Introduction
In 1994 the UK Biodiversity Action Plan (BAP) set out priority habitats and species that required protection. Local BAPs have since been produced to meet targets for habitat and species protection specific to local areas. In Derbyshire there are three Biodiversity Action Plans (BAPs):

- Peak District BAP
- Lowland Derbyshire BAP
- National Forest BAP

These set out priority habitats and associated species that require protection. They have also set specific targets for the conservation and enhancement of existing habitats and future expansion of priority habitats.

The Derbyshire landscape character assessment has identified, for each of the Landscape Character Types, the habitats that naturally occur in these areas and the potential for protection and expansion of these habitats.

This information can be used by a variety of interest groups including developers, planners, foresters and wildlife groups when considering the appropriateness of particular developments, woodland planting and habitat creation schemes in a specific area. The information is laid out in tablular form with “spots” to represent BAP priority habitats in a particular landscape type. The description of the habitats should be read in conjuction with the relevant BAP Action Plan. The names and definitions have been tailored to meet the Derbyshire and Peak District situation. In some instances where there are close associations, several habitats have been grouped under one habitat title. At the end of individual descriptions of each habitat, the appropriate BAP reference is given for further reading.

Habitat Descriptions
Ancient and semi natural broadleaved woodland
The term “Ancient semi natural broadleaved woodland” encompasses both ancient and semi natural broadleaved woodlands in the uplands (detailed in the Peak District BAP) and the lowlands (detailed in the Lowland Derbyshire BAP). The following are descriptions of the different woodland habitats covered that come under this general heading.

● Lowland mixed broadleaved woodland

This habitat encompasses two woodland types:

1. Ancient woodlands, which are remnants of the original forests that developed after the last glacial period 10,000 years ago through natural regeneration and have never been cleared.

2. Other lowland mixed deciduous woodland that may occur through planting, or may naturally regenerate from nearby woodlands into adjoining land such as fields, rough pasture or heath. Such woodlands tend to have fewer species of plants and animals than ancient woodland through lack of time for associated woodland species to colonise from surrounding woodlands or because they are isolated. However, sometimes where these woodlands occur next to ancient woodland, species diversity can be higher because of the connectivity between the two.
   LD BAP = Lowland mixed broadleaved woodland HAP
   NF BAP = Ancient woodland and plantation/ secondary woodland HAPs

● Upland ancient and semi natural woodland

This habitat covers two types of woodland that occur in upland Derbyshire; Upland ash woodlands and Upland oak/ birch woodlands.

Upland ash woodlands are the dominant (climax) native woodland type of the steeper slopes of the limestone dales and support one of the richest wildlife habitats in the uplands. Characteristic species that are found in this habitat include dog’s mercury, field maple and brome grasses as well as rare species such as mezereon, lily-of-the-valley, small leaved lime and large leaved lime. Prior to Dutch elm disease outbreaks in the 1970s, these woodlands would have also included elm species but these now only occur as small individuals in hedgerows and the understory. Ash woods in the White Peak include both ancient woodland and more recent secondary woodland that have expanded

through natural regeneration on open land where there is reduced grazing pressure or in disused quarry sites. These woods are an important transition habitat to grasslands, scrub and other woodland types in the White Peak.

Upland oak/ birch woodland is the main woodland type of the Dark Peak, occurring mainly in cloughs and on valley sides, with particularly high concentrations along the valley of the River Derwent. Small pockets can also be found on the upper dale sides and White Peak plateau. This woodland type, where it occurs in Derbyshire, is at the south-eastern edge of its British range.

Ancient oak/birch woodland has a range of notable plant species such as hazel, aspen, bird cherry, wood sorrel, wood anemone and bluebell. These woodlands are also vital for the invertebrate species they support, including northern wood ant and the purple hairstreak butterfly. They offer a valuable interface between woodland and moorland habitats and are especially important for birds such as nightjar and tree pipit.

As well as being important for wildlife, these woodlands are also of considerable landscape importance, with ancient sites often containing archaeological/historical features such as charcoal pits.

PD BAP = Upland ash woodlands and upland oak/birch woodland HAPs.

Lowland parkland

Parkland includes:

- individual or groups of over mature (veteran) trees usually with domestic livestock or deer grazing the grassland or heathland beneath;
- parkland that has been converted to agricultural land, forestry or amenity parkland but that retains veteran trees from an earlier landscape.

This habitat has its origins in earlier landscapes such as medieval or hunting forests, deer parks, parks associated with large country houses or estates and old pastures or commons with trees on them. Trees in parklands are often a mixture of native species and species that were planted about 200 to 300 years ago when it was fashionable to collect exotic plants and landscape large gardens. The continual presence of veteran trees over many centuries in these situations has been vital for the survival of many rare dead wood invertebrate, moss, and lichen and fungi species, many of which are also associated with ancient woodlands.

LD BAP = Lowland wood pasture and parkland HAP
PD BAP = Parkland and veteran trees HAP
NF BAP = Lowland wood pasture with mature trees HAP

Wet woodland

Wet woodland or Carr is woodland that has developed in a location where the water table is permanently high. The dominant tree species found in wet woodlands are those that can tolerate poorly drained soils, such as crack willow, sallow, alder and birch.

LD BAP = Wet woodland HAP
PD BAP = Wet woodland HAP
NF BAP = Wet woodland HAP

Veteran trees

Veteran trees offer an important habitat in parklands, but are also valuable in the wider countryside, as concentrations of trees or as isolated individuals in hedgerows, woodland edges and some older churchyards. Veteran trees managed as pollards can even be found in open field situations, often as remnants of a previous parkland landscape.

Veteran trees are valuable for wildlife, especially birds, bats, invertebrates and fungi. Many of the species found on veteran trees are rare, endangered dead wood specialists, making veteran trees an important BAP habitat. Veteran trees are also of value historically, culturally, visually and are an integral part of the English landscape.

Trees can be considered veterans if they are exceptionally old for their species and have reached or passed their peak growth rate. Long-lived species such as oak and beech reach this point at around 150 - 200 years at the earliest. Veteran trees may be either indigenous or introduced species. Non-native tree species, if long-established, may support a flora or fauna which is different from native tree species, but which may be of equal or occasionally even greater ecological interest. Beech, sweet chestnut, horse chestnut and sycamore are commonly found in Derbyshire as well as our native species such as oak, ash, yew and small leaved lime. Britain has one of the highest percentages of veteran trees in Europe.

LD BAP = Veteran trees HAP

Ancient and species rich hedgerows
Ancient hedgerows are those that have continually existed since at least 1600 and are associated with early land enclosure. Some that form parish boundaries can be over 1000 years old. Ancient hedgerows may have a greater number of tree and shrub species and can also have woodland ground flora species and ancient woodland indicator species growing within them.

Late enclosure and more recent hedgerows were planted with very few species, dominated by hawthorn. Colonisation by other trees, shrubs and ground flora is slow and so the older a hedgerow is, the longer new species have had to colonise. Generally, there are fewer species in younger hedgerows. However, some species rich hedgerows are not necessarily always ancient. Younger hedges may be located next to ancient woodland so that colonisation may be easier. Modern planting can also often include a wide variety of species in hedgerow mixes.

LD BAP = Ancient and/ or species rich hedgerows HAP
NF BAP = Ancient/ species rich hedgerows HAP

Cereal field margins
The strip of land lying between cereal crops and the field boundary, extending for a small distance into the crop, can have a variety of species and features associated with it, depending on the agricultural operations in the field. Margins are important to wildlife because they protect boundary features, such as walls and hedges from agricultural operations. Field margins may also be remnants of former habitats, for example species rich grassland. Margins are usually managed differently to the rest of the field and may contain important micro-habitats that act as wildlife corridors for species moving from one suitable habitat to another. They are important habitats for predator species that act as biological controls against many crop pests.

LD BAP = Cereal field margins HAP
NF BAP = Field margins HAP

Floodplain grazing marsh
This is wet grassland that occurs on the floodplains of rivers. Because the land is low lying, the water table is at, or near, the surface level for much of the year. They often have drier periods in spring and summer months and periods of flooding or prolonged water-logging in autumn and winter. This habitat is usually permanent grazing pasture but can sometimes be cut for hay if the ground conditions are suitable. Floodplain grazing, if water levels are kept high, can produce a mosaic of grassland micro-habitats such as short turf, tussocks and unmanaged areas of tall grass and herbs. This diverse habitat attracts a wide range of invertebrates and wading birds that feed, nest and over winter here.

LD BAP = Floodplain grazing HAP
PD BAP = River corridors HAP (rarely found in the Peak District)
NF BAP = Floodplain grazing marsh HAP

Rush pasture
Rush pasture, grazed by livestock includes all wet grassland that occurs on more acid soils, in association with areas of impeded drainage, springs, flushes and small streams. These additional features are sometimes species rich, whilst rush pasture itself, a mix of grasses, rushes and sedges, sometimes has floristically rich patches containing species such as devil's bit scabious and marsh bedstraw.

LD BAP = Rush pasture HAP
PD BAP = Rush pasture HAP

Reedbeds
Reedbeds are botanically species poor fens, dominated by large dense stands of common reed, *(Phragmites australis)*, but can support areas of open water, ditches, wet grassland and wet woodland. The water table has to be at or above ground level most of the year for this vegetation community to be maintained. Reedbeds are one of the most important habitats for the diversity of breeding birds in the UK.

LD BAP = Reedbeds HAP
NF BAP = Reedbeds HAP

Lowland fen meadows
Fens are a type of mire, or are peatlands that receive water and nutrients from soil, rock, and groundwater as well as from rainfall. The ground is periodically or permanently waterlogged by high rainfall, lateral flow or are affected by a high groundwater table. For fens the main source of water is from groundwater. Most fens are species rich. In Derbyshire this habitat occurs within river valley corridors with marsh marigold, ragged robin, lady's smock and tall herbs including wild angelica and meadowsweet. These habitats are also important for wading birds and invertebrates.

LD BAP = Lowland fen HAP
PD BAP = River corridors (more commonly found than floodplain grazing) HAP

Neutral grassland
These are unimproved, neutral grasslands often managed for hay and pasture. Traditional, unimproved hay meadows are often species rich as annual cutting for hay. Low intensity grazing removes excess nutrients, allowing many slower growing flowering species to thrive. These flower rich meadows were common up until the 1970s, when many were fertilised or re-seeded with more productive species such as rye grass. Hay meadows share many species with calcareous grasslands but growth tends to be more luxuriant on neutral grassland. Depending on the soil, hay meadows can include a full range of species from calcareous to acid grassland species.

LD BAP = Lowland neutral grassland HAP (possible name change to 'Species rich and unimproved grassland' HAP)
PD BAP = Hay meadows HAP
NF BAP = Lowland hay meadows HAP

Lowland calcareous grassland
This type of grassland occurs on basic soils and substrates. This is often the most species rich type of grassland for both plants and animals. Thin soils and limited nutrients provide ideal conditions for flowering plants and invertebrates. In Derbyshire, lowland calcareous grasslands occur on the carboniferous limestone of the White Peak with small outliers around Crich and Ashover.

LD BAP = Lowland calcareous grassland HAP
(possible name change to 'Species rich and unimproved grassland' HAP)
PD BAP = Hay meadows and limestone dales HAPs
NF BAP = Lowland calcareous grassland HAP

Magnesian limestone grassland
The climate on the magnesian limestone grassland is slightly drier and warmer than on the carboniferous limestone and so many mosses and lichens are much rarer on the surface of magnesian limestone grasslands. Also, the magnesian limestone attracts more southern warmth loving species than the carboniferous limestone. In Derbyshire, magnesian limestone occurs in north-east Derbyshire. The warmer conditions provide for species, which rarely occur on the carboniferous limestone, such as false broom and dwarf thistle. Some species such as yellow wort and black horehound are exclusive to the magnesian limestone in Derbyshire.

LD BAP = Magnesian limestone grassland HAP (possible name change to 'Species rich and unimproved grassland' HAP)

Lowland dry acid grassland
This type of grassland develops on acidic soils with pH 5.0 or lower or in areas where leaching has created acid conditions. It tends to be more species poor than other semi-natural grassland types, but contains important communities with rare and characteristic species, including, fine leaved bent and fescue grasses, sheep's sorrel, and heath bedstraw along with varying degrees of heathland species such as bilberry and heather. It is especially important for ground nesting birds and invertebrates.

LD BAP = Lowland dry acid grassland HAP (possible name change to 'Species rich and unimproved grassland' HAP)
PD BAP = Unimproved pasture and rough grazing HAPs
NF BAP = Lowland dry acid grassland HAP

Lowland heaths
Lowland heath is below 250m. Heathland usually develops on nutrient poor mineral soils but is also defined as occurring on peaty soils where the peat is less than 0.5m thick. Vegetation is at least 25% dwarf shrubs, predominantly heather, western gorse, bilberry and bell heather with other species such as sheep's sorrel, heath bedstraw and tormentil interspersed.
Oak and birch scrub is also often present. If left unmanaged heathland would quickly revert to woodland and scrub. A management regime of rotational cutting and controlled burning together with low intensity grazing, is used.

LD BAP = Lowland heath HAP
NF BAP = Lowland heath and purple moor grass HAP

Upland heaths Upland heath or heather moorland lies above 250m. Heathland usually develops on mineral soils which are acidic, but is also found on small remnants of acid soils over limestone. The dominant species are heather, bell heather, western gorse and bilberry with patches of oak and birch scrub.

LD BAP = Upland heath HAP
PD BAP = Blanket bog/ heather moorland/ limestone heath HAPs

Standing open waters and canals

Standing waters are water bodies that, except for in high periods of rainfall or when water is needed for power or supply purposes, has no through flow. These include natural and man made standing waters. Reservoirs, farm or field ponds, mill ponds, estate lakes and open water bodies created through mineral extraction or gravel workings are all standing open waters that occur throughout Derbyshire. The habitat includes land around the edges of the water body. Oxbow lakes are not included here as they form part of the river corridor habitat. Canals are included in this habitat type, even though there is a slight flow in most working canals with the use of locks. Here the term canal includes all adjacent land associated with the canal network, i.e. towpaths, bridges and hedgerows. Standing open waters are important for a number of plants and animals that require a stable water environment for growth, feeding or breeding purposes.

LD BAP = Standing open waters and canals HAP

PD BAP = Ponds HAP

NF BAP = Mesotrophic lakes and Eutrophic open waters HAPs

Rivers and streams (river corridors)

This habitat includes larger rivers and also streams, brooks and some larger ditches. The habitat includes the water body and also the surrounding marginal and adjacent land including floodplain. Species composition of rivers and streams depends on the underlying rock. The rivers and streams on the gritstone and more acid rocks have different species associated with them than those on limestone. Rivers on limestone do not always flow on the surface all year round, but flow through underground courses dissolved in the rock.

LD BAP = Rivers and streams HAP

PD BAP = River corridors HAP

Habitat Types	Landscape Types: Dark Peak					White Peak				Derbyshire Peak Fringe and Lower Derwent					Nottinghamshire, Derbyshire and Yorkshire Coalfield						SML		Needwood and South Derbyshire Claylands					Trent Valley Washlands			Melbourne Parklands			L & SDC	Mease & Sence Lowlands	
	Open Moors	Enclosed Moorland	Moorland Fringe	Settled Valley Pastures	Riverside Meadows	Plateau Pastures	Limestone Moorland	Limestone Slopes	Limestone Dales	Enclosed Moors and Heaths	Wooded Slopes and Valleys	Wooded Farmlands	Gritstone Heaths and Commons	Settled Farmlands	Riverside Meadows	Wooded Hills and Valleys	Coalfield Village Farmland	Estate Farmland	Wooded Farmland	Coalfield Estatelands	Riverside Meadows	Plateau Estate Farmlands	Limestone Farmlands	Limestone Gorges	Settled Farmlands	Settled Plateau Farmlands	Sandstone Slopes and Heaths	Estate Farmlands	Riverside Meadows	Lowland Village Farmlands	Wet Pasture Meadows	Riverside Meadows	Estate Farmlands	Wooded Estatelands	Sandstone Slopes and Heaths	Riverside Meadows	Coalfield Village Farmlands	Village Estates Farmlands	Riverside Meadows
Ancient & semi natural broadleaved woodland	—	—	✖	●	—	○	—	○	●	—	●	●	—	—	—	●	○	○	●	●	—	●	●	●	—	○	—	●	—	○	—	—	●	●	●	○	○	—
Lowland parkland	—	—	—	—	—	—	—	—	—	—	—	●	—	○	—	—	○	●	○	●	—	●	○	—	○	○	—	●	—	—	—	—	●	●	—	—	○	○	—
Wet woodland	—	—	—	●	●	—	—	—	●	—	●	●	—	○	●	●	○	●	●	●	●	○	●	—	○	—	—	○	●	○	—	●	○	●	●	—	●	●	●
Veteran trees	—	—	—	●	—	—	—	—	—	—	●	●	—	●	—	●	●	○	●	●	—	●	—	—	●	●	○	●	—	○	—	—	●	●	○	●	○	—
Ancient and species rich hedgerows	—	—	—	●	—	—	—	—	—	—	●	●	—	○	—	●	●	○	●	●	—	○	●	○	●	●	●	○	—	○	○	—	○	○	●	—	●	●	—
Cereal field margins	—	—	—	—	—	—	—	—	—	—	—	○	○	●	—	—	○	●	—	○	—	●	●	—	●	○	○	●	—	●	●	—	●	○	—	—	●	●	—
Floodplain grazing marsh	—	—	—	—	●	—	—	—	○	—	—	—	—	—	●	—	—	—	—	—	●	—	—	●	—	—	—	●	—	●	●	—	—	—	●	—	—	●
Rush pasture	○	●	●	●	●	—	—	—	—	●	●	○	—	○	●	—	○	—	○	○	●	—	—	○	○	○	—	○	●	—	●	●	—	○	—	●	○	—	●
Reedbeds	—	—	—	●	●	—	—	—	—	—	○	○	—	—	●	○	○	—	○	○	●	—	—	○	✖	—	—	—	✖	—	—	●	—	—	●	—	○	—	●
Lowland fen meadows	—	—	—	○	●	—	—	—	○	—	○	○	—	○	●	—	—	—	—	✖	●	—	✖	✖	○	—	✖	✖	●	—	●	●	—	○	—	●	—	—	●
Neutral grassland	—	—	—	●	●	○	○	○	○	●	●	●	●	●	●	●	●	○	●	●	●	○	—	○	●	●	—	○	●	●	●	●	○	●	—	●	●	●	●
Lowland calcareous grassland	—	—	—	—	—	●	●	●	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	—	—	—	—	—	—	—
Magnesian limestone grassland	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	—	—	—	—	—	—	—	—	—	—	—	—
Lowland dry acid grassland	—	●	●	○	—	—	—	—	—	●	○	○	●	—	—	○	○	○	○	—	—	○	—	—	○	○	●	○	—	—	—	—	●	●	●	—	○	—	—
Lowland heaths	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	○	○	●	○	—	—	—	—	●	—	●	—	—	○	—
Upland heaths	●	●	●	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Standing open waters & canals	—	—	—	●	●	—	—	—	●	—	○	●	—	○	●	○	●	●	●	●	—	○	○	—	●	○	—	—	●	○	●	●	—	●	○	●	●	○	●
Rivers and streams (river corridors)	—	○	—	●	●	—	—	○	●	○	●	●	—	—	●	●	●	●	●	●	○	●	●	—	●	—	—	○	●	○	—	●	○	●	○	●	●	●

Primary Habitat - prominent and key characteristic	●
Secondary habitat - variable and local characteristic	○
Locally significant - containing rare species	✖
Not Applicable	-

SML Southern Magnesian Limestone

L & SDC Leicestershire and South Derbyshire Coalfield

The descriptions of the habitats provided here should be read in conjunction with the Peak District, Lowland Derbyshire and National Forest BAPs, where Habitat Action Plans provide more detailed descriptions together with objectives and targets.

The names and definitions of the habitats have been tailored to meet the Derbyshire and Peak District situation.

In some instances, where there are close associations, several habitats have been grouped under one habitat title. At the end of each description is a reference given for further reading.

The corresponding priority habitat name for each relevant BAP for Derbyshire is given. The Peak District BAP being PD BAP, the Lowland Derbyshire BAP being LD BAP and the National Forest BAP being the NF BAP.

THE LANDSCAPE CHARACTER OF DERBYSHIRE

HABITATS CHARACTERISTIC AND APPROPRIATE WITHIN EACH LANDSCAPE CHARACTER TYPE