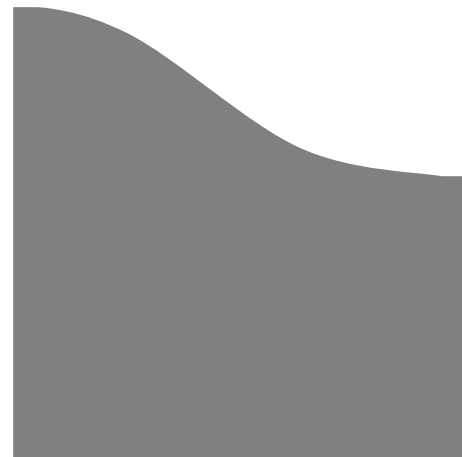


Local
Development
Framework
for Pendle

Evidence Base



Pendle
Biodiversity
Audit



Summer 2010



Adopted: 23rd September 2010

£25.00



Images on the front cover (top to bottom):

- Bryophyte (*Frullania tamarisci*) (Photo: Clare O'Reilly)
- Woods cranesbill (*Geranium sylvaticum*) (Photo: John Lamb)
- Water vole (*Arvicola amphibious*) (Photo: ourwildlifephotography.com)
- Tree roots (Photo: Burnley Borough Council)
- Reed bunting (*Emberiza schoeniclus*) (Photo: Stephen Burch)

Contents

1. Introduction	6
What is the Pendle Biodiversity Audit?	6
What is biodiversity?	6
Why is Biodiversity Important?	7
2. The Need for Evidence	8
Introduction	8
Local Distinctiveness in Spatial Planning	8
Soundness	8
Statutory Requirements	9
National Planning Guidance	9
Local Planning Policy	11
Evidence	11
3. The Pendle Biodiversity Audit	12
Our Biodiversity Resource	12
Extent of the Audit	22
Limitations of the Data	22
4. Priority Habitats and Species	24
Introduction	24
European Protected Species	24
UK Priority Habitats and Species	25
Habitats and Species of Principal Importance (England)	25
Lancashire Biodiversity Action Plan	26
Pendle Key Habitats and Species	27
Further Information	30
Planning	33
5. Statutory Wildlife Sites	34
Introduction	34
Special Protection Areas (SPA)	35
Special Areas of Conservation (SAC)	36
Ramsar Sites	38
Sites of Special Scientific Interest (SSSI)	41
National Nature Reserves (NNRs)	44
Local Nature Reserves (LNRs)	44
Planning	49
6. Local Sites of Biodiversity Interest	50
Introduction	50
Biological Heritage Sites (BHS)	50
Local Geodiversity Sites (LGS)	52
Sites of Local Natural Importance (LNI)	54
Planning	55
7. Pendle's Key Habitats	57
Introduction	57
Broadleaved and Mixed Woodland	57
– Ancient Woodland	60
Moorland and Fell	64

Reedbed	66
Rivers, Streams and Ponds	67
Species-rich neutral grassland	70
- Special Biodiversity Verges (SBV)	72
8. Landscape Ecology	75
Introduction	75
National Character Areas	77
Planning	79
9. Using the Pendle Biodiversity Audit	81
Introduction	81
Planning	81
Spatial Implications	85
10. Monitoring	94
11. Useful Contacts	96
Appendix 1 – Biodiversity Evidence Base for Pendle	100
Appendix 2 – Core Strategy and Policy Formulation	110
Appendix 3 – Monitoring Our Biodiversity Resource	112
Appendix 4 – Lancashire BAP Habitat Plans	114
Appendix 5 – Lancashire BAP Urban Habitat Plans	115
Appendix 6 – Lancashire BAP Species Plans	116
Appendix 7 – Summary of statutory and other protected sites in Pendle	118
Appendix 8 – Glossary of Terms	133

Tables

Table 4.2 – Number of priority habitats and species in Pendle	28
Table 4.3 – Key species in Pendle	29
Table 5.1 – SSSI coverage	42
Table 5.2 – LNR coverage	47
Table 6.1 – BHS coverage	51
Table 6.2 – LGS coverage	53
Table 6.3 – LNI coverage	55
Table 7.1 – Ancient woodland coverage	59
Table 7.2 – Woodland coverage	63
Table 7.3 – Special Wildflower Verges	73
Table 9.1 – Spatial distribution of protected sites/areas in Pendle Borough Council ...	88

Figures

Figure 3.1 – Pendle’s Geology	14
Figure 3.2 – Pendle’s Topography.....	15
Figure 3.3 – Landscape Character in Pendle	16
Figure 3.4 – Pendle’s Habitats	17
Figure 3.5 – Nature Conservation Designations in Pendle	18
Figure 3.6 – Natural Heritage Zones.....	19
Figure 3.7 – Pendle’s Biodiversity Resource	20
Figure 3.8 – Pendle’s Biodiversity Evidence Base	21
Figure 7.1 – Rivers of Pendle	68
Figure 9.1 – Extent of the Open Countryside	90
Figure 9.2 – Designated Sites of Biodiversity Interest	91
Figure 9.3 – Key Areas of Open Space	92
Figure 9.4 – Pendle Ecological Network	93



1. Introduction

What is the Pendle Biodiversity Audit?

- 1.1 The primary purpose of the Pendle Biodiversity Audit is to help to inform the preparation of new spatial planning policies in the emerging Pendle Local Development Framework (LDF) and future decisions on planning applications. It seeks to bring together information on biodiversity issues in Pendle (see inset), but is not in itself a single source for all the information on biodiversity in the borough.
- 1.2 The recently created Lancashire Environment Record Network (LERN) is tasked with collating information on biodiversity across the county, which is currently held by many individuals and organisations.

What is biodiversity?

Biological diversity – or biodiversity for short – is simply the wealth of wildlife on your doorstep. It includes everything from the landscape in which you live, through all the animals, plants and insects you live with, to the genes that make you an individual.

In more technical terms biodiversity provides the support systems – the intricate network of ecosystems, habitats and species that constitute all life on earth – that sustain human existence.

- 1.3 The format of Pendle Biodiversity Audit draws heavily on the report produced by the Cumbria Biological Data Network¹, which developed standard biodiversity evidence information for use by local authorities across that county. The information it contains will establish baseline data for the regular monitoring that will help to highlight any improvement or deterioration that occurs as a result of our ongoing efforts to protect and enhance our natural heritage. In addition, it is anticipated that the document will prove to be a useful point of reference for members of the public, environmental groups and developers.
- 1.4 The Pendle Biodiversity Audit makes reference to relevant environmental and planning legislation and provides a brief summary of the priority species and habitats, designated sites and important natural environments that together make up our biodiversity resource.
- 1.5 Information on biodiversity changes on an almost daily basis. So, wherever possible, we have signposted the reader to a website or other source, where more detailed and up-to-date information is readily available. As such Pendle Council can assume no liability or responsibility for any errors or omissions.

¹ The Cumbria Biodiversity Evidence Base for Cumbria's Planning Authorities (CBDN, June 2008)

- 1.6 The Pendle Biodiversity Audit also helps to address the requirements of the Council's requirements under the Environmental Information Regulations 2004, which came into force on 1st January 2005. This addresses how public authorities should:
- (a) progressively make the environmental information that they hold available to the public by electronic means which are easily accessible.
 - (b) take reasonable steps to organize the information relevant to its functions with a view to the active and systematic dissemination to the public of the information.
- 1.7 Where the information requested is not held by Pendle Council we will endeavour to transfer your request to another public authority believed to hold the information, or supply the applicant with the name and address of that authority.

Why is Biodiversity Important?

- 1.8 Biodiversity gives us many of the essentials of life - oxygen, water, food, clothing, health and relaxation. Its value ranges from the spiritual benefits to be gained from contact with nature, to the economic value of crops and livestock.
- 1.9 However, the world is losing biodiversity at an ever-increasing rate as a result of human activity. In the UK over 100 species were lost in the last century, with many more species and habitats in danger of disappearing. On a world scale the rate of loss is now recognised to be a cause for serious concern, requiring concerted international action to prevent continued loss of species and habitats. Our failure to act now will result in further losses, meaning that we pass on to future generations a planet that is much poorer than the one we were privileged to inherit.
- 1.10 Experts agree that climate change is one of the biggest threats to both people and wildlife. The conservation and enhancement of biodiversity is one of the portfolio of measures that ameliorate impacts. The moorland peat bogs in the hills above Pendle comprise a major store of carbon. When in poor condition they release carbon to the atmosphere, however, when in favourable condition through rewetting they can absorb carbon dioxide through the laying-down of peat. In this condition they can act as natural sponges soaking up water and releasing it slowly with the avoidance of floods.
- 1.11 Analysing the distribution of species over time, can also help to indicate changes in climate, temperature and the seasons.

2. The Need for Evidence

Introduction

- 2.1 Evidence is the basis for managing change and as such is an integral part of the plan making process. It helps to inform the preparation of new policies and to monitor their effectiveness over time.
- 2.2 To help us move from our current position to a more desirable situation in the future requires the setting of specifically measurable targets, timescales for their achievement and the identification of partners who will help with implementation and delivery.

Local Distinctiveness in Spatial Planning

- 2.3 Planning Policy Statement 12: Local Spatial Planning (PPS12) uses the concept of sound evidence, specifically in the context of illustrating local distinctiveness.
- 2.4 Pendle Council, as the local planning authority, does not have to justify higher-level planning policies, nor provide the evidence to support them.²
- 2.5 Where circumstances suggest that a local (more detailed) interpretation of higher-level policy is appropriate, the local planning authority may take such an approach, where it can demonstrate that there is sound evidence and that it is justified by local circumstances.

Soundness

- 2.6 Government guidance³ requires the policies in Development Plan Documents (DPDs) to be based on a sound evidence base. Whilst a wide and inclusive view needs to be taken of what constitutes evidence, it is essential that it is able to withstand scrutiny. In testing the soundness of plans, an independent Planning Inspector has to exercise judgement based on the evidence available.
- 2.7 The Planning and Compulsory Purchase Act 2004 does not define the term 'sound', but according to the Planning Inspectorate it:
"... may be considered in this context within its ordinary meaning of 'showing good judgement' and 'able to be trusted' and within the context of fulfilling the expectations of legislation."

² Whilst higher-level policies cannot be challenged through the LDF process, their application and implementation in Development Plan Documents (DPDs) can be tested.

³ Planning Policy Statement 12: Local Spatial Planning (CLG, June 2008)

- 2.8 Whilst the new PPS12 has moved the test for 'robust and credible evidence' towards a broader test that considers whether a DPD is 'justified', what is clear is that soundness and evidence are an integral element of all stages of plan making, and not an after thought.

Statutory Requirements

- 2.9 The Planning Inspectorate makes clear that evidence should be substantially completed by the end of the Regulation 25 stage (the consideration of reasonable alternatives) because the options need to be informed by the available evidence. To help demonstrate this Pendle Council is required to maintain an audit trail to show how the evidence has been collected, recorded, and used before it submits a DPD for testing at examination.
- 2.10 Evidence can be costly to gather, or acquire, and need only be produced to meet an identified purpose. In all cases the evidence gathered should be proportionate to the subject matter of the plan, relevant to the place in question and as up-to-date as practical having regard to what may have changed since the evidence was collected.
- 2.11 The evidence base should be derived from two sources:
1. Participation: evidence of the views of the local community and others who have a stake in the future of the area.
 2. Research / fact finding: evidence that the choices made by the plan are backed up by the background facts.

National Planning Guidance

- 2.12 Planning Policy Statement 12: Local Spatial Planning (PPS12, CLG, June 2008) focuses on the need for an evidence base that provides social, environmental, economic and physical information to identify the spatial⁴ characteristics of their locality.
- 2.13 Specific Government guidance on planning and biodiversity is contained in the following documents, all of which can be accessed via the web link that follows:
- Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9, ODPM, August 2005)
 - Government Circular ODPM 6/2005: Biodiversity and Geological Conservation - Statutory obligations and their impact within the planning system, Government Circular 6/2005 (ODPM, August 2005)
 - Planning for Biodiversity and Geological Conservation: A Guide to Good Practice, March 2006, the companion guide to PPS9 and the Government Circular 6/2005 (ODPM, March 2006)



<http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/historicenvironment/pps9/>

⁴ The term spatial in this context refers to how the various components of our local area / community relate to each other, and inter-act with one another.

- 2.14 The PPS9 Companion Guide to Good Practice provides an indication of the information and evidence required for the planning process. The Pendle Biodiversity Audit seeks to comply with this practice guidance and Appendix 2 shows how the biodiversity evidence base will be used to help inform the planning process in Pendle.
- 2.15 Sound information on biodiversity is required to inform Local Development Framework policy formulation, the development of options, Habitat Regulations Assessment, Sustainability Appraisal⁵ and monitoring. The extent of Pendle's biodiversity resource is summarised in Figure 3.7 and an overview of geographical coverage of Pendle LDD's is given at Figure 9.2.
- 2.16 Whilst Figure 3.7 illustrates the extent of the biodiversity resource in Pendle, it is also important to note the wider implications that any new policy or site allocation may have on sites outside the immediate area. In particular the potential impact on sites with statutory protection – the Ramsar sites in the West Lancashire and Lancaster areas and those parts of the South Pennine Moors beyond the Pendle boundary – need to be considered through a process referred to as Habitat Regulations Assessment.
- 2.17 PPS9 requires all development plan policies and planning decisions to be based on up-to-date information. This should include information on designated sites, habitats, species restoration and enhancement opportunities, and networks of natural habitats.
- 2.18 PPS9 (Para 12) recognises that networks of natural habitats are a vital resource as they can link sites of biodiversity importance and provide routes or stepping stones for the migration, dispersal and genetic exchange of species in the wider environment. Local authorities should aim to maintain networks by avoiding or repairing the fragmentation and isolation of natural habitats through policies in plans. Such networks should be protected from development, and, where possible, strengthened by or integrated within it. This may be done as part of a wider strategy for the protection and extension of open space and access routes such as canals and rivers, including those within urban areas.
- 2.19 The Pendle Biodiversity Audit represents the first steps in developing a more detailed representation of our local biodiversity and mapping opportunity. It should be taken into account in:
- the development of LDF policies, site allocations and Area Action Plans
 - development control constraints checking, protection and enhancement
 - the development of core output and other indicators
- 2.20 The information can also be used to help Pendle Council achieve its biodiversity duty, under Section 40 of the Natural Environment and Rural Communities Act 2006⁶.
- 2.21 It is also anticipated that the information provided in the Pendle Biodiversity Audit will be of value to Council staff, developers, other organisations and the general public.

⁵ This includes the European requirement for Strategic Environmental Assessment (SEA).

⁶ The Natural Environment and Rural Communities Act came into force on 1st October 2006. Section 40 of the Act states: *'Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.'*

Local Planning Policy

- 2.22 On 6th July 2010 the Secretary of State for Communities and Local Government issued a letter revoking Regional Spatial Strategies with immediate effect. As such the policies from the North West of England Plan: Regional Spatial Strategy to 2021 no longer form part of the statutory Development Plan for Pendle. This means they are not considered by officers when determining planning applications.
- 2.23 Currently the local component of the statutory Development Plan for Pendle is the Replacement Pendle Local Plan (2001-2016) adopted by Pendle Council in May 2006. Several policies in the Pendle Local Plan relate directly, or indirectly, to the conservation and enhancement of biodiversity throughout the Borough.

Evidence

- 2.24 An up-to-date evidence base is required if Development Plans are to include policies that seek to:
1. Increase the biodiversity resource by protecting, enhancing, expanding, and linking habitats and species populations.
 2. Develop a functional ecological framework.
- 2.25 The UK and Lancashire Biodiversity Action Plans (BAPs), and Section 41 of the NERC Act list of Species and Habitats of Principal Importance, set the scene for biodiversity conservation in Pendle.
- 2.26 The UK BAP seeks the protection and enhancement of UK priority species and habitats, even those that are not statutorily protected, and this is reflected in PPS9.
- 2.27 It is therefore vitally important to know about the distribution, abundance and conservation needs of species and habitats in the area. Knowledge of the occurrence and conservation requirements of these species and habitats in relation to climate change is also required to comply with national guidance.
- 2.28 But, whilst we may understand the conservation needs of the Species and Habitats Principal Importance in Pendle, our up to date knowledge of their distribution and/or abundance in Pendle is, in many cases, poor.

3. The Pendle Biodiversity Audit

Our Biodiversity Resource

- 3.1 Pendle's biodiversity resource is extensive due to its varied geology (Figure 3.1), topography (Figure 3.2), soils and climatic conditions. This variety is demonstrated in Lancashire County Council's Landscape Character Assessment (Figure 3.3), which clearly shows that biodiversity is a key element of the characterisation of Pendle.
- 3.2 Whilst there is still much to learn and plenty to be discovered about Pendle's biodiversity, there is a considerable amount of information already available ... it's just not all in one place!
- 3.3 The Phase 1 Habitat Survey of Lancashire, which was carried out in 1988, and the Biodiversity Audit of North West England (1999) helped to identify different habitats, species, conservation needs and priorities in the Pendle area. Unfortunately, in many instances, the Phase 1 Habitat Survey does not readily equate to the Biodiversity Action Partnership (BAP) Habitat classifications, and significant expertise is required to translate one into the other.
- 3.4 Much of our biodiversity resource, both habitats (Figure 3.4) and species, and the network of features in the landscape essential for migration, dispersal and genetic exchange, lie outside our designated sites (Figure 3.5). But, the best sites are protected by local, regional, national or international designations.
- 3.5 The South Pennine Moors are designated as a Site of Special Scientific Interest (SSSI). Significant areas of the SSSI are also of international importance and designated as a Special Area of Conservation (SAC) or Special Protection Area (SPA). They also support EC Habitats Directive Annex 1 Habitats.
- 3.6 UK Priority Habitats occur extensively within statutory sites, but they also occur outside of these sites, either in undesignated areas, or within designated local wildlife sites. Of the 65 UK Priority Habitats, 56 of which are classified as Habitats of Principal Importance in England, 5 can be found in Pendle (see Chapter 7).
- 3.7 In 2010 records indicate that Pendle supports at least 29⁷ species that require conservation action (Table 4.2), that is they are one of the 1,149 UK Priority Species, 941 of which are regarded as Species of Principal Importance in England⁸. Some of these species have statutory protection and all are identified on the Lancashire BAP Long List.

⁷ The Lancashire BAP Long Lists are currently in preparation, so this figure will increase as those for plants etc. are completed.

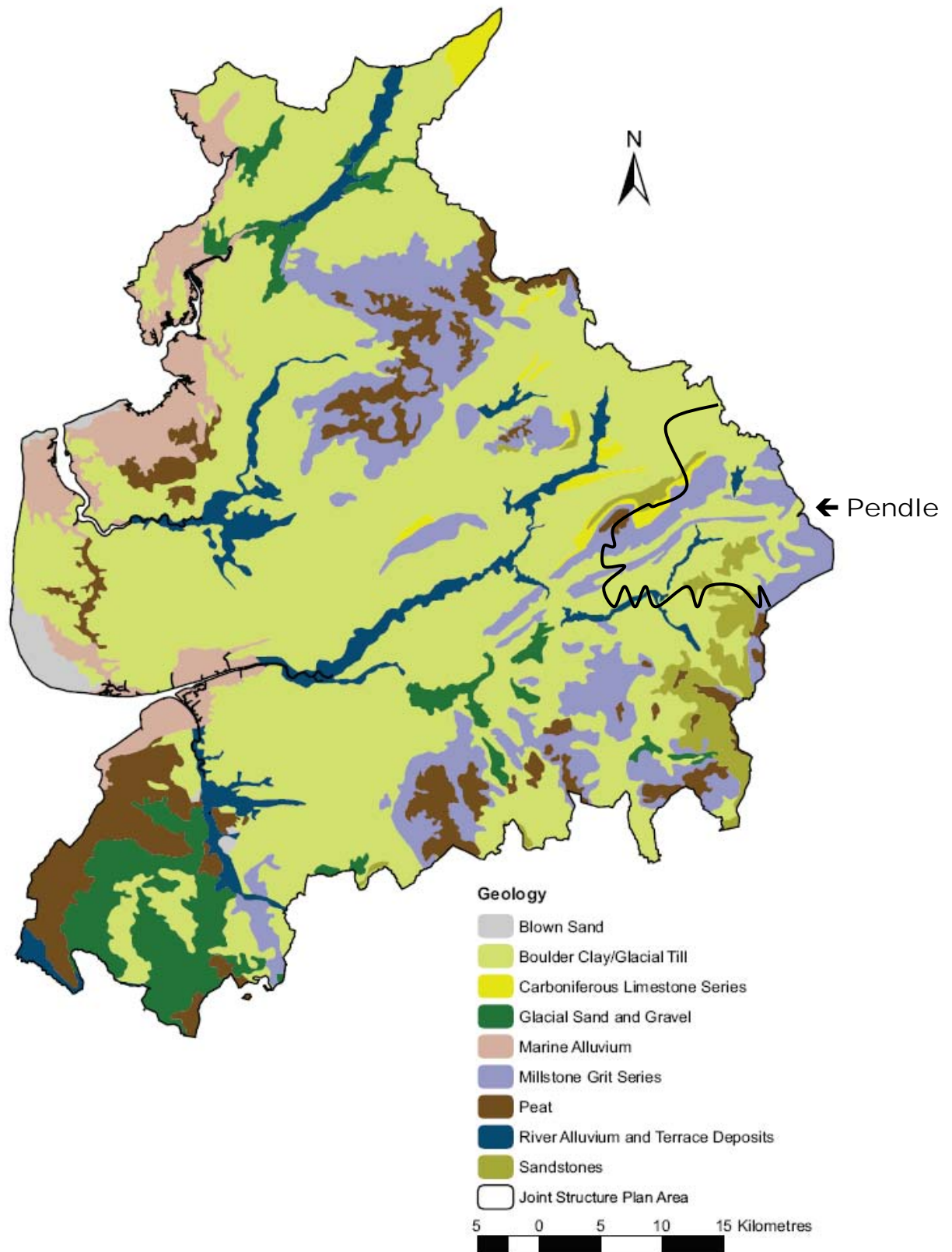
⁸ Of note is the fact that the UK is particularly important, in terms of the percentage of the world's species of fungi (21.4%), lichens (8.8%) and bryophytes (mosses and liverworts) (7.1%) that can be found here. These groups are typically under-recorded and often given little or no consideration when planning applications are assessed.

- 3.8 European Protected Species (see Para 4.5) are given a high level of protection from development, and other UK protected species are a significant material consideration in the planning system. Their protection is summarised in the Circular 06/2005 and reinforced by paragraph 12 in Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9, CLG, August 2005).
- 3.9 The UK BAP protected species, identified as being present in the Borough in the Lancashire BAP, form Pendle's Key Species list. In total there are at least 39 key species in Pendle (see Table 4.1).
- 3.10 A significant proportion of the biodiversity in Pendle is associated with sites that in isolation do not represent outstanding examples of individual habitat-types. The term landscape ecology is frequently used to refer to the combination of small semi-natural habitats, and land in non-intensive agricultural use; which may also include habitats developed since land formerly in agricultural or industrial use was abandoned or no longer fully used. Previously developed land can have biodiversity value far greater than Greenfield land under agricultural management.
- 3.11 The juxtaposition of different habitats within a single site and the transitions between them are themselves valuable ecological features. Thus the value of landscape ecology is generally much greater than the sum of its component parts. Such sites are most common on the fringes of urban areas; those areas, in fact, where semi-natural habitats which satisfy other site selection guidelines tend to be comparatively scarce.
- 3.12 Our biodiversity resource, particularly in built-up areas, has become increasingly fragmented, with habitats and species often isolated upon relatively small areas of land. Thus, rivers streams and canals, hedgerows, ponds and small woodlands that provide links between wildlife sites often provide valuable contributions to the biological diversity of an area.
- 3.13 The concept of **ecological networks** recognises the actual and potential linkages between fragmented sites (see Figure 9.4). It uses these opportunities as a framework to target action, so that priority biodiversity resources can be conserved more effectively or restored to viable levels. The principal variations in the broad character of Lancashire's natural heritage are shown in Figure 3.6.
- 3.14 The three zones (core, intermediate and man made) are based on an analysis of designated nature conservation sites, the extent of any semi-natural habitat, the diversity of habitats present, and the diversity of breeding bird species. Each zone has its own particular characteristics insofar as the nature, abundance and distribution pattern of its natural heritage is concerned. The characteristics of each zone will have implications for the way in which its natural heritage should be conserved and enhanced.
- 3.15 The Pendle Biodiversity Audit will assist the understanding of the biodiversity resource in Pendle, provide pointers to further information and guidance, and help to identify gaps in our knowledge and areas for further development.

Figures 3.1 to 3.6

Larger scale maps, providing more detail at the district level, are currently in preparation. These maps will be added to the Council's website at the earliest opportunity and included in future editions of the Pendle Biodiversity Audit.

Figure 3.1 – Pendle's Geology



© Crown Copyright. All rights reserved. Lancashire County Council Licence No 100023320 2005

Sources: Lancashire County Council 2001
Ordnance Survey 2001

Figure 3.2 – Pendle's Topography

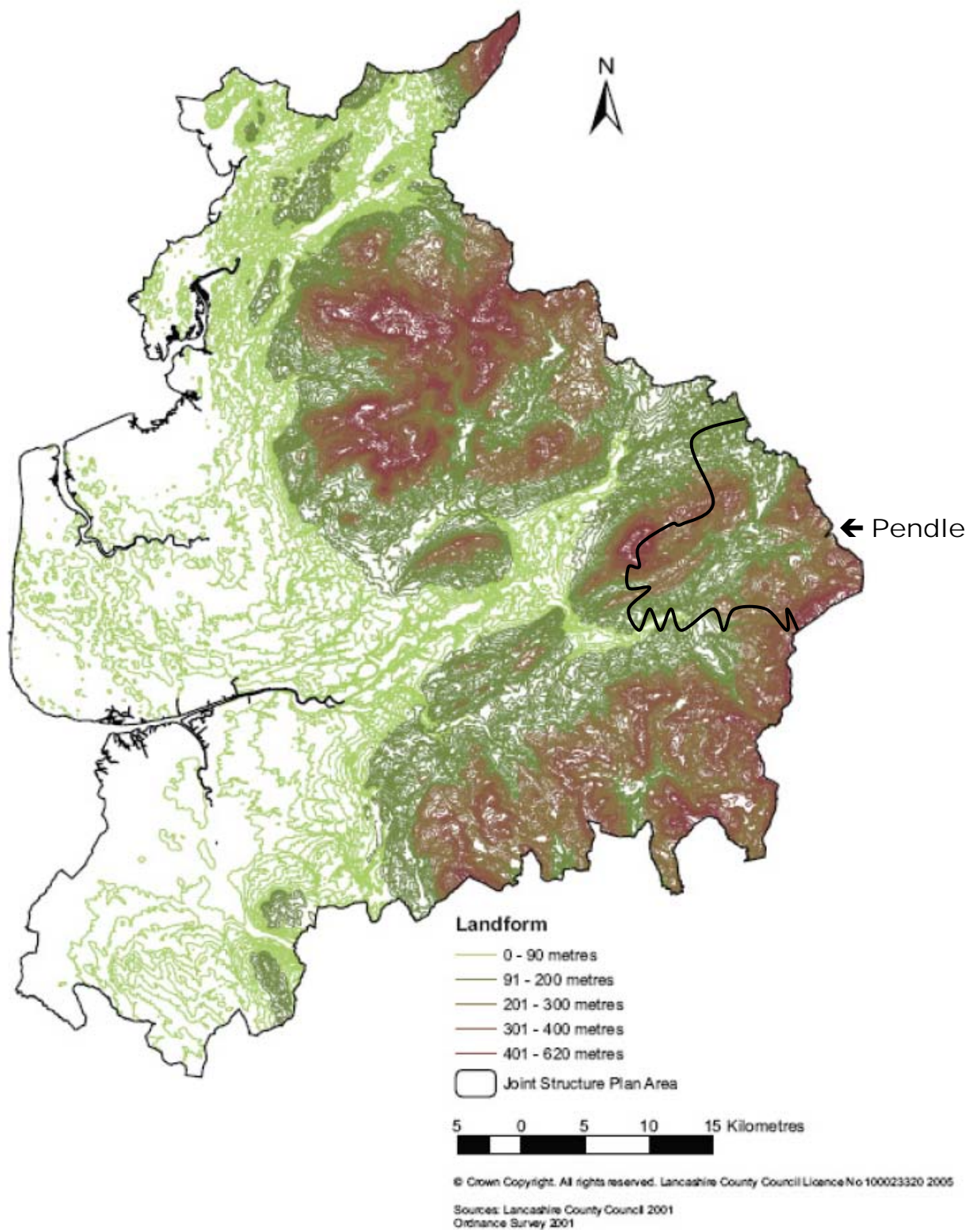


Figure 3.3 – Landscape Character in Pendle

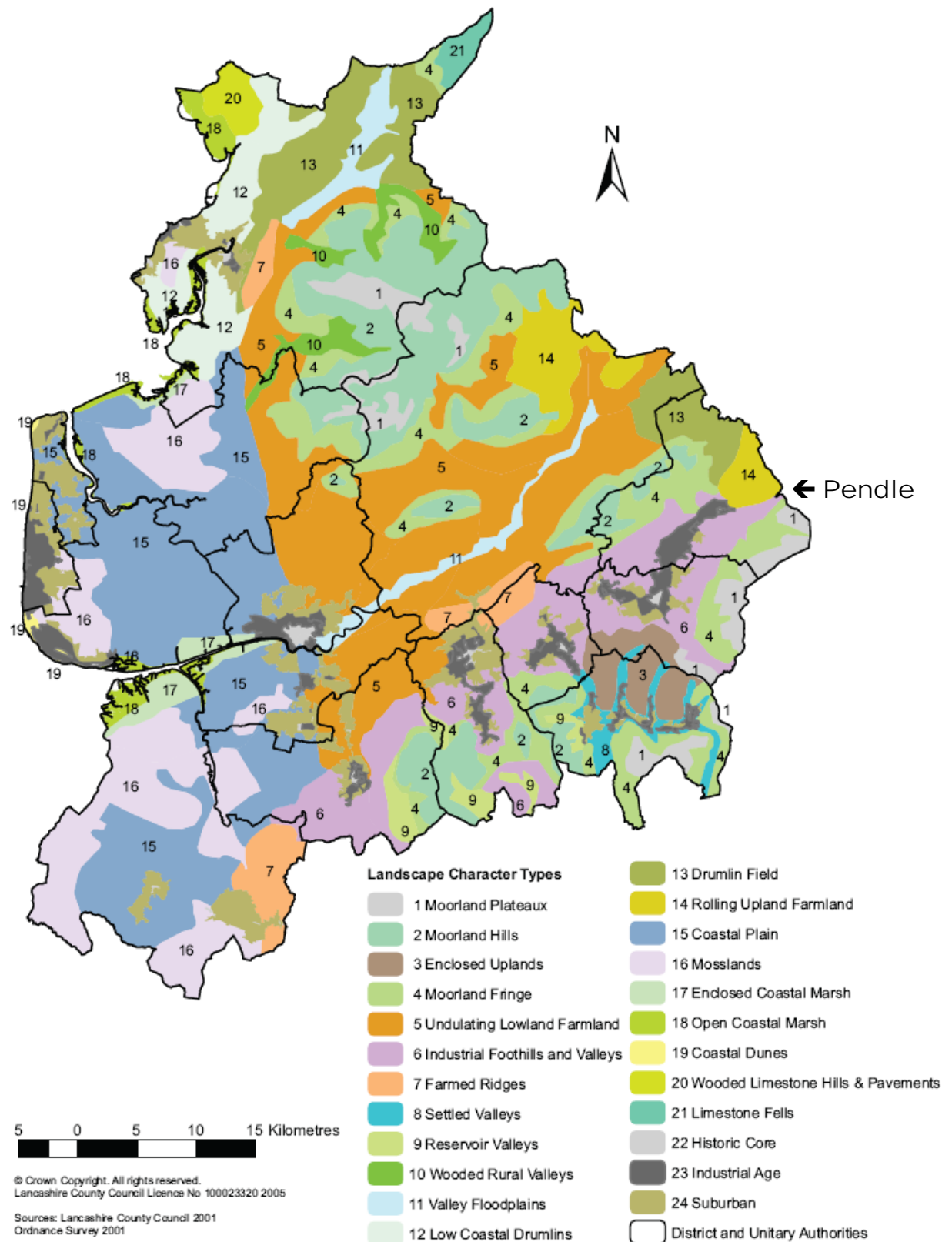


Figure 3.4 – Pendle's Habitats

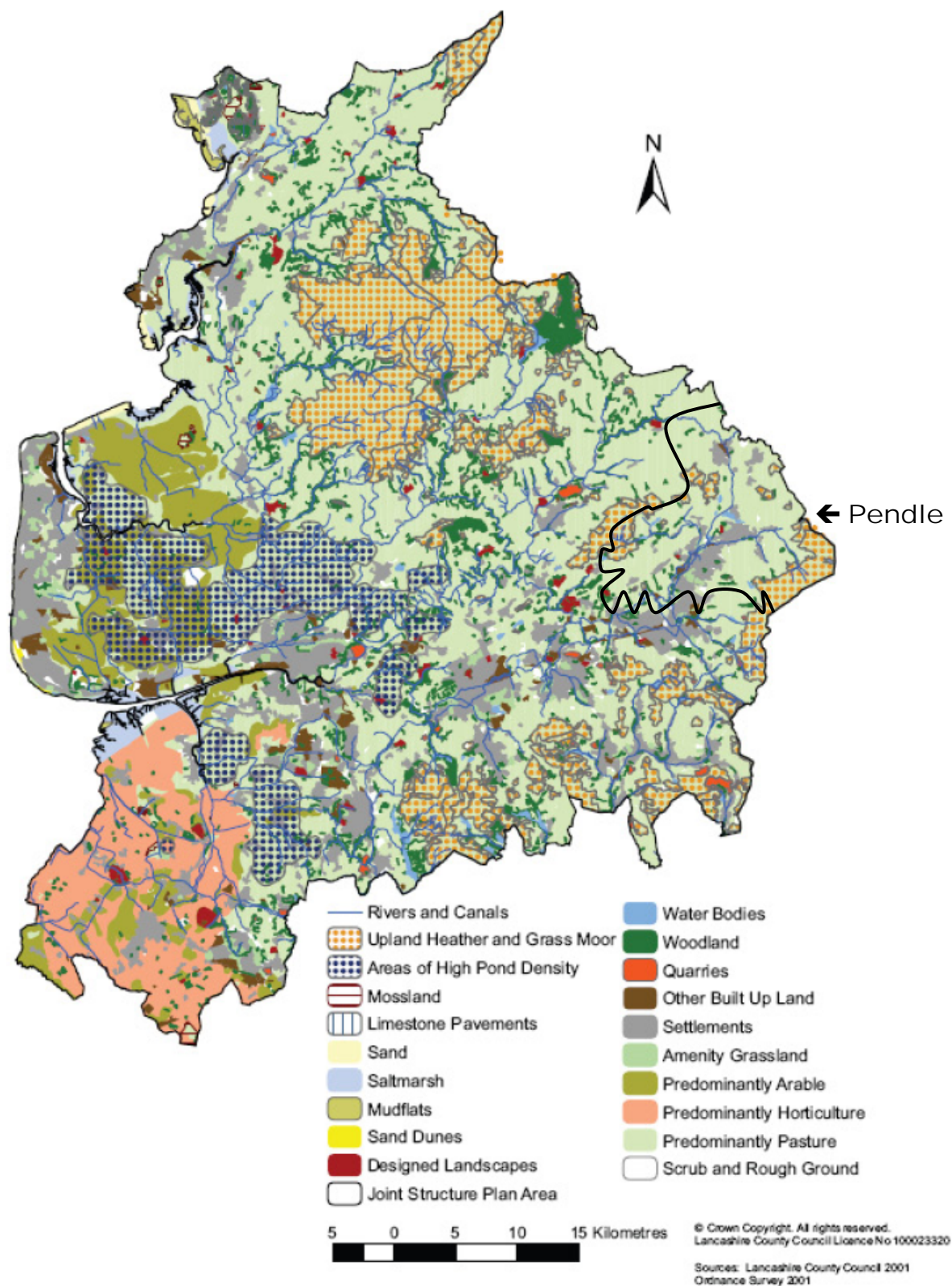


Figure 3.5 – Nature Conservation Designations in Pendle

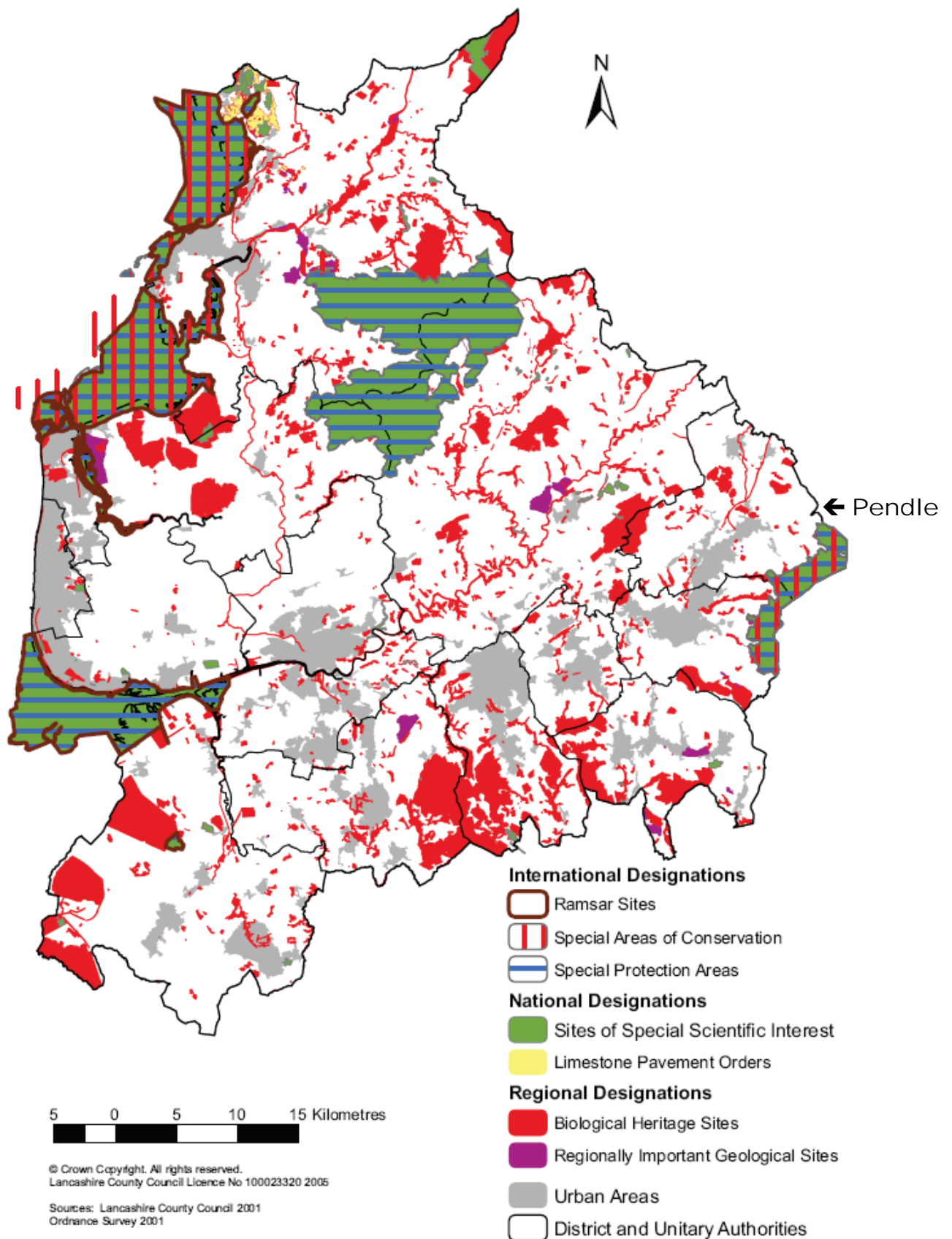


Figure 3.6 – Natural Heritage Zones in Pendle

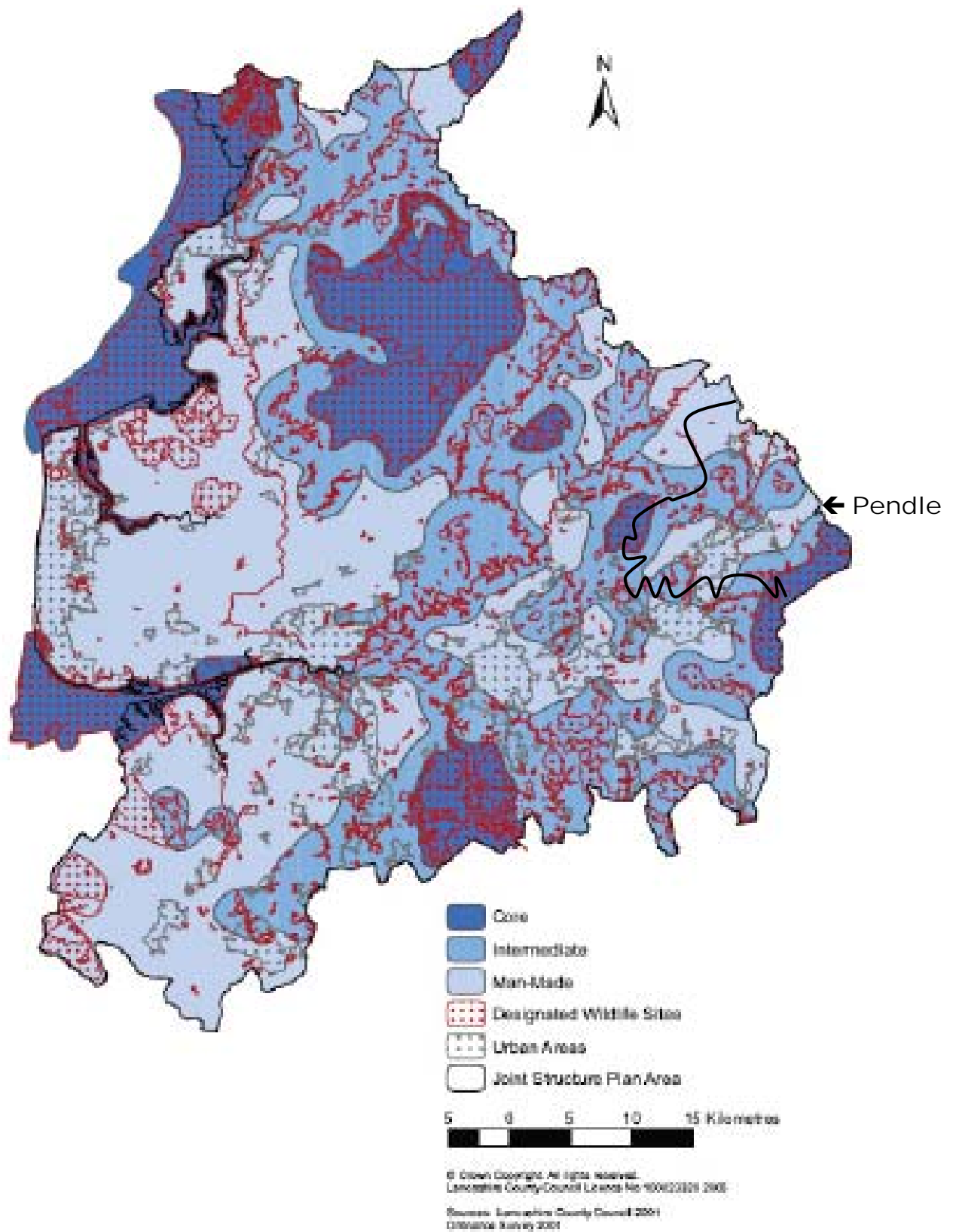


Figure 3.7 – Pendle's Biodiversity Resource

HABITATS	SITES	PLANT & ANIMAL SPECIES
INTERNATIONAL & NATIONAL HABITATS <ul style="list-style-type: none"> EC Habitats Directive: Annex 1 Habitats Natural Environment & Rural Communities Act: Section 41 List (Habitats of Principal Importance) <p>Note: Not all qualifying habitats are covered by statutory site designations.</p>	INTERNATIONAL & NATIONAL SITES <ul style="list-style-type: none"> Special Protection Areas (SPA) Special Area for Conservation (SAC) Sites of Special Scientific Interest (SSSI) <p>Note: The above sites are sometimes known as Statutory Sites. They are a representative sample of qualifying areas for habitats and species</p>	INTERNATIONAL & NATIONAL SPECIES <ul style="list-style-type: none"> EC Birds Directive Annex 1 Birds EC Habitats Directive Annex 2 & 4 Species Wildlife & Countryside Act Badgers Act Natural Environment & Rural Communities Act: Section 41 List (Species of Principal Importance) <p>Note: Many of the above species (e.g. bats, great crested newts and barn owls) occur outside Statutory Sites.</p>
LOCAL BAP HABITATS <ul style="list-style-type: none"> Lancashire BAP Habitats 	LOCALLY DESIGNATED SITES <ul style="list-style-type: none"> Local Nature Reserves (LNR) Biological Heritage Sites (BHS) Local Geodiversity Sites (LGS) (incl. RIGS/LGS sites) Sites of Local Natural Importance (LNI) <p>Note: Many sites support habitats and species of international or national importance, whilst others will support Lancashire BAP Habitats and/or Species.</p>	LOCAL BAP SPECIES <ul style="list-style-type: none"> Lancashire BAP Species
ECOLOGICAL NETWORKS & BIODIVERSITY FEATURES <ul style="list-style-type: none"> Linear and stepping-stone features (incl. urban and rural greenspace, previously developed land and farmland) Biodiversity integration groups 	OTHER AREAS OF INTEREST <ul style="list-style-type: none"> Ancient woodland Special Biodiversity Verges Habitat de-fragmentation areas Biodiversity opportunity areas Integrated biodiversity delivery areas 	RARE & SCARCE SPECIES <ul style="list-style-type: none"> Lancashire BAP Long List
<p>There are complex interrelationships between species and their habitats for day-to-day survival; and for migration, dispersal and genetic exchange in adaptation to environmental conditions (particularly climate change). Whilst some species are restricted to protected sites supporting certain habitats, many others require a patchwork of inter-connecting habitats, the scale and diversity of which depends on their ecological characteristics and requirements.</p>		OTHER SPECIES <ul style="list-style-type: none"> Other species may need to be considered in specific circumstances (e.g. breeding birds) Tree Preservation Orders

Source: Adapted from the Lancashire Biodiversity Resource Table (Lancashire County Council Natural and Historic Environment Service, 2010)

Figure 3.8 – Pendle’s Biodiversity Evidence Base

PENDLE BIODIVERSITY AUDIT EVIDENCE BASE SPREADSHEET Appendix 1 lists all the elements that together make up the biodiversity evidence base for Pendle		
HABITATS	SITES	PLANT & ANIMAL SPECIES
UK BAP Priority Habitats JNCC (UK BAP List) (GIS mapping layer) EC Habitats Directive Annex 1 Habitats (Microsoft Excel Spreadsheet)	SSSI Natural England (GIS mapping layer)	UK BAP Priority Species JNCC (UK BAP List) (Microsoft Excel Spreadsheet) EC Habitats Directive Annex 2 & 4 Species (Microsoft Excel Spreadsheet)
Phase 1 Habitat Survey (1987-1992) Lancashire County Council (GIS mapping layer plus target notes in Microsoft Access Database)	Biological Heritage Sites (BHS) Lancashire County Council (GIS mapping layer)	Lancashire BAP Priority Species Lancashire County Council (Lancashire BAP List in Microsoft Excel Spreadsheet)
Ancient Woodlands Lancashire County Council (GIS mapping layer and BHS designations)	Local Nature Reserves (LNR) Lancashire Wildlife Trust and Pendle Council (GIS mapping layer)	Pendle Key Species Lancashire County Council (Lancashire BAP List in Microsoft Excel Spreadsheet)
Woodland Surveys Lancashire County Council Natural England (Card system)	Geological Heritage Sites (LGS) Lancashire RIGS Group (GIS mapping layer)	Species Statements Lancashire County Council (Adobe Acrobat pdf documents)
Pendle Woodland Survey 1992 Forestry Commission (GIS mapping layer)	Local Sites of Natural Importance (LNI) Pendle Council (GIS mapping layer)	Species Record Lancashire NERN (34,500 species records in Microsoft Access database)
Land Use Potential Survey 2002 Elwood (GIS mapping layer)		

GIS = Geographical Information Systems; a system of computer hardware and software packages used for the storage, retrieval, mapping, and analysis of geographic data.

Note: This diagram is not intended to be a comprehensive list of all the ecological data in Pendle. It does not include references to surveys carried out for specific sites by local organisations, developers or individuals, although these add greatly to our knowledge of the areas biodiversity resource.

Source: Adapted from The Cumbria Biodiversity Evidence Base for Cumbria’s Planning Authorities (CBDN, June 2008)

- 3.16 It is acknowledged that there is a threat to biodiversity from invasive non-native species which can be either flora or fauna. They are generally more prolific and aggressive than native species and out-compete the native species to the detriment of biodiversity. The local extent of the problem is not known and should be addressed, but is not within the remit of this audit.

Extent of the Audit

- 3.17 The full coverage of the Pendle Biodiversity Audit is summarised in Figure 3.6.
- 3.18 **Appendix 1** illustrates the extent of the evidence base and seeks to comply with the requirements of the PPS9 Good Practice Guide, with specific reference to Pendle. It identifies the range of information that has been drawn-upon to establish the biodiversity evidence base for Pendle.
- 3.19 **Appendix 2** summarises the use of this evidence base within the LDF process in Pendle.

Limitations of the Data

- 3.20 To help illustrate that the Pendle Local Development Framework is based on sound up-to-date evidence, Appendix 1 provides a brief description for each of the documents that make up our biodiversity evidence base, a reference to any limitations and an indication of how up to date they are.
- 3.21 Information on **UK Priority Habitats** from the nationally held habitat inventories is of varying quality; there are incidences of double-counting and misidentification in the data and the mapping layers do not wholly overlay the designated sites. There is an outstanding requirement for work to integrate the local and national level Biodiversity Action Plan (BAP) data sets.
- 3.22 The information is presented as an absolute figure and as percentage coverage at the county and district level. The absolute⁹ figures for the areas covered by the various habitat types are generated directly from the habitat layer provided to local planning authorities.
- 3.23 It should be noted that the national habitat inventory information covers only a proportion of the UK Priority Habitats. The total area figures for priority habitats will increase as more habitats are mapped, and the relative percentages of priority habitat will change as a result.
- 3.24 **Species records** normally require interpretation by someone with ecological expertise. They can be used for scoping purposes, helping to identify the likelihood of a species being present within a certain area.

⁹ In reality biodiversity data is never 'absolute', but merely the 'best available' as the environment is constantly changing.



- 3.25 Wildlife distribution is not fixed and some species are more mobile than others. All species data presented is for occurrences since 1980. Whilst some recorded populations may have been lost from some sites during this period, many will persist.
- 3.26 Resources do not exist for comprehensive monitoring of all species, or even of all Key Species, within Pendle. Species records are collected on an ad hoc basis or through targeted survey work, either focused on particular species or species groups, or on specific areas (e.g. site surveys for development purposes). The species records, therefore, are an indicative, rather than a definitive, assessment of the current distribution and frequency of a species. The absence of a record of a species in a particular area is not proof that it does not occur there.
- 3.27 One of the aims of the new Lancashire Environment Record Network (LERN) is to coordinate and facilitate the exchange of information and to help to highlight areas where information is deficient.
- 3.28 The boundaries of **designated wildlife and geological sites** do not change on a regular basis. As such an annual review is considered to be more than sufficient.
- 3.29 The following chapters will consider the various elements of the biodiversity resource in Pendle, as follows:
- Chapter 4: Priority Habitats and Species**
 - Chapter 5: Statutory Wildlife Sites**
 - Chapter 6: Local Sites of Biodiversity Interest**
 - Chapter 7: Other Areas of Biodiversity Value**
 - Chapter 8: Landscape Ecology**

4. Priority Habitats and Species


Introduction

- 4.1 In 2002, one-third of the habitats identified in the UK Biodiversity Action Plan (UK BAP) and one-quarter of UK BAP species were still declining. The UK is committed through the Global strategy to a target of ensuring that at least 60% of threatened plant species are safe. In 2002, just 22% of UK BAP plant species were stable or increasing.
- 4.2 Important in their own right, individual species and individual habitat types are also critical for maintaining the fundamental balance of ecosystems.


European Protected Species

- 4.3 European Protected Species are defined in English legislation as species listed in Annex IV to the Habitats Directive whose natural range includes any area in Great Britain.
- 4.4 Statutory Instrument 1994 No. 2716 The Conservation (Natural Habitats, &c.) Regulations 1994, implements The Habitats Directive (EC Directive 92/43/EEC) in England and Wales. It has been law since 1994 and makes it an offence deliberately to kill, capture, or disturb a European Protected Species, or to damage or destroy the breeding site or resting place of such an animal.
- 4.5 From March 2000 anyone who wished to undertake an operation that would breach these regulations is required to apply for a licence from Department of the Environment, Transport and the Regions. For a licence to be issued these three tests must be satisfied:
 - 1. That the development is 'in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment';
 - 2. That there is 'no satisfactory alternative';
 - 3. That the derogation (i.e. any permission/licence granted) is 'not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range'
- 4.6 The species protected by Schedule 2 (animals) and Schedule 4 (plants) can be found via the following links.
 - Plants  www.opsi.gov.uk/si/si1994/Uksi_19942716_en_10.htm
 - Animals  www.opsi.gov.uk/si/si1994/Uksi_19942716_en_8.htm

UK Priority Habitats and Species


- 4.7 The proposed list of UK Priority Habitats and Species was first presented in June 2007. It has subsequently been adopted by the Governments of all four UK administrations.
- 4.8 The list, which forms the basis for the UK Biodiversity Action Plan (UK BAP), brings together all the scientific information on priority species and habitats in one place. It highlights 65 habitats and 1,149 species as priorities for conservation action under the UK BAP.
- 4.9 The full list can be downloaded from the UK Biodiversity Partnership website at:
 www.ukbap.org.uk/NewPriorityList.aspx

Habitats and Species of Principal Importance (England)



- 4.10 The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England, as required by the Act.
- 4.11 The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9, CLG, August 2005) states that Species of Principal Importance should be protected from the adverse effects of development, where appropriate, by using planning conditions or obligations.
- 4.12 There are 56 habitats and 943 species of principal importance included on the S41 list¹⁰. These are the species found in England which have been identified as requiring action under the UK BAP.
- 4.13 In accordance with Section 41(4) the Secretary of State will, in consultation with Natural England, keep this list under review and will publish a revised list if necessary.
- 4.14 Further information on the 'S41 list' is available on the Natural England website:
 www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx

¹⁰ The Hen Harrier (not present in Pendle) has also been included on the S41 list, because it is considered that without continued conservation action its population is unlikely to increase from its current low levels in England.

Lancashire Biodiversity Action Plan

- 4.15 The Lancashire Biodiversity Action Plan (Lancashire BAP) is made up of a number of individual species¹¹ and habitat plans (see Appendices 3-5). Each plan gives information on the status and threats to the species or habitat. The most important section of the plan details the conservation action required and the organisations responsible.
- 4.16 The Lancashire BAP is currently being revised. There is a draft 'long list' of National BAP species and species with a restricted county distribution. Lancashire County Council has over 31,500 records for these species, and over 800 can be found within Pendle.
- 4.17 The Lancashire BAP has adapted the list of habitats addressed by the UK BAP in order to make them more easily applicable to local conditions. The linkages between the UK BAP and Lancashire BAP are outlined on Lancashire's Biodiversity Partnership website at:
-  www.lancspartners.org/lbap/uk_lancashire_plans.asp
- 4.18 The Lancashire BAP includes 11 **Habitat Plans** (Appendix 4), providing information on:
- Description
 - Distribution and extent
 - Conservation issues
 - Planning considerations
 - Enhancement opportunities
 - Key species
 - Further information and contacts
- 4.19 In addition there are 17 **Urban Habitat Plans** (Appendix 5). These seek to recognise the contribution that urban areas can make to biodiversity in supporting a range of habitats and species that are frequently overlooked. They also seek to address the likely increase in development pressure within our urban areas over the lifetime of the Lancashire BAP, primarily due to the increased emphasis in providing new housing on previously developed land. The plans ensure that biodiversity in our urban areas is given adequate and appropriate consideration in planning decisions at both a county and local level.
- 4.20 It was not the original intention of the Lancashire BAP Steering Group to create a distinction between the Habitat Action Plans and the Urban Habitat Plans. But, the complexity of the urban environment meant that the best way to deal with this issue was to create a generic Urban BAP with 17 supplementary BAPs.

¹¹ It is not the intention to write individual plans for all the species in the Lancashire BAP Long List. The list is merely intended to highlight important species for consideration in habitat management, assessing the impacts of development and to focus mitigation and/or compensation measures.

- 4.21 The Lancashire BAP includes 38 **Species Plans** (Appendix 6), providing information on:
- Description
 - Legal and conservation status
 - Habitat
 - Ecology
 - Distribution
 - Conservation issues
 - Planning considerations
 - Enhancement opportunities
 - Further information and contacts
 - Current action in Lancashire
- 4.22 Targets for each of the Habitat Plans have been agreed by the Lancashire Biodiversity Partnership and will be incorporated in the relevant Habitat Action Plan in the near future. Details are available on Lancashire's Biodiversity Partnership website at:
-  www.lancspartners.org/lbap/pdf/lancs_habitat_targets_08.pdf
- 4.23 Alternatively the website for the Biodiversity Action Plan Reporting System (BARS) includes details for all national, local and company Biodiversity Action Plans in the UK.
-  www.ukbap-reporting.org.uk/default.asp

Pendle Key Habitats and Species

- 4.24 Table 4.1 indicates the number of key habitats and species to be found in Pendle. It should be noted that the Lancashire BAP is currently under review. It is anticipated that the figures for both Lancashire and Pendle will change when this work is completed. Appendices 3-5 provide links to more in depth coverage for the Key Species and Key Habitats present in the Borough.
- 4.25 There are 18 UK BAP key habitats known to be present in Pendle:
- | | |
|-------------------------------------------------------|-------------|
| 1. Lowland dry acidic grassland | Grassland |
| 2. Lowland meadows | Grassland |
| 3. Upland hay meadows | Grassland |
| 4. Hedgerows | Boundary |
| 5. Upland heathland | Heathland |
| 6. Lowland mixed deciduous woodland | Woodland |
| 7. Upland oakwood | Woodland |
| 8. Wet woodland | Woodland |
| 9. Wood pasture and parkland | Woodland |
| 10. Open mosaic habitats on previously developed land | Inland rock |
| 11. Blanket bog | Wetland |
| 12. Coastal and floodplain grazing marsh | Wetland |
| 13. Lowland fens | Wetland |
| 14. Reedbeds | Wetland |
| 15. Upland flushes, fens and swamps | Wetland |
| 16. Ponds | Freshwater |
| 17. Rivers | Freshwater |
| 18. Eutrophic stranding waters | Freshwater |

Table 4.1 – Number of Key Habitats and Species in Pendle

Broad Habitat / Taxon	UK BAP List	England S41 List	Lancashire Long List	Pendle Key Species and Habitats
Habitats	65	56	tbc	18
• Grassland	7	6	tbc	3
• Woodland	8	6	tbc	4
• Wetland	6	6	tbc	5
• Freshwater	6	6	tbc	3
• Other	38	32	tbc	3
Species	1,149	943	459¹	39¹
• Amphibian / Reptile	10	10	8	4
• Mammal	18	18	15	4
• Fish	15	13	11	3
• Birds	59	49	34	21
• Moths / Butterflies	176	165	292	6
• Spiders	31	31	99	1
• Other invertebrates	206	165	tbc	tbc
• Marine species	87	78	tbc	tbc
• Vascular plants	213	152	tbc	tbc
• Non vascular plants	122	86	tbc	tbc
• Fungi / Lichens	214	167	tbc	tbc

¹ Several Lancashire BAP Long Lists are still in preparation at the time of writing, so this figure is not final.

Source: UK BAP List (UK Biodiversity Partnership, August 2007), S41 List (DEFRA, November 2008) and Lancashire BAP List (Lancashire County Council, March 2010)

- 4.26 The 28 habitat plans currently available for Lancashire (Appendices 4 and 5) address several of these habitats, which are considered in more detail in Chapter 7. Similarly the 38 Species Plans for Lancashire (Appendix 6) address a number of the key species to be found in Pendle (Table 4.2).
- 4.27 Variability in habitat occurrence and the likelihood of species presence mean that mapping the spatial distribution of these priority species is unlikely to be accurate or meaningful. For example, the Pipistrelle Bat and Song Thrush can be found in most parts of the borough, both urban and rural, whilst the Brown Hare can be found on

farmland and in woodland. To map all these habitats would be misleading. However, the Species Plans accessible via Appendix 6 clearly indicate the types of habitat where each of these species is most likely to be found.

Table 4.2 – Key Species in Pendle

Mammals (4) ¹	Amphibians & Reptiles (4)	Fish (3)
Water Vole West European Hedgehog Brown Hare Common Pipistrelle Bat	Common Toad Common Frog Great Crested newt Common Lizard	Atlantic Salmon Brown / Sea Trout Bullhead
Birds (36)	Moths & Butterflies (6)	Spiders (1)
Red Grouse Grey Partridge Grey Heron Kestrel Oystercatcher Little Ringed Plover Golden Plover Lapwing Dunlin Snipe Curlew Redshank Common Sandpiper Cuckoo Long-eared Owl Swift Skylark Tree Pipit Meadow Pipit Dunnock Whinchat Ring Ouzel Song Thrush Wood Warbler Willow Warbler Spotted Flycatcher Marsh Tit Raven Starling House Sparrow Tree Sparrow Linnet Lesser Redpoll Bullfinch Yellowhammer Reed Bunting	Dark Marbled Carpet Chimney Sweeper Golden-rod Brindle Sword-grass Crinian Ear Gold Spangle	<i>Theridion hemerobium</i>

¹ The Lancashire Wildlife Trust advises that the Common Otter does occur in Pendle, but it has not been officially recorded on the Lancashire BAP Long List of Species.

Note: UK Priority Species are highlighted in bold text.

Source: UK BAP List (UK Biodiversity Partnership, August 2007), S41 List (DEFRA, November 2008) and Lancashire BAP List (Lancashire County Council, March 2010)

- 4.28 Where a site is situated within one of the habitat types identified, further investigation will need to be carried out, to determine whether local records indicate that any of the above species have been recorded.

Further Information

NBN Gateway


- 4.29 Additional data on the distribution of particular species in the UK can be accessed via the National Biodiversity Network's Gateway (NBN Gateway) website.

 <http://data.nbn.org.uk/>

- 4.30 The NBN Gateway brings together data previously stored in a variety of formats by many different organisations. It acts as a 'data warehouse' for biodiversity information, which can be quickly and easily accessed to understand the distribution of particular species in the UK. Individual records, covering plants, mammals, birds and invertebrates, are stored on the NBN Gateway and these can be displayed on a map of the UK in a number of different ways.
- 4.31 The Lancashire Environment Record Network (LERN) feeds records into the NBN Gateway. Although it is progressively making more records available, the Lancashire NERN holds far more records than are currently made available via the NBN Gateway.
- 4.32 The following link lists species groups which have species records that fall within or overlap Lancashire's Biodiversity Action Plan.

 <http://data.nbn.org.uk/siteInfo/siteSpeciesGroups.jsp?useIntersects=1&allDs=1&engOrd=1&srcDsKey=GA000329&srcKey=439>


JNCC – Spreadsheet of Species Designations

- 4.33 Over the past thirty years, numerous lists of conservation status have been produced - Red Lists, Biodiversity Action Plan Priority Lists, species listed on European Directives, species listed on the Schedules of the Wildlife & Countryside Act, together with lists of rare and scarce species.
- 4.34 There is considerable overlap between these and some species appear on several of them. The JNCC has attempted to collate many of the current lists into one place and make this available to users as a downloadable spreadsheet of species designations.
-  www.jncc.gov.uk/page-3408
- 4.35 The spreadsheet contains over 8,000 taxa¹² that have been assigned some form of rarity, threat or legal status in Great Britain or the UK. The spreadsheet contains several worksheets – the most important being the "Master list" which is really a collation of different lists combined into the same data structure.

¹² A taxon (plural taxa), or taxonomic unit, is a name designating an organism or a group of organisms. It is used because many of the entries on the list refer to sub-species rather than the species as a whole.

- 4.36 The Lancashire BAP 'long list', which is currently in preparation, is similar in concept but takes account of rarity at the County level.

JNCC – Phase 1 Habitat Survey

- 4.37 The Phase 1 Habitat Classification and associated field survey technique provides a standardised system to record semi-natural vegetation and other wildlife habitats. The approach is designed to cover large areas of countryside relatively rapidly. It presents the user with a basic assessment of habitat type and potential importance for nature conservation. Each habitat type/feature is identified by way of a brief description of its defining features. It is then allocated a specific name, an alpha-numeric code, and unique mapping colour.
- 4.38 Early work on the Phase 1 survey technique dates back to the 1970s. This was developed further in the 1980s and in 1990. Since its creation, the Phase 1 technique has been used widely. Many county-wide surveys have been completed, along with many other more localised mapping projects.
- 4.39 The Phase 1 classification comprises ten broad high level categories, with 155 specific habitat types recognised within these. Each is assigned its own name, alpha-numeric code, description and mapping colour.
-  <http://www.jncc.gov.uk/page-4258>
- 4.40 Reports have been produced for each Lancashire district. These include a summary of the habitat areas present.
- 4.41 The Habitat Map is accompanied by a set of descriptive Target Notes, which provide more detailed information for features of interest. There are 210 Target Notes for Pendle.
- 4.42 The Lancashire Phase 1 Habitat Mapping is a valuable resource. However, it needs to be recognised that this mapping technique does not readily equate to UK BAP Habitats and Habitats of Principal Importance. In terms of recording losses and gains of BAP Habitats for monitoring purposes its use is limited.

RSPB Bird Conservation Targeting Project

- 4.43 Information on the distribution of some bird species, including many of those that are considered key species in Pendle, can be found in the Bird Conservation Targeting Project. The maps for this project help to target the spending of conservation grant money, such as Natural England's Environmental Stewardship Scheme, and the Forestry Commission's England Woodland Grant Scheme. These maps can be found at:

 www.rspb.org.uk/ourwork/conservation/projects/targeting/targeting_maps.asp

North West Biodiversity Audit

- 4.44 Wild About the North West: A Biodiversity Audit of North West England was first published in hard copy in 1999 and is now available online. The audit contains the information available in 1998 on important wildlife species and habitats in North West England. For the first time it brought together information on habitats and species of conservation importance in North West England.

- 4.45 The data is presented to show the distribution of species and habitats so that agencies, authorities, and managers, with responsibility for land management and planning can readily identify those species and habitats that they need to consider. For all habitats and priority species there are profiles and descriptions that can be downloaded.



www.biodiversitynw.org.uk/audit/downloads/

- 4.46 A total of 82 habitats, of which 37 were UK Key Habitats (or equivalent), were identified in North West England. Written profiles define the habitat, discuss its nature conservation value, and identify issues which may impact on its condition in the future (this includes both its improvement and its deterioration). Tables show the occurrence of each habitat by local authority area.
- 4.47 The list of habitats in the region has since been updated and numerical targets produced for those habitats in line with the UK BAP Review in 2007. Further details of these can be accessed in the Regional Habitat Targets section.
- 4.48 The species identified in the audit are those found in North West England, that is, they:
- have, or are likely to have, resident wild population, or
 - are regular migrant (occurring in at least 3 out of 5 years), or
 - have become extinct recently but remain a conservation issue in the region,
- 4.49 Collectively they are termed Species of Conservation Importance in North West England, and in total number 1,939.
- 4.50 A total of 120 Species of Conservation Importance have been recorded in Pendle, including 8 mammals, 70 birds, 4 amphibians, 2 fish, 1 invertebrate, 1 fungus, 1 moss and 32 vascular plants.
- 4.51 Profiles are available for 97 species of particular conservation importance including UK Priority Species and endemic species which occur in the region. Where information is available, these include the current regional, national and international status of each species and any issues which may affect its survival. Again tables show the occurrence of these species by local authority area.
- 4.52 Please note that the data was not reviewed when putting it on the internet, so any inaccuracies in the original version have been replicated. The audit has not yet been updated, but subsequent updates to the categories and definitions are detailed in the Regional Target section.
- 4.53 The latest version of the north west regional habitat targets, which are the regional contribution to UK Biodiversity targets, were produced in April 2008 and are available at:



www.biodiversitynw.org.uk/page.asp?id=79

Lancashire Natural Environment Service

- 4.54 The Lancashire Natural Environment Service, led by the Lancashire Wildlife Trust, is a partnership between the district authorities in the county. It oversees the work of the Lancashire Environment Record Network (LERN), which is responsible for collating and disseminating current information and statistics relating to biodiversity issues in Lancashire.

Lancashire Landscape and Heritage Strategy

- 4.55 There is currently an aim to produce an updated Lancashire Landscape and Heritage Strategy to replace the supplementary planning guidance produced for the Joint Lancashire Structure Plan.
- 4.56 The latter document has been adopted by Lancashire County Council as an interim strategy document. In adopting the former Lancashire Landscape and Heritage Strategy SPG afresh, Lancashire County Council urged district councils in Lancashire to do likewise. As well as being adopted at the district level it should be part of the evidence base for the Local Development Framework in its own right.

Planning

- 4.57 Locally, protection is offered to species and biodiversity in general by Policy 4D: Natural Heritage – Wildlife Corridors, Species Protection and Biodiversity in the Replacement Pendle Local Plan (2001-2016).
- 4.58 You should refer to a copy of the Replacement Pendle Local Plan (2001-2016), which will place this policy in its strategic context (Pages 13-14) and provide a reasoned justification for the policy itself (Pages 36-37).
- 4.59 In addition Policies 4A, 4B and 4C offer protection to international, national and locally designated sites (see Chapters 5 and 6).



www.pendle.gov.uk/localplan

5. Statutory Wildlife Sites

Introduction

- 5.1 Statutory wildlife sites are those which have protection in law. There are three broad levels of importance: international, national and local, although there is some overlap between the designations. An overview of their distribution is given at figure 9.2.
- 5.2 The UK has a responsibility to ensure the conservation and enhancement of habitats and species in both a national and international context. One approach to achieving this is the establishment of a system of protected sites.
- 5.3 The national sites providing statutory protection for flora, fauna, or geological or physiographical features are known as Sites of Special Scientific Interest (SSSI). As well as underpinning other national designations (such as National Nature Reserves (NNR)), this system also provides statutory protection for sites designated under:
- (1) European Directives (Natura 2000 Network)
 - Special Areas of Conservation (SACs) – Habitats Directive
 - Special Protection Areas (SPAs) – EC Birds Directive
 - (2) International Conventions
 - Wetlands of International Importance (Ramsar sites)
- 5.4 Further designations exist for sites outside of the national suite (such as Local Nature Reserves (LNR)) and these vary in the level of protection afforded.
- 5.5 Apart from designations for sites with particular natural features, there are also landscape designations which aim to protect areas of either national (e.g. Areas of Outstanding Natural Beauty) or international (e.g. natural World Heritage Sites) significance in terms of their outstanding scenic importance (see Chapter 8).
- 5.6 The statutory basis for site protection in the UK is provided by various pieces of national legislation; in particular, the Wildlife and Countryside Act 1981 (as amended) and, in relation to European sites, the Conservation (Natural Habitats & c.) Regulations 1994 (as amended).
- 5.7 The Joint Nature Conservation Committee (JNCC) acts on behalf of the statutory conservation agencies and their associated government departments in collating information on sites for nature conservation in the UK designated under European Directives and International Conventions. The JNCC assists in the interpretation of criteria for site selection and the development of additional guidelines to aid this process.
- 5.8 Boundaries for all the statutory sites (SPA, SAC, SSSI, Ramsar, NNR, LNR etc.) for use in GIS mapping are available to download from:

 www.gis.naturalengland.org.uk/pubs/gis/GIS_register.asp

Special Protection Areas (SPA)


Introduction

- 5.9 These are strictly protected sites classified in accordance with Article 4 of the EC Directive on the conservation of wild birds (79/409/EEC), also known as the Birds Directive, which came into force in April 1979. They are classified for rare and vulnerable birds, listed in Annex I to the Birds Directive, and for regularly occurring migratory species.

Pendle Overview

- 5.10 There is one SPA partly within Pendle:
1. South Pennine Moors SPA – immediately south-east of Nelson and Colne
The South Pennine Moors SSSI is designated as a SPA, in recognition of its importance for several upland breeding species, including birds of prey and waders. Both Merlin *Falco columbarius* and Golden Plover *Pluvialis apricaria* spend some of their time feeding outside the SPA on adjacent areas of in-bye land.

Further Information

- 5.11 A full list of UK SPAs is available on the JNCC website at:
 www.jncc.gov.uk/page-162
- 5.12 The details available include the site name, site code, area, and location and its classification status. The boundary of each classified SPA is mapped digitally. UK SPA boundaries can be downloaded in the form of ArcShape files for use in a GIS. Boundaries are not available for potential SPAs.
- 5.13 The regularly updated UK SPA Summary Table provides an overview of both the number of classified SPAs and those approved by Government that are currently in the process of being classified (these are known as potential SPAs, or pSPAs).
- 5.14 The Birds Directive provides no formal criteria for selecting SPAs, so the JNCC, on behalf of the statutory country conservation agencies and government, published SPA Selection Guidelines for use in the UK. Each SPA has been selected according to the principles laid out in the selection guidelines.

Targets

- 5.15 To gradually improve those parts of the South Pennine Moors SPA within Pendle to a favourable condition.

Potential Threats

- 5.16 A detailed consideration of the important characteristics of the Atlantic blanket bog priority habitat, and the threats it potentially faces, is contained in the section on Sites of Special Scientific Interest, which follows later in this chapter. It is sufficient to say at this point that there are a wide variety of potential threats including lack of, or inappropriate, management/husbandry, recreational pressures, fire, pollution, vandalism and development. Any of these could lead to habitat fragmentation, increasing the risk of habitat degradation, associated (local) species extinction and the subsequent long-term viability of the site.
- 5.17 Legislation requires an Habitat Regulations Assessment to be carried out for any plans or projects which may have a significant effect on a European protected site. The first stage of the Habitat Regulations Assessment is a screening process which aims to establish whether the proposals are likely to have significant effect on those sites both within and in the vicinity of Pendle.
- 5.18 If evidence shows that a planning policy or development activity in Pendle is likely to threaten the conservation objectives or site integrity of a Special Protection Area, these will be carefully assessed and possible mitigation measures or alternative plan options highlighted in the Habitat Regulations Assessment.

Special Areas of Conservation (SAC)


Introduction

- 5.19 These are strictly protected sites designated under the EC Habitats Directive. They are considered to make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended).
- 5.20 Special Areas of Conservation (SACs) complement Special Protection Areas (SPA) and together form a network of protected sites across the European Union called Natura 2000. This, in turn, is part of the Emerald network of Areas of Special Conservation Interest (ASCIs) under the Berne Convention.
- 5.21 The listed habitat types and species are those considered to be most in need of conservation at a European level (excluding birds – see SPA). Of the Annex I habitat types, 78 are believed to occur in the UK. Of the Annex II species, 43 are native to, and normally resident in, the UK.


Pendle Overview

- 5.22 There is one SAC partly within Pendle:
1. South Pennine Moors SAC – immediately south-east of Nelson and Colne
The South Pennine Moors SSSI is designated as a SAC as the area hosts a number of important habitats notably blanket bogs; European dry heaths; Northern Atlantic wet heaths, old sessile oak woods and transition mires and quaking bogs.

Further Information

- 5.23 A full list of UK SACs is available on the JNCC website at:
 www.jncc.gov.uk/page-23
- 5.24 Downloadable data available for each site includes details of each site, a summary spreadsheet, GIS boundary data and copies of site documentation for designated sites.
- 5.25 The SAC spreadsheet contains a number of worksheets:
1. SAC Feature Data – contains a full listing of all Habitats Directive features occurring on SACs in the UK. This includes non-qualifying ('D-grade') features that are not a reason for SAC selection at a particular site. Note that a feature may not occur on all parts of a site, especially in the case of large SACs.
 2. SAC Site Data – contains summary information about the SACs, including their size, location and date of designation.
 3. SAC Maps – offers a simple mapping facility showing the location of the site(s).
 4. SAC habitat classes – indicates the percentage of each SAC comprised of certain broad habitat types. These are intended to give a general impression of the character of the SAC. They should not be confused with the Annex I habitats, which are listed in the SAC feature data worksheet.
 5. SAC Physical Characteristics – contains information on landscape, geomorphology, geology and soils. It is intended to give a general impression of the physical character of the SAC, and is not a detailed description.
- 5.26 The spreadsheet is updated after any new SAC information is submitted to the EC. Several columns of subsidiary data for Annex I habitats and Annex II species are not contained in the spreadsheet, but can be e-mailed on request to the JNCC. A GIS shape file is also available to download.

Other SAC Designations

- 5.27 There are also a range of designations for sites awaiting full SAC status.
- Sites of Community Importance (SCIs) – sites that have been adopted by the European Commission but not yet formally designated by the government.
 - Candidate SACs (cSACs) – sites that have been submitted to the European Commission, but not yet formally adopted.
 - Possible SACs (pSACs) – sites that have been formally advised to UK Government, but not yet submitted to the European Commission.
 - Draft SACs (dSACs) – areas that have been formally advised to UK government as suitable for selection as SACs, but have not been formally approved by government as sites for public consultation.
- 5.28 The SAC selection pages includes details of qualifying features for designated SACs, SCIs or candidate SACs, and summary information for possible SACs.
- 5.29 Pendle currently has no sites in the above categories, as verified by the information to be found on the following webpage.
 www.jncc.gov.uk/protectedsites/sacselection/SAC_list.asp?Country=E

Targets

- 5.30 To gradually improve those parts of the South Pennine Moors SAC within Pendle to a favourable condition.

Potential Threats

- 5.31 A detailed consideration of the important characteristics of the Atlantic blanket bog priority habitat, and the threats it potentially faces, is contained in the section on Sites of Special Scientific Interest, which follows later in this chapter. It is sufficient to say at this point that there are a wide variety of potential threats including lack of, or inappropriate, management/husbandry, recreational pressures, fire, pollution, vandalism and development. Any of these could lead to habitat fragmentation, increasing the risk of habitat degradation, associated (local) species extinction and the subsequent long-term viability of the site.
- 5.32 Legislation requires an Habitat Regulations Assessment to be carried out for any plans or projects which may have a significant effect on a European protected site. The first stage of the Habitat Regulations Assessment is a screening process which aims to establish whether the proposals are likely to have significant effect on those sites both within and in the vicinity of Pendle.
- 5.33 If evidence shows that a planning policy or development activity in Pendle is likely to threaten the conservation objectives or site integrity of a Special Area of Conservation, these will be carefully assessed and possible mitigation measures or alternative plan options highlighted in the Habitat Regulations Assessment.

Ramsar Sites

Introduction

- 5.34 Inter-governmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.
- 5.35 The initial emphasis was on selecting sites of importance to water birds within the UK, and consequently many Ramsar sites are also SPAs classified under the EC Birds Directive.

Pendle Overview

- 5.36 There are no Ramsar sites in Pendle. The nearest examples are:
1. Malham Tarn – 26 km north east of Pendle
A wetland of international importance containing the highest marl lake in Britain and comprising areas of open water, with acidophilous (raised) bog, calcareous fen and soligenous mire. These habitats hold important communities of rare plant species and wetland invertebrates, and are of types now highly restricted due to drainage and land use changes.

2. Morecambe Bay – 47 km north west of Pendle

Morecambe Bay represents the largest continuous intertidal area in Britain. It comprises the estuaries of five rivers, an area of intertidal mud and sandflats behind Walney Island, together with associated saltmarshes, shingle beaches and other coastal habitats. It is a key component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third-largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and terns. The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover *Charadrius hiaticula*.

3. Ribble and Alt Estuaries – 52 km west of Pendle

Two river estuaries forming extensive sand and mudflats backed, in the north, by the saltmarsh of the Ribble estuary and, to the south, the sand dunes of the Sefton Coast. The tidal flats and saltmarsh support internationally important populations of waterfowl in winter and the sand dunes support vegetation communities and amphibian populations of international importance.

No other UK site holds as many wintering waterfowl. On average it supports 340,000 waterfowl and has more species present in internationally important numbers than any other in the UK. Of these species bar-tailed godwit, wigeon, grey plover, knot and sanderling are present on the Ribble and Alt in greater numbers than anywhere else in the UK.

The areas of salt marsh provide important feeding habitat for pink-footed geese, teal, wigeon and pintail. Roost sites for waders and some wildfowl are also found on areas of sandflat, at various locations along the length of the coast. There is considerable interchange in the movements of wintering birds between this site and Morecambe Bay, the Mersey Estuary, the Dee Estuary and Martin Mere.

The site also supports up to 40% of the British population of the natterjack toad *Bufo calamita*.

4. Martin Mere – 54 km west of Pendle

Occupies part of a former lake and mire that covered over 1,300 hectares of the Lancashire Coastal Plain during the 17th Century. Since the acquisition of 147 hectares of rough damp pastures in 1972 the area has been transformed by means of positive management into a wildfowl refuge of international importance. Areas of open water with associated muddy margins have been created, whilst maintaining seasonally flooded marsh and reed swamp habitats via water level control. In addition large areas of semi-improved damp grassland, unimproved species rich damp grassland and rush pasture have been maintained and enhanced via appropriate grazing management. Of the pastures the most botanically important are those species rich areas supporting whorled caraway, present here at one of very few sites in northern England. Such pastures are nationally important.

However, the outstanding importance of Martin Mere is as a refuge for its large and diverse wintering, passage and breeding bird community. In September 2002, an additional 63 hectares of land were purchased on the southern most part of the refuge, to restore arable land to a variety of wetland habitats including seasonally flooded grassland, reedbed, wet woodland and open water habitats. These are all key Biodiversity Action Plan habitats within the Lancashire Plain and Valleys Natural Area.

5. Leighton Moss – 54 km north west of Pendle

Situated on the eastern edge of Morecambe Bay, Leighton Moss is the largest reedbed in north-west England. Large areas of open water are surrounded by extensive reedbeds in which areas of willow scrub and mixed fen vegetation also occur. A typical and varied fen flora has developed in part, whilst the reedbed shows all stages of seral transition from open water through to woodland.

The reedbeds are of particular importance as a northern outpost for breeding populations of great bittern *Botaurus stellaris*, Eurasian marsh harrier *Circus aeruginosus* and bearded tit *Panurus biarmicus*.

6. Rostherne Mere – 72 km south west of Pendle

Rostherne Mere is the deepest, one of the largest and the most northerly of the meres of the Shropshire-Cheshire Plain. It lies in a hollow surrounded by thick deposits of glacial drift overlying Triassic marls and saltbeds. Its shoreline is fringed with common reed *Phragmites australis*.

Further Information

- 5.37 The Ramsar Sites Information Service (RSIS) provides access to information on wetlands designated as internationally important under the Convention on Wetlands (Ramsar, 1971).

 <http://ramsar.wetlands.org/>

Targets

- 5.38 There are no Ramsar sites in Pendle, so this section is not applicable.

Potential Threats

- 5.39 Legislation requires an Habitat Regulations Assessment to be carried out for any plans or projects which may have a significant effect on a European protected site. The first stage of the Habitat Regulations Assessment is a screening process which aims to establish whether the proposals are likely to have significant effect on those sites both within and in the vicinity of Pendle.
- 5.40 If evidence shows that a planning policy or development activity in Pendle is likely to threaten the conservation objectives or site integrity of a Ramsar Site, these will be carefully assessed and possible mitigation measures or alternative plan options highlighted in the Habitat Regulations Assessment.

Sites of Special Scientific Interest (SSSI)

Introduction

- 5.41 Sites of Special Scientific Interest (SSSIs) are of national importance, designated under the Wildlife and Countryside Act (1981) as amended by the Countryside and Rights of Way (CROW) Act (2000). The Government expects local authorities to:
- (i) Apply strict tests when carrying out any functions within or affecting SSSIs to ensure that they avoid, or at least minimise, any adverse effects.
 - (ii) Adopt the highest standards of management in relation to SSSIs in their ownership and to take appropriate action to prevent damage by third parties.
 - (iii) As owners or otherwise take positive steps, wherever possible, to conserve and enhance the special interest features of a SSSI where their activities may be affecting it, or as opportunities arise in the exercise of their functions.
- 5.42 There are over 4,000 Sites of Special Scientific Interest (SSSIs) in England, covering around 7% of the country's land area. Over half of these sites, by area, are internationally important for their wildlife, and designated as Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites. Many SSSIs are also National Nature Reserves (NNRs) or Local Nature Reserves (LNRs).
- 5.43 SSSIs are representative of the country's very best wildlife and geological sites. They include some of our most spectacular and beautiful habitats supporting plants and animals that find it more difficult to survive in the wider countryside. It should be noted that many locally designated sites are equally important in terms of their biodiversity value and could potentially qualify for SSSI status.
- 5.44 Wildlife and geological features are under pressure from development, pollution, climate change and unsustainable land management, so the protection and active management of our SSSIs is an investment for the benefit of future generations. Maintaining goodwill and building upon the enthusiasm, knowledge and interest of the landowners is vital to successfully manage these nationally important sites.

Pendle Overview

- 5.45 There is one SSSI partly within Pendle:
1. South Pennine Moors SSSI – immediately south-east of Nelson and Colne
 The South Pennine Moors SSSI is one of the largest unenclosed moorland areas in the country and contains a diverse and extensive range of upland plant communities. The moorlands are on a rolling dissected plateau between 300m and 450m, with a high point of 517m at Boulsworth Hill. The underlying rock is Millstone Grit which outcrops at Boulsworth Hill. The greater part of the gritstone is overlain by blanket peat with the coarse gravelly mineral soils occurring only on the lower slopes. Extensive areas of Atlantic blanket bog occur on the upland plateaux and are punctuated by species rich acidic flushes and mires. Three habitat types which occur on the site are rare enough within Europe to be listed on Annex 1 of the EC habitats and Species Directive (92/43) EEC.

This mosaic of habitats supports a moorland breeding bird assemblage which, because of the range of species and number of breeding birds it contains, is of regional and national importance. The breeding populations of Merlin *Falco columbarius*, Golden Plover *Pluvialis apricaria* and Twite *Carduelis flavirostris* are of international importance.

Table 5.1 – SSSI Coverage

Category	England	Lancashire	Pendle
Total Sites	4,217	69	1
Area	1,073,828 ha	42,000 ha	1,542 ha
Coverage	7%	13.7%	9.1%

Source: Natural England (November 2009)

Further Information

- 5.46 Further information on the moorland and fell environments present in Pendle can be found in Chapter 7. Detailed information on the South Pennine Moors SSSI is available on the Natural England website at:



www.english-nature.org.uk/special/sss/sss_details.cfm?sssi_id=1007196

Targets

- 5.47 Atlantic blanket bog consists of 95-98% water held by *Sphagnum* peat. It is acidic and relies solely on nutrient-poor rainwater for its survival. Waterlogged conditions are sustained by high rainfall and low temperatures which result in low evaporation. Water movement through peat is very slow, so the water level is the most crucial aspect to consider when managing this habitat type. Even operations some distance away can have a devastating effect on *Sphagnum* communities if they are within the same hydrological unit.
- 5.48 On sites that are drying, raising the water levels should be considered. Blocking existing drains to help retain rainwater will allow the water table to re-stabilise and peat-forming *Sphagnum* species to colonise areas that have been affected. Unless the peat has been removed down to the level of the mineral substrate, secondary bog vegetation will return over time.
- 5.49 In addition to their significant role as a unique habitat that hosts many important species, blanket bogs also provide an important ecosystem service. Blanket bogs provide a natural mitigation process in terms of their carbon sequestration and storage¹³. It is estimated that they contain on average 5,000 tonnes of carbon per hectare and absorb carbon from the air at 0.7 tonnes per hectare per year.
- 5.50 The long-term objective is to gradually improve those parts of the South Pennine Moors SSSI within Pendle to a favourable condition.

¹³ Sequestration refers to the capture of carbon dioxide (CO₂) from the atmosphere through biological processes. It is an important means of mitigating the contribution of fossil fuel emissions to global warming, by storing them away from the atmosphere.

Potential Threats

- 5.51 There are a wide variety of potential threats including lack of, or inappropriate, management/husbandry, recreational pressures, fire, pollution, vandalism and development.
- 5.52 The damage caused to the peat habitat by past drainage regimes is of particular concern. Drainage ditches, both new and old, lower the water table and can initiate erosion and oxidation of the peat. Even old unmaintained drains continue to affect the hydrology of a site. Lowered water tables will alter the species composition of the surface vegetation and have a detrimental affect on specialist invertebrates. Drainage at the margins of bogs will also lower the water table and may modify the surface patterning, such as loss of Sphagnum hollows.
- 5.53 Erosion on blanket bog exposes more of the peat to the atmosphere, increasing drying and oxidation of the peat. Hag¹⁴ erosion may be instigated, resulting in extensive patches of bare eroding peat both in gullies and flatter areas.
- 5.54 Heavy grazing can have a significant impact on mire vegetation, especially if there is supplementary feeding (which will increase the nutrient input) and other management measures such as drainage, burning or fencing.
- 5.55 Serious fires can result in the loss of surface vegetation and the death of peat-forming species. These can slowly recover over time (over 20 years), but the invertebrate population will be seriously affected.
- 5.56 Many bogs, especially those in the North of England, have been affected by atmospheric pollution. This alters the nutrient status of the bog, and hence the plant species composition.
- 5.57 The construction of wind farms and communication masts, together with their associated infrastructure can cause significant hydrological disruption. Access roads and links to the national grid via landlines or pylons may also impact on very fragile blanket bog, particularly during the construction phase.
- 5.58 Any of these threats could lead to habitat fragmentation, increasing the risk of habitat degradation, associated (local) species extinction and the subsequent long-term viability of the site. In addition the blanket bogs also provide significant ecosystem benefits, as they act as carbon sinks.
- 5.59 If evidence shows that a planning policy or development activity in Pendle is likely to threaten the conservation objectives or site integrity of a Site of Special Scientific Interest, these will be carefully assessed and possible mitigation measures or alternative plan options highlighted.
- 5.60 This is likely to be in the form of an Habitat Regulations Assessment, which is required under European legislation, for any plans or projects which may have a significant effect on a European protected site. Parts of the South Pennine Moors SSSI are designated under European legislation as a Special Protection Area (SPA) – Birds Directive – and Special Areas of Conservation (SAC) – Habitats Directive.

¹⁴ Small islands or banks of peat; formed by the surrounding ground eroding away by water, feet or grazing.

National Nature Reserves (NNRs)


Introduction

- 5.61 English Nature describes National Nature Reserves as: places where wildlife comes first. They have been established to protect the most important areas of wildlife habitat and geological formations in Britain, and act as places for scientific research.

Pendle Overview

- 5.62 There are no NNRs in Pendle. The nearest examples are:
1. Ribble Marshes NNR – 52 km west of Pendle
A 4,520 ha area of intertidal and salt marsh habitats at the mouth of the Ribble Estuary, of considerable ornithological value for wintering wildfowl.
 2. Gait Barrows NNR – 55 km north-west of Pendle
Located just north of Lancaster the 121.6 ha site contains a rich mosaic of limestone habitats including unique limestone pavement, yew woodland, fen and reedbed.

Further Information

- 5.63 Further detailed information on the individual sites can be found at:
-  www.naturalengland.org.uk/ourwork/conservation/designatedareas/nnr/regions/northwest.aspx

Targets

- 5.64 There are no National Nature Reserves in Pendle, so this section is not applicable.

Potential Threats

- 5.65 If evidence shows that a planning policy or development activity in Pendle is likely to threaten the conservation objectives or site integrity of a National Nature Reserve, these will be carefully assessed and possible mitigation measures or alternative plan options highlighted.

Local Nature Reserves (LNRs)

Introduction

- 5.66 Local Nature Reserves (LNRs) are for both people and wildlife. They are places with wildlife or geological features that are of special interest locally and offer people the opportunity to study or learn about nature, or simply to enjoy it.

- 5.67 Section 21 of the National Parks and Access to the Countryside Act, 1949 gives local authorities the power to acquire, declare and manage nature reserves. Commonly referred to as LNRs they must afford special opportunities for study and research on wildlife or natural features and must preserve flora, fauna or geological features of special interest in the area.
- 5.68 Natural England, who must be consulted by local authorities in their use of the powers given to them by Section 21 of the 1949 Act, has produced the document Local Nature Reserves in England: A Guide to their Selection and Declaration. This is a working document for officers, outlining the purpose, selection, establishment, declaration and management of LNRs and attempts to place them in a general planning framework. A promotional leaflet entitled Nature Is Your Neighbour is also available.
- 5.69 There are now over 1,280 LNRs in England, covering almost 40,000 hectares – making an important contribution to England's biodiversity.
- 5.70 LNRs should normally be greater than 2ha in size and capable of being managed with the conservation of nature and/or the maintenance of special opportunities for study, research or enjoyment of nature as the priority concern. They should also be of high natural interest in the local context, or of some reasonable natural interest and of high value in the local context for formal education or research, or the informal enjoyment of nature by the public.
- 5.71 In January 2003 the Lancashire Wildlife Trust initiated a LNR project across the six districts in East Lancashire and 12 candidate sites were nominated in Pendle. These sites were assessed and scored against specific criteria to identify the best sites. Since then, four LNRs totalling 15.3 hectares have been declared in Pendle.

Pendle Overview

- 5.72 There are four LNRs in Pendle:

1. Lomeshaye Marsh LNR – Nelson

Designated in February 2005 Lomeshaye Marsh (2.0ha) is one of only two such habitats still remaining alongside Pendle Water. Its biological importance was initially recognised when it was declared as a BHS in the mid-1990's.

Situated on the floodplain of Pendle Water, the site has been through many changes over the past century. The Barrowford Sewage Treatment Works was built in the 1890s to provide much needed sanitation. It was sited in a meander, but with the development of the Lomeshaye Industrial Estate in the late 1970s / early 1980s, Pendle Water was re-routed to incorporate the former sewage works site into the new estate. The remaining buildings and filter beds were cleared in 1986.

The site was slowly reclaimed through natural regeneration, until Lomeshaye Marsh came to the public's attention in 1993. Employees from the industrial estate joined forces with local residents and Pendle friends of the Earth to rescue the wetland from drainage and industrial development. In 1995 an agreement was reached with Pendle Council and a partnership formed with the Heritage Trust for the North West, providing long term stability for the project.

Today Lomeshaye Marsh is a mosaic of habitats including ponds and swamp, trees and scrub, species-rich grassland and riverside banking on the site of a former sewage works.

The site has 166 species of plant recorded including cowslip, oxeye daisy, St. John's wort, lady's bedstraw, ragged robin, bullrush, kingcup, celery-leaved buttercup and yellow flag iris.

There have been 51 species of bird recorded including swallow, jack snipe, sedge warbler, reed bunting, water rail, whitethroat, blackcap, tawny owl, bullfinch, tree sparrow, grey heron and kingfisher. Surprisingly for such a small site a bittern roosted in the swamp in winter 1997. Also look out for frogs, toads, newts, dragonflies and damselflies.

A sustainable timber building with turf roof and a bird hide has been constructed, but is only open by prior arrangement

2. Greenfield Road LNR – Colne

Designated in October 2006 Greenfield Road (3.2ha) is a small reserve on a former floodplain of Colne Water. The reserve was once the area of a mill leat and pond for Greenfield Mill, which was destroyed by fire in 1885.

The ponds at Greenfield Road support numerous species including insects such as water boatmen and diving beetles. In spring, frogspawn and tadpoles can be seen in the pond and wetland area. Frogs can be seen all year round. Wetland plants such as Flag Iris and Marsh Marigold grow in the marginal areas surrounding the pond. In 2005 Pond Conservation created a new pond for use as an educational resource.

The site supports 61 bird species including a lively flock of long-tailed tits and Britain's smallest bird, the Goldcrest. Species such as blue tit, robin and chaffinch can be seen. Many of these can be attracted to the food on the bird tables near the pond. Kingfishers can often be seen as a flash of blue in their flight along Colne Water. Along with herons they can regularly be seen by the river or pond catching small fish. The sewerage works across the river attracts large numbers of birds including pied wagtails, grey wagtails and redshanks.

A floral survey by Lancashire Wildlife Trust in 2003 identified 156 species including 25 grasses, 42 trees and 89 herbaceous plants. The areas of woodland are mainly young plantation and scrubland. Dominant scrub species include Hawthorn, Elder and Hazel.

Eventually scrub areas tend to be taken over by taller trees forming woodland. Larger trees present throughout the reserve include Ash, Alder, Birch and Poplars. Near the pond is a large Crack Willow which, although fallen, is still alive. In 2000 an additional hectare was planted with native trees by Pendle Borough Council.

3. Alkincoats Woodland LNR – Colne

Designated in October 2006 Alkincoats Woodland (8.0ha) is a relatively recent broadleaved plantation, although there is a mature stand of Beech trees alongside Red Lane on the northern boundary. A variety of trees and shrubs have been planted including oak, alder, ash, aspen, birch, wild cherry, hazel, blackthorn, rowan and other native species. Small ponds, wetland areas and wildflower-rich rides provide a variety of habitats for insects, mammals and birds.

In addition to the planting of native trees and wildflowers, site improvements include new signage, path drainage and the installation of boardwalks, bird feeder tables etc. The site is now extremely popular with local residents and used every week by a local school for both academic (nature study) and physical (cross country runs) purposes.

Leaflets for the LNR and four circular walks are available from Pendle Council Economic Development and Tourism Unit.

4. Upper Ball Grove Lodge LNR – Colne

It was the first LNR to be declared in Pendle being designated in April 2004, Upper Ball Grove (2.1ha) is located on the floodplain of Colne Water. A lodge was constructed for use by a leather tannery downstream, in what is now Ballgrove Park. The lodge has partially silted up and is locally dominated by Bulrush, Yellow Flag, Reed Canary-grass and Amphibious Bistort.

Surveys indicate that 150 plant species are present including Knapweed, bird's-foot-trefoil, Meadowsweet, Wild Angelica, Marsh-marigold, Lesser & Greater Spearwort, Yellow Water Lily & Harebell.

In addition 51 species of bird have been recorded including Bullfinch, Goldfinch, Redpoll, Great Spotted Woodpecker, Nuthatch, Sand Martin, Swallow, Swift, Grey Heron, Tawny Owl, Reed Warbler & Kingfisher.

Other species to look out for are newts, snails, leeches, brown hare, deer, dragonflies and damselflies.

Table 5.2 – LNR Coverage

Category	Great Britain	Lancashire	Pendle
Sites	1,405	27	4
Total area	36,601 ha	325 ha	15.3 ha
Coverage	0.16%	0.1%	0.1%

Source: Natural England (November 2009)

Further Information

5.73 Further detailed information on the individual sites can be found at:



www.lnr.naturalengland.org.uk/special/lnr/lnr_search.asp

- 5.74 Paper records are also held by Pendle Council. Please contact:

Chris Binney
Principal Environment Officer
Planning & Building Control
Pendle Council
Town Hall
Market Street
Nelson
BB9 7LG

Tel: 01282 661729
Email: chris.binney@pendle.gov.uk

- 5.75 Future management of the LNR's in Pendle has recently passed to the Council's Tourism and Community Initiatives section. Species audits are currently being carried out to help inform the preparation of new ten-year management plans. Further information is available from:

Vaughan Jones
Tourism & Community Initiatives Manager
Economic Development & Tourism Unit
Pendle Council
Elliott House
9 Market Square
Nelson
BB9 0LX

Tel: 01282 661962
Email: vaughan.jones@pendle.gov.uk

Targets

- 5.76 The UK government recommends LNR coverage of 1 hectare per 1,000 people. With a population exceeding 90,000, Pendle should have LNR coverage of at least 90 ha, as opposed to the 15.3 ha currently designated.
- 5.77 This aspirational target needs to be tempered with other land use requirements and the basic need to identify land with suitable wildlife interest. Legislation also requires the local planning authority to have a legal interest in the land, or an agreement with the landowner. The declaration of a LNR also means that the local planning authority accepts a commitment to manage the land as a nature reserve and to protect it from inappropriate uses or development. These legislative requirements can have significant financial implications for the Council.

Potential Threats

- 5.78 There are a variety of threats including lack of or inappropriate management and husbandry, recreational pressures, pollution, vandalism and development. Any of these could lead to habitat fragmentation, increasing the risk of habitat degradation, associated (local) species extinction and the subsequent long-term viability of the site.
- 5.79 If evidence shows that a planning policy or development activity in Pendle is likely to threaten the conservation objectives or site integrity of a Local Nature Reserve, these will be carefully assessed and possible mitigation measures or alternative plan options highlighted.

Planning

- 5.80 Locally, protection for internationally designated wildlife sites is afforded by Policy 4A: Natural Heritage – International Sites in the Replacement Pendle Local Plan (2001-106).
- 5.81 Nationally designated wildlife sites are covered by Policy 4B: Natural Heritage – National Sites.
- 5.82 You should refer to a copy of the Replacement Pendle Local Plan (2001-2016), which will place these policies in their strategic context (Pages 13-14) and provide a reasoned justification for the policies themselves (Pages 30-31 and Pages 31-32 respectively).

 www.pendle.gov.uk/localplan

6. Local Sites of Biodiversity Interest

Introduction

- 6.1 Local authorities are required to identify and provide for the protection and enhancement of the natural heritage within their areas. As part of their planning function, they have a responsibility to take account of sites of significant nature conservation value. An overview of their distribution is given at figure 9.2.
- 6.2 Statutory sites, such as Sites of Special Scientific Interest (SSSI), are only intended to be a representative sample of the sites of biodiversity value. They do not necessarily represent the best sites in a particular area and on their own cannot conserve our natural heritage and biodiversity. As a result many sites of interest for their biodiversity are designated under several regional and/or local classifications.

Biological Heritage Sites (BHS)

Introduction

- 6.3 Biological Heritage Site (BHS) is considered the most important Local Site designation in Lancashire. They contain valuable habitats such as ancient woodland, species-rich grassland and bogs and are of at least County sub-regional significance. Many provide a refuge for rare and threatened plants and animals. BHSs form an irreplaceable part of our environment and are a major part of the strategy to conserve the biological richness of Lancashire.
- 6.4 The BHS Review Panel has responsibility for the management and review of the BHS Register and keeping the BHS Guidelines for Site Selection up-to-date. It meets annually (usually in November) and is made up of experienced professional ecologists from Lancashire County Council, Lancashire Wildlife Trust and Natural England. It is the responsibility of the panel to evaluate and select sites, usually from information and data supplied to them, through interpretation of the published guidelines.
- 6.5 Sites are afforded protection through their inclusion in spatial plans (i.e. Regional Spatial Strategy, or Local Development Framework) and through national planning policy in PPS 9.

Pendle Overview

- 6.6 There are 62 BHSs in Pendle and these are listed in Appendix 7. Together they make up a network of sites that are highly regarded by local naturalists and address the needs of wildlife in the wider environment. However, there is no general right of public access to BHSs.

Table 6.1 – BHS Coverage

Category	Lancashire	Pendle
Sites	1,209	62
Total area	33,888 ha	1,295 ha
Coverage	10.4%	7.6%

Source: Lancashire County Council (December 2009)

Further Information

- 6.7 Detailed information on the individual sites is not available online, but paper records are held by both Pendle Council and Lancashire County Council. The information held for each BHS includes:

- Site name
- Grid reference
- Site area
- Date of designation
- Site description
- Guideline(s) for site selection
- Owner / occupier
- Planning status
- Site map and boundary

- 6.8 The BHS site description and boundary plans carry a copyright. For further information please contact:

Chris Binney
Principal Environment Officer
Planning & Building Control
Pendle Council
Town Hall
Market Street
Nelson
BB9 7LG

Tel: 01282 661729
Email: chris.binney@pendle.gov.uk

Peter Jepson
Specialist Advisor (Ecology)
Lancashire County Council
Winckley House
Cross Street
Preston
PR1 8RD

Tel: 01772 661729
Email: peter.jepson@lancashire.gov.uk

 <http://www.lancashire.gov.uk/environment/ecology/bhs.asp>

Targets

- 6.9 To encourage and assist BHS landowners to manage their land in an appropriate and sympathetic manner, so as to maintain or improve the BHS habitat. This can be assisted by Pendle Council in a number of ways; for example, through the development control process and NERC Act.
- 6.10 The BHS sites at Fir Trees Brook Pasture (Entry Level Stewardship), Black Moss Pasture (Higher Level Stewardship) and Hagg Wood (Management Plan) all have positive management programmes in place.

Potential Threats

- 6.11 There are a variety of threats including lack of or inappropriate management and husbandry, recreational pressures, pollution, vandalism and development. Any of these could lead to habitat fragmentation, increasing the risk of habitat degradation, associated (local) species extinction and the subsequent long-term viability of the site.
- 6.12 If evidence shows that a planning policy or development activity in Pendle is likely to threaten the conservation objectives or site integrity of a Biological Heritage Site, these will be carefully assessed sequentially with avoidance being first priority through to possible mitigation measures or alternative plan options highlighted as alternatives.

Local Geodiversity Sites (LGS)

Introduction

- 6.13 Just as the biological interest of sites can be recognised and conserved so can the importance of certain geological sites and landforms. English Nature conserves about 1,300 nationally important geological research locations as SSSIs and in 1991 the Regionally Important Geological and Geomorphological Sites (RIGS) initiative was launched throughout Lancashire as a means of recognising sites of regional importance.
- 6.14 In Lancashire RIGS were formerly known as Geological Heritage Sites, but this name was recently changed to Local Geodiversity Sites (LGS) to reflect the inclusion of landforms and soils.
- 6.15 There are presently some 97 LGSs in Lancashire covering over 3,000 ha. The identification of further sites is an on-going process. Sites are identified by specialists in the Lancashire RIGS Group and endorsed by Lancashire County Council. LGSs may be identified where the geology and/or landforms are regarded as valuable in terms of:
- fieldwork for schools, universities and adult education;
 - scientific study by both professional and amateur geologists;
 - the historic associations which a site may have with regard to important advances in geological or geomorphological knowledge.
- 6.16 Sites vary enormously, from an exposure of a rock type found at only one locality in Lancashire to landforms of considerable size. Some sites provide valuable teaching opportunities. However, there is no general right of public access to LGSs.

- 6.17 Sites are afforded protection through their inclusion in spatial plans (i.e. Regional Spatial Strategy, or Local Development Framework).

Pendle Overview

- 6.18 There are three LGSs in Pendle. These are listed below, but further information can be found in Appendix 7.

- | | |
|--------------------------------|-------------|
| 1. Castercliffe | Nelson |
| 2. Tum Hill | Colne |
| 3. Salterforth Railway Cutting | Salterforth |

Table 6.2 – LGS Coverage

Category	Great Britain	Lancashire	Pendle
Sites	N/A	101	3
Total area	N/A	3,977 ha	6 ha
Coverage	N/A	1.3%	0.04%

Source: Lancashire County Council (December 2008)

Further Information

- 6.19 The GeoLancashire (officially referred to as the Lancashire RIGS Group) maintains a website with information on the general interest, location and boundaries of LGSs.

 www.lancashirerigs.org.uk

- 6.20 Further information is also available through the Association of UK RIGS Groups website at:

 www.ukrigs.org.uk/html/ukrigs.php

- 6.21 The Lancashire Environment Record Network (LERN) also holds details of 834 geological records, which were compiled by Clitheroe Castle Museum. Of these 71 relate to sites in Pendle.

- 6.22 The Lancashire NERN also holds various geological maps. Those out of copyright have been scanned and partially digitised. The British Geological Society also provide 1:625K mapping free for non-commercial use:

 www.bgs.ac.uk/downloads/browse.cfm?sec=6&cat=11

Targets

- 6.23 To encourage and assist LGS landowners to manage their land in an appropriate and sympathetic manner, so as to maintain or improve the LGS. This can be assisted by Pendle Council in a number of ways; for example, through the development control process.

Potential Threats

- 6.24 There are a variety of threats including lack of or inappropriate management and husbandry, recreational pressures, pollution, vandalism and development. Any of these could lead to fragmentation, increasing the risk of site degradation, the associated loss of features and the subsequent long-term viability of the site.
- 6.25 If evidence shows that a planning policy or development activity in Pendle is likely to threaten the conservation objectives or site integrity of a Local Geodiversity Site, these will be carefully assessed and possible mitigation measures or alternative plan options highlighted.

Sites of Local Natural Importance (LNI)

Introduction

- 6.26 In Circular 06/2005, ODPM recognised that there were many sites around the country which, whilst having nature conservation value, were not of such a high standard to merit a level of protection or status such as LNR or BHS. Also, they were identified by differing criteria standards and given different names by different authorities.
- 6.27 As a consequence, in 2006 DEFRA produced a document called 'Local Sites – Guidance on their Identification, Selection and Management' to assist in the development and management of systems to identify sites of local importance for nature conservation in England.
- 6.28 In 2005, Lancashire Wildlife Trust (LWT) in consultation with BHS partners English Nature (now Natural England) and Lancashire County Council produced guidelines for sites of Local Natural Importance (LNI) in Pendle. A number of LNI sites were subsequently included in the Replacement Pendle Local Plan (2001-2016) adopted in May 2006.

Pendle Overview

- 6.29 There are seven LNIs in Pendle. These are listed below, but further information can be found in Appendix 7.
- | | |
|------------------------------|--------------------------------------------------|
| 1. Walverden Reservoir | Nelson |
| 2. Ball Grove Lodge | Colne |
| 3. Greenfield Road | Colne |
| 4. Antley Gate | Trawden |
| 5. Corn Close / Bent Moor | Trawden |
| 6. Flake Hill Moor | Trawden |
| 7. Leeds and Liverpool Canal | M65 Junction 12 (Brierfield) to Barrowford Locks |
- 6.30 These sites were designated before the guidelines for the selection and designation of LNIs were introduced. As a result they have not been tested against the guidelines, but can be tested as a function of the development control process.

Table 6.3 – LNI Coverage

Category	Pendle
Sites	7
Total area	231.48 ha
Coverage	1.37%

Source: Pendle Council (December 2009)

Further Information

- 6.29 Further information on the individual sites can be found by contacting Pendle Council. Please contact:

Chris Binney
Principal Environment Officer
Planning & Building Control
Pendle Council
Town Hall
Market Street
Nelson
BB9 7LG

Tel: 01282 661729
Email: chris.binney@pendle.gov.uk

Targets

- 6.30 To encourage and assist LNI landowners to manage their land in an appropriate and sympathetic manner, so as to maintain or improve the LNI habitat. This can be assisted by Pendle Council in a number of ways; for example, through the development control process and NERC Act.

Potential Threats

- 6.31 There are a variety of threats including lack of or inappropriate management and husbandry, recreational pressures, pollution, vandalism and development. Any of these could lead to habitat fragmentation, increasing the risk of habitat degradation, associated (local) species extinction and the subsequent long-term viability of the site.
- 6.32 If evidence shows that a planning policy or development activity in Pendle is likely to threaten the conservation objectives or site integrity of a Site of Local Natural Importance, these will be carefully assessed and possible mitigation measures or alternative plan options highlighted.

Planning

- 6.33 Locally, protection for locally designated wildlife sites is afforded by Policy 4C: Natural Heritage – County and District designated Sites in the Replacement Pendle Local Plan (2001-106).

- 6.34 You should refer to a copy of the Replacement Pendle Local Plan (2001-2016), which will place the policy in its strategic context (Pages 13-14) and provide a reasoned justification for the policy itself (Pages 32-35).

 www.pendle.gov.uk/localplan

7. Pendle's Key Habitats

Introduction

- 7.1 Many areas valued for their biodiversity are not afforded protection by virtue of one of the international, national, regional or local designations covered in Chapters 5 and 6. But, these 'unprotected' areas include habitats that are vitally important for many of our most valued species.
- 7.2 This chapter considers the five UK BAP priority habitats present in Pendle. They vary in size from vast areas of moorland to small areas of grassland running alongside our highways. Whilst parts of these habitats will be afforded a level of protection by virtue of one of the statutory or local designations (see Chapters 5 and 6), others will not.

The five habitats are:

1. Broadleaved and mixed woodlands
 - including Ancient Woodland
2. Moorland and fell
3. Reedbed
4. Rivers and streams
 - including ponds
5. Species-rich neutral grassland
 - including Special Biodiversity Verges

Broadleaved and Mixed Woodland

Introduction

- 7.3 Woodland is important for the wide range of habitat mosaic of which it comprises. Its biodiversity value is not simply the trees but, based upon differing criteria such as soil type, wet or dry etc, the mix of other flora and fauna within it.
- 7.4 Individual trees are important aesthetically and for amenity but become particularly significant to biodiversity when they reach such an age or maturity to be designated as Veteran or Ancient Trees. Their cavities and deadwood provide important habitat. Such trees may occur in areas already recognised for their ecological importance whilst others may be growing on intensively managed farmland or other such land and are frequently associated with historic landscapes. When identified, such trees should be given due consideration in the development control process.
- 7.5 Accurate up-to-date data for woodland coverage is not readily available, but three surveys are of note. The National Inventory of Woodland and Trees was published by the Forestry Commission in 2001, with County reports made available in the following year. At the district level, information for Pendle is available from the Woodland Survey 1992 (Pendle Council) and the Land Use Potential Survey 2002 (ELWOOD).

- 7.6 In addition the Lancashire Environment Record Network (LERN) holds survey cards for Lancashire County Council and Natural England woodland surveys dating back to the early 1980s.

Pendle Overview

- 7.7 The three different surveys have each recorded different figures for woodland cover, resulting in significant anomalies between the published figures for woodland in Pendle.

1. National Inventory of Woodland and Trees (NIWT)

- 7.8 The Forestry Commission has been carrying out woodland surveys since 1924. The latest survey for which information is readily available was published in November 2001. The overall aim of the NIWT is to provide up to date information on the extent, size and composition of our woodlands.
- 7.9 Across Lancashire woodland of 0.1 hectare or more accounts for 14,078 hectares or 4.6% of the total land area. This represents an increase of over 2,400 hectares (0.9%) between 1980 and 1999. It is however well below the average coverage of 8.5% for England, 12.7% in Great Britain and 37% across the European Union (2000).
- 7.10 The relative proportion of broadleaves to conifers increased from 64% to 66% over the same period. There are 2,492 woods between 0.1 and 2.0 hectares within Lancashire with a mean area of 0.27 hectares.
- 7.11 Of the 1,662 hectares of woodland over 2.0 hectares, 12% is owned or leased by the Forestry Commission, with the remainder in private ownership. There are 1,244 woods over 2.0 hectares within Lancashire with a mean area of 10.8 hectares.
- 7.12 Broadleaf woodland is the dominant forest type, representing 52% of all woodland. Conifer woodland represents 24.4%, mixed woodland 15.0% and open space within woodlands 7.2%. The main broadleaved species is oak covering 1,584 hectares or 18.6% of all broadleaved species. Sitka Spruce accounts for 2,293 hectares or 52.7% of all conifer species. There are a further 1.6 million trees outside recognised areas of woodland across Lancashire.
- 7.13 Both the national and county reports can be downloaded via the following link:



www.forestresearch.gov.uk/forestry/hcou-54pg9u

2. Pendle Woodland Survey 1992

- 7.14 In 1992 Pendle Council commissioned a survey of woodland in both public and private ownership. A total of 354 hectares of woodland was recorded on sites of over 0.1 hectares. Since 1992 new public and private woodland has been planted, but Pendle Council only has records of its own planting. This has increased woodland coverage by 83 hectares taking the current known total for Pendle to 437ha, which represents 3% coverage for the borough.

3. Land-use Potential Survey 2002

- 7.15 The Land Use Potential Survey carried out by ELWOOD in 2002 recorded a total of 699 hectares of woodland in Pendle, which gives a figure for total woodland cover equal to 4.12%. As the most recent of the three studies, this is the figure shown in Table 7.2 below.



Table 7.1 – Woodland Coverage

Category	Great Britain	Lancashire	Pendle
Total area	2,665,125 ha	14,078 ha	699 ha
Coverage	12.7%	4.6%	4.1%


Source: Lancashire Environment Record Network and Pendle Council (January 2010)

- 7.16 Having three different totals for woodland cover in Pendle causes confusion and makes any comparison with the figures for Lancashire and England somewhat meaningless.
- 7.17 Further confusion is caused by the figure for woodland cover recorded in the Lancashire's Green Audit: A First State of the Environment Report (Lancashire County Council, 1991). Based on a survey conducted in 1985, this found that Pendle had coniferous woodland cover of 135 hectares and broadleaved cover of 899 hectares, giving a total of 1,034 hectares (Table 76 page 193). Together these figures represent total woodland coverage of 6.1%, giving Pendle the 5th highest coverage in the county.
- 7.18 What is known is that the North West has low woodland cover in comparison to the rest of Britain.

Site information

- 7.19 Further detailed information can be found at:
 www.statistics.gov.uk/STATBASE/ssdataset.asp?vlnk=7291&More=Y
- 7.20 The habitat action plan for broad-leaved and yew woodland (including semi-natural ancient woodlands and plantations) can be found at:
 www.lancspartners.org/lbap/habitat_plans.asp

Targets

- 7.21 To encourage and/or facilitate an increase in woodland cover and to promote sympathetic management of woodland.
- 7.22 The Lancashire Woodland Vision aims to provide information and guidance regarding new woodland planting and woodland management in the context of the Lancashire Landscape Strategy. Further information can be found at:
 www.lancashire.gov.uk/corporate/web/?Forestry/12201

- 7.23 The various indicators of habitat quality, together with a list of communities and species associated with broad-leaved and mixed woodland areas, are included in the relevant Habitat Action Plan (Para 7.20). This also includes targets and proposed actions.

Potential Threats

- 7.24 There are a variety of threats including lack of or inappropriate management and husbandry, recreational pressures, pollution, vandalism and development. Any of these could lead to habitat fragmentation, increasing the risk of habitat degradation, associated (local) species extinction and the subsequent long-term viability of the site.

Planning

- 7.25 Locally protection is afforded by Policy 14: Trees, Woodland and Hedgerows in the Replacement Pendle Local Plan (2001-106). Policy 4D: Natural Heritage – Wildlife Corridors, Species Protection and Biodiversity seeks to preserve and enhance the biodiversity function of important linear features.
- 7.26 You should refer to a copy of the Replacement Pendle Local Plan (2001-2016), which will place these policies in their strategic context (Pages 13-14) and provide a reasoned justification for the policy itself (Pages 50-51 and Pages 36-37 respectively).

 www.pendle.gov.uk/localplan

Ancient Woodland

Introduction

- 7.27 After the last Ice Age, with wild woodland as a component, a diverse range of habitats would have covered much of the UK. However, woodland cover began to decline with the arrival of Neolithic man and the first clearance of forests for agriculture. Deforestation continued over the centuries, as our population grew and more land was turned over to agriculture and development.
- 7.28 By the time of the Domesday Book in 1086 woodland cover in England was estimated to be around 15% of the total land area. It is thought to have halved in the following 300 years. After this, woodland cover fluctuated, but with an overall downward trend, until recent times, according to human population levels and our demand for wood and timber.
- 7.29 Nationally, nearly 50% of the Ancient Woodland that survived until the 1930's has since been lost or damaged by agriculture, development or planting of non-native conifers for commercial forestry.
- 7.30 Today, the UK is one of the least wooded places in Europe. Only 12% of the UK's landscape is wooded compared with an average of 44% in other European countries and only a small proportion of this, around 40%, is native woodland.

- 7.31 Ancient woodland, which is defined as land that has been continually wooded since at least 1600AD, now covers only 2 per cent of the UK's land area. From 1600AD, planting of woodland became more common, so woodland that pre-dates this is more likely to have grown up naturally.
- 7.32 Of the estimated 2 million hectares of woodland in Britain only 534,000 hectares are estimated to be ancient. Approximately 300,000 hectares of this can be described as ancient semi-natural woodland, the balance having been made into plantations. Relatively little of this woodland is protected by any form of formal nature conservation status.
- 7.33 Ancient Semi-natural Woodlands (ASNW), are a vital part of our heritage. They are all that remain of the original forests which covered most of Britain around 10,000 years ago, after the last Ice Age, and now occupy only 1% of land area. They provide a range of habitats which support a rich diversity of plants and animals. Many woodland species depend entirely for their survival on the continued existence of these habitats.
- 7.34 Semi-natural Woodlands are largely made up of trees and shrubs that are native to the site. They have developed from seedlings or stump re-growth through successive generations from the original trees in the wood which were self-sown. Their biodiversity and historical features comprise an irreplaceable asset of great importance to nature conservation which, once destroyed, can never be recreated. It is, therefore, essential that as much as possible of the remaining ancient woodland is protected and sympathetically managed.
- 7.35 The ancient woodlands of Lancashire are not evenly distributed throughout the county. They are found in discrete constellations of woods of similar ecological and historical character. Three major groups - the Ribble Valley woods, the East Lancashire woods and the Lune Valley woods - are typically woods of the steep valley sides fringing the Pennine massif in the east of the county.
- 7.36 The majority of ancient woods in Lancashire are small, 60% are less than 5 ha in size and over 85% measure less than 10 ha.

Pendle Overview

- 7.37 The Forestry Commission Ancient Woodland GIS mapping shows 694 polygons in Lancashire 12 of which are wholly, or partially, within Pendle. These cover a total area of 20 ha (including sites identified as replanted).
- 7.38 The Lancashire Inventory of Ancient Woodlands (provisional), carried out by English Nature¹⁵ in 1994, looked at woodland over 2 hectares in size. On this basis, it identified five ancient woodlands (Wd1) wholly within Pendle (see list below and Appendix 7 for further details). These are classified as Ancient Semi-Natural Woodland (ASNW), which means that they have been continuously wooded since at least 1600AD when the first accurate maps were produced, and do not obviously originate from planting. They are likely to be descended from the original woodland that developed after the retreat of the last ice age some 10,000 years ago.

¹⁵ Now known as Natural England

- 7.39 There is also a small portion of ancient woodland straddling the borough boundary with Burnley, but it is not semi-natural in character and is classified as replanted (Ancient Replanted Woodland – ARW).
- | | |
|------------------------------------------------|---------------------------|
| 1. West Close Clough and Upper Fir Trees Brook | Higham |
| 2. Ravens Clough Wood | Reedley Hallows |
| 3. Old Laund Clough | Fence |
| 4. Gilford Clough / Trawden Brook | Trawden |
| 5. Harden Clough | Kelbrook |
| 6. Hagg Wood | Higham (part) and Burnley |
- 7.40 Sites included on the Lancashire Inventory of Ancient Woodlands, which support semi-natural woodland vegetation, are designated as a BHS under National Vegetation Classification (NVC) Wd1.
- 7.41 The two hectare minimum size qualification for inclusion in the Lancashire Inventory of Ancient Woodlands is a national standard, but gives a false impression of the area of ancient woodland in Pendle.
- 7.42 Most of Lancashire's ancient semi-natural woods are small by national standards. Consequently, there are many small pockets of ancient woodland of less than two hectares in extent, which are not identified in the inventory, but which otherwise merit inclusion in terms of their habitat quality.
- 7.43 The semi-natural woodlands over one hectare in size, where field evidence indicates that they are ancient in origin, are designated as a BHS under NVC Wd2. Those in Pendle are listed below:
- | | |
|---------------------------------------|-----------------|
| 1. Moor Isles Clough | Higham |
| 2. Spurn Clough | Reedley Hallows |
| 3. Heald Wood | Reedley Hallows |
| 4. Slacks Wood | Barley |
| 5. White Hough and Hugh Woods | Barley |
| 6. Bank Ends, Middle and Hollin Woods | Roughlee |
| 7. Castor Gill | Roughlee |
| 8. Claude's Gill / Admergill Water | Roughlee |
| 9. Lower Blacko Water | Blacko |
| 10. Turnholes Clough | Trawden |
| 11. Stanridge and Three Acres Cloughs | Earby |
- 7.44 Inclusion of all the ancient woodland designated as a BHS would increase total ancient woodland coverage in Pendle to about 40 hectares, which represents 0.24% cover of the borough.
- 7.45 The Lancashire Environment Record Network (LERN) has also undertaken a comparative analysis of the Ordnance Survey 1st Edition 6" to 1 mile mapping and the Forestry Commission National Inventory of Woodland Data (1999) in an attempt to identify changes in woodland cover since the mid 19th century. This identified 121 ha of 'possible ancient woodland' including that already identified in the Lancashire Inventory of Ancient Woodlands.

Table 7.2 – Ancient Semi-natural Woodland Coverage

Category	Great Britain	Lancashire	Pendle
Sites	N/A	694	5
Total area	300,000 ha	3,014 ha	21 ha
Coverage	2.0%	0.98%	0.12%

Source: Lancashire Environment Record Network and Pendle Council (January 2010)

Further Information

- 7.46 Further detailed information on the individual sites can be found at:

 www.ndad.nationalarchives.gov.uk/CRDA/43/DD/2/23/detail.html

Targets

- 7.47 To encourage and advise owners to manage their ancient woodlands sympathetically so as to protect and improve them.
- 7.48 The various indicators of habitat quality, together with a list of communities and species associated with Broad-leaved and mixed woodland areas, are included in the relevant Habitat Action Plan (Para 7.20). This also includes targets and proposed actions.

Potential Threats

- 7.49 There are a wide variety of threats including lack of or inappropriate management and husbandry, recreational pressures, pollution, vandalism and development. Any of these could lead to habitat fragmentation, increasing the risk of habitat degradation, associated (local) species extinction and the subsequent long-term viability of the site.
- 7.50 If evidence shows that a planning policy or development activity in Pendle is likely to threaten the conservation objectives or site integrity of an Ancient Woodland, these will be carefully assessed and possible mitigation measures or alternative plan options highlighted.

Moorland and Fell

Introduction

- 7.51 Upland habitats are the most extensive semi-natural vegetation types in Lancashire, covering more than 13% of the county (40,000ha). However, bog and heathland are globally scarce. Approximately 12% of the world's blanket bog occurs in the UK. As such it is listed in Annex 1 of the EC habitats and Species Directive and is a priority habitat in the UK BAP (see Chapter 4).
- 7.52 Whilst many moorland areas are dominated by heather, the gentle slopes and upland plateaux of the South Pennine Moors are typified by blanket bog.
- 7.53 On the periphery of these bogs 'basin mires' form in waterlogged hollows, whilst on the lower slopes and the floor of small valleys, 'valley mitres' can be found.
- 7.54 Flushes are associated with springs, flowing water and seepages that occur on gently sloping ground. They are often linear or triangular and may include small watercourses. Flushes reflect the underlying geology and are generally acidic or neutral. They can be species rich in comparison to surrounding upland habitats. Bryophytes are a conspicuous feature.
- 7.55 Acidic grassland, which is species poor, tends to occur on the lower margins of the moors and fells, where grazing pressure is heavy.

Pendle Overview

- 7.56 Pendle stands at the head of the Calder Valley. To the north, east and south are large tracts of upland moor.
- 7.57 To the north Pendle Hill dominates the landscape and forms part of the Forest of Bowland Area of Outstanding natural Beauty (AONB). Weets overlooks White Moor and the low lying area of West Craven in the extreme north of the borough.
- 7.58 To the east and south is a large expanse of moorland that marks the boundary between Lancashire and Yorkshire. The highest areas to the south, referred to as the South Pennine Moors, were designated as Special Protection Areas (SPAs) under the Birds Directive in 1995 (see Chapter 4). Key species present in Pendle are golden plover, dunlin, merlin, curlew and short-eared owl.
- 7.59 In August 2000 the South Pennine Moors SSSI was designated as a Special Area of Conservation (SAC) for its extensive areas of blanket bog, European dry heath, Northern Atlantic wet heath, transition mires and quaking bogs (see Chapter 4).
- 7.60 Within each of these upland areas, large tracts of land have also been identified locally as Biological Heritage Sites (BHS). These sites are listed below, but further information on each site can be found in Appendix 7.

1. Turf Fields	BHS	Bo2 / Bo3	Barley
2. Burn Moor	BHS	Bo3	Blacko
3. Antley Gate	BHS / LNI	Bo3a	Trawden

Further Information

- 7.61 The habitat action plan for moorland and fell (including unenclosed upland vegetation and the upland habitat types of blanket bog, heathland, acid grassland and marshy grassland) can be found at:

 www.lancspartners.org/lbap/habitat_plans.asp

Targets

- 7.62 The SAC and SPA designations protect large areas of upland habitat from inappropriate development. BHS sites are also afforded protection through local planning policy.
- 7.63 Countryside stewardship schemes provide a potential source of funding for sustainable land management practices, targeted at priority habitats such as heathland.
- 7.64 Sheep stocking density is the main issue to be addressed. This should ideally be no more than 1.5 ewes per hectare. Sustainable patterns of heather burning and the re-wetting of drained bogs and wet heathland are also under consideration.
- 7.65 Within the AONB around Pendle Hill, farmers have received support to identify key features and implement environmental management plans.
- 7.66 The various indicators of habitat quality, together with a list of communities and species associated with Moorland and Fell areas, are included in the relevant Habitat Action Plan (Para 7.59). This also includes targets and proposed actions.

Potential Threats

- 7.67 Upland habitats are strongly influenced by altitude, climate, slope, hydrology and management practices.
- 7.68 Virtually all the unenclosed moorland and fell is grazed by sheep. Large areas have become impoverished botanically through a combination of burning, drainage and/or grazing.
- 7.69 Gamekeeping is also integral to the management of moorland. Grazing and/or rotational strip burning are essential to maintain heathland and supporting upland species. Natural succession, if allowed to proceed, would result in scrub and woodland establishment.

Reedbed


Introduction

- 7.70 Reedbeds are wetlands dominated by stands of common reed, where most of the year the water table is at, or above, ground level.
- 7.71 Although common reed predominates there are also large stands of other wetland plants, and possibly wet grassland and carr woodland.
- 7.72 Reedbeds vary in the species they can support. In 'reed swamp' there is normally 20cm or more depth of surface water, leading to high invertebrate and bird interest, but little botanical interest. In contrast 'reed fen' where the water level is at or below the surface during the summer are more complex botanically.
- 7.73 Extensive stands of reedbed are rare in North West England.

Pendle Overview

- 7.74 There is approximately 160ha of reedbed on 52 sites in Lancashire. Those found in Pendle are generally small in scale and located around the margins of reservoirs, mill ponds and sewage works. The Lomeshaye Marsh LNR in Nelson contains an accessible area of reedbed.

Further Information

- 7.75 The habitat action plan for reedbed can be found at:
 www.lancspartners.org/lbap/habitat_plans.asp

Targets

- 7.76 The various indicators of habitat quality, together with a list of communities and species associated with Moorland and Fell areas, are included in the relevant Habitat Action Plan (Para 7.74). This also includes targets and proposed actions.

Potential Threats

- 7.77 Nutrient enrichment from agricultural fertilisers and run-off can lead to the loss of characteristic species associated with this habitat. Water levels may be reduced quite substantially through drainage or water abstraction leading to drying out.
- 7.78 The routine management of ditches and watercourses can result in the removal of reeds and the increased use of waterbodies and waterways (notably canals) for recreation can lead to erosion.
- 7.79 The small size and relative isolation of many reedbeds increases the potential for habitat loss and degradation.

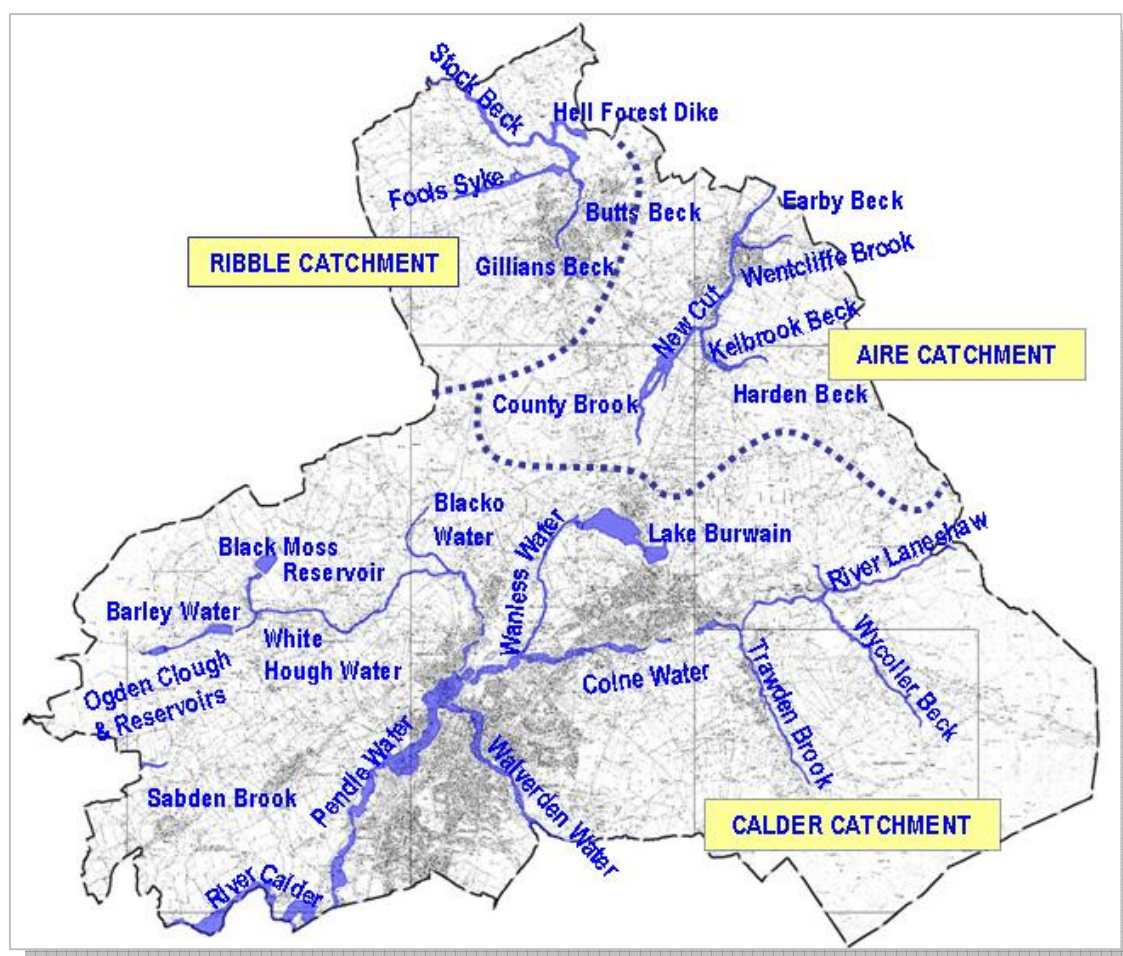
Rivers, Streams and Ponds

Introduction

- 7.80 Water provides an important habitat for many species and it provides a valuable resource for people's enjoyment and appreciation of the natural environment.
- 7.81 Rivers and streams is a very broad habitat category and within it there are a diverse range of features supporting different communities of plants and animals. The watercourses themselves come in many types from large natural rivers, to man made canals and small drainage ditches.
- 7.82 Rivers are dynamic systems which, in their natural state, continually modify their form. However, few rivers have stretches that have not in some way been physically modified by man.
- 7.83 The nature of individual rivers changes along their length, with small, fast-flowing upland streams developing into broad slow moving meandering rivers in their lower reaches. The water chemistry of rivers also varies considerably between different river types and is often dictated by the geology underlying the water catchment and changes in the nature of natural and man-made inputs.
- 7.84 As well as their intrinsic value, rivers and streams act as valuable wildlife corridors connecting otherwise isolated habitats.

Pendle

- 7.85 There are five Main Rivers in Pendle – Pendle Water, Walverden Water, Trawden Water, Colne Water and Stock Beck – and numerous tributaries/streams; 30km of which have been 'enmained' because of their tendency to flood following periods of heavy or continuous rain.
- 7.86 Rising in the Pennine Hills these rivers are characteristically fast flowing spate rivers. Their flora is limited by periodic scouring. Exposed shingle at the margins and in mid-river is a characteristic feature. These are valuable habitats for a wide number of invertebrates as well as birds and plants. Where water quality permits trout are a characteristic fish and salmon have been recorded in the lower reaches of the Calder/Pendle Water.
- 7.87 By far the most important watercourse in the south of the Borough is Pendle Water, which rises on the slopes of Pendle Hill as Ogden Clough. It cuts a deep valley between Barley Moor and Spence Hill, where it feeds two reservoirs. To the east of Roughlee it is joined by Blacko Water and it then moves south through Higherford and Barrowford, where Colne Water joins from the east. Pendle Water subsequently runs west towards its confluence with the River Calder north west of Burnley.
- 7.88 In the north Stock Beck and its tributaries drain the area around Barnoldswick. New Cut and Earby Beck drain the eastern part of West Craven between Foulridge and the border with North Yorkshire.

Figure 7.1 – Pendle's Rivers

- 7.89 The Environment Agency's General Quality Assessment (GQA) provides water quality data for the rivers in Pendle, for chemical and biological criteria and phosphate and nitrate concentrations. The agency maps 'Chemical Quality of Rivers in Lancashire' 2002 indicates that, generally, water quality is higher in the tributaries of the Main Rivers but that no watercourse has a GQA of less than 'Fair'. The main tributaries of Colne Water are all classified as 'Good,' except for Wycoller Brook, which is classified 'Very Good'. Colne Water and Pendle Water are both classified as 'Good'.
- 7.90 Within the urban areas many rivers have been canalised in order to speed up water flow, and culverted. This reduces both their aesthetic quality and impedes their role as wildlife corridors and can have implications for increased risk of flooding downstream.
- 7.91 The Leeds and Liverpool Canal runs through the heart of the Borough in a roughly north to south direction. For most of its length it is designated as a Biological Heritage Site (BHS) the remainder being site of Local Natural Importance (LNI), not only in recognition of the habitats it supports, but also for its role as a wildlife corridor, particularly in the urban areas it passes through.
- 7.92 There are no natural lakes in Pendle and relatively few ponds, either natural or man-made. Many former mill ponds and lodges have been filled in to provide additional car parking, expansion opportunities etc. over the years. The area's working reservoirs are owned either by British Waterways, and serve to balance water levels in the Leeds and Liverpool Canal, or United Utilities to provide a water supply to the area. Several reservoirs in Pendle have been granted BHS status.

Further information

7.93 There is no online information resource addressing the biodiversity aspects of rivers, lakes or ponds in Pendle.

7.94 For those parts of the Leeds and Liverpool Canal and the reservoirs that have been granted BHS status further information is available from:

Peter Jepson
Specialist Advisor (Ecology)
Lancashire County Council
Winckley House
Cross Street
Preston
PR1 8RD

Tel: 01772 661729
Email: peter.jepson@lancashire.gov.uk

 <http://www.lancashire.gov.uk/environment/ecology/bhs.asp>

7.95 The Lancashire Environment Record Network (LERN) holds various site-based survey details some of which relate to the 97 ponds identified in Pendle.

Nik Bruce
Local Record Centre
Development Officer
Lancashire County Council
Guild House
Cross Street
Preston
PR1 8RD

Tel: 01772 533896
Email: nik.bruce@lancashire.gov.uk

7.96 The habitat action plan for rivers and streams can be found at:

 www.lancspartners.org/lbap/habitat_plans.asp

Targets

7.97 To encourage and assist landowners to manage their land, water courses and ponds in an appropriate and sympathetic manner and where appropriate to create new ponds, so as to maintain or improve the biodiversity and site linkages. This is a function of Lancashire County Council and Pendle Borough Council and can be achieved in a number of ways; for example, through the development control process.

7.98 The Environment Agency is the main statutory body engaged in the regulating of watercourses and their associated habitats. The Agency is a statutory consultee on all planning applications affecting watercourses and its consent is required for operations within eight metres of a main river. There is a general presumption against development on the functional floodplain.

7.99 The various indicators of habitat quality, together with a list of communities and species associated with Rivers and Streams, are included in the relevant Habitat Action Plan (Para 7.95). This also includes targets and proposed actions.

Potential Threats

- 7.100 The UK BAP identifies the main threats as pollution, excessive abstraction, unsympathetic engineering works, inappropriate floodplain development and poor bankside management.
- 7.101 In Pendle, pollution and recreational pressures are the main threats. Many human activities and their by-products have the potential to pollute water. Large and small industrial enterprises, the water industry, the urban infrastructure, agriculture, horticulture, transport, discharges from abandoned mines, and deliberate or accidental pollution incidents all affect water quality. Pollution may arise at point source, such as discharges through pipes, or may be more dispersed and diffuse. Both sources may be made worse by adverse weather conditions.
- 7.102 Any of these occurrences could lead to habitat fragmentation, increasing the risk of habitat degradation, associated (local) species extinction and the subsequent long-term viability of the site.

Planning

- 7.103 Locally protection is afforded by Policy 4D: Natural Heritage – Wildlife Corridors, Species Protection and Biodiversity seeks to preserve and enhance the biodiversity function of important linear features and Policy 7: Water Resource Protection, which restricts development in the vicinity of groundwater resources and surface water bodies (rivers, streams, lakes and ponds).
- 7.104 You should refer to a copy of the Replacement Pendle Local Plan (2001-2016), which will place these policies in their strategic context (Pages 13-14) and provide a reasoned justification for the policy itself (Pages 36-37 and Pages 41-42 respectively).

Species-rich neutral grassland

Introduction

- 7.105 Lowland pasture and upland hay meadows occur on neutral soils with low-intensity farming practices. Species rich examples can also be found on roadside verges, railway cuttings, churchyards and steep reservoir embankments.
- 7.106 Species rich grasslands not only include those meadows and pastures with a wide range of flowering herbs, grasses and sedges, but also those rich in fungi. They can support important numbers of breeding birds (e.g. curlew). But, not only do they have a high intrinsic value for their importance for nature conservation, they also enhance the landscape and offer high amenity value.
- 7.107 Many species associated with this habitat type are in serious decline at a national level. The main reason for this is changing agricultural practices in the 20th century. During this period more intensive farming practices saw many long-established meadows converted to arable farming, silage production and intensive grazing.

Pendle Overview

- 7.108 There are estimated to be approximately 11,000ha of herb rich neutral grassland surviving in England, with less than one-tenth being upland hay meadow. Accurate figures are, however, not available. Whilst the Phase 1 habitat Survey (1988-1992) recorded 383ha of herb rich neutral grassland, more recent estimates by English Nature put the figure at around 860ha.
- 7.109 The Lancashire BAP records both lowland pasture and upland hay meadow in Pendle. Examples of lowland pasture are restricted to the fringes of the Forest of Bowland and the South Pennine Moors. Upland hay meadows are an increasingly rare and vulnerable habitat, with good examples rarely consisting of more than two or three adjacent fields.
- 7.110 A number of examples of species-rich neutral grassland have been designated as Biological Heritage Sites under NVC guidelines Gr1 (Areas of ancient semi-natural limestone and neutral grasslands over 0.5 hectare) and Gr3 (Areas of old established semi-natural grassland over 0.5 hectare). These sites are listed below, but further information on each site can be found in Appendix 7.
- | | | | |
|---------------------------------------|-----------|-----|-----------------|
| 1. Fir Trees Brook Pasture | BHS | Gr3 | Higham |
| 2. Moor Isles Clough | BHS | Gr3 | Reedley Hallows |
| 3. Higher Old Laund Pastures | BHS | Gr3 | Fence |
| 4. Catlow Valley | BHS | Gr3 | Nelson |
| 5. Gib Hill Fields | BHS | Gr3 | Nelson |
| 6. Lomeshaye Marsh and Green | LNR / BHS | Gr3 | Nelson |
| 7. Barley Lane Fields | BHS | Gr3 | Barley |
| 8. Barley Car Park Field | BHS | Gr3 | Barley |
| 9. Barley Road Pasture | BHS | Gr3 | Barley |
| 10. Black Moss Pasture | BHS | Gr3 | Barley |
| 11. Black Moss Reservoirs | BHS | Gr3 | Barley |
| 12. Lower Ogden Reservoir Grasslands | BHS | Gr3 | Barley |
| 13. Castor Gill | BHS | Gr3 | Roughlee |
| 14. Hollin Brow | BHS | Gr3 | Roughlee |
| 15. Claude's Clough / Admergill Water | BHS | Gr3 | Blacko |
| 16. Lower Blacko Water | BHS | Gr3 | Blacko |
| 17. Colne Water Pastures | BHS | Gr3 | Trawden |
| 18. Gilford Clough / Trawden Brook | BHS | Gr3 | Trawden |
| 19. Turnhole Flushes and Grassland | BHS | Gr3 | Trawden |
| 20. Bank House Flushes | BHS | Gr3 | Trawden |
| 21. Wycoller Beck | BHS | Gr3 | Wycoller |
| 22. Emmott House Grassland | BHS | Gr3 | Laneshaw Bridge |
| 23. Broach Pasture | BHS | Gr3 | Foulridge |
| 24. Sandhole Clough | BHS | Gr3 | Foulridge |
| 25. Sough Pasture | BHS | Gr3 | Kelbrook |
| 26. Harden Clough | BHS | Gr3 | Kelbrook |
| 27. Kelbrook Moor and Woods | BHS | Gr3 | Kelbrook |
| 28. Birch Hall Lane Pasture | BHS | Gr3 | Earby |
| 29. Windle Field | BHS | Gr3 | Earby |
| 30. Lodge Hill Syke | BHS | Gr3 | Bracewell |
- 7.111 Several other examples of species-rich neutral grassland are recognised as being present in Special Biodiversity Verges (see below).

Further Information

- 7.112 The habitat action plan for species-rich neutral grassland can be found at:

 www.lancspartners.org/lbap/habitat_plans.asp

Targets

- 7.113 The various indicators of habitat quality, together with a list of communities and species associated with species-rich neutral grassland, are included in the relevant Habitat Action Plan (Para 7.110). This also includes targets and proposed actions.

Potential Threats

- 7.114 A high proportion of species-rich neutral grassland occurs on flat topography over deep soils. Consequently these sites can be readily improved for agricultural use. The intensification of dairy farming and the rearing of livestock in lowland areas has resulted in the loss of many fine examples. In the upland fringes losses have been mainly due to grazing by sheep. The loss is less apparent than for many habitats, as the landscape remains predominantly pastoral despite the reduction in biodiversity value.
- 7.115 The application of artificial fertilisers and slurry raises soil nutrients to artificially high levels. This favours the growth of vigorous grass species that out compete and smother the flowering herbs, but simply poisons and kills off some sedges, orchids and fungi.
- 7.116 In contrast silage fields are cut two to three times per year, so flowering herbs are unable to flower and set seed, so that eventually they are lost from the grassland. This regular cutting also makes the habitat less suitable for breeding birds. Continuously high levels of grazing cause similar issues.
- 7.117 The ploughing up and re-seeding with rye-grass mixtures can result in the loss of such habitats in a single catastrophic event.

Special Biodiversity Verges (SBV)

Introduction

- 7.118 Outside Lancashire's urban areas the landscape has been intensively farmed. After the Second World War land drainage and the use of artificial fertiliser lead to increased production at the expense of biodiversity.
- 7.119 Roadside verges are widely recognised as making a major contribution to the nations semi-natural grassland resource. Some roadside verges assume particular significance as a relict of lowland semi-natural grassland and as wildlife corridors. They retain a much greater variety of wildflowers than the fields and meadows that they border.
- 7.120 There are UK Habitat Action Plans (HAPs) for lowland calcareous grassland, lowland neutral grassland and lowland dry acid grassland, and Lancashire HAPs for calcareous grassland and species-rich neutral grassland.

- 7.121 These verges support many different semi-natural habitats and sometimes support plant and animal communities which are important in their own right. Other minor habitats associated with roadside verges include hedges, ditches and scrub, and some run through areas of ancient woodland or wetland. On occasion they may also help to retain features of landscape, historic or archaeological importance.

Pendle

- 7.122 There are 11 Special Biodiversity Verges in Pendle. These sites are listed below, but further information on each site can be found in Appendix 7.

1. Back Lane	North-east of Higham
2. Croft Top	North-west of Higham
3. Guide Lane	East of Higham
4. Barley Road	East of Barley
5. Barley Lane	North of Barley
6. Stang Top Road	North of Roughlee
7. Black Moss Road	North-west of Roughlee
8. Wheathead Lane	North-east of Roughlee
9. Gisburn Old Road	North of Blacko
10. Barnoldswick Road	North-east of Blacko
11. Brogden Road	North of Barnoldswick

Table 7.3 – Special Biodiversity Verges

Category	Lancashire	Pendle
Total number	177	11
Total area	33.0 ha	0.63 ha
Total length	N/A	2.275 km

Source: Lancashire Environment Record Network (January 2010)

Site information

- 7.123 There is no online information currently available on Special Biodiversity Verges in Pendle, or Lancashire. Species lists and digital boundaries for special wildflower verges in Lancashire are available via the Lancashire Environment Record Network (LERN).

Nik Bruce
Local Record Centre
Development Officer
Lancashire County Council
Guild House
Cross Street
Preston
PR1 8RD

Tel: 01772 533896
Email: nik.bruce@lancashire.gov.uk

Targets

- 7.124 All Special Biodiversity Verges were re-surveyed in 2006 and are managed sympathetically by Lancashire County Council. Work on updating the management plans for these sites is currently underway.

- 7.125 In the Forest of Bowland Special Biodiversity Verges have recently been marked with a triangle containing the letters 'SI' drawn on the road; one triangle at the start and one at the end with arrows to indicate the direction. These markings are for the use of verge cutting contractors. Some of these Special Biodiversity Verges may also be designated as Biological Heritage Sites (BHS).
- 7.126 Annual species should be left to set and distribute seed before being cut down and the debris removed. Other species may need additional measures. Verges are designated by Lancashire County Council and Craven District Council.

Potential Threats

- 7.127 Work to Special Biodiversity Verges can be carried out by local landowners, or others, without the consent of Lancashire County Council. Such work may not be sympathetic to the wildflowers that are present. Severe and extensive cutting of verges can prevent flowering and seeding of interesting species.
- 7.128 With intensive farming becoming the dominant land use in recent years, roadside verges have become increasingly valuable as wildlife sites. But the total number and area of roadside verges, and those of conservation value, have undoubtedly been much reduced over recent years, due largely to road improvement schemes and the loss of traditional management practises. The hand cutting of grass verges and removal of cuttings, coppicing and even grazing has now been replaced by flail cutting, or no cutting at all. And since the 1960s and 1970s there has been an increase in the use of herbicide sprays. In some instances, these changes in the management of roadside verges have been at the expense of the nature conservation interest.
- 7.129 In addition to inappropriate management or husbandry there are numerous other factors affecting this habitat. These include pollution, fertilizer run-off from adjacent farms, recreational pressures, vandalism and structural disturbance from development. Any one of these could lead to habitat fragmentation, increasing the risk of habitat degradation, associated (local) species extinction and the subsequent long-term viability of the site.
- 7.130 If evidence shows that a planning policy or development activity in Pendle is likely to threaten the conservation objectives, or site integrity, of a Special Wildflower Verge, alternative policy options, or possible mitigation measures, will be considered.

8. Landscape Ecology

Introduction

- 8.1 Up to this point there has been a strong focus on biodiversity. This chapter looks briefly at the wider landscape considerations, which may reflect and/or have a positive impact on biodiversity and ecological processes.
- 8.2 At this point it is probably appropriate to briefly consider two emerging areas of planning policy that seek to protect and enhance the natural environment.

Ecological Frameworks

- 8.3 The land use planning system has traditionally approached nature conservation through the identification, designation and protection of sites considered to be of high nature conservation value, and the protection of a small list of specially protected species. These measures, although successful in their own right, have not been effective in preventing a significant decline in both habitats and species in the wider landscape.
- 8.4 National planning policy (PPS9) requires additional and new approaches to nature conservation to be adopted involving habitat creation, repair and maintenance in the wider landscape and the establishment of connections between areas of important habitats.
- 8.5 The development of ecological frameworks uses the principles of landscape ecology¹⁶ to inform and guide actions for habitat creation and repair. Plotting the extent and distribution of habitats and land uses in Pendle (see Figures 9.2-9.4) reveals that the borough is biologically diverse, but that its habitats are generally small and fragmented. Linking and buffering these habitats to form an interconnected habitat network is difficult to achieve, particularly in built-up areas. But, by identifying broad areas that share similar ecological characteristics (Figure 3.6) rather than concentrating on recreating and connecting selected habitat types, species hotspots and Biodiversity Opportunity Areas can be identified where locally specific actions will apply. Any ecological framework will be a major component in any Green Infrastructure plan (see below).

Green Infrastructure

- 8.6 Green Infrastructure is the term that is now commonly used to refer to “the network of natural environmental components and green and blue spaces that lie within and between (our) cities, towns and villages, which provides multiple social, economic and environmental benefits. In the same way that the transport infrastructure is made up of a network of roads, railways, airports etc., Green Infrastructure has its own physical components, including parks, rivers, street trees and moorland” (North West Green Infrastructure Guide 2008).

¹⁶ Landscape ecology refers to the mosaic of small semi-natural habitats and land in non-intensive agricultural use.

- 8.7 Green Infrastructure is principally concerned with how people interact with these 'green' spaces. It is designed and managed to be a multifunctional resource capable of delivering a wide range of environmental and quality of life benefits for local communities. Key components include parks, open spaces, playing fields, woodlands, allotments and private gardens. Habitats designated for their biodiversity value, or forming part of a wider ecological framework will form an integral part of this green Infrastructure network by virtue of their role as transit sites for wildlife, enabling species to move around the area for successful feeding, breeding etc.
- 8.8 Planning for Green Infrastructure will help to deliver new elements for inclusion in the ecological framework, providing valuable biodiversity benefits. Integrating the ecological framework with emerging strategies and programmes for regeneration and the land use planning will help to safeguard and enhance the contribution that the ecological framework can make to biodiversity in Pendle.

Landscape Character

- 8.9 Several studies have sought to identify indicative landscapes across the country and more detailed work has been carried out by Lancashire County Council.
- 8.10 Whilst not directly concerned with protecting and enhancing biodiversity many of these landscape designations indirectly support this important objective. These designations help to inform planning policy and designations such as Areas of Outstanding Natural Beauty (AONB) can indirectly help to protect valued, but undesignated, habitats in the open countryside from inappropriate development.
- 8.11 The following pages outline the main landscape assessments relevant to biodiversity in Lancashire. There is no attempt to identify, or assess, the hierarchy of these various assessments, or link them to relevant Government policy.

Natural Areas

- 8.12 Natural Areas are formally defined sub-divisions of England, each with a characteristic association of wildlife and natural features. Each Natural Area has a unique identity resulting from the interaction of wildlife, landforms, geology, land use and human impact.
- 8.13 They were formally defined in the mid 1990s as 'biogeographic zones which reflect the geological foundation, the natural systems and processes and the wildlife in different parts of England, and provide a framework for setting objectives for nature conservation' (Biodiversity: The UK Steering Group Report, HMSO, 1995).
- 8.14 Their purpose is to provide a wider context for nature conservation action. Natural Areas take into account not only the wildlife and natural features of the landscape, but also the views of the people who live and work there. As a result their descriptions incorporate a sense of place. They set objectives, define national priorities and local targets, and decide where in England resources should be focused to best effect. A result of this is that national targets can be converted into local action, helping people to 'think globally and act locally'. The instigation of local action by local people is a key ambition of the Natural Area approach.

- 8.15 Natural Areas provide a consistent, ecologically coherent countrywide framework to focus national targets to a level that can be used locally. Examples of their use include their role as a means to target the Countryside Stewardship scheme, administered by DEFRA, and the breakdown of national targets or priorities, such as those set out in the Biodiversity Action Plan and the Habitats Directive, to a more local level. Further information on Natural Areas can be found at:

 www.naturalareas.naturalengland.org.uk/Science/natural/NA_search.asp

- 8.16 Information on the three Natural Areas to be found in Pendle was prepared for the English Nature North West Team in March 1997 and published by English Nature in November 1998. The reports can be accessed via the following links:

1. Forest of Bowland (NA12)

 www.naturalareas.naturalengland.org.uk/Science/natural/NA_Details.asp?N=&R=2&NA_Id=12

2. Lancashire Plain and Valleys (NA13)

 www.naturalareas.naturalengland.org.uk/Science/natural/NA_Details.asp?N=&R=2&NA_Id=13

3. Southern Pennines (NA14)

 www.naturalareas.naturalengland.org.uk/Science/natural/NA_Details.asp?N=&R=2&NA_Id=14

National Character Areas

- 8.17 The Character of England Landscape, Wildlife and Cultural Features Map produced in 2005 by Natural England's with support from English Heritage, was an update to the 1996 map. The map combines English Nature's Natural Areas and the former Countryside Commission's Countryside Character Areas into a map of 159 National Character Areas (NCAs)¹⁷ for the whole of England.

- 8.18 This map provides a picture of the differences in landscape character at the national scale. It is accompanied by character descriptions of each NCA showing the influences which determine the character of the landscape.

- 8.19 The NCAs are a widely recognised national spatial framework, used for a range of applications. They form part of the data gathered for a Landscape Character Assessment. NCAs either match or rest within Natural Area boundaries, but their boundaries are not precise and should be considered as broad zones of transition. Further information on NCAs is available via the following weblink.

 <http://www.naturalengland.org.uk/ourwork/landscape/englands/character/areas/default.aspx>

- 8.20 There are three NCAs in Pendle and the features that define their landscape are recorded in individual descriptions that explain what makes one area different from another and show how that character has arisen and how it is changing. The text for each of the three NCAs to be found in Pendle can be accessed via the following weblinks.

¹⁷ National Character Areas were previously referred to as Joint Character Areas (JCA).

1. Bowland fringe and Pendle Hill (JCA33)



http://www.naturalengland.org.uk/ourwork/landscape/englands/character/areas/bowland_fringe_and_pendle_hill.aspx

2. Lancashire Valleys (JCA35)




http://www.naturalengland.org.uk/ourwork/landscape/englands/character/areas/lancashire_valleys.aspx

3. Southern Pennines (JCA36)



http://www.naturalengland.org.uk/ourwork/landscape/englands/character/areas/southern_pennines.aspx

Lancashire Landscape Strategy


- 8.21 In February 2001, Lancashire County Council published the Lancashire Landscape Strategy. This comprises two reports, the Landscape Character Assessment and the Landscape Strategy. The purpose of the strategy is to help us understand how the present day landscape has been created. It also aims to help guide landscape change so that it has a positive influence, reinforcing distinctive landscape character and sustaining the most sensitive and valuable parts of the landscape.
- 8.22 The first part of the Landscape Strategy classifies the landscapes of Lancashire and Craven District up to the Yorkshire Dales National Park boundary into 24 distinct Landscape Character Types defined by the physical influences of their geology, topography and ecology and human influences of activity and culture from the Stone Age to the present day.
- 8.23 Whilst Landscape Character Types are generic and each type may occur in different locations, Landscape Character Areas are specific to a locality and have a distinctive sense of place. Character Areas have been identified in each of the Landscape Character Types, e.g. within the Moorland Plateaux type, South Pennine Moors and High Bowland Plateaux form specific and distinct areas.
- 8.24 The second part of the Strategy deals with strategies and recommendations for landscape conservation, enhancement, restoration or creation for each of the Landscape Character Types. These recommendations are based on an analysis of the key environmental features and forces for change operating in each of the Landscape Character Types.
- 8.25 The various components of the Lancashire Landscape strategy can be viewed at:
 www.lancashire.gov.uk/environment/landscape/index.asp
- 8.26 In December 2008, Lancashire County Council commissioned Chris Blandford Associates to prepare a Landscape Character Assessment for the Forest of Bowland AONB at a scale of 1:25000
- 8.27 This work confirmed the diversity of the Forest of Bowland's landscapes, identifying, mapping and describing 14 Landscape Character Types and 82 Landscape Character Areas within only 803 square kilometres.

- 8.28 Parts of the area around the Pendle Hill outlier in Pendle are variously classified as Unenclosed Moorland Hills (Typology B), Enclosed Moorland Hills (Typology C), Moorland Fringe (Type D), Forestry and Reservoir (Typology M), and Farmed Ridge (Type N).
- 8.29 Further information on the Landscape Character Assessment for the Forest of Bowland AONB is available via the following weblink:



http://www.forestofbowland.com/landscape_character

Planning

- 8.30 The Lancashire Landscape Strategy formed the basis for the landscape elements of the Supplementary Planning Guidance (SPG) on Landscape and Heritage in Lancashire. Produced by Lancashire County Council and the Unitary Councils of Blackburn with Darwen and Blackpool (as Joint Structure Plan Authorities) it helped to support Policies 20 and 21 of the Replacement Joint Lancashire Structure Plan 2001-2016.
- 8.31 The SPG was subject to public consultation from July to September 2003 and August to September 2005. Whilst it did not form part of the Replacement Joint Lancashire Structure Plan 2001-2016, it could be taken into account as a material consideration in deciding planning applications.
- 8.32 The SPG was adopted by Blackpool Borough Council in December 2005 and by Blackburn with Darwen Borough Council in February 2006 and by Lancashire County Council in April 2006.
- 8.33 The Replacement Joint Lancashire Structure Plan 2001-2016 was replaced by the North West of England Plan: Regional Spatial Strategy to 2021 (adopted September 2008). As such the SPG is no longer a material consideration when determining planning applications. It does, however provide a valuable source of information on the landscape character of the county (See Figure 3.3).
- 8.34 The RSS did not contain policy guidance at the same level of detail as the SPG, so it was considered that the SPG remained relevant in providing guidance for the determination of planning applications; informing the production of Local Development Frameworks and setting out good practice for development taking into account landscape and heritage matters. Its role as a good practice guide that contains strategic guidance, recommendations and targets that remain relevant is increasingly important following the revocation of RSS in July 2010. Copies of the SPG can be viewed at:
-  www.lancashire.gov.uk/corporate/web/view.asp?siteid=3654&pageid=11650&e=e
- 8.35 Locally protection is offered to the rural landscape in Pendle through a combination of planning policies in the Replacement Pendle Local Plan (2001-106):
- Policy 1: Development in the Open Countryside
 - Policy 2: Area of Outstanding Natural Beauty
 - Policy 3: Green Belt.

- 8.36 You should refer to a copy of the Replacement Pendle Local Plan (2001-2016), which will place these policies in their strategic context (Pages 13-14) and provide a reasoned justification for the policy itself (Pages 26-28, Pages 28-29 and Pages 29-30 respectively).
- 8.37 Outside of specific environmental designations PPS7¹⁸ states that tools such as landscape character assessment should provide sufficient protection to rural areas without restricting acceptable, sustainable development and economic activities that underpin their vitality.
- 8.38 In 2002 Pendle Council adopted Supplementary Planning Guidance (SPG) addressing Development in the Open Countryside. This supports the position that development should be appropriate to the landscape character type within which the development is to be situated.
- 8.39 There are five landscape character types for the countryside areas of Pendle containing seven recognised character types (Figure 3.3).
1. Moorland Plateaux (1) and Moorland Hills (2)
 2. Moorland Fringe (4)
 3. Industrial Foothills and Valleys (6) – Valley Sides / Western Industrial Foothills and Rural Valleys / Eastern Industrial Foothills
 4. Drumlin Field (13) and Rolling Upland Farmland (14)
 5. Industrial Age (23)

¹⁸ Planning Policy Statement 7: Sustainable Development in Rural Areas (Communities and Local Government, 2004)

9. Using the Pendle Biodiversity Audit

Introduction

- 9.1 PAS 2010 is a Publicly Available Specification (PAS) developed by the British Standards Institution in August 2006 to help the planning system play its part in halting the decline of biodiversity.
- 9.2 PAS 2010 provides recommendations for the integration of biodiversity conservation into land use and spatial planning in the UK. It identifies where competent authorities have clear responsibilities for biodiversity conservation, and recommends tasks that should be undertaken to discharge their planning functions in a manner that is compliant with statutory obligations, government policy and professional good practice.
- 9.3 The RTPI Head of Policy, Rynd Smith, is quoted as saying
“The RTPI commends PAS 2010 to planners as a foundation stone from which to halt biodiversity decline by 2010. Good spatial planning can build from this foundation. The RTPI’s New Vision for Planning envisages that biodiversity should make an integrated contribution towards more liveable and prosperous places, where planners do not just halt loss, but deliver net biodiversity gains as part of green infrastructure provision. Sound development plan policies that deliver good design, and support creative development management can all help to realise this broader vision.”
- 9.4 PAS 2010 is reinforced by the Natural Environment and Rural Communities (NERC) Act 2006, which was granted Royal Assent on 30th March 2006 and took effect on 1st October 2006. Section 40 of the Act places a duty on **all** public sector bodies, including Local Authorities, to consider the effect on biodiversity of all the work they do. The Act states that ‘Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity’.
- 9.5 Appendix 2 provides a guide to how the Pendle Biodiversity Audit will be used as part of the evidence base in the local planning process.

Planning

- 9.6 National planning guidance is contained in Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9) (Communities & Local Government, September, 2004).
- 9.7 In addition Planning Policy Guidance Note 17: Planning for Open Space, Sport and Recreation (PPG17) (Communities and Local Government, July 2002) has implications for biodiversity. The companion guide to PPG17, Assessing Needs and Opportunities, states that the primary purpose of designating natural greenspaces is for their value to wildlife conservation, biodiversity and for environmental education and awareness.

- 9.8 On 6th June 2010 the Government announced that Regional Spatial Strategies (RSS) were to be revoked with immediate effect. It is now the role of local authorities to promote an integrated approach to delivering a better environment through land and water management, addressing the relationship between new development and the environment and adaptation to the impacts of climate change.
- 9.9 A 'no net loss' approach needs us to identify, protect, enhance and manage our environmental assets. Priority will be given to conserving and enhancing areas, sites and features of international, national, regional and local landscape, natural environment and historic importance. So where development proposals affect any of these areas we should first avoid any loss or damage to the assets, then mitigate any unavoidable damage and compensate for loss or damage through offsetting actions.
- 9.10 The creation of a multi-functional network of green spaces is not aimed at preserving biodiversity, but the delivery of wider spatial outcomes that incorporate environmental, social and economic benefits. Whilst the biodiversity components of any green infrastructure network would retain their intrinsic value, its differing objectives cannot guarantee benefits for the biodiversity resource.
- 9.11 Locally the Pendle Biodiversity Audit provides information that can be used at a range of levels within the planning function.
- **Planning Policy:** The preparation of new policies an understanding of the local habitats and species, their location, potential threats and trends, areas of irreplaceable habitat, key habitat networks, and areas with potential for biodiversity enhancement (PPS9 paragraph 5 (ii)) is essential. The existence and protection of designated sites is an essential element of this process.
 - **Site Allocations:** Documents such as the Land-use Allocations Development Plan Document (DPD) and the various Area Action Plans will require similar information at a more localised level. This will allow biodiversity requirements to be fully taken into account when deciding which areas of land can reasonably be allocated for different types of development and those where development should be resisted or required to meet certain requirements. This information will not only relate to wildlife and habitats on the site itself, but must also consider the immediate surroundings and function of the site, in order to ensure that any development will not have a detrimental impact upon adjacent sites of biodiversity interest, or have an adverse impact on wildlife that uses the site as part of a movement corridor.
 - **Development Control:** Officers require access to up-to-date accurate information on biodiversity to ensure that their decisions on planning applications are adequate and can be validated, and in particular to scope the information required to be submitted with an application.
 - **Annual Monitoring Report:** This requires baseline data for habitats, species and designated sites so that they can be monitored, as both contextual and core output indicators.
- 9.12 Sustainability is at the heart of the new spatial planning process, allowing us to address the potential conflicts between the conservation of biodiversity and human activity at an early stage. A successful spatial (development) plan will achieve sustainable development outcomes, helping to reconcile different human activities by addressing the key drivers that lead to major land use changes.

- 9.13 Instrumental in identifying these key drivers for change is the process of Strategic Environmental Assessment (SEA). In the British planning system the EU requirement for SEA is addressed through a comprehensive Sustainability Appraisal (SA) process. This helps to identify the effects that these drivers for change are likely to have on biodiversity, thereby seeking to avoid any potential for conflict from the outset.
- 9.14 Spatial planning must also take into account the evolving legislative framework, particularly at the European Union (EU) level, including conventions, policies, regulations and directives. As landscapes, ecosystems¹⁹ and biodiversity associated with these are always changing due to a wide range of drivers, so does the EU legislative framework relating to biodiversity. These changes will need to be accommodated through the constant development of new approaches and methods.
- 9.15 As such planning policies need to be adaptable in order to take account of future monitoring (see Chapter 10) and new research. These findings will help to improve our understanding of the ecological interactions and processes necessary to sustain the composition, structure, and function of ecosystems over the long-term.
- 9.16 This is not an easy objective to achieve when the complexity of ecosystems and the vast array of interconnections that underlie their function are taken into account. But, it is this complexity and diversity that provides ecosystems with their resistance to, and resilience from, disturbance and gives them the ability to adapt to long-term changes.
- 9.17 Current trends in population growth and the inevitable demand for more natural resources will require careful management, particularly if we are to support our needs in a sustainable way. But, whilst people may be the cause of the most significant challenges to sustainability, as an integral component of any ecosystem they must be fully engaged in order to achieve sustainable management goals.
- 9.18 Identifying and engaging with relevant stakeholders, in the preparation of future policies, should be a key component of any spatial strategy. Sound data, thorough analysis and the sharing of knowledge helps all parties to gain an understanding of the issues, resulting in better management of the natural environment and the preparation of sound spatial plans.
- 9.19 The Pendle Biodiversity Audit is a key component in improving our understanding of the environment. It highlights the species and habitats that must be considered as part of the spatial planning process. At this point it is also worth noting that many species also rely on buildings (particularly birds for nesting and roosting), so the impact of development in the built environment can also have an impact on local biodiversity.
- 9.20 Key issues we will seek to address when applying an 'ecosystem approach' to spatial planning in Pendle are as follows:
- Identify the driving forces and pressures for change
 - Identify and involve key stakeholders
 - Examine the implications of change, at an appropriate level and scale
 - Consider short, medium and long term changes
 - Integrate habitat and species restoration and enhancement into change proposals in order to increase biodiversity, not just to compensate for losses.

¹⁹ The term ecosystem is used to refer to the combined physical and biological components of an environment.

- 9.21 Finally, increasing the capacity of the natural environment to adapt to climate change is a key priority. To date policies and plans have tended to focus on preventing the causes of change rather than adapting to them. Spatial planning also has a key role to play in helping biodiversity adapt to climate change. Principally this requires building resilience into the natural environment.
- 9.22 As well as landscape scale impacts on broad habitat types, the wellbeing and diversity of our wild species will also be affected by climate change. The ability of species to survive changing climactic conditions will be influenced by many factors other than adaptability. Perhaps the most important of these will be the ability to disperse unhindered through robust networks of suitable habitats, avoiding physical barriers and hostile land uses.

Adaptability and Biodiversity

The Planning and Climate Change Supplement to Planning Policy Statement 1 (PPS1) (CLG, 2007) refers to adaptation as:

“... adjustments to natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.”

DEFRA (2006) notes that:

“Adaptation is about increasing the resilience and therefore reducing the vulnerability of natural systems so that they can accommodate and respond to climate change.”

Finally Natural England pulls these together by stating that adaptation in relation to biodiversity is:

“...the process by which ecosystems and their component species, seek to adapt to the impacts of climate change, particularly through movement and colonisation of areas where conditions, including climactic conditions, are conducive to continued survival.”

- 9.23 Facilitating species movement, and enhancing the amount and distribution of suitable habitats, should be a key aspiration for spatial planning. Fragmented landscapes, where habitats are pressured or isolated, will find adaptation difficult to achieve without some form of direct (land management) or indirect (spatial planning) intervention.

Spatial Implications

- 9.24 Pendle is a predominantly rural area, with over two-thirds of its population concentrated in just four contiguous settlements in the south of the borough, namely: Nelson (29,000), Colne (18,000), Brierfield (8,000) and Barrowford (5,000). To the north Barnoldswick (10,000) and Earby (4,000) dominate the rural area of West Craven, whilst the intermediate rural areas are characterised by a series of dispersed villages and hamlets of varying size and function.
- 9.25 This gives Pendle three distinct spatial areas:
1. M65 Corridor – Nelson, Colne, Brierfield and Barrowford
 2. West Craven Towns – Barnoldswick and Earby
 3. Rural Pendle – areas of open countryside containing sixteen smaller villages and hamlets
- 9.26 The key features of each of these spatial elements, with specific reference to biodiversity and green infrastructure, are outlined below:

M65 Corridor

- 9.27 Nelson, Colne, Brierfield and Barrowford all grew to prominence with the development of the textile industry in the late 19th Century. The centre of each is still characterised by former textile mills surrounded by street upon street of terraced housing of varying quality.
- 9.28 In these built up, densely populated urban areas, green space is at a premium and a highly valued asset. Fragmented landscapes are a key feature. In particular managed spaces such as formal parkland, cemeteries and playing fields are an important asset for both the community and biodiversity. Unmanaged river banks, railway cuttings and the canal, together with areas of amenity greenspace serve to provide valuable green corridors linking these isolated but important natural and semi-natural urban habitats.
- 9.29 In particular the vegetated cuttings and embankments of the M65 motorway and the railway provide significant corridors running west from Colne towards Burnley and beyond. Along their length they intersect with the Leeds and Liverpool Canal, another important corridor which, together with the line of the former Colne to Skipton railway line, extends north towards the border with North Yorkshire.
- 9.30 The Pendle Open Space Audit (Pendle Council, November 2008) records deficiencies for natural greenspace in the Bradley and Southfield wards in Nelson and Barrowford. The two Nelson wards, together with Walverden and Whitefield, also record a deficiency for amenity greenspace. This illustrates the lack of natural and semi-natural greenspace in inner Nelson. It is noteworthy that these towns are compact and from most points in any of them, it is only a short distance to the urban/rural fringe and open countryside.

West Craven Towns

- 9.31 The inner urban areas of Barnoldswick and Earby, like the towns in the M65 Corridor, are also characterised by former textile mills and densely populated areas of terraced housing. Again green space is at a premium and a much valued asset. Informal amenity greenspace is in short supply, so formal parkland is an even more important asset in these two communities.
- 9.32 The principal green corridors through these urban areas are provided by small streams such as Gillians / Butts Beck in Barnoldswick and New Cut and Earby Beck in Earby. But along much of their length these watercourses are built over and culverted making any transition of species between fragmented urban habitats difficult to achieve.
- 9.33 The Pendle Open Space Audit records deficiencies for natural greenspace and amenity greenspace in the Craven ward, illustrating the lack of natural and semi-natural greenspace in the centre of Barnoldswick. However, the central areas of recreational open space, whilst not natural, do have value and are linked for the most part by streams such as Butts Beck.

Rural Pendle

- 9.34 The market towns, villages and hamlets of rural Pendle are home to less than one-third of the Borough's population. But they are set in a rich and diverse landscape that contains a wide variety of land types and uses from lowland agriculture to clough woodland to high open moorland. All of these contribute to a greater or lesser extent to wildlife and biodiversity and habitat fragmentation is not significant.
- 9.35 The importance and value of their contribution is reflected in the fact that almost one-quarter (23.2%) of all the open countryside in Pendle is covered by one of the many recognised designations for sites of biodiversity interest considered in more details in Chapters 5 and 6 of this Audit and summarised in Table 9.1 and Appendix 7.

Key Spatial Issues

- 9.36 Pendle contains a wide variety of habitats that are valuable for species that are not only of local significance, but are also of international importance. Offering continued protection to these sites and putting in place measures that ensure their future enhancement will be a major strand of our new spatial planning policies. But it is important to note that biodiversity is by no means restricted to these designated areas. The contribution made to habitat connectivity by infrastructure such as street trees and domestic gardens can be significant. However, as many streets comprise terraced housing, there is often little opportunity for trees and the houses mostly do not have gardens but simply a yard.

- 9.37 Strategic Objectives 9 and 10 in the Pendle Core Strategy are most relevant to biodiversity:
9. To protect and enhance and improve access to our green open spaces, sport and recreation facilities to improve health and well-being through the promotion of more active lifestyles, encouraging a greater appreciation of the enjoyment they provide and the valuable contribution they make to biodiversity.
 10. Ensure that new development respects our natural and man made heritage, by seeking to protect, maintain and enhance those sites and habitats which are valued for the positive contribution they make to the character of our landscape, townscape or biodiversity.
- 9.38 Breaking this objective down further, our key objectives for biodiversity in Pendle must be to:
1. Protect and enhance our existing biodiversity resource.
 2. Develop mitigation measures that promote a 'no net loss' approach, by offsetting²⁰ negative impacts and promoting positive gains for biodiversity.
 3. Increase the amount of amenity and natural greenspace in our urban areas, particularly in the central wards of Nelson and Barnoldswick, and establish a coherent network of green corridors, to improve habitat connectivity and help facilitate species transfer.
 4. Build resilience into the natural environment, helping to increase its capacity and ability to adapt to climate change.
- 9.39 The figures in Table 9.1 represent a simple analysis of the distribution of sites of biodiversity value across Pendle. The vast majority of sites lie within Rural Pendle and there is relatively little provision within our urban areas.
- 9.40 As the cost of developing brownfield land becomes increasingly prohibitive, the vulnerability of our existing urban habitats must be a concern, particularly within the settlements in the M65 Corridor. The potential loss of valuable greenfield sites within the urban areas will further increase habitat fragmentation and possibly threaten the long term viability of biodiversity interest on other sites in the immediate vicinity.
- 9.41 The protection of existing sites and improvement of connectivity between them, through a variety of means, will help to build a natural resilience to future changes. As such our spatial policies on biodiversity, green infrastructure and open space provision should seek to justify new provision by highlighting the benefits of improving linkages between different habitats. An overview of land use distribution is given at figure 9.2.
- 9.42 Establishing green corridors is also a key objective of the Lancashire Green Infrastructure Strategy (Lancashire Economic Partnership, January 2010).

²⁰ Biodiversity offsets are measurable conservation outcomes arising from actions designed to compensate for significant adverse impacts on biodiversity, which persist after appropriate prevention and mitigation measures have been implemented. Their goal is to achieve no net loss, or preferably a net gain, in the biodiversity resource with respect to species composition, habitat structure and ecosystem services.

Table 9.1 – Spatial Distribution of Protected Sites in Pendle

Designation	Urban				Rural Pendle		Pendle	
	M65 Corridor		West Craven Towns					
	No	Area	No	Area	No	Area	No	Area
Area (ha)	2,932	17.2%	1,093	6.4%	12,914	76.4%	16,939	100%
Population	59,423	66.6%	12,693	14.2%	17,132	19.2%	89,248	100%
SSSI	0	0 ha	0	0 ha	1	1,542 ha	1	1,542 ha
LNR	4	16 ha	0	0 ha	0	0 ha	4	16 ha
BHS ¹	5	38 ha	4	6 ha	53	1,251 ha	62	1,295 ha
LGS	2	4 ha	1	2 ha	0	0 ha	3	6 ha
LNI	4	15 ha	0	0 ha	3	216 ha	7	231 ha
Totals ²	15	71 ha	5	8 ha	57	3,003 ha	76	3,082ha
	19.7%	2.4%	6.6%	0.7%	73.7%	23.2%	100.0%	18.2%

Notes:

¹ These figures include details of six Ancient Woodlands and 11 Ancient Semi-natural Woodlands, all of which are designated as BHS.

² To avoid 'double-counting' the total area for the M65 Corridor excludes 2.13 ha as part of the site at Greenfield, Colne is designated as both a LNR and LNI. Similarly the total area for Rural Pendle excludes 6.29 ha at Antley Gate, Trawden parts of which are designated a BHS and LNI.

9.43 Policies should also recognise that individual sites can help to deliver wider spatial outcomes (e.g. contribute to living healthier lifestyles etc.). But, if green spaces are to successfully deliver social and economic objectives, as well as environmental ones, public accessibility will be a key issue. The relatively poor access that our urban populace has to sites of biodiversity value is, in part, highlighted by the poor accessibility scores achieved for access to LNRs in Pendle, where only 16 hectares worth of provision is available rather than the recommended 90 hectares.

9.44 Natural England have taken this further, by developing and adopting a set of Accessible Natural Greenspace Standards (ANGSt), which state that:

- No person should live more than 300 metres from their nearest area of accessible natural green space of at least 2 hectares in size.
- There should be at least one 20 hectare accessible natural green space within 2 kilometres of home.
- There should be one 100 hectare accessible green space within 5 kilometres of home.
- There should be one 500 hectare accessible green space within 10 kilometres of home.

- 9.45 Natural greenspace includes land, water and geological features that have been naturally colonised by plants and animals.
- 9.46 The continued management of these sites is vital for the maintenance of any biodiversity interest. The Council will encourage land owners to manage their land sensitively and will assist where possible through the development control process. Specialist advice is available from Pendle Council and a number of other organisations (see Chapter 11) who periodically offer grant assistance for stewardship and other initiatives.
- 9.47 On the following pages a series of maps help to illustrate the various components of our natural resource.
- Figure 9.1 Extent of the open countryside and principal landscape designations, together with the extent of our urban areas.
- Figure 9.2 International, national and local sites designated for their biodiversity value. These sites form the basis for our Ecological Framework (see Figure 9.4).
- Figure 9.3 Designations included in the Pendle Open Space Audit 2008. These will form the basis for a future Green Infrastructure Strategy. The sites shown also include designated sites (Figures 3.5 and 9.2) and future components of our Ecological Framework.
- 9.48 At this time Figure 9.4 is primarily a composite of Figures 9.2 and 9.3. It helps to show the relationship between the key components of a future Ecological Network²¹. Together with information from Figure 3.4 (Key Habitats) and Figure 3.6 (Natural Heritage Zones) it will allow us to prepare an indicative biodiversity resource and opportunity diagram for Pendle. This will be included in the Core Strategy and help to inform strategic planning policies, which will be a key component of our Ecological Framework²². It will also define those areas of opportunity where it will be a priority for us to protect and enhance our biodiversity resource. In these areas the buffering and linking of sites, that are important for nature conservation, will help to form a physical network of interconnected sites. Further assessment of the available information, additional survey work and public consultation is required before the Ecological Network for Pendle can be agreed upon.

²¹ An ecological network concentrates on buffering and linking existing sites considered important for nature conservation, to form a physical network of interconnected sites.

²² An ecological framework provides information that helps to coordinate nature conservation actions in the wider landscape.

Figure 9.1 – Extent of the Open Countryside

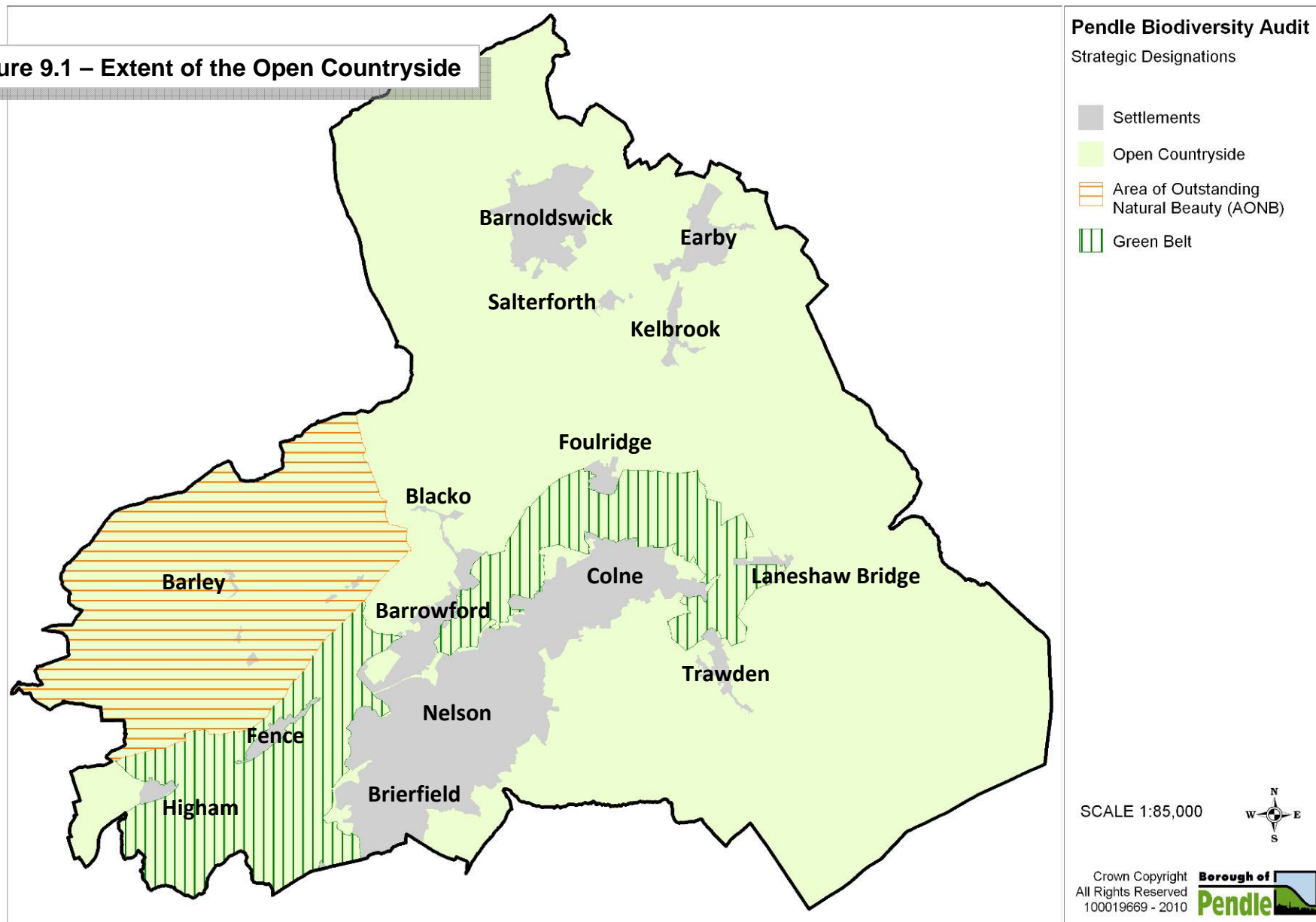


Figure 9.2 – Designated Sites of Biodiversity Interest

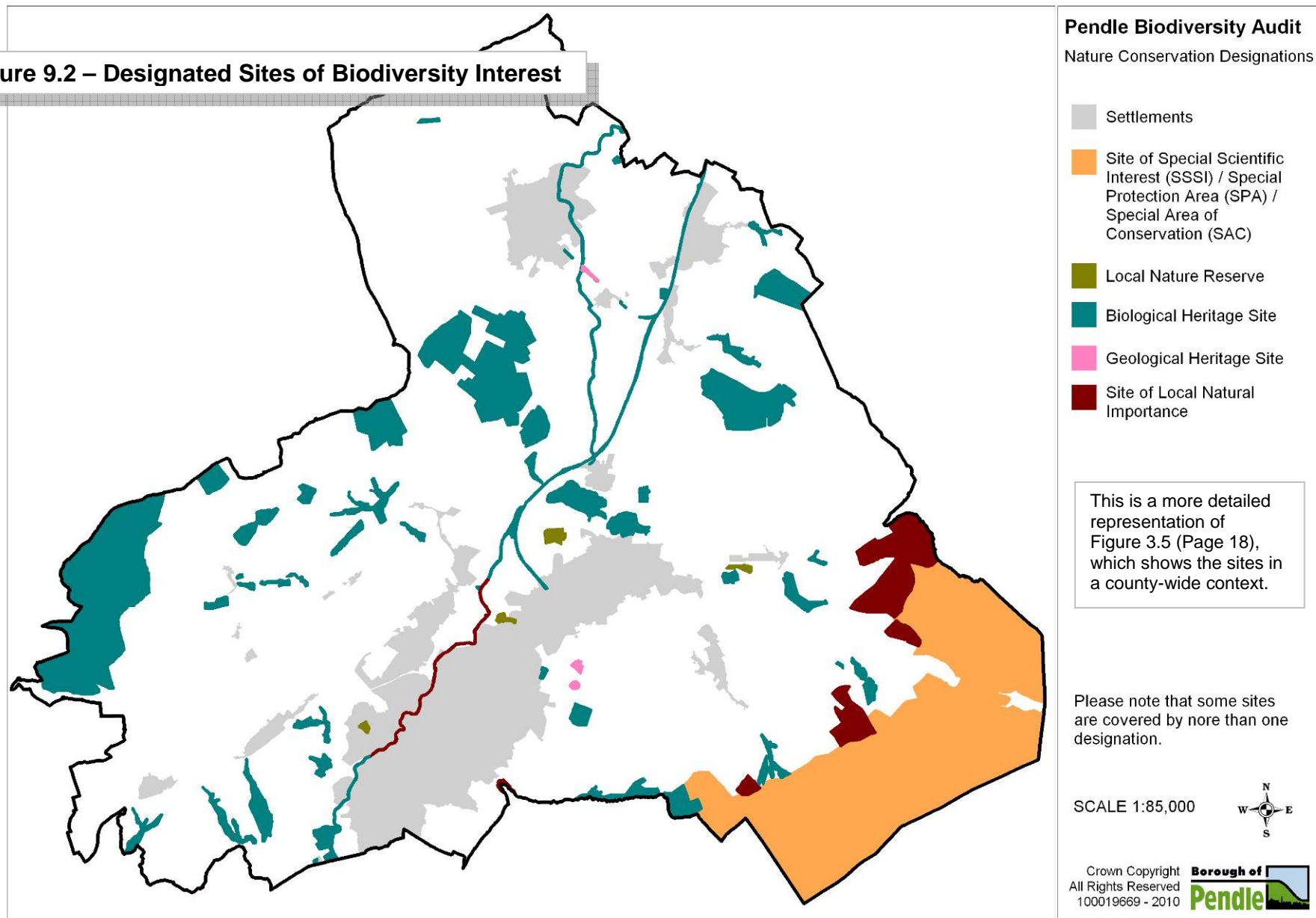


Figure 9.3 – Key Areas of Open Space

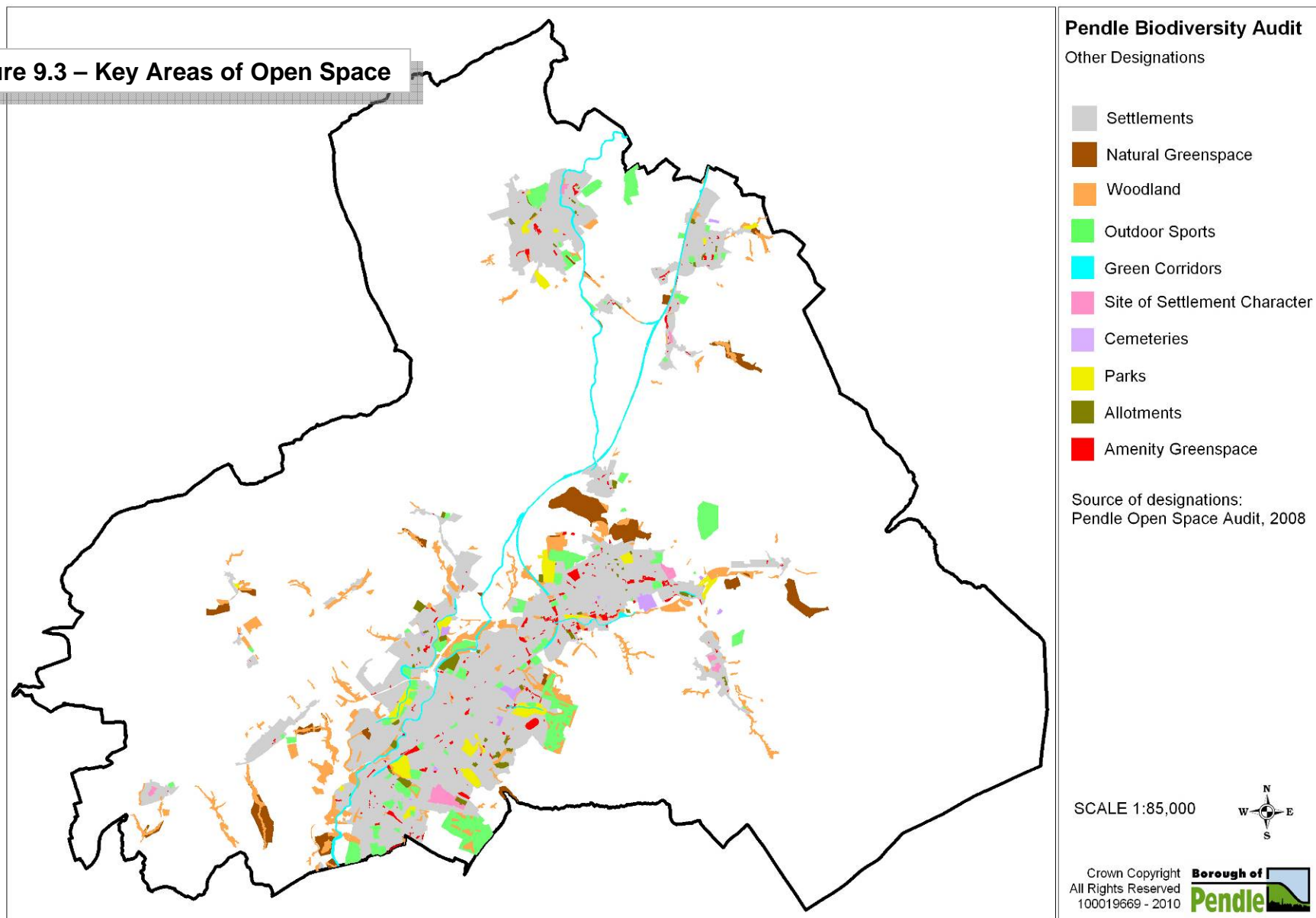


Figure 9.4 – Pendle Ecological Network**See Paragraph 9.48**

This map will be included in the Audit once work on the preparation of an Ecological Framework for Pendle has been finalised.

10. Monitoring

Introduction

- 10.1 Biodiversity brings many benefits to the local community. A good quality environment is not only important for biodiversity it also helps to improve people's health by providing recreational opportunities, offers an educational resource for people of all ages and supports the local economy.
- 10.2 Our valuable biodiversity resource is ultimately lost or conserved at the local level, so local monitoring is important. The evidence recorded in this audit represents a baseline for the information available on biodiversity in Pendle and will assist in the reporting of outputs that relate to biodiversity in Pendle.
- 10.3 Detailed monitoring is carried out through the use indicators, which measure progress against an objective or target that needs to be met.
- 10.4 Core Output Indicators tend to be mandatory and measure performance against a set of key objectives that contribute to the achievement of a national, regional or sub-regional target.
- 10.5 In contrast Contextual Indicators are often optional and seek to supplement the basic measure of performance by providing additional detail. They help to provide a better understanding of our biodiversity by monitoring trends over time, and recording the effects of delivery on protected / priority habitats and species, and designated wildlife sites.

Output Indicators and Area Agreements

- 10.6 Core Output Indicator E2 monitors the impacts of planning policies on our biodiversity resource, by recording losses or additions to biodiversity habitat. Progress against E2 is reported in the Council's Annual Monitoring Report (AMR), which is published and submitted to the Secretary of State for Communities and Local Government in December each year.
- 10.7 To help improve the long term delivery of biodiversity at the local level, the Local Area Agreement (LAA)²³ process places a statutory duty on local authorities to report to central Government on a national indicator (NI 197 – Improved Local Biodiversity) which records the positive management of local wildlife sites.

²³ Local Area Agreements (LAAs) set out the priorities for a local area agreed between central government and a local area (the local authority and Local Strategic Partnership) and other key partners at the local level. A multi-area agreement (MAA) is a cross-boundary LAA that brings together key players in flexible ways to tackle issues that are best addressed in partnership – at a regional and sub-regional level.

10.8 Local sites were chosen because they:

- are a comprehensive rather than a representative suite of sites;
- reflect local character and distinctiveness, but are recognised in national guidance; and
- represent one of the three pillars of a local biodiversity partnership, together with the Biodiversity Action Plan (BAP) and Local Records Centre.

10.9 NI197 is a simple performance indicator: $X \times Y / 100 = \%$

X = the number of local sites within the local authority area where positive management is being, or has been, implemented during the last five years.
Y = the total number of local sites within the local authority area at the time of reporting.

10.10 Positive conservation management is taken to include one or more of the following:

- A management plan is written and being implemented
- A management scheme (e.g. environmental stewardship) is being followed
- Management activity is being carried out in accordance with the relevant Biodiversity Action Plan
- Advice and conservation management is being provided by a local sites partnership and is being acted upon.

10.11 Information on national indicators can be found on the Joint Nature Conservation Committee (JNCC)²⁴ website.

10.12 Further details on the monitoring of Pendle's biodiversity resource are included in Appendix 3.

²⁴ JNCC is the statutory adviser to Government on UK and international nature conservation. Its work contributes to maintaining and enriching biological diversity, conserving geological features and sustaining natural systems.

11. Useful Contacts

- 11.1 There are a number of organisations that are concerned with biodiversity in the Pendle area, ranging from statutory bodies such as Natural England (formerly English Nature and the Countryside Agency) to local community groups such as the Friends of LNR Groups.
- 11.2 For further information on the Pendle Biodiversity Audit and your first point of contact in Pendle for all matters associated with wildlife habitats, species protection, trees and woodland is Chris Binney in the Planning Policy and Conservation team at Pendle Council. Contact details for Chris, and other sources of specialist advice and/or further information on biodiversity issues in the Pendle area, are given in the table below.

Organisation / Address	Contact / Telephone / Website	
Local Organisations		
Pendle Council – Biodiversity and Trees Planning Policy and Conservation Planning and Building Control Town Hall Market Street Nelson Lancashire BB9 7LG	☺	Chris Binney
	☎	01282 661729
	✉	ldf@pendle.gov.uk
Pendle Council – Local Nature Reserves Tourism & Community Initiatives Economic Development Unit Elliott House 9 Market Square Nelson Lancashire BB9 0LX	☺	Vaughan Jones
	☎	01282 661962
	✉	vaughan.jones@pendle.gov.uk
Lancashire County Council Ecology Unit Environment Directorate Guild House Cross Street Preston Lancashire PR1 8RD	☺	Peter Jepson
	☎	01772 534164
	✉	peter.jepson@lancashire.gov.uk
Lancashire Environment Record Network C/O Environment Directorate Lancashire County Council Guild House Cross Street Preston PR1 8RD	☺	Nik Bruce
	☎	01772 533896
	✉	nik.bruce@lancashire.gov.uk

Organisation / Address	Contact / Telephone / Website	
Wildlife Trust for Lancashire, Manchester & North Merseyside The Barn Berkeley Drive Bamber Bridge Preston Lancashire PR5 6BY	☺	John Lamb
	☎	01772 317240
	✉	jlamb@lancswt.org.uk
Heritage Trust for the North West Park Hill Colne Road Barrowford Nelson BB9 6JQ	☺	N/A
	☎	01282 877686
	✉	heritage.centre@pendle.gov.uk
Regional and National Bodies		
Natural England 3rd Floor Bridgewater House Whitworth Street Manchester M1 6LT	☺	N/A
	☎	0161 237 1061
	✉	northwest@naturalengland.org.uk
Forestry Commission NW England Region Area Office Linmere Delamere Cheshire CW8 2JD	☺	N/A
	☎	01606 889912
	✉	northwestfce@forestry.gsi.gov.uk
Environment Agency Lutra House Dodd Way, off Seedlee Road Walton Summit Bamber Bridge Preston Lancashire PR5 8BX	☺	N/A
	☎	08708 506506
	✉	enquiries@environment-agency.gov.uk

Appendices

Appendix 1 – Biodiversity Evidence Base for Pendle

Information	Reference Status	Description	Additional Information	Source / Weblink	Date
National Guidance on Biodiversity					
PPS9 – Biodiversity and Geological Conservation	Primary	Sets out the policies for protection of biodiversity and geological conservation through the planning system.		DCLG website	September 2004
Planning for Biodiversity and Geological Conservation: A Guide to Good Practice	Primary	Companion guide to PPS9 and Circular 6/2005		DCLG website	March 2006
ODPM Circular 06/2005 Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System	Primary	Administrative guidance on the application of the law to planning and nature conservation. It complements PPS9 and the accompanying Good Practice Guide.		DCLG website	August 2005
PAS 2010	Primary	<p>This Publicly Available Specification (PAS) is a code of practice offering biodiversity conservation standards for planning in the UK.</p> <p>Provides recommendations for the integration of biodiversity conservation into land-use and spatial planning, so that it can help to stop the decline of biodiversity.</p> <p>Identifies where authorities have clear responsibilities for biodiversity conservation, and recommends tasks that should be carried out to discharge their planning functions in a manner that is compliant with statutory obligations, government policy and professional good practice.</p>		British Standards Institute website	August 2006
Natural Environment and Rural Communities (NERC) Act, 2006 Biodiversity Duty Guidance	Primary	<p>For the first time, Section 40 of the Act places a duty on public authorities to conserve biodiversity. It states that:</p> <ul style="list-style-type: none"> • Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity; and • Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat. <p>This change is significant as it places a duty on</p>		Office of Public Sector Information website	May 2007

Information	Reference Status	Description	Additional Information	Source / Weblink	Date
		<p>all local authorities to conserve wider biodiversity in addition to the statutory protection given to certain sites and species.</p> <p>In addition Section 55 changes the situation regarding the local authority role and SSSI protection.</p>			
Wildlife and Countryside Act 1981, as amended	Secondary	<p>This Act, as amended, provides national protection for SSSIs and protected species, in addition to a range of other measures.</p> <p>The 1981 Act was been amended significantly through the CROW Act 2000 and the NERC Act 2006 and does not represent the Act as it currently stands. The legislation has been consolidated in the Manual of Nature Conservation Law, 2nd Edition, edited by Michael Fry.</p>	Landowners, occupiers and third parties are all subject to the legislative requirements of this Act (as amended) with regards to protection of SSSIs and protected species.	JNCC website	
Countryside and Rights of Way (CROW) Act 2000	Secondary	<p>With regards to nature conservation, the CROW Act increases protection for Sites of Special Scientific Interest (SSSI) and strengthens wildlife enforcement legislation.</p> <p>It also brings about the duty on government departments to have regard for the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity (Section 73 list).</p> <p>The NERC Act, 2006, paragraph 55 amends the legislation with regards to offences on SSSIs.</p>			
Designated Sites of Biodiversity Interest					
Special Protection Areas (SPA)	Primary	<p>Sites designated or recognised under International Regulations, Directives or Conventions.</p> <p>All land-based sites are SSSIs. Planning authorities are required to carry out a Habitats Regulations Assessment for any plan, programme or project (including development plans and planning permissions) to ensure that any impacts are not detrimental to the features</p>	<p>Part of the South Pennine Moors SSSI is designated as a SPA.</p> <p>Designation information on designated features can be found on JNCC website.</p> <p>Information on specific sites also available from Natural England</p>	Joint Nature Conservation Committee website	Current

Information	Reference Status	Description	Additional Information	Source / Weblink	Date
		for which the sites are designated. SPA: Areas given special protection under the European Union's Birds Directive, and through the Habitats Regulations 1994, reviewed 2007. With SACs they form the Natura 2000 series across Europe. They are designated for their birdlife, including rare and vulnerable birds and for regularly occurring migratory species.			
Special Areas of Conservation (SAC)	Primary	Sites designated or recognised under International Regulations, Directives or Conventions. All land-based sites are SSSIs. Planning authorities are required to carry out a Habitats Regulations Assessment for any plan, programme or project (including development plans and planning permissions) to ensure that any impacts are not detrimental to the features for which the sites are designated. SAC: Areas given special protection under the European Union's Habitats Directive, in the UK through the Habitats Regulations 1994, reviewed 2007. With SPAs they form the Natura 2000 series across Europe. Designated for their habitats, and for certain plant and animal species specifically.	Part of the South Pennine Moors SSSI is designated as a SAC. Designation information on designated features can be found on JNCC website. Information on specific sites is available from the Natural England	Joint Nature Conservation Committee website	Current
Sites of Special Scientific Interest (SSSI)	Primary	A representative sample of the country's very best wildlife and geographical sites, SSSI are designated under Section 28 of the Wildlife and Countryside Act 1981, as amended by the CROW Act 2000. Planning authorities have specific duties and responsibilities in respect of SSSIs; these are summarised in Part II of ODPM Circular 06/2005.	Part of the South Pennine Moors SSSI lies within Pendle. Citations can be found on the Natural England website	Natural England website	Current

Information	Reference Status	Description	Additional Information	Source / Weblink	Date
Local Nature Reserves (LNR)	Primary	<p>Local Nature Reserves are declared by local authorities (County, District, National Park, or Parish) under the National Parks and Access to the Countryside Act 1949 as living green spaces in towns, cities, villages and countryside.</p> <p>They are declared and managed for nature conservation, and provide opportunities for research and education, or for simply enjoying and having contact with nature.</p> <p>All LNRs are owned or controlled by local authorities, though they may be managed by others.</p>	<p>There are 4 LNR in Pendle.</p> <p>Information on specific sites is available from the Natural England and in the East Lancashire LNR booklet by Lancashire Wildlife Trust.</p>	<p>Natural England website</p> <p>http://www.lancswt.org.uk/PDFs/downloads/East%20Lancs%20Booklet.pdf</p>	Current
Biological Heritage Sites (BHS)	Primary	<p>Biological Heritage Sites (BHS) are wildlife sites with at least county significance. Some qualify for national or even international designation.</p> <p>BHSs contain valuable habitats such as ancient woodland, species-rich grassland and bogs. Many provide a refuge for rare and threatened plants and animals. They form an irreplaceable part of our environment and are a major part of the strategy to conserve the biological richness of Lancashire. Along with SSSIs they represent the priority biodiversity resource of Lancashire.</p>	There are 62 BHS in Pendle.	<p>Lancashire County Council website</p> <p>Guidelines for the selection of BHS.</p>	Current
Geological Heritage Sites (LGS)	Primary	<p>These are the most important places for geology and geomorphology outside statutorily protected land, such SSSIs. Sites are selected under locally-developed criteria, according to their value for education, scientific study, historical significance or aesthetic qualities.</p> <p>Known nationally as Regionally Important Geological Sites (RIGS) they are equivalent to Biological Heritage Sites, and are recognised within the planning system. They are designated at a county level by the Lancashire RIGS Group.</p>	There are 3 LGS in Pendle.	Lancashire County Council website	Current
Local Sites of Natural Importance (LNI)	Primary	Non-Statutory sites with natural elements but insufficient quality to designate as BHS or higher.	There are 7 LNI in Pendle.	Pendle Local Plan Guidelines for the selection of LNI	Current

Information	Reference Status	Description	Additional Information	Source / Weblink	Date
Inventory of Ancient Woodland	Primary	<p>A provisional inventory of ancient and semi-natural woodland (ASNW) over 2 hectares in size.</p> <p>ASNW status infers that the site has been a wooded habitat since 1600AD and primarily consists of indigenous, native species that have regenerated naturally.</p>	There are 5 Ancient Woodlands either wholly or partly within Pendle.		1994 with updates
Special Biodiversity Verges	Primary	<p>Sites identified by Lancashire County Council as being of notable importance for their habitat.</p> <p>These sites are not formally designated.</p>	There are 11 Special Biodiversity Verges in Pendle.		Current
National – Studies, Strategies and Audits					
UK Biodiversity Action Plan	Secondary	<p>Action plans prepared at the national level for priority habitats and species.</p> <ul style="list-style-type: none"> UK BAP Priority Species Action Plans: Information on the threats facing 382 species and actions to achieve targets. Grouped' Species Action Plans: common policies, actions and targets for similar species – 11 in total Species Statements: overview of the status of species and broad policies developed to conserve them. Broad Habitat Statements: summary descriptions of 28 natural, semi-natural and urban habitats; current issues affecting the habitat and broad policies to address them. UK BAP Priority Habitat Action Plans: detailed descriptions for 45 habitats falling within the Broad Habitat classification and detailed actions and targets for conserving these habitats. <p>Not all Action Plans have been added following review in August 2007.</p>	<p>Since the review of species and habitats and the action signposting work was completed in 2007 and 2008 respectively, responsibility for the implementation of conservation actions for the priority species and habitats has changed.</p> <p>Although Local Biodiversity Action Plans remain and continue to perform a vital conservation role, the delivery of the species and habitat actions will be done largely at a national level.</p>	UK BAP website	2007 Ongoing
UK Biodiversity Habitat Action Plan (HAP) Targets	Primary	Targets for most terrestrial and freshwater habitats were revised in 2005.		UK BAP website	2006
UK Biodiversity Species Action Plan (SAP) Targets	Primary	Targets for most terrestrial and freshwater species were revised in 2005.		UK BAP website	2006

Information	Reference Status	Description	Additional Information	Source / Weblink	Date
Nature on the Map	Secondary	<p>This is Natural England's interactive mapping website. It includes details for:</p> <ul style="list-style-type: none"> • Nature Reserves and Country Parks (including National and Local Nature Reserves) • Agri-environment schemes to improve wildlife on farmland • Sites which are protected because they are special for wildlife or geological features • Wildlife habitats, which are rare or threatened. <p>Clicking on the maps leads to further information about many of the features.</p>		Nature on the Map website	Ongoing
Natural Area Descriptions	Primary	Natural Areas are artificial divisions of England drawn up by English Nature based on the distribution of wildlife and natural features, and the land-use patterns and human history of an area.	There are 3 Natural Areas identified in Pendle	Natural England website	1993 No updates expected
National Character Areas	Primary	National Character Areas are similar artificial divisions of England to Natural Areas, but place a greater emphasis on landscape character. They either match or rest within Natural area boundaries	There are 3 National Character Areas identified in Pendle	Natural England website	1997 No updates expected
Conserving Biodiversity in a Changing Climate: Guidance on building capacity to adapt	Primary	Guidance on how to reduce the impacts of climate change on biodiversity and how to adapt existing plans and projects in the light of climate change		UK BAP website	2007
Regional – Studies, Strategies and Audits					
Wild About the North West: A Biodiversity Audit of North West England	Secondary	<p>A comprehensive audit of important habitats and species (including UK BAP priorities) in North West England, at both a Natural Area and district level.</p> <p>Detailed descriptions are provided for each habitat / species with sections addressing current status and key issues.</p>	<p>A total of 82 habitats, of which 37 are UK Key Habitats or their equivalents, have been identified in North West England.</p> <p>Profiles have been written for 97 species of particular conservation importance including UK Priority Species and endemic species which occur in the region.</p> <p>The key species and key habitats lists for Lancashire supersede these lists although the descriptions are useful.</p>	North West Biodiversity website	1999 No updates expected in the short-term

Information	Reference Status	Description	Additional Information	Source / Weblink	Date
North West Regional Habitat Targets	Primary	The regional contribution to UK Biodiversity targets and the England Biodiversity Strategy. The Strategy emphasises the need for large scale habitat restoration and better engagement with regional bodies to deliver the targets.	Although there are national targets for species, there are currently no regional species targets.	North West Biodiversity website	April 2008
North West Wetlands Network	Secondary	The North West Wetlands Network project was sponsored by the Northwest Regional Development Agency, the Environment Agency and English Nature (now Natural England). The vision of the project was "To use and improve the ecological resources of the North West's existing and potential wetlands to realise economic and environmental benefits and promote an attractive image of the region".	The study identified six potential networks across the region that could be developed to bring greater benefits to wildlife and people in the North West. None of these included sites in Pendle.	Environment Agency website	January 2006
North West Green Infrastructure Guide	Secondary	Written to support the Green Infrastructure Policy in the North West RSS	Version 1.1 published	Green Infrastructure North West website	Current
North West River Basin Management Plan	Primary	Under the EU Water Framework Directive a RBMP must be produced for each River Basin District with the aim of achieving good ecological status/potential in ground and surface waters. Consultation on the draft document closed on 22 nd June 2009.	The Upper Calder Catchment is part of the North West River Basin District	Environment Agency website	In preparation
Humber River Basin Management Plan	Primary	Under the EU Water Framework Directive a RBMP must be produced for each River Basin District with the aim of achieving good ecological status/potential in ground and surface waters. Consultation on the draft document closed on 22 nd June 2009.	Earby Beck is part of the Humber River Basin District	Environment Agency website	In preparation
North West of England Plan: Regional Spatial Strategy to 2021	Secondary	Chapter 9 contains policies that specifically address the environment. Diagram 9.1 illustrates the 'Indicative Biodiversity Resource and Opportunity'.		GONW website	September 2008 Current

Information	Reference Status	Description	Additional Information	Source / Weblink	Date
Local and Sub-regional – Studies, Strategies and Audits					
Lancashire Biodiversity Action Plan (BAP)	Primary	The Lancashire BAP aims to translate national targets for species and habitats into effective action at local level. It comprises both Habitat Action Plans (HAP) and Species Action Plans (SAP) based upon the Regional Biodiversity Audit.	For Pendle 6 HAPs and 9 SAPs relate to the priority habitats and species to be found in Pendle	Lancashire BAP website	2001
Lancashire BAP Habitat Plans	Primary	Action plans for priority and other important habitats in Lancashire.	See Appendix 2	Lancashire BAP website	Current
Lancashire BAP Urban Habitat Plans	Primary	Action plans for urban habitats in Lancashire.	See Appendix 2	Lancashire BAP website	Current
Lancashire BAP Species Plans	Primary	Action plans for priority and other important species in Lancashire.	See Appendix 2	Lancashire BAP website	Current
Lancashire BAP Habitat Targets	Primary	Targets for priority habitats in Lancashire.	Although there are national targets for species, there are currently no local species targets.	Lancashire BAP website	2008
Phase 1 Habitat Survey (Lancashire)	Primary	The Phase 1 Habitat Survey of Lancashire mapped all habitats in the county using a nationally adopted methodology. Sites and features of particular interest are also identified and described in accompanying 'target notes'.	The results of the Survey were used in the process to identify Biological Heritage Sites.	Lancashire County Council JNCC website	1983-1987 No updates expected
Lancashire Environment Strategy 2005-2010	Secondary	<p>Aims to bring a greater focus on environmental sustainability within policies, plans and programmes across the County. It addresses four main areas for improvement:</p> <ul style="list-style-type: none"> • climate change • health and the environment • sustainable resource management; and landscape, heritage and wildlife. <p>In addition, the strategy aims to promote education and raise awareness about environmental sustainability. A selection of the strategy's targets and actions to improve these areas follows.</p>		Lancashire County Council website	June 2005

Information	Reference Status	Description	Additional Information	Source / Weblink	Date
Lancashire Green Infrastructure Strategy	Primary	The strategy has seven key strategic objectives: <ul style="list-style-type: none"> to improve quality of place to improve health and well-being to create the setting for investment to enhance the tourism, recreation and leisure offer to enhance biodiversity and ecosystem services to adapt to and mitigate the effects of climate change to grow and develop the Regional Parks in Lancashire 			November 2009
A Landscape Strategy for Lancashire: Landscape Character Assessment	Primary	To provide an understanding of the areas landscape, as the basis for the Landscape Strategy. It considers the landscape as a mosaic of different landscape types and character areas subject to particular forces for change.		Lancashire County Council website	December 2000
A Landscape Strategy for Lancashire: Landscape Strategy	Primary	To review the forces of change that affect the landscape identify its key features, highlight the key issues and the key actions that need to be taken to bring about positive landscape change		Lancashire County Council website	December 2000
Lancashire Climate Change Strategy and Supporting Actions 2009-2020	Secondary	Response to the challenges and opportunities afforded by climate change. Seeks to deliver national targets aimed at reducing greenhouse gas emissions.		Lancashire County Council website	April 2009
Landscape Sensitivity to Wind Energy Development in Lancashire	Secondary	Strategic guidance on the sensitivity of Lancashire's landscapes to wind energy developments. Complies with the requirements of Planning Policy Statement 22 (PPS 22) which advocates criteria based policies to identify broad areas at the regional/sub-regional level. level where development of particular types of renewable energy may be appropriate.		Lancashire County Council website	February 2005
Lancashire Extensive Urban Survey	Secondary	Assessment of the fabric of Lancashire's historic towns.		Lancashire County Council	July 2006

Information	Reference Status	Description	Additional Information	Source / Weblink	Date
Upper Calder Catchment Flood Management Plan	Primary	CFMPs are a planning tool through which the Environment Agency seeks to work in partnership with other key decision makers, within a river catchment, to explore and define long-term sustainable policies for the management of flood risk. Draft document published in June 2008.	Pendle Water and its tributaries are part of the Upper Calder catchment		In preparation
Aire and Calder Catchment Flood Management Plan	Primary	CFMPs are a planning tool through which the Environment Agency seeks to work in partnership with other key decision makers, within a river catchment, to explore and define long-term sustainable policies for the management of flood risk. Draft document published in June 2008.	Earby Beck is part of the Aire and Calder catchment	Environment Agency website	In preparation
Replacement Pendle Local Plan (2001-2061)	Secondary	Policies 1-16 directly address environmental issues.		Pendle Council website	May 2006 Current
Pendle Open Space Audit	Primary	The Pendle Open Space Audit 2008 provides an important part of the evidence base which will be used for the preparation of the Core Strategy and Land Use Allocations Development Plan Documents. It was adopted on 20th November 2008 at the meeting of the Council's Executive and replaces the previous audit which was adopted in 2004 and provides an update to the amount of open space in the borough.		Pendle Council website	November 2008 Current
LNR Management Plans	Secondary	Plans for Pendle's four LNR's are currently in production.		Pendle Council	Pending

Appendix 2 – Core Strategy and Policy Formulation

Area	Primary Information	Type of information	Supporting information
1. Our Landscape Characteristics	A Landscape Strategy for Lancashire (Parts 1 and 2)	Document	<ul style="list-style-type: none"> Lancashire Biodiversity Action Plan
	Natural Area Descriptions	Document	
	National Character Areas	Document	
	Lancashire Extensive Urban Survey	Document GIS Raster Layer	
	Maps and Related Information Online (MARIO)	GIS Mapping	
2. Our Natural Systems and Processes	North West River Basin Management Plan	Document	<ul style="list-style-type: none"> Lancashire Climate Change Strategy
	Upper Calder Catchment Flood Management Plan	Document	
	Aire and Calder Catchment Flood Management Plan	Document	
	Conserving Biodiversity in a Changing Climate (DEFRA)	Document	
3. Our Biodiversity Resource	International designated sites (SSSI, SPA and SAC)	GIS Raster Layer and Citations	<ul style="list-style-type: none"> Lancashire BAP Lancashire BAP Habitat Plans Lancashire BAP Species Plans Nature on the Map
	National designated sites (LNR)	GIS Raster Layer and Citations	
	Local designated sites (BHS, LGS, LNI)	GIS Raster Layer and Citations	
	UK BAP Priority Habitat Action Plan	Document	
	UK BAP Priority Species Action Plan	Document	
	Phase 1 Habitat Survey	GIS Raster and Vector Layers	
	Inventory of Ancient Woodland	GIS Layer, Maps and Inventory	






















Area	Primary Information	Type of information	Supporting information
	Special Wildflower Verges	GIS Layer	
	Lancashire Green Infrastructure Plan	GIS Layer and Document	
	Pendle Open Space Audit 2008	Document	
	Site specific surveys (as required)	Field survey and assessment	
4. Enhancing Our Biodiversity Resource	North West BAP Priority Habitat targets	Target	<ul style="list-style-type: none"> Lancashire BAP
	Lancashire BAP Priority Habitat targets	Target	
	Lancashire BAP Habitat Statements	Document	
	Lancashire BAP Urban Habitat Statements	Document	
	Lancashire BAP Species Statements	Document	
	Natural Area Profiles	Document	
	Pendle Open Space Audit 2008	Document	
	LNR Management Plans	Document	
5. Planning Considerations	Lancashire BAP Habitat Statements	Document	<ul style="list-style-type: none"> Lancashire BAP North West Biodiversity Audit North West Wetlands Network
	Lancashire BAP Urban Habitat Statements	Document	
	Lancashire BAP Species Statements	Document	
	Pendle Open Space Audit 2008	Document	
	Landscape Sensitivity to Wind Energy Development in Lancashire	Document	

Appendix 3 – Monitoring Our Biodiversity Resource

Area	Monitoring information	Type of information	Supporting information
Contextual	Condition of SSSI	Natural England	
	Condition of BHS	Lancashire	
	Extent of priority habitats	GIS mapping	
	Extent of ancient woodland	GIS mapping	
	North West Priority Habitat Targets		
	Lancashire Priority Habitat Targets		
	UK BAP Habitats Action Plan Targets		
	UK BAP Species Action Plan Targets		
Core Output Indicators	E2 – Change in areas of biodiversity importance (incl. NI197)		
	NI197 – Proportion of local sites where positive conservation management has or is being implemented		
	Change in areas of biodiversity importance		
	Loss of designated sites	GIS Layers and Planning Decisions	
	Change in area of priority habitat	GIS Layers and Planning Decisions	
	Gain in wildlife habitat	GIS Layers and Planning Decisions	
	Planning applications including biodiversity measures	Planning Decisions	
	Change in length of hedgerows	Planning Decisions	

Area	Monitoring information	Type of information	Supporting information
	Planning approvals with significant negative impact on biodiversity		
	Planning approvals with specific measures to protect priority species		
	Planning approvals with specific enhancement measures		



































Appendix 4 – Lancashire BAP Habitat Plans

Habitat Action Plans	Habitat in Pendle	Link to Download	
		PDF	Word
Arable Farmland		 pdf 335kb	 word 268kb
Broadleaved and Mixed Woodlands	✓	 pdf 585kb	 word 502kb
Calcareous Grassland		 pdf 468kb	 word 392kb
Limestone Pavement		 pdf 332kb	 word 262kb
Moorland and Fell	✓	 pdf 525kb	 word 447kb
Mossland		 pdf 300kb	 word 237kb
Reedbed	✓	 pdf 258kb	 word 203kb
Rivers and Streams	✓	 pdf 346kb	 word 283kb
Salt Marsh and Estuarine Rivers		 pdf 83kb	 word 101kb
Sand Dune		 pdf (314kb	 word 253kb
Species-rich Neutral Grassland	✓	 pdf 344kb	 word 271kb

Link to index page for Lancashire BAP Habitat Plans:

 www.lancspartners.org/lbap/habitat_plans.asp

Appendix 5 – Lancashire BAP Urban Habitat Plans













Habitat Action Plans	Habitat in Pendle	Link to Download	
		PDF	Word
Managed Urban Greenspace Group			
Amenity Grassland & Sports Fields	✓	 pdf 107kb	 word 74kb
Churchyards and Cemeteries	✓	 pdf 119kb	 word 87kb
Golf Courses	✓	 pdf 133kb	 word 86kb
Road Verges	✓	 pdf 114kb	 word 89kb
School Grounds	✓	 pdf 152kb	 word 117kb
Urban Parks	✓	 pdf 147kb	 word 114kb
Urban Forest Group			
Community Woodlands, Orchards, Street Trees, Shrubberies and Shelterbelts	✓	 pdf 156kb	 word 88kb
Previously Developed Land Group			
DUN (derelict, underused or neglected) Land	✓	 pdf 167kb	 word 50kb
Quarries and Gravel Pits	✓	 pdf 116kb	 word 86kb
Railway Sidings and Disused Railways	✓	 pdf 118kb	 word 80kb
Private Gardens Group			
Allotments	✓	 pdf 108kb	 word 85kb
Gardens and Backyards	✓	 pdf 152kb	 word 118kb
Relict Landscape Group			
Encapsulated Countryside	✓	 pdf 102kb	 word 78kb
Built Structures Group			
New and Existing Built Structures	✓	 pdf 129kb	 word 93kb
Urban Species Group			
Common Frog	✓	 pdf 149kb	 word 153kb
House Sparrow	✓	 pdf 160kb	 word 119kb
Urban Bumblebees	✓	 pdf 132kb	 word 90kb

Link to index page for Lancashire BAP Urban Habitat Plans:

 www.lancspartners.org/lbap/urban_habitat.asp

Appendix 6 – Lancashire BAP Species Plans

Species Plans	Species in Pendle	Link to Download	
		PDF	Word
Birds			
Black-tailed Godwit		 pdf 40kb	 word 56kb
Farmland Birds	✓	 pdf 294kb	 word 121kb
Lapwing	✓	 pdf 212kb	 word 162kb
Reed Bunting	✓	 pdf 308kb	 word 259kb
Skylark	✓	 pdf 311kb	 word 263kb
Song Thrush	✓	 pdf 476kb	 word 428kb
Twite		 pdf 437kb	 word 388kb
Mammals			
Bats	✓	 pdf 246kb	 word 203kb
Brown Hare	✓	 pdf 387kb	 word 340kb
Otters		 pdf 247kb	 word 201kb
Red Squirrel		 pdf 241kb	 word 191kb
Water Vole	✓	 pdf 288kb	 word 242kb
Amphibians			
Great Crested Newt	✓	 pdf 410kb	 word 359kb
Natterjack Toad		 pdf 169kb	 word 123kb
Insects			
Belted Beauty Moth		 pdf 178kb	 word 128kb
Dorus Profuges – a hoverfly		 pdf 40kb	 word 192kb
High Brown Fritillary		 pdf 320kb	 word 267kb
Large Heath Butterfly		 pdf 276kb	 word 229kb
Northern Brown Argus		 pdf 161kb	 word 110kb
Pearl-bordered Fritillary		 pdf 183kb	 word 130kb
Shining Guest Ant		 pdf 313kb	 word 247kb
Southern Wood Ant		 pdf 253kb	 word 205kb
Wall Mason Bee		 pdf 195kb	 word 149kb
Other Invertebrates			
Freshwater Pearl Mussel		 pdf 215kb	 word 166kb
Freshwater White-clawed Crayfish		 pdf 222kb	 word 175kb
Jennings Proboscis Worm		 pdf 131kb	 word 84kb
Whorl Snails		 pdf 165kb	 word 115kb
Plants			
Birds-eye Primrose		 pdf 109kb	 word 438kb
Black Poplar		 pdf 61kb	 word 76kb
Dwarf Cornel		 pdf 58kb	 word 76kb
Flat-Sedge		 pdf 65kb	 word 56kb
Great Butterfly Orchid		 pdf 107kb	 word 135kb

Species Plans	Species in Pendle	Link to Download	
		PDF	Word
Plants (continued)			
Lady's-slipper Orchid		 pdf 254kb	 word 211kb
Lancaster Whitebeam		 pdf 160kb	 word 109kb
Narrow Small-Reed		 pdf 44kb	 word 70kb
Purple Ramping-fumitory		 pdf 261kb	 word 220kb
Rock Sea Lavender		 pdf 118kb	 word 68kb
Sea Bindweed		 pdf 60kb	 word 71kb

Link to index page for Lancashire BAP Species Plans:

 www.lancspartners.org/lbap/species_plans.asp

Appendix 7 – Summary of statutory and other protected sites in Pendle (listed alphabetically)

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
Antley Gate Trawden Forest	SD 916 364	LNI (BHS)	8.53 (6.29)	An in-bye field adjoining South Pennine Moors SSSI, SPA and SAC lying to the north of Boulsworth Hill and to the south of Trawden. It is important for its relict area of blanket mire (Bog) and for flushes emanating from springs near the head of the clough.	<ul style="list-style-type: none"> Swamp and Fen (Fe2) Bog (Bo3a) Flowering Plants and Ferns (Ff3)
Back Lane Higham-with-West Close Booth	SD 799 370	SBV	0.02	Narrow bank of tall, often acidic, grassland below a wire fence, with short hawthorn hedge at eastern end. Length 118m / Width 1.5m.	<ul style="list-style-type: none"> Lowland dry acidic grassland
Ball Grove Lodge Laneshaw Bridge	SD 909 403	LNI	0.60	An ex-mill lodge now a fishing lake in a parkland setting.	
Bank Ends, Middle and Hollin Woods Roughlee Booth	SD 843 411	BHS	7.97	Comprising woodland that is ancient semi-natural in character. The open canopy is dominated by Oak with frequent Birch and occasional Rowan, Sycamore and Larch.	<ul style="list-style-type: none"> Woodland and Scrub (Wd2)
Bank House Flushes Trawden Forest	SD 937 387	BHS	4.46	Comprising three adjoining fields along the western side of Wycoller Beck, which support species-rich neutral to acidic grassland with numerous flushes.	<ul style="list-style-type: none"> Grassland (Gr3) Swamp and Fen (Fe1)

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
Barden Lane Fields Reedley Hallows	SD 840 352	BHS	2.32	Species-rich grassland situated along the western side of the Leeds Liverpool Canal.	• Grassland (Gr3)
Barley Car Park Field Barley-with-Wheatley Booth	SD 823 404	BHS	0.58	A steep south-facing field supporting species-rich neutral/acidic grassland with flushes and scattered scrub.	• Grassland (Gr3)
Barley Lane Barley-with-Wheatley Booth	SD 814 416	SBV	0.05	Moderately steep bank of tall grassland leading up to a dry stone wall. Length 166m / Width 3m (approx)	• Lowland dry acidic grassland
Barley Road Barley-with-Wheatley Booth	SD 831 402	SBV	0.07	Edge of an ash dominated woodland bank with no physical boundary to rear. Length 166m / Width 4m (approx)	• Lowland mixed deciduous woodland
Barley Road Pasture Barley-with-Wheatley Booth	SD 825 402	BHS	2.10	Two adjacent fields on a steep north-facing slope supporting species-rich neutral and acidic grassland with localised scattered scrub.	• Grassland (Gr3)
Barnoldswick Road Blacko / Foulridge	SD 870 422	SBV	0.12	Mixed-ash and alder-ash hedgerow. Length 80m / Width 3m	• Ancient and/or species rich hedgerows

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
Barrowford Locks Hills and Hollows Barrowford / Colne	SD 867 401	BHS	0.33	A small area of sloping hummocky grassland which is very species-rich.	• Artificial habitats (Ar1)
Birch Hall Lane Pasture Earby	SD 918 468	BHS	1.58	Situated on the outskirts of Earby at the western end of Three Acre Clough comprising species-rich semi-natural neutral grassland.	• Grassland (Gr3)
Black Moss Pasture Barley-with-Wheatley Booth	SD 836 419	BHS	6.82	Two adjoining areas of pasture to the north of Black Moss Road supporting neutral grassland.	• Grassland (Gr3)
Black Moss Reservoirs Barley-with-Wheatley Booth	SD 824 413	BHS	17.40	Comprising Upper (7.71ha) and Lower (9.67ha) Black Moss Reservoirs and adjacent habitat including species-rich grassland. The reservoirs are of significant ornithological value being important for both wintering and breeding birds and water-purslane, a species listed in the Provisional Lancashire Red Data List of Vascular Plants, occurs at the site.	• Birds (Bi8) • Grassland (Gr3) • [Flowering Plants and Ferns (Ff4)]
Black Moss Road Barley-with-Wheatley Booth	SD 825 421	SBV	0.01	Short section of tall grassland (dry acidic against the wall and damp grassland along roadside) backed by a dry-stone wall. Common lizard observed to be present. Length 80m / Width 1.5m	• Lowland dry acidic grassland
Bleara Moor Earby	SD 925 456	BHS	39.02	Moorland to the south east of Earby supporting heather-dominated vegetation.	• Heathland (He1)

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
Broach Pasture Foulridge	SD 897 419	BHS	3.94	A field to the south-east of Foulridge supporting species-rich grassland.	<ul style="list-style-type: none"> Grassland (Gr3)
Brogden Road Bracewell-with-Brogden	SD 863 473	SBV	0.07	<p>Hedge and woodland edge, with tall grass fronting the hedgerow to the roadside.</p> <p>Length 250m (approx) / Width up to 5m</p>	<ul style="list-style-type: none"> Ancient and/or species rich hedgerows Lowland mixed deciduous woodland
Burn Moor Blacko	SD 848 432	BHS	54.58	Comprising an area of moorland supporting modified blanket bog and wet heath communities with associated flush systems. The moor is of ornithological importance with breeding red grouse and curlew.	<ul style="list-style-type: none"> Birds (Bi2) Heathland (He1) Bog (Bo3)
Castercliffe Colne	SD 885 384	LGS	1.80	An iron-age hill fort with hut circles, but somewhat scarred by mining. The fort comprises of an oval-shaped internal plateau enclosed on all sides except the north by three rubble ramparts (1.5m high), with an external ditch (1.5m deep) in front. Limited excavation of the defences indicates that the inner rampart was revetted with stone and also timber-laced.	<ul style="list-style-type: none"> Mineshafts
Castor Gill Roughlee Booth / Blacko	SD 845 416	BHS	5.48	Comprising clough woodland and species-rich grassland along Castor Gill and a tributary stream.	<ul style="list-style-type: none"> Woodland and Scrub (Wd2) Grassland (Gr3)
Catlow Valley Nelson / Trawden Forest / Briercliffe	SD 895 363	BHS	20.36	A steep-sided valley with a fast-flowing stream running east-west. The valley supports a mosaic of habitats including species-rich grassland, mires, scrub and woodland. Three species listed in the Provisional Lancashire Red Data List of Vascular Plants are present – broad-leaved cottongrass, grass-of-Parnassus and globeflower.	<ul style="list-style-type: none"> Grassland (Gr3) Swamp and Fen (Fe1) Flowering Plants and Ferns (Ff3)(Ff4) Habitat Mosaic (Hm3)

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
Claude's Clough – Admergill Water Blacko / Roughlee Booth	SD 850 419	BHS	12.98	Comprising species-rich grassland and woodland/scrub on the steep slopes of the narrow stream valleys of Claude's Clough and Admergill Water in the north and Blacko Water and Castor Gill in the south.	<ul style="list-style-type: none"> Woodland and Scrub (Wd2) Grassland (Gr3)
Coal Pit Lane Bracewell and Brogden / Middop / Rimington / Gisburn	SD 843 470	BHS	N/A	<p>Wide verges, hedgerows and trees running along both sides of Coal Pit Lane for approximately 3.5km – part in Pendle, part in Ribble Valley.</p> <p>The verges support a wide variety of habitats including species-rich grassland, tall herb vegetation, damp ditches, wet flushes, scattered scrub and woodland.</p>	<ul style="list-style-type: none"> Artificial habitats (Ar2) Flowering Plants and Ferns (Ff3) and (Ff4)
Coldwell Reservoirs Trawden Forest	SD 905 363	BHS	24.10	Comprising Lower and Upper Coldwell Reservoirs and adjoining moorland and plantation of significant ornithological interest.	<ul style="list-style-type: none"> Birds (Bi2) Swamp and Fen (Fe2)
Colne / Skipton disused railway Colne / Foulridge / Kelbrook & Sough / Earby	SD 899 451	BHS	6.35	An exceptionally diverse range of habitats including woodland and scrub, neutral, acidic and calcareous grassland, tall herb-fen and heather.	<ul style="list-style-type: none"> Artificial habitats (Ar2) Flowering Plants and Ferns (Ff3) (Ff4)
Colne Water Pastures Trawden Forest	SD 913 403	BHS	4.54	Two fields of species-rich, semi-natural, neutral grassland situated 1 km west of Laneshawbridge. The fields lie on sloping ground adjoining the south bank of Colne Water including the embankment between the fields and Colne Water.	<ul style="list-style-type: none"> Grassland (Gr3)
Corn Close / Bent Moor Trawden Forest	SD 947 410	LNI	163.33	Open moorland.	

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
The Crank, Wycoller Trawden Forest	SD 933 387	BHS	0.51	A steep, rocky slope to the south of Copy House Farm supporting flushed mire communities amidst acid grassland.	• Swamp and Fen (Fe1)
Croft Top Higham-with-West Close Booth	SD 813 375	SBV	0.01	Bank of tall grass below a fence along a narrow road. Periodic evidence of stone wall beneath grassy bank. Length 122m / Width 1.5m	• Lowland dry acidic grassland
Emmott House Grassland Laneshaw Bridge	SD 928 407	BHS	2.18	Species-rich grassland and other habitats on steeply sloping banks along the River Laneshaw and a tributary to the east of Laneshaw Bridge.	• Grassland (Gr3)
Fir Trees Brook Pasture Higham-with-West Close Booth	SD 804 355	BHS	6.04	A clough supporting species-rich flushed grassland with scattered scrub.	• Grassland (Gr3)
Flake Hill Moor Trawden Forest	SD 939 378	LNI	44.00	Open moorland.	
Foulridge Reservoirs Foulridge / Colne	SD 885 418	BHS	56.63	Comprising the Upper Reservoir and adjacent fields (20.21ha) and Lower Reservoir (36.42ha), which together form an area of significant ornithological value and support good inundation vegetation.	• Birds (Bi8) • Swamp and Fen (Fe1) • Flowering Plants and Ferns (Ff2) (Ff3)

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
Ghyll Lane Church Yard Barnoldswick	SD 893 481	BHS	1.40	A cemetery supporting semi-natural neutral grassland which is species-rich in places.	• Artificial habitats (Ar1)
Gib Hill Fields Nelson / Colne	SD 879 386	BHS	1.62	Three fields of neutral grassland to the north-east of Nelson adjacent to Marsden Park Golf Course.	• Grassland (Gr3)
Gilford Clough / Trawden Brook Trawden Forest	SD 923 368	BHS	13.17	A clough complex formed by three converging tributaries of Trawden Brook. Supporting a mosaic of habitats including species-rich grassland and Ancient Semi-Natural Woodland.	• Habitat Mosaic (Hm3) • Woodland and Scrub (Wd1) • Grassland (Gr3)
Gisburn Old Road Blacko / Bracewell-with-Brogden	SD 862 436	SBV	0.24	Largely overgrown ditch, with tall (acidic) grass on either side, backed by a dry-stone wall. Length 591m / Width 2m	• Lowland dry acidic grassland • Fens
Greenfield Road Colne	SD 872 396	LNR (LNI)	3.12 (2.13)	On the slopes and floodplain of Colne Water. Supporting woodland and scrub, grassland, wetland and tall ruderal vegetation.	• Woodland and scrub • Grassland • Habitat mosaic
Guide Lane Higham-with-West Close Booth	SD 815 370	SBV	0.04	Tall unmanaged holly and mixed-ash hedgerow. Length 100m (approx) / Width 4m (approx)	

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
Hagg Wood Higham-with-West Close Booth / Ightenhill	SD 817 346	BHS	0.30	Semi natural (ancient) woodland. Birch dominates, with ash, oak, sycamore and beech. Ground flora dominated by creeping soft grass, frequent bramble, bracken and broad buckler fern. Also bluebell greater stitchwort, foxglove and honeysuckle, Occasional wood-sorrel, wood anemone, red campion and pignut. N.B. The total area of the BHS is 5.7ha but only part is in Pendle.	<ul style="list-style-type: none"> Woodland and scrub (Wd1)
Harden Clough Kelbrook & Sough	SD 913 446	BHS	11.47	Comprising a mosaic of habitats including neutral grassland, acid grassland, flush communities, scrub and ancient semi-natural woodland situated along Harden Clough.	<ul style="list-style-type: none"> Habitat Mosaic Hm3) Woodland and Scrub (Wd1) Grassland (Gr3)
Heald Wood Reedley Hallows	SD 836 348	BHS	0.50	Broad-leaved woodland on the steep slopes above Pendle Water. The woodland ground flora is ancient semi-natural in character. N.B. The total area of the BHS is 2.60ha but only part is in Pendle.	<ul style="list-style-type: none"> Woodland and scrub (Wd1)
Higher Old Laund Pastures Old Laund Booth	SD 836 377	BHS	5.21	Species-rich grassland, associated flushes and scrub/woodlands situated along a stream valley adjoining Old Laund Clough.	<ul style="list-style-type: none"> Grassland (Gr3)
Hollin Brow Roughlee Booth	SD 841 408	BHS	1.00	Comprising a steep brow supporting species-rich neutral grassland with some open scrub.	<ul style="list-style-type: none"> Grassland (Gr3)

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
Kelbrook Moor and Woods Kelbrook & Sough	SD 915 435	BHS	103.16	An area of heather-dominated moorland and an adjacent clough supporting species-rich grassland, flushes and plantation woodland.	<ul style="list-style-type: none"> • Heathland (He1) • Swamp and Fen (Fe2) • Grassland (Gr3)
Leeds & Liverpool Canal, (Old Hall Street to J12 M65) Burnley / Reedley Hallows / Brierfield	SD 841 352	BHS	15.10	A section of the Leeds Liverpool Canal from Old Hall Street in the south to M65 Junction 12 in the north. Aquatic and marginal vegetation is present in the canal itself and the towpath and banks support a range of habitats including species-rich grassland, tall herb vegetation and scrub.	<ul style="list-style-type: none"> • Artificial habitats (Ar1)
Leeds & Liverpool Canal, (Barrowford Locks to J12 M65) Colne / Barrowford / Nelson	SD 847 371 SD 858 383 SD 869 397	LNI	8.52	This section of the canal links the sections to north and south which are BHS. Woodland and scrub adjacent in parts.	<ul style="list-style-type: none"> • Artificial habitats
Leeds Liverpool Canal (Barrowford Locks to Foulridge Tunnel) Colne / Blacko / Foulridge	SD 870 406	BHS	5.88	Marginal vegetation occurs along the canal itself whilst the canal banks and adjacent land support a variety of habitats including species-rich grassland, tall-herb vegetation, scrub and woodland.	<ul style="list-style-type: none"> • Artificial habitats (Ar1) • Flowering Plants and Ferns (Ff3)
Leeds Liverpool Canal (Foulridge Wharf to county boundary) Foulridge / Salterforth / Barnoldswick	SD 889 449	BHS	19.23	Canal supports marginal flora and the bankings and land associated with the towpath supports scrub and species-rich grassland.	<ul style="list-style-type: none"> • Artificial habitats (Ar1) • Flowering Plants and Ferns (Ff3)
Lodge Hill Syke Bracewell and Brogden	SD 857 487	BHS	1.60	Species-rich grassland along Lodge Hill Syke.	<ul style="list-style-type: none"> • Grassland (Gr3)

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
Lomeshaye Marsh and Green Old Laund Booth	SD 846 376	LNR (BHS)	2.00	A mosaic of habitats including species-rich grassland, swamp and open water, on the site of a former sewage works.	<ul style="list-style-type: none"> Grassland (Gr3) Swamp and Fen (Fe1) Amphibians (Am2)
Lower Blacko Water Blacko	SD 856 412	BHS	4.00	A grazed strip of river-side woodland and species-rich semi-improved and unimproved pasture alongside Blacko Water.	<ul style="list-style-type: none"> Woodland and Scrub (Wd2) Grassland (Gr3)
Lower Ogden Reservoir Grasslands Barley-with-Wheatley Booth	SD 819 398	BHS	5.30	Moderate to steeply sloping ground to the south and south-east of Lower Ogden Reservoir supporting species-rich grassland with extensive flushing.	<ul style="list-style-type: none"> Grassland (Gr3)
Moor Isles Clough Reedley Hallows	SD 820 360	BHS	14.40	Semi-natural woodland and flushed ground occupying the steep sides of Moor Isles Clough to the east of Higham. Canopy dominated by Alder with some Ash and Oak in the drier areas.	<ul style="list-style-type: none"> Woodland and Scrub (Wd2) Swamp and Fen (Fe1) Grassland (Gr3)
Old Laund Clough Old Laund Booth	SD 839 375	BHS	3.86	Ancient semi-natural woodland occupying a deep, steep-sided ravine and two tributary valleys.	<ul style="list-style-type: none"> Woodland and Scrub (Wd1)
Pendle Hill Goldshaw Booth / Barley-with-Wheatley Booth	SD 800 410	BHS	414.09	Extensive and prominent upland area rising to 557m, situated between the Bowland Fells and the Pennines. It consists of a large, relatively flat, unenclosed moorland plateau with steeply sloping sides divided into sizeable enclosures. Most of the hill is covered in peat of varying depth and the vegetation forms a complex mosaic of habitat types including bog, heathland, acid grassland and species-	<ul style="list-style-type: none"> Bog (Bo4), Heathland (He1), Grassland (Gr2) Swamp and Fen (Fe2) (Fe3) Flowering Plants and Ferns (Ff4), Birds (Bi2)

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
				rich flushes. N.B. The total area of the BHS is 1,182.30ha but only part is in Pendle.	<ul style="list-style-type: none"> Mosses and Liverworts (Br1)
Raven's Clough Wood Reedley Hallows	SD 838 368	BHS	7.27	Site comprises ancient semi-natural woodland situated immediately west of Pendle Water at Waterside. Canopy dominated by Ash, Birch, Beech and Sycamore with occasional Oak, Wych Elm and Rowan.	<ul style="list-style-type: none"> Woodland and Scrub (Wd1)
Roundwood Swamp, Meadows and Scrub Reedley Hallows	SD 839 356	BHS	10.80	An extensive area of semi-natural habitat situated between Pendle Water and the Leeds Liverpool Canal. A diverse mosaic of habitats, including swamp communities, woodland, scrub and semi-improved grassland.	<ul style="list-style-type: none"> Habitat Mosaic (Hm3) Swamp and Fen (Fe1)
Salterforth railway sections, embankments and cuttings Salterforth / Barnoldswick	SD 884 463 SD 887 460 SD 894 454	BHS	2.52	Three discrete sections of disused railway, the cuttings and embankments supporting a mosaic of habitats including scrub and woodland, tall-herb vegetation and species-rich wet and dry grassland.	<ul style="list-style-type: none"> Artificial habitats (Ar2)
Salterforth railway sections, embankments and cuttings Salterforth / Barnoldswick	SD 887 460	LGS	1.66	Section of disused railway cutting.	<ul style="list-style-type: none"> Characteristic Mid-Visean sediments
Sandhole Clough Foulridge	SD 877 424	BHS	5.05	A mosaic of species-rich neutral to acidic grassland, scrub and woodland, situated along a narrow stream clough.	<ul style="list-style-type: none"> Grassland (Gr3)

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
Shelfield Farm Nelson	SD 887 376	BHS	10.57	Two fields of semi-improved pasture to the north-west of Shelfield Farm. The fields support a significant population of breeding Lapwing.	• Birds (Bi6)
Slacks Wood Barley-with-Wheatley Booth	SD 830 403	BHS	2.87	Two adjacent strips of broadleaved woodland and scrub to the north (2.49ha) and south (0.38ha) of Barley Road. The woodland has been planted but retains a ground layer which is ancient semi-natural in character.	• Woodland and Scrub (Wd2)
Sough Pasture Kelbrook & Sough	SD 901 456	BHS	2.11	A pasture supporting species-rich neutral grassland situated immediately to the west of the disused Colne-Skipton railway.	• Grassland (Gr3)
South Pennine Moors Trawden Forest	SD 943 367	SSSI	1,542.00	Unenclosed moorland area containing a diverse and extensive range of upland plant communities (SAC designation) and breeding bird assemblage of regional and national importance (SPA designation). N.B. The total area of the SSSI is 20,938.05 ha, but only part is in Pendle.	• Blanket bogs (7130) • Transition mires and quaking bogs (7140) • Merlin • Golden Plover • Twite
Spurn Clough Reedley Hallows	SD 827 360	BHS	24.70	A tributary stream valley of the River Calder with an extensive mosaic of habitats including woodland and scrub, grassland and flushes.	• Habitat Mosaic (Hm2) • Swamp and Fen (Fe1) • Woodland and Scrub (Wd2)
Stang Top Road Barley-with-Wheatley Booth	SD 841 403	SBV	0.003	Planted and maintained hedgerow, alongside very narrow lane, dominated by the non-native Bridewort Spiraea sp., with barbed wire running through. Length 59m / Width 0.5m (approx)	• Lowland mixed deciduous woodland • Ancient and/or species rich hedgerows

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
Stanridge and Three Acre Cloughs Earby	SD 919 467	BHS	1.96	Two narrow converging cloughs supporting woodlands that are ancient semi-natural in character.	• Woodland and Scrub (Wd2)
Tum Hill Colne	SD 885 387	LGS	2.53	Exposed hillside location	• Meltwater channel
Turf Fields Barley-with-Wheatley Booth	SD 818 422	BHS	17.74	Comprising an area of blanket bog supporting a number of characteristic plant species as well as breeding Curlew and Skylark.	• Bog (Bo2) (Bo3)
Turnholes Clough Trawden Forest	SD 939 384	BHS	3.00	A narrow, steep-sided clough supporting broadleaved woodland. The woodland in the north and south of the site is ancient semi-natural in character. These two compartments are linked by a central area of plantation woodland.	• Woodland and Scrub (Wd2)
Turnholes Flushes and Grassland Trawden Forest	SD 939 383	BHS	4.17	Comprising land to the west of Turnholes Clough supporting species-rich grassland and flushes.	• Grassland (Gr2) (Gr3) • Swamp and Fen (Fe1)
Walverden Reservoir Nelson	SD 872 365	LNI	2.81	A reservoir surrounded by farmland except industrial buildings to the north. Marginal vegetation and birds.	

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
Wanless Bridge Triangle Colne	SD 873 412	BHS	2.64	A triangular area of land between the Leeds Liverpool Canal in the west and the disused Colne-Skipton railway in the east supporting species-rich semi-natural grassland.	• Grassland (Gr3)
West Close Clough and Upper Fir Trees Brook Higham-with-West Close Booth	SD 806 357	BHS	4.83	Ancient semi-natural woodland occupying a series of adjoining cloughs to the south of Higham. Alder and Ash dominate the canopy with some Oak and Rowan on drier areas.	• Woodland and scrub (Wd1)
Wheathead Lane Barley-with-Wheatley Booth	SD 849 418	SBV	0.05	Woodland edge and tall holly and mixed ash hedgerow on opposite sides of narrow lane. Length 167m / Width 3m (approx)	
White Hough and Hugh Woods Barley-with-Wheatley Booth / Roughlee Booth	SD 835 403	BHS	1.82	Two adjoining woods, White Hough Wood to the north-west and Hugh Woods in the south-west occupying sloping ground above White Hough Water supporting plantation woodland over a ground flora that is semi-natural in character.	• Woodland and Scrub (Wd2)
White Moor and Weets Hill Salterforth / Bracewell and Brogden / Barnoldswick	SD 870 440	BHS	230.40	An extensive area of heather-dominated moorland that supports a variety of heathland, bog and acid grassland communities. Part of the site is of significant ornithological value.	• Bog (Bo4) • Birds (Bi3)
White Moor Reservoir Salterforth / Foulridge	SD 878 432	BHS	24.58	Comprising White Moor Reservoir and some adjoining fields to the west and is of ornithological value.	• Birds (Bi8)

Site Name / Parish	Grid Ref.	Status	Area (ha)	Brief description	Guidelines for selection • Priority species / habitats
Windle Field Earby	SD 922 467	BHS	0.73	Species-rich, semi-natural neutral grassland on the steep slopes adjoining a tree and scrub-lined brook.	<ul style="list-style-type: none"> Grassland (Gr3)
Wycoller Beck Trawden Forest	SD 924 403	BHS	15.61	A small valley along the winding Wycoller Beck and its tributary Ratten Clough Brook. A series of fields flanking the beck support species-rich grassland as well as flushes and mires.	<ul style="list-style-type: none"> Grassland (Gr3) Swamp and Fen (Fe1)

Appendix 8 – Glossary of Planning Terms

↔ = Cross reference

Term / Common abbreviation		Brief Description
Annual Monitoring Report	AMR	Submitted to the Government in December of each year, this document sets out how the Council's planning policies have been used in the previous financial year (April to March) and whether it has achieved the milestones set out in its ↔ Local Development Scheme.
Appropriate Assessment	AA	A specific stage in the ↔ Habitat Regulations Assessment required by Article 6 of the Habitats Directive. It is the detailed consideration of the potential impact emerging planning policies may have - either alone, or in combination with other projects or plans - on the structure, function or conservation objectives for a European (Natura 2000 ²⁵) Site.
Area Action Plan	AAP	A ↔ Development Plan Document that provides the planning framework for a specific location subject to conservation, or regeneration. A key feature is its focus on implementation. In Pendle AAPs will be used to support the delivery of the ↔ Housing Market Renewal programme.
Core Strategy	CS	The key document in the new Local Development Framework (LDF). The Core Strategy establishes the key elements for planning in the Pendle area and sets out: <ul style="list-style-type: none"> • a spatial vision and strategic objectives; • a spatial strategy; • core policies; and • a framework for monitoring and implementation. The Core Strategy must be kept up to date and all other ↔ Development Plan Documents must be in conformity with it.

²⁵ Natura 2000 Sites include Special Areas of Conservation (SACs) designated for species and habitats and Special Protected Area (SPAs) designated for birds. On land these are usually part of existing Sites of Special Scientific Interest (SSSIs).

Term / Common abbreviation		Brief Description
Development Plan	-	<p>Development plans are 🔄 statutory documents, which contain planning policies and 🔄 site specific allocations and proposals to guide the nature and location of development in a particular area.</p> <p>In Pendle the Development Plan currently comprises the saved policies from the Pendle Local Plan, which expresses locally specific planning policy guidance and advice for developers; and 🔄 Development Plan Documents included in the Lancashire Minerals and Waste Local Plan.</p> <p>Under the new planning system 🔄 Local Plans are to be replaced by a 🔄 Local Development Framework (LDF).</p>
Development Plan Document	DPD	<p>Theses are 🔄 statutory planning documents, which contain the key policies used to control development in the Borough. Those that local planning authorities are required to prepare include the 🔄 Core Strategy, site-specific allocations of land and, where needed, 🔄 area action plans. A 🔄 proposals map, which illustrates the spatial extent of policies must also be prepared and maintained to accompany all DPDs.</p> <p>DPDs form part of the 🔄 Development Plan and are, therefore, a primary consideration in decisions on a planning application, unless material considerations indicate otherwise. As such they are subject to rigorous consultation procedures, 🔄 sustainability appraisal and independent examination. DPDs can only be adopted once the inspector appointed by the Government to oversee the examination has issued his/her binding report.</p>
Evidence Base	-	<p>The body of information and data prepared or collated by a local planning authority to help justify the 🔄 soundness of the policy approach set out in its 🔄 Local Development Documents.</p>
Green Infrastructure	GI	<p>The term used to describe natural and managed areas of 'green' land lying both in, and between, our towns and villages, that together make up a network of inter-connected, high quality, multi-functional open spaces and the corridors that link them, which provide multiple social, economic and environmental benefits for both people and wildlife.</p> <p>🔄 Infrastructure.</p>

Term / Common abbreviation		Brief Description
Habitat Regulations Assessment	HRA	<p>The European Commission Guidance on the Habitats Directive sets out four distinct stages for assessments under the Directive:</p> <ul style="list-style-type: none"> • Stage 1: Screening – the process which initially identifies the likely impacts upon a Natura 2000 site and considers whether these impacts are likely to be significant. • Stage 2: ➡ Appropriate Assessment – the detailed consideration of any impact, with respect to the site's conservation objectives and its structure and function, to determine whether there will be adverse effects on the integrity of the site. • Stage 3: Assessment of alternative solutions – to examine alternative ways of achieving the objectives of the plan, or project, that avoid adverse impacts on the integrity of a Natura 2000 site • Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain – an assessment of whether the development is necessary for imperative reasons of overriding public interest (IROPI) and, if so, of the compensatory measures needed to maintain the overall coherence of the Natura 2000 network.
Infrastructure	-	<p>Collective term for the basic services necessary for development to take place i.e. transport, electricity, sewerage, water, education, health and community facilities.</p> <p>➡ Green infrastructure.</p>
Local Development Framework	LDF	<p>The term used to describe the collection of documents that outline how planning will be managed in the local area.</p> <p>The LDF will eventually replace the Pendle Local Plan.</p>
Local Development Scheme	LDS	<p>Sets out the timetable for the production of all the documents that will form part of the new LDF for Pendle.</p> <p>The LDS must be agreed with Government.</p>
Local Plan	-	<p>Document identifying detailed proposals for the protection and use of land in a local area. It consists of a Written Statement and a ➡ Proposals Map. It is used as the basis for development control decisions and to help co-ordinate new development. ➡ Local plans are to be phased out and replaced by a ➡ Local Development Framework.</p>
Local Strategic Partnership	LSP	<p>A non ➡ statutory body of public, private, community and voluntary sector organizations working together to support one another so that they can help improve service delivery and deliver a better quality of life for local residents. The key goals of the LSP are set out in the ➡ Sustainable Community Strategy. The LSP for Pendle is known as Pendle Partnership.</p>

Term / Common abbreviation		Brief Description
Planning Policy Guidance note	PPG	A series of notes setting out the Government's national policies for land use on a wide range of different planning issues. Due weight must be given to them when considering individual planning applications as they are a material factor in their determination. PPGs are gradually being replaced by ➡ Planning Policy Statements.
Planning Policy Statement	PPS	Prepared by the Government to outline national planning policy on a wide range of planning issues. In order to provide greater clarity than the ➡ Planning Policy Guidance notes that they will eventually replace, they will exclude advice on practical implementation, which is better expressed as guidance rather than policy. The contents of a PPS must be taken into account in the preparation of the ➡ Local Development Framework.
Proposals Map	-	Map of the district, using an Ordnance Survey base to illustrate the ➡ spatial implications of the policies and proposals contained in the other Development Plan Documents. The map defines sites where particular developments or land uses are favoured, or those areas that are protected from development. Detailed inset maps are used where additional clarity is required.
The Regulations	-	Reference to The Town and Country Planning (Local Development) (England) (Amendment) Regulations 2008, which govern all matters relating to the preparation of Local Development Documents.
Site Specific Allocations	-	The allocation of land for particular uses within a ➡ Development Plan Document.
Soundness	-	The term means founded on a robust and credible evidence base and the most appropriate strategy when considered against the reasonable alternatives. For something to be sound is must also be deliverable, flexible and able to be monitored.
Spatial	-	Although often used instead of the term 'geographic', it has a much broader meaning in that it refers to an in depth understanding of the position, area and size of features in a particular location, and the relationship that this place has with other locations. ➡ Spatial planning

Term / Common abbreviation		Brief Description
Spatial Planning	-	<p>Spatial planning refers to the methods used by the public sector to influence the distribution of people and activities in a particular area. It goes beyond traditional land use planning, in that it brings together and integrates policies for the development and use of land with other policies and programmes which influence the nature of places and how they function.</p> <p>This will include policies which can impact on land use by influencing the demands on, or needs for, development, but which are not capable of being delivered solely or mainly through the granting or refusal of planning permission and which may be implemented by other means.</p>
Stakeholder	-	The term used to describe any organisation or individual that has a direct interest in, or is affected by, the actions or decisions of another individual or organisation.
Strategic Environmental Assessment	SEA	<p>A legally enforced assessment procedure required by EU Directive 42/2001/EC. The directive aims to introduce a systematic assessment of the environmental effects of strategic planning and land use decisions. The environmental assessment requires:</p> <ul style="list-style-type: none"> • the preparation of an environmental report; • the carrying out of consultations; • taking into account the environmental report and the results of the consultations in decision making; • the provision of information when a plan or programme is adopted; and • showing that the results of the environmental assessment have been taken into account. <p>For planning documents, the SEA requirements have been incorporated into the ➡ Sustainability Appraisal.</p>
Statutory	-	Required by law (statute), usually through an Act of Parliament.
Sub-regional	-	The term used to describe any subdivision of a region, larger than a district authority. For example Lancashire and East Lancashire are both sub-regions of North West England.
Supplementary Planning Document	SPD	<p>Cover a range of thematic or site specific issues in order to provide additional information and guidance that expands on the policies contained in 'parent' ➡ Development Plan Documents. They do not form part of the ➡ statutory ➡ Development Plan and cannot be used to allocate land or introduce new planning policies (➡ Development Plan Document). Although SPDs go through public consultation procedures and ➡ sustainability appraisal, they are not subject to independent examination.</p> <p>SPDs will replace existing Supplementary Planning Guidance.</p>

Term / Common abbreviation		Brief Description
Sustainability Appraisal	SA	<p>The process of assessing the policies and site allocations in a ➡ Development Plan Document, for their global, national and local implications on social, economic and environmental objectives.</p> <p>➡ Strategic Environmental Assessment</p>
Sustainable Community Strategy	SCS	<p>This is a community document prepared by Pendle Partnership, the ➡ local strategic partnership for the borough. It sets out the strategic vision for the area and provides a vehicle for considering how to address difficult issues such as the economic future of an area, social exclusion and climate change.</p> <p>It is a vision document which and the ➡ Core Strategy must be aligned with its objectives.</p>
Sustainable Development	-	<p>Various definitions of sustainable development have been put forward over the years, but that most often used is the Brundtland definition: enabling development that meets the needs of the present without compromising the ability of future generations to meet their own needs.</p> <p>Planning seeks to promote sustainable development by helping to achieve a balance between economic growth, social advancement and environmental conservation.</p>

Planning Policy & Conservation
Planning & Building Control
Pendle Council
Town Hall
Market Street
Nelson
Lancashire BB9 7LG

Tel: 01282 661330

Fax: 01282 699463

Email ldf@pendle.gov.uk

Website: www.pendle.gov.uk/planning



**If you would like this information
in a way which is better for you,
please telephone us.**

اگر آپ یہ معلومات کسی ایسی شکل میں چاہتے ہیں، جو کہ
آپ کے لئے زیادہ مفید ہو تو برائے مہربانی ہمیں ٹیلیفون کریں۔



2006-2007
Transforming the Delivery of
Services Through Partnerships

