malvernhills
Area of Outstanding Natural Beauty

First draft, 14th October 2021

Nature Recovery Plan

Introduction

Nature in crisis

The UK has only half of its natural biodiversity left, making it one of the most nature depleted countries in the world.[i] The 2019 UK wide State of Nature report[ii] gives a sobering picture of the UK's wildlife including habitats that are of significance to the Malvern Hills Area of Outstanding Natural Beuaty (AONB). The climate crisis is disrupting natural systems shifting climatic zones and exacerbating land degradation[iii] increasing pressure on nature.

Despite its outstanding natural beauty, the Malvern Hills AONB has not escaped these changes. Although it retains large areas of nature-rich habitats and is an important regional reservoir of biodiversity, it has seen the same declines as many other areas and faces the same challenges.

A plan to inspire action for nature

This Nature Recovery Plan aims to halt and reverse this decline, providing an inspiring vision of what is possible and practical solutions for achieving it.

It is a Plan for everyone who has influence over, and benefits from, nature in the Malvern Hills AONB. It recognises that it is the decisions of the many private landowners, including farmers and estates, that will have the greatest effect on nature. Those who look after nature need the right balance of incentives, guidance and regulation, provided by public bodies and environmental organisations, to guide and support their decisions. Local residents and visitors also have a role to play: as consumers of the food, drink and leisure opportunities produced in the countryside; and as stewards of nature in their own gardens and neighbourhoods.

AONBs leading nature recovery

Although AONBs are not primarily a wildlife designation, the important role they play in nature recovery has been confirmed and enshrined in policy.

In the light of the climate and biodiversity crises the planet is facing, AONBs across the country made a collective declaration on nature in 2019, known as the Colchester Declaration.[iv] It states that AONBs should be places of rich, diverse and abundant wildlife and reaffirms the importance of Natural Beauty and that it has intrinsic value which means so much to people. It places nature recovery at the centre of the conservation and enhancement of natural beauty. To follow through on these statements, a pledge was made to draw up Nature Recovery Plans for each AONB, of which this Plan is the Malvern Hills'.

In 2010 in his seminal report 'Making Space for Nature', Professor Sir John Lawton recommended that "*recovering wildlife will require more habitat; in better condition; in bigger patches that are more closely connected.*"[v] The Government's 25 Year Environment Plan aims to deliver this recommendation "*Developing a Nature Recovery Network to protect and restore wildlife, and provide opportunities to re-introduce species that we have lost from our countryside.*" [vi] This will be achieved by, amongst other things, linking existing protected landscapes, of which the Malvern Hills AONB is one.

What do we mean by nature?

Wildlife and the habitats that sustain them, including the soils and underlying geology, are the focus of this Plan. By protecting and enhancing these, the Plan also recognises the many benefits that local communities and wider society can gain

from thriving nature, including healthy food, clean water and air, resilience to the changing climate and access for recreation and enjoyment. The Plan therefore covers nature itself as well as the many benefits and services that nature provides us with.

Figure 1: The services we receive from nature

The interacting mosaic of habitats that provides a home for so many key species forms the landscape of the Malvern Hills AONB. The special wildlife of the AONB is closely related to thousands of years of farming and forestry traditions.[vii] These actions and interaction between nature and people within the AONB has resulted in the distinct character of the landscape such as ancient unenclosed common land, orchards, parklands which are home to this wildlife.

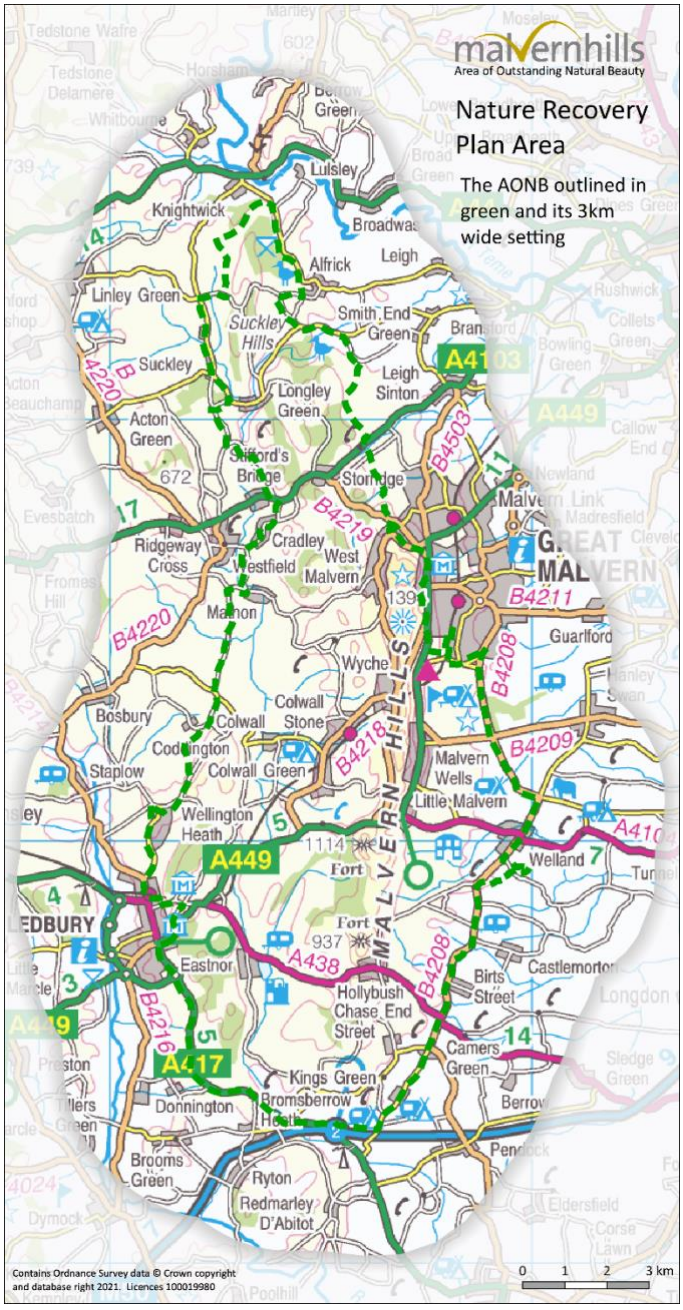
For nature to flourish, it will be important that land management practices that conserve the nature-rich landscapes of the AONB, such as grazing, coppicing, orchard management and hedge laying[vii] are able to continue. This close relationship between nature and landscape character means that throughout the NRP references and information on landscape character and nature are used interchangeably.

However, landscape character is not, and never has been static. Such are the pressures facing the AONB, from climate change, development and changing agricultural priorities, that the characteristics of land use and management that provide its outstanding natural beauty will need to be revalued and, in some cases, reinterpreted.

What is the geographical scope of this Plan?

This Plan is centred on the designated Area of Outstanding Natural Beauty, an area of some 105 km^2. It also takes account of its wider setting and connectivity, defined by a 3km-wide setting around the AONB boundary. More broadly, the Plan also recognises the broader regional context and the links for nature that need to be strengthened and extended through the surrounding countryside and urban areas. The 'Strategies' section of this Plan uses these three scales to describe key approaches and priorities for nature.

Figure 2: The Nature Recovery Plan area



Relationship with other plans and policies

There are a range of new national initiatives under development that will influence this Plan. These include the preparation of Local Nature Recovery Strategies, the design of the Environmental Land Management Schemes and the requirement for Biodiversity Net Gain provision as part of new development. As these are developed, there will be a need to review and revise the strategy and actions in this Plan.

The State of Nature in the AONB

A special place for nature

Nature is at the heart of what makes the Malvern Hills AONB special. From the area's distinct and varied geology, celebrated by the internationally recognised Abberley & Malvern Hills Geopark, arise an array of natural habitats and species many of which are nationally rare (see Box 1 below).

The interaction of nature and people within the AONB has produced different areas of distinctive landscape character. These show a combination of features that have evolved over time such as ancient unenclosed common land, orchards, parklands, ridgelines, ponds and hedgerows which form the mosaic of habitats that are so important to wildlife in the area.

Box 1: Special habitats and species:

- Extensive areas of acid grassland and heath on the tops of the Malvern Hills and on the commons on their eastern flanks. These are home to … [AONB team to add more?]
- Flower-rich calcareous grassland on the limestone rocks to the north and west of the Hills, containing species of rare orchids.
- Ancient deciduous woodland particularly on the lower hills and valleys in the north and west of the AONB
- Lowland meadows, some (to the east of the Hills) containing rare plants such as green-winged orchid.
- Traditional orchards in parishes such as Colwall, Alfrick and Suckley
- Woodpasture, parkland and veteran trees (in arable and pastoral fields)
- Hedgerows and hedgerow trees …
- Ponds, rivers and streams …

There are 16 Sites of Special Scientific Interest (SSSIs) lying partly or wholly within the AONB, the majority of which are designated to protect biodiversity. These represent 10.9% of its total area (11.45 square kms).[vii] There is one Local Nature Reserve within the AONB at St Wulstan's (Malvern Wells).[vii]

The current state of nature

In recent decades, the AONB and the area surrounding it has been subject to the same losses of nature as those across the nation. For instance, the UK has seen 97% of wildflower meadows lost between the 1930s and 1984 and 90% of lowland ponds in the UK were lost in the 20th Century. [ii] Within the AONB, there has been a significant reduction in the area of traditional orchards, especially in parishes such as Colwall, Alfrick and Suckley. [See insert maps – to be added].

Box 2: The condition of key natural assets:

- Agricultural soils. Most arable soils have significantly depleted levels of organic matter and microbial activity and a poor structure, reducing their productivity and ability to hold water and carbon. Soils under permanent pasture are in better condition but may be locally compacted.
- Water and wetlands. Diffuse pollution and sediment run-off means that the ecological condition of many rivers and water courses is not good. Climate change is causing more frequent and intense flooding and also low summer flows, exacerbating problem for aquatic life.
- Woodland. Many of our native trees are coming under acute stress from new pests and diseases and periods of intense weather (e.g. storms and drought). Loss of key species such as ash will accelerate change, particularly in unmanaged woodland.
- Unimproved grassland and heathland. Many nature-rich sites have become isolated and their small populations of plants and animals disconnected from others.

[Note in this draft Plan: The data on SSSI condition, summarised in the State of the AONB Report, 2015, paints a relatively rosy picture (98% favourable or unfavourable recovering condition), which is at odds with national state of nature reports. How to address this?].

Current and future pressures

Nature in the AONB will face significant pressures for change over the foreseeable future.

The agricultural transition

Farming in the AONB is starting to go through a period of major change as the support schemes that were funded by the EU's Common Agricultural Policy (CAP) are replaced by a new domestic policy based on supporting public goods from land. Defra is developing three new Environmental Land Management Schemes but their content and suitability to the AONB is currently not known. Other factors that will influence how farmland is managed include the costs of agricultural inputs; the available of labour; promotion of low carbon / net zero farming techniques; pests and diseases (including bovide TB); and changes to farming export markets

Climate change

Average UK temperatures have already increased by nearly 1°C since the 1980s and the trends predicted by climate science are proving accurate. As well as rising average temperatures, periods of low rainfall, interspersed by intense rainfall are creating difficult conditions for our native wildlife, and are testing some types of farming and forestry. Examples of the impacts on nature include: new pest and diseases (ash dieback being a highly visible example); changing timings of seasons; low summer river flows; and damage to vegetation from high winds. Many of these impacts are likely to accelerate in the short term. The longer term effects will depend on measures by governments and individuals over the next few years.

Built development

The Government has a goal of significantly increasing the rate of house building in England and of ensuring that negative environmental impacts of these developments are mitigated. The AONB itself is unlikely to see new developments at the same scale as surrounding areas. However, there are likely to be growing numbers of visitors and a reduction in the tranquillity that can be experience in the AONB (for instance dark night skies). There are also likely to be opportunities to create new habitats using funding from development in nearby areas through the proposed requirements for 'Biodiversity Net Gain' (described further below).

New opportunities

Whilst these pressures continue, the policy context within which nature recovery sits is rapidly changing. This presents significant opportunities to create positive change for nature, but also requires a new understanding to develop of the stakeholders and policy and funding mechanisms and the connections (chains of influence) between them that will be able to facilitate nature recovery.

Some key emerging opportunities for nature recovery are:

Environmental Land Management schemes

The delivery of public goods under the three proposed Environmental Land Management (ELM) schemes and the need for priorities to be spatially targeted means that there is an opportunity for the Nature Recovery Plan to direct and influence landowners and their advisors in their delivery of nature and other public goods. The NRP should be a key influence on ELM delivery and a source of guidance to farmers and their advisers.

Biodiversity Net Gain requirements

The imminent introduction of mandatory Biodiversity Net Gain (BNG) provides a significant opportunity for land that is going through land use change as a result of development. For mandatory BNG to achieve its full potential requires a NRP that helps to coordinate and direct the type of net gain planned for and achieved. The AONB should also be looking to implement a more stringent requirement than 10% net gain (many Local Authorities have already raised the requirement to 20%).

Carbon Markets

New markets are emerging for landowners to get funding for woodland etc through carbon markets. These markets are growing. The NRP could have a significant role in influencing uptake and location – ensuring synergies with landscape and nature recovery.

Local Food Markets

As noted in the AONB Management Plan, the area has a relatively affluence of the population with an above average income (and high carbon footprint) – and it can be assumed a high interest in local products. Food production in the AONB is significant and some of the production systems that

are of particular value to nature are under threat e.g. Orchards. Closing the gap between food production and the local population is a way to help lower the AONB population's carbon footprint, support nature as well as protecting some of the most important agricultural systems in the AONB that underpin the landscape and livelihoods. This avenue of business and nature-based solutions in the AONB could be explored further through the NRP.

Community interests

The AONB and the communities that live and work in and around it are inextricably linked. Some of these connections are well understood and relationships established - For example, recreational use of the AONB and the work of the Malvern Hills Trust. However, other connections need strengthening - For example the link between personal consumption patterns and land use or between choices relating to private property and nature and other public goods (such as areas of hard surfacing, fencing and outdoor lighting). The NRP can start a process of engaging with the community on these issues and identifying spatial opportunities for suitable interventions.

A changing place for Nature

Change to the landscapes and habitats that make up the AONB are inevitable given the climate crisis and other pressures that are exerting themselves on the area. The challenge going forward is to ensure that change positively benefits nature and allows it to recover from past harm that has occurred. We may need to change our perceptions of the functions that landscapes can provide and the way they look – for instance welcoming increases in tree cover or accepting flooding in areas that can cope with it. Thinking about the needs of wildlife (as well as our own), both now and going forward, as the climate crisis takes hold, will help us evaluate what is special about our cherished landscapes and reimagine them for the future.

The special qualities of the AONB that are most vulnerable to change are set out below [Note in draft: Is this table a useful part of the NRP?]:

Special qualities of the AONB	Sensitivity to change
A high, dramatic ridge of ancient rock that is visible from a distance	
A distinctive and varied geology giving rise to a unique array of natural habitats	
Dramatic scenery and spectacular views	
A strong 'spirit of place': landscapes that inspire with a deep cultural narrative	
An historic landscape including ancient unenclosed commons and designed parkland	
A rich and distinctive historic environment including prehistoric sites	
A distinctive combination of landscape elements (e.g. orchards, parklands, quarries, etc.)	
A wide variety of landscape types in a relatively small area	
A wide variety of wildlife habitats and species, many of which are nationally rare	
Distinctive 'villagescapes' that define a 'spirit of place' in the settlements	
A sense of remoteness and tranquillity. People feel calm and spiritually refreshed	

Our Strategy

This section of the Nature Recovery Plan consists of two parts.

- The first part is a set of guiding principles, describing the approaches that should be taken to safeguard and restore nature in the AONB.
- The second part contains three sets of priorities to shape the way land is used and managed for nature. Each set of priorities operates at a different scale.

Guiding principles

Do no harm

Given the crisis in nature the first principle should be to do no further damage. Nature recovery will not be successful if it is under-mined by further loss of habitats or deterioration of soils or water resources. This includes small scale harms which have an incremental and cumulative impact.

The NRP has the potential to influence changes to both land use and to land management. It should address activities that negatively impact upon nature (e.g. light pollution, development and pesticide use) as well as proactively increasing and enhancing nature. This may require thinking in a more holistic way about impacts on nature, rather than sticking to traditional nature conservation approaches.

Build a movement

The NRP is for everyone who lives and works in and around the MHAONB. Many different groups of people have a role to play, including owners and managers of land, consumers of food and drink, recreational users, regulators or advisers. The diagram to the right shows how the Plan provides the means to co-ordinate appropriate actions by those who own and manage land using the resources and guidance from national and local policies and schemes.

Figure 3. How the Plan joins top-down policies to bottom-up land management activities

Those involved in both bottom-up activities and top-down policies have to want change to happen, and this 'will' needs to be fostered in order for solutions to be delivered. Public will is an important influence on both the policy making process and encouraging the uptake of new ideas in land management, industry and commerce.

Stepping-stones to improvement

Given the scale of the biodiversity crisis, nature recovery can seem like a daunting, formidable task. The first step to change can be the hardest. However, the impact of everyone has making small changes is cumulative. Individuals and organisations start at different stages of understanding, engagement, will and ability (either financial, operational or technical) to make changes. This stepping-stones approach helps to remove barriers to participation whilst inspiring a longer-term commitment to action.

[To add diagram showing scale of measures]

The past isn't a guide to the future

The climate crisis means that change to the wildlife, habitats and landscapes of the AONB is inevitable. A new direction must be found; one that allows nature to recover and flourish into the future at the same time as the qualities that make the AONB special are revalued or reimagined. Our landscapes will need to be dynamic and revaluating them for the future is essential for them to survive as special places.

Priorities for nature

This Nature Recovery Plan advocates three key sets of priorities for nature in the AONB, each of which operate at a different scale. These are:

A. Strengthening the Regional Nature Network. This recognises the importance of the AONB as a core area for nature of regional significance and the need to enhance and enlarge the habitat corridors and connections to other core areas;

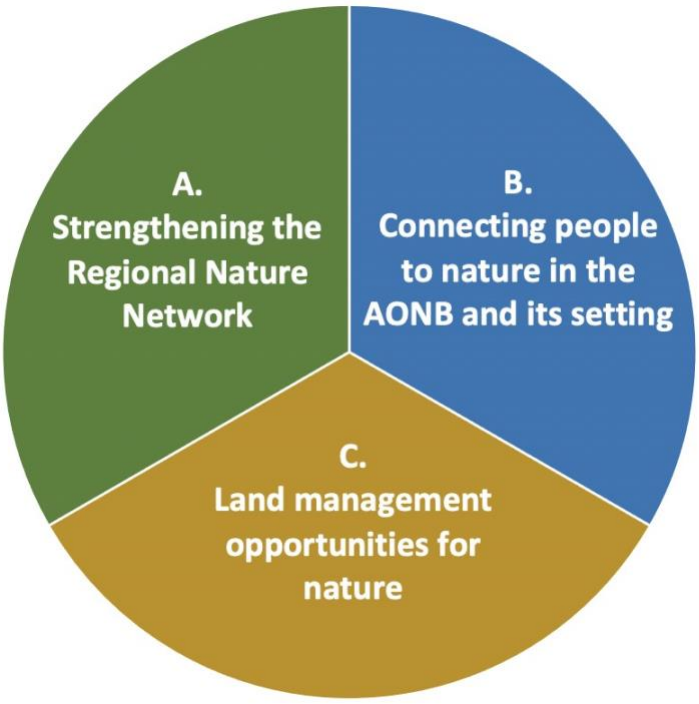
B. Connecting people to nature in the AONB and its setting. This emphasises the benefits that local people and visitors, and society more widely, gain from nature, and the actions that are needed to enhance these services.

C. Land management opportunities for nature. This provides guidance to landowners and managers on the actions they can take to conserve and enhance nature on their land. It does so under headings of six key landscape types:

- High nature value open habitats
- Highly wooded landscapes
- Predominantly grazed areas with frequent HNV habitats
- Predominantly grazed areas with fewer HNV habitats
- Predominantly arable landscapes
- Urban areas

A map showing the connectivity of different types of habitat across the whole area is also used to suggest how the nature network can best be reinforced.

Our approach for prioritising nature



A. Strengthening the regional nature network

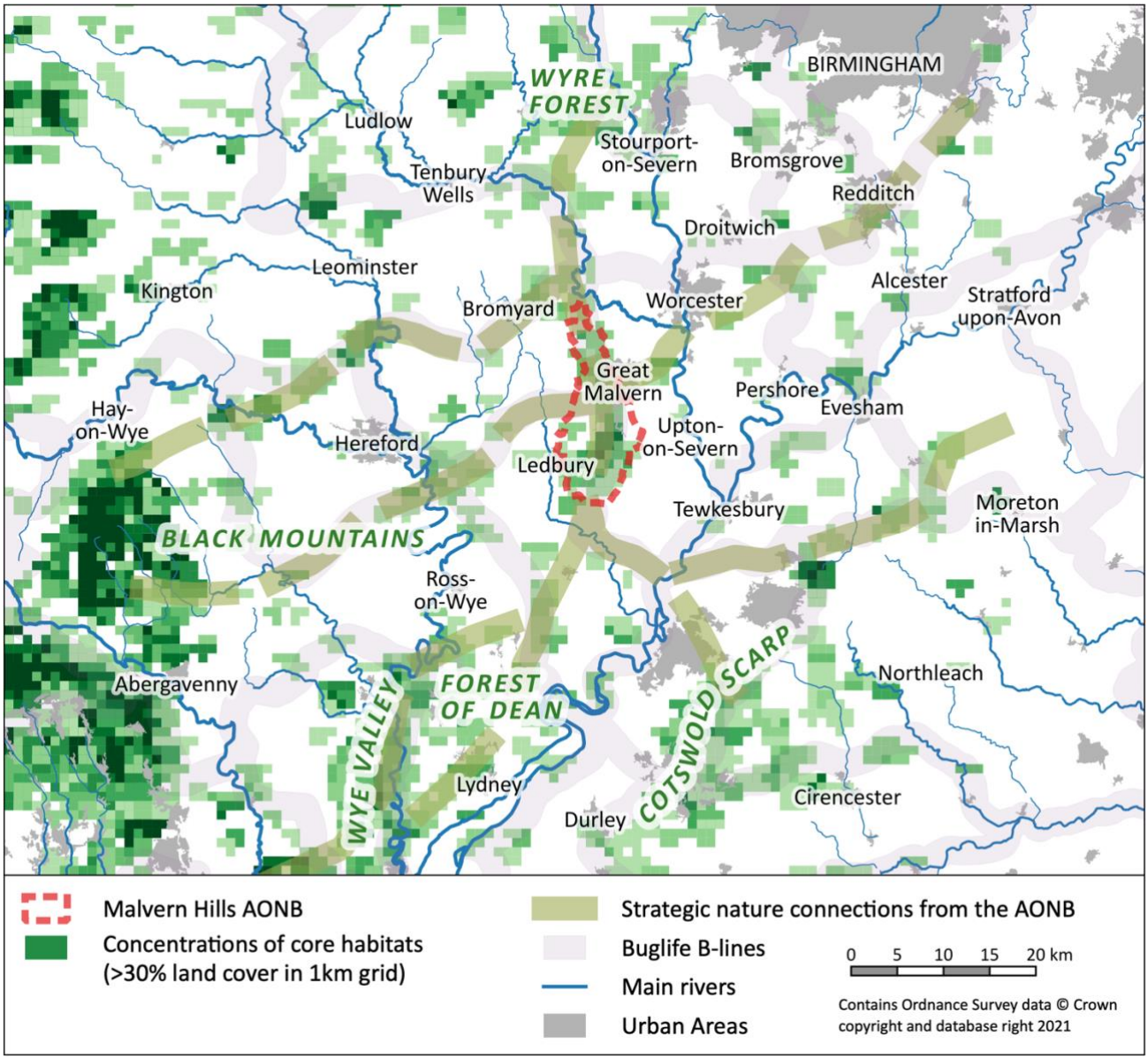
The map below shows how the AONB (ringed in red) contains a high concentration of core habitats (the grid squares coloured darker greens).

The thick dashed lines show how the AONB is connected to other core biodiversity areas. These closely following the 'B-lines' developed by Buglife (shown as pale purple lines).

These key connections are:

- To the north: the Wyre Forest (ancient woodland and heathland),
- To the south: the Cotswold scarp (beech woodland and calcareous grassland), Forest of Dean (broadleaved woodland and heathland) and Wye Valley (ancient woodland), and
- To the west, the Black Mountains (moorland and acid grassland).

Figure 4. Regional Nature Connections



The Priorities for safeguarding nature at this regional scale are:

- To recognise the importance of the AONB as a core area for nature of regional significance.
- To promote, with partners including other projected landscapes, the strengthening of connections to other regionally important areas.

B. Connecting people to nature in the AONB and its setting

Reinforcing people's relationships with nature and the benefits that it provides them with is central to achieving nature's recovery. The AONB's Colchester declaration [iv] recognises this and pledges to "create opportunities within AONBs for people to make an emotional connection to nature". Functional connections to nature in the MHAONB and its setting are clear from the wide range of services and benefits that local people, visitors and wider society receive from it. **Appendix 1** sets out a series of maps of how well the AONB and setting is doing at providing these services.

Whilst the public are at different stages in their understanding and willingness to adopt change, public awareness internationally is now at an all-time high of how our actions have harmed nature and how this is changing the world to our detriment. Even amongst the people in this AONB who are already aware of the biodiversity crisis and the need to act, there may still be uncertainty about what they can do individually or as a community to make things better.

Understanding the benefits we all gain from nature, whether pollinating the crops we eat, providing a place of tranquillity to visit or filtering the air we breath, is an important step to making decisions that support these connections.

Everyone has a role to play, whether as purchasers of food that can be produced locally and sustainably, recreational users of the countryside, policy makers and regulators, or owners and managers of land.

The priorities for connecting people to nature in the AONB and its setting are:

- **Connect and join up activities on the ground for nature:** Bringing individuals together, encouraging community organisation and activism for nature, (including public support for mitigation / enhancement policies, contacting government officials and pro-biodiversity consumer behaviour) and showcasing diverse voices who can advocate for nature but who would not normally be associated with this message can be powerful and effective ways of early adopters connecting with the silent majority and encouraging change.

- **Partnership working for a unified approach for nature recovery:** Top-down organisations can also play a role by organisations coming together and speaking with one united voice, delivering a consistent message and advice, this will increase trust, reduce ambiguity and in still confidence in those seeking to take action.

C. Land management opportunities for nature

This set of priorities provides guidance to landowners and managers on the actions they can take to conserve and enhance nature on their land. It does so under headings of six key landscape types:

- High nature value open habitats
- Highly wooded landscapes
- Predominantly grazed areas with frequent HNV habitats
- Predominantly grazed areas with fewer HNV habitats
- Predominantly arable landscapes
- Urban areas

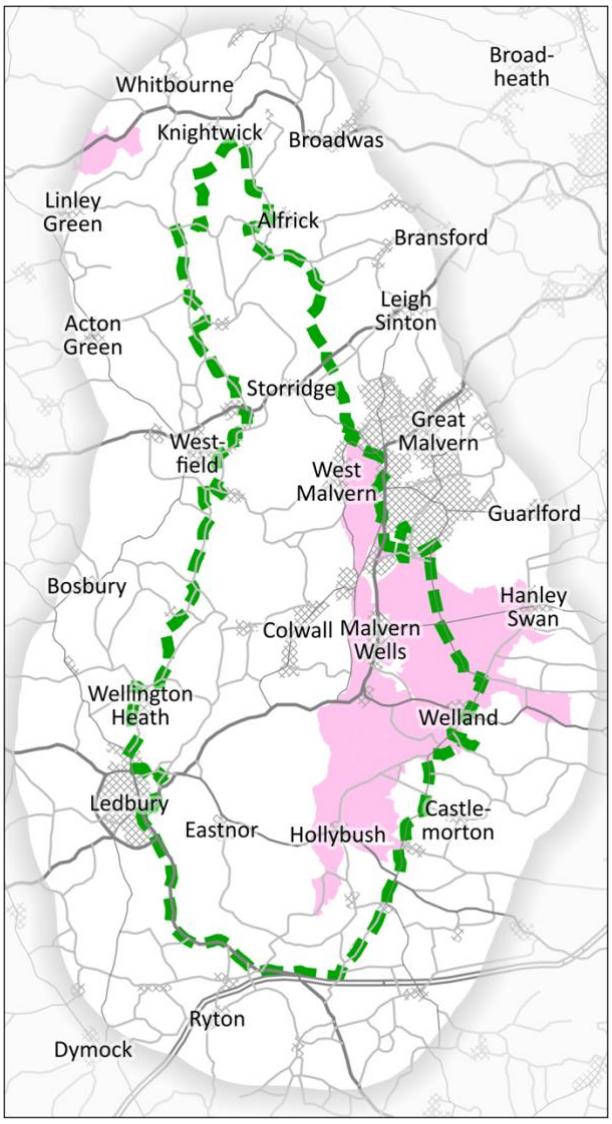
These landscape types are based on the landscape character typology prepared for the AONB in 2011 (described in the Landscape Strategy Guidelines for the AONB) and extended by Worcestershire County Council to cover the 3km side setting area in 2021 (CHECK). Appendix 2 provides a statistical summary of these simplified landscape types and their relationship to the full landscape character typology.

High nature value open habitats

High concentrations of agriculturally unimproved grassland, heathland and wetlands (or 'high nature value open habitats') occur along the spine of the Malvern Hills and on the commons that lie on the southern easterly flanks of the hills. There is also a smaller area at Bringsty Common in the north west of the NRP area. In this areas, high nature value open habitats account for at least a third of the total land area.

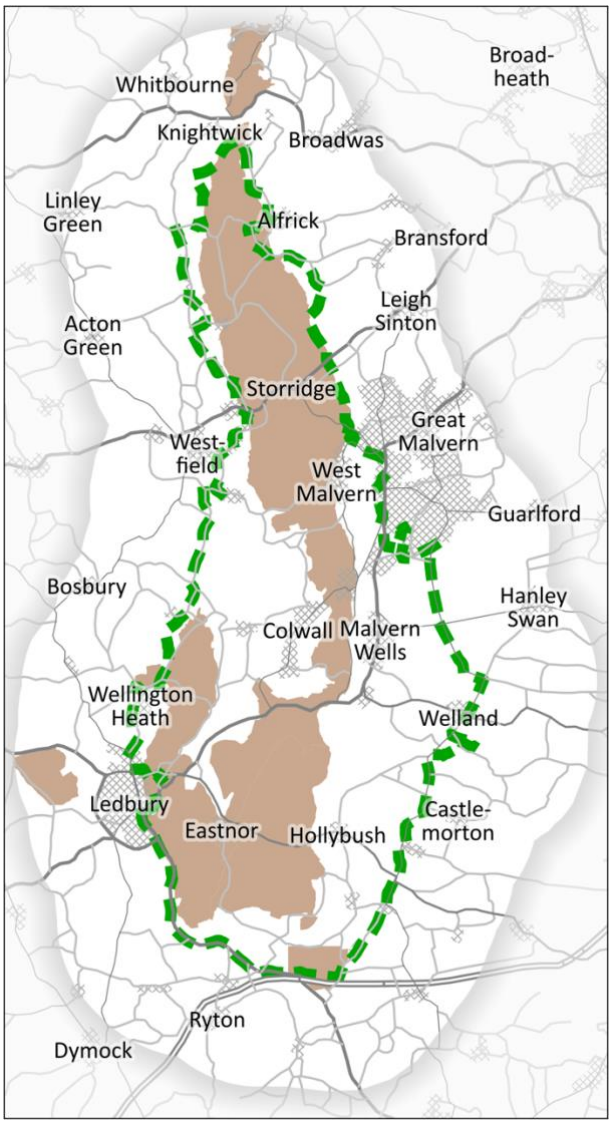
Land management priorities for nature in these areas are to:

- Promote opportunities for grazing on commons
- Maintain a balance between open land, scrub and woodland on the ridge slopes
- Manage/restore all remaining patches of semi-natural vegetation
- Manage bracken cover to maintain an open structure
- Protect the heritage value of rock outcrops
- Manage the balance of habitats to retain views of outcrops and protect archaeology
- Develop an access strategy to reduce erosion along the ridge footpaths



Highly wooded areas

Areas which are highly wooded (with nearly 40% of the land area covered by woodland, most of which is broadleaved) occur in the northern and south western parts of the AONB. Smaller areas occur outside the AONB in the 3km setting area north of Knighwick and west of Ledbury. Along with woodland, these areas have high concentrations of permanent pasture, a dense network of large hedgerows and significant remaining areas of traditional orchards (including cider apple and cherry trees). Significant areas of parkland and wood pasture also occur in places.



Land management priorities for nature in these areas are to:

- Conserve and maintain all remaining blocks of ancient woodland
- Conserve all older permanent pastures
- Conserve remaining traditional orchards
- Conserve the historic enclosure pattern
- Protect the heritage value of small quarries
- Maintain/enhance tree cover and wetland vegetation along watercourses
- Maintain/manage all woodlands using sustainable forestry management practices
- Maintain/manage hedgerow trees, ensuring a diverse age structure
- Manage/restore hedgerow boundaries including hedgerow trees
- Manage gamebirds to support sustainable woodland and hedgerow management
- Replace conifer plantations in ancient woods
- Seek opportunities to restore/create orchards

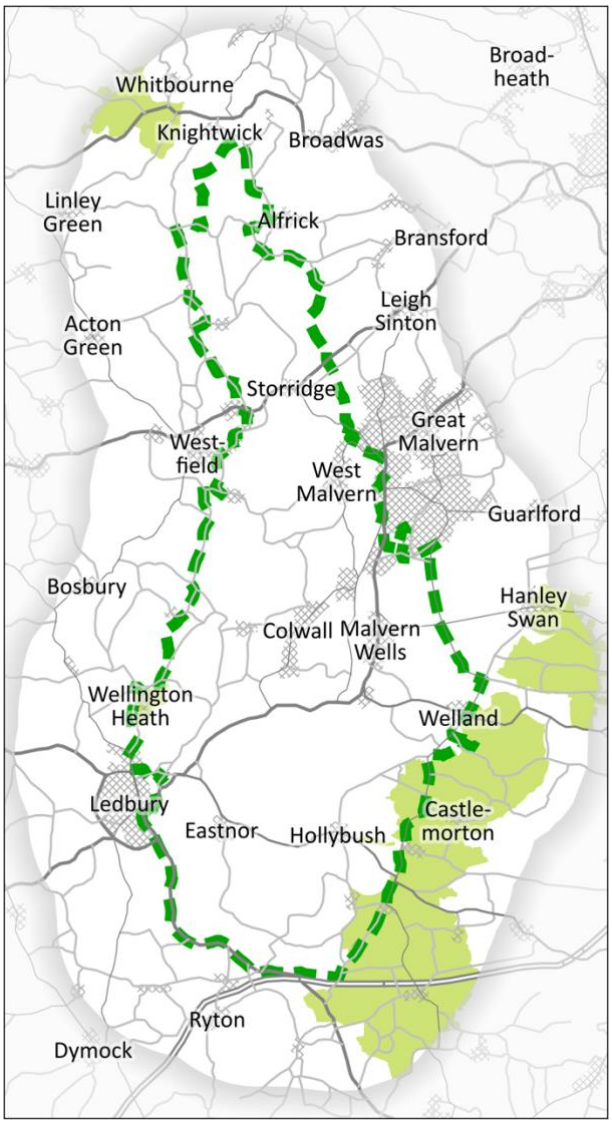
Predominantly grazed areas with frequent HNV habitats

This landscape type is dominated by grassland farming (60% of land cover as permanent pasture) and has significant areas of high nature value open habitats (principally unimproved neutral grassland and some traditional orchards). It has low levels of woodland cover (as low as 4%) and a quarter of farmland is under arable cultivation. There are many watercourses and streams and farm ponds are also frequent.

These areas occur in the south western part of the NRP area, in the 3km setting to the AONB and a smaller area in the north west of the NRP area.

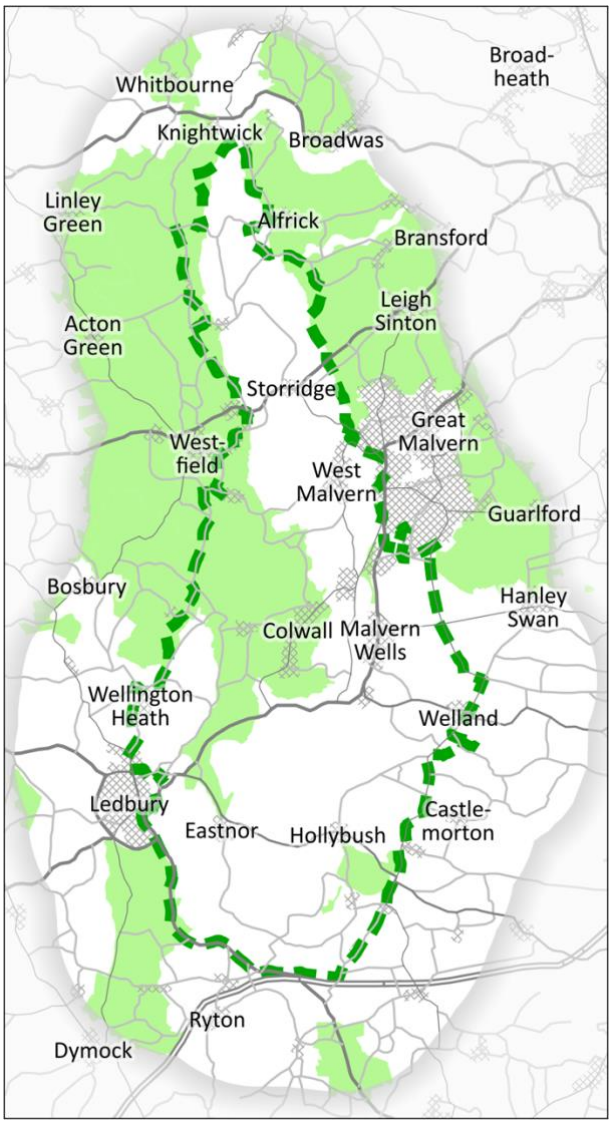
Land management priorities for nature in these areas are to:

- Conserve all older permanent pastures
- Conserve the historic enclosure pattern
- Retain and manage field ponds
- Maintain/enhance tree cover and wetland vegetation along watercourses
- Maintain/manage hedgerow trees, ensuring a diverse age structure
- Manage/restore hedgerow boundaries including hedgerow trees
- Seek opportunities to create new woodlands
- Seek opportunities to restore/create orchards
- Seek opportunities to restore wetlands to enhance ecological diversity
- Seek opportunities to restore/enhance the biodiversity of agricultural land



Predominantly grazed areas with fewer HNV habitats

This landscape type has high levels of grassland farming (permanent pasture accounts for nearly half of land use) and, unlike the previous types, relatively few areas of high nature value. Woodland cover is around 8% but much of this woodland is ancient semi-natural in character. Arable cropping takes place on a third of the land. Field boundaries are frequently low annually trimmed hedges. There are many watercourses and streams and farm ponds are also frequent. There are also areas of parkland and wood pasture.



Land management priorities for nature in these areas are to:

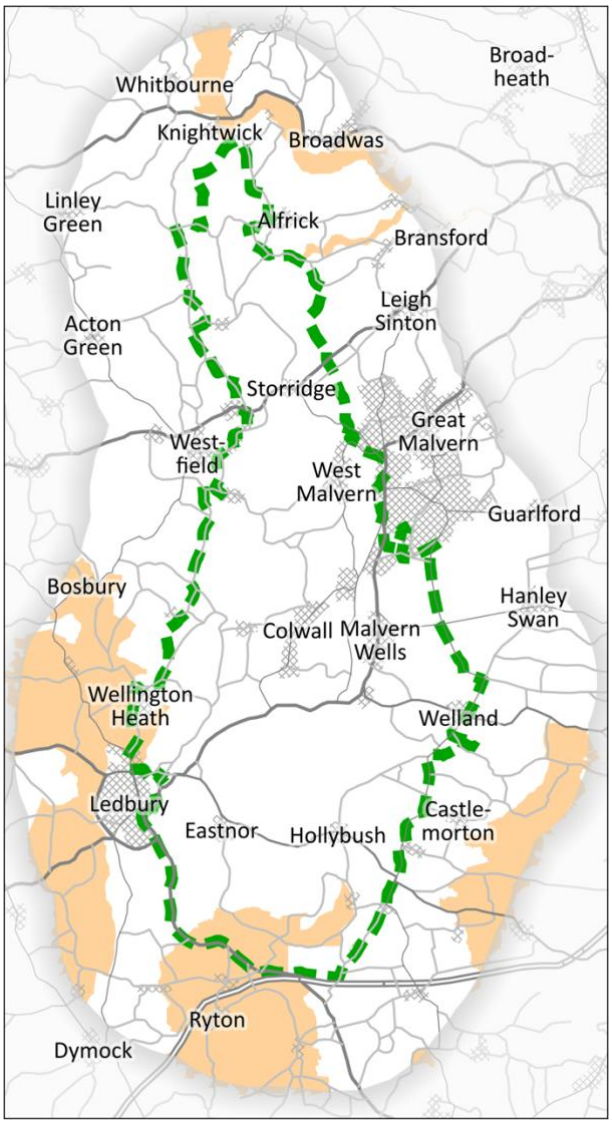
- Conserve all older permanent pastures
- Conserve and maintain all remaining blocks of ancient woodland
- Conserve remaining traditional orchards
- Maintain/manage hedgerow trees, ensuring a diverse age structure
- Manage/restore hedgerow boundaries including hedgerow trees
- Manage standing water bodies to enhance biodiversity
- Seek opportunities to create new woodlands
- Seek opportunities to restore/create orchards
- Seek opportunities to restore former parkland

Predominantly arable areas

Areas where arable farming is the dominant land use (accounting for half of land cover), occur around the southern edge of the AONB and also in the valley floor of the River Teme to the north of the AONB. Agriculturally improved permanent pasture accounts for about a quarter of land cover and woodland is found on about 8% of the area. In many areas, field boundaries consist of low annually trimmed hedges, often beside watercourses and streams.

Land management priorities for nature in these areas are to:

- Create/maintain a minimum 4m buffer strip around field margins
- Maintain/enhance tree cover and wetland vegetation along watercourses
- Manage/restore hedgerow boundaries including hedgerow trees, ensuring a diverse age structure
- Manage field pattern & hedgerows for good habitats & visual screening
- Seek opportunities to restore/create orchards
- Manage standing water bodies to enhance biodiversity
- Seek opportunities to create new woodlands

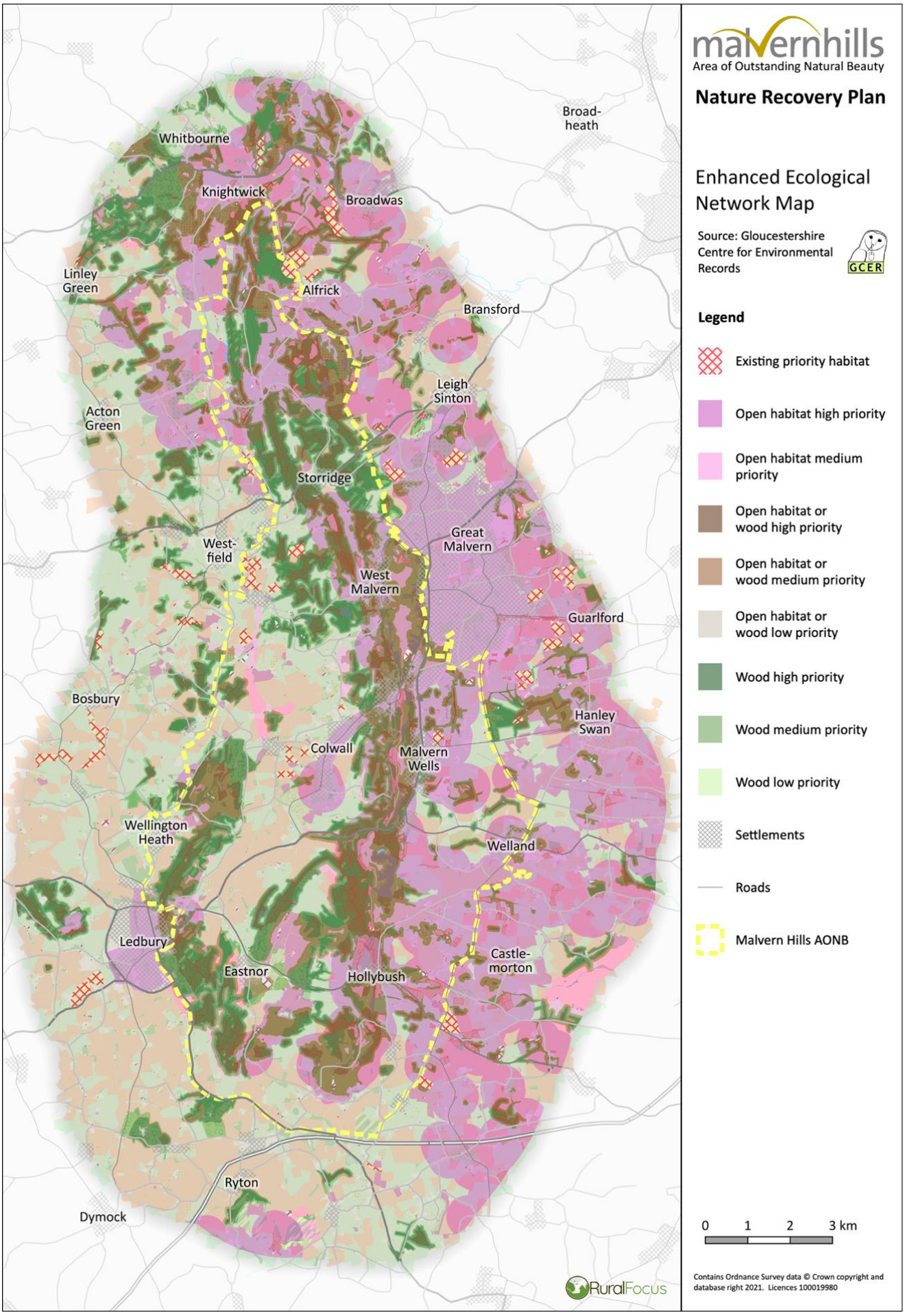


Enhancing the nature network across the whole Plan area

The map on the following page (Figure 5) has been prepared to show how populations of key species can be protected and better connected allowing them to spread and grow. Based on the extent of existing habitats and the way key species move between them, it shows the areas where there is highest priority for conserving, expanding or creating open habitats (such as agriculturally unimproved grassland and heathland), woodland or a combination of the two.

The map suggests that in most of the AONB there are large areas which have a high priority as native woodland and open habitats (mainly flower-rich low input grassland). The land to the east of the AONB has a high priority for conserving, expanding or creating open habitats. The land to the west of the AONB has a medium priority for woodland or open habitats, with some areas having a high priority for woodland.

Figure 5. Enhanced ecological network map



Delivery – Action Plan

To be developed. Short table of actions over a ?2 year timescale.

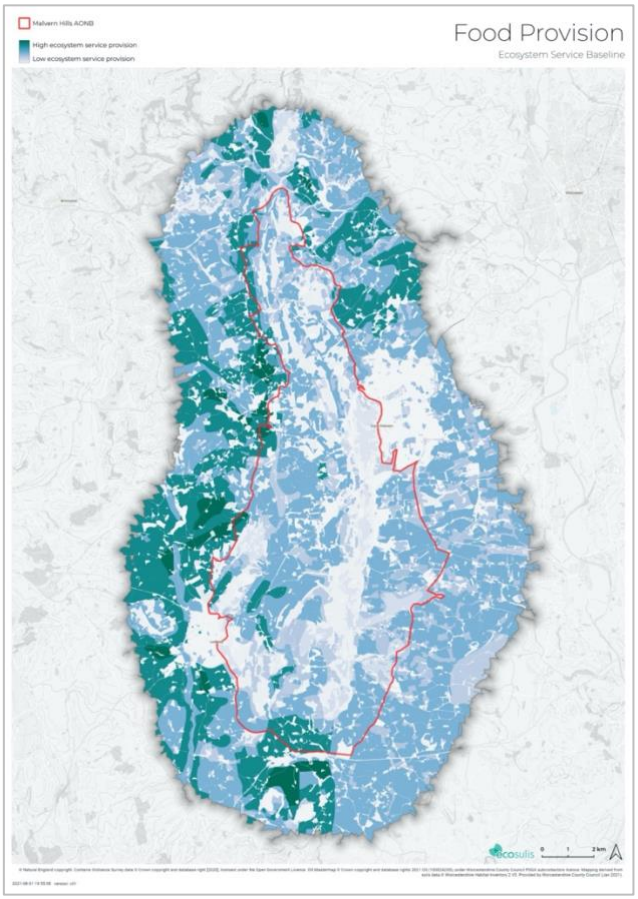
Monitoring progress of this Plan

To be added. Commitment to monitoring and review as national and regional policies (ELM, BNG etc) are rolled out.

Appendix 1. State of Nature – Provision of Ecosystem Services

This appendix uses a series of six maps of ecosystem service provision, prepared for the AONB and its setting in 2021, to assess where and how well these services are being provided to local people, visitors and wider society.

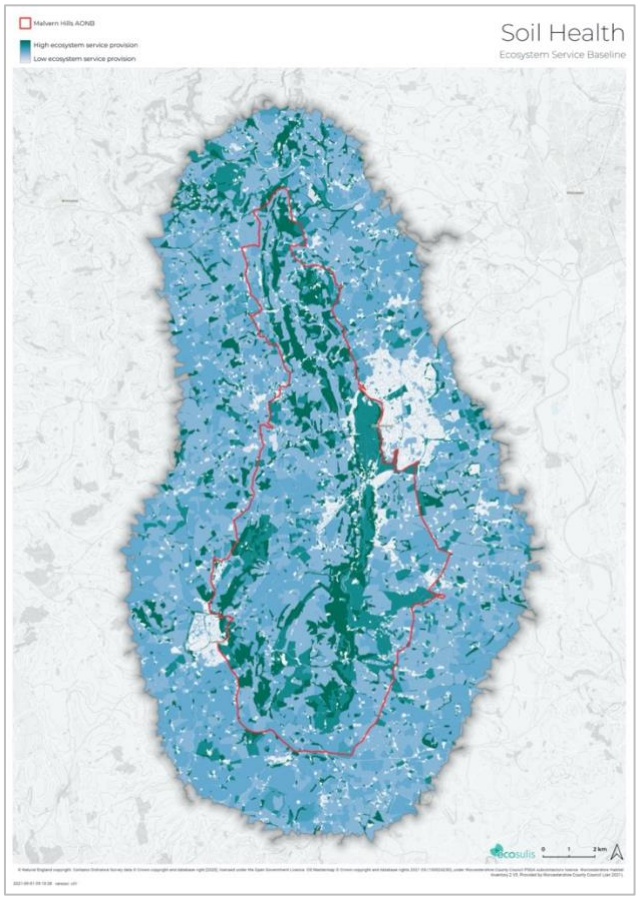
Food provision



This map is based on the Agricultural Land Classification which grades land based on its capability for agricultural and forestry production.

It shows that the greatest opportunity for food production, based on the Agricultural Land Classification, occurs outside the AONB in the western, southern and north eastern parts of the 3km setting around the AONB

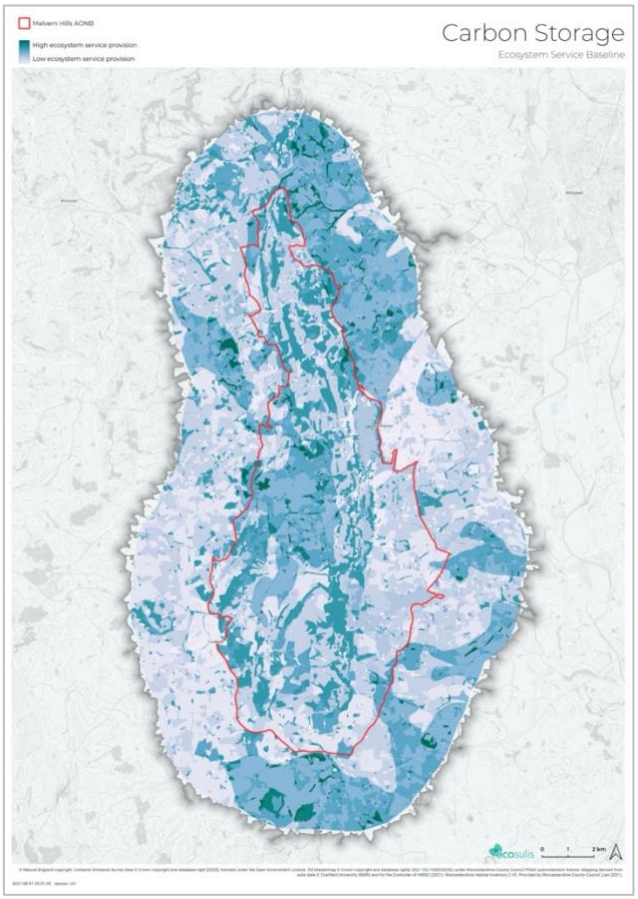
Soil health



This map is based on current land use, relating this to the likely health of the underlying soil. For instance woodland and unimproved grassland is assumed to have high soil health.

It shows that soil is likely to be in best condition in the centre of the AONB, following the line of the Hills and the concentrations of woodland on its flanks.

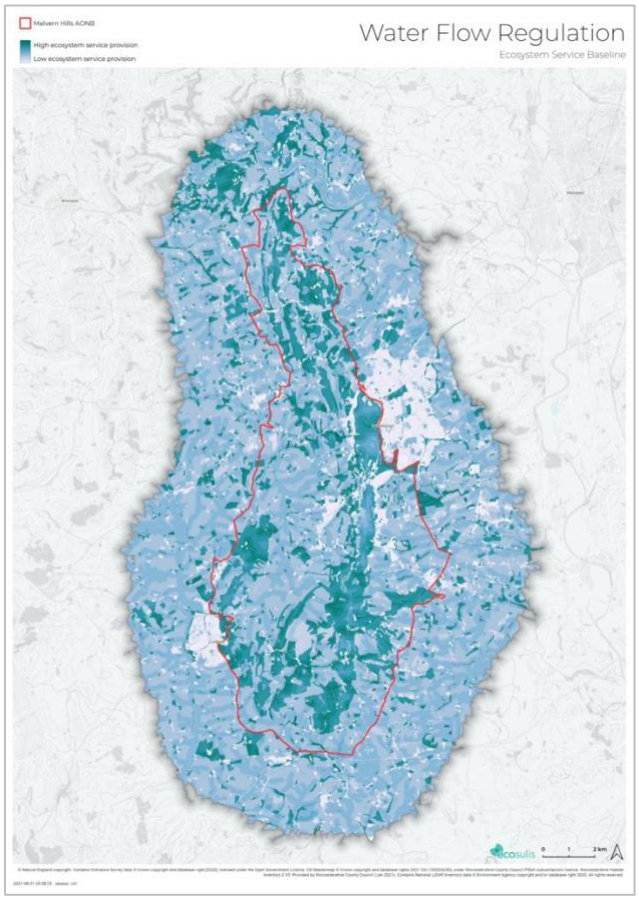
Carbon storage



This map is based on TO BE COMPLETED

It shows

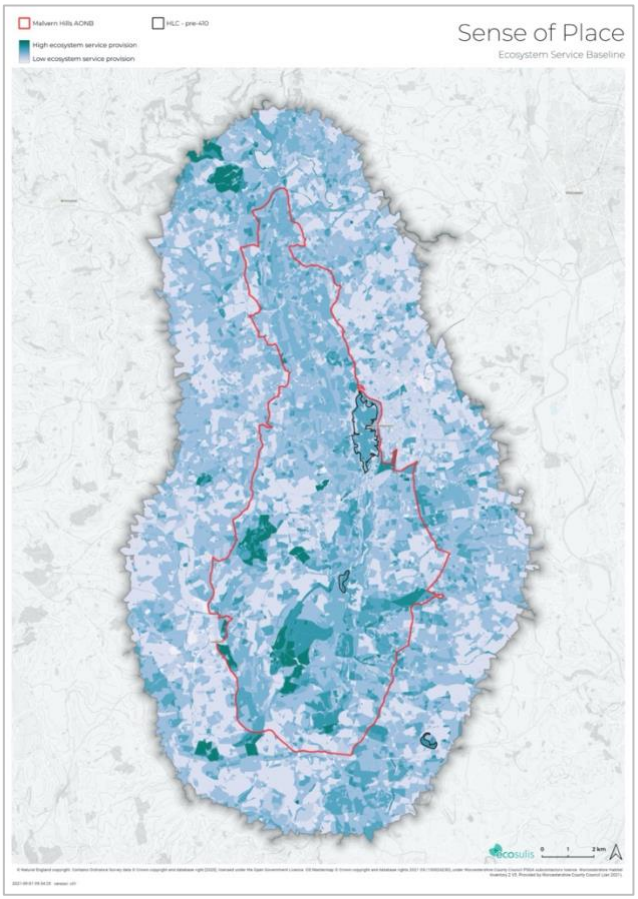
Water flow regulation



This map is based on

It shows

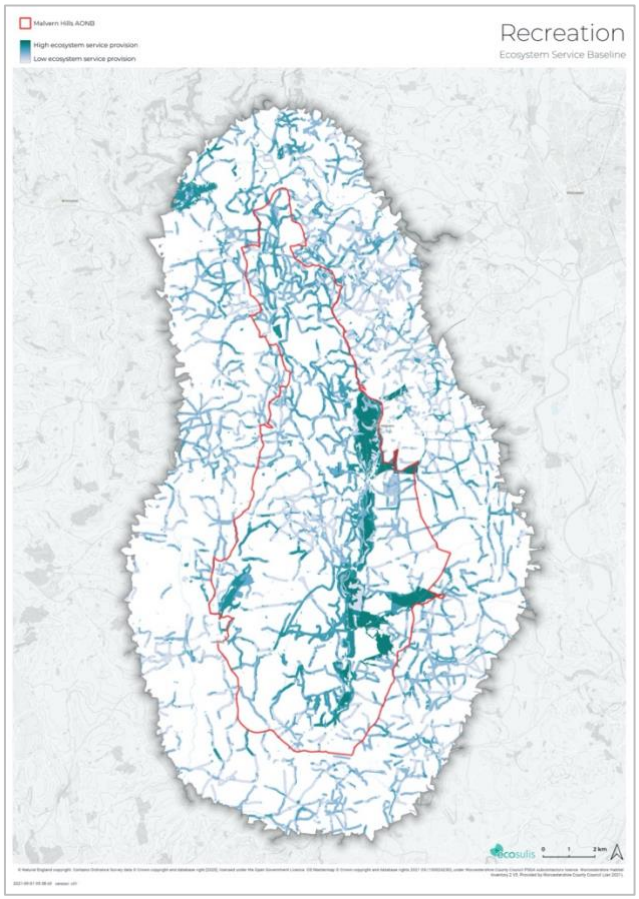
Sense of place



This map is based on

It shows

Recreation

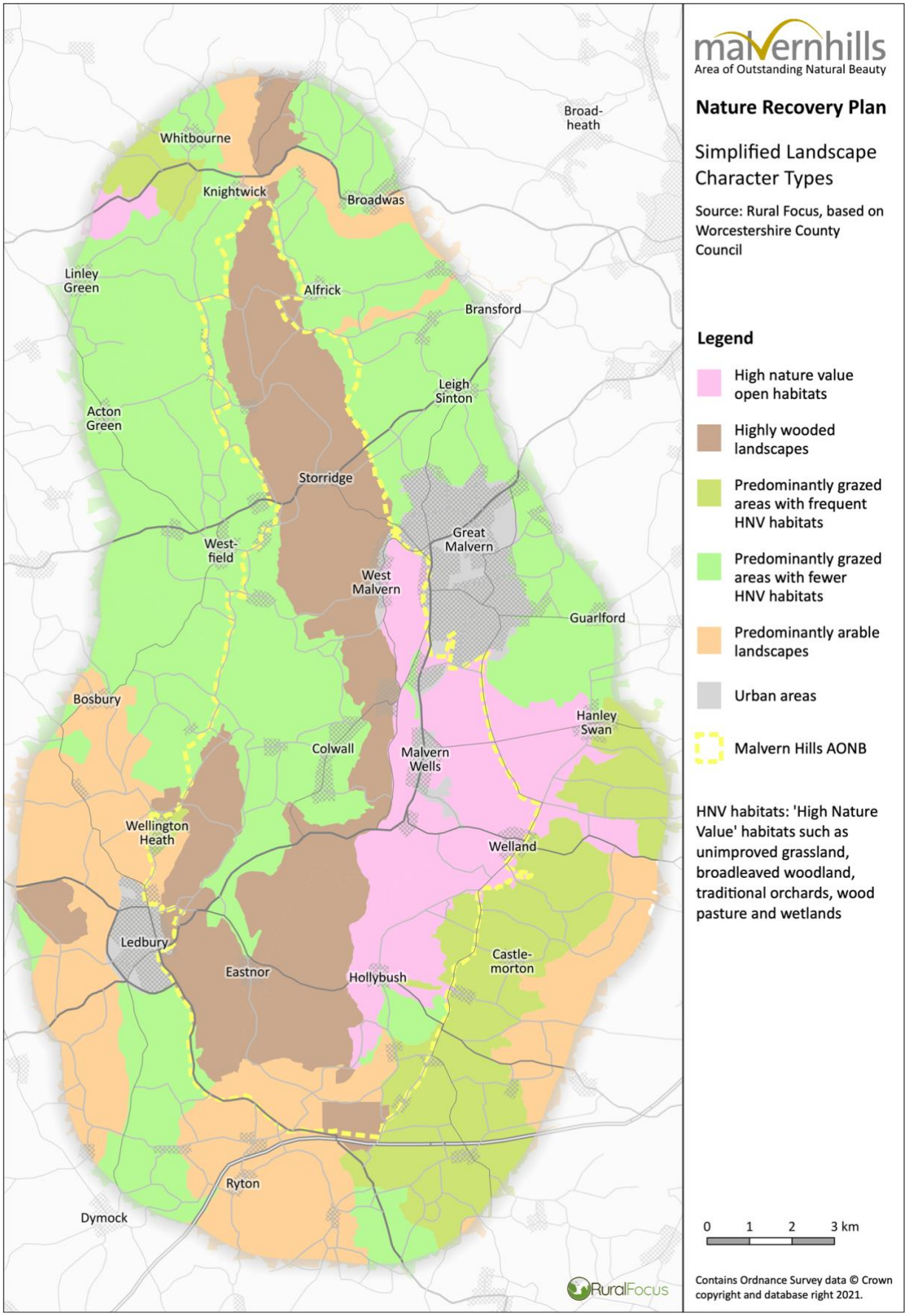


This map is based on

It shows

Appendix 2. Simplified Landscape Types

This plan six simplified landscape types to identify the areas where discrete sets of land management actions are likely to provide most benefits to nature. The map below shows these areas and the table on the following page provides a statistically summary of their areas and land cover.



Summary land cover statistics for simplified landscape types

Simplified landscape types	High nature value open habitats	Highly wooded landscapes	Predominantly grazed areas with frequent HNV habitats	Predominantly grazed areas with fewer HNV habitats	Predominantly arable landscapes	Urban areas	The AONB	Whole NRP area
Constituent landscape character types	High hills and slopes, Unenclosed commons, Enclosed commons	Principal wooded hills, Wooded hills, Wooded hills and farmlands	Wooded estatelands, Settled farmlands with pastoral land use, Forest smallholdings & dwellings	Principal timbered farmlands, Timbered plateau farmlands, Unwooded vale	Estate farmlands, Low hills and orchards, Principal settled farmlands, Riverside meadows, Sandstone estatelands, Settled farmlands on river terrace, Wet pasture meadows	Urban		
Proportion of the AONB area	21%	47%	3%	22%	5%	2%	100%	
Proportion of the total NRP area	10%	18%	12%	39%	18%	4%		100%
Percentage land cover by simplified landscape type and in the AONB and whole NRP area								
High Nature Value open habitats	36%	19%	22%	11%	6%	6%	21%	15%
Woodland	16%	38%	4%	8%	8%	3%	23%	13%
Agriculturally improved permanent pasture	23%	29%	40%	35%	29%	6%	28%	31%
Arable	11%	8%	24%	33%	48%	1%	17%	26%
Built up areas and gardens	9%	6%	9%	8%	6%	84%	8%	11%
Other land cover	5%	1%	2%	4%	4%	1%	3%	3%

Footnotes

[i] Natural History Museum (26/09/20) "UK has led the world in destroying the natural environment – analysis of the Biodiversity Intactness Index (PREDICTS: Projecting Responses of Ecological Diversity In Changing Terrestrial Systems). https://www.nhm.ac.uk/discover/news/2020/september/uk-has-led-the-world-in-destroying-the-natural-environment.html (accessed 1/10/21)

[ii] Hayhow DB, Eaton MA, Stanbury AJ, Burns F, Kirby WB, Bailey N, Beckmann B, Bedford J, Boersch-Supan PH, Coomber F, Dennis EB, Dolman SJ, Dunn E, Hall J, Harrower C, Hatfield JH, Hawley J, Haysom K, Hughes J, Johns DG, Mathews F, McQuatters-Gollop A, Noble DG, Outhwaite CL, Pearce-Higgins JW, Pescott OL, Powney GD and Symes N (2019) The State of Nature 2019. The State of Nature partnership.

[iii] IPCC, 2019: Summary for Policymakers. In: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.- O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)].

[iv] Colchester Declaration (2019). The National Association for Areas of Outstanding Natural Beauty. https://landscapesforlife.org.uk/projects/colchester-declaration

[v] Professor Sir John Lawton CBE FRS (Chair) (2010) Making Space for Nature: A review of England's Wildlife Sites and Ecological Network Submitted to the Secretary of State, the Department for Environment, Food and Rural Affairs on 16 September 2010

[vi] HM Government (2018) A Green Future: Our 25 Year Plan to Improve the Environment https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

[vii] Malvern Hills Area of Outstanding Natural Beauty Management Plan 2019-2024