provides extensive views across Winchester and the Itchen valley. The site is managed by the Hampshire Wildlife Trust. The SSSI comprises chalk grassland and scrub occupying the spur of St. Catherine's Hill and an adjoining dry valley. The thin rendzina soils of the slopes and summit of the Iron Age hill fort support a speciesrich sward.

Unimproved chalk grassland on St. Catherine's Hill abuts the south-east edge of the city.



- 3.8.10 Cheesefoot Head SSSI is more isolated from the city, being located about four kilometres to the east, but is an important landscape feature on the approach along the A272 road. The site comprises an extensive area of species-rich chalk grassland around a horse-shoe shaped dry valley. The sward is dominated by fine grasses with a rich herb compliment. There is a vigorous population of juniper amongst mixed scrub at the western extremity of the site. The site supports a colony of the rare and declining Duke of Burgundy butterfly *Hamearis lucina*.
- 3.8.11 Chalk grassland is also present on many of the steeper scarp slopes to the south-east of Winchester, and more locally on a number of sites to the north-west of the city. The majority of the remaining areas of species-rich chalk grassland in Hampshire are designated as Sites of Interest for Nature Conservation (SINCS), and there are fifteen chalk grassland SINCs in the study area. Details of these sites are summarised in Appendix 3. The chalk grassland communities are similar to those found on the SSSIs, but are generally less species rich, and have fewer rarities. Magdalen Hill Down and Yew Hill are now being managed by the British Butterfly Conservation Society, who have cleared much scrub, with an increase in the richness of the flora and butterfly fauna.

## Ancient Woodland

3.8.12 Ancient woodland is present in the outer perimeter of the study area, and is a particular feature of clay-with-flints soils to the west of the city. The most important of the ancient woodlands is Crab Wood SSSI, which is about four kilometres west of the city centre.



- 3.8.13Crab Wood is dominated by oak *Quercus robur* over a hazel *Corylus avellana* shrub layer, and was last coppiced about twenty years ago. The ground flora is a fine example of a former coppice on clay with flints and is dominated either by bluebell *Hyacinthoides non-scripta* or dog's mercury *Mercurialis perennis*. Particular species of interest include Solomon's-seal *Polygonatum multiflorum* and lily-of-the-valley *Convallaria majalis*. The butterfly fauna is rich and includes purple emperor *Apatura iris*.
- 3.8.14 There are five additional ancient woodlands within the study area, all of which are designated as SINCs. Details of these sites are given in Appendix 3. Three of the woodlands are located to the north-west of the city; that is Northwood Park Farm Woods, Little Grove and Worthy Grove; and two to the north-east; BurntWood and Shroner Wood. The woodland vegetation is generally dominated by oak with hazel coppice, with a ground flora dominated either by bluebell *Hyacinthoides non-scripta* and bramble *Rubus fruticosus agg* or dog's mercury *Mercurialis perennis*. A wide variety of species characteristic of ancient woodland are present including wood spurge *Euphorbia amygdaloides*, sweet woodruff *Galium odoratum*, yellow archangel *Lamiastrum galeobdolon*, wood millet *Milium effusum*, Solomon's seal *Polygonatum multiflorum*, primrose *Primula vulgaris* and wood speedwell *Veronica montana*. Shroner Wood, located to the north-east of the city, adjacent to the M3, supports additional species such as nettle-leaved bellflower *Campanula trachelium*, pignut *Conopodium majus*, wood melick *Melica uniflora*, and sanicle *Sanicula europaea* which are associated with calcareous clay soils.

## Sites of Local Importance

- 3.8.15 Many areas outside the SSSI and SINC system are of some value for wildlife, and of importance to local people. The short time available for consultation made it impossible to identify all areas of value. However, the following were highlighted by the Hampshire Wildlife Trust and the nature conservation discussion group:
  - The Cathedral Precincts, Winchester College and Hospital of St. Cross, where ancient masonry not subject to heavy restoration and cleaning supports nationally important lower plant populations, predominantly lichens;
  - The combination of mature trees and buildings in the older areas of the city, such as Abbey Gardens, the Cathedral Close, and Middle Road, support important bat populations and an unusual form of ivy broomrape, Orobanche hederae forma monochroma, also Dracunculus vulgaris;
  - Mature trees, particularly beech, and associated wide grass verges, which line
    many of the routes into the city. Colonies of white helleborine Cephalanthera
    damasonium are associated with these verges, and are often cut as part of routine
    verge maintenance;
  - MoD land e.g. Bushfield, Chilcomb Ranges, which support areas of semi-improved chalk grassland and scrub.

## Species

A Biodiversity Action Plan for Hampshire is currently in preparation. The priority species identified in the plan which occur in the study area are listed in Appendix 3, Table 3. The majority of these priority species occur within sites which are notified as SSSIs or designated as SINCs on habitat grounds. However, there is a group of species which is not site specific, being associated with habitat features which are



more widespread. Skylark, stone curlew and brown hare are associated with farmland, normally predominantly arable in nature. The rarest of these species is stone curlew, which is most likely to occur on the thin chalk soils to the south-east of the city. Barn owl can be found where there are good areas of rough grassland, and may occur throughout the river valley. Pipistrelle and other species of bats use buildings as roosts, but rely on parks, gardens and other areas of open space, preferably with a mix of mature trees and grass, for foraging. Surveys have shown that the Cathedral and the surrounding areas are important for bats.

Cathedral Close, an important green space, is a valuable roost site for bats in the heart of the city.



## 3.9 Land Cover and Vegetation

A rural landscape encircles Winchester. Agricultural land extends up to most edges of the city. Other land uses on the periphery, include three golf courses, an army barracks, sewage works, allotments, nature reserves and playing fields. These are, on the whole, successful in maintaining a successful transition between urban and rural character. The new 'edge' created by the M3 motorway is raw but extensive mitigation measures will soften this effect in coming years.

- 3.9.1 The agricultural land is a mix of arable and pasture (Drawing No. 1035LP/4). Extensive areas of open arable land predominate, particularly across the elevated area of chalkland to the east of the city and within the chalk plateau to the north. To the west and south-west, the pattern is more varied with significant stretches of arable land alternating with belts of mixed arable and pasture.
- 3.9.2 This highly managed landscape contains occasional remnants of unimproved, species rich chalk grassland. Surviving fragments of downland of exceptionally high biodiversity interest are principally located on the very steep chalk escarpments, for example at Magdalen Down, St. Catherine's Hill, and part of Twyford Down. Designated as Nature Reserves these benefit from long term management plans to sustain the fine balance and survival of the diversity of species of considerable botanical and wildlife interest. Another area of chalk scrub/downland forms a strong feature penetrating the southern city edge. As a result of the initiative and efforts of the Whiteshute Ridge Conservation Group, acting on behalf of the Badger Farm Parish Council, Whiteshute Ridge, an extension of Bushfield, has been restored as a



- valuable area of chalk downland close to the centre of the city. It is now managed for public access and enjoyment and is a good example of practical restoration through local action.
- 3.9.3 Throughout this farmed landscape, numerous areas of woodland ranging in scale from large blocks to small copses, as well as hedgerow and hedgerow tree cover, provide varying degrees of enclosure. There is a mix of woodland types, including many areas of broadleaved woodland with a number identified as ancient seminatural woodland. This vegetation cover, in combination with the dramatic landform of the chalk downs, makes a very important contribution to the character and attractiveness of the landscape. By providing either a backdrop or foreground setting, it enhances and frames views both into and out of the city.
- 3.9.4 In addition, significant areas of vegetation extend into the city and form part of the urban fabric. The communication infrastructure provides an important link in this transition from rural to urban vegetation. Substantial avenues of forest scale, broadleaved trees and linear blocks of woodland enhance a number of roads entering the city, as well as the main line railway. This vegetation eventually links into the more extensive matrix of urban trees and numerous 'green' areas throughout the city. The importance of the tree and woodland cover within and beyond the city is critical and is considered in more detail in Section 4.

The watermeadows to the east of St. Cross are well used and valued by local residents throughout the city.





3.9.5 The Study Area is notable for its lack of 'brownfield' sites, as is the rest of Hampshire. An exception, located to the north east of Badger Farm Road is the site of the former Bushfield Army Camp. Although most of the buildings have been demolished, a number still remain together with remnants of the road and site infrastructure. These are contained within the greater Bushfield area where part of the land holding is farmed under tenancy with the area to the north of the camp reverting to chalk scrub/downland extending as far as St. Cross. The former Army camp is part of a more extensive network of open space/downland which presents an attractive green link into the south western fringe of the city and is an important backdrop to the Hospital of St. Cross. This link includes St Catherine's Hill, Itchen Navigation, Magdalen Down and St Giles's Hill and demonstrates the high quality

interface between town and country that is a vibrant part of Winchester's character. A prominent line of ridge top beech trees are a strong feature in views from the south city edge and St. Catherine's Hill.

- 3.9.6 The land in the vicinity of the works depot and the Sewage Works on the northeastern slopes and base of St. Catherine's Hill has a degraded character. Generally, however, the city and its immediate surroundings are remarkably free of despoiled land.
- 3.9.7 The land use and vegetation cover within the River Itchen valley is of particular importance to the city and its setting. This mix of water meadows, and river edge trees, woodland and scrub threads through a complex network of braided river channels and drainage ditches to create a highly attractive pastoral landscape that is immediately accessible from the city. The area is of very high biodiversity interest. It also encloses important, formal recreational spaces such as the playing fields of Winchester College and the recreation ground at Hyde.



Winchester City and its Setting

Landcover and Vegetation

Boundary of study area

Agricultural land



Principal areas of woodland and tree lines



Principal open / green areas within city and it's setting



Itchen Valley floodplain and water meadows



Golf courses



Built up area

LANDSCAPE DESIGN ASSOCIATES