

1 INTRODUCTION

Most people in Britain spend a large part of their lives in urban areas. In Hampshire there are numerous cities, towns and other areas of built development concentrated in a band along the south coast from Southampton to Portsmouth, or on the north-eastern county boundary. The ultimate success of biodiversity programmes rests on widespread support from not only those in positions of influence, but from people of all ages and in all walks of life. Many of those people live or work in urban areas. Their activities and aspirations will shape the future of biodiversity¹.

The need to have regular contact with nature is well documented². Wherever they live, people have a strong emotional attachment to the natural world. People also value the relaxation and opportunity to experience a different pace of life associated with nature and a more natural environment. Nature is a vital part of urban life.

A rich network of open space can support a wealth of wildlife in towns and cities. Ensuring that people have ready access to such places gives everyone the opportunity to experience nature at first-hand. Studies show that this has a direct positive effect on attitudes to conserving biodiversity³; people denied close contact with nature do not develop an understanding of, or support for, biodiversity conservation. There are enormous opportunities to provide more access to nature in urban areas, despite the great demand for urban land. Even a small area can give a sense of spaciousness and inspire a sense of wonder with the natural world.

The *Biodiversity Action Plan for Hampshire*⁴ identified 21 key habitats for conservation action. This Action Plan is concerned with habitats in urban areas. The category 'urban habitats' encompasses a wide range of habitat types. Some key habitats, such as ancient semi-natural woodland, lowland heath, open water or coastal habitats can be found in Hampshire's urban areas, but there are also habitats with assemblages of species that are particular to urban areas. This Plan provides a county-wide framework for biodiversity action in Hampshire's towns, cities and other areas of built development.

Throughout the Plan, 'greenspace' is used as a generic term for all open space including remnants of countryside, formal parks, greenways, railway land, road verges, gardens or nature parks. Greenspace can be extremely diverse in size, ownership, and how it is managed, and varies considerably in its value to biodiversity. The Plan explains the benefits of conserving biodiversity in urban areas, identifies the characteristics of towns and cities that influence nature, describes the variety of urban areas found in Hampshire and categorises the different types of urban habitats. The Plan also discusses the factors affecting urban biodiversity, policy and planning issues, and outlines current action and initiatives.

Recommendations to protect, manage and establish new habitats, to ensure access and encourage involvement, are set out in the proposed action table.

2 CHARACTERISTICS OF URBAN AREAS

Urban areas can be defined in a number of ways: by population size, administrative boundaries, or simply as 'built-up' areas. The traditional concept of a densely built-up core of businesses surrounded by less-dense residential areas is of course too simplistic. Urban areas are quite distinct in response to their geography (along the coast or straddling a river), their location (in relation to other urban areas or perhaps transport networks) and their history (as a port, new town, or industrial city).

Whatever their precise form, all urban areas share certain characteristics: urban areas tend to be warmer, drier and more polluted than the surrounding countryside. They generally have large expanses of 'sealed' land surface in core areas (built development, tarmac or concrete) with varying amounts of 'unsealed' land surface (greenspaces, rivers and streams). They also tend to be noisier, busier, and more disrupted than equivalent areas of countryside.

Some parts of urban areas are more hospitable to wildlife than others. The largest greenspaces can support a great diversity of plants and animals, particularly where a network of continuous open land leads beyond the urban boundary, or where

habitats more familiar in the countryside remain. But even small spaces are valuable. Nature parks, school nature areas, corners of city parks and private gardens all provide habitats, particularly for the more common species. Although sealed areas of concrete and tarmac are largely inhospitable, even here some plants gain a foothold.

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BENEFITS OF URBAN BIODIVERSITY

Nature Conservation

- Maintains the diversity and richness of habitats and species found in urban areas
- Conservation action directed at urban biodiversity can assist county, UK or international biodiversity targets

Social

- Greenspaces provide access to wildlife for all members of the community
- Greenspaces provide a place for people to meet and a focus for community events
- Greenspaces provide a venue for adventure play or informal recreation
- A local greenspace can encourage people's involvement in the community

Health

- Biodiversity has aesthetic and spiritual value
- People gain physical benefits from outdoor exercise and recreation
- Greenspaces provide an 'escape valve' and sense of freedom from busy schedules
- Contact (physical or visual) with nature can increase recovery times from illness

Education

- Greenspaces provide opportunities for learning about nature at first-hand
- Greenspaces provide a venue for learning about natural processes such as food-chains, food-webs and seasonal changes
- Encourages respect for nature and the environment generally

Economic

- Attractive green areas promote inward investment to towns and cities
- Greenspaces encourage tourism
- Greenspaces have direct positive impacts on property values
- Greenspaces provide a desirable element in new developments

Wider environment

- Green areas assist with flood control and can alleviate rapid stormwater run-off
- Green areas can reduce pollutants such as suspended solids, heavy metals and oils in surface water run-off
- Vegetation can help to filter wastewater in sewage treatment schemes
- Trees help to filter pollutants from the air
- Green areas mitigate the visual intrusion and improve the appearance of development
- Large greenspaces can ameliorate the temperature and belts of trees and shrubs create a buffer against noise and wind
- Vegetation on or around buildings reduces heat loss in winter and deflects heat in summer
- Biodiversity is an indicator of the health of the wider environment and a key test of sustainability

See references for further information on benefits of urban biodiversity⁵

3 TOWNS AND CITIES IN HAMPSHIRE

The main urban areas in Hampshire individually cover approximately 1 million hectares or more. These include Fleet, Farnborough, Aldershot and Basingstoke in the north-east; Andover and Winchester in central Hampshire; and Eastleigh, Southampton, Locks Heath, Fareham/Porchester, Gosport, Portsmouth, Waterlooville and Havant located in an almost continuous corridor along the south coast. The area from Southampton to Portsmouth is the largest urban concentration in South East England outside London. Appendix 1 gives a summary description of the main habitats found in and around Hampshire's largest urban areas.

Although these urban areas are united by their large size, they are also quite distinct. For example, Winchester was an important Roman town and later the capital of England; Basingstoke is largely a new town that developed rapidly in the last decades of the 20th century; and Southampton and Portsmouth have been shaped by their role as major ports. Patterns of development have a considerable role in determining the wildlife habitats that remain today.

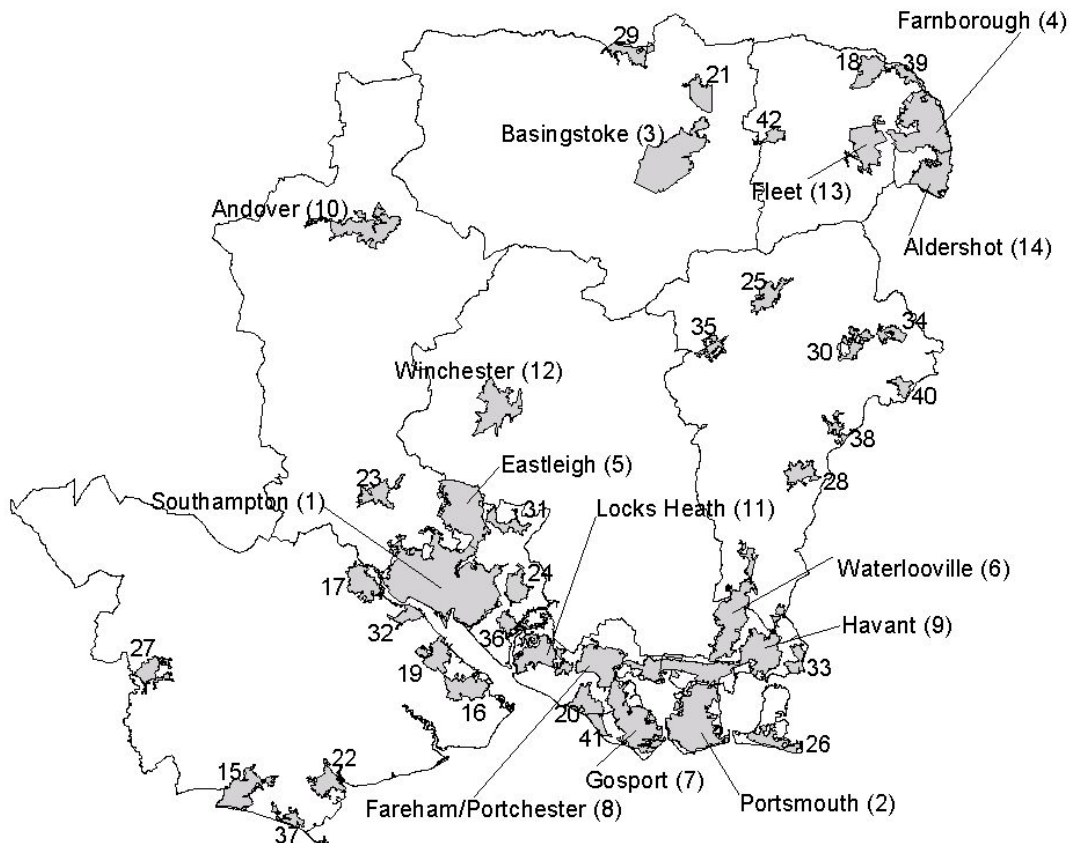
Many actions proposed in this Topic Action Plan are also relevant to smaller urban centres and any area of built development. Small towns and cities also have densely developed centres, large housing estates,

and industrial complexes with large areas of sealed surfaces and relatively small proportions of greenspace. In Hampshire this includes settlements such as Frogmore, Yateley, Hook, Tadley and Bramley in the north-east; Alton, Borden, Headley, Liphook, Four Marks, Liss and Petersfield in the east; Romsey in the central area; Bishopstoke, Hedge End, Bursledon, Stubbington, Lee-on-the-Solent, Emsworth/Southbourne and Hayling Island in the densely populated

Southampton – Portsmouth corridor; Totton, Marchwood, Hythe and Fawley on the west side of Southampton Water; and Ringwood, New Milton/Barton-on-Sea, and Lymington in the south-west. Map 1 shows the location of all urban areas in Hampshire over 175,000 hectares. The key to the 42 areas shown on the map is given in Appendix 2, along with the size, population and population density of each area.

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MAP 1: URBAN AREAS OF HAMPSHIRE
(see APPENDIX 2 for key to numbered areas)



4 CATEGORIES OF URBAN HABITATS

Wildlife habitats in urban areas are extremely varied. Some pre-date the urban development in which they are now found, and are remnants of former countryside. Other habitats have grown alongside built development or have appeared following a decline in industrial land use. Yet others have been planted and managed to create new areas for wildlife. The categories of habitats listed below are not entirely distinct as there may be several types present in one site. For instance, a largely planted golf course may also contain a remnant of ancient woodland.

Remnants of Countryside

As urban areas grow, the original countryside disappears beneath tarmac and concrete. However rivers and streams can continue their original course, ancient woodlands and heathland can be left intact, and areas of wetlands and coastal habitats can survive. These remnants of countryside are often surrounded by built development but can retain their value to wildlife if they are sufficiently large and are managed appropriately.

Remnant habitats are particularly valuable to wildlife in an urban setting and should be

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given strong protection from development. These are the urban habitats least modified by man and share many characteristics with similar habitats found in rural areas. Information on their characteristics, appropriate management and proposed action can be found in relevant Hampshire habitat action plans (HAPs) such as the Ancient Semi-natural Woodland HAP, Hedgerows HAP, or Lowland Calcareous Grassland HAP⁶. Nevertheless, because of their urban setting, traditional methods of habitat management may need adjustment. For example grazing of grasslands may be impractical and management programmes will need to accommodate demands for recreation.

Many remnants of countryside can still be found in or near Hampshire's main urban settlements. For example, Southampton Common was originally a grazing common and still contains a diversity of habitats: acid scrub and heath; wet meadows, ditches, ponds and streams; species-rich grassland and oak woodland. Many of the Common's 148 hectares are designated as a Site of Special Scientific Interest, and the priority species great-crested newt can be found throughout the Common, particularly in the ditches and ponds.

Coastal habitats within Southampton, Gosport and Portsmouth are protected by international designations for their outstanding value to wetland birds. Chessell Bay Local Nature Reserve (LNR) in Southampton contains a long stretch of natural shoreline with mudflats and saltmarsh, and forms part of the Solent and Southampton Water Special Protection Area (SPA). Chichester, Langstone and Portsmouth Harbour all contain mudflats and intertidal habitats that are particularly valuable for the dark-bellied brent goose and other wetland birds.

Also in the south, The Wildgrounds LNR and SSSI in Gosport's Alver Valley is 27 hectares of relic woodland pasture with many pollarded oak trees over 400 years old.

Valuable tracts of lowland heath can be found in the north-east of the county alongside the cities of Fleet, Farnborough and Aldershot. Most of the remaining heathlands are owned and managed by the Ministry of Defence and are of vital importance to a range of plant and animal communities.

In central Hampshire, Anton Lakes LNR is a 24 hectare wetland site that includes part of the Anton River as well as a number of old watercress beds. Anton Lakes is situated on the northern side of Andover close to

residential areas and forms part of a riverside walk that runs from north to south through the town centre.

Naturally Colonised Habitats

Manufacturing industries, transportation corridors, infrastructure for energy and water supplies, waste processes – all of these essential urban activities result in considerable land take. Wildlife habitats often develop spontaneously alongside these industrial developments.

These habitats have unique assemblages of species that develop through natural processes of dispersal and succession. Valuable wildlife habitats can develop following initial disturbance of the land, or flourish once industrial activities have stopped. Vertical surfaces can also be colonised by vegetation: old walls become covered in ivy or old man's beard; moss and lichens form a carpet on roofs and pavements; buddleia colonises cracks in brickwork.

The vegetation of urban 'wasteland' or 'brownfield' sites is often initially composed of escaped cultivated plants and ruderal species well-adapted to urban living – plants such as everlasting pea, rosebay willowherb and Oxford ragwort. These habitats also support a great range of invertebrates and are "disproportionately good at preserving (invertebrate) species which are scarce because they are on the edge of their range"⁷. Habitats will change and evolve in accordance with many other factors including the substrate and level of disturbance. Many will eventually become scrub and woodland as time passes. They offer enormous potential for formal teaching of ecology and as exciting, complex nature areas to visit.

There are many examples of naturally colonised habitats in Hampshire. In Basingstoke, roundabouts at Newbury Road and Black Dam have been identified as Sites of Importance for Nature Conservation (SINCs). Fleet Pond on the edge of Fleet is a shallow lake with fringing reedbeds and fen, heath and woodland. This former reservoir is widely used as public open space and contains a great diversity of flora and fauna: birds such as bittern, lesser spotted woodpecker, sedge warbler and reed warbler; harvest mice; herpetofauna including adder, grass snake and common lizard; many nationally scarce invertebrates; and wetland plants including a nationally scarce moss, marsh fern and six-stamened waterwort.

Changing patterns of employment in coastal cities have left significant areas of disused land. For example, the former HMS Daedalus caravan park 'Home Heath' in Gosport is now a 4 hectare grassland site managed for nature conservation. Another example is 'West of the River' in the Alver Valley in Gosport. This former gravel extraction site now includes an extensive reedbed, grassland, scrub and woodland, and Hampshire priority species such as bittern, bearded tit, Cetti's warbler, reed bunting, snipe, bullfinch, linnet and song thrush.

Hilsea Lines in Portsmouth was built in the 1860s to defend the city from any potential threats from the landward side. The ancient monument, moats and surrounding grounds are now of considerable value for biodiversity with scrub, woodland, grassland, and wetland areas.

Informal Open Space

Whereas remnants of countryside and industrial habitats have developed through natural processes, areas of informal open space have largely been planted. Some will be planted with nature conservation as a main aim, others may benefit nature by chance. This category includes less-intensively managed areas of public parks; 'naturalistic' areas within hospital grounds, business parks, golf courses, churchyards and school grounds; roadside plantings of wildflowers and trees; nature parks created to provide a variety of wildlife habitats; and plantings on roofs and walls.

Informal open spaces often contain a high proportion of native plant species. Some are particularly valued for their educational role and opportunities for community involvement. The Hawthorns Centre in Southampton is an excellent example of a purpose-built nature park and study centre. The grounds provide a variety of habitats such as hedgerows, meadows, woodland, streams and ponds. Another example is The Hermitage in Gosport where Gosport Borough Council and local residents have created several wildlife habitats including a pond, hedgerow and butterfly garden on land that was originally earmarked for development. Basingstoke and Deane Borough Council are establishing two community woodland parks – Beggarwood Lane and Kempshott Lane – at the south-west edge of Basingstoke.

In addition to planting areas of open land, vegetation can be introduced to roofs, walls and pavements to provide new habitats in areas where greenspace is scarce, or simply as an attractive backdrop to development. A

good example is Belvedere House, an office building in Basingstoke where balconies have been sumptuously planted, some even including small wildlife ponds.

Formal Open Space

Generations of civic designers have provided public open space within urban areas for recreation and amenity. These areas are characterised by large areas of intensively mown grass and a high proportion of non-native plant species, and include public parks, playing fields and landscaped areas around civic buildings. For many people, urban parks provide the most obvious and regular contact with nature. Formal parks are often the most widespread type of greenspace available in heavily built-up areas of towns and cities.

Although of limited value to wildlife, such areas have considerable potential. Changes in management techniques and additional structural planting could transform them into valuable wildlife habitat at relatively low cost. They could provide diverse nature areas where people could see a variety of plants, birds and invertebrates.

Gardens and Allotments

Large numbers of individual gardens and allotments together provide a considerable resource for wildlife. Combining the characteristics of both formal and informal open space, rows of gardens are often diverse in structure and provide a source of food for wildlife throughout the year.

Gardens can act as green corridors, connecting otherwise isolated greenspaces. Gardens and allotments can offer a refuge for increasingly rare species such as annual arable weeds. Tree-lined streets can be very valuable for wildlife and support large numbers of species. Individual trees provide song-posts and nesting sites for birds and feeding stations for invertebrates, and bridge gaps in greenspace provision.

Greenways and Green Corridors

Linear green features can connect isolated greenspaces and provide a green route from the countryside into the heart of the urban area. Natural elements such as rivers and streams can permeate towns and cities providing corridors for wildlife and substantial areas for informal recreation. Their long, linear shape gives access to nature for large numbers of people.

Green corridors include wedges of agricultural land, coastlines, steep linear

ridges, river valleys, hedgerows, railway embankments and road verges. Some of these habitats support Hampshire priority species such as the rapidly declining water vole. Urban river valleys can be good habitats for these mammals due to the absence of predatory mink. Strips of urban gardens and avenues of trees, as mentioned above, also act as linear features⁸. Wide, rich and continuous corridors perform better as wildlife habitats than narrow, poor, discontinuous ones⁹.

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Southampton has a network of eight Greenways based around stream valleys that permeate the city. Together they cover almost 4% of the city's land area. Each Greenway provides valuable habitats and open space for a variety of leisure pursuits.

5 SPECIES

Urban greenspaces support a great variety of plant and animal species. For example, gardens often sustain high densities of birds in comparison with surrounding rural areas and foxes roam in most towns and cities. Many common species occur, but specialist fauna and flora can thrive too. Some have survived by their enduring association with urban remnants of rural habitats such as ancient semi-natural woodland, chalk downland or chalk streams: for example, several unusual species such as Southern Damselfly use the River Itchen as it flows through urban areas such as Winchester, Eastleigh and Southampton.

Other species have adapted to urban habitats that fulfil their requirements. Internationally important populations of dark-bellied brent geese graze on playing fields and other amenity open space in Gosport and Portsmouth in the winter, and peregrine falcons nest in Basingstoke and Fawley on tall buildings that mimic their original habitat of cliff faces. Urban greenspaces along the south coast are the first stopping-off point for birds migrating northwards in spring such as the nightingale and Dartford warbler.

The relatively warm southern climate in Hampshire fosters a rich invertebrate population. The diversity of breeding butterflies in south coast conurbations is particularly high: a recent survey recorded 35 species in Southampton and its immediate surrounds¹⁰.

Several priority species identified in the *Biodiversity Action Plan for Hampshire* are commonly found in urban areas: birds such as spotted flycatcher, bullfinch and song thrush; pipistrelle, grey long-eared and

Serotine bat; buttoned snout moth and stagbeetle; and fine-leaved sandwort. Great-crested newts are found in several urban parks and as noted above, water voles in urban river valleys.

CURRENT FACTORS AND ISSUES AFFECTING BIODIVERSITY IN URBAN AREAS

Many factors cause the loss, damage or reduction in quality of urban habitats. Some of these factors are also operating in rural areas but are intensified in densely populated towns and cities. The key issues are to ensure that new developments are sited to avoid loss of biodiversity, that permitted development improves the net biodiversity value of an area, and that the biodiversity value of existing greenspace is enhanced.

Size – Urban nature areas are predominantly small in size and hence support relatively few habitats and species. Most are fragmented and isolated from other similar areas by roads, buildings or other hard surfaces.

Disturbance – Large numbers of people living and working in cities results in considerable disturbance to wildlife areas. Wildlife sites with no obvious management are often used as dumping grounds, attracting further litter and tipping, or as unofficial areas for bikes, motorbikes and bonfires. Trees and landscape structures can be vandalised and dogs and cats often disturb wildlife.

Pollution – Air pollution and contamination from road salt, dust, tars and oils stresses sensitive plants and animals.

Development Pressures – Unprotected land in urban areas is constantly under threat of development. Current Government policy to concentrate development on previously developed 'brownfield' land in urban areas puts additional pressure on informal open land with no apparent use (see also section on Policy and Planning below). Development encroachment can also affect parks and large gardens.

Inadequate Survey – Valuable wildlife habitats can disappear if they have been inadequately assessed, particularly naturally colonised brownfield land. These areas often have high invertebrate interest that goes unrecorded¹¹.

Inappropriate Management – Greenspaces need specialist management to optimise their value to wildlife. Many sites are either neglected or suffer from overtiding or overly intensive park management. Carefully planned management will protect and enhance biodiversity.

Public Perception – Some people perceive nature areas as unkempt and unmanaged. This is particularly so where vacant land has been naturally colonised. Many prefer, or feel more familiar, with formally managed greenspaces such as public parks. Others may also assume that nature's place is in the countryside, or feel that issues such as energy use or global warming are more pertinent.

Access and Involvement – Many people are unable or do not wish to travel long distances to see wild plants and animals. Their needs can be met to a large extent by providing greenspace throughout the urban area. This also supports more locally-based sustainable lifestyles where more work and leisure time is spent within easy reach of home¹².

national Sites of Special Scientific Interest (SSSIs).

Several internationally protected sites occur in or alongside urban areas in Hampshire. Chichester and Langstone Harbour is a Ramsar Site and SPA designated principally for its saltmarsh and intertidal habitats that support large populations of wintering wetland birds, particularly the priority species dark-bellied brent goose (further details are given in the Brent Goose Strategy¹³). Langstone Harbour is surrounded by the heavily urbanised areas of Portsmouth, Havant and Hayling Island. Portsmouth Harbour is also a Ramsar Site and SPA largely designated for its wintering waterfowl, again including dark-bellied brent goose. The Harbour is heavily industrialised and sandwiched between Gosport, Porchester, Fareham and Portsmouth.

The River Itchen runs through Southampton into Southampton Water. Upriver of Woodmill, the river and adjacent areas of watermeadow have been designated a cSAC. Below Woodmill, areas of intertidal mud in the river form part of the Solent and Southampton Water SPA.

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6 POLICY AND PLANNING

The planning of future land use must be driven by the principles of sustainable development where human activities are balanced with the protection of the environment. Human impact on the environment continues to threaten biodiversity and indeed everyone's quality of life. Environmental issues must be considered on an equal footing with social and economic priorities.

International

Since the Earth Summit in 1992 the UK has been developing a national strategy for the conservation of biological diversity. Britain has an international obligation to outline a programme of biodiversity action. The *Biodiversity Action Plan for Hampshire* contributes to Britain's national and international biodiversity objectives by identifying action that needs to be taken throughout the county, in both urban and rural areas.

Other international treaties and directives also provide a framework for protecting wildlife sites: Ramsar Sites, Special Protection Areas (SPAs) and candidate Special Areas of Conservation (cSACs). These are also known as 'European Sites' and are always additionally designated as

National

National objectives for biodiversity are set out in the UK Action Plan¹⁴ and Steering Group Reports¹⁵. Urban habitats are one of the 37 broad habitat types listed in the Steering Group Report and national action is outlined in an Urban Habitat Statement¹⁶. Recently the urban broad habitat classification has been redefined to include all built up areas, and is now known as 'Built up areas and gardens'¹⁷.

Although the Urban Statement acknowledges that urban wildlife habitats include buildings, hard surfaces and all greenspaces, the Statement focuses on two types of greenspace: managed greenspaces (e.g. parks and gardens) and naturally seeded urban areas/industrial sites (e.g. railway lands and demolition sites). Remnants of rural habitats are considered in other relevant habitat statements or action plans and therefore not discussed in the Urban Statement. The conservation direction for urban habitats is to "maintain the existing diversity and extent of wildlife in all urban areas, expanding the range and distribution of rare and common species and enabling this resource to be utilised as an education tool"¹⁸.

There are many Sites of Special Scientific Interest (SSSIs) in Hampshire's urban areas but only a few Local Nature Reserves (LNRs). English Nature has recommended

that LNRs should be designated much more widely, at the minimum level of one hectare per thousand population¹⁹. English Nature's grant scheme 'Wildspace' aims to distribute over £5 million between 2001 and 2007 to create, manage and promote involvement in new and existing LNRs²⁰.

Planning Policy Guidance Note 9 (PPG9)²¹ outlines Government planning guidance for nature conservation and recognises the important contribution of urban nature conservation to social and economic well-being. A revision of this guidance should be available in 2002.

The Government's most recent policy direction for urban areas is set out in the Urban White Paper²². This follows the publication of a visionary document 'Towards an Urban Renaissance' by the Urban Task Force in June 1999²³. Essentially, both reports acknowledge the need for an urban renaissance in Britain's towns and cities to re-ignite their appeal as desirable places to live and work.

One of the main principles to emerge is to direct 60% of development to 'brownfield' (previously developed) sites in urban areas rather than 'greenfield' sites in the countryside. This objective is reiterated in Planning Policy Guidance Note 3 (PPG3)²⁴ that outlines the Government's intention to "promote more sustainable patterns of development and make better use of previously-developed land". This has considerable implications for urban biodiversity, particularly where naturally seeded habitats have spontaneously developed on industrial land.

The Urban Task Force advocates the value of open space in urban areas and acknowledges the contribution of green areas to making cities more attractive: "We also need to promote the idea of the ecologically sensitive city in which humans recognise that they cohabit with nature. Trees, woodlands and other open space are all important in fostering biodiversity, in enhancing human health and well-being, and in reducing noise and pollution"²⁵.

Although there is a new impetus to direct development to brownfield land, the Urban Task Force points out that previously developed land can also be used to create new areas of urban greenspace. PPG3 also explains that previously developed land should exclude land that has become "part of the natural surroundings", and where the contribution to nature conservation outweighs the re-use of the site. Brownfield land often provides a refuge for birds, amphibians, reptiles, invertebrates and

uncommon plants. Clearly, valuable wildlife sites and some land with potential as nature areas will have to be identified as no-go areas for development – a balance will need to be struck.

Regional

Regional guidance for the South East²⁶ reiterates that 60% of new development and redevelopment should be concentrated in urban areas. The guidance also acknowledges that positive action should be taken to maintain and enhance the region's biodiversity in accordance with the national Biodiversity Action Plan (BAP) and local BAPs, and the contribution that greenspaces make to nature conservation and wider environmental and social benefits.

The guidance points out that English Nature can advise on targets for the provision of accessible natural greenspace in urban areas (see English Nature standards given in 'Access and Involvement' section below). Priority areas for economic regeneration in the South East include Southern Hampshire (Southampton, Eastleigh, Fareham, Gosport, Portsmouth, Havant) as well as parts of the New Forest, Test Valley and Winchester.

Local

The County Structure Plan and local plans guide development in urban areas. Planning authorities have considerable powers to protect wildlife sites and to impose conditions or enter into legal agreements with developers to benefit biodiversity. Statutory Local Nature Reserves can be designated by county, district, town or parish councils.

Local Authorities work on long time scales and own or manage a high proportion of land in towns and cities in comparison with equivalent areas of rural land. All local authorities are required under the Local Government Act 2000 to prepare 'community strategies' to promote or improve "the economic, social and environmental well-being of their area" and contribute "to the achievement of sustainable development in the UK"²⁷. Local authorities are expected to incorporate local action for biodiversity conservation in their community strategies. This reinforces the importance of biodiversity as an important indicator of the health of the environment.

Two important themes in the County Structure Plan Review²⁸ are sustainable development and maximising the potential of urban areas to accommodate future development. However it is acknowledged that development schemes "will need to

recognise the importance of open space” and that in some cases derelict land may be “more suitable for introducing environmental improvements”. The Review also acknowledges that wildlife habitats within urban areas can be particularly valuable. To accommodate the requirement for new housing in Hampshire, the Structure Plan Review proposes four ‘Major Development Areas’ (MDAs): Basingstoke; Andover; west of Waterlooville; and south-east Eastleigh. The proposed MDAs are located close to existing major urban areas to minimise the need to travel and link with existing public transport systems. Policies for these areas take account of protecting biodiversity and also include advance landscaping and greater emphasis on biodiversity conservation.

Hampshire County Council is assisting other local authorities in the county in the identification of Sites of Importance for Nature Conservation (SINCs). These are sites that are not statutorily designated, but which are of particular importance for nature conservation in Hampshire and recorded in local plans. There are many SINCs in urban areas. The sites are selected primarily against ecological criteria, although in special circumstances they can be selected for their exceptional social value. Few SINCs have been identified using social criteria. There could be a case for refining the social criteria for the selection of sites to reflect the needs of those urban areas particularly deficient in accessible natural greenspace.

All district and borough councils and the unitary authorities of Southampton and Portsmouth have policies for nature conservation in their local plans, although these vary in detail. When local plans are reviewed they will need to take full regard of revisions to legislation and planning guidance such as the Countryside and Rights of Way Act 2000, the Conservation (Natural Habitats etc.) Regulations 1994, PPG3 and revised PPG9.

Policies should give appropriate protection for the range of nature conservation designations and ensure mitigation and compensation where new developments may have adverse effects. Policies are also required for the protection of non-designated land of wildlife interest, and for creating new opportunities for wildlife alongside development. Land allocations within local plans need to be sensitive to maintaining urban biodiversity, and spatial planning should ensure that ‘semi-natural’ open space and corridors are provided. It will be particularly important to ensure good standards of greenspace provision and

management in Hampshire’s four Major Development Areas.

The Forests of Bere and Eversley are two projects that have been established to support environmental enhancement and countryside recreation requirements adjacent to major urban areas²⁹. The Forest of Bere is surrounded on three sides by urban development – Hedge End to the west, Fareham, Gosport and Portsmouth to the south, and Waterlooville to the east. The Forest of Eversley is in the north-east of the county, sandwiched between Basingstoke, Fleet, Aldershot and other urban areas across the county boundary in Berkshire and Surrey. The Forests will contribute to sustainability policies by providing access to nature near large centres of population thereby reducing travel distances, and to biodiversity goals by protecting important wildlife habitats and promoting environmental understanding.



7 ACCESS AND INVOLVEMENT

A Topic Action Plan for Education, Awareness and Involvement³⁰ has been produced as part of the *Biodiversity Action Plan for Hampshire*. The Plan assesses the extent of current work in raising awareness of biodiversity and guides future action. The Plan does not particularly separate urban and rural activity, but clearly includes much information relevant to this Urban Areas Plan.

The social aspects of urban biodiversity are as important as the biological aspects of protecting and maintaining wildlife habitats. As mentioned above, most people live in urban areas and it is here that opportunities for raising awareness of biodiversity conservation are greatest. Everyone can make a contribution through direct actions at school or college, work or home.

Contact with nature close to where people live and work is the most obvious way to encourage an appreciation of urban biodiversity. In many cases allowing or improving access to existing green areas, or changing the management of sections of local parks, will go a long way towards achieving the necessary level of greenspace provision (see English Nature recommendations below). Urban areas still deficient in wildlife habitat should have priority. Habitat creation can be achieved through the use of planning gain and planning conditions, and through integrating nature areas into appropriate new development schemes.

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English Nature recommends³¹ that people living in towns and cities should have:

- Statutory Local Nature Reserves provided at a minimum level of one hectare per thousand population;
- An accessible natural greenspace less than 300 metres (in a straight line) from home;
- At least one accessible 20 hectare site within 2 kilometres of home; one accessible 100 hectare site within 5 kilometres of home; and one accessible 500 hectare site within 10 kilometres of home.

Access to greenspace is generally measured in terms of physical constraints, but accessibility also depends on social and cultural factors. Greenspaces can be available nearby, yet remain out-of-bounds if they are perceived as uncared for or dangerous. They may also be inaccessible for people with pushchairs, elderly people and people with limited mobility.

Studies show that nature areas are appealing to all age groups and ethnic groups³². To increase accessibility, sites need to be regularly used and supervised, better managed, and therefore perceived as safe places to visit. Activity programmes, community events, newsletter and leaflets, better signs and pathways will all help to make nature areas more accessible. Many people still perceive biodiversity as only about the rare and the obscure, yet people's "instinctive feeling of care for nature"³³ can be turned into a force for biodiversity conservation.

Public access to greenspace need not conflict with its wildlife interest. The two uses are generally very compatible. Nevertheless greenspaces that are heavily used can suffer from trampling and disturbance to wildlife. Access may need to be restricted in some areas or at some times – for instance during the breeding season visitors could be directed away from sensitive locations. Access should be carefully controlled through the provision of paths and natural barriers to ensure that there is no detriment to wildlife or people's enjoyment.

Interpretation is particularly important where management regimes are being altered or where a site may be perceived as unkempt. People need to know what the aim of management is. Greater understanding will lead to increased support for biodiversity objectives and reduce the risk of neglect and vandalism.

Gardening is one of the main means of contact with nature for a large proportion of urban residents. It is perhaps the biggest leisure pursuit in Britain. There is tremendous scope for increasing the value of gardens for wildlife and gardener's appreciation of biodiversity.

Encouraging visits to urban greenspaces on an informal basis and promoting environmentally-friendly gardening are key methods of raising environmental awareness. But formal biodiversity education is critical too. Understanding and respect for nature and the environment can be introduced to children at a very early age and fostered throughout their education career. Hands-on elements of biodiversity education can take place in school grounds, in local greenspaces or at urban or countryside study centres.

The loss of biodiversity is important to everyone and it is critical that this message reaches all those living and working in urban areas. Biodiversity action should reflect this overriding need to raise widespread awareness and support. In urban areas this means focussing on the common, the places near to where people live, and the issues that are relevant to everyday life. This will ensure the widest possible support for biodiversity conservation.

8 CURRENT ACTION

There is a considerable range of activity taking place in Hampshire to protect and enhance urban biodiversity. The list of initiatives outlined below is not a complete catalogue but rather an indication of some of the main activities.

Survey and Data

There are currently no comprehensive city-wide surveys of urban habitats taking place. However Southampton City Council, with the GeoData Institute, undertook a survey of greenspaces in 1989/90, and a comprehensive survey of open spaces in Basingstoke – an Open Spaces Audit – was recently undertaken.

The Hampshire Habitat Survey Project, managed by Hampshire Wildlife Trust in partnership with local authorities, undertakes surveys across the county, which may include urban sites.

Species surveys are more numerous. Hampshire Wildlife Trust co-ordinated a county stagbeetle survey in 1998, and song

thrush surveys in conjunction with the Hampshire Ornithological Society in 2000 and 2001. Many sightings were in urban areas. English Nature and the Hampshire Bat Group monitor urban bats and Butterfly Conservation undertake regular surveys of butterflies and moths in urban areas throughout the county.

Hampshire County Council in partnership with Hampshire Wildlife Trust, English Nature and others are developing a Biological Record Centre for Hampshire. Information on habitats and species throughout the county will be stored on databases and widely available to ensure the best use of all biodiversity data. HCC also provide schedules of Sites of Importance for Nature Conservation (SINCs) for inclusion in local plans.

Strategies and Planning

A Nature Conservation Strategy for Southampton was produced in 1992 following the Council's survey of greenspaces in 1989/90. Although there are no other urban nature conservation strategies, some authorities have addressed this topic within other plans or strategies. For example, Portsmouth City Plan includes a sustainability audit of wildlife value, Fareham Borough Council's Countryside Management Strategy includes biodiversity conservation as a principal aim, and Basingstoke and Deane Borough Council is addressing biodiversity in their Landscape Strategy.

Eastleigh Borough Council is producing a Local Biodiversity Action Plan (LBAP) that will address local action needed to protect and enhance the borough's greenspaces. East Hampshire District Council is also producing an LBAP.

Many current initiatives in forward planning and development control are outlined in the section on Policy and Planning above.

Management

Most local authorities have teams involved in nature conservation management of urban sites:

- Fareham Borough Council's Countryside Ranger Service undertakes practical habitat management, access, landscape enhancement and interpretation work;
- Gosport Borough Council's Countryside Section manages all the nature conservation areas in the Alver Valley (including the restoration of an 8 hectare

reedbed) and other sites such as Gilkicker Point, Monks Walk and Rowner Copse;

- Hart District Council's Countryside Service have written a management plan for Fleet Pond and have rangers who carry out practical management;
- Rushmoor Borough Council have management plans for key sites such as Cove Brook Greenway, Rowhill Copse, Southwood Woodland and Brickfields Park;
- Portsmouth City Council has two wildlife rangers who manage Portsdown Hill SSSI in conjunction with volunteers, and Hilsea Lines;
- Basingstoke and Deane Borough Council has two park rangers who both have management and education remits;
- Southampton Common is managed by Southampton City Council with nature conservation as a main aim;
- Eastleigh Borough Council's Countryside Unit own and manage for nature conservation and public enjoyment a wide range of sites, including Itchen Valley Country Park, West End Copse and Hocombe Mead;
- Test Valley Borough Council are developing a road verge management strategy for Andover.

Several county-wide management projects involve sites in and around urban areas: the North East Hampshire Heathlands Project provides a focus for heathland management and protection, with major areas located at Fleet, Farnborough and Aldershot, and the Hampshire Grazing Project is helping to establish grazing on three sites in Gosport.

The British Trust for Conservation Volunteer's network of local groups, schools and pond wardens involve many sites in urban areas. BTCV also has a Portsmouth based community officer offering support and funding for such schemes, and run NVQ training in conservation skills and management planning. Hampshire Wildlife Trust manage many nature reserves in several of Hampshire's urban areas.

Research and Monitoring

There is very little current research into the state of Hampshire's urban habitats and species. However, Butterfly Conservation

have established transect monitoring at several sites in urban areas or nearby country parks such as Itchen Valley Country Park and Portsdown Hill, and run a long-term butterfly survey and monitoring project as part of Southampton City Council's Health of the City project. Southampton City Council also run a bat box project with the Hampshire Bat Group.

Awareness and Involvement

Formal Education

HCC's School Landscape Project give advice on school grounds management and habitat creation throughout Hampshire. Several borough councils (e.g. Basingstoke and Deane, Hart, Fareham and Eastleigh) also assist schools with projects in their grounds. The British Trust for Conservation Volunteers (BTCV) works throughout the county supporting schools and both BTCV and Hampshire Wildlife Trust provide training for teachers.

Fareham Borough Council's Countryside Officers are currently developing an educational nature reserve, in partnership with Southern Water, within the grounds of the Peel Common Waste Water Treatment Works. The Ranger Service also organises school visits to parks such as Holly Hill Woodland Park.

In Gosport, the Borough Council's Countryside Section run a service for the majority of the city's infant and junior schools, including visits to Wildgrounds and Oxstall Meadows to promote biodiversity education. The County Council runs the Gosport SEARCH museum, a hands-on education centre for history and natural history.

Portsmouth City Council park rangers have an environmental education remit with schools. The City Council also has a BTCV school liaison advisor to work with schools. In Southampton, the Hawthorns Urban Wildlife Centre provides an excellent venue for biodiversity education that is used by schools and the wider community.

There are many excellent publications that demonstrate the biodiversity value of urban nature areas. For instance Rushmoor Borough Council and HCC have produced the Cove Brook Schools Pack. Butterfly Conservation has published a guide to the butterflies of the Southampton area³⁴.

Community Schemes

Many local authorities manage sites for nature conservation in conjunction with volunteers from the local community. Southampton City Council manages several sites in this way, including Chessel Bay LNR. A large number of volunteers assist Gosport Borough Council's Countryside Section with their nature conservation areas, and Rushmoor Borough Council involve local volunteers in most of their conservation work.

Fareham Borough Council's Ranger Service supports a number of site based friends groups and also runs a weekly volunteer group that works across the borough.

Basingstoke and Deane Borough Council have a Community Woodland Officer who oversees management of several woodlands by volunteers. The Walled Garden at Down Grange in Kempshott, Basingstoke has many community events and activities on a wildlife theme. The Council extensively consulted and involved the public in formulating plans for two large woodland parks on the edge of Basingstoke.

Eastleigh Borough Council's Itchen Hamble Countryside Project involves local community groups and teams of volunteers in the management of a variety of sites to enhance their value to wildlife. Hart District Council Countryside Service and the Fleet Pond Society work together to raise awareness of the value of Fleet Pond for nature conservation and education. Havant Borough Council work with BTCV and local conservation groups to manage nature areas such as Brook Meadow, Park Wood, Gundrymoor Wood and Hollybank Wood.

Several parish and town councils have undertaken community surveys of individual species and local habitats, including West End Parish Council, Nursling and Rownhams Parish Council, Swanmore Parish Council, Romsey Town Council and Totton and Eling Town Council.

The Hampshire Wildlife Trust have a Community Conservation Officer who co-ordinates the Trust's activities throughout urban centres in south-east Hampshire, working in partnership with a wide variety of community organisations such as cultural faith groups, disability centres and Prison Service establishments. BTCV is also a key organisation working with many urban community groups on environmental projects, providing environmental skills training and advice for groups of people managing local areas.

Campaigns and Grant-aid

Many organisations promote wildlife gardening through campaigns and competitions. Southampton City Council has a wildlife garden category as part of 'Southampton in Bloom', and Petersfield Town Council and Bishops Waltham Parish Council have also promoted wildlife gardening in this way.

Hampshire Wildlife Trust has developed a Gardening for Wildlife Campaign that encourages people to take care of wildlife in their own backyard. HWT have also set up a Garden for Wildlife in Southampton city centre to demonstrate how effective gardens are as refuges for wildlife. BTCV have been running a 'Growing Trees from Seed Project' in Portsmouth.

Small grants for environmental projects in urban areas are available through Southampton City Council's Greening the City scheme, Eastleigh Borough Council's Itchen Hamble Countryside Project, Basingstoke and Deane Borough Council environmental grant and tree and landscape management grant schemes, and HCC's Community Action Fund. BTCV give advice on grants for environmental projects and also administer landfill tax grants from their office in Portsmouth. They also run a 'Peoples Places' award scheme.

9 OBJECTIVES

The overall aims of this Plan are to protect and enhance the biodiversity of urban areas in Hampshire, and to ensure widespread access to nature areas for all who live and work in Hampshire's towns and cities. These broad aims translate into the specific objectives set out below. The 'Proposed

Action table in section 10 identifies the action to be taken to meet these objectives.

OBJECTIVES OF THE URBAN AREAS TOPIC ACTION PLAN	
A	To protect key sites of nature conservation importance in urban areas;
B	To identify and evaluate the 'natural features' of urban areas to provide a sound basis for their protection and management;
C	To identify urban areas deficient in accessible natural greenspace and remedy the deficiencies through restoration, changes in management or habitat creation;
D	To maintain and enhance existing areas of greenspace through appropriate management;
E	To create new areas for biodiversity;
F	To promote widespread access, enjoyment and involvement in natural greenspaces for all who live and work in urban areas;
G	To promote a much wider understanding of urban biodiversity and the part it plays in improving the quality of life in towns and cities;
H	To encourage people's personal commitment to conserving biodiversity in urban areas;
I	To contribute to sustainable development by reducing the environmental impact of urban areas.

TOPIC ACTION PLAN

10 PROPOSED ACTION

The following table lists the actions required to achieve the objectives for biodiversity in urban areas as set out in Section 9 of this Plan. Each action has been assigned to one or more 'Key Partners'. Key Partners are those organisations that are expected to take responsibility for the delivery of the actions assigned to them. Other organisations may also be involved in the delivery of action, and they have been indicated in the 'Others' column of the table.

Key to symbols in Action Table:

- ◆ To be completed by the indicated year. Work can commence at any time before the due date, at the discretion of the Key Partner.
- ◆⇒ Design or production of a plan/strategy to be completed by this year and then followed by its implementation.
- ➔ To start by the indicated year and usually followed by ongoing work. A start arrow in year 2002 can indicate a new action or a new impetus to existing work.
- ⇨ Work that has already begun and is ongoing.

	ACTION	DELIVERY BY		YEAR						MEETS OBJ.
		Key Partner	Others	2002	2003	2004	2005	2006	2010	
				◆ = complete by ◆⇒ = design by and implement ➔ = start by ⇨ = ongoing						
Audit and Survey										
1	Audit the nature conservation resource in each of Hampshire's urban areas	LAs	HWT			◆				A, B, C
2	Ensure that all sites meeting SSSI criteria have been designated	EN		⇨	⇨	⇨	⇨	⇨	⇨	A, B
3	Refine SINC criteria to take account of the particular social value of sites in urban areas	HCC	EN, HWT, DCs, UAs		◆⇒					A, B, F
4	Identify all sites meeting SINC criteria and list these sites in local plans or associated schedules	LAs	EN, HWT, EA	➔						A, B
5	Identify other areas of value or potential value for biodiversity and include these in planning/land management strategies	LAs	HWT	➔						A, B, C, D
6	Produce 'alert' maps showing important and potentially important sites, to guide planning and other strategies	LAs	HWT	➔						A, B, C
7	Ensure regular re-survey of wildlife sites to keep data up-to-date	LAs, HWT	EN	⇨	⇨	⇨	⇨	⇨	⇨	A, B
8	Ensure that all habitat and species data collected in urban areas is entered onto the County Council's Biological Record (future Biodiversity Information Centre)	HCC	DCs, UAs, EN, HWT	⇨	⇨	⇨	⇨	⇨	⇨	A, B

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Urban Areas

9	Develop indicators of urban biodiversity to assist with monitoring, 'state of the environment' reporting, and assessments of 'best value'	LAs	HBP		➔					A, B, C
Planning and Strategies										
10	Produce local biodiversity action plans to provide a strategic framework for biodiversity conservation in urban areas	DCs, UAs	HWT, HCC, EA, EN		➔					A, B, C
11	Ensure that biodiversity is fully integrated into community strategies	LAs				◆⇔				A, B, C
12	Include policies for the protection and enhancement of urban biodiversity in local plans	DCs, UAs	HCC, EN, HWT		➔					A, B, C, D
13	Ensure that local plan policies give appropriate protection to statutory designations, SINCs and other areas of wildlife value	DCs, UAs	HCC, EN, HWT		➔					A, B
14	Ensure that new developments retain existing wildlife habitats and create new opportunities for wildlife where possible	LAs	EN, EA, HWT		➔					C, E, I
15	Ensure that development briefs take full account of biodiversity	DCs, UAs	HWT, EN, EA		➔					C, E, I
16	Include policies in local plans to ensure appropriate mitigation, compensatory provision and enhancement of biodiversity where development is permitted	DCs, UAs	HCC, EN, HWT		➔					C, D, E, I
17	Ensure that land allocations in local plans take account of areas of value or potential value to wildlife	DCs, UAs	HCC, EN, HWT, EA		➔					C, F
18	Identify potential and existing green corridors and greenspaces in planning strategies and development proposals to ensure easy access to biodiversity for all	DCs, UAs	HWT		➔					C, F
19	Ensure the use of planning conditions and agreements to ensure provision for biodiversity within development	DCs, UAs	HCC, EN, HWT		➔					C, D, E
20	Ensure that full provision is made for biodiversity and access to greenspace in the planning and establishment of Major Development Areas (MDAs)	DCs, UAs	HCC, EN, HWT		➔					A, B, C, F
21	Develop management and enhancement strategies for land surrounding urban areas to ensure: <ul style="list-style-type: none"> • continuity of habitats and species between urban and rural areas • adequate provision for access to natural areas adjacent to large concentrations of population • maximum value for biodiversity 	LAs	EN, HWT, EA, FA			➔				A, B, D, F
22	Consider the retention of habitats and species that have established on previously developed (brownfield) land. Aim to retain examples of these habitats on both a temporary and permanent basis	DCs, UAs			➔					C, F

**TOPIC
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Urban Areas

	ACTION	DELIVERY BY		YEAR						MEETS OBJ.	
		Key Partner	Others	2002	2003	2004	2005	2006	2010		
◆ = complete by ◆⇒ = design by and implement ➡ = start by ⇔ = ongoing											
Planning and Strategies (continued)											
23	Aim to establish accessible natural greenspace to the level recommended by English Nature: <ul style="list-style-type: none"> • One within 300 m of all urban homes • One 20 ha site within 2 km • One 100 ha site within 5 km • One 500 ha site within 10 km 	DCs, UAs							◆		C, F
24	Aim to establish statutory LNRs at the minimum level of 1 ha per 1000 population as recommended by English Nature	LAs	EN						◆		A, B
25	Establish nature parks/community wildlife sites to act as demonstration sites and facilitate access and involvement	DCs, UAs	HWT	➡							A, C, E, F
Management											
26	Review management of all SSSIs and other wildlife sites to ensure favourable management	LAs, EN	HWT, EA	➡							D
27	Prepare management plans or briefs for all key sites to accommodate the needs of both people and wildlife	LAs	HWT, EN	➡							D, F
28	Review the management of parks and other local authority controlled land to consider introducing additional measures for nature conservation such as planting native trees and changing the regime for maintaining grasslands	DCs, UAs		➡							D, E
29	Review the management of road verges to maintain their existing wildlife interest, develop a greater range of habitats and create green corridors	LAs		➡							D, E
30	Develop 'best practice' guidelines for favourable conservation management of all public open space, to protect street trees from damage during road/pavement works, and to guide urban tree planting and maintenance.	DCs, UAs			◆						D, E
31	Encourage large landowners (such as utilities, large corporations, health trusts, colleges, transport agencies) to improve provision for wildlife on their landholdings	LAs	HWT, BTCV, GG	➡							D, E
32	Enable the use of vacant and derelict land for wildlife either temporarily or permanently	DCs, UAs		➡							D, F

TOPIC ACTION PLAN

Urban Areas

33	Encourage community involvement in the management of wildlife habitats	DCs, UAs HWT, BTCV	WT	➔							D, F, H
34	Seek public support for changes in management regimes	DCs, UAs HWT, BTCV	WT	➔							F, G
Habitat Creation											
35	Create new habitats to provide additional areas for wildlife, particularly in areas of deficiency	DCs, UAs	HWT	➔							C, E
36	Incorporate measures such as retention basins and wetlands in development schemes to provide new wildlife habitats whilst reducing stormwater run-off and pollution	LAs	EA	➔							E, I
37	Review tree planting programmes to identify new opportunities as appropriate	DCs, UAs	FC	➔							C, E, I
38	Explore possibilities with developers for planting roofs, walls and pavements to create additional wildlife habitat, particularly in areas of very dense development	LAs		➔							C, E, I
39	Explore possibilities for involving the community in all stages of creating habitats from design and construction to management and monitoring	LAs, HWT, BTCV		➔							F, G, H
Education Awareness Involvement											
40	Establish a forum to exchange information on urban biodiversity	LAs,	HWT, BTCV		➔						F
41	Develop innovative ways to promote urban biodiversity to the public generally and at urban wildlife sites	LAs, HWT	BTCV		➔						F, G, H
42	Produce information materials that: <ul style="list-style-type: none"> emphasize the value of biodiversity to everyone make links between local biodiversity and national and international biodiversity goals make links between biodiversity and other indicators of sustainable development such as health, economic growth and an attractive environment 	LAs, HWT			➔						G, H, I
43	Promote wildlife gardening to the public and link to existing mechanisms such as 'Southampton in Bloom'	HWT, LAs	EA, BC	⇔	⇔	⇔	⇔	⇔	⇔	⇔	G, H
44	Consider the establishment of model wildlife gardens as demonstration sites	LAs	BTCV, HWT		➔						F, H
45	Consider organising schemes to supply low-cost native trees and shrubs, wildflower seed, compost, nestboxes and birdfeeders to the public	LAs	BTCV, HWT	➔							H
46	Organise community surveys of individual species and local habitats	LAs, HWT, BTCV	HCC, BC	➔							F, G, H

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	ACTION	DELIVERY BY		YEAR						MEETS OBJ.
		Key Partner	Others	2002	2003	2004	2005	2006	2010	
◆ = complete by ◆⇒ = design by and implement ➡ = start by ⇔ = ongoing										
Education Awareness Involvement (continued)										
47	Promote access to natural greenspace for all sections of the community such as ethnic minority groups, people with disabilities, the elderly and children of all ages	DCs, UAs	HWT, BTCV	➡						F, H
48	Promote initiatives to encourage people to explore biodiversity in their neighbourhood	DCs, UAs	HWT, BTCV	➡						F, G, H
49	Promote the use of nature areas as an educational resource	HCC, UAs	HWT	➡						F, G, H
50	Promote the management of school grounds for biodiversity education	HCC, UAs, SLP, BTCV	DCs, HWT	⇔	⇔	⇔	⇔	⇔	⇔	F, G, H
51	Consider the provision of a 'biodiversity centre' in major urban areas as a venue for exhibitions and demonstrations	DCs, UAs	HWT	➡						F, G, H
52	Identify 'champions' of urban biodiversity in each of Hampshire's main urban areas to help obtain additional resources	DCs, UAs	HWT		➡					D, E, F
53	Investigate the development of an award scheme for community wildlife projects	LAs, HWT				◆⇒				F, H
54	Run environmental training courses in practical skills and conservation management	BTCV	HWT	⇔						D, E, F, G, H

TOPIC ACTION PLAN

KEY TO ORGANISATIONS

- BC Butterfly Conservation
- BTCV British Trust for Conservation Volunteers
- DCs District/Borough Councils
- EA Environment Agency
- EN English Nature
- FC Forestry Commission
- GG Gosport Groundwork
- HBP Hampshire Biodiversity Partnership
- HCC Hampshire County Council
- HWT Hampshire Wildlife Trust
- LAs All Local Authorities (County, District/Borough, Unitary)
- SLP Schools Landscape Project (Hampshire County Council)
- UAs Unitary Authorities (Southampton and Portsmouth)
- WT Woodland Trust

APPENDIX 1: DESCRIPTION OF PRINCIPAL HABITATS FOUND IN AND AROUND HAMPSHIRE'S MAIN URBAN AREAS

Fleet	Fleet is dominated by a large expanse of heath, mire and mixed woodland on its eastern boundary: the Bourley and Long Valley SSSI/pSPA. The Basingstoke Canal SSSI cuts through the middle of Fleet, running east-west, and on the north-eastern boundary is Fleet Pond SSSI and LNR. SINC's include a large block of mixed woodland and heath on the eastern edge of the city at Pondtail, and several smaller woodlands within the city boundary. Large areas of coniferous plantation dominate the landscape north of Fleet, with arable fields to the west and a mixture of improved and unimproved grassland to the south.
Farnborough	Large areas of heath, mixed woodland, and conifer plantations at Hawley Common stretch from the north-western edge of Farnborough to Yateley. Much of this area is included within the Castle Bottom to Yateley Common SSSI. To the west of Farnborough lies meadow and fen designated as the Foxlease and Ancells Meadows SSSI, and Hawley Lake SINC. To the south-west, SINC's include the airfield with it's large expanse of heathland and neutral/acid grassland. The entire north-eastern/eastern boundary of Farnborough is delineated by the Blackwater River and Valley, including several neutral grassland SINC's. Several small woodland SINC's are located within the city.
Aldershot	The landscape west of Aldershot is dominated by a large complex of woodland and heath/acid grassland, with smaller areas of neutral grassland. Much of the area is contained within the Bourley and Long Valley SSSI/pSPA or SINC's. The Basingstoke Canal SSSI runs through north Aldershot, and on the north-eastern boundary are several SINC's covering areas of open water, wetland and woodland.
Basingstoke	Basingstoke is surrounded by arable fields. There are no SSSI's in or around the city. However several SINC's have been identified, mainly on the north-eastern edge: Basing Forest; the River Loddon with associated open water, wetland and woodland; and several small blocks of ancient woodland remaining in Chineham. There are also two roundabouts at Newbury Road and Black Dam identified as SINC's.
Andover	Andover is also surrounded by arable fields. The most important wildlife area is the River Anton and it's associated habitats. In north Andover, Anton Lakes LNR and SINC comprise a series of small lakes, neutral grassland and woodland surrounding the river. Just outside Andover at the Clatfords in the south, the river and an area of unimproved neutral grassland have also been identified as a SINC.
Winchester	The River Itchen SSSI/cSAC and Itchen Valley SSSI cut through the heart of Winchester. The chalk river with it's associated meadow, fen and broadleaved woodland form a band of very valuable wildlife habitats. The other main important habitats are the remnants of unimproved chalk grassland: St Catherines's Hill has been designated an SSSI and several areas are SINC's – Magdelene Hill, Twyford Down, the Whiteshute Ridge, and the golf course at Teg Down.
Eastleigh	The chalk river, fens and meadows of The River Itchen SSSI/cSAC runs along the eastern boundary of Eastleigh. The other nationally designated site is Trodds Copse SSSI, a broadleaved woodland on the north-western edge of Eastleigh. SINC's include: woodlands north of Eastleigh at Cranbury Park; unimproved neutral grassland and woodland amongst housing in Chandler's Ford and west of it, at Allbrook, and woodland at Fleming Park golf course; and woodland and dry heath/acid grassland at Stoneham to the south-west of Eastleigh towards Southampton.

Urban Areas

Southampton	Southampton has 4 areas of national or international importance for wildlife: The River Itchen SSSI/cSAC which bisects the city; the coastal habitats of the River Itchen and Southampton Water (part of the Lee-on-the-Solent to Itchen Estuary SSSI/cSAC/SPA/Ramsar Site); a small fragment of the reedbeds, meadow and fen of the Lower Test Valley SSSI/cSAC/SPA/Ramsar Site on the western boundary; and the woodland, ponds, and grassland of Southampton Common SSSI in the centre of the city. There are several woodland SINC's just outside the city boundary at Chilworth, West End, Netley Hill, and Netley Abbey. Within the city are 8 wooded river valleys and numerous other small blocks of woodland or amenity grassland.
Locks Heath	The urban area of Locks Heath extends to the River Hamble SSSI on the west, and to the coastal habitats of Southampton Water on the south-west (part of the Lee-on-the-Solent to Itchen Estuary SSSI/cSAC/SPA/Ramsar Site). Coastal grazing marsh at Titchfield Haven NNR are also just south of Locks Heath. SINC's include woodland on the west side at Holly Hill, on the south at Newtown, and the wooded river valley that runs through Titchfield Common on the east side.
Fareham/ Porchester	The upper reaches of Portsmouth Harbour SSSI/SPA/Ramsar Site extend to the south-eastern boundary of Fareham and to Portchester's southern boundary. The chalk grassland of Portsdown SSSI runs along a ridge on the north side of Porchester and beyond to Ports Down. SINC's near Fareham include Oxleys Coppice woodland on the south, neutral grassland near Fort Fareham, and a series of neutral grassland and woodland sites in the Meon Valley to the west. The landscape south of Fareham and north of Fareham and Porchester is dominated by arable fields.
Gosport	Gosport is dominated by Portsmouth Harbour SSSI/SPA/Ramsar Site along the entire north and eastern boundary where the coastal habitats extend into Gosport in several places. On the southern tip at Gilkicker Point is Gilkicker Lagoon SSSI/cSAC/Ramar Site. Further east on the coast is an area of shingle, scrub, heath and mire – Browdown SSSI – and beyond are coastal habitats that form part of Lee-on-the-Solent to Itchen Estuary SSSI/cSAC/SPA/Ramsar Site. Inland, the Alver Valley runs along the west side of Gosport and includes the pasture woodlands of the Wildgrounds SSSI and LNR, several other woodland SINC's, and a dry heath/acid grassland SINC near Browdown. Several areas of amenity grassland have also been designated as SINC's at the southern end of the Alver Valley near the coast for their importance to grazing brent geese.
Portsmouth	The peninsula of Portsmouth is dominated by Portsmouth Harbour SSSI/SPA/Ramsar Site on the west and Langstone Harbour SSSI/cSAC/SPA/Ramsar Site on the east. The coastal grazing marshes of Farlington Marshes LNR is within Langstone Harbour SSSI on the north-east boundary of the city. Other wildlife habitats include an area of neutral grassland and parkland at Portsea Island, the coastal shingle of the Solent, Portsdown Hill, and several parkland sites inland.
Waterlooville	Much of Waterlooville is surrounded by other urban areas (Portsmouth and Havant) or large expanses of arable fields. The main habitats for wildlife are the neutral/acid grasslands, bracken and scrub SINC's at Blendworth Common on the east, and neutral grassland and woodland SINC's between Waterlooville and Havant. Woodland SINC's within the city include 'The Queen's Enclosure' and several smaller sites in the north.
Havant	The boundary of Havant to the south is Langstone Harbour SSSI/cSAC/SPA/Ramsar Site. SINC's include several areas of grazing marsh, and neutral grassland and woodland sites at Neville's Park on the west, and at Leigh Park in the north.

APPENDIX 2: URBAN AREAS OF HAMPSHIRE LARGER THAN 175,000 HECTARES

	URBAN AREA	SIZE (1000 ha)	POPULATION (Year 2000)	POP'N DENSITY (persons/ha)
1	Southampton	5,166	220,700	42.72
2	Portsmouth	2,910	187,945	64.59
3	Basingstoke	2,220	77,006	34.68
4	Farnborough	1,874	52,382	27.95
5	Eastleigh	1,725	49,473	28.68
6	Waterlooville	1,566	63,940	40.84
7	Gosport	1,519	69,912	46.03
8	Fareham/Porchester	1,437	55,244	38.44
9	Havant	1,147	46,168	40.24
10	Andover	1,135	35,978	31.70
11	Locks Heath	1,089	31,661	29.08
12	Winchester	1,086	37,820	34.82
13	Fleet	935	31,618	33.83
14	Aldershot	912	33,241	36.45
15	New Milton/Barton-on-Sea	844	23,985	28.43
16	Fawley	638	8,027	12.59
17	Totton	633	26,660	42.08
18	Yateley	544	15,778	28.99
19	Hythe	538	19,493	36.20
20	Stubbington	487	13,733	28.18
21	Bramley	476	2,988	6.28
22	Lymington	465	13,390	28.77
23	Romsey	460	16,859	36.64
24	Hedge End	449	17,881	39.82
25	Alton	441	16,057	36.34
26	Hayling Island	439	14,568	33.22
27	Ringwood	436	12,705	29.16
28	Petersfield	396	12,938	32.70
29	Tadley	394	14,173	35.95
30	Bordon	361	16,068	44.47
31	Bishopstoke	333	16,487	49.56
32	Marchwood	265	5,147	19.43
33	Emsworth/Southbourne	256	9,643	37.64
34	Headley	242	4,834	19.97
35	Four Marks/Medstead	225	3,223	16.48
36	Bursledon	220	6,250	28.43
37	Milford on Sea	216	4,023	18.60
38	Liss	202	5,297	26.26
39	Frogmore	201	9,907	49.27
40	Liphook	190	5,695	29.91
41	Lee-on-the-Solent	189	7,340	38.74
42	Hook	189	6,079	32.18

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This is one of many Habitat, Species and Topic Action Plans being prepared by the Hampshire Biodiversity Partnership. It will be monitored by the Partnership and fully reviewed and updated in 2007.

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