

1. Background information (Introduction)

1.1 What is “biodiversity”?

“Biodiversity” is now a familiar term but, in fact; the origins of the word and the scientific meaning are relatively recent. The phrase “natural diversity” was more commonly used but during the 1980’s this was gradually replaced by the term “biodiversity”.

Biodiversity is more than just the number of species in a given geographic area. The term is now used to include:

- Species diversity
- Genetic diversity
- Ecosystem diversity
- Molecular diversity

Biodiversity is not evenly distributed across geographic areas. As an extreme example, the biodiversity of a hectare of ancient woodland is much higher than for a similar area of concrete hardstanding.

In the United Kingdom the most biodiverse habitats include ancient woodland, unimproved (especially chalk) grassland, grazing marsh, the marine environment, sand dunes, coastal saltmarsh, heathland and aquatic environments such as ponds and chalk streams.

To simply use the number of species in a particular habitat or geographic area as a measure of the overall “richness” can give a false impression. For example, lowland heathland is relatively impoverished in terms of fauna compared to an area of ancient oak woodland. However, many of the plants and animals found on lowland heathlands in the UK are restricted to this habitat.

Given these differences in species diversity and biodiversity itself, it is more productive to look at the conservation of biodiversity over a larger area – such as the district of Hart – being achieved by the preservation and enhancement of the individual habitats which make it up.

1.2 Why is biodiversity important?

The natural environment around us enriches our lives and is also an important part of both the national character and the character of local areas, such as Hart district. Maintaining the diversity of habitats and protecting the species they support is beneficial to us in a variety of different ways. The vast array of benefits and products that both habitats and species provide are sometimes known collectively as “Ecosystem services”. These services can loosely be divided into four categories; Provisioning, regulating, cultural and supporting.

Provisioning

Provisioning services relate to products which we obtain from ecosystems. These include:

- Food (fish, crops, fruit)
- Fibres and fuels
- Ornamental resources (flowers, etc)
- Genetic material (for the breeding and production of livestock etc)

Regulation

Regulatory ecosystem services are benefits gained from the regulation of ecological processes.

- Air quality maintenance
- Climate regulation (tree cover can affect local climate and precipitation and ecosystems regulate emissions and greenhouse gases)
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- Flood alleviation
- Erosion control
- Water purification and detoxification
- Remediation of environmental pollutants

Cultural/social

Cultural or social services are non-material gains that ecosystems provide for people.

- Health and wellbeing (access to the natural environment can keep people healthy and also aid recovery from illness)
- Recreation and ecotourism
- Cultural heritage
- Aesthetic value

Supporting

These are services which are required for all the other services that ecosystems provide.

- Nutrient cycling
- Soil formation
- Water cycling
- Provision of habitat

In June 2011 the Government published “The Natural Choice: securing the value of nature” White Paper. The paper outlines the vision for the next 50 years for biodiversity in the UK and makes reference to the National Ecosystem Assessment. It makes it clear that government and society need to account better for the value of nature.

1.3 Conserving Biodiversity – the bigger picture

In 1992 the first international “Convention on Biological Diversity” took place in Rio de Janeiro in Brazil. The convention recognised that the conservation of biodiversity was essential to “humankind” and it covers all ecosystems, species and genetic resources.

Most of the parties which signed up to the convention have produced national biodiversity strategies and action plans. Many, such as the UK, have been detailed and far reaching with several layers making up the overall strategy.

The UK’s initial response to signing the 1992 convention was the publication of the UK Biodiversity Action Plan (UKBAP) in 1994. This led to the production of 436 action plans between 1995 and 1999 which began the process of protecting and enhancing biodiversity in the UK. A further update in 2007 identified 1, 150 species and 65 habitat types that were deemed worthy of action plans. The UKBAP progress is monitored every three years.

In 2010 at the Nagoya Biodiversity Summit in Japan environment ministers from almost 200 nations signed up to a new commitment to reduce global biodiversity loss. These are known as the “Aichi targets”. The delegates agreed to at least half the loss of natural habitats and expand the area covered by nature reserves to 17% of global land area by 2020. Marine habitats are also set to gain greater protection with a target to designate at least 10% of global seas as marine conservation areas.

1.4 Conserving Biodiversity - the local view

International and national biodiversity targets can only be achieved with effective action at a local level. The 1995 UKBAP steering group report was published in two parts, making a series of recommendations. One of these was to encourage the production of local biodiversity action plans to bring those species and habitats identified nationally into a more regionally-based focus.

In response to this, the Hampshire Biodiversity Partnership was formed and in 1998 the Hampshire Biodiversity Action Plan (HBAP) was produced. Hampshire is very rich in biodiversity resources. Approximately 13% of the county is covered by the national Site for Special Scientific Interest (SSSI) designation and much more is covered by non-statutory Sites of Importance for Nature Conservation (SINC) designations.

Hampshire has a mosaic of habitats, which includes heathlands, woodlands, river valleys, unimproved grassland, ancient hedgerows and coastal habitats in the south of the County. Initially, the HBAP identified 455 priority species and 21 habitats worthy of conservation action. A theme of local biodiversity action plans, including in Hampshire, is to ensure that widespread and common species continue to thrive while also ensuring the rare do not become locally extinct.

Subsequently, many of the districts that make up Hampshire have developed their own specific action plans, targeting local sites and species for conservation over designated time periods. Local Biodiversity Action Plans are important as species and habitat conservation priorities may differ from district to county level. Biodiversity enhancements on a district scale may seem small, but as we have seen they are integral to the overall protection and enhancement of biodiversity on a much greater scale.

This action plan aims to:

- Conserve and enhance the current resource
- Identify new areas for biodiversity improvement
- Raise awareness of biodiversity in the council and local community
- Monitor and review biodiversity and the progress of this plan

2. Hart Action Plan – background

To include: introduction to the Action plan (and introduction to Hart District designated sites and BOAs), Why does Hart need an action plan? what are the main threats? (Climate change, inappropriate management, development, fragmentation, invasive species, disturbance?).

2.1 The Biodiversity Resource – an overview

In comparison to some other districts of Hampshire, Hart is particularly rural in character. There are five major urban areas; Fleet, Hook, Yateley, Blackwater and Hartley Wintney. Urban areas can be rich in biodiversity in comparison to areas such as intensive farmland with gardens, parks, railways and road corridors all providing opportunities for species. Hartley Wintney also has series of commons that contain many mature trees which are an excellent habitat for specialist deadwood invertebrates and in turn provide food for foraging bats and birds. Urban areas should be considered as places with substantial opportunities for biodiversity enhancement.

A landscape character assessment based initially on a county-wide assessment identified two broad groupings of rural landscape types:

- Chalklands (open arable and chalk and clay)
- Lowland mosaic (heathland and forest, pasture and woodland, mixed farmland and woodland and river valleys)

On a local scale within Hart district these landscape types can be further sub-divided to give a more detailed local assessment of the landscape character.

Landscape types associated with chalk occur in the southern part of the district in a broad sweeping band south of Odiham and Crondall. The chalk landscapes are typified by rolling hills, large mainly arable fields and scattered blocks of woodland. In the very southern part of the district the chalk landscape becomes more complex with increased woodland blocks and two areas of enclosed mixed farming where the field sizes are smaller and the hedgerow structure is stronger.

Aside from the chalklands in the south of the district, the remainder of the landscape is made up of a patchwork of other habitat types which reflect the underlying geology. Large areas in the north and east of the district are covered by heathland and forest. Most of the heathland areas in the district occur as part of a mosaic of heathland, grassland, scrub and woodland. These habitat types occur at Hazeley Heath, Eversley, Yateley and Hawley Commons and in the area to the east of Fleet. More open heathland habitats are found on Yateley Common. The woodland comprises a number of species but a distinction can be made between the predominantly coniferous woodland plantations and broad-leaved woodland, some of which may be semi-natural and ancient in origin. There are also some areas of farmed landscape associated with the unenclosed woodland and heathland and this retains a “heathy” character.

Three main river systems pass through Hart District: the Blackwater, Hart and Whitewater. The habitats and landscape associated with the river corridors is typically flat, low-lying pasture criss-crossed with drainage ditches which commonly floods. There has also been extensive gravel extraction along the Blackwater Valley which has created a series of wetlands. Tree species such as willow and alder are frequent along the ditches.

The Basingstoke Canal and its associated habitats passes through Fleet and across the district to the south of Odiham. The canal itself is an important site for biodiversity and it also has features such as the Greywell Tunnel which is a nationally important site for biodiversity.

The variety of landscape types within the district help to create an impressive biodiversity resource. The specially designated conservation sites in the district are described in more detail in the following section.

2.2 Designated Sites Overview

There are effectively three tiers of conservation designations for sites in Hampshire, based on their relative importance for biodiversity. International and European designated sites include Ramsar sites, Special Protection Areas (SPAs) and Special Areas of Conservation (SAC). Nationally designated sites include Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNRs), while local sites include Sites of Importance for Nature Conservation (SINCs) and Local Nature Reserves (LNRs).

Appendix ?? contains a full list of the designated sites within Hart.

2.3 Internationally important sites

Thames Basin Heaths Special Protection area

The Thames Basin Heaths SPA was designated in 2005 under the EC Birds Directive and represents the best remaining areas of heathland in north Hampshire, Berkshire and Surrey. SPAs are comprised of nationally designated Sites of Special Scientific interest in the UK.

The areas of heathland included in the SPA within the district (figure ?) cover 2, 099 ha and are designated due to their breeding populations of woodlark, Dartford warbler and nightjar.

insert figure 1 SPA map

2.4 Nationally important sites

Sites of Special Scientific Interest (SSSI)

The district contains a number of sites designated as SSSIs. These are regarded as being important for conservation at a national level. Several of the heathland SSSIs are also designated as part of the SPA.

There are 16 SSSIs that fall entirely or partially within the district boundary (figure??). Together they cover 2,696 ha which equates to approximately 12.5 % of the district.

The SSSIs cover a variety of habitat types including a variety of heathland types, meadows, woodland, river valleys, lakes and the Basingstoke Canal.

National Nature Reserves (NNRs)

Castle Bottom NNR is an important valley mire located in the north of the district. The reserve also includes supporting heathland and woodland. The nature reserve is also part of the SPA and Castle Bottom to Yateley and Hawley Commons SSSI.

The site is owned and managed by Hampshire County Council.

insert figure ? SSSI map*

2.5 Locally important sites

Sites of Importance for Nature Conservation (SINC)

Habitats and species which are regarded as important at a county level are designated as SINCs. The Council works in partnership with the Hampshire Biodiversity Information Centre (HBIC) to identify, designate and monitor the sites. Sites are designated using a series of criteria created by Hampshire County Council, The Hampshire and Isle of Wight Wildlife Trust and Natural England. SINCs are reviewed annually on a rotational basis and boundaries can change while new SINCs can also be designated. Occasionally SINCs can also be deleted if they no longer hold the interest for which they were originally designated.

There are 254 SINCs in the District at present which cover a total of 1,935 ha. SINCs comprise a wide range of habitat types ranging from woodland to lakes. A complete list of SINCs currently designated in Hart is provided in appendix one.

Local Nature Reserves (LNR)

LNRs are designated by the Council with approval from Natural England. LNRs have an emphasis on being sites which can be enjoyed by the public for recreation and education while also being managed for nature conservation.

There are three LNRs within the District:

- Elvetham Heath
- Fleet Pond
- Zebon Copse

2.6 Biodiversity Opportunity Areas

Biodiversity Opportunity Areas (BOAs) are regional priority areas with high opportunities for habitat restoration and associated biodiversity enhancement. They are comprised to a large extent of areas identified as UK Biodiversity Action Plan (BAP) Priority habitats although BOAs do not include all of the BAP habitat in any given area. A range of semi-natural habitat types are listed as BAP habitats all of which are regarded as having high biodiversity value.

Of the 43 BOAs identified in the Southeast, four fall within the district boundary. These are the Blackwater Valley, the Thames Basin Heaths, the Loddon and Whitewater and the Herriard Wooded Downland Plateau. The following paragraphs outline these areas in more detail. Figure ?? shows the geographic location of each of the BOAs within the district.

Thames Basin Heaths

This BOA includes a number of SSSIs and in general is comprised of heathland, woodland, mire and grassland habitats. Opportunities in this BOA include the restoration and enhancement of lowland grasslands, heathland and rushy pasture.

Blackwater Valley

This BOA is centred on the Blackwater River Valley and its tributaries. The river itself contains a diverse range of marginal and aquatic habitats supporting a wide range of species. There are also a number of gravel extraction sites along the north of the valley. Important habitats for enhancement and restoration include wet woodland, grazing marsh, rushy pasture and reedbeds.

Rivers Loddon/Lyde/Whitewater Catchment & Headwaters

These rivers rise on the chalk escarpment to the east of Basingstoke and from there flow north across the clays and sands of the Thames basin. The valleys are mainly shallow and fairly wide and many areas are prone to flooding. Although much of the land is agricultural there are opportunities to restore and enhance areas of wet grassland and fen along with other areas of woodland and heathland.

Herriard Wooded Plateau

A small portion of this BOA falls within the south east of the district, including Sheephouse Copse. The majority is located to the south of Hart on the mid Hampshire downland plateau. The BOA features many areas of semi-natural woodland, many of which still have coppice rotations as part of the management regimes.

2.7 Threats to biodiversity in Hart

There are a number of potential threats to biodiversity globally but there are some which are more appropriate within Hart District. These are:

- **Development**
 - **Disturbance**
 - **Fragmentation**
- **Inappropriate management**
- **Invasive species**

- **Climate Change**
- **Pollution**

None of these threats are specific to Hart and a number are linked. The next paragraphs look at the potential threats in more detail.

Development

Inappropriate development is potentially damaging to biodiversity in a number of ways. This could be *via* direct habitat loss due to development in sensitive areas. In these cases there are potential issues in both the construction and operational phases of the development. The construction phase can cause disturbance through noise or pollution while the operational phase can continue to have negative impacts such as changes in demand on water resources, increased artificial lighting and related infrastructural changes.

Development which appears to have minimal direct ecological impacts may have detrimental effects by increasing the fragmentation of habitats. Particularly in urban areas but also in intensive farmland, corridors of habitat such as railway lines, waterways, patches of woodland and even hedgerows and gardens can provide links between otherwise isolated habitats. While some species are highly mobile and are able to travel large distances some species are far less mobile and rely on these links. It is important that these links are maintained and where possible, enhanced.

An increase in the recreational use of heathland areas can result from new developments. Increased recreational use of heathland habitats has implications for the associated designating species and the habitats themselves. Nightjar and woodlark are ground-nesting birds while Dartford warblers nest low down in scrub and are effectively ground-nesting from the perspective of disturbance. During the breeding season they are sensitive to the presence of walkers and cyclists and, in particular, uncontrolled dogs. Dogs are perceived by the birds as predators and they will readily desert an active nest if disturbed. Where the urban fringe encroaches to the edge of the heathland domestic cats can also be a major predatory threat to ground-nesting birds and also reptiles.

Measures to reduce disturbance are required where new developments have the potential to cause disturbance to heathland habitats. These measures include providing alternative greenspaces in proximity to the new developments to encourage residents to use these rather than the heathland. Educating people who use the SPA about the impacts of their visits and explaining how following paths and keeping dogs on leads during sensitive times of the year can also have positive effects.

Inappropriate Management

Changes in the way a site is managed can be positive for biodiversity where active conservation is the aim. However, changes to the management of a site can also be detrimental to the conservation value when the management does not support the biodiversity interest.

Inappropriate land management of valuable sites can include increases or decreases in grazing levels, drainage of wet heath or bogs, afforestation of heathland or the ploughing or cutting of grasslands.

In the past large areas of Hart were covered by common land and woodland pasture where commoners would graze their stock at intensities which allowed a rich and varied ground flora to become established and controlled the growth of tree seedlings. The situation on heathlands was similar, with grazing preventing scrub and woodland developing on the sites.

Sites within the district which are currently managed favourably for conservation should be maintained and sites where the management is neutral or detrimental should be changed to positive management where opportunities exist.

Invasive species

New species can colonise areas naturally as a result of range expansions and changes in climate. However, some of the most damaging invasive species for our native wildlife have been deliberately or accidentally introduced by the actions of man.

Plants such as rhododendron, laurel, Japanese knotweed, Himalayan balsam, giant hogweed and bamboo were deliberately introduced as ornamental plants in gardens and plant collections and have subsequently become naturalised in the English countryside.

These plants can be highly aggressive and can crowd out native flora and fauna or, in the case of rhododendron, can also use chemical inhibitors in the soil to limit the growth of other plants.

Invasive plant species need to be controlled and prevented from spreading any further. In many cases and in many habitats they need to be eradicated to allow native flora to re-establish, although this can be a long and time consuming process.

Climate change

The effects of climate change over the next century will be one of the biggest issues facing biodiversity globally, nationally and locally. Biodiversity is affected by climate change in a number of ways, such as changes in abundance and distribution which leads to new ecological communities developing.

The timing of seasonal events such as insect breeding and plant-flowering can also change which will have consequences for other species which depend on the timing of these events for breeding. Also, greater fluctuations in the weather and rainfall events are likely to lead to changes in water levels in some habitats. The wet heath and mire communities which are some of Hart's most valuable habitats could potentially be at risk.

Predicting exactly which species will flourish and which will decline under various climate scenarios is not straightforward. Because of these uncertainties, adaptations to future climate scenarios need to be put in place to allow biodiversity to adapt and flourish. It is essential that biodiversity is provided with the space to adapt in the future.

Pollution

Pollution that affects biodiversity occurs in a number of forms; air, water, soil, noise and light. Light pollution, for example, can affect the localised distribution of nocturnal insects which can have a knock-on effect on the foraging of bats. Similarly, traffic noise is known to influence the territorial singing of some bird species with a subsequent impact on breeding. As well as these less obvious impacts the direct pollution of water courses and soil can be very damaging.

3 Planning Policy and Biodiversity

To include: an outline of the LDF and local biodiversity policies. Also mention things like the NERC act and PPS9? This section should put the LBAP into the planning context.

3.1 Introduction

This section will describe the existing nature conservation legislation around which this Biodiversity Action Plan will fit. Current planning policy allows Hart District Council to protect and enhance the biodiversity within the district. The Biodiversity Action Plan will be an important document that supports these aims and provides specific biodiversity enhancement targets.

3.2 National Policy

The government has outlined its commitment to the protection and enhancement on biodiversity in its **Planning Policy Statement 9** (PPS 9). The planning system plays an important role in the protection and enhancement of biodiversity in association with development.

Planning Policy Statement 9 requires all developments to be sustainable, take account of biodiversity and, where reasonable opportunities exist, enhance biodiversity. Appropriate levels of consideration to protected sites and species should be given when considering planning applications. PPS 9 also states that if a development leads to unavoidable harm to biodiversity or an alternative site or suitable mitigation cannot be provided then planning permission should be refused.

PPS 9 is also supported by **Circular 06/05: "Biodiversity and Geological Conservation – Statutory obligations and their impact within the planning system"**. This document provides administrative guidance on the implementation of legislation for nature conservation in the UK.

The **Countryside Rights of Way Act 2000** (CRoW Act 2000) places a duty on public bodies (including Local Authorities) to improve the condition of SSSIs. It also strengthens some of the legislation associated with protected species.

Under the **Natural Environment and Rural Communities Act 2006** (NERC Act 2006) every public authority must have regard to the purpose of conserving biodiversity.

3.2 Regional Policy

The **South East Plan** was issued in May 2009 and is the Regional Spatial Strategy for planning in the South East of England. This document includes policies relating to sustainable development and green infrastructure. It also includes a specific policy relating to biodiversity. This document re-emphasises many of the themes and aims of the national policies at a regional level.

South East Plan Policy NRMS states that *“local planning authorities and other bodies shall avoid a net loss of biodiversity and actively pursue opportunities to achieve a net gain across the region”*.

The plan outlines a hierarchical approach to conservation with the appropriate emphasis being given to those sites of highest importance such as international and nationally important designations.

The plan also sets biodiversity targets in the form of habitat restoration projects to be achieved by 2026.

The Hart Biodiversity Action Plan will be a key document in implementing many of the restoration targets outlined in the South east plan.

3.3 Local Policy within Hart

A plan-led system of development control is run at a local level in England. Local Plans have now been replaced by **Local Development Frameworks (LDF)**. The emerging core strategy which forms part of Hart’s LDF includes a conservation policy.

Core Policy 7: Biodiversity. This policy focuses on the protection and enhancement of designated sites, including SINCs, and other biodiversity resources. New development should protect and enhance existing biodiversity but where damage cannot be reasonably avoided, suitable mitigation or compensation strategies will need to be agreed.

Core Policy 8: Thames Basin Heaths Special protection area. This policy ensures that any development that is likely to have a detrimental effect on the SPA, either alone or in combination with other projects, will have to demonstrate that suitable mitigation and compensation is in place to negate any potentially detrimental effects.

The BAP will work in conjunction with the broad conservation aims of the core strategy and also a green infrastructure plan to deliver the biodiversity targets in Hart.

The previous **Local Plan** included eight policies directly relating to nature conservation and the local environment.

Local Plan biodiversity Policies

Con 1. Nature Conservation: European designations

Con 2. Nature Conservation: National designations

Con 3. Nature Conservation: Local designations

Con 4. Nature Conservation: Replacement and habitats

Con 5. Nature Conservation: Species protected by law

Con 6. Heathlands

Con 7. Riverine environments

Con 8. Trees, woodland and hedgerows: Amenity value

In combination, these policies protect designated sites, protected species and other features of nature conservation value against the detrimental effects of inappropriate development. The policies aim to ensure that where development is permitted, it will not have a negative effect on biodiversity and will provide suitable mitigation and compensation.

Hart District Council also has a **Leisure Strategy** which covers the period from 2007-2017. As part of this strategy there is a commitment to protect and maintain areas of open heathland and commons as natural habitats with informal public access.

3.4 Other conservation legislation

The **Wildlife and Countryside Act 1981 (as amended)** is still the major legislative mechanism for the protection of wildlife in the UK. There have been a number of significant amendments, including the previously mentioned CRoW Act (2000). The act is divided into four parts:

- The protection of wildlife
- Countryside and national parks
- Public rights of way
- Miscellaneous provisions of the act

The act protects wild animals against deliberate injury or killing and for some species it provides special protection. The act also prohibits the release of non-native species into the wild and also implements the control of invasive species such as Japanese knotweed.

The **European Habitats Directive** is transposed into UK law *via* The **Conservation of Habitats and Species Regulations 2010** (commonly known as the Habitats Regulations). These consolidate and update the Conservation (Natural Habitats, &c.) Regulations 1994. These regulations, along with the Wildlife and Countryside Act 1981 (as amended), also implement the European Birds Directive.

These regulations allow for the designation and protection of “European sites” and protection of “European protected species”. A register of European sites which include Special Conservation Areas (SACs) and Special Protection Areas (SPAs) is maintained, forming a network of sites termed “Natura 2000”.

The regulations require an appropriate assessment to be undertaken by a competent authority (including Local Authorities) where a proposal may include potentially damaging operations on or near one of these sites. Consent for such a proposal may only be granted once it has been shown that the proposed operation will not adversely affect the integrity of the site. In instances where damage could occur permission may be granted where there is no alternative solution AND there are imperative economic, social or environmental reasons of overriding public interest.

The regulations also afford extended protection to EPS (European Protected Species), making it an offence to deliberately capture, kill, disturb or trade in animals listed in Schedule 2. This includes species such as great-crested newt, dormouse, otter and all UK bats. However, these actions can be made lawful through the granting of licences for certain activities such as Science and education, conservation and health and safety, providing there

are no satisfactory alternatives and that such actions will not have an overall detrimental effect on the wild population.

3.5 Thames Basin Heaths SPA - avoidance Measures

The Thames Basin Heaths SPA is subject to specific regulations relating to development which may have either direct or indirect effects on the site. A 400m buffer – known as the “inner exclusion zone” – surrounds the edge of the SPA. There is a presumption against residential development in this zone as it would be very difficult to avoid adverse effects. A further “zone of influence” stretches 5 km beyond the SPA boundary. In this area residential development can be permitted but still has the potential to have adverse effects on the SPA through indirect effects such as increased recreational pressure.

As such, the council has developed mechanisms to ensure that development in this zone does not adversely affect the SPA. These form the basis for the “avoidance measures” strategy. These measures only apply to residential developments.

There are two mechanisms – which work together - through which adverse effects are avoided:

- The provision of Suitable Alternative Natural Greenspaces (SANGs)
- Implementing Strategic Access Management and Monitoring measures (SAMMs)

SANGs are green spaces which can be developed on existing public open space or in new areas. They are not intended to recreate the biological characteristics of the designated heathland and their primary function is to act as an alternative greenspace for recreation (e.g. dog-walking and cycling). If residents of new developments can be encouraged to use the SANGs rather than the SPA heathland the potential adverse effects resulting from disturbance can be reduced to acceptable levels. SAMMs are the mechanism by which residents are educated about the SPA and encouraged to use SANGs.

Residential developments that meet the requirements for SANG provision are therefore required to make the necessary financial contributions. The potential capacity of a SANG is calculated using guidelines developed by Natural England. There are currently two SANGs available to developers in Hart:

- Hitches Lane, Fleet
- Hawley Meadows and Blackwater Park

Hitches Lane is a proposed 24 hectare Country Park located approximately 1 mile to the west of Fleet. Using the Natural England guidelines it is calculated that Hitches Lane has capacity for 3000 people.

4 Sites and species (an audit)

This section should be divided by habitat type i.e. woodland, aquatic, heathland etc. Designated sites and protected species that fall within these habitats will be discussed. To include overview maps of each habitat type. Give acreages.

4.1 Woodland

There are a number of broad types of woodland found in the UK which include broadleaved, coniferous, alder carr,...Some woodland can be described as "ancient", the definition of which is that the area must have had continuous tree cover since 1600 AD.

There is approximately ?? hectares of woodland within Hart district. **Nearly 70% of SINCs in the district feature at least some element of woodland.**

Ancient woodland

Ancient woodland can be further divided into semi-natural woodland and plantation woodland on ancient woodland sites. Ancient woodland is regarded as irreplaceable and is one of the most biodiverse habitat types in the UK. Ancient woods also contain a very high proportion of protected species compared with other habitat types.

Coniferous woodland

Coniferous woodland in England has been planted for the purpose of forestry. Conifers are preferred for timber production because they grow quickly and will produce timber up to six times faster than slow-growing, native deciduous species.

Because of the dense nature of conifer plantations they are often lacking in sunlight and as a result of this ground flora and understorey growth are limited. Species diversity in coniferous woodland can also be reduced although some species have adapted to this habitat.

Wet woodland

Wet woodland is often found on floodplains where small patches are often located within larger areas of woodland. It can occur on a variety of soil types and is extremely rich in invertebrate diversity.

4.2 Grassland

Lowland grassland is one of the most evocative and beautiful habitats in the UK - but unfortunately it is also one of the most threatened. While lowland grassland is still widespread in southern England much of it has been agriculturally improved and has become less biodiverse.

Protected Species Associated with lowland grassland in Hart

- **Skylark**
- **Brown hare**
- **Orchids**
-

Flower-rich grassland supports a high diversity of invertebrate fauna, especially insects. Agriculturally improved grasslands support far less flower species which in turn support less insects.

Approximately 22% of the SINCs in the district are designated because of grassland features.

4.3 Heathland

Lowland heathland is a rare and protected habitat. Only 6% of the heathland that was present in the 1800's is still present today. In the past heathland was lost to agriculture, forestry, mineral extraction and development. The current threats facing heathlands include uncontrolled burning, encroachment of trees and scrubs, nutrient enrichment, disturbance and fragmentation. The heathland in lowland England represents approximately 20% of the entire world's resource of this habitat.

Heathland soil is usually acidic and poor in nutrients and therefore develops a distinctive floral community.

There are around ?? hectares of heathland in Hart district, the majority of which is managed by the council's rangers.

Protected Species Associated with heathlands in Hart

- **Dartford warbler**
- **Woodlark**
- **Nightjar**
- **Adder**
- **Silver studded blue butterfly**
- **Marsh clubmoss**

Heathlands are also of interest in terms of their microclimatic conditions which includes microhabitats such as bare ground. These can be very warm in comparison to surrounding areas of habitat such as vegetation. Because of these characteristics heathlands can also support a diverse array of invertebrate fauna.

Heathland can be further divided into wet heath and dry heath, both of which are found within the district.

4.4 Wetlands

There are a variety of habitats which can be included within the broad category of wetlands. These include rivers, canals, lakes, ditches, streams and ponds. There are a number of terrestrial habitats associated with the aquatic habitats which include reedbeds, wet flushes and marginal features. A number of these habitats are listed as priority habitats in the National Biodiversity Action Plan.

Lakes

Fleet Pond Local Nature Reserve covers 21 hectares and is Hampshire's largest freshwater lake. Much of the lake is designated as SSSI. As well as the open water of the lake there are associated reedbeds, woodland and small areas of heathland. Much of the woodland associated with the reserve is regarded as wet and is dominated by alder and willow.

Ponds

Ponds have been lost in the wider countryside and are now far less common than they used to be. Ponds in the urban environment including garden ponds and ornamental park ponds now play an important role in the conservation of species such as common frog, smooth newt and common toad.

4.5 Urban environments

The urban environment is increasingly recognised as being a potentially rich source of biodiversity. Urban greenspaces such as gardens, allotments, parks and linear features such as railway lines and roads can all be rich in biodiversity. In one long term study a wildlife-friendly urban garden was found to have more than 2200 species of plants and animals while another garden was found to support 95 species of wild plant.

While the urban environment does not have any specific conservation designations there are many protected and priority conservation species which are found in the towns and villages of Hart.

Protected Species Associated with urban areas in Hart

- **Stag beetle**
- **Bats (several species)**
- **Hedgehog**
- **Common amphibians**
- **House sparrows**
- **Song thrush**

The urban centres of Fleet, Yateley and Hartley Wintney are relatively small compared to other towns and cities in Hampshire and they cover approximately ?? ha. This equates to ??% of the district.

Parks and open spaces

Although parks and other greenspaces are often intensively managed and frequently planted with ornamental species they still provide important resources for biodiversity, particularly given the urban location.

5. Biodiversity Action Plan

5 Year Action Plan 2012 – 2016

1. Development Control and Policy Documents

Action	Implementation/Partners	Timescales
Provide advice to developers and planning officers before and during the planning application process to ensure wildlife value of all sites is taken into consideration	HCC/Biodiversity Officer Statutory consultees (e.g. NE, EA...)	Ongoing as required
Ensure planning applications are supported by high quality ecological surveys	HCC/Biodiversity Officer/DC	Ongoing as required
Include policies in council plan documents to protect existing biodiversity at all development sites	HDC	Ongoing as required
Ensure designated sites are listed and given appropriate protection in all council documents and plans	HDC	Ongoing as required
All development briefs to include information on biodiversity of sites and take account of green corridors and green spaces	HDC	Ongoing as required

2. Monitoring and survey work

Action	Implementation/Partners	Timescales
Identify areas of existing or potential value that meet SINC criteria	HBIC/HDC	Ongoing Annually 2012 -
Identify priority habitats and species found on HDC land	HDC/Biodiversity Officer/HBIC/species groups/surveyors	Ongoing Annually 2012 -
Ensure regular re-survey of SINCs with continuing SLA with HBIC	HDC/Biodiversity Officer/HBIC	Annual Survey program 2012 -
Continue regular species group surveys on key Council owned sites	HDC/Biodiversity Officer/species group surveyors	Ongoing Annually 2012 -

3. Land management and Enhancement

Action	Implementation/Partners	Timescales
Ensure SSSI land within the district is maintained in favourable condition	HDC/Land owners	Ongoing 2012 -
Identify enhancement opportunities within SSSIs in council ownership aligned with overall management aims	HDC/Biodiversity officer	Ongoing 2012 -
Ensure the targets and aims set out in management plans for council sites are achieved	HDC/Biodiversity officer	Annually 2012 -
Ensure SINC in council ownership are managed positively to reflect their biodiversity interests	HDC/Biodiversity officer	Annual reporting to national indicator 2012 - 2016
Identify priority habitats with the potential for positive management and enhancement, especially on council sites	HDC/HBIC/Biodiversity officer	Annually/ongoing

4. Education and awareness

Action	Implementation/Partners	Timescales
Produce ?? (a number) of articles on biodiversity for local media	HDC/Biodiversity officer	Ongoing annually 2012 -2016
Raise awareness within the council using the website and presenting interesting features at “Greening Hart” meetings	Biodiversity officer	Ongoing 2012 -2016
Provide at least two sessions a year for schools on nature conservation issues	Biodiversity Officer	Two annually 2012 - 2016
?		
?		

5. Monitoring and review

Action	Implementation/Partners	Timescales
Produce annual report highlighting biodiversity action achievements	Biodiversity officer	Annually 2012 - 2016
Five year review of whole Biodiversity Action Plan to assess progress and future targets	HDC/Biodiversity officer	2016