



Havant Borough Council

Havant Biodiversity

Action Plan

2011



Hampshire &
Isle of Wight
Wildlife Trust



Produced by Hampshire and Isle of Wight Wildlife Trust
in partnership with Havant Borough Council

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Executive Summary

This Local Biodiversity Action Plan (LBAP) provides a vision and a framework for future action to conserve biodiversity in Havant Borough. The LBAP provides Havant with a mechanism for meeting Green Infrastructure objectives to enhance existing biodiversity, restore habitats, mitigate for the impacts of development and reduce the effects of climate change.

The BAP links in with the 'Greening for Growth' vision for the borough, and relates opportunities for biodiversity enhancement to:

- Economy
- Recreation
- Health & Wellbeing
- Community & Volunteering

Havant LBAP identifies and audits green space both natural and urban, and seeks to balance the use of such space by identifying projects with multifunctional benefits to both people and wildlife. Havant has a number of motivated and organised local groups already doing great work for biodiversity; ideas for local actions and projects for community groups are central to the Plan.

Havant borough holds a biodiversity asset of international importance having a large variety of notable and protected species and habitats within its boundary. Havant Borough Council have recognised and actively conserved important sites through the adoption of five Local Nature Reserves (LNRs) and 135 Sites of Importance for Nature Conservation (SINCs).

There are many areas of opportunity to further enhance and protect biodiversity and in doing so ensure that economic development is sustainable and quality of life improved. Ideas for biodiversity enhancement and partnership working are brought together in this document.

The LBAP is a comprehensive document which will enable the council to actively fulfil its duty under the Natural Environment and Rural Communities (NERC) Act 2006 and its statutory obligations under The Conservation of Habitats and Species Regulations 2010, and take a coherent approach to conservation.

The first two sections provide an introduction and audit of the biodiversity in the borough to provide an evidence base for actions, and highlight key areas for important habitats and species. Sections 3 and 4 give detailed actions based on targets that are applicable across the borough, but also specific projects for the various areas within the borough and how these should be monitored and reviewed over the lifespan of the LBAP.

The LBAP has been produced by Hampshire & Isle of Wight Wildlife Trust in partnership with Havant Borough Council and is seen by the Council as a key policy document, and many of its objectives will feed into the Local Development Framework. It builds upon the work of national and County level biodiversity action plans and offers an overview of our local biodiversity resources, as well as guidance on how these might best be protected and improved.

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Acknowledgements

A key part of the development and delivery of the BAP is the involvement of community groups, local naturalists, land managers, conservation organisations and local representatives from national government agencies. The groups and individuals involved have a wide range of knowledge and experience without which the BAP could not have been produced.

Havant has a number of motivated and organised local groups already doing great work for biodiversity. The plan will tap into this existing support for biodiversity action and seek to sustain it into the future as supporting biodiversity effectively is a long term vision. Although this plan has a lifespan of 10 years, many of the changes arising from it may have longer-term benefits resulting from a wide range of actions, some of which are already underway across the borough, including survey work, habitat creation and restoration and land management.

Section 1: Introduction

1.1 What is biodiversity and why is it important?

The term Biodiversity originates from the phrase 'biological diversity'. It describes the variety of different species of plants and animals, their environment, and the ecological systems that support them. It relates to both rare and common species, to the complex interactions between them and to the habitats in which they live.

The immense variety of biological systems enables life on earth to adapt to change and helps to ensure long-term stability in our environment. Biodiversity has an intrinsic value but it is also essential for the continuation of life on earth. In the 1980's the famous biologist E O Wilson recognised the importance of biodiversity to survival:

"The one process ongoing, that will take millions of years to correct is the loss of genetic and species diversity by the destruction of natural habitats. This is the folly that our descendants are least likely to forgive us for."

Without variety we are less likely to be able to adapt to changing climates, we could also lose resources for medicine and other natural products that are essential for our survival. Our health and wellbeing are also dependent upon the components of ecosystems i.e. water, soil, nutrients, minerals and organisms. All are utilised by humans for food and water, energy, disease control, and flood and pollution management. Natural processes or *ecosystem services* are the essential 'life support' functions, without which society becomes unsustainable.

The impacts on society of the increasing degradation of ecosystems, including the cost of fixing the resultant problems are now becoming more widely recognised. It can be argued that biodiversity is also essential for long-term economic success. In agriculture, our main food crops are descendents of wild organisms and many improvements in disease resistance come from cross-breeding different varieties. Fruit crops rely on the many insects that pollinate their flowers, losses in bumblebee and honey bee populations have recently served to highlight how critical a role wildlife plays in food production. Fisheries are another example of an economy dependent on the variety found only in healthy, functioning and sustainable river and marine ecosystems.

Another reason for the importance of biodiversity is that it improves our quality of life. In an ever more urban environment, the smallest of green spaces can provide a sanctuary in which to escape and unwind. Proximity to green space and access to the countryside creates a feeling of belonging and participation in practical work is both enjoyable and satisfying. Wild places can engender feelings of social responsibility and have educational and health benefits that can enrich our lives.

1.2 Issues and Threats to Biodiversity

There are a number of issues which pose a serious threat to biodiversity, many of which are the direct or indirect impacts of human activity. Recent decades have seen unprecedented levels of development and increases in population densities. The South of England has experienced this in the extreme.

Development can mean the direct loss of habitats and an additional pressure on the areas remaining from the consequent increase in people. Development can also result in increased indirect impacts such as habitat fragmentation, where infrastructure and buildings can break up the landscape resulting in isolated less robust patches, where wildlife cannot survive in the long-term. Development in agriculture and industry can also bring problems in terms of pollution; affecting water and air quality, and chemicals that can cause damage to sensitive species and habitats.

The global issues of sea level rise and climate change are likely to affect all of us but in particular coastal and low-lying areas like Havant. A global temperature increase would result, for example, in both a rise in sea level threatening coastal habitats and settlements, and an increase in extreme weather events such as heavy flooding. Key for the survival of biodiversity in the face of these changes is room for manoeuvre via connected and permeable habitats, all of which are under threat from the issues already listed above.

Indirect impacts on the environment are also having a significant role; these include the effects of changes to water quality and quantity, and visitor pressures.

1.3 Biodiversity in Context

In the UK, the government responded to the international Convention on Biological Diversity signed at the Earth Summit in Rio de Janeiro in 1992, by forming a partnership responsible for describing and planning the protection of the UK's biodiversity resource. Known as the UK BAP partnership, it identified a list of priority habitats and species and in conjunction with statutory and non-statutory organisations set out, through a series of action plans, targets to conserve these priority species and report on their progress. Action for biodiversity has since been devolved to national, regional, county and district levels.

In England, a national biodiversity strategy, Working with the Grain of Nature – a Biodiversity Strategy for England by DEFRA, was launched in 2002. In 1998 the RSPB and Wildlife Trusts produced The Biodiversity of South East England: an Audit and Assessment. This provides details of the status and distribution of habitats and species in the South East and identifies those of greatest priority. These two strategies were integrated at the regional level by the South East England Biodiversity Forum (SEEBF) into the South East Biodiversity Strategy. Both national and regional strategies identify biodiversity priorities, but also recognise that action is required at the local level in order to successfully deliver benefits for wildlife.

Local Biodiversity Action Plans (LBAPs) also work on the basis of partnerships to identify local priorities and to determine the contribution they can make to the delivery of the national Species and Habitat Action Plan targets. Often, but not always, LBAPs conform to administrative boundaries. In 1996 Hampshire County Council set up the Hampshire Biodiversity Partnership and in 1998 Volume 1 of the Biodiversity

Action Plan for Hampshire was published. This describes Hampshire's biodiversity and identifies habitats and species of priority concern. It also sets out a 10-year plan of action for the County. Individual action plans for priority habitats and species are contained in Volume 2. Work on Volume 2 is ongoing and habitat and species action plans continue to be reviewed.

Hampshire is divided into several district authorities and two unitary authorities, which sit outside of the county boundary. Several of the local authorities have taken action on their own local duty to protect and enhance local biodiversity by producing local authority action plans. The borough of Havant's Biodiversity Action Plan is outlined in this document.

Havant Biodiversity Action Plan

Location within county:

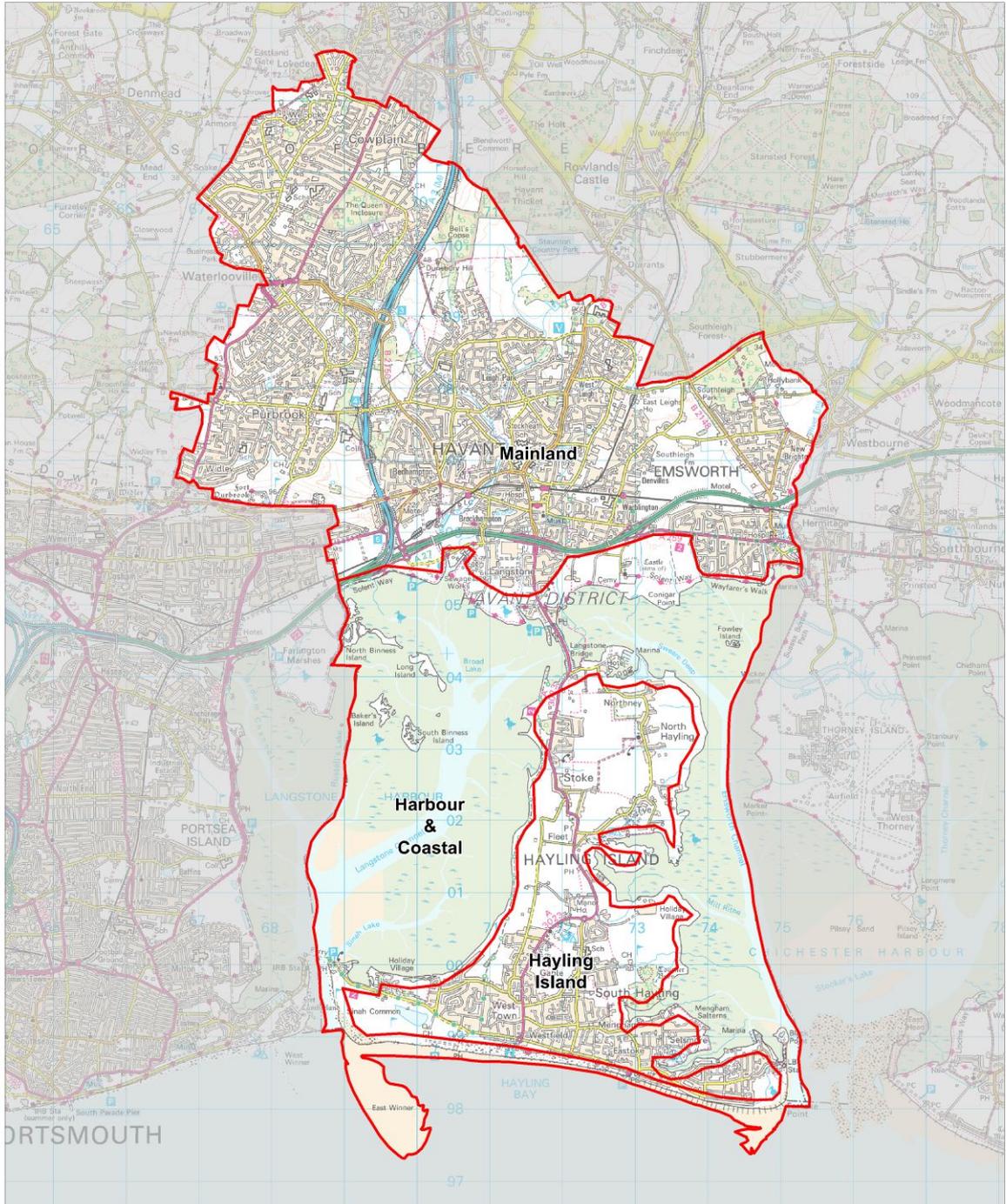


Havant BAP

Map 2. Action Plan Areas

Scale 1:50000

Hampshire and Isle of Wight Wildlife Trust
Beechcroft House, Vicarage Lane
Curridge, Hampshire
SO32 2DP



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 BAP Priority habitat, notable species and SINCC data supplied by the Hampshire Biodiversity Information Centre on behalf of the HBIC Partnership Produced by Hampshire and Isle of Wight Wildlife Trust on 19 May 2011 by Sarah Bignell
 For enquiries relating to the Wildlife Trust's GIS data contact Deborah King, email DebbieK@hwt.org.uk, tel: 01489 774420.

1.4 Biodiversity in Local Decision Making

As a local authority, Havant Borough Council has a duty to protect and enhance biodiversity. The Natural Environment and Rural Communities (NERC) Act 2006 requires every local authority to have regard to conserving biodiversity.

“Every public body must, in exercising its functions, have regard ... to the purpose of conserving biodiversity”

Section 41 of the act lists 56 habitats and 943 species of principal importance, all of which are identified on the UK BAP, which should be taken into consideration by local authorities when implementing their duty under the NERC Act.

In practice, the Council needs to ensure that its various departments have policies and procedures in place for the conservation of biodiversity and a Local Biodiversity Action Plan can provide an essential source of information as it identifies the key habitats and species the Borough supports. Further to this, it provides a framework for delivery of biodiversity restoration and enhancements for the future that will not only protect the borough's biodiversity resource but also enhance it.

A local authority that is actively implementing its NERC duty will be able to show that:

- biodiversity conservation and enhancement is appropriately integrated throughout all departmental policies and activities
- all staff, managers and elected members understand how biodiversity issues relate to their own decisions and actions
- it provides sustained support to local biodiversity initiatives, such as Local Biodiversity Action Plans, Biological Records Centres and Local Wildlife Site systems
- biodiversity, in particular species and habitats of principle importance, is properly protected and enhanced in line with statutory nature conservation obligations
- it has access to professional ecological expertise and up-to-date biodiversity information
- it reports on progress towards national and local biodiversity targets.

The Legal Context for the Protection of Biodiversity

In addition to the duties under the NERC act there are a number of other legal requirements for the protection of habitats and species. A short summary of the requirements set out in the legislation is given here, however this is purely intended as an overview and is not definitive.

European Directives

Havant borough is surrounded by sites designated of international and European conservation importance (see map 1), as such they are subject to the legal requirements as set out in the European directives and UK law.

The European designated sites are those categorised as Special Areas of Conservation (SAC), Special Protection areas (SPA) and Ramsar sites (areas of international wetland importance). Together these are known as Natura 2000 sites and are protected by European legislation. These directives all have implications for local decision making and special care must be taken to ensure decisions and plans do not impact negatively on these European sites or their qualifying species. For full information on these directives see the Joint Nature Conservation Committee (JNCC) website.

Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the 'Habitats Directive') and Directive 2009/147/EC on the Conservation of Wild Birds (the 'Birds Directive'); These directives provide for the protection of European species and the habitats that support them including their habitats outside the designated areas.

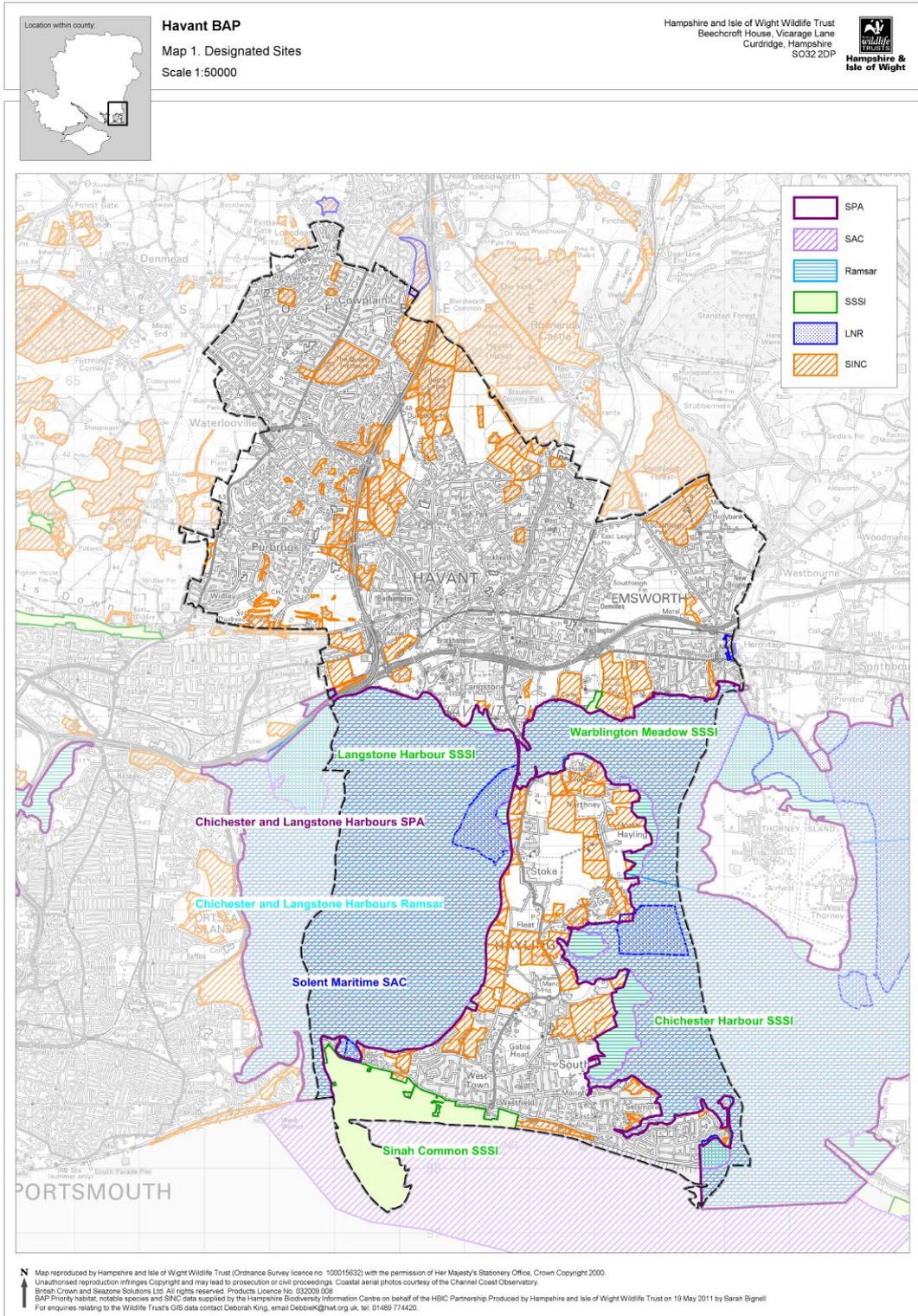
Directive 92/43/EEC (the Water Framework Directive); This requires member states to achieve stated targets for the protection and improvement of inland and coastal waters.

Council Directive 2008/56/EC (the Marine Strategy Framework Directive); This requires member states to achieve stated targets in the marine environment.

The Conservation of Habitats and Species Regulations 2010; This translates the European Habitats Directive into UK law and provides for the protection of habitats and species. Where plans or projects are "*likely to have a significant effect on a European Site... either alone or in combination*" (regulation 61) then an assessment of these effects must be undertaken.

The habitat regulations also give protection of certain wild animals and make it an offence to "*deliberately capture, injure or kill a wild animal of a European protected species,* " or to "*deliberately disturb....Take or destroy the eggs of such animal*" or "*damage or destroy a breeding site or resting place of such and animal*" (regulation 41)

Map 1: Designated Sites



Biodiversity and the Planning System

The planning system is an important tool in the protection of biodiversity and priority habitats and species. The planning system also has a legal requirement to consider biodiversity as set out through the European directives and UK law. This is also recognised through national planning policies.

Detailed guidance on how proposals affecting statutory designated sites, or the interest they support, can currently be found in Planning Policy Statement 9 Biodiversity and Geological Conservation (and its accompanying Government Circular¹), and Managing Natura 2000 Sites (European Communities 2000). A short summary of the requirements set out in the relevant policy and legislation is given here, however this is purely intended as an overview and is not definitive.

PPS1 – Delivering Sustainable Development

This has an explicit commitment to protection and enhancement of the natural environment; planning authorities should seek to enhance the environment as part of development proposals (para. 19).

PPS9 – Biodiversity and Geological Conservation

States that Local Development Frameworks should “identify any areas or sites for restoration or creation of new priority habitats which contribute to regional targets, and support this restoration or creation through appropriate policies”. Furthermore “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.”

The approach of establishing networks of natural habitats is a key principle of PPS9, it states that sites of biodiversity importance can be linked to provide routes or “stepping stones” for the migration, dispersal and genetic exchange of species in the wider environment. This will become increasingly important in facilitating “species creep” in response to climate change.

A local BAP can also be taken into account in the preparation of local development frameworks (LDFs) under PPS12:

PPS12 – Local Development Frameworks (LDFs)

Clearly states that Local Planning Authorities should take into account a range of relevant strategies and programmes when preparing Local Development Documents. These include strategies for biodiversity and environmental protection (para.1.9). LDFs should be led by a spatial vision and an environmental vision should be part of this. Para. 2.1 points out that “policies must be based on a clear understanding of the economic, social and environmental needs of the area”. The environmental needs of the South East, as accepted in the England Biodiversity Strategy, the Regional Spatial Strategy and PPS9, include the reversal of biodiversity loss and habitat fragmentation.

Havant Borough includes three sites of international conservation importance, SAC, SPA and Ramsar. They are protected by European legislation* known as “The Habitats Regulations” translated into UK law by The Conservation of Habitats and Species Regulations 2010 (commonly known as ‘The Habitats Regulations’). Special care must be taken to ensure decisions and plans do not impact negatively on the sites or their qualifying species.

The Conservation of Habitats and Species Regulations 2010

Where impacts cannot be avoided or satisfactorily reduced/mitigated, the competent authority will need to ascertain that the plan or project will not have a negative impact on the designated site populations, which would otherwise constitute an adverse effect on the integrity of the international site as a whole.

¹ Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System (ODPM 06/2005, Defra 01/2005)

**Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the 'Habitats Directive'); and Directive 2009/147/EC on the Conservation of Wild Birds (the 'Birds Directive').*

Local authorities also have a duty to conserve and enhance Areas of Outstanding Natural Beauty (AONB) under the Countryside and Rights of Way (CRoW) Act 2000. Section 85 states *"In exercising or performing any functions in relation to, or so as to affect, land in an area of outstanding natural beauty, a relevant authority shall have regard to the purpose of conserving and enhancing the natural beauty of the area of outstanding natural beauty."* Chichester Harbour AONB is within Havant Borough.

National Indicator Number 160-01 - Local Nature Conservation/biodiversity

Local authorities are required by government to report on a single dataset list of indicators, the list currently includes indicator number 160-01 - Local nature conservation/biodiversity. The information required is likely follow the same sampling method as the previous indicator NI 197 i.e. a calculation of the proportion of local sites (SINCs) in positive conservation management

Additional key strategic ecological studies that should be taken in to account during the planning process include the Solent Waders and Brent Goose Strategy 2010 and the Solent Disturbance and Mitigation Project.

Havant's Biodiversity Action Plan may be useful for informing other plans and strategies by providing baseline information on the location and distribution of important habitats and species (see Section 2) and as a source for project ideas that will enhance and restore biodiversity (see Section 3). Such plans include Green Infrastructure, Access, Shoreline and Harbour Management Plans, and habitat recreation and restoration projects. Havant BAP could also be a useful source of information for the processes of identifying Alternative Areas of Natural Green Space, in particular to protect the areas of European Importance, from adverse impacts from development.

1.5 Integration with other Strategies and Plans

There are a number of strategies and plans with which the LBAP can be directly linked. The key strategies (although some are still in the draft stages) are the Havant Borough Core Strategy, Solent European Marine Sites (SEMS) Draft Management Scheme, North Solent Shoreline Management Plan, Green Infrastructure strategy for PUSH area, and the Solent Waders and Brent Goose Strategy 2010. There are also other plans which need to be considered as they influence the planning and decision making process for the borough, or the council are actively involved, for example Chichester Harbour AONB Management Plan and the Coastal Biodiversity Action Plan. The borough should also work closely with neighbouring council's, particularly those with their own BAP such as East Hampshire District Council, to ensure a coherent approach.

Havant Borough Core Strategy recognises the importance of the natural environment in its vision for the borough. It provides the policy position on the protection and enhancement of the habitats in Havant, as well as the ability to secure 106 and CIL payments. It identifies the need to focus resources on green infrastructure which includes protecting and creating open spaces, which will also have a positive effect for wildlife by creating additional space and linkages across the borough, one of the objectives of the BAP. The consideration of designated sites and green space in planning, and the incorporation of features for wildlife and

biodiversity into the design of new developments, is another aspect of the strategy which is reflected in the BAP as being of key importance to ensure that adverse impacts and loss of habitats does not occur.

The **Solent European Marine Sites (SEMS) Draft Management Scheme** states that the estuaries and habitats (e.g. mudflats, saltmarsh, sandbanks etc) of the Solent SAC are maintained in favourable condition. Also that activities and projects such as bait digging, coastal development, coastal protection and flood defence are monitored and assessed. Some of these actions are stated in the LBAP, highlighting the link between the management scheme and the LBAP, but the SEMS has a much more extensive list and detail on each of the points.

The **North Solent Shoreline Management Plan** highlights the need to look at shoreline management in the long term. It focuses on two areas of the coast on the mainland of Havant borough at Southmoor and Warblington. The immediate plan for both these sites is Hold The Line (HTL). At Southmoor, HTL will contribute to the loss of inter-tidal foreshore habitats which will need to be compensated for elsewhere. There is the potential for localised habitat creation in the medium to long term, but these areas are currently behind privately maintained defences and therefore are only possible with landowner consent. Secondary defences would also be required to manage flood risk and losses of designated coastal grazing marsh would need to be recreated in a more sustainable site elsewhere. At Warblington there is potential for managed realignment in the long term (50-100 years) to create inter-tidal habitat. This would require the construction of secondary defences to protect the cemetery. The plan for Hayling Island involves a mix of HTL, Managed Realignment (MR) and No Active Intervention (NAI). Hold the Line is the final proposal for Northney Farm on the north east coast of the island, but further detailed studies are required to consider whether MR may occur; NAI is proposed for the area from North Shore Road, Newtown to West Lane, Stoke, on the west of the island, with localised HTL at Newtown. This is coherent with the LBAP which states that coastal grazing schemes should be implemented and coastal realignment and habitat re-creation opportunities should be considered where appropriate.



The **Green Infrastructure (GI) strategy for PUSH area** aims to highlight what enhancements need to be considered and the introductions that should be made, and how to deliver the GI strategy. It has a number of themes but those particularly relevant to the LBAP are Theme II: Maximising biodiversity opportunities, adapting to change and protecting European sites; and Theme IV: Access to the countryside and green spaces, providing recreational opportunities and experiences. Part of the GI includes 5 initiatives (listed below) on the sub-regional level; these can be transposed into the Havant LBAP. The initiatives are:

1. The Green Grid – promoting linear features that allow for connectivity between green spaces
2. Coast for people, wildlife and improved water
3. The Forest of Bere land management initiative
4. Country parks and woodlands

5. Greener urban design

South Hampshire Agreement – PUSH Multi Area Agreement (MAA) focuses on the economic development and enterprise of the south Hampshire area. As part of this drive to increase the business and economic opportunities, which will lead to increased numbers of people and houses required in the area, infrastructure needs to be developed. The agreement recognises the requirement for sustainability and social infrastructure, and one of the aims relates to green infrastructure. The agreement's objective is to have green infrastructure that is well maintained, accessible to users, improves the biodiversity of the sub-region, contributes to both adaptation to and mitigation of climate change and produces high quality public space which enhances the quality of life experience and economic competitiveness of the sub-region. These objectives are in agreement with those of the LBAP.

The **Chichester Harbour AONB Management Plan** was prepared by the Chichester Harbour Conservancy on behalf of the 4 constituent authorities, who adopted the completed management plan, including Havant Borough Council. Many points on the management plan link in with those on the Havant BAP, as the AONB not only covers the harbour but the surrounding land. The current management plan is for 5 years from 2009 to 2014. Points on the management plan which directly link with the LBAP include the management of land in public ownership to maintain and enhance its wildlife and landscape value, in particular rural road verges; demonstrate best practice and provide advice to influence and encourage landowners and land managers in the AONB to manage land positively for nature conservation; implement a survey and monitoring programme of species and habitats of conservation importance within the AONB; make appropriate information on the nature conservation value of Chichester harbour AONB available to a wide audience, of all ages through a variety of media; influence and encourage the uptake of suitable agri-environment scheme options to protect and enhance nature conservation; seek opportunities for appropriate habitat creation or restoration; research and monitor the impact of fish activities and bait digging on the Harbour's marine resources and habitats; and provide a range of interpretive material throughout the AONB, to include publications, signage and interpretation boards.

As part of the Hampshire BAP there is a dedicated **Coastal Habitat Action Plan**. The coastal BAP has specific actions for certain habitat types e.g. maritime cliffs, but also has generic actions for the coast. Many of these actions coincide with the Havant BAP actions. For example, monitoring the status of priority species, other species of national concern, and priority species in Hampshire, determining the management requirements for stabilising populations and reversing declines; monitor and take action where possible against invasive non-native species; and promote the use of on-site interpretation, where appropriate, of the existence, importance and sensitivity of coastal species and habitats and the need for their management.

Solent Waders and Brent Goose Strategy 2010 aims to conserve extant sites and create new sites, where possible, to enhance the quality and extent of the feeding and roosting resource for coastal birds. The strategy provides an evidence base for use in decision-making processes that may impact on the important network of sites. It is a useful tool for coastal decision-makers, land managers and stakeholders. The BAP has a number of actions linked to the strategy relating to the provision of space for waders and Brent Geese and management of land in a considerate manner to their requirements. It also highlights the requirement for continued monitoring of coastal birds.

South Hampshire: Integrated Water Management Strategy for PUSH. There is an identified link between nitrogen in effluent and growth of algae/green weed mats in designated areas. The Environment Agency have set permissions for certain levels of nitrogen to be discharged at wastewater treatment works, including Budds Farm. The LBAP has identified that Southern Water need to closely monitor these discharges, especially at times of heavy rainfall, as algal growth effects the ability of wading birds to feed because it forms a 'blanket' across the seabed.

Links to plans and policies on SoMap policy database www.solentforum.org/somap

1.6 Objectives for Biodiversity in Havant

Havant Borough faces some difficult challenges in protecting and enhancing biodiversity. Havant lies within the South Hampshire Sub-region, a priority area for housing and economic development. Havant's existing conurbations are home to 116,000 residents (just under 10% of the County-wide population). Havant is also home to several significant sites within and around the authority boundary, several of international importance. These sites are important resources that offer a wide variety of plant, animal and conservation interest to both residents and visitors.

The objectives of the Havant Biodiversity Action Plan are:

- to present an accurate and up-to-date description of the habitat and wildlife resources in the area
- to identify local priorities for action based on larger landscape-scale processes
- to ensure that national and county objectives are translated into effective local action
- to stimulate effective local partnerships for biodiversity
- to raise awareness of the importance of biodiversity
- to support a range of biodiversity conservation measures: protection, restoration and habitat creation
- to identify the resources required for action and those already available
- to provide a systematic basis for monitoring and reviewing progress
- to feed progress to the Hampshire Biodiversity Partnership and work towards best practice

1.7 Producing a BAP for Havant

The production of the BAP has involved consultation with local people through an online questionnaire and workshop days for local groups, naturalists, land managers and conservation organisations with the support of Havant Borough Council staff and Councillors. The information shown here and ideas for actions have been developed by these local biodiversity and community partnerships. The four key aspects of biodiversity action plan development are:

- 1. Audit** - gathering and assessing information on local biodiversity.
- 2. Action Plans** - preparation of plans listing actions, partners and timescales.
- 3. Implementation** - partnership working to identify and carry out actions.
- 4. Monitoring and Review** - assessing and reporting progress made, and evaluating effectiveness of projects.

These aspects are covered in detail in the subsequent sections.

Section 2: Biodiversity Audit

Situated in the Hampshire Basin between the cities of Chichester and Portsmouth, with significant areas of countryside and coast within an urban setting, Havant Borough has an interesting landscape character. Defining features include the surrounding harbours and coastline, the chalk streams and river valleys of the Ems and Westbourne, and the pastoral agricultural and woodland heritage associated with the Forest of Bere. The Borough underwent a Landscape Character Assessment in 2007 (Kirkham Landscape Planning Consultants) in which 16 distinct landscape types were identified; these divisions are shown in Table 1 in relation to the three area divisions used in the BAP, the Mainland, Hayling Island, and the Harbour and Coast.

Table 1: Havant Borough Landscape Character Areas

Havant Borough Landscape Character Types	Havant BAP Areas
Pasture and Woodland (Heath Associated)	Mainland
Lowland Settled Wooded Farmland	Mainland
Urban Lowlands	Mainland and Hayling Island
Settled Chalk Ridge	Mainland
Urban Upper Harbour Plain	Harbour & Coastal
Open Upper Harbour Plain	Harbour & Coastal
Urban Lower Harbour Plain	Harbour & Coastal
Open Lower Harbour Plain	Harbour & Coastal
Enclosed Lower Harbour Plain	Harbour & Coastal
Harbour Basin	Harbour & Coastal
Harbour Mouth	Harbour & Coastal
Broad Inlets	Mainland and Hayling Island
Minor Inlets	Mainland and Hayling Island
Lowland Coastal Settlement	Mainland and Hayling Island
Lowland Open Coastal Plain	Harbour & Coastal
Open Coast	Harbour & Coastal

Havant Mainland Area

The mainland comprises a range of habitat types including urban, woodland, agricultural and coastal. There are three distinct urban areas within the mainland of Havant Borough; Waterlooville and Purbrook which form the western boundary to the borough, Emsworth to the East and Havant in the centre. Although these locations are built up, a large number of properties have gardens and green space can also be found in cemeteries, school grounds and parks scattered within the residential areas.

The agricultural and woodland habitats of the mainland are primarily around the northern boundary of the borough and between the major urban areas of Waterlooville, Havant and Emsworth. The fields are predominantly improved grassland, but are interspersed with arable land. Both broadleaved woodland and coniferous plantations are present in the area, some of which are ancient, semi-natural broadleaved woodlands. Hedgerows, hedgebanks and mature hedgerow trees are also present across the landscape.

Part of the borough sits on a harbour plain which is broken up by small streams leading to the coast. The upper areas of the plain are largely urban (approximately 95%) with occasional woodland, green space and fields. As the landscape extends towards the coast it changes to be dominated by open spaces, mainly agricultural fields with occasional hedgerows and small areas of woodland, which are broken up by the urban areas of Langstone and Emsworth.

Hayling Island Area

Hayling Island has a harbour plain landscape character, key features of which are a predominantly flat landscape with fields, tidal inlets, small woodlands and small rural settlements on the north and central areas of the island. Areas of flower-rich meadow, sand dunes and remnants of heathland can also be found making this a diverse habitat for both people and wildlife.

The coastal habitats of the island are predominately grassland grazing and intertidal shingle in the north and central areas, urban settlement to the south, open dune and shingle habitat to the south east and a low lying natural shoreline in the south west.

The coastal shingle and grassland habitats of the island, like those found at Sinah Common SSSI, form a significant assemblage of nationally scarce plants, and the natural vegetated shingle shoreline found in this area is one of the prime locations in Hampshire for coastal plants.



Harbour & Coastal Area

The coastline of the Borough extends 48 kilometres, mainly due to the presence of Langstone Harbour (to the west of Hayling Island) and Chichester Harbour (to the east).

The harbours are characterised by mudflats, sand banks and channels forming an intertidal zone that is able to support a diverse range of wildlife, for which the harbours are renowned and has led to their designation as Sites of Special Scientific Interest (SSSIs), a Special Protection Area (SPA), Ramsar site and inclusion in the Solent Maritime Special Area of Conservation (SAC).

During the winter, Langstone and Chichester Harbours support approximately 20 birds per hectare of mud, this is the highest density of any estuarine site in the UK and the intertidal mudflats are the feeding grounds for internationally important numbers of waders, including Grey Plover and Black-tailed Godwit. Harbour seals have been recorded using both of the harbours for foraging.

There is over 3 miles of beach along the southern edge of Hayling Island facing the Solent. This area is largely comprised of shingle above the high water mark, with occasional deposits of intertidal shingle below. It is a constantly changing landscape as it is exposed and subject to both wind and wave action.

2.1 Habitats

Certain habitats and species have been targeted for extra conservation effort by the Joint Nature Conservation Committee and these are called priority habitats and species. Havant contains 16 priority habitats; these are detailed below and in Map 3.

Table 2: Havant Priority Habitats

UK BAP Priority Habitats found in Havant based on HBIC habitat layers	Area (ha)	Havant BAP Areas
Coastal and floodplain grazing marsh	129.25	Harbour & Coastal
Coastal saltmarsh	573.64	Harbour & Coastal
Coastal sand dunes	64.51	Hayling Island & Harbour & Coastal
Coastal vegetated shingle	48.78	Hayling Island & Harbour & Coastal
Intertidal mudflats	943.29	Harbour & Coastal
Lowland calcareous grassland	8.24	Mainland
Lowland dry acid grassland	32.32	Mainland & Hayling Island
Lowland heathland	0.20	Hayling Island
Lowland meadows	81.25	Mainland & Hayling Island
Lowland mixed deciduous woodland	327.89	Mainland & Hayling Island
Purple moor grass and Rush pastures	5.28	Hayling Island
Reedbeds	0.57	Mainland
Saline lagoon	18.97	Mainland
Seagrass beds	92.7	Harbour & Coastal
Sheltered muddy gravels	129.1	Harbour & Coastal
Wet woodland	75.43	Harbour & Coastal
Wood pasture and parkland	16.17	Mainland
Total	2547.59	
Havant total area (ha)	7920	
Havant total urban area (ha)	3083.60	

The habitat data has been sourced from Hampshire Biodiversity Information Centre (HBIC) and is accurate based on current knowledge. HBIC have been conducting a rolling programme of habitat surveys since 1979 funded by partner organisations.

Coastal and Floodplain Grazing Marsh

Grazing marsh is periodically inundated pasture, or meadow with ditches which maintain the water level, containing standing brackish or fresh water. The ditches are especially rich in plants and invertebrates. Almost all areas are grazed and some are cut for hay or silage. Sites may contain seasonal water-filled hollows and permanent ponds with emergent swamp communities, but not extensive areas of tall fen species like reeds; although they may abut with fen and reed swamp communities. The most extensive areas of grazing marsh are found on the east coast of Hayling Island, however there are some small areas on the coast of the mainland such as at Conigar Point.

Coastal Saltmarsh

Coastal saltmarshes comprise the upper, vegetated portions of intertidal mudflats, lying approximately between mean high water neap tides and mean high water spring tides. Saltmarshes are usually restricted to comparatively sheltered locations such as in estuaries, saline lagoons, behind barrier islands and on beach plains. The development of saltmarsh vegetation is dependent on the presence of intertidal mudflats. Saltmarsh vegetation consists of a limited number of salt-tolerant species adapted to regular immersion by the tides and a natural saltmarsh system shows a clear zonation according to the frequency of inundation. Examples of coastal saltmarsh can be found in both Langstone harbour, to the east of Farlington marshes and Chichester harbour, to the south of Emsworth, and along the east coast of Hayling Island.

Coastal Sand Dunes – Acidic Dune Grassland

Sand dune vegetation forms a number of zones, which are related to the time elapsed since the sand was deposited, the degree of stability which it has attained and the local hydrological conditions. Embryonic and mobile dunes occur mainly on the seaward side of a dune system and support very few plant species. Semi-fixed dunes occur where the rate of sand accretion has slowed but the surface is still predominantly bare sand; there is also an increasing number of species found. Fixed dune grassland forms largely closed swards where accretion is no longer significant, the surface is stabilised and some soil development has taken place. On dunes which have become acidified by leaching, acid dune grassland develops and if these areas are heavily grazed by rabbits they may support lichen communities. Dunes can be found on Hayling Island at Sinah Common and Sandy point.

Coastal Vegetated Shingle

Shingle is sediment with particle sizes in the range of 2-200 mm. Shingle beaches are widely distributed around the coast of the UK, where they develop in high energy environments. The vegetation communities of shingle depend on the amount of finer materials mixed in with the shingle and on the hydrological regime. This habitat type is found in a number of locations in the borough including Sinah Common, Sandy Point and the islands in Langstone harbour.

Intertidal Mudflats

Mudflats are sedimentary intertidal habitats created by deposition in low energy coastal environments, particularly estuaries and other sheltered areas. Their sediment consists mostly of silts and clays with a high organic content. Mudflats are

intimately linked by physical processes to other coastal habitats such as saltmarshes. They commonly appear in the natural sequence of habitats between subtidal channels and vegetated saltmarshes. Mudflats are characterised by high biological productivity and abundance of organisms, but low diversity with few rare species. Intertidal mudflats can be found in both Langstone and Chichester harbours.

Lowland Calcareous Grassland

Lowland calcareous grasslands are developed on shallow lime-rich soils generally overlying limestone rocks, including chalk. Calcareous grasslands cover a range of plant communities in which lime-loving plants are characteristic. Lowland calcareous grasslands support a very rich flora including many nationally rare and scarce species, and a diverse range of invertebrates including scarce species. There is only one small area of grassland in the borough on Portsdown Hill, but it forms part of a larger habitat that extends into Portsmouth.

Lowland Dry Acid Grassland

Lowland acid grassland typically occurs on nutrient-poor, generally free-draining soils with a pH ranging from 4 to 5.5 overlying acid rocks or superficial deposits such as sands and gravels. Acid grassland is characterised by a range of plant species, and can include dwarf shrub species at low abundance. Lowland acid grassland often forms a mosaic with dwarf shrub heath. Acid grasslands can have a high cover of bryophytes and parched acid grassland can be rich in lichens. Acid grassland is very variable in terms of species richness and stands can range from relatively species-poor (less than 5 species per 4m²) to species-rich (in excess of 25 species per 4m²). Areas of dry acid grassland can be found at the south of Hayling Island and on the mainland at Southleigh Park and Havant Thicket.

Lowland Heathland

Lowland heathland is a broadly open landscape on impoverished, acidic mineral and shallow peat soil, which is characterised by the presence of plants such as heathers and dwarf gorses and is generally found below 300 metres. Areas of heathland in good condition should consist of an ericaceous layer of varying heights and structures, plus some or all of the following additional features, depending on environmental and/or management conditions; scattered and clumped trees and scrub; bracken; areas of bare ground; areas of acid grassland; lichens; gorse; wet heaths, bogs and open waters. Lowland heathland is a dynamic habitat which undergoes significant changes in different successional stages, from bare ground (e.g. after burning or tree clearing) and grassy stages, to mature, dense heath. These different stages often co-occur on a site. There is only one very small area of heath on the seafront of Hayling Island.

Lowland Meadows

Lowland meadows include most forms of unimproved neutral grassland across the enclosed lowland landscapes of the UK. They have a specialist group of scarce and declining plant species. These grasslands may be cut for hay or used for livestock grazing. In non-agricultural settings, such grasslands are less frequent but additional examples may be found in recreational sites, churchyards, roadside verges and a variety of other localities. There are examples of this habitat type scattered across the borough; areas include Waterlooville golf course, Dunsbury Farm, Neville's Park, Conigar Point Meadow, Brook Meadow and Chichester Road Meadow.

Lowland Mixed Deciduous Woodland

Lowland mixed deciduous woodland includes woodland growing on the full range of soil conditions and occurs largely within enclosed landscapes, usually on sites with well-defined boundaries and tend to be small, less than 20 ha. There is great variety in the species composition of the canopy layer and the ground flora. Areas of woodland are located on both the mainland and Hayling Island, for example at Queens's Inclosure, Southleigh Park and Tournerbury.

Purple Moor Grass and Rush Pastures

Purple moor grass and rush pastures occur on poorly drained, usually acidic soils in lowland areas of high rainfall. Their vegetation, which has a distinct character, consists of various species-rich types of fen meadow and rush pasture. Purple moor grass (*Molinia caerulea*), and rushes, especially sharp-flowered rush (*Juncus acutiflorus*), are usually abundant. The characteristic plant communities often occur in a mosaic with one another, together with patches of wet heath, dry grassland, swamp and scrub. One area of purple moor grass and rush pasture can be found to the east of Leigh water in Staunton Country Park.

Reedbeds

Reedbeds are wetlands dominated by stands of common reed (*Phragmites australis*), wherein the water table is at or above ground level for most of the year. They tend to incorporate areas of open water and ditches, and small areas of wet grassland and carr woodland may be associated with them. There are areas of reedbed found at Langstone Mill pond and the shoreline of Nore Barn Woods.

Saline Lagoons

Lagoons are essentially bodies, natural or artificial, of saline water partially separated from the adjacent sea. They retain a proportion of their seawater at low tide and may develop as brackish, full saline or hyper-saline water bodies. Lagoons can contain a variety of substrata, often soft sediments which in turn may support tasselweeds and stoneworts as well as filamentous green and brown algae. In addition, lagoons contain invertebrates rarely found elsewhere. There are several small areas of saline lagoon around the coast of the borough, with two larger areas found at Emsworth millpond and the Oysterbeds on Hayling Island.



Turnstones at Oyster Beds

Seagrass Beds

Seagrass beds develop in intertidal and shallow subtidal areas on sands and muds. They may be found in marine inlets and bays but also in other areas, such as lagoons and channels, which are sheltered from significant wave action. Seagrass

species are divided into tassleweeds (*Ruppia*) and eelgrass (*Zostera*). Three species of *Zostera* occur in the UK, and all are considered to be scarce. Dwarf eelgrass (*Zostera noltii*) is found highest on the shore, often adjacent to lower saltmarsh communities, narrow-leaved eelgrass (intertidal variant of *Zostera marina*) on the mid to lower shore and eelgrass (*Zostera marina*) predominantly in the sublittoral. Two areas of seagrass bed are present off of Hayling Island, one in Langstone harbour and the other in Chichester harbour.

Sheltered Muddy Gravels

Sheltered muddy gravels occur principally in estuaries, rias and areas protected from wave action and strong tidal streams. In fully marine conditions on the lower shore this habitat can be very species-rich because the complex nature of the substratum supports a high diversity of both infauna and epifauna. Polychaetes and bivalve molluscs are normally dominant and the most varied, but representatives of most marine phyla can be present. Fauna is often characterised by a large range in body size. Species richness reduces with a move into an estuary. Areas of sheltered muddy gravels can be found on the west and southern shores of Hayling Island.

Wet Woodland

Wet woodland occurs on poorly drained or seasonally wet soils, usually with alder, birch and willows as the predominant tree species, but sometimes including ash, oak, pine and beech on the drier riparian areas. It is found on floodplains, as successional habitat on fens, mires and bogs, along streams and hill-side flushes, and in peaty hollows. These woodlands occur on a range of soil types including nutrient-rich mineral soils and acid, nutrient-poor organic ones. The boundaries with dryland woodland may be sharp or gradual and may change with time through succession; therefore wet woods frequently occur in mosaic with other woodland key habitat types and with open key habitats such as fens. There is one large area of wet woodland at Southleigh Park and some small patches either side of the A3 (M), Bells Copse and Nore Barn Woods.

Wood Pasture and Parkland

Wood-pastures are areas that have been managed by a long-established tradition of grazing allowing, where the site is in good condition, the survival of multiple generations of trees, characteristically with at least some veteran trees or shrubs. The tree and shrub component may have been exploited in the past and can occur as scattered individuals, small groups, or as more or less complete canopy cover. Depending on the degree of canopy cover, other semi-natural habitats including grassland, heath, scrub etc, may occur in mosaic with woodland communities. While oak, beech, alder, birch, ash, hawthorn, hazel or pine are often dominant, a wide range of other tree and shrub species may occur as part of wood-pasture systems. Wood-pastures and parkland are the products of historic land management systems, and represent a vegetation structure rather than being a particular plant community. Typically this structure consists of large, open-grown or high forest trees (often pollards) at various densities, in a matrix of grazed grassland, heathland and/or woodland floras. There is only one example of this habitat type in the borough in the area around Thicket Lawn.

2.2 Species

Knowledge of the presence or absence of any species is never complete. Populations are dynamic; they fluctuate across the landscape, from year to year and decade to decade. Consequently, it is impossible to have a 100% accurate picture of the species in an area. However, decades of wildlife recording by amateur experts, professionals and members of the public have led to a good idea of how Havant's species are distributed.

Hampshire Biodiversity Information Centre (HBIC) acts as a repository for species data gathered during its surveys; data is also gathered by Hampshire and Isle of Wight Wildlife Trust, a range of specialist species recording groups, government agencies, local authorities, local groups and individuals. Hampshire hosts hundreds of UKBAP and Hampshire BAP priority species, and Havant contains a proportion of these. It is beyond the scope of this document to deal with every one of these species, but in some cases certain species are identified which indicate the wider health of a habitat; alternatively a whole group of species is identified, such as flowering plants.

Available species data has been used to identify 'cluster' sites with records for priority species in the district and these are shown in the maps 4 to 8. These are sometimes known as 'flagship' species i.e. species which are distinctive but often rare or declining; these species are good indicators of the general ecological health of an area. Most of the clusters correspond closely with the areas of priority habitat mapped above. It is important to remember that these maps indicate recorder effort as much as they indicate true species distribution, but they are in themselves valuable tools in identifying areas of high biodiversity.

A table listing the UK BAP and / or Hampshire BAP priority species* recorded in Havant Borough district since records were available is provided in Appendix I. The list indicates a large number of priority species recorded historically or more recently. It is important to note that some groups are not as well recorded as others – notably lower plants (including fungi) and invertebrates.

Public Participation

Although most of the focus here is on rare or declining species found in Havant Borough, it is still very important to ensure that all species, such as familiar garden species, are looked after and recorded within the district - this will help to ensure that they do not become tomorrow's rarities. Gardens and public spaces are important habitats for wildlife and its appreciation.

If you have seen an interesting species and would like to share your observations, Havant records, old or new, that will contribute to the recording network in Hampshire can be submitted to the appropriate recording group. Sending the information to the relevant Hampshire County Recorder (list of recorders is provided in Appendix IV) avoids duplication of records and ensures that all data is validated and consolidated by one organisation. Data exchange agreements are in place in Hampshire whereby a group of partner organisations provide HBIC with regular database updates. For species where no County Recorder exists HBIC will receive the records, especially for notable species.

Species records must include the following:

- **Who:** Name of recorder(s) and contact details
- **What:** Species name
- **Where:** Grid reference (six or eight figure) and site name
- **When:** Date of survey or record

Wherever possible include:

- An estimate of species abundance
- Brief site description with details of habitat types
- A map showing the site/species location

Several of the recording groups also have standard recording forms and to improve data input efficiency many are now encouraging individuals to enter their data directly onto a database (for further details contact the relevant organisation - some are listed below and in Appendix IV).

There are also a number of species groups in Hampshire which hold regular activities, training and events for members. The ones listed below all have websites where further details can be found. A full list of specialist recording groups in Hampshire is given in Appendix IV of this document.

Butterfly Conservation (Hampshire & IoW Branch) - www.hantsiow-butterflies.org.uk

Hampshire Ornithological Society - www.hos.org.uk

Hampshire & Isle of Wight Wildlife Trust - For local species groups: Hampshire Amphibian and Reptile Group (HARG), Hampshire Flora Group (HFG) and Hampshire Mammal Group (HMG) - www.hwt.org.uk

Hampshire Fungus Recording Group - www.hampshirefungi.org.uk

Hampshire Bat Group - www.bats.hampshire.org.uk

Botanical Society of the British Isles (BSBI) - www.bsbi.org.uk

British Dragonfly Society - www.dragonflysoc.org.uk/index.html

British Bryological Society - www.britishbryologicalsociety.org.uk

Plantlife - www.plantlife.org.uk

Buglife - www.buglife.org.uk

2.3 Designated Sites

The priority habitats and species in Havant are further identified and afforded protection by a network of designated sites, the Borough has several internationally important designated areas as well a number of locally important sites. There are several different types and levels of site designation:

SPA

A **Special Protection Area (SPA)** is a site designated under Article 4 of EC Directive 79/409 on the conservation of wild birds. Together SACs and SPAs form a network of European sites known as Natura 2000.

SAC

A **Special Area of Conservation (SAC)** is a site designated by the UK Government under EC Directive 92/43 on the conservation of natural habitats and of wild fauna and flora.

Ramsar

The **Ramsar Convention** (The Convention on Wetlands of International Importance, especially as Waterfowl Habitat) is an international treaty for the conservation and sustainable utilisation of wetlands i.e. to stem the progressive encroachment on and loss of wetlands now and in the future, recognising the fundamental ecological functions of wetlands and their economic, cultural, scientific, and recreational value. It is named after the town of Ramsar in Iran.

SSSIs

A **Site of Special Scientific Interest (SSSI)** is an area of land notified under the Wildlife and Countryside Act 1981 as being the country's best wildlife and geological sites. The SSSI designation applies in England, Wales and Scotland. Sites are notified by the appropriate country conservation agency, in England this is Natural England.

Natural England administers the SSSI system, designating and monitoring these areas of national importance for nature conservation. Natural England use standard criteria to assess the condition of SSSIs; if a site meets these criteria it has 'Favourable Condition Status'. Natural England works with, and provides advice and guidance, to landowners to ensure that the majority of SSSIs are either assessed as 'Favourable' or 'Unfavourable Recovering' (i.e. failing the criteria, but showing signs of recovery).

LNRs

Local Nature Reserves (LNRs) are for both people and wildlife. They offer people special opportunities to study or learn about nature or simply to enjoy it.

All district, county, town and parish councils have powers to acquire, declare and manage LNRs. To qualify for LNR status, a site must be of importance for wildlife, geology, education or public enjoyment. Some are also nationally important Sites of Special Scientific Interest.

LNRs must be controlled by the local authority through ownership, lease or agreement with the owner. The main aim must be to care for the natural features which make the site special.

SINCs

Site of Importance for Nature Conservation (SINC) - A non-statutory designation of sites at the county/district level. Sites are generally assessed by either local authorities or county wildlife trusts, and adopted in local plans. For the criteria used for selecting SINCs, see below.

Hampshire Biodiversity Information Centre (HBIC) and Hampshire County Council administer the SINC system in Hampshire on behalf of the Hampshire Biodiversity

Partnership. In practice this means identifying and monitoring sites according to criteria, and proposing the list to Havant for adoption in the Local Development Framework. HBIC's field surveyors survey SINC's on a rolling basis to characterise their habitat features. Havant is able to prioritise survey of certain SINC's within the Borough by agreement with HBIC. Any given SINC may have features which qualify under one or more of the criteria as detailed below:

Criteria for Sites of Importance for Nature Conservation (SINC's)

– visit www.hants.gov.uk/biodiversity/hbic for expected updates to these criteria

<p>Woodland</p> <p>1A Ancient¹ semi-natural² woodlands.</p> <p>1B Other woodland where there is a significant element of ancient semi-natural woodland surviving.</p> <p>1C Other semi-natural woodland if; (ii) they comprise important community types of restricted distribution in the County, such as yew woods and alder swamp woods</p> <p>1D Pasture woodland and wooded commons, not included in any of the above, which are of considerable biological and historical interest.</p> <p><i>1 Ancient - refers to woodlands which have developed particular ecological characteristics as a result of their long continuity. Those identified to date which are over 2ha are included on the Hampshire Inventory of Ancient Woodlands (Provisional).</i></p> <p><i>2 Semi-natural - modified types of vegetation in which the dominant and constant species are accepted natives to Britain and that locality, and the structure of the community conforms to the range of natural vegetation types.</i></p> <p>Neutral/acid/calcareous grassland</p> <p>2A Agriculturally unimproved grasslands³</p> <p>2B Semi-improved grasslands which retain a significant element of unimproved grassland.</p> <p>2D Grasslands which have become impoverished through inappropriate management but which retain sufficient elements of relic unimproved grassland to enable recovery.</p> <p><i>3 Agriculturally unimproved grassland - grassland that is composed of a mixed assemblage of indigenous species in essentially semi-natural communities which has been allowed to develop without the major use of herbicides or inorganic fertilisers.</i></p> <p>Heathland</p> <p>3A Areas of heathland vegetation; including matrices of dwarf shrub, acid grassland, valley mires and scrub.</p> <p>3B Areas of heathland which are afforested or have succeeded to woodland if; (i) they retain significant remnants of heathland vegetation which would enable their recovery, or (ii) they are contiguous with, or form an integral part of an open area of heathland,</p> <p>Coastal habitats</p> <p>4A Semi-natural coastal and estuarine habitats, including saltmarsh, intertidal mudflats, sand dunes, shingle, brackish ponds, grazing marsh and maritime grasslands.</p> <p>Wetlands</p>
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5A Areas of open freshwater (eg. lakes, ponds, canals, rivers, streams and ditches) which support outstanding assemblages of floating/submerged/ emergent plant species, invertebrates, birds or amphibians.

5B Fens, flushes, seepages, springs, inundation grasslands etc. that support a flora and fauna characteristic of unimproved and waterlogged (seasonal or permanent) conditions.

Species

6A Sites which support one or more notable species⁴.

6B Sites which regularly support a significant population of a species which has a restricted distribution or has substantially declined in population or range. Such sites may be used seasonally or for only one part of a species life-cycle.

6C Sites which support an outstanding assemblage of species.

⁴ *Notable species include Red Data Book species, Nationally Scarce species, species covered under Schedules 1,5 and 8 of the Wildlife & Countryside Act 1981, Annex 1 of the EC Bird Directive 79/409 and Annex II & IV of the EC Directive 92/43/EEC 'The Habitats Directive', and those covered by the Bern, Bonn and Ramsar Conventions. Notable species will also include species which are considered 'County Rare' or 'County Scarce'. County Rare = those species recorded in 1% or less tetrads in Hampshire or either of the two vice-counties (11 & 12) separately. County Scarce = 4% or less tetrads.*

Social value

7A Sites of nature conservation interest which occur in areas otherwise deficient in such interest, and/or are known to be of particularly high value to local communities e.g. community wildlife sites.

Sites selected under this criteria will be rigorously confined to those which, if lost, would result in a considerable and demonstrable loss to the local community which would be very difficult/impossible to replace. Because of the widespread distribution of sites of nature conservation interest in Hampshire, and the high threshold used to define critical importance, only a limited number of sites are likely to meet this criteria.

Geology and geomorphology

8A Sites which have been designated as Regionally Important Geological/Geomorphological Sites (RIGS)

Regionally Important Geological/Geomorphological Sites are sites of regional importance excluding SSSIs. RIGS are analogous to biological non-statutory sites.

2.4 Designated Sites in Havant

Havant has a significant proportion of the county's internationally important designated areas for biodiversity, including part of the extensive Solent coastal area. Section 1 outlines the categories of site designation for biodiversity. The sites designated for their biodiversity in the Borough are shown in Map 1 and summarised in the following table:

Designation	Number in Havant	Havant number as % total Hampshire number	Area in Havant (hectares)	Havant area as % total Hampshire area
Special Area of Conservation (SAC)	1	8	2274	6
Special Protection Area (SPA)	1	1	2436	6
Ramsar	1	2	2433	7
Site of Special Scientific Interest (SSSI)	4	1	2682	9
Local Nature Reserve (LNR)	5	9	171.6	10
Site of Importance for Nature Conservation (SINC)	135	4	863.3	3

Havant can be seen to contain significant areas designated as SAC, SPA and Ramsar sites, accounting for over 30% of the total area of the Borough.

Special Areas of Conservation (SAC)

Solent Maritime SAC

The Solent encompasses a major estuarine system on the south coast of England with four coastal plain estuaries (Yar, Medina, King's Quay Shore and Hamble) and four bar-built estuaries (Newtown Harbour, Beaulieu, Langstone Harbour and Chichester Harbour). The Solent and its inlets are unique in Europe due to their four tides each day and the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive estuarine flats, often with intertidal areas supporting eelgrass and green algae, sand and shingle spits, and natural shoreline transitions. The mudflats range from low and variable salinity in the upper reaches of the estuaries to very sheltered, almost fully marine muds in Chichester and Langstone Harbours.

Solent Maritime is the only site for smooth cord-grass (*Spartina alterniflora*) in the UK and is one of only two sites where significant amounts of small cord-grass (*Spartina maritima*) are found. It is also one of the few remaining sites for Townsend's cord-grass (*Spartina x townsendii*) and holds extensive areas of common cord-grass (*Spartina anglica*), all four taxa thus occurring here in close proximity. It has additional historical and scientific interest as the site where *S. alterniflora* was first recorded in the UK (1829) and where *S. x townsendii* and, later, *S. anglica* first occurred.

The Solent contains the second-largest aggregation of Atlantic salt meadows in south and south-west England. Solent Maritime is a composite site composed of a large number of separate areas of saltmarsh. In contrast to the Severn estuary, the salt meadows at this site are notable as being representative of the ungrazed type and support a different range of communities dominated by Sea-purslane (*Atriplex portulacoides*), Common sea-lavender (*Limonium vulgare*) and Thrift (*Armeria maritima*). As a whole, the site is less truncated by man-made features than other parts of the south coast and shows rare and unusual transitions to freshwater

reedswamp and alluvial woodland as well as coastal grassland. Typical Atlantic salt meadow is still widespread in this site, despite a long history of colonisation by cord-grass *Spartina* spp.

Special Protection Areas (SPA)

Chichester and Langstone Harbours SPA

The harbours are two large, sheltered estuarine basins with extensive mud and sandflats exposed at low water, with tidal channels that drain the basin. The mudflats support extensive beds of algae, particularly *Enteromorpha* species, and eelgrasses, *Zostera* species. There are also a range of coastal habitats supporting important plant and animal communities. The site has been designated because of the significance of the waterbird assemblages, with the regular occurrence of Annex 1 species and important migratory species, its importance for internationally important assemblages of waterfowl and as a breeding site for Little Tern, Sandwich Tern and Common Tern in Langstone Harbour.

The harbours regularly support large numbers of non-breeding waterbirds, with the average for the last 5 years in excess of 82,000 birds for the harbours (BTO WeBS, 2009), as well as supporting significant numbers of migratory wild bird species. Over the last 5 winters the harbours have been the overwintering site for over 5% of the world population of Dark-bellied Brent Geese (Stillman *et al.* 2009) and have historically always been an important site for the species; they are also internationally important sites for Black-tailed godwit and Dunlin, and nationally important for Red-breasted merganser, Grey plover and Turnstone (BTO WeBS 2008/09).

There are historical records indicating the importance of the harbours for Brent Geese. It is known that the geese regularly wintered here prior to the 1940s, but there is little quantitative data. The geese went through a period of decline until, in the early 1950s, they ceased to winter on a regular basis. The number of birds began to re-establish in the mid-1950s with records of 25 birds in Chichester harbour in 1952/53, increasing to 220 individuals in 1955/56 and then staying at just below 300 until 1960/61, and in Langstone harbour the numbers increased from 70 birds in 1952/53 to 750 in 1957/58 (Ward, 2004). This rapid increase in the number of birds means that the Sussex and East Hampshire harbours formed part of the nuclei that was key in the re-establishment of Brent geese in Britain during the 1950s to 1960s (Rowcliffe & Mitchell, 1998).

Ramsar sites

Chichester and Langstone Harbour Ramsar

The site comprises two large, interconnected sheltered estuarine basins providing extensive intertidal mud and sand flats with eelgrass *Zostera* spp. beds, large areas of mixed saltmarsh and extensive cord-grass *Spartina* spp. swards in an advanced state of degeneration. Fringing habitats include shingle spits, saline, brackish and freshwater lagoons, coastal grazing marsh and deciduous woodland. The site supports important overwintering populations of migratory waterfowl.

Sites of Special Scientific Interest in Havant

SSSI Name	% area Favourable (2008 data)	% area Unfavourable Recovering (2008 data)
Chichester Harbour	52.7	2.4
Langstone Harbour	7.1	0.5
Sinah Common	0	100
Warblington Meadow	100	0

Note that these figures are for the SSSI as a whole, not all of which may fall within the Havant Borough boundary.

Langstone Harbour SSSI

Langstone Harbour is a tidal basin which at high water resembles an almost landlocked lake. At low water extensive mud flats are exposed, drained by three main channels which unite to make a common and narrow exit to the sea. The harbour includes one of the largest areas of mixed saltmarsh on the south coast, and extensive cord-grass (*Spartina anglica*) marsh in an advanced state of degeneration. The Site of Special Scientific Interest includes Farlington Marshes, a peninsula of grassland and marsh on reclaimed tidal silt protected by a sea wall; and a similar but much smaller area at Southmoor in the north-east of the harbour. The harbour is of international importance as a rich intertidal system supporting high densities of intertidal invertebrates and large populations of migrant and overwintering waders and wildfowl, dependent upon them and upon the extensive beds of eelgrass *Zostera* species.



Brent Geese at Farlington Marshes

The *Zostera angustifolia* and *Z. noltii* beds are among the largest in Britain. The harbour is among the 20 most important intertidal areas in Britain as a summer and autumn assembly ground for waders during the moult (when they require abundant high protein food) and as a post-moult wintering ground. Dunlin (*Calidris alpina*) exceeded 8000 individuals during the 2008/09 recording period (BTO WeBS 2008/09) classifying it as a site of international importance for the species. It is also of international importance for Black-tailed Godwit (*Limosa limosa*), with numbers exceeding 400 individuals in 2008/09. Grey Plover (*Pluvialis squatarola*) have been recorded in excess of 950 individuals, making Langstone harbour of national importance for these birds. The total number of waders present in 2008/09 was over 22,000.

Langstone Harbour and the adjoining and connected Portsmouth and Chichester Harbours form a single, coherent ecosystem which is among the most important intertidal areas for waders in Britain. In the 1970s and 1980s Langstone Harbour alone has consistently supported in excess of 5,000 wintering Dark-bellied Brent Geese (*Branta bernicla bernicla*), or 5-10% of the world population depending on fluctuating population levels. It has supported up to 2.5% of the European winter

population of Shelduck (*Tadorna tadorna*) and regularly supports substantial numbers of other ducks in autumn and winter.

Farlington Marshes intrudes into the north-west sector of the harbour. Its vegetation is strongly influenced by drainage water from the chalk and by brackish water infiltration. The marshes embrace a variety of habitats, brackish marsh, fresh marsh, a large lagoon with associated reed *Phragmites* beds, *Agrostis stolonifera* grassland and scrub. It is a vital high water wader roost for the Harbour and a major feeding ground for Brent Geese after the *Zostera* beds in the Harbour have been consumed. Few comparable sites have survived agricultural improvement on the south and east coasts of England, where the habitat was formerly common; the grassland flora is especially rich for reclaimed silt, and includes over 50 species of grasses. Southmoor shares these characteristics but is much smaller.

Langstone Harbour has been the forum for important ecological research on estuarine eutrophication and the relationship with algal blanketing of the muds, changes in invertebrate communities and changes in the composition of vertebrate predator communities.

Chichester Harbour SSSI

Chichester Harbour is a large estuarine basin where extensive mud and sandflats are exposed at low water, drained by channels which unite to make a common exit to the sea. The site is of particular significance for wintering wildfowl and waders, and also breeding birds both within the harbour and in the surrounding permanent pasture fields and woodlands. There is a wide range of habitats which have important plant communities.

The intertidal area is fragmented in the upper reaches of the harbour by intruding tongues of land giving a very long and varied coastline. The harbour exhibits a wide range of intertidal and associated terrestrial habitats and with the neighbouring Langstone and Portsmouth Harbours, is unusual in providing a large volume of sheltered saline water fed by a few streams of only low volume.

The extensive intertidal mudflats are the feeding grounds, at the relevant times of year, for internationally important numbers of Dark-bellied Brent Geese, Dunlin and Black-tailed Godwit, and nationally important numbers of Ringed Plover, Grey Plover, Bar-tailed Godwit and Redshank. It also supports significant numbers of Sanderling which have demonstrated a decline in excess of 50% of the population in the harbour in the last 25 years. Chichester harbour had a count of 8757 individuals in 2008/09 accounting for approximately 12% of the UK population (BTO WeBS, 2009). The unimproved permanent pasture behind the sea wall provides alternative feeding sites for the geese and major high tide wader roosts. Some of this pasture is floristically rich being a Red Fescue (*Festuca rubra*) sward with scarce species such as Green-winged Orchid (*Orchis morio*) and Adder's Tongue Fern (*Ophioglossum vulgatum*).

The lower saltmarsh habitat fringing the mud flats is dominated by Cord Grass (*Spartina*



Green-Winged Orchid

anglica) and in most places the upper saltmarsh is rather restricted by the sea wall but there are some pure stands of Sea Purslane (*Halimione portulacoides*), while in some areas there is also Sea Lavender (*Limonium vulgare*), Sea Aster (*Aster tripolium*) and other saltmarsh species.

Shingle occurs as spits and islands and most are rather unstable permitting little vegetation to become established. This habitat forms the main breeding grounds in the harbour for Ringed Plover, Black-headed Gull and three species of tern.

A number of small ponds occur, one of which contains the rare Annual Beard Grass (*Polypogon monspeliensis*). Significant blocks of scrub, mainly Hawthorn (*Crataegus monogyna*) and Blackthorn (*Prunus spinosa*), occur which are important for breeding and roosting birds. Hedgerows of Oak (*Quercus robur*) are common and in some places the oak roots are strongly influenced by salt water.

Semi-natural broadleaved woodland associated with the harbour is important for breeding birds and supports two heronries. Oak is the major tree species usually with Hazel (*Corylus avellana*) coppice, as at Old Park Wood, although Tournerbury Wood has well spaced Oaks with the occasional Beech (*Fagus sylvatica*), Holly (*Ilex aquifolium*) and Yew (*Taxus baccata*) with a fairly dense ground flora of Bramble (*Rubus fruticosus*) and Bracken (*Pteridium aquilinum*).

Notable invertebrates include the Long-winged Conehead (*Conocephalus discolor*) and the moths, Starwort Shark (*Cucullia asteris*), Sand Dart (*Agrotis ripae*), Shore Wainscot (*Mythimna litoralis*) and Lunar Hornet (*Sphecia bemeciformis*).

Sinah Common SSSI

Sinah Common SSSI comprises a complex of maritime habitats which extend for over 2km eastwards from the south-western extremity of Hayling Island. Gunner Point at the western end contains the most extensive sand dunes and vegetated shingle beach in Hampshire. This part of the site supports shingle beach vegetation, along with grassland, dune heath, dune grassland, saltmarsh and open water communities. To the east of Gunner Point there is an extensive area of fragmented dune grassland and shingle. The site embraces the adjacent intertidal area including East Winner because of the important functional relationship between this and the sand and shingle system.

The present day Gunner Point is a relatively recent feature having developed over the past 150 years due to accretion of material originating from the extreme east of Sinah Common.

The shingle beach supports Sea Kale (*Crambe maritima*), Yellow Horned-poppy (*Glaucium flavum*), Sea Radish (*Raphanus raphanistrum* subsp *maritimus*), Sea Beet (*Beta vulgaris* subsp *maritima*) and Curled Dock (*Rumex crispus*). To landward, sand and humus have accumulated within the shingle, resulting in more stable conditions which has led to the development of a range of grassland, heath and scrub communities.

The grasslands range from maritime grassland to dry acid grassland further from the sea. These often species-rich grasslands, dominated by Common Bent (*Agrostis capillaries*) and Sheep's-fescue (*Festuca ovina*), have a high lichen cover and support species such as Sheep's-bit (*Jasione Montana*), Upright Chickweed (*Moenchia erecta*), Heath Pearlwort (*Sagina subulata*) and occasional Sea Campion (*Silene uniflora*). Other species present include the lichen *Cornicularia aculeata*, the

bryophytes *Scleropodium tourettii* and *Archidium alternifolium*, Bell Heather (*Erica cinerea*), Rough Clover (*Trifolium scabrum*), Green-winged Orchid (*Orchis morio*) and Autumn Lady's Tresses (*Spiranthes spiralis*), as well as the following nationally scarce species: Nottingham Catchfly (*Silene nutans*), Bulbous Meadow-grass (*Poa bulbosa*), Bearded Fescue (*Festuca subulata*), Suffocated Clover (*Trifolium suffocatum*), Smooth Cat's-ear (*Hypochoeris glabra*), Mossy Stonecrop (*Crassula tillea*) and Toothed Medick (*Medicago polymorpha*).

Large populations of many of the nationally scarce species also occur in the eastern half of the site in areas of disturbed sand dune and shingle vegetation, while open shingle areas support the largest known populations in Hampshire of the nationally scarce Little Robin, comprising many thousands of plants. A matrix of gorse (*Ulex europaeus*) and oak (*Quercus robur*) scrub occurs to the north of the site. Dartford Warblers (*Sylvia undata*) breed in the scrub on the shingle.

The shingle at Gunner Point grades into dunes with acidic sandy grassland. This part of the site is mainly comprised of semi-fixed dunes dominated by Marram Grass (*Ammophila arenaria*), a species which also grows on the fixed dunes in association with Lyme Grass (*Leymus arenarius*), Sea Couch (*Elytrigia atherica*) and Sand Sedge (*Carex arenaria*). The locally scarce Sea Spurge (*Euphorbia paralias*), Soft-brome (*Bromus hordeaceus* subsp. *ferronii*) and the nationally scarce Dune Fescue (*Vulpia fasciculata*) occur on the dunes. Sea Holly (*Eryngium maritimum*) is also present on the dunes. Dune heath, dominated by Bell Heather, also occurs on Sinah Common and is one of only two locations for this habitat in the Solent area. Bell Heather grows in association with Sheep's-fescue and the lichens *Cladonia portentosa* and *C. foliacea* and the mosses *Polytrichum juniperinum*, *Dicranum scoparium* and *Hypnum lacunosum*.

Sinah Common supports brackish communities overlying wet sand, on the site of old mineral workings. This saltmarsh community is dominated by Sea Rush (*Juncus maritimus*) and Sea Club-rush (*Bolboschoenus maritimus*) with occasional Saltmarsh Rush (*Juncus gerardii*), Sea Milkwort (*Glaux maritime*) and Sea Aster (*Aster tripolium*). Species more typical of freshwater communities include Marsh Pennywort (*Hydrocotyle vulgaris*) and Southern Marsh-orchid (*Dactylorhiza praetermissa*). The locally scarce Royal Fern (*Osmunda regalis*) occurs on the site together with the nationally scarce Stiff Saltmarsh-grass (*Puccinellia rupestris*) and Dotted Sedge (*Carex punctata*), a western species here growing at its most easterly location in Britain. Flooded gravel workings provide an area of open water colonised by Rigid Hornwort (*Ceratophyllum demersum*), a locally scarce species in Hampshire. The nationally rare charophyte, *Chara baltica*, has been recorded.

The diversity of vegetation is reflected in a rich invertebrate fauna including a number of nationally rare or vulnerable and nationally scarce species. All the nationally rare species, namely the Solitary Bee (*Hylaeus euryscapus*), a mud wasp *Podalonia affinis* and the moths *Stigmella samiatella*, *Platytes alpinella*, *Cynaeda dentalis*, *Gymnancyla canella* and *Psammathocrita argentella*, and many of the nationally scarce species including the Grey Bush Cricket (*Platypleis albopunctata*) and Long-winged Conehead (*Conocephalus discolor*), are associated with coastal shingle and sand dunes. Typical saltmarsh invertebrates recorded include *Mythimna favicolor*, *Apamea oblonga*, *Scopula emutaria* and *Eupithecis subumbrata*. *Selidosema brunnearia* and *Scopula margine punctata* are moths characteristic of coastal heathland.

Warblington Meadow SSSI

Warblington Meadow SSSI is an unimproved grazing marsh adjoining Chichester Harbour and is of special interest for its gradation from freshwater, base rich marsh to old reclaimed saltmarsh, and for its rich associated flora, with a total of 158 species of flowering plants having been recorded up to the time of notification.

The freshwater marsh consists of a sedge-rush community with *Carex acutiformis*, *C. otrubae*, *C. flacca*, *C. panicea*, *C. nigra*, *C. disticha* and *C. ovalis* growing together with *Juncus effusus*, *J. inflexus*, *J. acutiflorus* and *J. articulatus*. The grass component is also high with much Yorkshire Fog (*Holcus lanatus*), Crested Dog's Tail (*Cynosurus cristatus*), Quaking Grass (*Briza media*) and several fescues *Festuca* species including *F. rubra*, *F. pratensis* and *F. arundinacea*. The sward contains a number of locally distributed herbs, such as Marsh Arrow-grass (*Triglochin palustris*), Southern Marsh Orchid (*Dactylorhiza praetermissa*), Ragged Robin (*Lychnis flos-cuculi*), Bog Pimpernel (*Anagallis tenella*), Creeping Jenny (*Lysimachia nummularia*) and Corky-fruited Water-dropwort (*Oenanthe pimpinelloides*).

The freshwater marsh grades seawards into reclaimed saltmarsh, dominated by Saltmarsh Rush (*Juncus gerardi*), and retaining several elements of the old saltmarsh flora. Species include Sea Arrow-grass (*Triglochin maritime*), Sea Plantain (*Plantago maritime*), Sea Milkwort (*Glaux maritime*), both Common and Reflexed saltmarsh grasses (*Puccinellia maritime*) and (*P. distans*) and Glasswort *Salicornia* species in the wetter areas, and Red Fescue (*Festuca rubra*), Sea Rush (*Juncus maritimus*), Buck's-horn Plantain (*Plantago coronopus*), Hard Grass (*Parapholis strigosa*), Strawberry Clover (*Trifolium fragiferum*) and both Distant and Divided sedges (*Carex distans*) and (*C. divisa*) on the drier ground.

A small bed of reed (*Phragmites australis*) and a clear, unpolluted stream lined with oaks (*Quercus robur*), Alders (*Alnus glutinosa*) and willows *Salix* species add habitat diversity to the site.

Local Nature Reserves in Havant

Brook Meadow (Emsworth)

Brook Meadow LNR is an area of open pasture and meadow alongside the River Ems at Emsworth and is an important site for Water Vole. The site is owned by the council but is maintained by a 'friends' group. It was designated in 2007 and covers an area of 3.95 Ha.

Gutner Point

Gutner Point LNR comprises grassland, saltmarsh and mudflats which extend into Chichester harbour. It is located on the eastern shore of Hayling Island and covers an area of 68.87 Ha. It is one of the key wader roosts in the harbour, and contains a range of interesting intertidal species such as Sea Lavender, Glasswort and Sea Heath, and habitats including Seagrass beds.

Sandy Point

Sandy Point LNR comprises coastal dunes, sandy heathland and grassland. It is located on the south east tip of Hayling Island and covers an area of 18.41 Ha. It was designated in 1994. Many rare plants and insects can be found on the site. Plants that can be found at Sandy Point include Yellow Horned Poppy and Sea Holly.

The Kench, Hayling Island

The Kench LNR comprises saltmarsh and mudflats. It is a small, naturally protected tidal inlet close to the entrance of Langstone Harbour at the south west corner of Hayling Island. It is of special importance as a sheltered feeding spot for birds. The Kench is 6.02 Ha and was designated in 1994.



The Kench

West Hayling

West Hayling LNR comprises the historic Oysterbeds found on the north west shore of Hayling Island. It was designated in the summer of 2000, covers an area of 76.05 Ha and is recognised for its importance for the many rare nesting seabirds that can be found there at certain times of year.



Oystercatchers Wader Roost and Grey Plover

Sites of Importance for Nature Conservation in Havant

There are currently 135 SINC's in Havant. They are listed in the table below and shown on Map 9.

Table 4: SINC's in Havant

Map ID	SINC Name	Grid reference	Criteria*
1	Battins Copse	SU71850780	1A
2	Beachlands East	SZ72009870	4A/6A
3	Beech Wood East	SU69800940	1A/1B
4	Bell's Copse	SU70501010	1A/1B
5	Blendworth Common (South)	SU70701070	2A
6	Boatyard Patch	SZ74659884	6A
7	Broadmarsh Playing Field	SU70020563	6B
8	Brook Farm B	SU73700560	6A/6B
9	Bushy Lease	SU69900840	1A
10	Cabbagefield Row	SU70700950	1A
11	Camp Down Grassland Remnants	SU69000651	2D
12	Cherry Tree Row	SU69800890	1A
13	Chichester Road Meadow	SU73500270	2A/4A
14	Conigar Point Meadows	SU73500530	2A/6A
15	Dunsbury Hill - Area 1	SU70211018	2A
16	Dunsbury Hill - Areas 5 & 6	SU70201000	2A
17	Dunsbury Hill Grassland 2	SU70620969	2B
18	Dunsbury Hill Wood	SU70500960	1Cii
19	East Of Pycroft's Meadow	SU71900370	6B
20	East Of St Peters Road A	SU73470374	6B
21	East Of St Peters Road D	SU73470342	6B
22	Emsworth Millpond	SU74800548	4A
23	Farlington Marshes Grassland (Ne)	SU69200550	2A/4A
24	Field East Of Farlington Redoubt (North)	SU68790639	2A
25	Fields & Saltmarsh South Of Copse Lane	SU72730188	4A/6B
26	Fields Off Havant Road	SU69180613	6B
27	Fishery Creek Camp Site	SZ73599868	6B
28	Fort Purbrook	SU67800650	2A/6A
29	Fort Purbrook Paddock 1 (Havant)	SU68050645	2B/6A
30	Fort Purbrook Paddock 2 (Havant)	SU68200640	2B/6A
31	Forty Acres Farm B	SU69080568	6B
32	Frank's Coppice	SU68760890	1B
33	Great Copse	SU71800840	1A
34	Gun Site Car Park & Open Space	SZ70009940	4A/6A
35	Gundymoor Wood (Main)	SU69000750	1A
36	Gundymoor Wood (West)	SU68850760	1A
37	Gutner Farm	SU73430206	6B
38	Gutner Lane Meadow	SU73600200	4A/6A/6B
39	Havant Thicket (Sw Corner)	SU71001050	1B/3Bi
40	Hayling Billy C	SU71500160	6B
41	Hayling Billy D	SU71500130	6B
42	Hayling Billy E	SU71500120	6B
43	Hayling Billy F	SU71500090	6B
44	Hayling Billy G	SU71300060	6B
45	Hayling Billy Line	SU71690325	6A
46	Hayling Secondary School Playing Field	SU72500020	6B
47	Hazleton Wood	SU70171149	3A

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48	High Lawn	SU71900890	2B
49	Hulbert Road Meadow	SU69500800	2D/5B
50	Johnston's Coppice	SU69100790	1A
51	Knott's Marsh Scrub	SU71660260	4A/6A
52	Land East Of Sandy Point	SZ75059841	4A/6A
53	Land West Of Emsworth Recreation Ground	SU74450668	2B/2D
54	Landfill Meadow	SU71300050	4A/6A
55	Langstone Mill Pond	SU72050500	4A/5B/6A
56	Lifeboat Station Heath	SZ75009830	3A
57	Lifeboat Station Saltmarsh	SZ75009860	4A/6A
58	Littlepark Wood (East)	SU69500710	1A
59	Littlepark Wood (West)	SU69200750	1B
60	London Road Fen	SU67070763	1Cii/5B
61	Long Marsh	SU71500180	4A/6A
62	Longwood (Idlewood)	SU68951160	1A
63	Lower Beacon Field	SU72110919	2A
64	Lumley Meadow (now "Brook Meadow")	SU75100610	2A/6A
65	Manor Farm A	SU70000610	6B
66	Meadow Adjacent To Johnston's Copse	SU69200780	1A/2B/5B
67	Meadow By Bells Copse	SU70400990	2A/2D
68	Mengham Salterns	SZ73709920	4A/6A
69	Middle Clearing	SU71250960	1A
70	Mill Rythe Holiday Village	SU73400090	4A/6A/6B
71	Mill Rythe Lane Saltmarsh	SU72700100	4A/6B
72	Neville's Park Areas 2 & 3	SU69800860	2A
73	Neville's Park Areas 4-10	SU69800810	1B/1Cii/2A/2D
74	Neville's Park East Wood	SU69600850	1A
75	Neville's Park West Wood	SU69480843	1B
76	Newlease Copse	SU68400830	1A
77	Nore Grassland & Saltmarsh	SU73870531	4A
78	North Common & Saltmarsh	SU72800390	2A/4A/6B
79	North Copse	SU72840213	1A
80	North Of Northney Road	SU73000380	6B
81	Outhurst/Inhurst/Beech Woods	SU69500940	1A/6A
82	Park Wood	SU68501040	1A
83	Pill Box Field	SU71600190	2B
84	Plot 5835 South of Knotts Marsh	SU71600240	2A/4A/6A
85	Plot 6114 South of Knotts Marsh	SU71600220	2D
86	Portsmouth City Golf Course Copse	SU68900660	1B/2D/6A
87	Portsmouth Golf Course East	SU68500662	2A/2B/2D
88	Portsmouth Golf Course West	SU67700665	2B/2D
89	Pound Croft Field	SU71800280	6A
90	Pound Marsh B	SU72590089	6B
91	Purbrook Park Wood	SU67800680	1A
92	Pyecroft's Meadow	SU71800370	2B/4A/6A/6B
93	Saltmarsh Lane C	SU71000010	6B
94	Saltmarsh Lane E	SU71100000	6B
95	Sandy Dell	SU67900740	1A
96	Selsmore Boating Lake	SZ73709880	4A
97	Sinah Stables	SZ70059963	6B
98	Sinah Warren Village Marsh	SZ70009980	4A
99	South Of Daw Lane A	SU71900150	6B
100	South Of Daw Lane C	SU71900130	6B
101	South Of Daw Lane D	SU72100130	6B
102	South Of Daw Lane H	SU71700060	6B

103	Southleigh Forest (N Of Emsworth Common Road)	SU74550866	1D
104	Southleigh Forest (South)	SU74400830	1D
105	Southmoor - Big Field (South Edge)	SU70980487	4A
106	Southmoor Reserve	SU71200520	2A/4A/5B/6A
107	Stakes Coppice Remnant 1	SU68270868	1B/7A
108	Stakes Coppice Remnant 2	SU68810852	1B
109	Stakes Coppice Remnant 4	SU69000882	1B
110	Stakes Coppice Remnant 5	SU69070864	1A/1B
111	Stakes Coppice Remnant 6	SU69100852	1A
112	Stakes Coppice Remnant 7	SU69300882	1A/7A
113	Stoke Common	SU71800320	4A/6A
114	The Kench Scrubs	SZ69409990	6A
115	The Queen's Inclosure	SU69301050	1A
116	The Warren	SU70500930	1Cii
117	Thicket Bottom Woods & Lake	SU71900930	1A
118	Thicket Lawn	SU71600900	2A/6A
119	Tournerbury Farm A	SU72900030	6B
120	Tournerbury Farm B	SU73200020	6B
121	Verner Common West	SU72350145	6B
122	Wade Court Park	SU71980531	6B/6C
123	Wakefords Copse	SU72400890	1A
124	Warblington Castle Farm East D	SU73300560	6B
125	Warblington Castle Farm East E	SU73300520	6B
126	Warblington Castle Farm West	SU72670544	6B
127	Waterlooville Golf Course	SU70301100	1A/2B/3A
128	Wecock Common	SU68201140	1D
129	Wecock Wood	SU69001190	1A
130	West Of North Hayling F	SU72900330	6B
131	West Of North Hayling G	SU72980293	6B
132	West Of North Hayling B	SU72430394	6B
133	West Of North Hayling D	SU72510349	6B
134	West Of North Hayling P	SU73000263	6B
135	West Of North Hayling V	SU72400190	6B
136	Westbrook Stream, Bridge Road	SU74730600	6A/7A

* for explanation of criteria see Section 2

It can be difficult to build an accurate picture of SINC condition as the majority are in private ownership and are not managed primarily with nature conservation in mind. Consequently, ensuring SINC's are managed in a manner sympathetic to their features is a priority for this BAP as they form an essential part of the ecological framework across the landscape.

2.5 Urban Green Spaces

Havant Borough contains many parks, gardens and open spaces. These include playing fields, golf courses, allotments and cemeteries. Many form important wildlife corridors and buffers, and provide sanctuaries for wildlife in more urban areas; these areas are illustrated in Map 10.

Allotments are an increasingly important resource for wildlife. Many of the plants and animals that struggle to survive on intensively-managed farmland or in urban areas find a refuge on allotment sites. Valuable wildlife habitats on allotments include hedges, ponds and bog areas, nest boxes for birds and roosts for bats. Undisturbed areas, such as log and stone piles are ideal for insects and wildflower/herb patches can provide important nectar sources. See Natural England's 'Wildlife on Allotments' leaflet for ideas on how to make your allotment more wildlife-friendly.

Churchyards and cemeteries can provide a haven for wildlife, especially for garden birds and butterflies, lichens, fungi and mosses. They are also important green spaces providing access to nature and a peaceful place to hear and observe wildlife.

School grounds can provide habitats for local wildlife and small changes can increase biodiversity. Simply planting some native plants and providing attractive conditions for wildlife, such as places for insects and garden birds to shelter and feed, will increase the wildlife population. These wildlife-friendly areas can also be used as an outdoor classroom where students can discover the natural world and develop their understanding of environmental issues.

The harbours of Langstone and Chichester are internationally important overwintering grounds for wading birds and Brent Geese, at times of high-tide and bad weather, these birds come inland to feed and roost, often using green spaces such as school playing fields and recreational areas. Providing less disturbed areas within these sites for birds to use can go along way to helping conserve them in the long term as coastal space is dwindling for these impressive migrants.

Mature trees in the urban environment can provide excellent habitat for birds and insects. Mature trees can support over 300 species of insects and are therefore good habitats for insect-eating birds such as Woodpeckers, Tree creepers and Nuthatches. Acorns are food for small mammals and the leaves are larval food sources for butterflies and many moth species. Although redevelopment provides the opportunity for new tree planting, there is a steady loss of older trees. The Town and Country Planning Acts allow local councils to protect visually important trees by making them subject to a Tree Preservation Order (TPO). Havant Borough Council is a member of the Tree Council which promotes the planting, care, conservation and value of trees. Through this membership the council co-ordinate and support a network of 42 volunteer tree wardens responsible for the planting and care of trees throughout the Borough.

Section 3: Action Plans

The following sections outline a framework for action by biodiversity and community partnership organisations. A borough wide action plan gives priorities for Havant Borough as a whole; more detailed area-based action plans translate objectives into local action for the three BAP areas, Havant Mainland, Hayling Island and Harbour & Coast.

Ideas for Actions

The public were asked how they currently view and use the wildlife areas in Havant via an online questionnaire. Most people (26%) visited a wildlife area daily, the favourite place to visit being the Hayling Billy Line (10%). The main activities people undertook when visiting open spaces were walking (59%), wildlife-spotting (21%) and quiet enjoyment (20%). A large proportion (47%) of people were concerned about urban development in Havant, with many people saying they would be interested in helping out at local wildlife sites. 66% of respondents said that if they were to do one thing for wildlife they would make their garden more wildlife friendly, with some respondents already encouraging a range of species, including birds, butterflies and bees. The full results of the survey are in Appendix V.



Workshops for local conservation groups, conservation organisations, naturalists and councilors were also held to establish where the key areas for biodiversity are, where there are areas of opportunity for biodiversity and where actions could be taken to enhance biodiversity. The workshop highlighted that a need for engagement with members of the public was vital for promoting biodiversity through such schemes as gardening for wildlife and by utilising local conservation groups, and that the management and linking of wildlife areas is important for enhancing biodiversity areas.

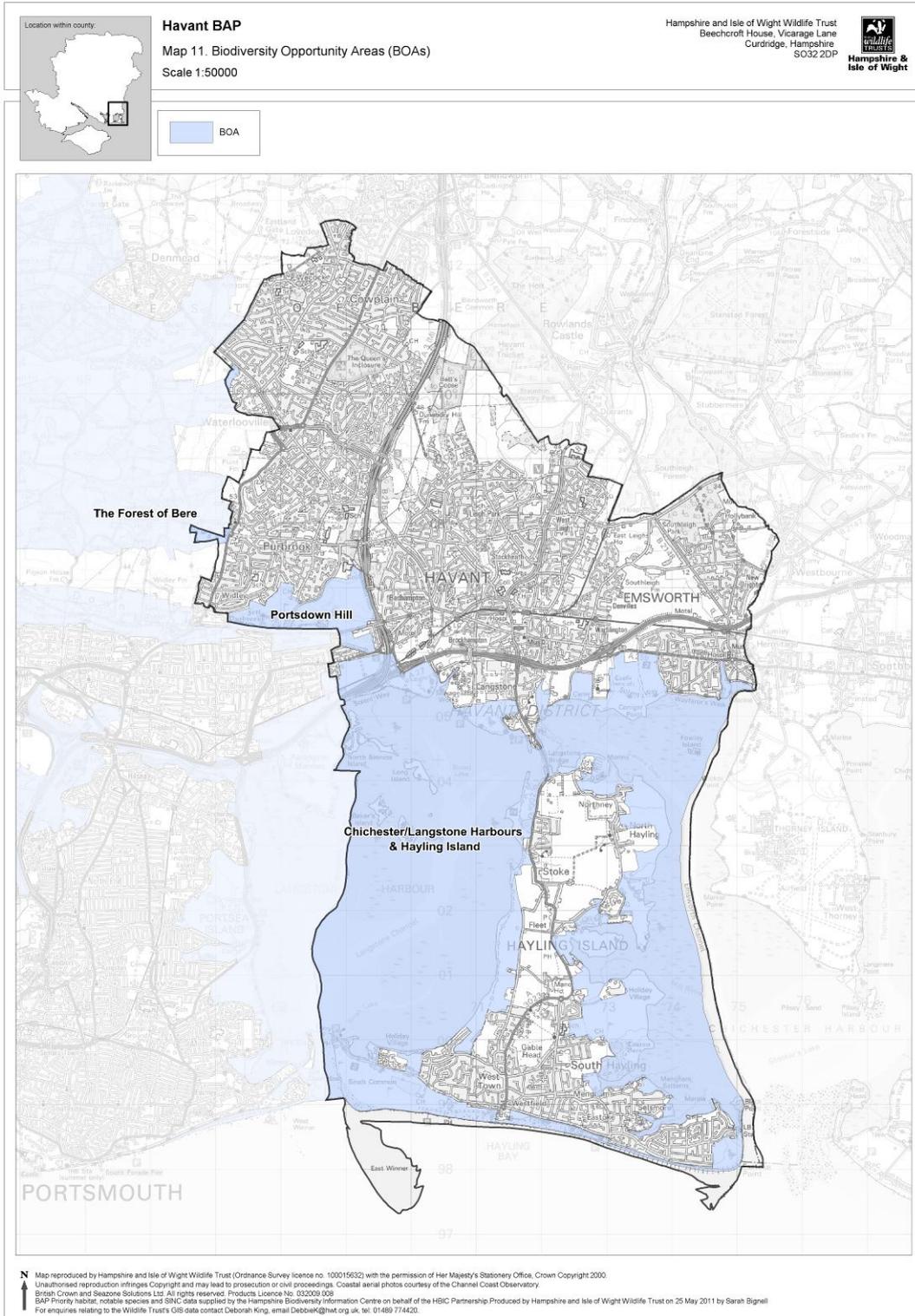
The ideas and results from the questionnaire and workshops were then used to inform the action plan.

Rationale for Deciding Actions

1. Is the area in an area of biodiversity opportunity e.g. the Forest of Bere or the BOAs of Chichester/Langstone Harbours & Hayling Island and Portsdown Hill, shown in Map 11.
2. Is the area under threat? Sea-level rise, development, pollution, abstraction, litter and vandalism, bait digging, dredging, fragmentation and isolation
3. Is the current action or a framework for delivery already in place? Management plans, local group activity, initiatives e.g. Solent forum, LA policies e.g. sustainable planting policies, school conservation areas, HBAP actions?

4. Are there opportunities for linkages and restoration? BOA's, mitigation opportunities e.g Havant Thicket
5. Are there opportunities for community involvement? Community boards, local groups, schools, online initiatives

Map 11: Biodiversity Opportunity Areas (BOAs)



Structure of the Action Plan

First are the borough-wide actions, organised into the following action types: designated sites, wider countryside, species, people and wildlife and urban green space.

Secondly are the area specific actions, pertaining to the Havant Mainland, Hayling Island and the Harbours and Coast.

Action Tables

The actions, listed below in tables, include habitat management, advice, monitoring and education. These have been developed on the basis of advice from partners with relevant or site-specific expertise and actions listed in relevant Habitat and Species Action Plans published as part of the Hampshire BAP or UKBAP. District-level BAPs like this one have the dual purpose of translating priorities and objectives identified in County-level BAPs – in this case *Biodiversity Action Plan for Hampshire* - which in turn is intended to translate priorities and objectives identified at national level in the UK BAP; and encouraging community engagement and access to nature.

Action Types

Action Type	Description
Designated Sites	Actions relevant to sites designated for conservation (e.g. SSSI, SINC)
Wider Countryside	Actions for areas not designated, but often adjacent to designated land or forming a key network
Species	Actions relevant to one or more priority species
People and Wildlife	Actions relevant to the engagement of people with Biodiversity, including actions which directly or indirectly benefit the local economy.
Urban Green Space	Actions relevant to open green spaces and amenity areas.

Each action is listed under a specific objective, and in turn listed under the above categories. Some of the actions listed are already likely to be underway; others are potential projects, while others are aspirational, they represent ideal actions given sufficient resources or political will. The actions listed represent the current priorities. Priorities will, however, constantly change for many reasons, hence the need for regular review of this BAP and progress towards it (see Section 4).

Also listed in the action tables are suggested partners (suggested lead partner in bold where applicable) who should liaise during the delivery of the action, as well as a proposed timescale for each outcome for the area specific action tables. All of the actions within the borough-wide action table should be viewed as ongoing within the 10 year lifespan of this BAP, unless modified through a review. Where possible, partners have been consulted in their willingness to be listed against each action and have helped refine actions so that they are more closely aligned to current schemes and priorities locally.

Suitable timescales are proposed for each project in the area action tables to enable effective delivery and reporting. It is hoped that this should provide flexibility and allow partner organisations to respond, as opportunities and funding become available. Outcomes from each action should be achieved according to the following timescales when possible:

- * **within next 3-5 years**
- ** **within next 10 years**
- **then ongoing**

Reporting themes are given in the last column of each of the action tables (HBAP reporting theme) which link to the tables in Section 4. Each of the headings allows the reporting of the progress and achievements of the LBAP to the Hampshire Biodiversity Partnership. They are the same as the Hampshire-wide biodiversity objectives agreed by the county-wide partnership allowing a coherent approach to reporting. This report can also be used to identify how Havant Borough Council are fulfilling their biodiversity duty under the NERC Act 2006.

Borough-wide Action Table for next Ten Years

	OBJECTIVES	ACTIONS	OUTCOMES	PARTNER(S)	HBAP REPORTING THEME
Designated Sites	Protect and enhance designated sites	<p>Ensure biodiversity is considered in all decision making and strategic processes</p> <p>Ensure protection of off-site features, including Brent Goose feeding sites and wader roost sites by reference to the Solent Waders & Brent Goose Strategy</p> <p>Ensure that planning proposals for major development areas do not directly or indirectly impact negatively on designated areas for wildlife</p> <p>Seek opportunities for enhancement of designated sites and supporting areas through the planning system and other council functions</p> <p>Improve evidence base and awareness of human disturbance through support of Solent Forum research</p> <p>Ensure appropriate access management to designated sites to minimise human disturbance</p>	<p>No net loss of biodiversity</p> <p>SINCs recognised through Local Development Framework</p> <p>Local Nature Reserves identified and maintained in Local Development Framework</p> <p>Sound evidence base of effects of human disturbance on designated sites/features established</p> <p>Appropriate and robust strategic mitigation secured in line with new development to avoid cumulative impacts on designated sites/features from development pressures</p> <p>Additional and enhanced Alternative Areas of Natural Green Space are provided that avoid increases in disturbance and damage to sensitive sites</p> <p>Sustainable populations of designated site species</p>	<p>HBC CHC HIWWT NE RSPB Solent Forum Solent LPAs</p>	<p>Planning, Plans and Strategies & Land Management</p>
	Manage SSSIs for biodiversity	Owners and managers of SSSIs receive advice and support for maintaining or achieving favourable condition	<p>All SSSIs in favourable or favourable recovering condition</p> <p>Landowners and land managers aware of impacts of potentially damaging activities</p>	<p>NE CHC HCC - CS HIWWT</p>	<p>Land Management</p>

	<p>Manage SINC's for biodiversity</p>	<p>Private land owners of SINC's receive advice and support for management</p> <p>Local conservation groups continue to carry out voluntary practical conservation work on SINC's</p> <p>Survey SINC's to understand biodiversity needs and inform management</p> <p>HBIC to propose new SINC's and amendments to existing SINC's through ongoing survey, with approval for proposals by the SINC panel (HCC/NE/HIWWT)</p>	<p>An increase in the number of SINC's in positive management</p> <p>All priority habitats captured outside SSSI/SPA/SAC's within SINC's through HBIC survey programme</p> <p>Havant BC engaged in programme of SINC survey with HBIC</p> <p>Local conservation groups have all biodiversity information available and support e.g. from BTCV for carrying out management work</p>	<p>BTCV CHC HBC HBAP HBIC HCC - CS Local Conservation Groups</p>	<p>Land Management</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Wider Countryside</p>	<p>Manage roadside verges for biodiversity</p>	<p>Pilot and where possible expand "Emsworth Waysides" cutting regime project</p> <p>Leave some areas of long grass and managed grass growth with yellow rattle</p> <p>Planting of native hedgerows & wildflower mixes in grassland areas such as roadside verges & roundabouts</p>	<p>Timing of cutting allows for flowering & re-seeding to take place resulting in increased floral diversity</p> <p>Diversity of sward height and increase in invertebrate species diversity</p>	<p>HBC Conservation Groups</p>	<p>Land Management</p>
	<p>Manage hedgerows for biodiversity</p>	<p>Continuation of on-going repair programme</p> <p>Survey hedgerows</p>	<p>Ancient and species rich hedgerows protected and identified as SINC's</p> <p>Improved landscape linkages</p>	<p>HBC CHC Conservation Groups PUSH</p>	<p>Land Management</p>
	<p>Manage farmland for biodiversity</p>	<p>Encourage take up of environmental stewardship options for biodiversity e.g. farmland birds, BAP habitats, resource protection etc</p>	<p>Reduced habitat fragmentation, edge effects and increases in species populations and diversity</p>	<p>NE</p>	<p>Land Management</p>

	Manage arable farmland for birds	<p>Improvements to hedgerows, arable fields, arable field margins and beetle banks within cultivated land, particularly around Stoke, North Hayling and either side of the motorway between Langstone & Emsworth</p> <p>Raise awareness of farmland as a habitat in itself through advice to farmers</p> <p>Maintain areas of open landscape with shorter hedges and less woodland for arable birds, particularly Grey Partridge</p>	Improved arable habitats for farmland bird index species, including Grey Partridge	GWCT	Land Management & Education, Awareness and Communication
	Manage woodlands for biodiversity	<p>Promote "multi-purpose" forestry as a means of sustainable management</p> <p>Provide advice and support to landowners with an interest in creating new native woodland & restoring plantations on Ancient Woodland Sites</p> <p>Designate sites as woodland (Type "W") Tree Preservation Orders (TPOs) where appropriate</p>	<p>Sustainable local enterprises supported</p> <p>Improved habitat structures and increases in species diversity</p> <p>Protection of important woodland sites</p>	FC HCC - CS Woodland Trust	Land Management
Species	Create and improve ecological networks	<p>Use habitat opportunity mapping to identify areas for habitat restoration</p> <p>Prioritise Biodiversity Opportunity Areas for conservation projects</p> <p>Utilise local conservation groups to undertake habitat management work</p> <p>Improve hedgerows and field boundaries through environmental stewardship, where appropriate</p>	A more robust, linked and permeable landscape	<p>CHC HBAP HBIC HIWWT Local Conservation Groups NE PUSH</p>	Land Management

	Update and improve species records	<p>Promote species recording to local conservation groups</p> <p>Undertake surveys for under-recorded species e.g. small mammals, invertebrates, marine species etc.</p> <p>Update veteran tree survey, enabling tree preservation orders to be assigned to old trees</p>	<p>Increase in number of records sent to HBIC</p> <p>Accurate data available for decision-making</p> <p>Greater understanding of distribution and range of species in the Borough</p>	<p>CHC HBIC Local Conservation Groups</p>	Data and Information
	Protect important species	<p>Ensure appropriate protection of the borough's biodiversity is given through the planning system by following planning policy guidance, Natural England's Standing Advice and relevant legislation. All opportunities for biodiversity enhancement, including those for protected and BAP species, explored</p> <p>Solent Forum to continue running the Nature Conservation group and provide the secretariat for the SEMS scheme of management</p> <p>Seek opportunities to enhance biodiversity through the planning system and other Council functions</p>	<p>Biodiversity protected and unharmed by development decisions</p> <p>Opportunities for population expansion and gains achieved</p> <p>Co-ordinated approach to species protection and biodiversity enhancement</p>	<p>HBC CHC HIWWT NE RSPB Solent Forum</p>	Planning, Plans and Strategies
People and Wildlife	Monitor priority species populations	<p>Continue to monitor species populations e.g. breeding bird surveys, WeBS counts, Water Voles etc.</p> <p>Continue to monitor distribution of sensitive species e.g. seagrass, and intertidal & terrestrial vegetation monitoring at key sites</p>	<p>Accurate and up to date understanding of species populations and distributions across the Borough</p>	<p>BTO CHC GWCT HIWWT</p>	Data and Information

	<p>Improve awareness and management of disturbance to sensitive species</p>	<p>Better interpretation boards and signage</p> <p>Incorporate needs of sensitive species in Borough Access Plans</p>	<p>Awareness raised and wildlife messages communicated to visitors and residents</p>	<p>HBC HCC – CS HIWWT</p>	<p>Planning, Plans and Strategies & Education, Awareness and Communication</p>
	<p>Officer support to biodiversity work</p>	<p>Support for community biodiversity work from existing staff where feasible</p>	<p>Co-ordination and implementation of biodiversity action plan</p> <p>Increased opportunities for sharing resources and training opportunities for local conservation groups</p> <p>Continued support to local conservation groups through the Havant Conservation Forum</p> <p>Improved partnership working</p>	<p>HBC BTCV HIWWT Local Conservation Groups</p>	<p>Data and Information</p>
	<p>Increase education and training opportunities</p>	<p>Support and encourage school education conservation projects run by BTCV e.g. school green gym and tree planting</p> <p>Explore ideas on how to encourage schools to share resources e.g. outdoor classrooms and conservation areas</p> <p>Promotion of after school nature groups such as Wildlife Watch</p> <p>Implement new Access to Nature project which offers training and outdoor experiences for young people and hard to reach groups</p>	<p>Increase in number of educational activities and events held annually</p> <p>A wider demographic of people able to experience wildlife</p> <p>Wildlife and the environment valued more by more people</p>	<p>BTCV HCC - Schools HIWWT</p>	<p>Education, Awareness and Communication</p>

	Increase access to biodiversity	Build relationships with local hospitals and hospices to provide advice to improve grounds and create wildlife gardens, and to be involved with "Walking for health" schemes	Improved well-being and quality of life Inclusion of biodiversity in community and health strategies	HBC NHS Private Hospice Owners	Planning, Plans & Strategies
	Increase engagement and celebrate local wildlife	Develop a Visitor centre that celebrates and educates about local wildlife Raise awareness of the biodiversity and amenity value of green spaces next to urban areas Make use of local press to promote biodiversity, such as regular spot for local volunteer groups in publications such as 'Serving You' Better use of existing local websites to promote events and local group activities Joint website and leaflet for conservation groups to promote activities and recruit volunteers	Wildlife and the environment strongly associated with Havant Borough in the minds of more people Greater awareness in the community about the importance of Havant's wildlife areas Increased opportunities for people to find out about volunteering in the borough and get involved in conservation work	BTCV CHC HBAP HCC - CS HIWWT Local Conservation Groups	Education, Awareness and Communication
Urban Green Space	Improve understanding of biodiversity	Disseminate biodiversity and conservation progress by feeding into county-wide biodiversity and community publications and reports Communicate and consult communities on decisions that affect wildlife	Status and progress of biodiversity work understood in local, regional and national contexts Local communities are aware of why conservation management takes place	HIWWT BTCV Local Conservation Groups	Education, Awareness and Communication

	<p>More wildlife rich gardens and allotments</p>	<p>Promote wildlife gardening i.e. through HIWWT wildlife gardening awards scheme and wildlife garden species surveys</p> <p>Implement new planning guidance to avoid “garden grabbing” development proposals</p> <p>HBC to send out HIWWT information pack to allotment holders on how to encourage wildlife & relevant BAP species and grow organically</p>	<p>Increase in number of wildlife gardening scheme prizes awarded</p> <p>Less garden space lost to development</p> <p>Sightings of indicator species such as butterflies, birds, amphibians and reptiles increase</p>	<p>HBC HBIC HIWWT</p>	<p>Planning, Plans and Strategies & Education, Awareness and Communication</p>
	<p>More wildlife rich amenity spaces</p>	<p>Management regimes to include space for wildlife, such as areas of long grass and short grass, planting of hedgerows with native species, digging of ponds, planting of nectar rich flowers for insects etc. in churchyards, parks and gardens, and playing fields</p>	<p>Balance achieved between use of amenity sites by people and wildlife</p>	<p>HBC PUSH</p>	<p>Land Management</p>
	<p>Integration of biodiversity into the built environment</p>	<p>Integrate green space and urban fabric by use of green roofs and walls, include urban bird friendly designs for swifts, starlings and house sparrows</p>	<p>Permeable and visibly wildlife friendly urban landscape</p>	<p>HBC RSPB</p>	<p>Planning, Plans and Strategies</p>

Mainland Area Action Plan and Map

	OBJECTIVES	ACTIONS	OUTCOMES	PARTNER(S)	TIME SCALE	HBAP REPORTING THEME
Designated Sites	Maintain Brook Meadow as a Local Nature Reserve	Support local conservation group – Brook Meadow Conservation Group Site protected from development in LDF	Indicator and flagship wetland species such as dragonfly, damselfly, and Water Vole thriving	HBC BTCV HBIC HIWWT Brook Meadow Conservation Group	→	Land Management
	Maintain Woodland SINC sites in positive management	Support local conservation groups – Friends of Nore Barn Woods, Friends of Hollybank Woods, Friends of Park Wood, Friends of Battins Copse Creation of groups for woodland SINC sites that do not currently have an affiliated local conservation group Review of the ancient woodland inventory to reassess current designation and include woodlands under 2ha	Indicator and flagship species such as butterflies, reptiles and birds thriving	BTCV HBC HBIC HIWWT	→	Land Management
Wider Countryside	Ensure major development areas incorporate appropriate mitigation and enhancement opportunities for wildlife, including consideration of likely recreational disturbance from large developments	Seek opportunities at Havant Thicket, Dunsbury Hill, Hampshire Farm (Emsworth) and West of Waterlooville Ensure partnership working for delivery of proposals for creating and enhancing wildlife habitats Work across administrative boundaries to enhance biodiversity	Improved connectivity and restoration of surrounding priority habitats and bat foraging routes at : <ul style="list-style-type: none"> • Havant Thicket • Dunsbury Hill • Waterlooville • Hampshire Farm 	HBC EHDC FC HIWWT NE Portsmouth Water WCC	*	Planning, Plans and Strategies

	Improve Emsworth Waysides	<p>HBIC to continue to support Emsworth waysides with road verge surveys and SINC designations</p> <p>Support to local conservation groups to continue management of verges</p>	Diverse habitat and improved connectivity	<p>HBC HBIC Local Conservation Groups</p>	*	Land Management
	Restore Hermitage Stream for wildlife	<p>Formation of project partnership and engagement of local community groups to undertake work with technical support from EA</p> <p>Creation of a 'Friends of' group to undertake some of the work</p> <p>Obtain funding to undertake river restoration to make it more naturalised and less culverted</p> <p>Develop banks for biodiversity</p>	<p>Indicator and flagship wetland species thriving</p> <p>Overall length of river is restored</p> <p>More natural and self-regulating river system in operation</p> <p>Water Framework Directive status of the water body improved</p>	<p>EA Groundwork HBC HIWWT PUSH</p>	**	Land Management
	Restore heathland habitat	<p>Investigate heathland restoration opportunities in North East Havant</p>	<p>Increase in well managed priority habitat</p>	<p>HBC EHDC PUSH</p>	**	Land Management
	Encourage environmental stewardship of farmland	<p>Contact land owners and offer advice around Staunton Country Park, Leigh Park, Purbrook and Cowplain</p>	<p>Increase in well managed priority habitat</p>	<p>NE</p>	*	Land Management

	Increase connectivity along woodland corridors	Contact land owners along Hursts Woods, Woodsedge and Johnstons Coppice corridors and offer advice & information on stewardship	A more robust, linked and permeable landscape	FC HIWWT Local Groups PUSH	**	Land Management
	Restore wood pasture habitat	Consider pilot project to reintroduce pastoral woodland management to HBC woodlands	Increase in well managed priority habitat	HBC PUSH	**	Land Management
	Restore chalk downland habitat	Investigate options for chalk downland restoration within Portsdown Hill BOA	Increase in well managed priority habitat	PCC PUSH	**	Land Management
Species	Species recording	Survey for threatened woodland species, including Dormouse & Nightingale	Better understanding of distribution and status Better evidence for habitat management More records sent to HBIC	HIWWT Friends of Groups HBIC	*	Data and Information

	Invasive Species	<p>Strategy for invasive species developed including identification and mapping of issues</p> <p>Control of non-native species, for example Himalayan Balsam and Mink on Brockhampton water</p> <p>Engagement with local community groups and landowners e.g. use of volunteers for Himalayan Balsam removal</p>	<p>Removal of source of non-native species</p> <p>Better survival of native competitors e.g. Water vole</p>	<p>CHC EA HBC</p> <p>Local conservation groups Private landowners</p>	*	Land Management
People and Wildlife	Creation of space for biodiversity in dense urban areas	Introduce space for biodiversity in dense urban areas and new developments through innovative ideas such as ponds, green walls / roofs and gardening for wildlife	<p>A more robust, linked and permeable landscape</p> <p>Improved access to and experience of wildlife for residents</p>	HBC PUSH	**	Planning, Plans and Strategies
	Education	Continue to use Staunton Country Park as a venue for educational work	<p>More people inspired about wildlife</p> <p>More people with a greater understanding of the importance of local wildlife</p>	HCC - CS	→	Education, Awareness and Communication
Urban Green Space	More wildlife rich key amenity spaces i.e Leigh Park Woods	<p>Oak trees in Leigh park recorded and protected under TPO's</p> <p>Enhance and restore ponds</p>	Biodiversity incorporated into management plans of parks and gardens	<p>HBC HBIC</p> <p>Local Conservation Groups</p>	*	Land Management

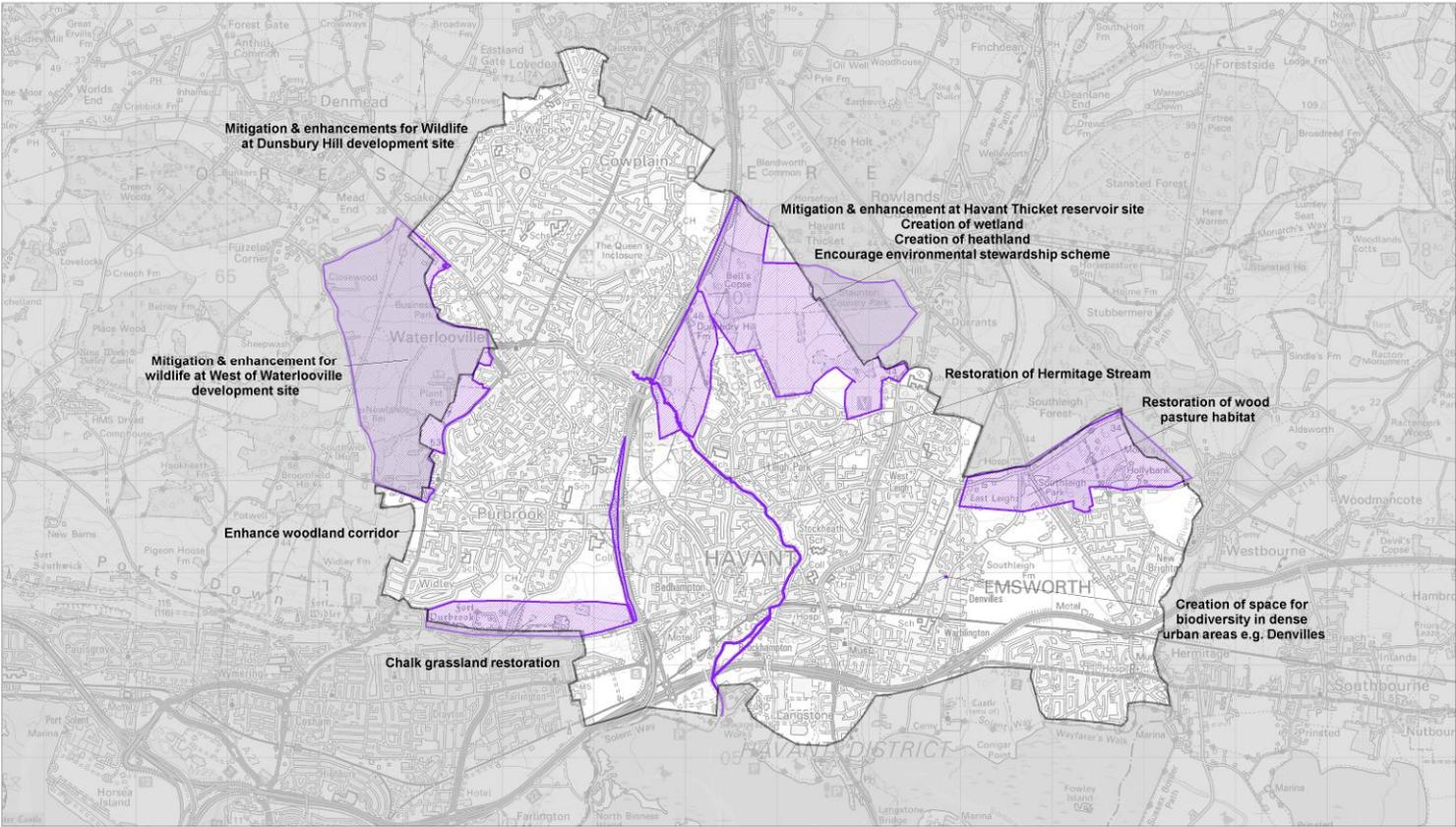
	Major development areas have green space for wildlife within fabric of the development	Biodiversity friendly design to demonstrate good green building practice	West of Waterlooville MDA model site for protection and creation of biodiversity assets	HBC	*	Planning, Plans and Strategies
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Map 12: Mainland Area Action Plan (see overleaf)



Havant BAP
 Map 12. Mainland Action Areas
 Scale 1:40000

Hampshire and Isle of Wight Wildlife Trust
 Beechcroft House, Vicarage Lane
 Curdridge, Hampshire
 SO32 2DP

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 Produced by Hampshire and Isle of Wight Wildlife Trust on 19 May 2011 by Sarah Bignell. For enquiries relating to the Wildlife Trust's GIS data contact Deborah King, email DebbieK@hwt.org.uk, tel: 01489 774420.

Hayling Island Area Action Plan and Map

	OBJECTIVES	ACTIONS	OUTCOMES	PARTNER(S)	TIME SCALE	HBAP REPORTING THEME
Designated Sites	Enhancement of coastal grassland SINCs along Hayling Billy Line	Link the SINCs along the Hayling Billy Line to enhance the area of coastal grassland	A more robust, linked and wildlife permeable landscape	HCC - CS Local Conservation Groups PUSH	**	Land Management
	Maintain Sinah Common SSSI in favourable condition	Continue with management plan and annual ecological surveys to ensure appropriate management of site Manage access to sensitive dune habitat system Establishment of local conservation group to help maintain site through BTCV Hayling Island beach wardens projects	SSSI qualifying features present i.e. rare plants such as Little Robin and Nottingham Catchfly	BTCV HBC NE Sinah Golf Course	→	Land Management
	Maintain the Kench, Sandy Point, West Hayling, and Gutner Point as LNR	Sites protected from development in LDF Ensure appropriate access management of designated sites to minimise human disturbance	Survival and breeding success for coastal bird populations	HBC HCC – CS	→	Land Management

Wider Countryside	<p>Improve management of intensively horse grazed grassland sites</p>	<p>Contact landowners and offer advice</p>	<p>Larger size, less intensively grazed pony paddocks</p> <p>Brent Geese using paddock grasslands</p>	<p>HIWWT</p>	<p>**</p>	<p>Land Management</p>
	<p>Maintain and enhance important inland sites for waders and Brent geese</p>	<p>Identify sites using the Solent Waders and Brent Goose Strategy 2010</p> <p>Flag up sites through the LDF</p> <p>Include Solent Waders and Brent Goose Strategy 2010 in development control decisions especially regarding seasonal changes of use i.e. all year round caravan parks</p>	<p>Maintained and increased feeding and roosting resource for feeding Brent Geese and waders</p>	<p>HBC CHC Solent Forum PUSH</p>	<p>→</p>	<p>Land Management</p>
Species	<p>Species protection</p>	<p>Manage access to ensure minimal disturbance to nesting and overwintering birds through Solent Disturbance and Mitigation (SD&M) Project.</p> <p>Highlight seasonal use of caravan sites by Brent Geese</p>	<p>Survival and breeding success for coastal bird populations</p>	<p>HBC CHC Solent Forum PUSH</p>	<p>→</p>	<p>Land Management</p>
People and Wildlife	<p>Communication of disturbance message to dog walkers on HBC LNRs: <i>West Hayling, Gutner Point, Sandy Point, The Kench & HCC Countryside Sites: Hayling Billy Coastal Path, The Kench, Gutner Point, Sandy Point, Creek Common</i></p>	<p>Use of appropriate signage to minimise effect of dogs on nesting birds (keep dogs on leads at certain times of year, keep to paths etc)</p> <p>Implement recommendations of SD&M Project</p> <p>Solent forum to continue facilitating a mitigation strategy</p>	<p>Awareness of effects of disturbance on sensitive bird populations</p>	<p>CHC HBC HCC-CS HIWWT Solent Forum</p>	<p>*</p>	<p>Planning, Plans and Strategies & Land Management</p>

	Equestrian best practice	Promotion of equestrian best practice for biodiversity – e.g. workshop day for horse owners	Awareness of wildlife issues with key landowners raised	HIWWT	*	Education, Awareness and Communication
Urban Green Space	School grounds	Advice given for sympathetic management of grassland areas for Brent Geese	Maintained and increased feeding and roosting resource for feeding Brent Geese and waders	HIWWT	*	Land Management

Map 13: Hayling Island Area Action Plan (see overleaf)



Havant BAP
 Map 13. Hayling Island Action Areas
 Scale 1:25000

Hampshire and Isle of Wight Wildlife Trust
 Beechcroft House, Vicarage Lane
 Curridge, Hampshire
 SO32 2DP

Hampshire & Isle of Wight



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 For enquiries relating to the Wildlife Trusts GIS data contact Deborah King, email DebbieK@hwt.org.uk, tel. 01489 774420.

Harbour & Coastal Area Action Plan and Map

	OBJECTIVES	ACTIONS	OUTCOMES	PARTNER(S)	TIME SCALE	HBAP REPORTING THEME
Designated Sites	Protect SAC and SPAs	<p>Manage public access and recreational activities to avoid disturbance and negative impacts on sensitive bird coastal breeding and roosting sites</p> <p>Delivery of proposals in the Solent Disturbance & Mitigation Study</p> <p>Creation of high tide roosts to compensate for those lost to sea level rise</p> <p>Solent Forum to continue to facilitate a mitigation strategy</p>	<p>Integrity of SPA/SAC network maintained</p> <p>Protection of habitats most vulnerable to sea level rise</p>	<p>CHC HBC HCC – CS/Coastal NE Solent Forum PUSH</p>	→	Land Management
	Maintain/enhance RSPB Langstone Harbour Reserve islands	<p>Enhancement of the shingle areas for breeding and wintering coastal birds</p>	<p>Increased longevity of roosting/breeding areas under pressure from coastal change</p>	<p>RSPB HIWWT</p>	*	Land Management
	Maintain and enhance Oysterbeds LNR	<p>Enhancement of the shingle areas for coastal birds</p> <p>Creation of saline lagoon habitat</p>	<p>Reduced Little Tern colony predation, increased breeding success</p> <p>Increased longevity of roosting areas as sea-level rises</p>	<p>HBC HIWWT Solent Forum</p>	*	Land Management

Wider Countryside	Develop coastal grazing scheme	Development of coastal cattle grazing scheme, which compliments the established saltmarsh grazed beef marketing scheme, to achieve appropriate grassland management	Grazier network established, layback areas found, more grassland grazed, better condition	HBC Graziers HCC - CS Private Landowners Three Harbours Beef	**	Land Management
	Maintain biodiversity of the intertidal and marine habitats	Promote sustainable / non-damaging activities (commercial and recreational)	Enhanced biodiversity of invertebrate, vertebrate and plant populations	HBC CHC PCC RSPB Southern Sea Fisheries	**	Education, Awareness and Communication
	Prevent pollution damage to water quality	Environment Agency to continue to monitor pollution from run-off and to work with industry, taking enforcement action when required Southern Water to meet conditions of the Discharge Permits issued by EA to monitor Storm Water discharge into the Natura 2000 sites Educate local people and work with planners on the effects of pollution	Green algae (<i>Enteromorpha</i>) coverage reduced SW fulfil commitment to pollution prevention through its ISO14001 certification Raised awareness of the effects of pollution in the harbours and how it can be reduced	EA Southern Water PUSH	*	Land Management
	Maintain and enhance important inland sites for waders and Brent geese	Identify sites using the Solent Waders and Brent Goose Strategy 2010 Flag up sites through the LDF Include Solent Waders and Brent Goose Strategy 2010 in development control decisions especially regarding seasonal changes of use i.e. all year round caravan parks	Maintained and increased feeding and roosting resource for feeding Brent Geese and waders	HBC CHC Solent Forum PUSH	→	Land Management

	Work with coastal land owners to improve coastal habitats	Maintain variety of suitable habitats for target species as identified on the Section 106 agreement for Budds Farm	Integrity of ecological network for roosting and feeding coastal birds maintained and improved	Southern Water CHC HIWWT NE PUSH	**	Land Management
	Consider coastal realignment opportunities	Include Hayling Island in coastal realignment and coastal habitat re-creation opportunities Realise coastal realignment opportunities identified in the North Solent Shoreline Management Plan	More dynamic coastal system better equipped to cope with climate change and sea-level rise	EA HBC NE Private landowners Solent Forum	**	Land Management & Planning, Plans and Strategies
Species	Manage disturbance and recreational access for sensitive species	Work with Solent Forum and Natural England to investigate bait digging (legislation / timing restrictions) as causes disturbance to birds Work with Solent Forum and Natural England to investigate damaging dredging activities Support and action findings of the Solent Disturbance and Mitigation project	Survival and breeding success for coastal bird populations Seagrass beds remain intact	CHC HIWWT Solent Forum NE	*	Land Management & Planning, Plans and Strategies

	Identify key areas for priority harbour species	<p>Identify important areas for seals (Solent Seal tagging project)</p> <p>Identify extent and location of seagrass beds (Seagrass survey)</p> <p>Identify important areas and maintain data for Brent Geese and waders (including inland sites)</p> <p>Maintain data on birds at key locations</p>	<p>Able to give appropriate advice to landowners and advise planning consultations</p> <p>Planning and management decisions for the harbours incorporate locations of priority species</p>	<p>HIWWT CHC RSPB Solent Forum</p>	*	Data and Information
People and Wildlife	Engagement and Celebration	Create harbour experience opportunity with Wildlife Visitor Centre	Greater appreciation and profile gained for local wildlife	Private enterprise	**	Education, Awareness and Communication
	Communicate international importance of harbours to the wider public	Improve interpretation and signage along public routes	Awareness raised about importance of coastal and harbour wildlife	<p>HBC HCC – CS/Coastal HIWWT</p>	*	Education, Awareness and Communication

Map 14: Harbour and Coastal Action Areas (see overleaf)

Section 4: Monitoring & Review

The following section sets out the framework for monitoring the success of this Biodiversity Action Plan, by reporting and reviewing the actions within it.

In order to determine the effectiveness of this BAP and the progress towards the actions within it, Havant Borough Council as part of the Hampshire BAP partnership, will provide information to the HBAP partnership on action progress through existing reporting mechanisms, using the Hampshire-wide biodiversity objectives agreed by the partnership.

Havant Borough Council can also use this information to measure progress towards its own corporate objectives and obligations, notably its 'Biodiversity Duty' under the Natural Environment & Rural Communities Act (2006). This BAP will be a background document as an evidence base for the Borough's Local Development Framework in order to give recognition to the Borough's biodiversity priorities through the spatial planning process.

Havant Borough Council will also be asked to report progress biannually to the Hampshire Biodiversity Partnership who will use the criteria listed below to measure progress at county level, reporting nationally through the Biodiversity Action Reporting System (BARS) where feasible.

Outcomes identified in the Borough-wide Action Table in Section 3 have been matched to the objectives listed below. More specific area based actions will need to be matched to these objectives on a case-by-case basis, depending on what has been achieved.

This BAP has been designed to have a lifespan of ten years. The actions within it should, however, be reviewed periodically and refined in the light of changes in biodiversity, opportunities, external policies and legislation. This will be an additional role of the above Partnership or BAP Group.

Twenty One Key Biodiversity Objectives for Havant Borough

Theme 1 Land Management

Aim: to ensure favourable condition of priority habitats and species in Hampshire

	KEY OBJECTIVE
1a	<p>Maximise the extent of land covered by incentive schemes and land management projects in Havant Borough (see also 1g below)</p> <p><i>e.g. land covered by Agri-environment / Woodland Grant Schemes</i></p>
1b	<p>Encourage favourable condition of the 4 Sites of Special Scientific Interest (SSSIs) Havant</p> <p><i>e.g. Chichester Harbour, Langstone Harbour, Sinah Common, Warblington Meadow (as defined by Natural England)</i></p>
1c	<p>Encourage favourable management of the 135 Sites of Importance for Nature Conservation (SINCs) in Havant</p> <p><i>e.g. management plans / projects for SINCs; advice to landowners; action on-the-ground etc.</i></p>
1d	<p>Ensure favourable management of borough council land:</p> <p><i>e.g. management for nature conservation in parks, school grounds, cemeteries, on road verges etc.</i></p>
1e	<p>Promote management of land at 'landscape scale' for nature conservation</p> <p><i>e.g. work across administrative boundaries e.g. follow the landscape-scale Biodiversity Opportunity Areas of Portsdown Hill and Langstone and Chichester Harbour and the historic area of the Forest of Bere</i></p>
1f	<p>Encourage appropriate action for priority species (see also 3c below)</p> <p><i>e.g. specific habitat management and site protection to conserve a priority species in Havant Borough for example. Brent Goose, Hazel Dormouse, Seagrass</i></p>
1g	<p>Restore / recreate priority habitats or create new habitats in Havant Borough as opportunities arise through development of adjacent sites (includes land within or outside SSSIs)</p> <p><i>e.g. recreation of priority habitats on former landfill sites such as Southleigh; "multi-purpose" forestry etc, restoration of ancient woodland sites</i></p>

Theme 2 Planning, Plans and Strategies

Aim: seek to ensure no net loss of biodiversity through the planning process, and establish commitment and implementation programmes for biodiversity through plans and strategies

	KEY OBJECTIVE
2a	Ensure appropriate consideration of biodiversity in development plans and the development control process, and promote good practice by developers <i>e.g. local development frameworks; Section 106 Agreements (to become Community Infrastructure Levy); guidance notes etc.</i>
2b	Ensure all priority habitat and species assemblages that meets SINC or SSSI criteria are designated
2c	Ensure Community Strategies in Havant Borough include biodiversity policies and plans
2d	Incorporate biodiversity as a key element of all relevant plans and strategies and support appropriate changes in regulations and legislation <i>e.g. plans and strategies for, forestry, climate change, sustainable development, waste, transport etc.</i>
2e	Encourage production of local biodiversity action plans by local communities <i>e.g. local community groups, village and parish plans</i>

Theme 3 Data and Information

Aim: to ensure availability of appropriate data and information on Hampshire's habitats and species

	KEY OBJECTIVE
3a	Contribute to the Hampshire Biodiversity Information Centre to share data and make more widely available to the borough. <i>e.g. support and promote HBIC to relevant council departments and community groups, credit HBIC when HBIC data is used.</i>
3b	Encourage and support the voluntary network of recorders and recording groups via HBIC <i>e.g. promote recording events to local groups and support community events such as BioBlitz</i>
3c	Survey / monitor extent and condition of key habitats and species in Havant Borough via HBIC <i>e.g. support HBIC rolling habitat survey programme, support local groups survey work, work with HIWWT on additional species survey programmes</i>
3d	Monitor the implementation of your organisation's/ group's action for biodiversity via the LDF <i>i.e. monitoring progress against the key objectives</i>

3e	<p>Monitor 'external' influences on biodiversity</p> <p><i>e.g. major influences such as outcomes of planning decisions, climate change, changes in laws governing public access to land etc.</i></p>
3f	<p>Support research and ensure that research is disseminated</p> <p>e.g. promote project research ideas to local universities via the Hampshire BAP research forum</p>

Theme 4 Education, Awareness and Communication

Aim: to broaden awareness of biodiversity and involvement in its conservation

	KEY OBJECTIVE
4a	<p>Promote the aims and work of the Havant Biodiversity Action Plan</p> <p>e.g. Havant Borough Council website, local group websites, public events, local press etc.</p>
4b	<p>Promote biodiversity as beneficial to quality of life (health, wellbeing etc.) and key to sustainable development</p> <p>e.g. via initiatives that relate biodiversity to recreation, education, recycling, energy conservation etc.</p>
4c	<p>Raise general awareness and commitment to biodiversity (e.g. giving guidance and specialist advice, development of demonstration areas or centres, exhibitions, seminars etc.) in the following 6 sectors:</p> <ul style="list-style-type: none"> • public sector (local government, statutory organisations etc) • farmers, landowners and other land managers • business and industry • education • community / user groups (ramblers, gardeners, residents associations, etc) • public

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Appendices

Appendix I - Summary of Species Records Collated and Supplied by HBIC for Havant Borough (up to October 2010)

Group Name	Taxon Name	Common Name
Amphibians & Reptiles	<i>Vipera berus</i>	Adder
Amphibians & Reptiles	<i>Bufo bufo</i>	Common Toad
Amphibians & Reptiles	<i>Natrix natrix</i>	Grass Snake
Amphibians & Reptiles	<i>Triturus cristatus</i>	Great Crested Newts
Amphibians & Reptiles	<i>Anguis fragilis</i>	Slow-worm
Amphibians & Reptiles	<i>Zootoca vivipara</i>	Viviparous Lizard
Birds	<i>Acrocephalus paludicola</i>	Aquatic Warbler
Birds	<i>Stercorarius parasiticus</i>	Arctic Skua
Birds	<i>Puffinus mauretanicus</i>	Balearic Shearwater
Birds	<i>Limosa lapponica</i>	Bar-tailed Godwit
Birds	<i>Panurus biarmicus</i>	Bearded Tit
Birds	<i>Melanitta nigra</i>	Black Scoter
Birds	<i>Podiceps nigricollis</i>	Black-necked Grebe
Birds	<i>Limosa limosa</i>	Black-tailed Godwit
Birds	<i>Gavia arctica</i>	Black-throated Diver
Birds	<i>Cettia cetti</i>	Cetti's Warbler
Birds	<i>Pyrrhula pyrrhula</i>	Common Bullfinch
Birds	<i>Cuculus canorus</i>	Common Cuckoo
		Common Grasshopper
Birds	<i>Locustella naevia</i>	Warbler
Birds	<i>Carduelis cannabina</i>	Common Linnet
Birds	<i>Luscinia megarhynchos</i>	Common Nightingale
Birds	<i>Aythya ferina</i>	Common Pochard
Birds	<i>Coturnix coturnix</i>	Common Quail
Birds	<i>Tringa totanus</i>	Common Redshank
Birds	<i>Gallinago gallinago</i>	Common Snipe
Birds	<i>Sturnus vulgaris</i>	Common Starling
Birds	<i>Emberiza calandra</i>	Corn Bunting
Birds	<i>Crex crex</i>	Corn Crake
Birds	<i>Sylvia undata</i>	Dartford Warbler
Birds	<i>Calidris alpina</i>	Dunlin
Birds	<i>Numenius arquata</i>	Eurasian Curlew
Birds	<i>Falco subbuteo</i>	Eurasian Hobby
Birds	<i>Acrocephalus scirpaceus</i>	Eurasian Reed Warbler
Birds	<i>Passer montanus</i>	Eurasian Tree Sparrow
Birds	<i>Jynx torquilla</i>	Eurasian Wryneck
Birds	<i>Pluvialis apricaria</i>	European Golden Plover
		European Honey-
Birds	<i>Pernis apivorus</i>	buzzard
Birds	<i>Caprimulgus europaeus</i>	European Nightjar
Birds	<i>Streptopelia turtur</i>	European Turtle Dove
Birds	<i>Regulus ignicapilla</i>	Firecrest
Birds	<i>Anas strepera</i>	Gadwall
Birds	<i>Mergus merganser</i>	Goosander
Birds	<i>Botaurus stellaris</i>	Great Bittern
Birds	<i>Aythya marila</i>	Greater Scaup
		Greater White-fronted
Birds	<i>Anser albifrons</i>	Goose
		Greenland White-fronted
Birds	<i>Anser albifrons subsp. flavirostris</i>	Goose

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Birds	<i>Perdix perdix</i>	Grey Partridge
Birds	<i>Pluvialis squatarola</i>	Grey Plover
Birds	<i>Coccothraustes coccothraustes</i>	Hawfinch
Birds	<i>Prunella modularis</i>	Hedge Accentor (Dunnock)
Birds	<i>Circus cyaneus</i>	Hen Harrier
Birds	<i>Passer domesticus</i>	House Sparrow
Birds	<i>Carduelis cabaret</i>	Lesser Redpoll
Birds	<i>Dendrocopos minor</i>	Lesser Spotted Woodpecker
Birds	<i>Egretta garzetta</i>	Little Egret
Birds	<i>Sternula albifrons</i>	Little Tern
Birds	<i>Poecile palustris</i>	Marsh Tit
Birds	<i>Larus melanocephalus</i>	Mediterranean Gull
Birds	<i>Falco columbarius</i>	Merlin
Birds	<i>Circus pygargus</i>	Montagu's Harrier
Birds	<i>Vanellus vanellus</i>	Northern Lapwing
Birds	<i>Milvus milvus</i>	Red Kite
Birds	<i>Calidris canutus</i>	Red Knot
Birds	<i>Lanius collurio</i>	Red-backed Shrike
Birds	<i>Mergus serrator</i>	Red-breasted Merganser
Birds	<i>Phalaropus lobatus</i>	Red-necked Phalarope
Birds	<i>Emberiza schoeniclus</i>	Reed Bunting
Birds	<i>Turdus torquatus</i>	Ring Ouzel
Birds	<i>Sterna dougallii</i>	Roseate Tern
Birds	<i>Arenaria interpres</i>	Ruddy Turnstone
Birds	<i>Calidris alba</i>	Sanderling
Birds	<i>Locustella luscinioides</i>	Savi's Warbler
Birds	<i>Alauda arvensis</i>	Sky Lark
Birds	<i>Podiceps auritus</i>	Slavonian Grebe
Birds	<i>Turdus philomelos</i>	Song Thrush
Birds	<i>Muscicapa striata</i>	Spotted Flycatcher
Birds	<i>Burhinus oedicephalus</i>	Stone-curlew
Birds	<i>Anthus trivialis</i>	Tree Pipit
Birds	<i>Cygnus columbianus</i>	Tundra Swan
Birds	<i>Carduelis flavirostris</i>	Twite
Birds	<i>Saxicola rubetra</i>	Whinchat
Birds	<i>Poecile montanus</i>	Willow Tit
Birds	<i>Lullula arborea</i>	Wood Lark
Birds	<i>Phylloscopus sibilatrix</i>	Wood Warbler
Birds	<i>Motacilla flava</i>	Yellow Wagtail
Birds	<i>Emberiza citrinella</i>	Yellowhammer
Fish	<i>Salmo trutta morpha trutta</i>	Sea Trout
Higher plants - Conifers	<i>Juniperus communis</i>	Juniper
Higher plants (Flowering Plants)	<i>Vulpia ciliata</i> subsp. <i>ambigua</i>	Bearded fescue
Higher plants (Flowering Plants)	<i>Puccinellia fasciculata</i>	Borrer`s Saltmarsh- grass
Higher plants (Flowering Plants)	<i>Carex punctata</i>	Dotted Sedge
Higher plants (Flowering Plants)	<i>Ophrys insectifera</i>	Fly Orchid
Higher plants (Flowering Plants)	<i>Inula crithmoides</i>	Golden-samphire
Higher plants (Flowering Plants)	<i>Vulpia unilateralis</i>	Mat-grass fescue
Higher plants (Flowering Plants)	<i>Bupleurum tenuissimum</i>	Slender Hare`s-ear
Higher plants (Flowering Plants)	<i>Puccinellia rupestris</i>	Stiff Saltmarsh-grass
Higher plants (Flowering Plants)	<i>Teucrium scordium</i>	Water Germander

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Higher plants (Flowering Plants)	<i>Lathyrus aphaca</i>	Yellow Vetchling
Higher plants (Flowering Plants)	<i>Polypogon monspeliensis</i>	Annual Beard-grass
Higher plants (Flowering Plants)	<i>Scleranthus annuus</i> subsp. <i>annuus</i>	Annual Knawel
Higher plants (Flowering Plants)	<i>Clinopodium acinos</i>	Basil Thyme
Higher plants (Flowering Plants)	<i>Thesium humifusum</i>	Bastard-toadflax
Higher plants (Flowering Plants)	<i>Valerianella rimosa</i>	Broad-fruited Cornsalad
Higher plants (Flowering Plants)	<i>Euphorbia platyphyllos</i>	Broad-leaved Spurge
Higher plants (Flowering Plants)	<i>Alopecurus bulbosus</i>	Bulbous Foxtail
Higher plants (Flowering Plants)	<i>Poa bulbosa</i>	Bulbous Meadow-grass
Higher plants (Flowering Plants)	<i>Carum carvi</i>	Caraway
Higher plants (Flowering Plants)	<i>Chamaemelum nobile</i>	Chamomile
Higher plants (Flowering Plants)	<i>Petrorhagia nanteuillii</i>	Childing Pink
Higher plants (Flowering Plants)	<i>Illecebrum verticillatum</i>	Coral-necklace
Higher plants (Flowering Plants)	<i>Ranunculus arvensis</i>	Corn Buttercup
Higher plants (Flowering Plants)	<i>Centaurea cyanus</i>	Cornflower
Higher plants (Flowering Plants)	<i>Otanthus maritimus</i>	Cottonweed
Higher plants (Flowering Plants)	<i>Parapholis incurva</i>	Curved Hard-grass
Higher plants (Flowering Plants)	<i>Dianthus armeria</i>	Deptford Pink
Higher plants (Flowering Plants)	<i>Carex divisa</i>	Divided Sedge
Higher plants (Flowering Plants)	<i>Vulpia fasciculata</i>	Dune Fescue
Higher plants (Flowering Plants)	<i>Zostera noltei</i>	Dwarf Eelgrass
Higher plants (Flowering Plants)	<i>Zostera marina</i>	Eelgrass
Higher plants (Flowering Plants)	<i>Minuartia hybrida</i>	Fine-leaved Sandwort
Higher plants (Flowering Plants)	<i>Lythrum hyssopifolia</i>	Grass-poly
Higher plants (Flowering Plants)	<i>Orchis morio</i>	Green-winged Orchid
Higher plants (Flowering Plants)	<i>Ajuga chamaepitys</i>	Ground-pine
Higher plants (Flowering Plants)	<i>Arum italicum</i> subsp. <i>neglectum</i>	Italian Lords-and-Ladies
Higher plants (Flowering Plants)	<i>Geranium purpureum</i> subsp. <i>forsteri</i>	Little-Robin
Higher plants (Flowering Plants)	<i>Aceras anthropophorum</i>	Man Orchid
Higher plants (Flowering Plants)	<i>Stellaria palustris</i>	Marsh Stitchwort
Higher plants (Flowering Plants)	<i>Crassula tillaea</i>	Mossy Stonecrop
Higher plants (Flowering Plants)		Narrow-leaved Eel-grass (Now sunk into <i>Z. marina</i>)
Higher plants (Flowering Plants)	<i>Zostera angustifolia</i>	Nottingham Catchfly
Higher plants (Flowering Plants)	<i>Silene nutans</i>	One-flowered Glasswort
Higher plants (Flowering Plants)	<i>Salicornia pusilla</i>	Pale Dog-violet
Higher plants (Flowering Plants)	<i>Viola lactea</i>	Pheasant's-eye
Higher plants (Flowering Plants)	<i>Adonis annua</i>	Portland Spurge
Higher plants (Flowering Plants)	<i>Euphorbia portlandica</i>	Prickly Saltwort
Higher plants (Flowering Plants)	<i>Salsola kali</i> subsp. <i>kali</i>	Purple Fescue
Higher plants (Flowering Plants)	<i>Vulpia ciliata</i> subsp. <i>ambigua</i>	Red Hemp-nettle
Higher plants (Flowering Plants)	<i>Galeopsis angustifolia</i>	Round-headed Club-rush
Higher plants (Flowering Plants)	<i>Scirpoides holoschoenus</i>	Rush-leaved Fescue
Higher plants (Flowering Plants)	<i>Festuca arenaria</i>	Sea Barley
Higher plants (Flowering Plants)	<i>Hordeum marinum</i>	Sea Clover
Higher plants (Flowering Plants)	<i>Trifolium squamosum</i>	Shepherd's-needle
Higher plants (Flowering Plants)	<i>Scandix pecten-veneris</i>	Small Cord-grass
Higher plants (Flowering Plants)	<i>Spartina maritima</i>	Smooth Cat's-ear
Higher plants (Flowering Plants)	<i>Hypochaeris glabra</i>	Spiral Tasselweed
Higher plants (Flowering Plants)	<i>Ruppia cirrhosa</i>	Stinking Goosefoot
Higher plants (Flowering Plants)	<i>Chenopodium vulvaria</i>	Stream Water-crowfoot
Higher plants (Flowering Plants)	<i>Ranunculus penicillatus</i>	

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Higher plants (Flowering Plants)	<i>Trifolium suffocatum</i>	Suffocated Clover
Higher plants (Flowering Plants)	<i>Leucojum aestivum</i>	Summer Snowflake
Higher plants (Flowering Plants)	<i>Galium parisiense</i>	Wall Bedstraw
Higher plants (Flowering Plants)	<i>Euphrasia pseudokernerii</i>	
Higher plants (Flowering Plants)	<i>Euphrasia anglica</i>	
Invertebrates (Cnidaria)	<i>Nematostella vectensis</i>	Starlet Sea Anemone
Invertebrates (Coleoptera)	<i>Lucanus cervus</i>	Stag Beetle
Invertebrates (Coleoptera)	<i>Ophonus (Metophonus) cordatus</i>	
Invertebrates (Diptera)	<i>Asilus crabroniformis</i>	
Invertebrates (Diptera)	<i>Machimus rusticus</i>	
Invertebrates (Diptera)	<i>Urophora quadrifasciata</i>	
Invertebrates (Diptera)	<i>Eumerus ornatus</i>	
Invertebrates (Diptera)	<i>Eumerus ornatus</i>	
	<i>Bombus (Thoracombus) muscorum</i>	a bumblebee
Invertebrates (Hymenoptera)	<i>Temnothorax interruptus</i>	an ant
Invertebrates (Hymenoptera)	<i>Odynerus (Odynerus) melanocephalus</i>	Black Headed Mason Wasp
		Brown-banded Carder Bee
Invertebrates (Hymenoptera)	<i>Bombus (Thoracombus) humilis</i>	
	<i>Bombus (Thoracombus) ruderarius</i>	Red-tailed Carder Bee
Invertebrates (Hymenoptera)	<i>Bombus (Subterraneobombus) subterraneus</i>	Short Haired Bumble Bee
Invertebrates (Hymenoptera)	<i>Bombus (Thoracombus) sylvarum</i>	Shrill Carder Bee
Invertebrates (Lepidoptera)	<i>Rheumaptera hastata</i>	Argent & Sable
Invertebrates (Lepidoptera)	<i>Ennomos quercinaria</i>	August Thorn
Invertebrates (Lepidoptera)	<i>Eugnorisma glareosa</i>	Autumnal Rustic
Invertebrates (Lepidoptera)	<i>Trichopteryx polyommata</i>	Barred Tooth-striped
Invertebrates (Lepidoptera)	<i>Agrochola lychnidis</i>	Beaded Chestnut
Invertebrates (Lepidoptera)	<i>Timandra comae</i>	Blood-vein
Invertebrates (Lepidoptera)	<i>Heliophobus reticulata</i>	Bordered Gothic
Invertebrates (Lepidoptera)	<i>Oria musculosa</i>	Brighton Wainscot
Invertebrates (Lepidoptera)	<i>Lycia hirtaria</i>	Brindled Beauty
		Broad-bordered Bee
Invertebrates (Lepidoptera)	<i>Hemaris fuciformis</i>	Hawk
Invertebrates (Lepidoptera)	<i>Melanchra pisi</i>	Broom Moth
Invertebrates (Lepidoptera)	<i>Agrochola litura</i>	Brown-spot Pinion
Invertebrates (Lepidoptera)	<i>Spilosoma luteum</i>	Buff Ermine
Invertebrates (Lepidoptera)	<i>Hyperba rostralis</i>	Buttoned Snout
Invertebrates (Lepidoptera)	<i>Atethmia centrargo</i>	Centre-barred Sallow
Invertebrates (Lepidoptera)	<i>Scotopteryx bipunctaria</i>	Chalk Carpet
Invertebrates (Lepidoptera)	<i>Lysandra coridon</i>	Chalkhill Blue
Invertebrates (Lepidoptera)	<i>Tyria jacobaeae</i>	Cinnabar
Invertebrates (Lepidoptera)	<i>Pechipogo strigilata</i>	Common Fan-foot
Invertebrates (Lepidoptera)	<i>Celaena leucostigma</i>	Crescent
		Dark Crimson
Invertebrates (Lepidoptera)	<i>Catocala sponsa</i>	Underwing
Invertebrates (Lepidoptera)	<i>Pelurga comitata</i>	Dark Spinach
		Dark-barred Twin-spot
Invertebrates (Lepidoptera)	<i>Xanthorhoe ferrugata</i>	Carpet
Invertebrates (Lepidoptera)	<i>Aporophyla lutulenta</i>	Deep-brown Dart
Invertebrates (Lepidoptera)	<i>Erynnis tages</i>	Dingy Skipper
Invertebrates (Lepidoptera)	<i>Melanchra persicariae</i>	Dot Moth
Invertebrates (Lepidoptera)	<i>Mythimna turca</i>	Double Line
Invertebrates (Lepidoptera)	<i>Minoa murinata</i>	Drab Looper

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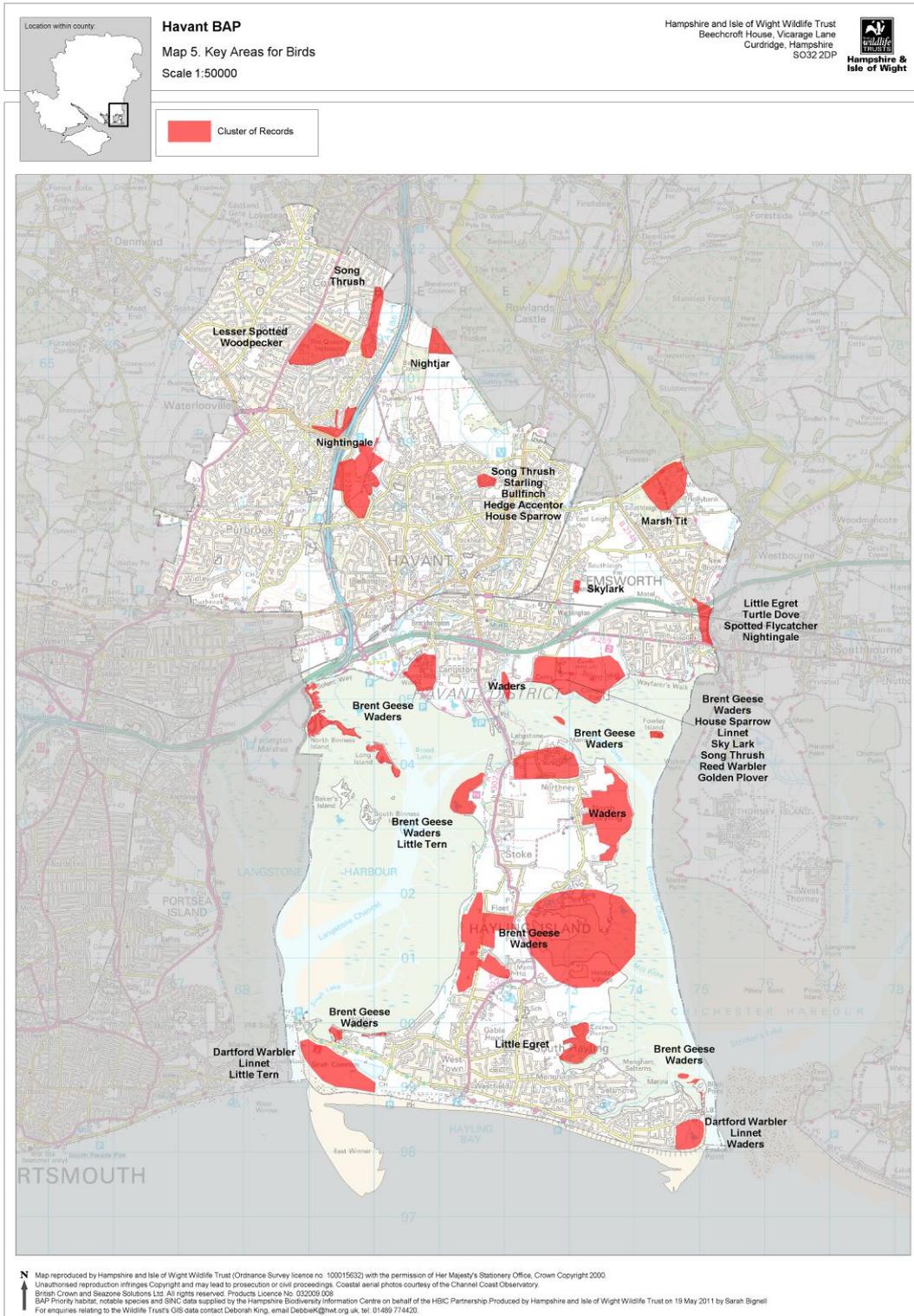
Invertebrates (Lepidoptera)	<i>Apamea remissa</i>	Dusky Brocade
Invertebrates (Lepidoptera)	<i>Ennomos fuscantaria</i>	Dusky Thorn
Invertebrates (Lepidoptera)	<i>Xanthia gilvago</i>	Dusky-lemon Sallow
Invertebrates (Lepidoptera)	<i>Amphipoea oculea</i>	Ear Moth
Invertebrates (Lepidoptera)	<i>Cyclophora porata</i>	False Mocha
Invertebrates (Lepidoptera)	<i>Tholera decimalis</i>	Feathered Gothic
Invertebrates (Lepidoptera)	<i>Apoda limacodes</i>	Festoon
Invertebrates (Lepidoptera)	<i>Diloba caeruleocephala</i>	Figure of Eight
Invertebrates (Lepidoptera)	<i>Agrochola helvola</i>	Flounced Chestnut
Invertebrates (Lepidoptera)	<i>Tyta luctuosa</i>	Four-spotted
Invertebrates (Lepidoptera)	<i>Epirrhoe galiata</i>	Galium Carpet
Invertebrates (Lepidoptera)	<i>Euxoa nigricans</i>	Garden Dart
Invertebrates (Lepidoptera)	<i>Arctia caja</i>	Garden Tiger
Invertebrates (Lepidoptera)	<i>Hepialus humuli</i>	Ghost Moth
Invertebrates (Lepidoptera)	<i>Cossus cossus</i>	Goat Moth
Invertebrates (Lepidoptera)	<i>Lasiocampa trifolii</i>	Grass Eggar
Invertebrates (Lepidoptera)	<i>Hipparchia semele</i>	Grayling
Invertebrates (Lepidoptera)	<i>Allophyes oxyacanthae</i>	Green-brindled Crescent
Invertebrates (Lepidoptera)	<i>Acronicta psi</i>	Grey Dagger
Invertebrates (Lepidoptera)	<i>Pyrgus malvae</i>	Grizzled Skipper
Invertebrates (Lepidoptera)	<i>Xestia agathina</i>	Heath Rustic
Invertebrates (Lepidoptera)	<i>Tholera cespitis</i>	Hedge Rustic
Invertebrates (Lepidoptera)	<i>Acronicta rumicis</i>	Knot Grass
Invertebrates (Lepidoptera)	<i>Malacosoma neustria</i>	Lackey
Invertebrates (Lepidoptera)	<i>Apamea anceps</i>	Large Nutmeg
Invertebrates (Lepidoptera)	<i>Chiasmia clathrata</i>	Latticed Heath
		Light Crimson
Invertebrates (Lepidoptera)	<i>Catocala promissa</i>	Underwing
Invertebrates (Lepidoptera)	<i>Agrotis cinerea</i>	Light Feathered Rustic
Invertebrates (Lepidoptera)	<i>Noctua orbona</i>	Lunar Yellow Underwing
Invertebrates (Lepidoptera)	<i>Heliopsis virescens</i>	Marbled Clover
Invertebrates (Lepidoptera)	<i>Mythimna favicolor</i>	Mathew's Wainscot
Invertebrates (Lepidoptera)	<i>Brachylomia viminalis</i>	Minor Shoulder-knot
Invertebrates (Lepidoptera)	<i>Caradrina morpheus</i>	Mottled Rustic
Invertebrates (Lepidoptera)	<i>Amphipyra tragopoginis</i>	Mouse Moth
Invertebrates (Lepidoptera)	<i>Scopula marginepunctata</i>	Mullein Wave
Invertebrates (Lepidoptera)	<i>Watsonalla binaria</i>	Oak Hook-tip
Invertebrates (Lepidoptera)	<i>Cymatophorima diluta</i>	Oak Lutestring
Invertebrates (Lepidoptera)	<i>Eilema sororcula</i>	Orange Footman
Invertebrates (Lepidoptera)	<i>Boloria euphrosyne</i>	Pearl-bordered Fritillary
Invertebrates (Lepidoptera)	<i>Orthosia gracilis</i>	Powdered Quaker
Invertebrates (Lepidoptera)	<i>Melanthia procollata</i>	Pretty Chalk Carpet
Invertebrates (Lepidoptera)	<i>Apatura iris</i>	Purple Emperor
Invertebrates (Lepidoptera)	<i>Aplasta ononaria</i>	Rest Harrow
Invertebrates (Lepidoptera)	<i>Mesoligia literosa</i>	Rosy Minor
Invertebrates (Lepidoptera)	<i>Hydraecia micacea</i>	Rosy Rustic
Invertebrates (Lepidoptera)	<i>Hoplodrina blanda</i>	Rustic
Invertebrates (Lepidoptera)	<i>Xanthia ictertia</i>	Sallow
		Scarce Merveille du Jour
Invertebrates (Lepidoptera)	<i>Moma alpium</i>	September Thorn
Invertebrates (Lepidoptera)	<i>Ennomos erosaria</i>	Shaded Broad-bar
Invertebrates (Lepidoptera)	<i>Scotopteryx chenopodiata</i>	Shoulder-striped Wainscot
Invertebrates (Lepidoptera)	<i>Mythimna comma</i>	Wainscot
Invertebrates (Lepidoptera)	<i>Hesperia comma</i>	Silver-spotted Skipper

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Invertebrates (Lepidoptera)	<i>Plebejus argus</i>	Silver-studded Blue
Invertebrates (Lepidoptera)	<i>Argynnis paphia</i>	Silver-washed Fritillary
Invertebrates (Lepidoptera)	<i>Cupido minimus</i>	Small Blue
Invertebrates (Lepidoptera)	<i>Eriogaster lanestris</i>	Small Eggar
Invertebrates (Lepidoptera)	<i>Hemistola chrysoprasaria</i>	Small Emerald
Invertebrates (Lepidoptera)	<i>Chlorissa viridata</i>	Small Grass Emerald
Invertebrates (Lepidoptera)	<i>Coenonympha pamphilus</i>	Small Heath
Invertebrates (Lepidoptera)	<i>Ecliptopera silaceata</i>	Small Phoenix
Invertebrates (Lepidoptera)	<i>Diarsia rubi</i>	Small Square-spot
Invertebrates (Lepidoptera)	<i>Eulithis mellinata</i>	Spinach
Invertebrates (Lepidoptera)	<i>Cucullia asteris</i>	Star-wort
Invertebrates (Lepidoptera)	<i>Chesias legatella</i>	Streak
Invertebrates (Lepidoptera)	<i>Shargacucullia lychnitis</i>	Striped Lychnis
Invertebrates (Lepidoptera)	<i>Macaria wauaria</i>	V-Moth
Invertebrates (Lepidoptera)	<i>Lasiommata megera</i>	Wall
Invertebrates (Lepidoptera)	<i>Spilosoma urticae</i>	Water Ermine
Invertebrates (Lepidoptera)	<i>Limenitis camilla</i>	White Admiral
Invertebrates (Lepidoptera)	<i>Spilosoma lubricipeda</i>	White Ermine
Invertebrates (Lepidoptera)	<i>Satyrium w-album</i>	White-letter Hairstreak
Invertebrates (Lepidoptera)	<i>Schrankia taenialis</i>	White-line Snout
Invertebrates (Lepidoptera)	<i>Cosmia diffinis</i>	White-spotted Pinion
Invertebrates (Lepidoptera)	<i>Elegia similella</i>	
Invertebrates (Lepidoptera)	<i>Elegia similella</i>	
Invertebrates (Lepidoptera)	<i>Coleophora vibicella</i>	
Invertebrates (Lepidoptera)	<i>Pempelia genistella</i>	
Mammals (Marine)	<i>Phoca vitulina</i>	Common Seal
Mammals (Terrestrial)	<i>Myotis bechsteinii</i>	Bechstein's Bat
Mammals (Terrestrial)	<i>Lepus europaeus</i>	Brown Hare
Mammals (Terrestrial)	<i>Plecotus auritus</i>	Brown Long-eared Bat
Mammals (Terrestrial)	<i>Pipistrellus pipistrellus</i>	Common Pipistrelle
Mammals (Terrestrial)	<i>Muscardinus avellanarius</i>	Hazel Dormouse
Mammals (Terrestrial)	<i>Nyctalus noctula</i>	Noctule Bat
Mammals (Terrestrial)	<i>Arvicola amphibius</i>	Northern Water Vole
Mammals (Terrestrial)	<i>Eptesicus serotinus</i>	Serotine
Mammals (Terrestrial)	<i>Pipistrellus pygmaeus</i>	Soprano Pipistrelle
Mammals (Terrestrial)	<i>Erinaceus europaeus</i>	Western Hedgehog

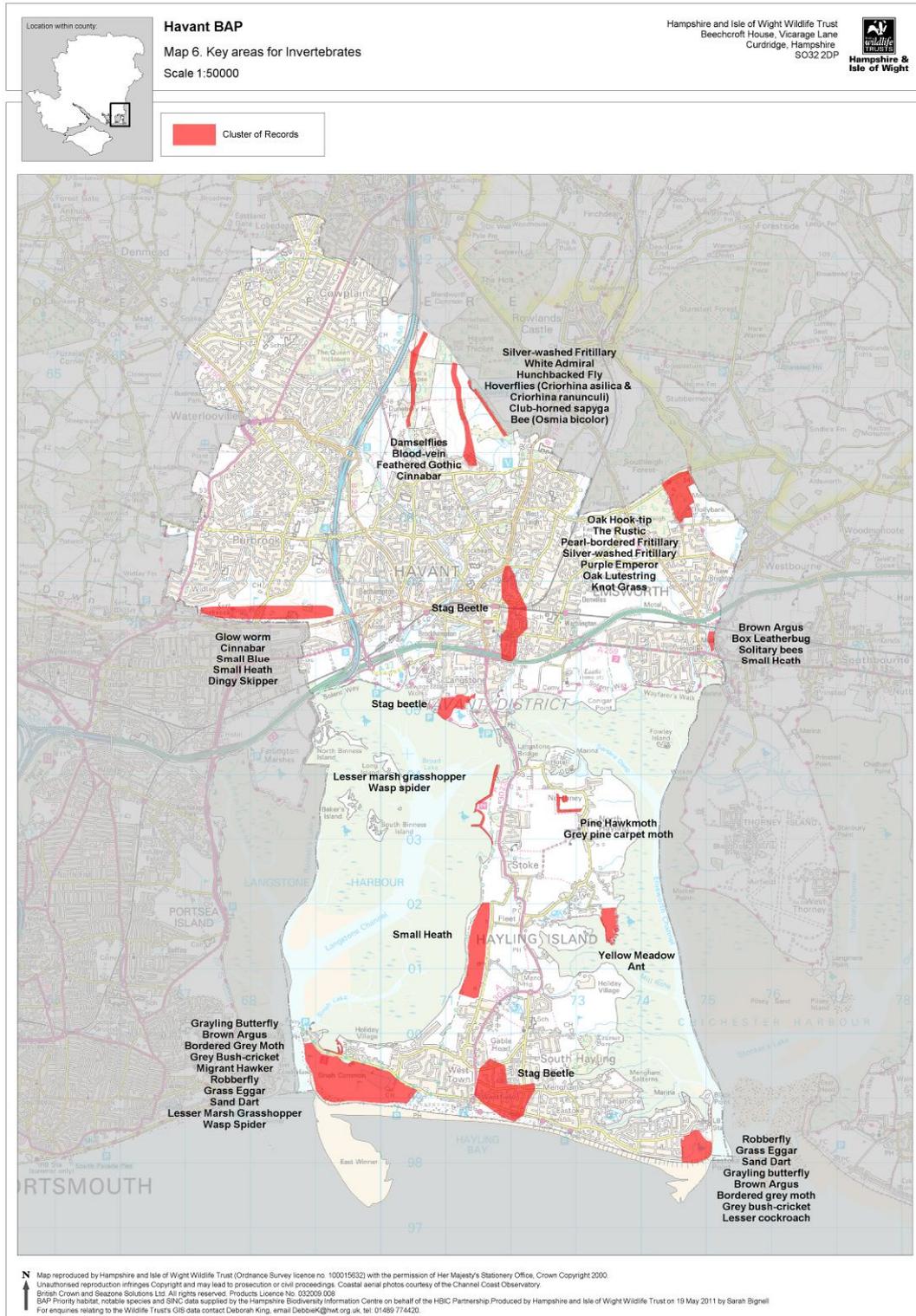
* For an explanation of what makes a priority species, refer to the Biodiversity Action Plan for Hampshire at www.hampshirebiodiversity.org.uk/action.html.

Key Areas for Birds

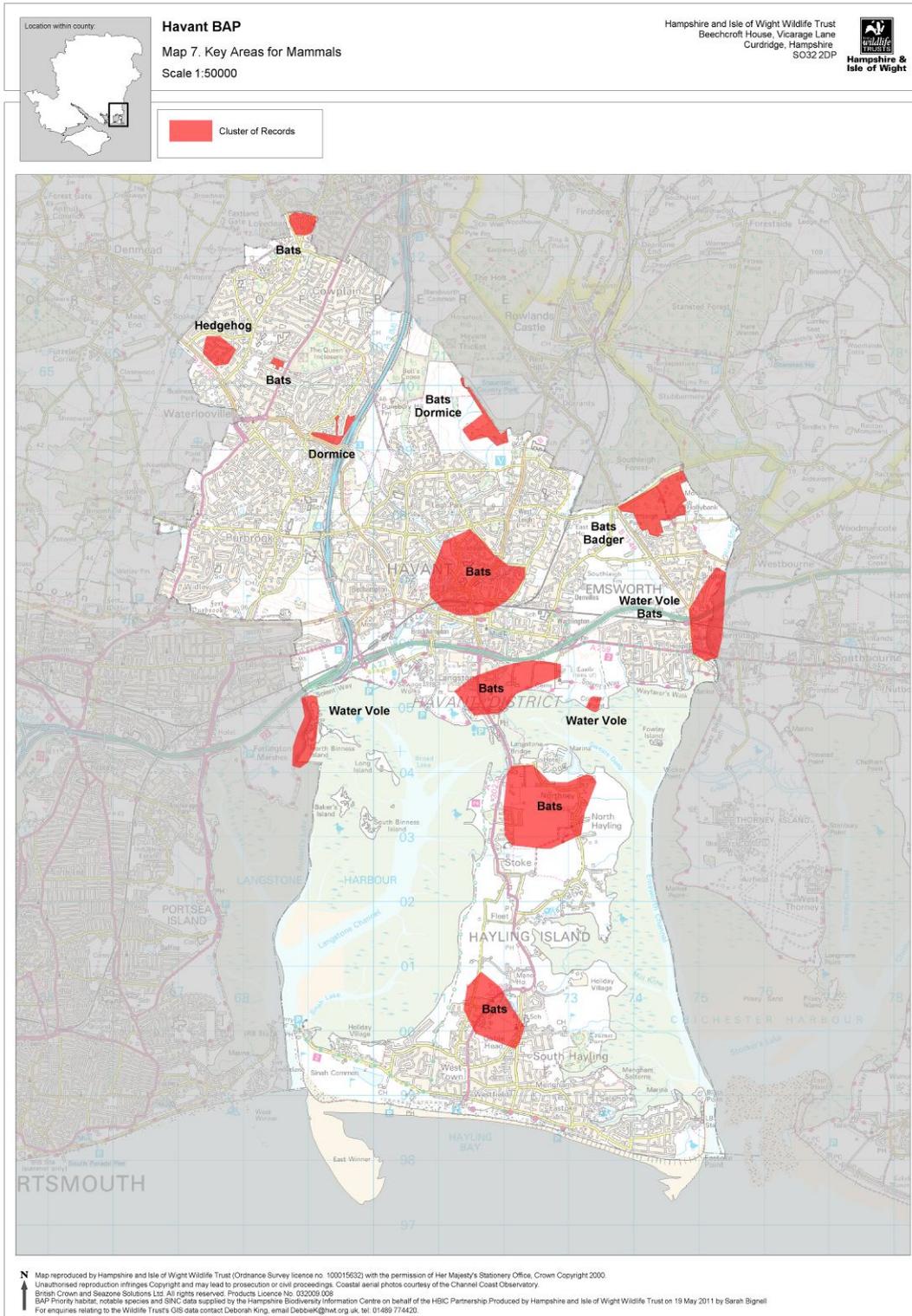


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 BAP Priority habitat, notable species and SNC data supplied by the Hampshire Biodiversity Information Centre on behalf of the HBC Partnership Produced by Hampshire and Isle of Wight Wildlife Trust on 19 May 2011 by Sarah Bignell
 For enquiries relating to the Wildlife Trust's GIS data contact Deborah King, email: debbie@hwt.org.uk, tel: 01489 774420.

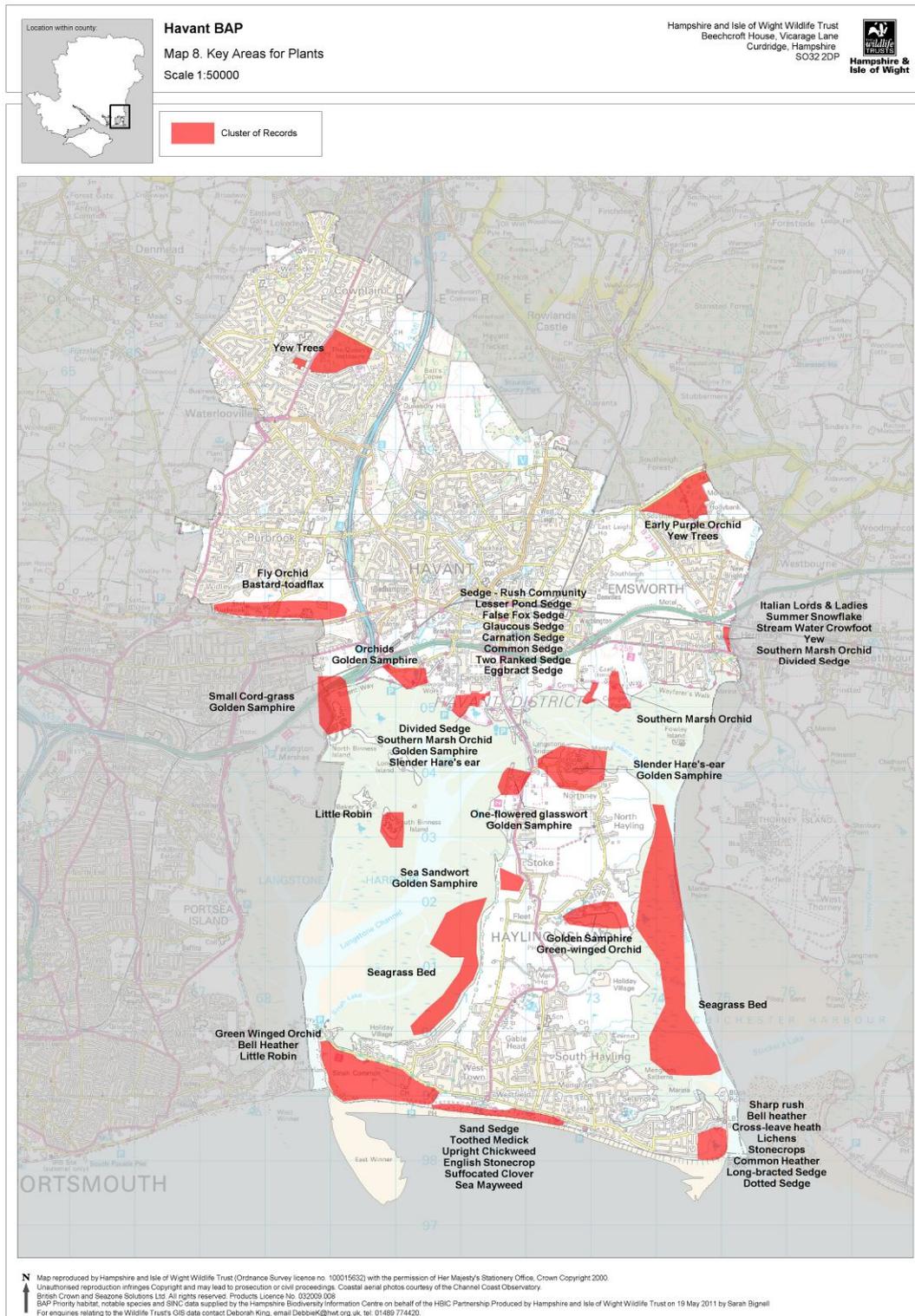
Key Areas for Invertebrates



Key Areas for Mammals



Key Areas for Plants



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Appendix III - Biodiversity Terms

Agri-environment schemes - schemes offering payments to farmers to promote farming compatible with the protection of the environment and the maintenance of the countryside as part of the Rural Development Regulation. Schemes applicable in all countries of the UK are Environmentally Sensitive Areas, Countryside Access Scheme, Organic Aid Scheme and Habitat Scheme.

ASNW – Ancient Semi-Natural Woodland.

Biodiversity – the diversity of life in an area.

Biodiversity Opportunity Area (BOA) – regional priority areas of opportunity for restoration and creation of Biodiversity Action Plan habitats.

Buffer Zone - a strip that partially or fully encloses an area to protect the inner section from ecological disturbance by outside pressures.

Carr - woodland, usually comprising alder and willow, naturally occurring in marshy conditions.

Coastal Squeeze – effect on coastal habitats when they become trapped between a fixed landward boundary, e.g. sea wall, and rising sea levels and/or increased storminess causing the habitat to be 'squeezed' between the two, leading to a reduced quantity and/or quality of habitat.

Coppice - trees which are cut back to near ground level every few years and which grow again from the stump or stool. The many straight stems which grow from each stool are used for firewood, tools and other purposes.

Coniferisation – the planting of any habitat with conifers.

Environmental Stewardship - an agri-environment scheme which enables farmers and land managers in England to enter management agreements to maintain or enhance certain landscapes and features: it consists of two tiers: Entry Level Stewardship (ELS) and Higher Level Stewardship (HLS).

Corridor - the principle of connections between wildlife habitats. Closely related to the theory of fragmentation, ecological corridors aim to provide a corridor for migration of all species between suitable habitat areas.

Ecosystem - the interactions of animals, plants, fungi, and micro organisms with each other and the non-living world.

Ecosystem Services – the natural resources and processes supplied by the ecosystem.

Ecotone – the transition between one habitat and the next. Certain species prefer sharp or gradual ecotones for all or part of their life-cycle.

Edge-effects – where much of the biodiversity in small or narrow sites is under the influence of factors from outside the site. Larger blocks of habitat have an inner core which is buffered from these influences.

England Woodland Grant Scheme (EWGS) - grants from the Forestry Commission to create new woodlands and to encourage the good management and regeneration of existing woodlands.

Epifauna – aquatic animals that live on the surface of a substrate e.g. rocks, sea bed etc.

Eutrophication – the enrichment by nutrients of waterbodies leading to algal blooms which disrupt the ecosystem.

Fragmentation - the disruption of large areas of habitat into smaller, separate units. Involves both a total loss of habitat area and the isolation of remaining habitat patches, which prevents interaction between some organisms located in the fragments, and renders them effectively separate populations.

Green Infrastructure – a term used to describe the accessible ‘multi-functional’ green space that should accompany housing developments for residents’ quality of life. These areas provide potential direct and indirect benefits for biodiversity.

Habitat - a place where animals, plants, fungi, and micro organisms live.

Improved land – land that has been improved for the purposes of agricultural production, usually through ploughing, sowing, drainage, and the application of fertilisers.

Infauna – aquatic animals that live in the substrate of a body of water e.g. soft sea bottom.

Invasive alien species - species from other countries not naturally found growing in Britain, with a tendency to dominate communities to the detriment of native species.

Local Biodiversity Action Plan (LBAP) – plans produced at county, district, parish or similar level to interpret the actions of the UK BAP.

Natural Environment & Rural Communities Act (2006) – Legislation which places a duty upon local authorities to protect and enhance biodiversity through their activities.

PAWs – Planted Ancient Woodlands – Plantations on former ancient woodland sites. Usually these woodlands retain features from the ancient woodland such as ground flora, veteran trees and boundary banks.

Ramsar – The Convention on Wetlands of International Importance, especially as Waterfowl Habitat, is an international treaty for the conservation and sustainable utilisation of wetlands.

Ride - open track-ways cut through woods originally for the extraction of timber. Now important conservation areas for butterflies, other invertebrates and wildflowers growing there due to the increased sunlight along the woodland edge.

Riparian – living or growing along the banks of a river.

Site of Importance for Nature Conservation (SINC) - A non-statutory designation of sites at the county/district level. Sites are generally assessed by either local authorities or county wildlife trusts, and adopted in local plans. For the criteria used for selecting SINC, see section 2.

Site of Special Scientific Interest (SSSI) - an area of land notified under the Wildlife and Countryside Act 1981 as being of special nature conservation interest. The SSSI designation applies in England, Wales and Scotland. Sites are notified by the appropriate country conservation agency, in England this is Natural England.

South East England Biodiversity Forum – forum attended by leading voluntary and statutory nature conservation organisations, with a remit to provide advice to regional government and co-ordinate biodiversity activity across the region.

Special Area for Conservation (SAC) - a site designated by the UK Government under EC Directive 92/43 on the conservation of natural habitats and of wild fauna and flora.

Special Protection Area (SPA) - a site designated under Article 4 of EC Directive 79/409 on the conservation of wild birds. Together SACs and SPAs form a network of European sites known as Natura 2000.

Tree Preservation Order (TPO) – an Order which causes the prohibition of cutting down, topping, lopping or the wilful destruction of trees except with the consent from the Local Authority to ensure the preservation of trees, groups of trees and woodlands. Type “W” refers to TPOs for woodlands.

UK Biodiversity Action Plan (UKBAP) - the UK’s priorities in biodiversity conservation, formulate a series of focused action plans designed to achieve these objectives.

Appendix IV - Directory of Biodiversity Contacts

Abbreviation	Organisation	Status	Roles
BC	Butterfly Conservation	Charity	Butterfly & moth conservation, survey, nature reserves
BSBI	Botanical Society of the British Isles	Charity	Plant recording, survey, conservation
BTCV	British Trust for Conservation Volunteers	Charity	Volunteer coordinators for conservation & survey
CHC	Chichester Harbour Conservancy	Statutory Harbour Authority	Manage AONB on behalf of the four constituent local authorities
DEFRA	Department for Environment, Food & Rural Affairs	Government Department	Includes RDS* (Rural Development Service) for advising farmers on Environmental Stewardship and agronomy
EA	Environment Agency	Government Agency	River quality, biodiversity, water abstraction control, fisheries
EHDC	East Hampshire District Council	Local Government	Biodiversity, planning
FC	Forestry Commission	Government Agency	Forestry, forest amenity, conservation
FWAG	Farming and Wildlife Advisory Group	Subsidised Consultants	Farm conservation advice
GWCT	Game & Wildlife Conservancy Trust	Charity	Conservation of game species, advice, research
HARG	Hampshire Amphibian & Reptile Group	Species group	Amphibian & reptile recording, conservation
HBG	Hampshire Bat Group	Species group	Bat conservation, survey, recording
HBIC	Hampshire Biodiversity Information Centre	Biological records centre	Coordinate biological records and recorders, survey data, SINC designation
HCC	Hampshire County Council	Local Government	Countryside service, schools, coastal
HFG	Hampshire Flora Group	Species group	Flora recording, conservation
HMG	Hampshire Mammal Group	Species group	Mammal recording, conservation
HOS	Hampshire Ornithological Society	Species Group	Bird survey, recording, conservation
HIWWT	Hampshire and Isle of Wight Wildlife Trust	Charity	Conservation advice, nature reserves, education, survey
NE	Natural England	Government Agency	SSSI monitoring and advice, protected species, planning

Every effort has been made to ensure these details are up-to-date, but changes to personnel and websites are inevitable.

For advice on management for biodiversity, including available grants:

- **Entry Level Stewardship** – Administered by Natural England, aims to encourage a large number of farmers across a wide area of farmland to deliver simple yet effective environmental management. Contact your local Natural England office to apply.

- **Higher Level Stewardship** - Administered by Natural England, aims to deliver significant environmental benefits in high priority situations and areas. Contact your regional Natural England office to apply - pre-Farming Environment Plan is required from Natural England in order for applications to be considered.
- **English Woodland Grant Scheme** – Available from Forestry Commission, aims to sustain and increase benefits to the public from existing woodlands and help create new woodlands to deliver additional benefits.
- **Single Payment Scheme** – Administered by an Executive Agency of DEFRA, the Rural Payments Agency. Payments available to farmers, aimed at acknowledging and rewarding environmentally friendly farming practices.

Havant Local Strategic Partnership
Havant Community Partnership Co-ordinator, Havant Borough Council, Civic Offices,
Civic Centre Road, Havant, Hampshire PO9 2AX
TEL: 023 9244 6580
EMAIL: hcp.communitystrategy@havant.gov.uk
WEBSITE: www.hcp-partnership.org.uk

Chichester Harbour Conservancy
Harbour Office, Itchenor, Chichester, West Sussex PO20 7AW
TEL: 01243 512301
EMAIL: harbourmaster@conservancy.co.uk
WEBSITE: www.conservancy.co.uk

Department for Environment, Food and Rural Affairs
Rural Payments Agency, Customer Service Centre, PO Box 1058
Newcastle Upon Tyne NE99 4YQ
TEL: 0845 603 7777
EMAIL: CSC@rpa.gsi.gov.uk
WEBSITE: www.rpa.gov.uk

East Hampshire District Council
Penns Place, Petersfield, Hampshire GU31 4EX
TEL: 01730 266551
WEBSITE: www.easthants.gov.uk

Farm Conservation Advisor
Hampshire Farming and Wildlife Advisory Group
The Old Cart Shed, Herriard Park, Basingstoke, Hampshire RG25 2PL
TEL: 01256 381655
EMAIL: debbie.miller@fwag.org.uk
WEBSITE: www.fwag.org.uk

Game & Wildlife Conservation Trust
Burgate Manor, Fordingbridge, Hampshire SP6 1EF
TEL: 01425 652381
EMAIL: info@gwct.org.uk
WEBSITE: www.gwct.org.uk

Hampshire and Isle of Wight Wildlife Trust
Beechcroft House, Vicarage Lane, Curdridge, Hampshire SO32 2DP
TEL: 01489 774400
EMAIL: feedback@hwt.org.uk
WEBSITE: www.hwt.org.uk

Forestry Commission
South East England Office, Alice Holt, Wrecclesham, Farnham, Surrey GU10 4LF
TEL: 01420 23337
EMAIL: fc.seeng.cons@forestry.gsi.gov.uk
WEBSITE: www.forestry.gov.uk

Natural England
2nd Floor, Cromwell House, 15 Andover Road, Winchester, Hampshire SO23 7BT
TEL: 0300 060 2514
EMAIL: enquiries.southeast@naturalengland.org.uk
WEBSITE: www.naturalengland.org.uk

The Tree Council
71 Newcomen Street, London SE1 1YT
TEL: 02074 079992
WEBSITE: www.treecouncil.org.uk

Woodland Trust
Kempton Way, Grantham, Lincolnshire NG31 6LL
TEL: 01476 581135
EMAIL: enquiries@woodlandtrust.org.uk
WEBSITE: www.woodlandtrust.org.uk

English Heritage
Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD
TEL: 02392 856700
EMAIL: fort.cumberland@english-heritage.org.uk
WEBSITE: www.english-heritage.org.uk

Ministry of Defence
Main Building, Whitehall, London SW1A 2HB
TEL: 020 7218 9000

Palmerston Fort Society
Geoffrey Hallett, Fort Nelson, Portsdown Hill Road, Fareham, Hampshire PO17 6AN
TEL: 023 9259 6694
WEBSITE: <http://www.palmerstonforts.org.uk>

Network Rail
Kings Place, 90 York Way, London N1 9AG
TEL: 08457 11 41 41 (National Helpline)
WEBSITE: www.networkrail.co.uk

If you want information on water quality, resources and river biodiversity:

Environment Agency
Solent and South Downs Office
Colvedene Court, Colden Common, Hampshire SO21 1WP
TEL: 08708 506506
EMAIL: enquiries@environment-agency.gov.uk
WEBSITE: www.environment-agency.gov.uk

If you want to know about protected sites and protected species:

Natural England

2nd Floor, Cromwell House, 15 Andover Road, Winchester, Hampshire SO23 7BT
TEL: 0300 060 2514
EMAIL: enquiries.southeast@naturalengland.org.uk
WEBSITE: www.naturalengland.org.uk

Hampshire Biodiversity Information Centre (SINCs)
3rd Floor Capital House, 48-52 Andover Road, Winchester, Hampshire SO23 7BF
TEL: 01962 832327
EMAIL: enquiries.hbic@hants.gov.uk
WEBSITE: www.hants.gov.uk/biodiversity/hbic

If you want to know about biodiversity or have a wildlife enquiry:

Hampshire Biodiversity Information Centre
3rd Floor Capital House, 48-52 Andover Road, Winchester, Hampshire SO23 7BF
TEL: 01962 832327
EMAIL: enquiries.hbic@hants.gov.uk
WEBSITE: www.hants.gov.uk/biodiversity/hbic

Wildline - Wildlife Information Service
Hampshire and Isle of Wight Wildlife Trust
Beechcroft House, Vicarage Lane, Curdridge, Hampshire SO32 2DP
TEL: 01489 774446
EMAIL: Wildline@hwt.org.uk
WEBSITE: www.hwt.org.uk

If you want to know about rural issues:

CPRE Hampshire
Bridgett's Farm Offices, Bridgett's Lane, Martyr Worthy, Winchester SO21 1AR
TEL: 01962 779185
EMAIL: info@cprehampshire.org.uk
WEBSITE: www.cprehampshire.org.uk

Country Land & Business Association
South East Region, The Turbine Barn, Forton, Longparish, Andover, Hampshire
SP11 6NU
TEL: 01264 722 000
EMAIL: rupert.ashby@cla.org.uk
WEBSITE: www.cla.org.uk

National Trust – Thames & Solent
Hughenden Manor, High Wycombe, Buckinghamshire HP14 4LA
TEL: 01494 755500
EMAIL: enquiries@nationaltrust.org.uk
WEBSITE: www.nationaltrust.org.uk

National Farmers Union – South East
Ground Floor, Rotherbrook, Petersfield, Hampshire GU32 3QG
TEL: 01730 711950
EMAIL: south.east@nfu.org.uk
WEBSITE: www.nfuonline.com

If you want information about planning and your administrative area:

Havant Borough Council
Civic Offices, Civic Centre Road, Havant, Hampshire PO9 2AX
TEL: 02392 446015
EMAIL: planning.development@havant.gov.uk
WEBSITE: www.havant.gov.uk

Hampshire Association of Local Councils
121a Winchester Road, Chandler's Ford, Eastleigh, Hampshire SO53 2DR
TEL: 02380 263438
EMAIL: hampshirealc@hants.gov.uk
WEBSITE: www.hampshire-alc.gov.uk

Policy and Evidence Team
Hampshire and Isle of Wight Wildlife Trust
Beechcroft House, Vicarage Lane, Curdridge, Hampshire SO32 2DP
TEL: 01489 774419
EMAIL: paulineh@hwt.org.uk
WEBSITE: www.hwt.org.uk

If you want to know about species events and recording:

Botanical Society of the British Isles (Hampshire Branch)
Contact for the North of the district: Tony Mundell
EMAIL: vc12Recorder@hantsplants.org.uk
Contact for the South of the district: Martin Rand
EMAIL: vc11Recorder@hantsplants.org.uk

Hampshire Amphibian and Reptile Group
Hampshire and Isle of Wight Wildlife Trust, Beechcroft House, Vicarage Lane,
Curdridge, Hampshire SO32 2DP
TEL: 01489 774400
EMAIL: feedback@hwt.org.uk
WEBSITE: www.hwt.org.uk

Hampshire Bat Group
TEL: 02380 617551
EMAIL: michael.pawling@btinternet.com
WEBSITE: www.hants.gov.uk/bats

Butterfly Conservation (Hampshire Branch)
13 Ashdown Close, Chandler's Ford, Eastleigh, Hampshire SO53 5QF
TEL: 02380 270042
EMAIL: lindabarker4@btinternet.com
WEBSITE: www.hantsiow-butterflies.org.uk

Hampshire and Isle of Wight Wildlife Trust
Beechcroft House, Vicarage Lane, Curdridge, Hampshire SO32 2DP
TEL: 01489 774400
EMAIL: feedback@hwt.org.uk
WEBSITE: www.hwt.org.uk

Hampshire Biodiversity Information Centre
3rd Floor Capital House, 48-52 Andover Road, Winchester, Hampshire SO23 7BF
TEL: 01962 832327

EMAIL: enquiries.hbic@hants.gov.uk
WEBSITE: www.hants.gov.uk/biodiversity/hbic

Hampshire Fungus Recording Group
Stuart Skeates, 55 Cherville Street, Romsey, Hampshire SO51 8FB
TEL: 01794 522192.
EMAIL : hfrg@hampshirefungi.org.uk

Hampshire Flora Group
Hampshire and Isle of Wight Wildlife Trust, Beechcroft House, Vicarage Lane,
Curdridge, Hampshire SO32 2DP
TEL: 01489 774400
EMAIL: feedback@hwt.org.uk
WEBSITE: www.hwt.org.uk

Hampshire Mammal Group
Hampshire and Isle of Wight Wildlife Trust, Beechcroft House, Vicarage Lane,
Curdridge, Hampshire SO32 2DP
TEL: 01489 774400
EMAIL: feedback@hwt.org.uk
WEBSITE: www.hwt.org.uk

National Conchological Society
Conservation Officer, 14 Goodwood Close, Midhurst, West Sussex
GU29 9JG
TEL: 01483 411217 (work)
EMAIL: conservation@conchsoc.org
WEBSITE: www.conchsoc.org

Hampshire Ornithological Society
The Membership Secretary, 'Westerley', Hundred Acres Road, Wickham, Hampshire
PO17 6HY
TEL: 01329 833086
EMAIL: kay@shillitoe.freeserve.co.uk
WEBSITE: www.hos.org.uk

Amphibian and Reptile Conservation
655A Christchurch Road, Boscombe, Bournemouth, Dorset BH1 4AP
TEL: 01202 391319
EMAIL: enquiries@arc-trust.org
WEBSITE: www.arc-trust.org.uk

Royal Society for the Protection of Birds
South East Regional Office, 2nd Floor, 42 Frederick Place, Brighton, East Sussex
BN1 4EA
TEL: 01273 775333
WEBSITE: www.rspb.org.uk

If you want to volunteer:

BTCV
Manor Farm Country Park Rangers Depot, Pylands Lane, Bursledon, Southampton
SO31 1BH
EMAIL: hampshire@btcv.org.uk
WEBSITE: www.btcv.org.uk

Volunteering Development Manager
Hampshire and Isle of Wight Wildlife Trust
Beechcroft House, Vicarage Lane, Curdridge, Hampshire SO32 2DP
TEL: 01489 774442
EMAIL: feedback@hwt.org.uk
WEBSITE: www.hwt.org.uk

Havant Volunteer Centre
TEL: 023 9241 5556
EMAIL: volunteering@havantccs.org.uk
WEBSITE: <http://www.do-it.org.uk/>

Visit the following website, hosted by Hampshire County Council, which gives links to volunteer opportunities in Hampshire: <http://www.e.volve.org.uk>

If you want more information about wildlife education resources:

Senior People and Wildlife Officer
Hampshire and Isle of Wight Wildlife Trust
Beechcroft House, Vicarage Lane, Curdridge, Hampshire SO32 2DP
TEL: 01489 774400
EMAIL: feedback@hwt.org.uk
WEBSITE: www.hwt.org.uk

Learning Through Landscapes
3rd Floor, Southside Offices, The Law Courts, Winchester, Hampshire SO23 9DL
TEL: 01962 846258
WEBSITE: www.ltl.org.uk

Local Conservation Group representatives

- Battins Copse and Havant Friends of the Earth
- Bedhampton Allotments Group
- Bedhampton Conservation Volunteers
- Brook Meadow Conservation Group
- Friends of Emsworth Waysides
- Friends of Hayling Billy Line
- Friends of Hollybank Woods
- Friends of Langstone Harbour
- Friends of Nore Barn Woods
- Friends of Park Wood
- Gundrymoor Wood Conservation Group
- Havant Conservation Action
- Havant Borough Tree Wardens
- Havant District Allotment and Horticultural Society
- Havant, Hayling & Emsworth District Group (HIWWT)
- Hurstwood Community Project
- Keep it tidy
- LADWACA (Langstone & District Wildfowling and Conservation Association)
- Purbrook and Widley Area Residents Association Environmental Group
- The Langstone Conservation Group
- The Langstone Village Association

- The Slipper Mill Pond Preservation Association
- Wecock Farm Green Gym
- Woodsedge Waders

County Recorders

Amphibians & Reptiles - Hampshire Amphibian & Reptile Group (HARG) c/o Hampshire & Isle of Wight Wildlife Trust, Beechcroft House, Vicarage Lane, Curdridge, Hampshire, SO32 2DP. Email: HARGRecorder@hwt.org.uk

Bats - Hampshire Bat Group: Matthew Clarke, 164 Windham Road, Bournemouth, Dorset, BH1 4RA. Email: records@bats.hampshire.org.uk

Bees, Wasps and Ants – Bees, Wasps and Ants Recording Society (BWARS): Mike Edwards, Lea-side, Caron Lane, Midhurst, West Sussex GU29 9LB. Email: ammophila@macace.net

Beetles – VC11: Records should be sent to the relevant national scheme (see http://www.brc.ac.uk/recording_schemes.asp) or direct to HBIC. Advice or verification provided by Michael Salmon, Avon Lodge, Woodgreen, New Forest, Hants SP6 2AU. Email: michael@salmon5621.eclipse.co.uk.

VC12: Dr Jonty Denton, 25 Glebe Meadow, Overton, Basingstoke, Hants, RG25 3ER. Email: jontydenton@aol.com

Birds - Hampshire Ornithological Society (HOS): Keith Betton, 8 Dukes Close, Folly Hill, Farnham, Surrey GU9 0DR. Tel:01252 724068. Email: keithbetton@hotmail.com

Bugs - VC11: Records should be sent to the relevant national scheme (see http://www.brc.ac.uk/recording_schemes.asp) or direct to HBIC. Advice or verification provided by Michael Salmon, Avon Lodge, Woodgreen, New Forest, Hants SP6 2AU. Email: michael@salmon5621.eclipse.co.uk.

VC12: Dr Jonty Denton, 25 Glebe Meadow, Overton, Basingstoke, Hants, RG25 3ER. Email: jontydenton@aol.com

Butterflies - Butterfly Conservation - Hampshire Branch : Linda Barker, 13 Ashdown Close, Chandler's Ford, Eastleigh, Hampshire, SO53 5QF Tel: 023 80270042. Email: lindabarker4@btinternet.com

Dragonflies & Damselflies - British Dragonfly Society, Hampshire Branch : Peter Allen, Hackers, Martin, Fordingbridge, SP6 3LA. Tel: 01725 519269, Email: allenbds@waitrose.com

Fleas - Siphonaptera Recording Scheme : Robert George, 54 Richmond Park Avenue, Queens Park, Bournemouth, Dorset, BH8 9DR. Tel: 01202 515238

Flora - Botanical Society of the British Isles (BSBI)

- **VC 11:** Martin Rand, 21 Pine Road, Chandlers Ford, Eastleigh, Hampshire, SO53 1LH. Email: martin.rand@ntlworld.com

- **VC 12:** Tony Mundell, 38 Conifer Close, Church Crookham, Fleet, Hampshire, GU52 6LS. Email: tonymundell@ukonline.co.uk

Fungi - Hampshire Fungus Recording Group : Stuart Skeates, 55 Cherville Street, Romsey, Hampshire, SO51 8FB Tel: 01794 522192. Email: hfrg@hampshirefungi.org.uk

Hoverflies - Phil Budd, 488 Bitterne Road East, Bitterne, Southampton, SO18 5EP.
Tel: 023 8044 4172. Email : phillipbudd@btinternet.com.
Advice on identification also provided by Chris Palmer, Hampshire Museums
Service. Email: chris.palmer@hants.gov.uk

Lichens - Neil Sanderson, 3 Green Close, Woodlands, Southampton, Hampshire,
SO40 7HU Tel: 02380 293671. Email: neilsand@dircon.co.uk

Mammals - Hampshire Mammal Group: Hampshire & Isle of Wight Wildlife Trust,
Beechcroft House, Vicarage Lane, Curdridge, Hampshire, SO32 2DP
Email: HMGRecorder@hwt.org.uk

Molluscs - Conchological Society of Great Britain & Ireland: Records to Rev.
Graham Long, 12 Burgate Fields, Fordingbridge, SP6 1LR. Tel: 01425 53718
Email: grahamlong@waitrose.com
Verification material to Dr June Chatfield, 44 Ashdell Road, Alton, GU34 2TA
Tel 01420 82214

Mosses & Liverworts - British Bryological Society
- **VC11**: Rod Stern, 15 Selham Close Chichester, West Sussex, PO19 5BZ Email:
roderickstern@yahoo.co.uk
- **VC12**: Fred Rumsey, c/o Natural History Museum, Cromwell Rd, London, SW7
5BD. Email: F.Rumsey@nhm.ac.uk

Moths – Butterfly Conservation : Tim Norriss, 40 Taskers Drive, Anna Valley,
Andover, Hampshire, SP11 7SA Tel : 01264 354944 Mobile : 0771 3254901
Email: tim@kitsmail.com

Spiders - VC12: Rod Allison, Walnut Barn, Gussage St Michael, Wimborne, Dorset,
BH21 5HX. Email: rod.allison@walnutbarn.org

Stoneflies & Caddis flies - Graham Vick, Crossfields, Little London, Tadley, Hants
RG26 5ET Tel 01256-850718. Email: Camdragonfly@aol.com

Hampshire Specialist Recording Groups (with contacts)

Badgers - Eastern Hampshire: Mick & Gill Neeve, 14 Sandown Close, Alton,
GU34 2TG. Tel: 01420 87366 Email: MGNeeve@aol.com
- **Southampton/Winchester:** Mike & Chris Pawling. Tel: 02380 617551
- **New Forest National Park:** Martin Noble. Tel: 02380 283141
info@newforest-badgers.org

Bats - Hampshire Bat Group : Stephanie West (Membership Secretary), Spring
Cottage, Somborne Park Road, Little Somborne, Hampshire, SO20 6HW
Email: hbgmembership@hotmail.co.uk

Birds - Hampshire Ornithological Society (HOS) : Alison Wall (Membership
Secretary), 11 Waterloo Avenue, Basingstoke, Hampshire, RG23 8DL. Website:
www.hos.org.uk

Flora - Hampshire Flora Group : Catherine Chatters (Secretary), Ivy Cottage,
Ashurst Bridge Road, Totton, Southampton, Hampshire, SO40 7EA.

Fungi - Hampshire Fungus Recording Group: Stuart Skeates (Chairman), 55 Cherville Street, Romsey, Hampshire, SO51 8FB. Tel: 01794 522192.
Email: hfrg@hampshirefungi.org.uk. Website: www.hampshirefungi.org.uk

Hampshire Wildlife Trust's Species Groups – Hampshire Amphibian & Reptile Group (**HARG**), Hampshire Mammal Group (**HMG**) & Hampshire Flora Group (**HFG**) c/o Hampshire and Isle of Wight Wildlife Trust, Beechcroft House, Vicarage Lane, Curdridge, Hampshire, SO32 2DP.
Website: www.hwt.org.uk Email: Wildline@hwt.org.uk

To contact large private landowners in the area:

English Heritage
Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD
TEL: 02392 856700
EMAIL: fort.cumberland@english-heritage.org.uk
WEBSITE: www.english-heritage.org.uk

Ministry of Defence
Main Building, Whitehall, London SW1A 2HB
TEL: 020 7218 9000

Network Rail
Kings Place, 90 York Way, London N1 9AG
TEL: 08457 11 41 41 (National Helpline)
WEBSITE: www.networkrail.co.uk

Palmerston Fort Society
Geoffrey Hallett, Fort Nelson, Portsdown Hill Road, Fareham, Hampshire PO17 6AN
TEL: 023 9259 6694
WEBSITE: www.palmerstonforts.org.uk

Portsmouth Water
PO BOX 8, West Street, Havant, Hampshire PO9 1LG
TEL: 02392 499888
WEBSITE: www.portsmouthwater.co.uk

Appendix V - Wildlife in Havant Questionnaire (75 responses – 74 via website, 1 by post)

Q1) How important to you are areas that support wildlife and nature? For example, local nature reserves, parks and commons.

Very important	66 (89%)
Quite important	8 (11%)
A little	0
Not at all	0

Q2) How accessible are wildlife areas to you? For example, local nature reserves, parks and commons. (*note: only the nearest answer was counted*)

On your doorstep	18 (24%)
Walking distance	45 (61%)
Driving distance	11 (15%)

Q3) How often do you visit wildlife areas in Havant? (*note: only the first answer was counted e.g. most often*)

Daily	19 (26%)
Once a week	15 (20%)
Several times a week	16 (22%)
Once or twice a month	16 (22%)
Less frequently / never	8 (11%)

Q4) What activities do you undertake in open spaces such as nature reserves, parks or commons?

Walking	59 (30%)
Dog walking	22 (11%)
Cycling	17 (9%)
Wildlife-spotting	41 (21%)
Quiet enjoyment	39 (20%)
Conservation work parties	7 (4%)
Informal recreation	13 (7%)

Q5) Where is your favourite place to go to enjoy nature and wildlife in Havant?

Lots of answers – the most common answers were:

Warblington & Langstone Foreshore	10 (7%)
Hayling Billy Line	14 (10%)
Broadmarsh	6 (4%)
Hayling Oysterbeds	6 (4%)
Hayling Island	12 (9%)
Langstone Harbour	10 (7%)
Staunton Country Park	7 (5%)
Emsworth Foreshore	10 (7%)

Q6) Which wildlife do you actively attract to your garden?

Birds	69 (34%)
Hedgehogs	31 (15%)
Butterflies and bees	59 (29%)
Slow-worms	14 (7%)
Frogs	30 (15%)

Q7) Which of these issues are you most concerned about in Havant? (note: some responses gave more than one answer)

Urban development	56 (47%)
Pollution	20 (17%)
Litter and vandalism	42 (36%)

Q8) What wildlife have you seen in Havant?

Brent Goose	59 (17%)
Adder	13 (4%)
Stag beetle	35 (10%)
Frog	61 (17%)
Fox	69 (20%)
Hedgehog	57 (16%)
Green-winged orchid	16 (5%)
Peacock butterfly	40 (11%)

Q9) Would you be interested in helping out at any of these local wildlife sites in Havant?

Brook Meadow	7 (11%)
Hollybank Woods	8 (12%)
Hayling Billy Line	15 (23%)
Battins Copse	0
Emsworth Waysides	3 (5%)
Nore Barn Woods	3 (5%)
Park Wood	2 (3%)
Langstone Harbour	13 (20%)
Hermitage Stream	4 (6%)
Sinah Common	11 (17%)

Q10) Where do you find out about local wildlife?

Television/Radio Programmes	29 (20%)
Internet	53 (37%)
Magazines/Newspaper	33 (23%)
Visitor Centres	13 (9%)
Library	15 (10%)

Q11) If you could do one thing to help wildlife in Havant what would you do?

Join a conservation group	9 (13%)
Make your garden more wildlife friendly	45 (66%)
Take part in a wildlife survey	12 (18%)
Sign up to a wildlife campaign	2 (3%)