropriate mixes. Additionally, implementing a pond onto site would be of high value as the grassland is already wet and has some species indicative of wet soils.	The site is bordered by a new housing development, this would be a suitable place to open to public through the inclusion of a short wildlife trail. Any footpath inclusion would need to be considered within the final calculations.
13	Land off St. Georges Road, New Mills	NA	Not suitable, the site is entirely wooded small and therefore uplift would be minimal.	Whilst BNG is not appropriate for this site, existing management should be reviewed to ensure the site is being maintained appropriately.	
14	Open Space off Vale House Drive, Hadfield,	+4.51	Moderate, the existing grassland is currently poor but with high potential for uplift.	Restoration of poor modified grassland to good quality other neutral grassland, aiming to create a diverse mix of species and transition zones of wet grassland around the edges of the stream.	Any footpath inclusion would need to be accounted for within the final BNG calculations.
15	Hope Cemetery, Hope Valley	NA	Not suitable, BNG would not be able to occur on an established burial ground as HPBC will not have control over the	A wide array of enhancements are able to occur on churchyards, see associated areas of wider report for details.	





			management of each individual grave.		
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Table 6. Overview of HPBC owned BNG Assessments





10 Management Recommendations for the Creation of Key Habitats and Restoration of Existing Sites

There are a number of key habitats that should be created and restored within HPBC, aiming to connect the landscape. Appropriate guidance for the management and creation of these key habitats are outlined in *Appendix E Habitat Creation and Management Guides*. These guides are broad and intended to have a positive impact on most sites. However, detailed management plans complete with surveys are recommended for more complex, site-specific projects. Current management techniques should be assessed and reviewed against the information provided in Appendix E. Detailed management plans or additional advice is available from DWT on request.

10.1 Habitats to Restore and Protect Woodland Networks

The borough currently contains very little woodland and large areas of the landscape are of high priority for creation of woodland networks, This would bring significant additional benefits in the form of enhanced flood mitigation and carbon sequestration. A woodland NRN does not only mean broadleaf woodland, but also scattered trees and parkland, hedgerows, treelines and scrub.

Additionally, hedgerows, treelines and scattered standing trees have a relatively small spatial footprint, meaning they are suitable for implementation in urban and suburban areas. The overall ecological value of existing woodland can be increased through expansion, appropriate management and improving connectivity through creating small steppingstone woodlands in disused land, amenity grasslands and fields.

Key actions to expand and restore the woodland network include:

- Appropriate management of hedgerows, restocking gaps and creating new hedges within urban, suburban and rural spaces, particularly within farmlands where possible in conjunction with dry stone walls;
- Utilise Derwent Connections and EWCO to fund woodland creation;
- Utilise existing open space;
- Create new copses and scattered trees where possible;
- Increase street trees and hedgerows within POS;
- Use BNG to create new woodland sites;
- Support residents and businesses to replace fences with hedges; and,
- Surveying existing non-designated woodlands and ancient woodlands for potential LWS status, increasing awareness and adding value to sites.

10.2 Habitats to Restore and Protect Open Networks

One of the key methods that should be used to restore and connect the open habitat network is through creating nature forward management plans for public parks and gardens under council ownership and management, ensuring that grassland restoration is being achieved at the large sites to create 'source' sites for species. These should be supported through the creation of corridors and steppingstone habitats through wildlife friendly private gardens, pollinator routes through towns, wildlife friendly verges and field margins.





This work must include engagement with local landowners and raising awareness of various support schemes that may be available to encourage them to actively change management.

Key actions include:

- Raising public awareness on the importance of managing gardens for nature, the creation of hedgehog tunnels and carrying out actions such as grow don't mow and 'go potty'. This should be done not only through the wilder gardens initiative being trialled in Buxton between DWT and HPBC but also through newsletter and social media;
- Pollinator friendly hanging baskets and urban flower beds, removing ornamental plants and replacing with native flowers;
- Creating wildlife friendly management plans for public open spaces and parks;
- Engaging with large landholdings and improving relationships;
- Creating green verges; and,
- Identifying existing high-quality sites to be surveyed for LWS designation.

10.3 Habitats to Restore and Protect Wetland Networks

Outside of the SSSIs and SACs, the existing wetland sites are primarily made up of small, scattered wetlands and rivers, many of which are identified to be in poor condition. Priority habitats identified within the previous BAPs include blanket bog, upland heathland, upland flushes, fens and swamps, wet woodland, purple moor grass and rush pasture, rivers and streams, ponds and lowland fens.

The most effective method of increasing wetland habitats includes appropriate management of council owned or influenced ponds and waterbodies, the creation of community ponds, and supporting schools and community groups in the creation of ponds as well as planting trees in flood risk zones to create wet woodland.

Key actions include:

- Raising awareness for the importance of ponds, increasing accessibility through advertisement of 'pond in a pot' schemes;
- Inclusion of community wildlife ponds in green spaces;
- Planting of appropriate trees in flood risk zones and open spaces;
- Awareness of Natural Flood Management methods;
- Encouraging farming groups and landowners to halt draining their land; and,
- Where high quality wet habitats exist, surveying for LWS designation.





11 Potential Threats and Challenges

The UK's exit from the European Union has generated significant levels of change across a wide range of policy areas (agricultural subsidy, planning policy, wildlife-related legislation etc.) and significant uncertainty remains in terms of policy frameworks and economic consequences. As climate change leads to increased freak weather events and rising sea levels, it is possible that landlocked counties such as Derbyshire may experience greater pressures for development as people are displaced from coastal towns. This would increase the pressure on remaining wild spaces and reduce the capacity to create and expand new networks.

The mandatory requirement for 10% BNG in the Environment Act presents huge opportunities for nature's recovery however, the system has several constraints and there may be challenges which should be taken into consideration when planning its implementation, these are outlined in Table 7.

Constraint or challenge	Potential Impact	Example
Assumptions and calculations within the metric combined with human error within surveying mean that 10% may not have actually been implemented.	Without LPAs going beyond the mandatory 10%, we will likely be seeing more no net loss as opposed to gain.	The metric and condition assessments involve several assumptions and can be broad brush within their application.
Increasing demand for land for habitat enhancement or creation.	Lack of available land. Costs and competition for land.	Realisation of potential financial incentives to BNG causing higher competition for land.
Limited requirements for long term monitoring mean sites may not be positively managed, particularly in on site offsetting.	Long term net loss in biodiversity in areas previously assumed to be positive.	There is currently no register for onsite net gain, small parcels of habitats added into edges of development risk being left after the initial few years post development.
Does not apply to Nationally Significant Infrastructure Projects. Minor developments such as self-build houses and extensions are also likely to be excluded.	Habitat loss	HS2 and other NSIPs continue to threaten habitats without measurable compensation.

Table 7. Potential Challenges to BNG





12 Conclusion and Action Plan

HPBC has the foundation to establish a diverse, connected Nature Recovery Network. Overlapping with the Peak District, the landscape already has ecological and cultural value, not only within Derbyshire but across the UK, containing important and protected habitats and species. As a Local Authority, the council have the potential to have substantial, direct impact on the environment; firstly due to the amount of land that is either owned or influenced by the council, secondly due to the country wide shift in policy and planning and finally due to the existing support network that surround HPBC's ambition to drive nature's recovery, which includes the Wildlife Trust and community groups like the High Peak Biodiversity Group.

Investigation of council owned land indicates a number of opportunities for the council to develop BNG within their own landholdings, and the potential to create sites that are both diverse in wildlife and offer important spaces for the community to engage with nature.

The habitat mapping and modelling discussed in the above sections display key locations that are strategically significant for the creation and enhancement of open, wetland and woodland habitats; creating and strengthening nature recovery networks. The mapping identifies a particular focus on creating an increasingly wooded landscape, expanding a wide corridor throughout Buxton, Chapel-en-le-Frith and Whaley Bridge. In addition, the North of the area shows high suitability for the creation and restoration of high-quality open habitats, expanding the designated moorlands and creating transition zones. Finally, there is a borough wide focus on the creation of wetland habitats. The below sections outline a proposed vision for how the area will look by 2040 if the proposed actions are put into place, and a summary of priorities for the first 5 years.

12.1 Vision for 2040

The landscape is now rich in wildlife, with connected corridors of designated local wildlife sites in good condition. HPBC leads the way in sustainable planning, recognised for their dynamic approach to ecology and development; all residents have good quality open space within walking distance from their homes, that are filled with the hum of pollinators, swathes of wildflowers and networks of native trees. Towns and villages have species rich verges and pollinator friendly planters, creating urban networks to improve dispersal; green roofs, native hedges and ponds are a common site within new developments and the increased access to nature has led to a reduction in mental health issues, a rise in physical fitness and increasing air quality.

The borough is taking important steps towards nutrient neutrality with rivers and streams being brought into good condition, appropriate planning and tree planting has led to a notable decrease in flooding events, and green jobs and nature-based enterprises have risen exponentially.

The borough is a hub for wildlife, with numerous ecological projects occurring across all areas, from nature friendly gardening competitions in villages, to collaborative working between farming clusters, a beacon for change that ripples out into the wider landscape.





12.2 Proposed Action Plan

The above report covers a wide range of aspects, all of which will be beneficial to wildlife if delivered correctly. The below table outlines which opportunities should be considered the highest priority for the council to consider undertaking as next steps within the next 5 years.

Focus Area	Proposed Actions	Threats or Challenges
<p>Planning and Development</p>	<ul style="list-style-type: none"> • Implementing a minimum 20% BNG requirement within the emerging Local Plan. • Inclusion of blue / green infrastructure in emerging local plan, aligning with Natural England’s Green Infrastructure Framework (Natural England, 2023), including strong messaging on SUDs, pollinator friendly greenspaces and hedges, bird, bat and swift boxes on new development and a focus on using nature-based solutions within sustainable planning. • Review allocated sites in the emerging Local Plan, pre-emptively reviewing sites for their biological characteristics, with a particular focus on brownfield Open Mosaic Habitat. • Create a ‘Wild Belt’ designation for land that is identified as high priority in Figures 13 - 17 for connectivity but is not currently of ecological value, reducing the risk of further fragmentation of valuable habitats and formally identifying these areas within planning. This would be a non-statutory designation that would protect these potentially important sites to improve opportunities for the creation of corridors. 	<ul style="list-style-type: none"> • Additional constraints to development may lead to potential pushback from developers meaning that policy wording would need to be strong. Countering this would involve engaging LPAs where this is already in place and consultation with neighbouring councils to mobilise greater ambition across Derbyshire. • There is often lack of understanding surrounding brownfield and greenfield sites, with many people feeling that brownfield sites are of no ecological value. Again, strong messaging and evidence would be needed around this, ensuring ecological assessment by qualified ecologists is used to support decision making, including Plan-making. National Policy in NPPF generally prefers development of brownfield over greenfield land, leading to further complications. For example planning inspectors may expect Local Planning authorities to justify the proposed allocation of greenfield (or green belt) land, when there are urban brownfield options. Further, both greenfield and brownfield land may exhibit ecological characteristics, which Local Planning Authorities must consider alongside wider policy considerations and material considerations when formulating Local Plans.





		<ul style="list-style-type: none"> • Competing needs for land around settlement peripheries for a number of land uses in emerging Local Plans (such as housing or industrial land), in addition to land for ‘wild belt’, or for sites for off-site habitat creation under BNG process. • Constraints surrounding justifying proposed policies to a planning inspector, including possible impacts on the financial viability of developments. For example proposing to uplift the regulatory minimum 10% BNG on development sites may raise build costs, and may also reduce the on-site developable area for the use in question (<i>e.g.</i> housing), meaning the site “yield” is less, lowering the revenue from the development. Inspectors at Local Plan examinations would also need to be satisfied that proposals for “wild belt” were in accordance with the NPPF.
<p>Designated Sites and Habitats</p>	<ul style="list-style-type: none"> • Creating funding schemes or projects to support LWS or pLWS owners, <i>i.e.</i> providing increased access to experts for support and advice on green finance opportunities and / or grants to kickstart habitat creation / restoration. • Increase capacity for LWS surveying to allocate more sites and increase knowledge on current condition. 	<ul style="list-style-type: none"> • This is a relatively new approach so some risks and opportunities are unknown. DWT are developing a project focused on funding for LWS, with possible collaboration opportunities in future. • Risks of lack of response and engagement from landowners.
<p>Engagement and Consultation</p>	<ul style="list-style-type: none"> • Delivery of a Biodiversity Summit as the first step in engagement with major stakeholders and landowners. • Schedule engagement events on community action, engaging with groups to learn what they need. 	<ul style="list-style-type: none"> • Ensure to avoid a ‘one size fits all’ mindset when engaging with different communities, possibly using facilitators or partnered workshops to reduce conflict.





	<ul style="list-style-type: none"> • Identification of where local groups can take ownership of projects to increase capacity, as well as identifying training needs through open conversation and the creation of a skills matrix. 	<ul style="list-style-type: none"> • Knowledge levels within groups will vary and therefore, decisions must be primarily informed by peer reviewed evidence, professional judgement and best practice.
Council Land	<ul style="list-style-type: none"> • Review existing management plans against best practise guidelines to assess if changes can be made to increase conservation value, aiming for a balance of accessibility, wellbeing and ecology. • Ecological survey and bespoke, ambitious management plans for two flagship open spaces. • Access what the borough must do to achieve NE good quality greenspace guidelines and create a plan to meet these targets. 	<ul style="list-style-type: none"> • Existing equipment from traditional management may no longer be suitable and staff may need to be upskilled in certain areas. • Lack of community engagement on land changes can generate complaints so residents must feel an ownership over their open spaces.
Green Finance and Ecosystem Services	<ul style="list-style-type: none"> • Create biodiversity bank through BNG. • Assess council land for delivery of additional ecosystem services including flooding, access to nature, nutrient neutrality and carbon capture and create a strategy for implementation. • Focus on a key ecosystem service such as NFM or nutrient neutrality which can be funded through green finance schemes and put out call for sites. 	<ul style="list-style-type: none"> • As a relatively new funding stream, successful evaluation of the risks and opportunities may require external sources of advice and insight. • Must be delivered on a nature-based solution approach, putting the right actions in the right place.

Table 8. Summary of Priorities





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