



**LAND NORTH OF WEST DURRINGTON DEVELOPMENT (SITE 8)  
PRELIMINARY ECOLOGICAL SUMMARY REPORT**

**Prepared for Worthing Borough Council**

**by**

**Hankinson Duckett Associates**

**HDA ref: 454.2**

**November 2015**

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## **1 Site summary**

- 1.1 Site 8 comprises approximately 9.8ha of land bordered to the north a pub, a small number of residential properties and the A27 (Arundel Road); to the east by residential development; to the south by arable fields; and to the west by Forest Lane with grassland fields and residential properties beyond.
- 1.2 The site comprises agricultural land including small species-poor grassland fields in permanent pasture and a larger field in the west of the site supporting grassland ley. The boundaries of the site generally comprise native hedgerows and/or scattered scrub and mature trees. Other features within the site include a footpath passing north to south through the centre of the site lined by defunct hedgerow and trees, a pond surrounded by tall ruderal vegetation and mature trees in the south-west, and a wet ditch running along the western boundary of the large grassland ley field in the west of the site. The southern boundary of the eastern area of the site borders a strip of broadleaved woodland dominated by non-native trees.
- 1.3 Locations and detailed descriptions of the habitats present at the site are provided in the Phase 1 habitat survey plan and target notes in *Appendix A*.

## **2 Desk study**

- 2.1 No statutory nature conservation designations pertain to the site or adjacent land.
- 2.2 No areas of international importance (i.e. SPA, SAC or RAMSAR) occur within 10km and no National Nature Reserves (NNRs) occur within 5km of the site boundary.
- 2.3 The closest area of national importance to the site is 'Cissbury Ring' Site of Special Scientific Interest (SSSI) which is located approximately 3.1km to the north-east and designated for its chalk grassland habitat. No other SSSIs are located within 5km of the site boundary.
- 2.4 There are no Local Nature Reserves (LNRs) located within 2km of the site.
- 2.5 No non-statutory nature conservation designations pertain to the site. Seven Sites of Nature Conservation Importance (SNCIs) occur within 2km of the site, the closest of which is 'Titnore & Goring Woods Complex' SNCI, located approximately 130m south-west of the site.
- 2.6 The closest area of woodland listed on Natural England's inventory of Ancient Woodlands is located approximately 130m south-west of the site and forms a part of 'Titnore & Goring Woods Complex' SNCI.

- 2.7 A suite of ecological surveys carried out at the site by Waterman between 2002 and 2010 (Waterman, 2011) recorded foraging and commuting bats, breeding Great Crested Newts, Badgers, Slow-worm, Grass Snake and notable birds using the site. Hazel Dormouse was also recorded using woodland to the south-west of the site. Other records of protected and notable species provided by SBRC for within 2km of the site include Water Vole, Common Lizard, Adder, and notable invertebrates and plants.
- 2.8 The full results of the desk study including plans showing the locations of nearby designated nature conservation sites and complete protected and notable species records for within 2km of the site are provided in *Appendix B*.

### **3 Constraints and opportunities**

- 3.1 The habitat of greatest value within the site is the pond in the south-west of the site, which although is not considered to represent a high quality aquatic standing water habitat, it contributes to a network of ponds in the local area and provides opportunities for a range of wildlife. The pond is therefore considered of **moderate local** value for wildlife.
- 3.2 Although linear vegetative features within and bordering the site, including hedgerows/scrub lines, strips of woodland, scattered mature trees and the wet ditch, are likely to be of **less than local** value in their own right, they do however provide suitable opportunities for movement of wildlife and compliment habitats in the wider area so are considered in combination to be of **moderate local** wildlife value.
- 3.3 The remainder of habitats within and bordering the site, including grassland ley and species-poor semi-improved grassland which dominate the site and ruderal vegetation, are considered of **negligible/ less than local** conservation interest in their own right.
- 3.4 Any development proposals for the site should seek to retain features of local value and where appropriate enhance these features and the wider site through management and complimentary habitat creation. Ways in which this could be achieved include:
- Management to enhance the value of the existing pond including measures such as clearance of silt, twigs and leaf litter from within the pond, reduction of shading vegetation and establishment of aquatic and marginal plant species within the water and around the pond margins.
  - Enhancement of existing hedgerows/ linear scrub habitats along field boundaries through selective clearance of Bramble, infilling using a species-rich mix of native shrubs and trees, and appropriate long-term management.
  - Use of native species-rich hedgerow, scrub and tree planting as boundary features to further enhance habitat connectivity across the site and complement existing habitats.

- Creation of a range of habitats with high wildlife interest within areas of public open space such as species-rich grassland, native scrub and tree planting.
- Creation of new wetland habitats such as ponds, swales and reedbeds in conjunction with SuDS proposals.
- Creation of new opportunities for nesting birds and roosting bats through provision of bird and bat boxes on existing trees and new buildings.
- Use of native species typical of the local area in landscape planting where appropriate to do so. Where possible these should be sourced from stock of local provenance.
- Prioritising the use of plants which benefit native wildlife within formal landscaping schemes, including nectar- and pollen-rich and fruit- and nut-producing species.

#### **4 Further information requirements**

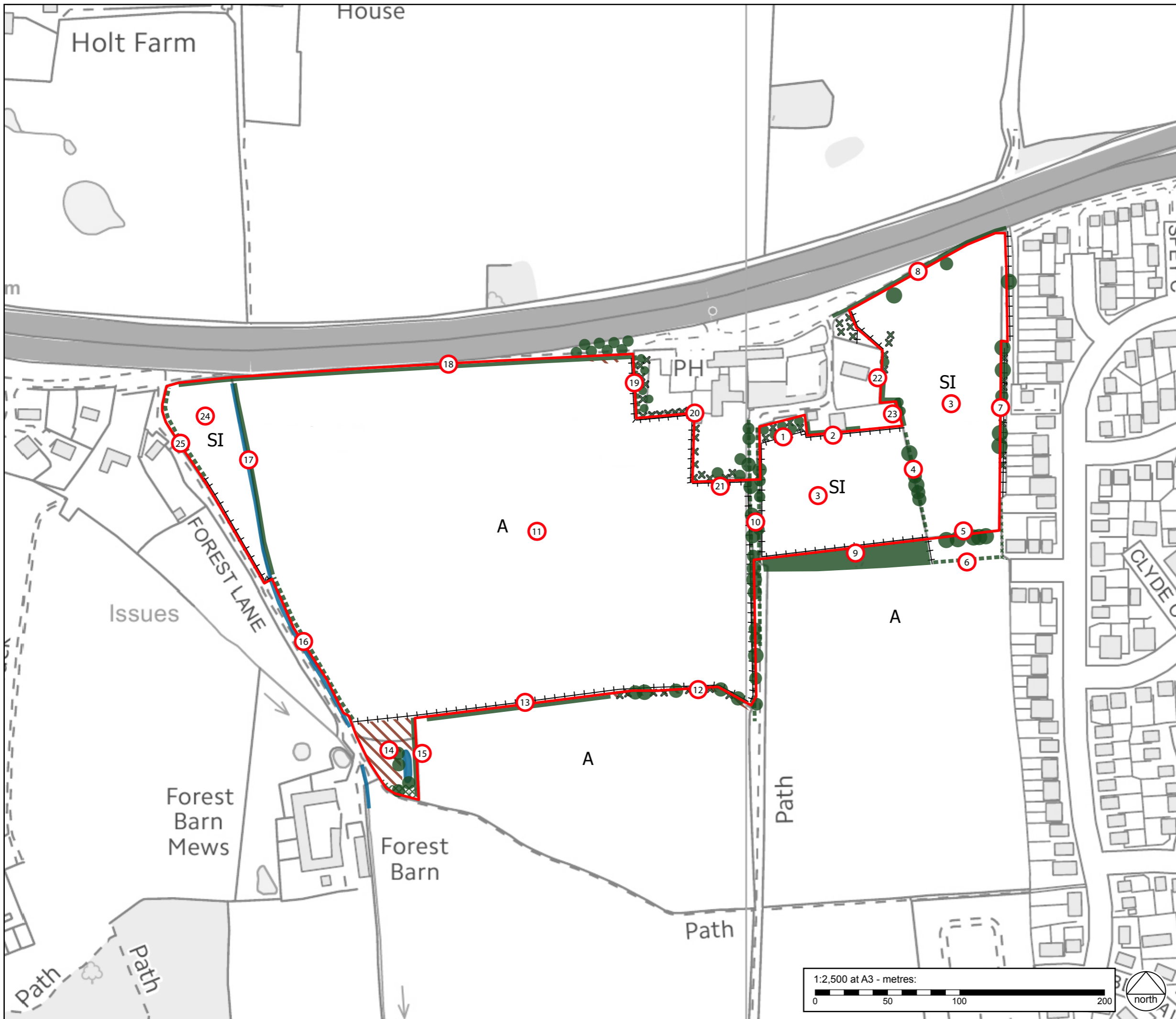
4.1 In view of the findings of the desk study and/or habitat resource of the site, consideration should be given to the requirement for the following further surveys and assessment work in support of a planning application:

- Phase 1 bat survey (scoping inspections of trees)
- Phase 2 emergence surveys (if potential for roosting bats identified during Phase 1 bat survey)
- Phase 2 bat activity survey
- Great Crested Newt survey
- Dormouse survey
- Reptile survey
- Badger survey
- Water Vole survey
- Wintering and breeding bird surveys
- Implications of increased recreational pressure on off-site designated areas both alone and in combination with other plans and projects.

4.2 It is recommended that the extended Phase 1 habitat survey and desk study are updated by the applicant prior to submission of a planning application. This is in order to ensure that the assessment of habitats at the site and its potential to support protected and notable species reflect any subsequent changes in the ecological character of the site and its surrounds, and strategic nature conservations objectives. The actual requirements for further work should also take into account the nature and extent of proposed development works.

**APPENDIX A**

**Phase 1 habitat survey: Plan and Target Notes**



**KEY**

	Site boundary
	Broadleaved woodland
	Scattered mature trees
	Intact species-poor hedgerow
	Defunct species-poor hedgerow
	Dense scrub
	Scattered scrub
	Tall ruderals
	Species-poor semi-improved grassland
	Recently seeded grassland (arable)
	Seasonally wet ditch
	Pond
	Fence
	Target note

CLIENT:  
**Worthing Borough Council**  
 PROJECT:  
**Worthing Landscape and Ecology Study**  
 TITLE:  
**Site 8 - Phase 1 Habitat Survey**  
 SCALE AT A3: 1:2,500      DATE: November 2015

454.2 / 110

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Landscape Architecture Masterplanning Ecology **hda**

## Site 8 - Target Notes

- 1. Trees and scrub:** Small wooded area dominated by mature Sycamore *Acer pseudoplatanus* trees with an understorey of Elder *Sambucus nigra*, English Elm *Ulmus procera*, Hawthorn *Crataegus monogyna* and Bramble *Rubus fruticosus* agg. Nettle *Urtica dioica* dominates the ground layer.
- 2. Garden boundary:** Short section of the site boundary bordering an adjacent residential garden, comprising stock fence and a Beech *Fagus sylvatica* hedge.
- 3. Grassland:** Species-poor semi-improved grassland heavily grazed by cattle. The sward includes Annual Meadow-grass *Poa annua*, Cocksfoot *Dactylis glomerata*, Perennial Ryegrass *Lolium perenne*, Yorkshire Fog *Holcus lanatus*, Bent-grass *Agrostis* sp., Common Mouse-ear *Cerastium fontanum*, Spear Thistle *Cirsium vulgare*, Creeping Thistle *Cirsium arvense*, Ivy-leaved Speedwell *Veronica hederifolia*, Yarrow *Achillea millefolium*, White Clover *Trifolium repens*, Dandelion *Taraxacum* agg. and Nettle.
- 4. Defunct hedgerow and trees:** Defunct outgrown field boundary hedgerow with a large proportion of gaps and early-mature and mature standard trees. Hedgerow species included Holly *Ilex aquifolium*, Elder, Hawthorn, Ash *Fraxinus excelsior* and Sycamore. Ash and Sycamore trees grow along the hedgerow.
- 5. Treeline:** Line of mature trees along the site boundary in the south-east including Common Lime *Tilia x europaea*, Sycamore and Horse Chestnut *Aesculus hippocastanum*.
- 6. Fence and scrub:** Field boundary comprising a post and wire fence with a few Elm shrubs and dense Bramble scrub along its entire length, resembling a defunct hedgerow.
- 7. Eastern boundary:** Site boundary bordering residential gardens to the east of the site comprising various garden fences with scattered trees and scrub, and dense Bramble in places. Tree and scrub species include Common Lime, Ash, Sycamore, Hawthorn and Elm.
- 8. Hedgerow:** Hedgerow and fenceline forming the north-eastern site boundary along Arundel Road (A27). The hedgerow is outgrown, mostly intact and dominated by Hawthorn and Elm with early-mature Sycamore. Adjacent to the hedgerow along the margin of the field are two mature Evergreen Oak *Quercus ilex* trees.
- 9. Woodland strip:** Narrow strip of mature broadleaved trees and scrub, some of which is likely planted. Species include Common Lime, Sycamore, Holly, Elder and Wych Elm *Ulmus glabra*.
- 10. Central footpath:** A footpath running north to south through the centre of the site is lined by outgrown defunct hedgerows including Hawthorn, Holly, Elder and Elm, with mature Sycamore trees.
- 11. Grassland ley:** Species-poor grassland seeded on arable land including Meadow Foxtail *Alopecurus pratensis*, Cocksfoot and Annual Meadow-grass. A number of common arable weeds also occur in the sward, particularly on the field margins, including White Clover, Nettle, Creeping Thistle, Spear Thistle, Bristly Ox-tongue *Picris echioides*, Tutsan *Hypericum androsaemum* and Scentless Mayweed *Tripleurospermum inodorum*. The grassland was heavily grazed by sheep at the time of survey.
- 12. Southern boundary:** Short section of the southern site boundary supporting mature trees and scattered scrub, including Sycamore, Beech, Sweet Chestnut *Castanea sativa*, Elder and Hawthorn. Dense Nettle dominates the ground layer.
- 13. Southern hedgerow:** Managed hedgerow along the southern boundary of the western grassland ley field dominated by Hawthorn with Elder, Dog Rose *Rosa canina* and Blackthorn *Prunus spinosa*. Bramble is also abundant.
- 14. Pond and ruderals:** A small fenced area in the south-west of the site comprising a pond with mature Pedunculate Oak *Quercus robur* trees and tall ruderal vegetation on previously disturbed ground. Tall ruderal vegetation dominating this area includes Spear Thistle, Creeping Thistle, Great Willowherb *Epilobium hirsutum*, Bristly Ox-tongue, Common Fleabane *Pulicaria dysenterica*, Broadleaved Dock

*Rumex obtusifolius* and Bramble. Other species present include Soft Brome *Bromus hordeaceus*, White Clover and Bittersweet *Solanum dulcamara*, as well as occasional scattered Elm and Hawthorn. The pond is heavily overshadowed by the Oak trees and adjacent hedgerow (TN15), and had only shallow water in the centre at the time of survey. Marginal plants around the banks of the pond included Water Mint *Mentha aquatica* and Water Pepper *Persicaria hydropiper*.

15. **Hedgerow:** Short section of outgrown hedgerow to the east of the pond (TN14) dominated by Hawthorn with Elm, Blackthorn and Bramble.
16. **Young western hedgerow:** A relatively young hedgerow forming the southern section of the western site boundary comprising Hawthorn, Blackthorn, Dogwood *Cornus sanguinea*, Elm and Cherry Plum *Prunus cerasifera*. The hedgerow was defunct with abundant Bramble filling the gaps.
17. **Mature hedgerow:** Mature field boundary hedgerow in the north-west of the site. The hedgerow is mostly intact but is tall and outgrown with gaps at the base filled with Bramble. The dominant woody species is Elm with occasional Blackthorn, Field Maple *Acer campestre*, Elder and Dog Rose. Along the western side of the hedgerow is a field drain with a channel approximately 1m deep and a shallow flow of water. Bramble scrub and tall ruderal vegetation including Great Willowherb and Hogweed *Heracleum sphondylium*, grows along the ditch.
18. **Northern boundary hedgerow:** Intact managed hedgerow along the northern boundary of the western section of the site. The hedgerow is fairly young and is heavily dominated by Hawthorn with occasional Sycamore.
19. **Pub boundary hedgerow:** Short section of mature defunct hedgerow bordering a pub to the north-east of the grassland ley field (TN11). The hedgerow is dominated by Hawthorn with occasional Holly, Elm and Elder, and has a ground layer of Nettle and Bramble. Japanese Knotweed *Fallopia japonica*, an invasive plant listed on Schedule 9 of the Wildlife and Countryside Act (as amended), was recorded within an area of scrub and trees just beyond the site boundary.
20. **Pub boundary:** Sections of the site boundary bordering a pub supporting scattered scrub, including Elder, Elm and Bramble, and a small Ash tree.
21. **Pub boundary:** Site boundary with scrub and trees overhanging from the adjacent pub including Sycamore, Ash, Field Maple, Beech, Cherry Laurel *Prunus laurocerasus* and Bamboo species.
22. **Garden hedge:** Leyland Cypress *Cupressus x leylandii* hedge along the site boundary bordering an adjacent garden in the north-east of the site.
23. **Hedgerow:** Hedgerow with Sycamore trees along a garden boundary in the north-east of the site with a similar species composition to hedgerow TN4.
24. **Grassland field:** A small field in the north-west of the site comprising species-poor semi-improved with a sward composition similar to TN3.
25. **Western boundary:** The northern section of the western site boundary comprises a fenceline and highly defunct hedgerow with abundant Bramble scrub. Woody scrub species forming the hedgerow include Hawthorn and Elder. A small Ash tree also grows near the northern end of the boundary.

**APPENDIX B**  
**Desk Study Results**



## Desktop Biodiversity Report

Land north of West Durrington Development, Worthing + 2km radius

ESD/15/565

Prepared for Alex Leishman (Hankinson Duckett Associates)

18th August 2015

**Sussex Biodiversity Record Centre  
report regarding  
land north of West Durrington  
Development, Worthing + 2km radius  
18/08/2015**

**Prepared for Alex Leishman  
Hankinson Duckett Associates  
ESD/15/565**

**The following information was requested:**

<b>Maps</b>	<input checked="" type="checkbox"/>
<b>Sussex Protected Species Register - Excel</b>	<input checked="" type="checkbox"/>
<b>Sussex Bat Inventory - Excel</b>	<input checked="" type="checkbox"/>
<b>Sussex Bird Inventory - Excel</b>	<input checked="" type="checkbox"/>
<b>UK BAP Species Inventory - Excel</b>	<input checked="" type="checkbox"/>
<b>Sussex Rare Species Inventory - Excel</b>	<input checked="" type="checkbox"/>
<b>Sussex Invasive Alien Species - Excel</b>	<input checked="" type="checkbox"/>
<b>Full Species List</b>	<input type="checkbox"/>
<b>Environmental Survey Directory</b>	<input checked="" type="checkbox"/>

**SNCI**

W01 - The Gallops & No Man's Land; W02 - Highdown Hill & the Miller's Tomb; W03 - The Sanctuary; W04 - Titnore & Goring Woods Complex; W05 - Ham Farm Wood; W06 - Offington Cemetery; W09 - Clapham Wood.

**SSSI**

None

**Other Designations/Ownership**

Environmental Stewardship Agreement; Local Geological Site; National Park; National Trust Property.

**Habitats**

Ancient tree; Ancient woodland; Lowland calcareous grassland; Traditional orchard; Wood-pasture and parkland.

## Important information regarding this report

**It must not be assumed that this report contains the definitive species information for the site concerned.**

The species data held by the Sussex Biodiversity Record Centre (SxBRC) is collated from the biological recording community in Sussex. However, there are many areas of Sussex where the records held are limited, either spatially or taxonomically.

A desktop biodiversity report from SxBRC will give the user a clear indication of what biological recording has taken place within the area of their enquiry. The information provided is a useful tool for making an assessment of the site, but should be used in conjunction with site visits and appropriate surveys before further judgements on the presence or absence of key species or habitats can be made. It may be that the content of this report guides the reader as to which surveys should be carried out on the site.

This report was compiled using data held at SxBRC at the time of production. SxBRC takes data validation very seriously, but cannot be held responsible for the accuracy of data included in this report.

### Copyright

**The Sussex Biodiversity Record Centre must be acknowledged in all documents containing any part of the information contained in this report.** You can also use the whole of a SxBRC report (unedited) as an appendix in your own report.

The SxBRC operates as agent to the individuals and groups who provide their records free of charge. The data suppliers retain copyright on their data, while SxBRC retains copyright on its desktop biodiversity reports.

### Data usage

The data contained within this report is for use in the project for which the data was requested. It is not to be shared with third parties for use in other projects, unless permission is granted from SxBRC.

The data may be used for 12 months, after which a replacement SxBRC report must be requested. This ensures the most up-to-date information is being used.

### Ordnance Survey maps

Members of the public wishing to reproduce maps made by SxBRC under East and West Sussex County Council or Brighton and Hove City Council licences must use copying facilities that have been authorised by Ordnance Survey (OS). Further information can be found on the [OS website](#).

### Impartiality

SxBRC functions as custodian of biological data. Our role is to collect, manage and disseminate wildlife and habitat data. As such, we have to remain impartial and cannot offer opinions on the biodiversity value of a given site. Similarly, we cannot put forward objections to planning applications or be involved in campaigns.

### Supplying records

Our desktop biodiversity reports are only as good as the data we hold. We rely on the continuous submission of records to keep our database up-to-date. We are always grateful to receive records from ecological consultants and members of the public alike. We accept records in many different formats – please see our [website](#) for more details.

## Confidential Records

The following species are not included in desktop biodiversity reports

### Badgers

Badgers are one of our most recognisable native British mammals. They are not considered rare but are protected along with their setts under The Protection of Badgers Act 1992 and schedule 6 of the Wildlife and Countryside Act (1981, as amended).



It is an offence to kill, injure, or take a badger or interfere with a badger sett.

“Interference” is defined by section 3 of The Protection of Badgers Act and includes damaging or destroying a badger sett, obstructing any entrance to a sett and also disturbing a badger when it is occupying a sett. If you need to do any work near to a sett (within 30m) you must contact Natural England for guidance as your activities may require a licence.

**With continued persecution of badgers, often for the most cruel and barbaric ‘sport’, badger records are not included in our species inventory reports, as it has been requested that they remain confidential.**

If you need further information about badgers in your enquiry area please contact the Badger Trust Sussex. Contact details can be found on their website: [www.badgertrust-sussex.org.uk](http://www.badgertrust-sussex.org.uk)

### Otters

Otters are slowly making a return to Sussex after becoming extinct in the 1960s, but are nowhere near their former numbers and remain very vulnerable.

If there is a river or tributary within 1km of your enquiry area please be aware of the potential for otters in the vicinity, especially if you are undertaking operations that may impact potential otter habitat.



Otters are protected by European and UK law. It is an offence under the Wildlife and Countryside Act 1981 to kill, injure or take an otter from the wild without a licence; to damage or obstruct a holt; or disturb an otter in its resting place. Licences are required for checking holts or for carrying out work that may disturb otters, such as the management of trees that are known to be used as resting sites. Natural England are responsible for issuing these licences in England.

**If you need to find out if otters have been recorded in your enquiry area, please get in touch with the Record Centre.**

### Wood White and Duke of Burgundy butterflies

These two rare butterfly species have a very restricted range in Sussex and records have been made confidential based on advice given from Butterfly Conservation Sussex Branch.

### Other confidential records

SxBRC holds records of other species that are confidential. Confidentiality can be for a variety of reasons but is usually to benefit the site or the species. If you need to know if any confidential records have been recorded in your enquiry area, please get in touch with the Record Centre.

## MAPS

There are three maps included in a standard desktop biodiversity report which show designated sites (statutory and non-statutory); habitats and natural features; and ownership and management.

The key on a map only shows those layers which are located within the enquiry area or immediate area. Below is a list of all layers which we currently show on our maps, with details of the data source. Citation sheets and further information on each layer can be found towards the back of the pdf report.

<b>Designated sites</b>	
<b>Statutory</b>	
Area of Outstanding Natural Beauty (AONB)	Downloaded from NE website.
Country Park	Downloaded from NE website.
Local Nature Reserve (LNR)	Downloaded from NE website.
Marine Conservation Zone (MCZ)	Downloaded from NE website.
Marine Site of Nature Conservation Importance (MSNCI)	Supplied by ESCC in 2005.
National Nature Reserve (NNR)	Downloaded from NE website.
National Park	Downloaded from NE website.
Ramsar	Downloaded from NE website.
Site of Special Scientific Interest (SSSI)	Downloaded from NE website.
Special Area of Conservation (SAC)	Downloaded from NE website.
Special Protection Area (SPA)	Downloaded from NE website.
<b>Non-Statutory</b>	
Local Geological Site (LGS)	Originally supplied as hand drawn maps by the Booth Museum (Brighton) in 2009, LGS boundaries were digitised by SxBRC. Site boundaries are now administered by SxBRC and the Sussex Geodiversity Partnership and have been further improved as a result of ground surveys between 2010 to 2012.
Notable Road Verge	Owned and provided by ESCC and WSCC.
Site of Nature Conservation Importance (SNCI)	Supplied by WSCC, ESCC & BHCC.
<b>Habitats and natural features</b>	
Ancient/veteran tree	Merged dataset created in July 2009. Data from Ancient Tree Hunt (national survey carried out in 2007/2008) and Tree Register of the British Isles (a charity which collates and updates data on notable trees).
Ancient woodland	Downloaded from NE website.
Black poplar	Created by SxBRC based upon species records arising from Sussex Wetland Landscapes Project.
Chalk stream	Created and owned by SWLP and SxBRC.
Coastal & floodplain grazing marsh	Downloaded from NE website.
Coastal saltmarsh	Supplied by EA, based on data from the SRCMP Habitat Mapping Project.
Coastal sand dune	Supplied by EA, based on data from the SRCMP Habitat Mapping Project.
Coastal vegetated shingle	Downloaded from NE website.
Ghyll woodland	Boundaries drawn on paper maps by Dr Francis Rose which were then digitised by SxBRC. Not ground-truthed.
Intertidal chalk	Supplied by EA, based on data from the SRCMP Habitat Mapping Project.

Intertidal mudflat	Supplied by EA, based on data from the SRCMP Habitat Mapping Project.
Lowland calcareous grassland	Merged dataset from NE and SDJC sources, created in 2005. Administered by SxBRC.
Lowland fen	Created by SxBRC in June 2011. Layer is an amalgamation of all the fen data currently available to SxBRC.
Lowland heathland	High Weald Heathland data created by the High Weald Unit in 2006. The rest of Sussex Heathland data was created by SxBRC, with funding from WSCC and RSPB in 2007.
Lowland meadow	Downloaded from NE website.
Maritime cliff and slope	Supplied by EA, based on data from the SRCMP Habitat Mapping Project.
Open water	Derived from OS mapping. This includes inland and tidal, running and standing water.
Reedbed	Created by SxBRC in June 2011. Layer is an amalgamation of all the reedbed data currently available to SxBRC.
Saline lagoon	Created by SxBRC.
Traditional orchard	Downloaded from NE website.
Wood-pasture & parkland	Downloaded from NE website.
<b>Ownership and management</b>	
Environmental Stewardship Agreement	Downloaded from NE website.
National Trust property	Owned and provided by National Trust.
RSPB reserve	Owned and provided by RSPB. Downloadable from their website.
Sussex Wildlife Trust reserve	Created and maintained by SxBRC on behalf of SWT.
Woodland Trust site	Owned and provided by the Woodland Trust.

### Abbreviations

BHCC	Brighton and Hove City Council
EA	Environment Agency
ESCC	East Sussex County Council
NE	Natural England
PTES	People's Trust for Endangered Species
RSPB	Royal Society for the Protection of Birds
SDJC	South Downs Joint Committee
SRCMP	Strategic Regional Coastal Monitoring Programme
SxBRC	Sussex Biodiversity Record Centre
SWLP	Sussex Wetland Landscapes Project
SWT	Sussex Wildlife Trust
WSCC	West Sussex County Council

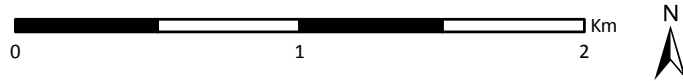
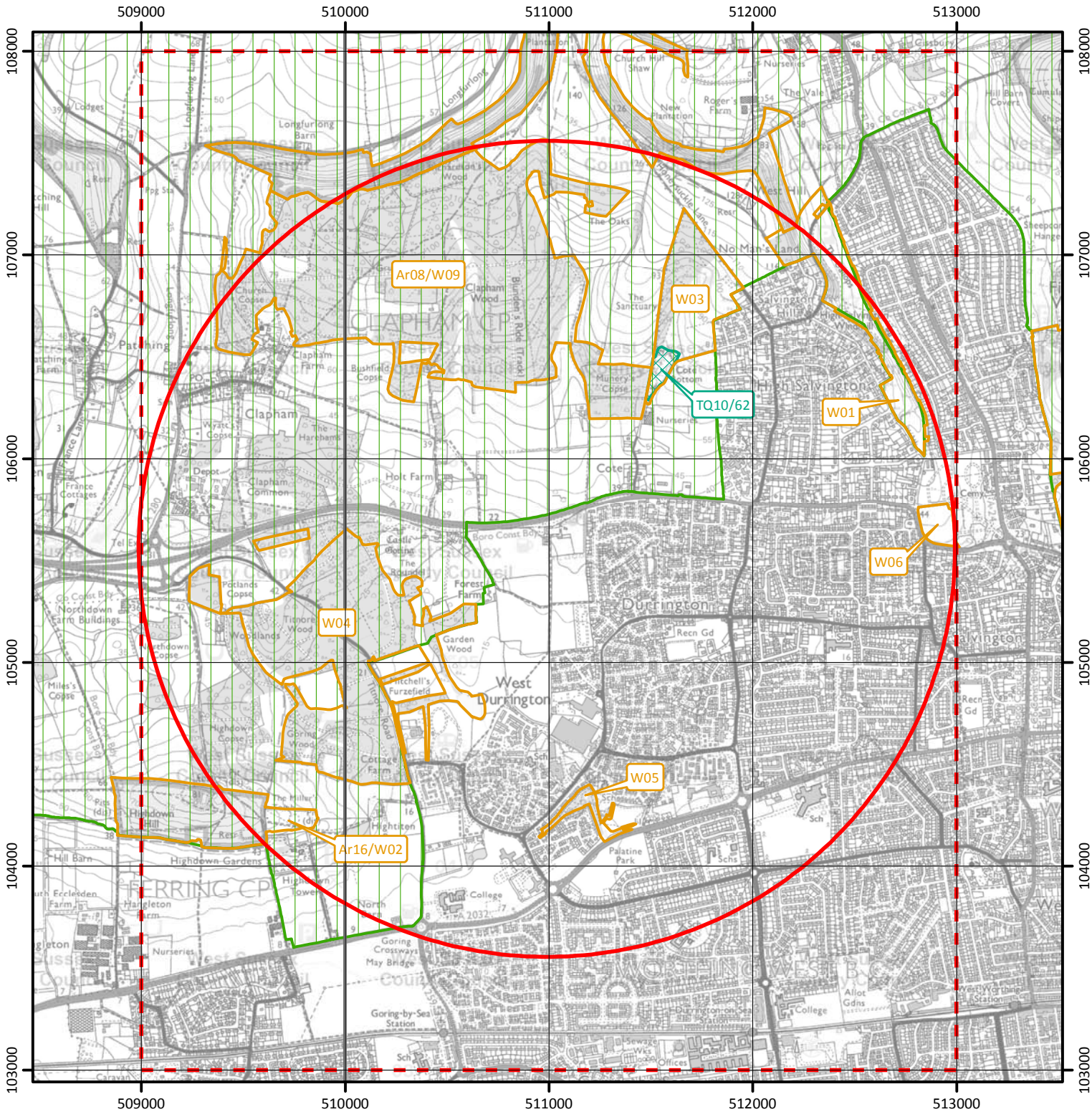
### Natural England datasets

These are available for anyone to download and use in their own Geographical Information System (GIS). Visit [www.gis.naturalengland.org.uk](http://www.gis.naturalengland.org.uk) for more information and register as a user.

# Designated Site Map (ESD/15/565)

Land north of West Durrington Development, Worthing + 2km radius

Prepared for Alex Leishman (Hankinson Duckett Associates) - 18/08/2015



**Key to Map:**

-  Enquiry area
-  Species search area
-  SNCI
-  National Park
-  LGS

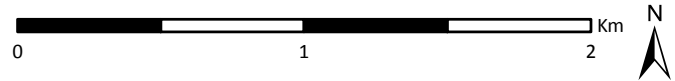
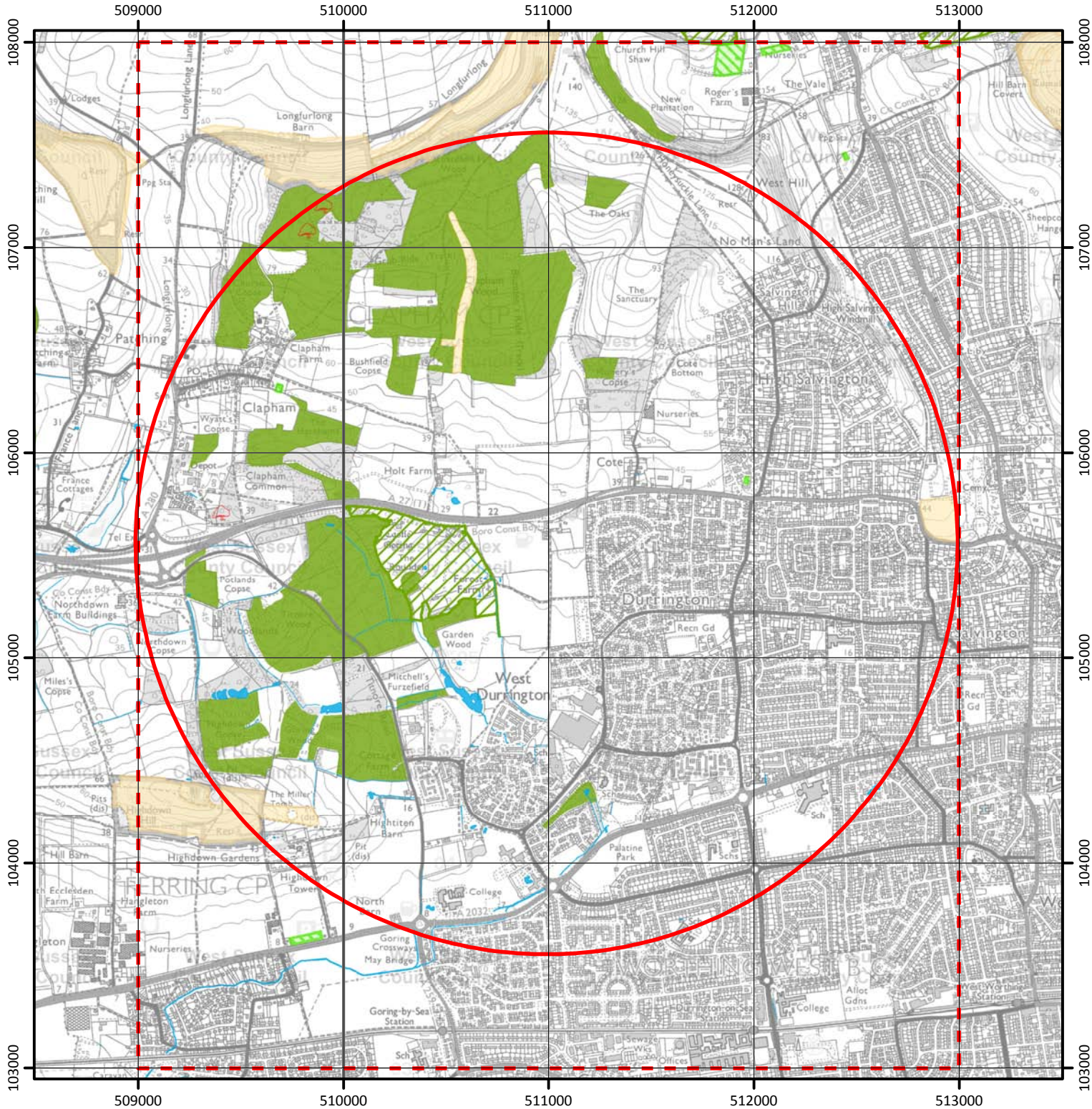
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RAMSAR, Special Area of Conservation (SAC), Special Protection Area (SPA), National Park, Area of Outstanding Natural Beauty (AONB), National Nature Reserve (NNR), Site of Special Scientific Interest (SSSI), Local Nature Reserve (LNR) and Country Park data reproduced with permission of Natural England. Site of Nature Conservation Importance (SNCI) data provided by East and West Sussex County Councils, and Brighton & Hove City Council. Notable Road Verge data supplied by East and West Sussex County Councils. Local Geological Site (LGS) data created by Sxbrc in partnership with Sussex Geodiversity Group. © Crown Copyright. All rights reserved 2015.

# Habitat & Natural Features Map (ESD/15/565)

Land north of West Durrington Development + 2km radius

Prepared for Alex Leishman (Hankinson Duckett Associates) - 18/08/2015



**Key to Map:**

-  Enquiry area
-  Species search area
-  Ancient/veteran tree
-  Open Water
-  Traditional orchard
-  Wood-pasture & parkland
-  Ancient woodland
-  Lowland calcareous grassland

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Ancient woodland, traditional orchards, woodpasture and parkland, vegetated shingle and saline lagoon data reproduced with permission of Natural England. Revised coastal and floodplain grazing marsh data remains provisional and is also reproduced with permission of Natural England. Chalk grassland data supplied by Natural England and South Downs Conservation Board. Black Poplar data supplied by Sussex Wetland Landscapes Project. Ghyll woodland data supplied by Dr Francis Rose. Reedbed data funded by Environment Agency and West Sussex County Council is provided by Sussex Biodiversity Record Centre and maintained by RSPB. Heathland data funded by West Sussex County Council, RSPB and High Weald AONB Unit. Ancient/veteran tree data derived from results of the Ancient Tree Hunt Project and the Tree Register of the British Isles (TROBI). South East Coastal Habitat Mapping data reproduced with permission of Environment Agency. © Crown Copyright. All rights reserved 2015.

Habitat data held by Sussex Biodiversity Record Centre (SxBRC) are created in-house or obtained from a variety of dataset providers. SxBRC continually strive to further improve and update these data wherever possible. However, this map should be treated as indicative rather than definitive: data may be generated from a range of field survey and/or predictive methods, each of which may have its own inherent limitations. In some situations a recent ground survey may be required to establish definitively the current status of a particular habitat at a specific location.



## Sussex Environmental Survey Directory

Report on behalf of Alex Leishman (Hankinson Duckett Associates) regarding land north of West Durrington Development, Worthing + 2km radius.

Our Ref: ESD/15/565

Date: 18-Aug-15

The Sussex Environmental Survey Directory (ESD) was initiated in 1990 as a tool to report on biological surveys that had taken place in Sussex. The directory now contains information on over 2,000 surveys covering over 22,000 sites. This report details what surveys have been carried out on specific sites and directs the enquirer to where this information is held. The Record Centre does not hold copies of all the reports that it refers enquirers to, but simply directs the enquirer to organisations or individuals who do.

The directory is updated on a weekly basis and also contains summary data on the county's ornithological data, (courtesy of the Sussex Ornithological Society) and on the county's geological sites (courtesy of the Booth Museum).

<b>Survey Name</b>	Clapham Wood Management Plan - (3659)	
<b>Survey Author</b>	RJ Dyer	
<b>Survey Comment</b>	Clapham wood is an ancient semi natural woodland situated within the South Downs Area of Outstanding Natural Beauty. The management plan has been produced so that the woodland can be improved by the owner in accordance with a plan agreed by the Forestry Authority and the County Council.	
<b>Date</b>	February 1993	
<b>Site Name</b>	Clapham Wood - SNCI Ar08	TQ105070
<b>Site Comment</b>	An ancient semi-natural woodland on the undulating dip slope of the South Downs. Variable damage occurred in the 1987 storm. It has a variety of soil types.	
<b>Copies Available</b>	SxBRC Digital	

<b>Survey Name</b>	Management Plan for Whitebeam Woods, Durrington - (3668)
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<b>Survey Author</b>	BRITISH TRUST CONSERVATION VOLUNTEERS
<b>Survey Comment</b>	An Area of semi natural woodland surrounded by recently built housing, with an area of open parkland on its Eastern boundary. Dominated by oak, English oak and Turkey Oak with Ash, Field Maple and English Elm.
<b>Date</b>	March 1995
<b>Site Name</b>	Ham Farm Wood - SNCI W05 <span style="float: right;">TQ112044</span>
<b>Site Comment</b>	An ancient woodland within the built up area of Worthing. It consists of ash, field maple and english elm over hazel and sweet chestnut and sycamore coppice. An old pond to the south has abundant crack willow. It is owned by Worthing BC.
<b>Copies Available</b>	SxBRC Digital

<b>Survey Name</b>	Draft Woodland Management Plan-The Harehams Clapham - (3782)
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<b>Survey Author</b>	*
<b>Survey Comment</b>	
<b>Date</b>	TBC
<b>Site Name</b>	The Harehams <span style="float: right;">TQ097061</span>
<b>Site Comment</b>	Predominantly Hazel coppice with Oak standards.
<b>Copies Available</b>	SxBRC Digital

<b>Survey Name</b>	Storm Damage Clearance in West Sussex - (221)
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<b>Survey Author</b>	ROBERTS, Graham
<b>Survey Comment</b>	Surveys of several woods noting the general species composition of the woods and the effects of storm damage. It is a bound report and gives management suggestions.
<b>Date</b>	4.89, 10.89
<b>Site Name</b>	Clapham Wood (Part of SNCI Ar08) <span style="float: right;">TQ104070</span>
<b>Site Comment</b>	An ancient coppice woodland which is mainly derelict Hazel coppice with Oak standards.It has a rich ground flora including Stinking Iris.
<b>Copies Available</b>	WSCC

<b>Survey Name</b>	Titnore Lane Realignment - Vegetation Survey - (256)	
<b>Survey Author</b>	ANDREWS, John	
<b>Survey Comment</b>	A detailed botanical survey of the area of woodland affected by the proposed lane realignment. (Phase II)	
<b>Date</b>	6.96	
<b>Site Name</b>	Titnore Road/Lane (Realignment Scheme Section)	TQ100050
<b>Site Comment</b>	The area of woodland along Titnore Lane is damp and one of the more floristically rich areas of the wood.	
<b>Copies Available</b>	WSCC	

<b>Survey Name</b>	Bryophytes and Lichens in Chalk Grassland in West Sussex. - (283)	
<b>Survey Author</b>	ROSE, Francis (Dr).	
<b>Survey Comment</b>	A detailed survey of the Bryophytes (mosses and liverworts) on West Sussex chalk grassland. Areas were identified from Graham Steven's chalk grassland report of 1992. Each area is given a grading according to how rich it is in Bryophytes. Much information was gathered during spring 1993, but information from previous years is also included. (Phase II). [SxBRC (2 copies) filed in G1-3 Box].	
<b>Date</b>	1.93-4.93	
<b>Site Name</b>	Highdown Hill NT	TQ095042
<b>Site Comment</b>	Relict area of chalk grassland some degraded through fertiliser application and hay cutting. Highdown Hill owned by NT. The scrub is confined to narrow strips along the boundary hedgerows and to the old chalk pits. Hill-fort on summit with a clump of trees planted in 1890's. A rich and varied molluscan fauna, including scarce and RDB species.	
<b>Copies Available</b>	SxBRC Boxes, WSCC, EN/LEWES/LIB	

<b>Survey Name</b>	Report on the Molluscs of the West Sussex Chalk Downs 1993 - (293)	
<b>Survey Author</b>	WILLING, Martin J	
<b>Survey Comment</b>	Land molluscs were surveyed at 68 chalk grassland sites in West Sussex (plus 2 further sites reported to the author following completion of the main text). At each site field searches were undertaken and bulk samples of vegetation were taken to record smaller species. Species found are given an abundance rating at sites being newly surveyed for molluscs. The report also contains notes on selected species. (Phase II). [SxBRC copies held in G8 Molluscs box].	
<b>Date</b>	8.92-4.93	
<b>Site Name</b>	Highdown Hill SE Corner	TQ096042
<b>Site Comment</b>		
<b>Copies Available</b>	SxBRC Digital, WSCC, EN/LEWES/LIB	

<b>Survey Name</b>	National Trust Biological Survey/Nature Conservation Evaluation - (324)	
<b>Survey Author</b>	NATIONAL TRUST	
<b>Survey Comment</b>	A comprehensive, ongoing, ecological survey covering stratigraphy, sedimentology and Petrology. Management Prescriptions were written for some of the sites. Species lists for some sites are held at Cirencester. (Phase II/III).	
<b>Date</b>	1983-	
<b>Site Name</b>	Highdown Hill NT	TQ095042
<b>Site Comment</b>	Relict area of chalk grassland some degraded through fertiliser application and hay cutting. Highdown Hill owned by NT. The scrub is confined to narrow strips along the boundary hedgerows and to the old chalk pits. Hill-fort on summit with a clump of trees planted in 1890's. A rich and varied molluscan fauna, including scarce and RDB species.	
<b>Copies Available</b>	, SxBRC Digital, SxBRC Digital	

<b>Survey Name</b>	Amphibians in Sussex - A Site Inventory - (334)	
<b>Survey Author</b>	BANKS, Brian, ELLIOTT, M.	
<b>Survey Comment</b>	A survey of many ponds in Sussex for their breeding amphibians. Data taken from a summary report entitled 'Amphibians in Sussex - A Site Inventory'. [SxBRC copy held in box G6].	
<b>Date</b>	1980-1989	
<b>Site Name</b>	Northbrook Pond / Durrington Pond	TQ106042
<b>Site Comment</b>		
<b>Copies Available</b>	EN, SxBRC Archive, WSCC	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	Potlands Copse (pSNCI)	TQ093054
<b>Site Comment</b>	Potential SNCI. A woodland on gently sloping north facing slopes dominated by oak standards about 100yrs old with ash, birch and a few conifers. Hazel coppice on lower slopes, sweet chestnut coppice on upper slopes. A well managed coppice wood with boundary banks.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	The Miller's Tomb (Part of SNCI W02)	TQ097043
<b>Site Comment</b>	An area of species rich chalk grassland with a chalk pit. The pit has much scrub.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	Shaw, South of A27 at Clapham (Part of SNCI W04)	TQ097057
<b>Site Comment</b>	A small strip of regenerated ancient or old secondary woodland.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	Titnore Wood & Goring Woods (Part of SNCI W04)	TQ100052
<b>Site Comment</b>	The largest area of ancient woodlands in Worthing in 1992. Most is even aged oak standards over hazel coppice with a rather sparse ground flora.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)		
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<b>Survey Author</b>	FINCH, Marion, CLARK, Louise		
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.		
<b>Date</b>	1990-3.92		
<b>Site Name</b>	West Lodge Copse, Goring Wood (pSNCI)		TQ100056
<b>Site Comment</b>	Potential SNCI. A highly modified area of secondary woodland much of which has been cleared leaving standards over rye grass. The remaining woodland is oak over hazel coppice.		
<b>Copies Available</b>	WSCC, EN/SSSI/SCI		

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)		
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<b>Survey Author</b>	FINCH, Marion, CLARK, Louise		
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.		
<b>Date</b>	1990-3.92		
<b>Site Name</b>	Goring Wood & Street's Copse (Part of SNCI W04)		TQ100046
<b>Site Comment</b>	A large block of ancient woodland on east facing slopes. Oak standards over hazel coppice. Much clearance has been undertaken.		
<b>Copies Available</b>	WSCC, EN/SSSI/SCI		

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)		
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<b>Survey Author</b>	FINCH, Marion, CLARK, Louise		
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.		
<b>Date</b>	1990-3.92		
<b>Site Name</b>	Mitchell's Furzefield (Part of SNCI W04)		TQ101048
<b>Site Comment</b>	A possibly ancient wood on gentle south facing slopes leading down to a damp area and ditch in the SE corner.		
<b>Copies Available</b>	WSCC, EN/SSSI/SCI		

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)		
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise		
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.		
<b>Date</b>	1990-3.92		
<b>Site Name</b>	Hightiten Barn Pond (pSNCI)		TQ101043
<b>Site Comment</b>	Potential SNCI. Set within an arable field about 20m away from Goring Wood. A pond about 5m wide with good scrubby banks. Water looking unpolluted and it is deeper and more permanent than a dew pond.		
<b>Copies Available</b>	WSCC, EN/SSSI/SCI		

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)		
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise		
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.		
<b>Date</b>	1990-3.92		
<b>Site Name</b>	South Lodge Plantation, Goring (Part of SNCI W04)		TQ103049
<b>Site Comment</b>	Old secondary or possibly ancient woodland. A roadside boundary is formed by a characteristically medieval bank/ditch boundary.		
<b>Copies Available</b>	WSCC, EN/SSSI/SCI		

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)		
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise		
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.		
<b>Date</b>	1990-3.92		
<b>Site Name</b>	Wood East of Titnore Road - (pSNCI) (Developed)		TQ104047
<b>Site Comment</b>	Potential SNCI. Most of this area has been cleared leaving only the northern edge and stream, the eastern edge and a strip along Titmore Road. These areas are ancient woodland.		
<b>Copies Available</b>	WSCC, EN/SSSI/SCI		

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	Upper Northbrook Farm Pond (Part of SNCI W04)	TQ106048
<b>Site Comment</b>	A pond which merges into damp woodland on its northern edge. It has shrubby areas, large patches of marginal flora and aquatic flora. Included in the Titmore and Goring Woods complex SNCI	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	Small Pond in Field, Upper Northbrook Farm (pSNCI)	TQ106049
<b>Site Comment</b>	Potential SNCI. A small pond set in an arable field with a margin of shrub and tall grass.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	Northbrook Pond & Nature Area (pSNCI) (Developed)	TQ106041
<b>Site Comment</b>	Potential SNCI. This site consists of a small pond and its margins and hedgerow. They are owned by Worthing District Council and managed for nature conservation. There is a Friends of Northbrook Pond group which looks after the site.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	Lower Northbrook Farm Wood (pSNCI)	TQ106041
<b>Site Comment</b>	Potential SNCI. A secondary woodland with a canopy dominated by sycamore.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	A2032 Shaw, West Durrington (pSNCI)	TQ110040
<b>Site Comment</b>	Potential SNCI. A 10m strip running for about 50m beside the A259 with a ditch forming the NW boundary. It is a remnant of a semi-natural woodland. It is a useful wildlife corridor.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	The Oaks & Land to West, Clapham (pSNCI)	TQ112073
<b>Site Comment</b>	Potential SNCI. An ancient woodland of oak and ash standards over well developed coppice/shrub layers. Part of site is within SNCI Ar08.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	Ham Farm Wood - SNCI W05	TQ112044
<b>Site Comment</b>	An ancient woodland within the built up area of Worthing. It consists of ash, field maple and english elm over hazel and sweet chestnut and sycamore coppice. An old pond to the south has abundant crack willow. It is owned by Worthing BC.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	Ham Farm Nurseries/Longcroft Park (pSNCI)	TQ113043
<b>Site Comment</b>	Potential SNCI. Predominately an open space with species poor amenity grassland and planted specimen trees. Along the north edge there is an area of planted native trees and shrubs. Owned by Worthing BC. Part of site falls within SNCI W05.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	The Sanctuary, High Salvington (pSNCI)	TQ116067
<b>Site Comment</b>	Potential SNCI. Predominately species-rich chalk scrub developed over chalk grassland with older secondary woodland on the upper slopes. There are some open chalk grassland areas. Owned by Worthing BC. There are disturbed chalk pits at the southern end. Most of site falls within SNCI W03.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)		
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise		
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.		
<b>Date</b>	1990-3.92		
<b>Site Name</b>	Training Centre, Worthing (pSNCI) (Developed)		TQ117044
<b>Site Comment</b>	Potential SNCI. Most of this site has been built on. The remainder is heavily grazed semi improved calcareous grassland with areas of hawthorn scrub with taller grasses. Building on site is known as Gateway House.		
<b>Copies Available</b>	WSCC, EN/SSSI/SCI		

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)		
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<b>Date</b>	1990-3.92		
<b>Site Name</b>	Scrub/Hedge SW of The Oaks, Clapham (pSNCI)		TQ114072
<b>Site Comment</b>	Potential SNCI. A 5-10m wide by 20-30m long thick hedge on the south facing slope of the South Downs. Much undergrowth beneath the shrubs.		
<b>Copies Available</b>	WSCC, EN/SSSI/SCI		

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)		
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<b>Date</b>	1990-3.92		
<b>Site Name</b>	Dew Pond nr The Sanctuary, High Salvington (pSNCI)		TQ114070
<b>Site Comment</b>	Potential SNCI. Set in an arable field, the dewpond is greater than 10m in diameter.		
<b>Copies Available</b>	WSCC, EN/SSSI/SCI		

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
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<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	West Hill (Fields nr The Sanctuary), High Salvington (pSNCI)	TQ117067
<b>Site Comment</b>	Potential SNCI. The site consists of two neutral fields separated by a hedge. Hedgerows surround the site. They are species rich. Some of site falls within SNCI W03.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
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<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	Swandean Hospital Grounds & Field (pSNCI)	TQ118059
<b>Site Comment</b>	Potential SNCI. The site consists of the hospital grounds and a 100m.sq. field in the north-west of the site. The hospital grounds have amenity grassland and landscaping shrubs and trees. The field is used for grazing.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
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<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	No Man's Land, High Salvington (pSNCI)	TQ122071
<b>Site Comment</b>	Potential SNCI. The site has a strip of secondary oak/ash woodland bordering species-rich calcareous grassland. The lower slopes in the east of the site are rank, poor grassland used for parking. Most of site forms part of The Gallops and No Man's Land SNCI W01.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	West Sussex Potential SNCI Project - (397)	
<b>Survey Author</b>	FINCH, Marion, CLARK, Louise	
<b>Survey Comment</b>	A survey of potential SNCIs to assess their significance. Incidental records of mammals, birds, butterflies and moths, and ferns/bryophytes/lichens were included. ONLY West Sussex covered in the survey. Where relevant, info. In EN/SSSI Files. NB: some sites listed below have since been designated, and are now named accordingly.	
<b>Date</b>	1990-3.92	
<b>Site Name</b>	The Gallops (Part of SNCI W01)	TQ125067
<b>Site Comment</b>	A long strip of scrub/grassland running north to south on a north-east facing slope. It is a mosaic of secondary woodland, tall herb, chalk grassland and amenity grassland. The scrub and tall herb are encroaching. Part of The Gallops and No Man's Land SNCI W01. The site also has a small chalk cliff.	
<b>Copies Available</b>	WSCC, EN/SSSI/SCI	

<b>Survey Name</b>	Invertebrate Site Register - (480)	
<b>Survey Author</b>	WILLING, Martin J, PARSONS, M.	
<b>Survey Comment</b>	The Invertebrate Site Register is a document listing sites which are important for invertebrates. It is regularly updated and revised. Information for each site usually includes a site description, the main invertebrate interest and some general comments. This is a collation of information from a variety of sources. (Phase II)	
<b>Date</b>	-	
<b>Site Name</b>	Highdown Hill NT	TQ095042
<b>Site Comment</b>	Relict area of chalk grassland some degraded through fertiliser application and hay cutting. Highdown Hill owned by NT. The scrub is confined to narrow strips along the boundary hedgerows and to the old chalk pits. Hill-fort on summit with a clump of trees planted in 1890's. A rich and varied molluscan fauna, including scarce and RDB species.	
<b>Copies Available</b>	EN	

<b>Survey Name</b>	Designated SNCIs (in West Sussex) - (500)	
<b>Survey Author</b>	WSCC	
<b>Survey Comment</b>	All SNCIs in West Sussex are covered here. All sites have management prescriptions. Each site was surveyed botanically, but additional information on other groups is included where known. (A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produced). (Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites were added and 1 deleted. [NB: a number of additional sites are also included which are not designated, but which were presumably considered for designation at some stage, or which were at some time designated but which have since be deselected].	
<b>Date</b>	1990-	
<b>Site Name</b>	Ham Farm Wood - SNCI W05	TQ112044
<b>Site Comment</b>	An ancient woodland within the built up area of Worthing. It consists of ash, field maple and english elm over hazel and sweet chestnut and sycamore coppice. An old pond to the south has abundant crack willow. It is owned by Worthing BC.	
<b>Copies Available</b>	EN, SWT, WSCC	

<b>Survey Name</b>	Designated SNCIs (in West Sussex) - (500)	
<b>Survey Author</b>	WSCC	
<b>Survey Comment</b>	All SNCIs in West Sussex are covered here. All sites have management prescriptions. Each site was surveyed botanically, but additional information on other groups is included where known. (A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produced). (Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites were added and 1 deleted. [NB: a number of additional sites are also included which are not designated, but which were presumably considered for designation at some stage, or which were at some time designated but which have since be deselected].	
<b>Date</b>	1990-	
<b>Site Name</b>	Clapham Wood - SNCI Ar08	TQ105070
<b>Site Comment</b>	An ancient semi-natural woodland on the undulating dip slope of the South Downs. Variable damage occurred in the 1987 storm. It has a variety of soil types.	
<b>Copies Available</b>	EN, SWT, WSCC	

<b>Survey Name</b>	Designated SNCIs (in West Sussex) - (500)	
<b>Survey Author</b>	WSCC	
<b>Survey Comment</b>	All SNCIs in West Sussex are covered here. All sites have management prescriptions. Each site was surveyed botanically, but additional information on other groups is included where known. (A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produced). (Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites were added and 1 deleted. [NB: a number of additional sites are also included which are not designated, but which were presumably considered for designation at some stage, or which were at some time designated but which have since be deselected].	
<b>Date</b>	1990-	
<b>Site Name</b>	The Gallops & No Man's Land - SNCI W1	TQ124069
<b>Site Comment</b>	Owned by Worthing Borough Council.This site consists of areas of calcaerous grassland set within a mosaic of ranker grassland;scrub and secondary woodland.	
<b>Copies Available</b>	EN, SWT, WSCC	

<b>Survey Name</b>	Designated SNCIs (in West Sussex) - (500)	
<b>Survey Author</b>	WSCC	
<b>Survey Comment</b>	All SNCIs in West Sussex are covered here. All sites have management prescriptions. Each site was surveyed botanically, but additional information on other groups is included where known. (A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produced). (Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites were added and 1 deleted. [NB: a number of additional sites are also included which are not designated, but which were presumably considered for designation at some stage, or which were at some time designated but which have since be deselected].	
<b>Date</b>	1990-	
<b>Site Name</b>	The Sanctuary, High Salvington - SNCI W03	TQ117067
<b>Site Comment</b>	Owned by Worthing Borough Council;this site consists of a south facing combe and slope located on the edge of High Slavington.It includes chalk grassland;scrub and woodland.	
<b>Copies Available</b>	EN, SWT, WSCC	

<b>Survey Name</b>	Designated SNCIs (in West Sussex) - (500)	
<b>Survey Author</b>	WSCC	
<b>Survey Comment</b>	All SNCIs in West Sussex are covered here. All sites have management prescriptions. Each site was surveyed botanically, but additional information on other groups is included where known. (A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produced). (Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites were added and 1 deleted. [NB: a number of additional sites are also included which are not designated, but which were presumably considered for designation at some stage, or which were at some time designated but which have since be deselected].	
<b>Date</b>	1990-	
<b>Site Name</b>	Titnore & Goring Woods Complex - SNCI W4 (Old Boundaries)	TQ100050
<b>Site Comment</b>	This woodland is the largest in Worthing Borough; much of it is ancient. Site has boundaries prior to 1994 revision.	
<b>Copies Available</b>	EN, SWT, WSCC	

<b>Survey Name</b>	Designated SNCIs (in West Sussex) - (500)	
<b>Survey Author</b>	WSCC	
<b>Survey Comment</b>	All SNCIs in West Sussex are covered here. All sites have management prescriptions. Each site was surveyed botanically, but additional information on other groups is included where known. (A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produced). (Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites were added and 1 deleted. [NB: a number of additional sites are also included which are not designated, but which were presumably considered for designation at some stage, or which were at some time designated but which have since be deselected].	
<b>Date</b>	1990-	
<b>Site Name</b>	Offington Cemetery - SNCI W06	TQ129057
<b>Site Comment</b>	Owned by Worthing Borough Council this urban amenity is found in the south western corner of the cemetery & is the largest area of chalk grassland in urban Worthing.It is heavily horse grazed.	
<b>Copies Available</b>	EN, SWT, WSCC	

<b>Survey Name</b>	Designated SNCIs (in West Sussex) - (500)	
<b>Survey Author</b>	WSCC	
<b>Survey Comment</b>	All SNCIs in West Sussex are covered here. All sites have management prescriptions. Each site was surveyed botanically, but additional information on other groups is included where known. (A hand-book 'West Sussex Sites of Nature Conservation Importance' has been produced). (Phase II). In 1998 a further 26 new sites were added. In 2001 a further 23 new sites were added and 1 deleted. [NB: a number of additional sites are also included which are not designated, but which were presumably considered for designation at some stage, or which were at some time designated but which have since be deselected].	
<b>Date</b>	1990-	
<b>Site Name</b>	Highdown Hill & The Miller's Tomb - SNCI W2	TQ095042
<b>Site Comment</b>		
<b>Copies Available</b>	EN, SWT, WSCC	

<b>Survey Name</b>	Botanical Survey of Unimproved Grassland on South Downs in West Sussex 1992 - (549)	
<b>Survey Author</b>	STEVEN, Graham	
<b>Survey Comment</b>	Areas of long-established grassland were surveyed botanically. Areas excluded were under 1ha., pioneer communities on bare chalk in pits, road cuttings and areas recently re-established following scrub clearance. (Phase II). NB: since survey aimed to record area of unimproved grassland on the downs, some sites are identified in report (and included below in site list) even if they were not surveyed as part of this study. [SxBRC (2 copies) held in H3 box].	
<b>Date</b>	05-10.92	
<b>Site Name</b>	Highdown Hill NT	TQ095042
<b>Site Comment</b>	Relict area of chalk grassland some degraded through fertiliser application and hay cutting. Highdown Hill owned by NT. The scrub is confined to narrow strips along the boundary hedgerows and to the old chalk pits. Hill-fort on summit with a clump of trees planted in 1890's. A rich and varied molluscan fauna, including scarce and RDB species.	
<b>Copies Available</b>	EN, SxBRC Boxes, WSCC	

<b>Survey Name</b>	English Nature Woodland Information - (602)	
<b>Survey Author</b>	Various	
<b>Survey Comment</b>	This is a collation of data on woodlands throughout Sussex. It consists of mostly botanical data, and other information which varies from site to site. (It is held in the woodland cabinet at EN in grid reference order). (Phase II). Woodland Record Cards also held in SxBRC Archive. Recorders include A Whitbread.	
<b>Date</b>	-	
<b>Site Name</b>	Highdown Copse & Goring Wood South Complex	TQ095046
<b>Site Comment</b>	Some parts of this wood are ancient and almost all of it is coppice some of which is still managed. Oak and Birch are the most frequent trees.	
<b>Copies Available</b>	EN, SxBRC Archive	

<b>Survey Name</b>	Titnore Road Proof of Evidence. Appendix 2: Woodland Context. - (690)	
<b>Survey Author</b>	CHRIS BLANDFORD ASSOC.	
<b>Survey Comment</b>	Brief site visits to ancient woodland in the proposed landfill site area. The principle features and species were recorded on a presence/absence basis. Appendix 2 of the Titnore Road Proof of Evidence for the public enquiry. (Phase I)	
<b>Date</b>	3.90-5.90	
<b>Site Name</b>	Clapham Wood 2 (Part of SNCI Ar08)	TQ105070
<b>Site Comment</b>	A large wood of predominantly Hazel coppice with Oak standards and grassed. Falls within SNCI Ar08.	
<b>Copies Available</b>	WSCC	

<b>Survey Name</b>	Titnore Road Proof of Evidence. Appendix 2: Woodland Context. - (690)		
<b>Survey Author</b>	CHRIS BLANDFORD ASSOC.		
<b>Survey Comment</b>	Brief site visits to ancient woodland in the proposed landfill site area. The principle features and species were recorded on a presence/absence basis. Appendix 2 of the Titnore Road Proof of Evidence for the public enquiry. (Phase I)		
<b>Date</b>	3.90-5.90		
<b>Site Name</b>	The Harehams		TQ097061
<b>Site Comment</b>	Predominantly Hazel coppice with Oak standards.		
<b>Copies Available</b>	WSCC		

<b>Survey Name</b>	Titnore Road Proof of Evidence. Appendix 2: Woodland Context. - (690)		
<b>Survey Author</b>	CHRIS BLANDFORD ASSOC.		
<b>Survey Comment</b>	Brief site visits to ancient woodland in the proposed landfill site area. The principle features and species were recorded on a presence/absence basis. Appendix 2 of the Titnore Road Proof of Evidence for the public enquiry. (Phase I)		
<b>Date</b>	3.90-5.90		
<b>Site Name</b>	Goring Wood 2/Catle Goring Woods		TQ100053
<b>Site Comment</b>	Predominantly Hazel coppice under Oak with Silver Birch present and some Ash and Field		
<b>Copies Available</b>	WSCC		

<b>Survey Name</b>	WSCC Areas of Nature Conservation Value - (700)		
<b>Survey Author</b>	GRIFFITHS, Ann		
<b>Survey Comment</b>	Brief descriptions of areas of conservation value. Records habitats present and selected species lists - mostly botanical with casual records of other groups. (Phase I)		
<b>Date</b>	1970-1980		
<b>Site Name</b>	Titnore & Goring Woods Complex - SSCI W4 (Old Boundaries)		TQ100050
<b>Site Comment</b>	This woodland is the largest in Worthing Borough; much of it is ancient. Site has boundaries prior to 1994 revision.		
<b>Copies Available</b>	WSCC		

<b>Survey Name</b>	WSCC Areas of Nature Conservation Value - (700)		
<b>Survey Author</b>	GRIFFITHS, Ann		
<b>Survey Comment</b>	Brief descriptions of areas of conservation value. Records habitats present and selected species lists - mostly botanical with casual records of other groups. (Phase I)		
<b>Date</b>	1970-1980		
<b>Site Name</b>	Hightiten Barn Wood (ex-Quarry) AoNCV		TQ100041
<b>Site Comment</b>	A derelict chalk quarry which is very overgrown with secondary woodland.		
<b>Copies Available</b>	WSCC		

<b>Survey Name</b>	A27 Worthing/Lancing Improvement - Environmental Statement - (740)	
<b>Survey Author</b>	CHRIS BLANDFORD ASSOC.	
<b>Survey Comment</b>	The ecological survey is an appendix to the statement. It identifies areas of semi-natural vegetation and mature conservation significance, giving botanical species lists and a very brief description of most sites. Appendices detail Cissbury Ring and Lancing Ring. (Phase II)	
<b>Date</b>	6.90	
<b>Site Name</b>	The Sanctuary, High Salvington (pSNCI)	TQ116067
<b>Site Comment</b>	Potential SNCI. Predominately species-rich chalk scrub developed over chalk grassland with older secondary woodland on the upper slopes. There are some open chalk grassland areas. Owned by Worthing BC. There are disturbed chalk pits at the southern end. Most of site falls within SNCI W03.	
<b>Copies Available</b>	SxBRC Digital	

<b>Survey Name</b>	A27 Worthing/Lancing Improvement - Environmental Statement - (740)	
<b>Survey Author</b>	CHRIS BLANDFORD ASSOC.	
<b>Survey Comment</b>	The ecological survey is an appendix to the statement. It identifies areas of semi-natural vegetation and mature conservation significance, giving botanical species lists and a very brief description of most sites. Appendices detail Cissbury Ring and Lancing Ring. (Phase II)	
<b>Date</b>	6.90	
<b>Site Name</b>	West Hill (Fields nr The Sanctuary), High Salvington (pSNCI)	TQ117067
<b>Site Comment</b>	Potential SNCI. The site consists of two neutral fields separated by a hedge. Hedgerows surround the site. They are species rich. Some of site falls within SNCI W03.	
<b>Copies Available</b>	SxBRC Digital	

<b>Survey Name</b>	A27 Worthing/Lancing Improvement - Environmental Statement - (740)	
<b>Survey Author</b>	CHRIS BLANDFORD ASSOC.	
<b>Survey Comment</b>	The ecological survey is an appendix to the statement. It identifies areas of semi-natural vegetation and mature conservation significance, giving botanical species lists and a very brief description of most sites. Appendices detail Cissbury Ring and Lancing Ring. (Phase II)	
<b>Date</b>	6.90	
<b>Site Name</b>	The Gallops (Part of SNCI W01)	TQ125067
<b>Site Comment</b>	A long strip of scrub/grassland running north to south on a north-east facing slope. It is a mosaic of secondary woodland, tall herb, chalk grassland and amenity grassland. The scrub and tall herb are encroaching. Part of The Gallops and No Man's Land SNCI W01. The site also has a small chalk cliff.	
<b>Copies Available</b>	SxBRC Digital	

<b>Survey Name</b>	A27 Worthing/Lancing Improvement - Environmental Statement - (740)	
<b>Survey Author</b>	CHRIS BLANDFORD ASSOC.	
<b>Survey Comment</b>	The ecological survey is an appendix to the statement. It identifies areas of semi-natural vegetation and mature conservation significance, giving botanical species lists and a very brief description of most sites. Appendices detail Cissbury Ring and Lancing Ring. (Phase II)	
<b>Date</b>	6.90	
<b>Site Name</b>	Clapham Wood (East Part of)	TQ110070
<b>Site Comment</b>	An area of hazel coppice with Oak and Ash standards. It has a rich ground flora. Most of site falls within SNCI Ar08.	
<b>Copies Available</b>	SxBRC Digital	

<b>Survey Name</b>	A27 Worthing/Lancing Improvement - Environmental Statement - (740)	
<b>Survey Author</b>	CHRIS BLANDFORD ASSOC.	
<b>Survey Comment</b>	The ecological survey is an appendix to the statement. It identifies areas of semi-natural vegetation and mature conservation significance, giving botanical species lists and a very brief description of most sites. Appendices detail Cissbury Ring and Lancing Ring. (Phase II)	
<b>Date</b>	6.90	
<b>Site Name</b>	Wood NW of Munery's Copse	TQ113065
<b>Site Comment</b>	A small area of mature Ash and Oak woodland.	
<b>Copies Available</b>	SxBRC Digital	

<b>Survey Name</b>	A27 Worthing/Lancing Improvement - Environmental Statement - (740)	
<b>Survey Author</b>	CHRIS BLANDFORD ASSOC.	
<b>Survey Comment</b>	The ecological survey is an appendix to the statement. It identifies areas of semi-natural vegetation and mature conservation significance, giving botanical species lists and a very brief description of most sites. Appendices detail Cissbury Ring and Lancing Ring. (Phase II)	
<b>Date</b>	6.90	
<b>Site Name</b>	The Oaks, Clapham (Part of SNCI Ar08)	TQ114073
<b>Site Comment</b>	A area of overgrown Oak woodland.	
<b>Copies Available</b>	SxBRC Digital	

<b>Survey Name</b>	A27 Worthing/Lancing Improvement - Environmental Statement - (740)		
<b>Survey Author</b>	CHRIS BLANDFORD ASSOC.		
<b>Survey Comment</b>	The ecological survey is an appendix to the statement. It identifies areas of semi-natural vegetation and mature conservation significance, giving botanical species lists and a very brief description of most sites. Appendices detail Cissbury Ring and Lancing Ring. (Phase II)		
<b>Date</b>	6.90		
<b>Site Name</b>	Munery's Copse		TQ115062
<b>Site Comment</b>	An area of Chestnut and Hazel coppice with standards and a small block of mature woodland.		
<b>Copies Available</b>	SxBRC Digital		

<b>Survey Name</b>	A27 Worthing/Lancing Improvement - Environmental Statement - (740)		
<b>Survey Author</b>	CHRIS BLANDFORD ASSOC.		
<b>Survey Comment</b>	The ecological survey is an appendix to the statement. It identifies areas of semi-natural vegetation and mature conservation significance, giving botanical species lists and a very brief description of most sites. Appendices detail Cissbury Ring and Lancing Ring. (Phase II)		
<b>Date</b>	6.90		
<b>Site Name</b>	New Plantation		TQ115076
<b>Site Comment</b>	An area of Sycamore and Ivy clad Ash on a steep north facing slope. It has a small pocket of grassland.		
<b>Copies Available</b>	SxBRC Digital		

<b>Survey Name</b>	A27 Worthing/Lancing Improvement - Environmental Statement - (740)		
<b>Survey Author</b>	CHRIS BLANDFORD ASSOC.		
<b>Survey Comment</b>	The ecological survey is an appendix to the statement. It identifies areas of semi-natural vegetation and mature conservation significance, giving botanical species lists and a very brief description of most sites. Appendices detail Cissbury Ring and Lancing Ring. (Phase II)		
<b>Date</b>	6.90		
<b>Site Name</b>	West Hill Scrub, High Salvington		TQ120074
<b>Site Comment</b>	Predominantly an area of scrub merging into Ash/Syamore woodland. There is a small clump of Beech at the top of the hill and small areas of grassland.		
<b>Copies Available</b>	SxBRC Digital		

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<b>Survey Name</b>	Common Bird Census - The Sanctuary - (744)		
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<b>Survey Author</b>	B.T.O		
<b>Survey Comment</b>	A common bird census of the area. The original maps are included with this report.		
<b>Date</b>	3.84 -6.84		
<b>Site Name</b>	The Sanctuary, High Salvington (pSNCI)		TQ116067
<b>Site Comment</b>	Potential SNCI. Predominately species-rich chalk scrub developed over chalk grassland with older secondary woodland on the upper slopes. There are some open chalk grassland areas. Owned by Worthing BC. There are disturbed chalk pits at the southern end. Most of site falls within SNCI W03.		
<b>Copies Available</b>	WSCC		

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<b>Survey Name</b>	Brief Survey of (Upper) Northbrook Farm - (746)		
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<b>Survey Author</b>	ROBERTS, Graham		
<b>Survey Comment</b>	Written notes from a site visit, which are fairly detailed.		
<b>Date</b>	7.91		
<b>Site Name</b>	Upper Northbrook Farm & Land to NE (Developed)		TQ107046
<b>Site Comment</b>	An area of meadow and fields with hedgerows and some ponds.		
<b>Copies Available</b>	WSCC		

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<b>Survey Name</b>	Assessors Report on Trees and Woodland - (852)		
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<b>Survey Author</b>	BURLEY, P. F.		
<b>Survey Comment</b>	A report dealing with trees and woodland and the more general ecological considerations relevant to the development of the site. It was carried out in relation to a planning application for a landfill site. It gives some details of the character and the species composition of the woodland on the site. Given as evidence at public enquiry. (File No.:APP/P3800/A/90/168282 and 168601).		
<b>Date</b>	1991		
<b>Site Name</b>	Titnore & Goring Woods Complex - SNCI W4 (Old Boundaries)		TQ100050
<b>Site Comment</b>	This woodland is the largest in Worthing Borough; much of it is ancient. Site has boundaries prior to 1994 revision.		
<b>Copies Available</b>	WSCC		

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<b>Survey Name</b>	Titnore Road Proof of Evidence - (853)	
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<b>Survey Author</b>	MASTERS, Phillip John	
<b>Survey Comment</b>	A botanical survey with notes on birds and invertebrates seen during the survey and in one night's light trapping in July 1990. This is Appendix 1 to the proof of evidence. Appendix 2 has the woodland context of the lease area (see No.690, Appendix 3 is the management proposals and Appendix 4 is the nature conservation impact.	
<b>Date</b>	1989-1991	
<b>Site Name</b>	Titnore & Goring Woods Complex - SNCI W4 (Old Boundaries)	TQ100050
<b>Site Comment</b>	This woodland is the largest in Worthing Borough; much of it is ancient. Site has boundaries prior to 1994 revision.	
<b>Copies Available</b>	WSCC	

<b>Survey Name</b>	Titnore Road: WSCC Proof of Evidence - (854)	
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<b>Survey Author</b>	GRIFFITHS, Ann	
<b>Survey Comment</b>	A summary of botanical survey data, a completed woodland record card, photographs of the site and the loss of woodland in the area. The appendices have a description of the wood broken up into six areas, a report on invertebrates seen on a site visit in August 1990 and species lists of lichens, liverworts, mosses and ancient woodland indicators present.	
<b>Date</b>	-	
<b>Site Name</b>	Titnore & Goring Woods Complex - SNCI W4 (Old Boundaries)	TQ100050
<b>Site Comment</b>	This woodland is the largest in Worthing Borough; much of it is ancient. Site has boundaries prior to 1994 revision.	
<b>Copies Available</b>	SxBRC Digital	

<b>Survey Name</b>	Sussex Churchyard Survey - (916)	
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<b>Survey Author</b>	DONOVAN, Pat	
<b>Survey Comment</b>	Botanical survey of most of the churchyards in Sussex. The majority will have just a species list, but the ones with ecological significance have more detail. (Phase II). NB: Results held at SxBRC for some of sites covered (with details for each site filed according to grid squares), including ESD site nos. 841[TQ33], 1370 [TQ32], 4470 [TQ32], 4341 [SU90]., 4382 [TQ01]. [SxBRC also holds documents in BRC box H2b].	
<b>Date</b>	1980-	
<b>Site Name</b>	St Mary's Churchyard, Clapham	TQ096067
<b>Site Comment</b>		
<b>Copies Available</b>	As contact, SxBRC File Cabs, SxBRC Boxes	

<b>Survey Name</b>	Sussex Churchyard Survey - (916)
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**Survey Author** DONOVAN, Pat

**Survey Comment** Botanical survey of most of the churchyards in Sussex. The majority will have just a species list, but the ones with ecological significance have more detail. (Phase II). NB: Results held at SxBRC for some of sites covered (with details for each site filed according to grid squares), including ESD site nos. 841[TQ33], 1370 [TQ32], 4470 [TQ32], 4341 [SU90]., 4382 [TQ01]. [SxBRC also holds documents in BRC box H2b].

**Date** 1980-

**Site Name** St Symphorian's Churchyard, Durrington TQ118053

**Site Comment**

**Copies Available** As contact, SxBRC File Cabs, SxBRC Boxes

<b>Survey Name</b>	Mollusc Survey with RIGS - (935)
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**Survey Author** MILLAR, Amanda J.

**Survey Comment** Mollusc surveys carried out on sites visited in the course of regionally important geological/geomorphological sites (RIGS) survey. [SxBRC copy held in G8 Molluscs box].

**Date** 1993-1995

**Site Name** Small Quarry opposite Longfurlong Barn, nr Clapham TQ097074

**Site Comment** South facing slope with a very shallow; small chalk quarrey which is now (1995) overgrown with grass and nettles at the bottom. Cattle grazed turf. Opposite Longfurlong Barn (A280).

**Copies Available** As contact, SxBRC Boxes

<b>Survey Name</b>	Ecological Survey of Highdown Hill - (940)
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**Survey Author** WORTHING NATURAL HISTORY SOCIETY

**Survey Comment** Worthing Natural History Society are monitoring this site approximately every 15-20 years. They produce reports which detail geography, geology, history, plants and birds. Each year's monitoring involves several regular visits. (Phase II)

**Date** 1958-59, 1982-83, 1996

**Site Name** Highdown Hill NT TQ095042

**Site Comment** Relict area of chalk grassland some degraded through fertiliser application and hay cutting. Highdown Hill owned by NT. The scrub is confined to narrow strips along the boundary hedgerows and to the old chalk pits. Hill-fort on summit with a clump of trees planted in 1890's. A rich and varied molluscan fauna, including scarce and RDB species.

**Copies Available** As contact

<b>Survey Name</b>	Ecological Appraisal of Sites in Arun District - (945)
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<b>Survey Author</b>	SPIERS, Tony, RYLAND, Kate
<b>Survey Comment</b>	A habitat survey of Arun District was undertaken using aerial photographs. The more significant sites were then visited by a survey team and plant species indicated on a present/absent basis. (Phase II). [SxBRC copy held in S1 box].
<b>Date</b>	1988
<b>Site Name</b>	Clapham Wood, Longfurlong, Church & West Hills Area <span style="float: right;">TQ096070</span>
<b>Site Comment</b>	The western half of the wood is well maintained with hazel being coppiced; large rides and mature oak; giving way to sweet chestnut; silver birch and oak mixed. Includes part of SNCI Ar08 and Ar03.
<b>Copies Available</b>	SxBRC Boxes, As contact

<b>Survey Name</b>	Survey of Clapham Wood (incl discussion of Ecological & Historical Value) - (973)
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<b>Survey Author</b>	WHITBREAD, A (Dr).
<b>Survey Comment</b>	A detailed survey with completed woodland record sheets, descriptions of the NVC woodland compartments and written summaries. (Phase II). Includes a document entitled "The ecological and historical value of Clapham Wood" by the same author, but with an SWT header. [SxBRC copy filed under TQ10].
<b>Date</b>	5.88
<b>Site Name</b>	Clapham Wood (Part of SNCI Ar08) <span style="float: right;">TQ104070</span>
<b>Site Comment</b>	An ancient coppice woodland which is mainly derelict Hazel coppice with Oak standards. It has a rich ground flora including Stinking Iris.
<b>Copies Available</b>	SxBRC File Cabs

<b>Survey Name</b>	Water Vole Survey - West Sussex - (1059)
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<b>Survey Author</b>	KEELING, Chris
<b>Survey Comment</b>	Survey concentrated on the Adur catchment and the Chichester Rifes.
<b>Date</b>	17.8.98 - 6.9.98
<b>Site Name</b>	Ferring Rife Water Vole Site, E of Ferring Lane <span style="float: right;">TQ099035</span>
<b>Site Comment</b>	Water vole tunnel below water level - possible feeding remains in immediate area of tunnel (Aug 1998).
<b>Copies Available</b>	WSCC

<b>Survey Name</b>	West Durrington Ecological Appraisal - (1080)
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<b>Survey Author</b>	COUNTRYSIDE PLANNING AND MANAGEMENT
<b>Survey Comment</b>	A detailed survey of the area identifying the habitats and giving some plant species. A map grading the ecological value of the site is included. Conducted for Heron Homes Ltd. See also Survey no. 2753.
<b>Date</b>	6.92
<b>Site Name</b>	West Durrington Proposed Urban Extension Site <span style="float: right;">TQ105054</span>
<b>Site Comment</b>	Site proposed for development, in vicinity of Titnore Lane & Castle Goring, Worthing.
<b>Copies Available</b>	SxBRC Digital

<b>Survey Name</b>	Survey of Land at Chatsmore Farm, Worthing - (1442)
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<b>Survey Author</b>	HELLIWELL, D. R.
<b>Survey Comment</b>	Survey, by Reading Agricultural Consultants, of arable farmland prior to proposed development.
<b>Date</b>	14.9.99
<b>Site Name</b>	Chatsmore Farm (Arable Land S of Ferring Rife), Worthing <span style="float: right;">TQ101033</span>
<b>Site Comment</b>	Site is flat, surrounded by housing and a dual carriageway. Mostly intensively cultivated with canalised stream.
<b>Copies Available</b>	SxBRC Digital

<b>Survey Name</b>	Survey of Church Copse, Clapham Woods - (1446)
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<b>Survey Author</b>	DENNESS, Sue., RICHARDS, Carolyn
<b>Survey Comment</b>	
<b>Date</b>	4.4.98, 2.8.98
<b>Site Name</b>	Church Copse, Clapham Wood (Part of SNCI Ar08) <span style="float: right;">TQ095067</span>
<b>Site Comment</b>	Part of SNCI Ar08.
<b>Copies Available</b>	As contact

<b>Survey Name</b>	Biodiversity Audit of West Sussex Mineral Sites - (1516)
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<b>Survey Author</b>	RYLAND, Kate
<b>Survey Comment</b>	Data collation exercise to assess biodiversity and earth science interest of 58 mineral sites. Gives current status of each site and suggests future programme of site visits and surveys.
<b>Date</b>	-
<b>Site Name</b>	Clapham Clay Pit TPA (incl Brick Works) - AR24 <span style="float: right;">TQ093059</span>
<b>Site Comment</b>	Landfilled - restored to agricultural use. Probably no current ecological interest.
<b>Copies Available</b>	WSCC

<b>Survey Name</b>	Botanical lists for Whitebeam Wood (Ham Farm Wood SNCI) & Grass Bank (Ham Farm Nurseri	
<b>Survey Author</b>	CURSON, Simon	
<b>Survey Comment</b>	Botanical species lists for grass bank in NW of Longcroft Park, plus incomplete list for Whitebeam Wood (Ham Farm Wood SNCI). NB: Grass Bank is within "Ham Farm nurseries, now Longcroft Park".	
<b>Date</b>	25.6.98	
<b>Site Name</b>	Ham Farm Wood - SNCI W05	TQ112044
<b>Site Comment</b>	An ancient woodland within the built up area of Worthing. It consists of ash, field maple and english elm over hazel and sweet chestnut and sycamore coppice. An old pond to the south has abundant crack willow. It is owned by Worthing BC.	
<b>Copies Available</b>	WSCC	

<b>Survey Name</b>	Botanical lists for Whitebeam Wood (Ham Farm Wood SNCI) & Grass Bank (Ham Farm Nurseri	
<b>Survey Author</b>	CURSON, Simon	
<b>Survey Comment</b>	Botanical species lists for grass bank in NW of Longcroft Park, plus incomplete list for Whitebeam Wood (Ham Farm Wood SNCI). NB: Grass Bank is within "Ham Farm nurseries, now Longcroft Park".	
<b>Date</b>	25.6.98	
<b>Site Name</b>	Ham Farm Nurseries/Longcroft Park (pSNCI)	TQ113043
<b>Site Comment</b>	Potential SNCI. Predominately an open space with species poor amenity grassland and planted specimen trees. Along the north edge there is an area of planted native trees and shrubs. Owned by Worthing BC. Part of site falls within SNCI W05.	
<b>Copies Available</b>	WSCC	

<b>Survey Name</b>	West Durrington Proposed Urban Extension - Environmental Statement Technical Appendix - (27	
<b>Survey Author</b>	COUNTRYSIDE PLANNING AND MANAGEMENT	
<b>Survey Comment</b>	Describes the ecology of land at West Durrington and sets out an impact assessment of development proposed at the site. Information in report mostly derived from a number of site visits undertaken by CPM ecologists over a number of years. Includes a Phase 1 habitat survey conducted in 1992. Flora and fauna observed or heard during general site visits also recorded. Specialist hedgerow and amphibian surveys were also carried out. Further ecological information was sought from a variety of sources, including BTO, EN, EA, SBRS, SWT WSCC and others. Report prepared on behalf of Heron Land Developments Ltd, Persimmon Homes and Bryant Homes Southern Ltd. See also Survey No. 1080, which contains some of the same information, but which was published several years earlier.	
<b>Date</b>	various: 06.92 - 11.00	
<b>Site Name</b>	West Durrington Proposed Urban Extension Site	TQ105054
<b>Site Comment</b>	Site proposed for development, in vicinity of Titnore Lane & Castle Goring, Worthing.	
<b>Copies Available</b>	SxBRC Digital	

<b>Survey Name</b>	Land at Lower Northbrook Farm, Titnore Lane, Worthing - Ecological Survey - (2807)	
<b>Survey Author</b>	MICHAEL WOODS ASSOCIATES	
<b>Survey Comment</b>	Extended Phase 1 habitat survey of land subject to development proposals. A search for Badger setts was conducted, as well as an assessment of potential bat roosting sites. Casual sightings of birds and other species were also noted. Survey commissioned by Marshall Clark LLP on behalf of Chandlers Garage Holdings Ltd. [species data extracted].	
<b>Date</b>	02.02.05	
<b>Site Name</b>	Land at Lower Northbrook Farm, Worthing	TQ104040
<b>Site Comment</b>	A greenfield site 2.2ha in area lying east of Titnore Lane, just north of Goring Crossways. To the south of the site is Northbrook College, to the north houses, gardens and stables. The site is used for grazing horses and is typical of unkempt urban fringe land.	
<b>Copies Available</b>	SxBRC Digital	

<b>Survey Name</b>	Bat & Barn Owl Survey at Forest Farm, Castle Goring - (2851)	
<b>Survey Author</b>	LOVE, Martin	
<b>Survey Comment</b>	The survey was a requirement of a planning application to demolish buildings to erect a number of residential units. A bat and barn owl survey was necessary as part of the planning process. [spp data extracted].	
<b>Date</b>	30.12.04	
<b>Site Name</b>	Forest Farm Buildings Area, Durrington	TQ107053
<b>Site Comment</b>	Area immediately surrounding farm buildings.	
<b>Copies Available</b>	SxBRC Digital	

<b>Survey Name</b>	Ecological Assessment - Site of Proposed Smock Mill, Highdown Hill - (2884)	
<b>Survey Author</b>	CPM Env Planning & Design Ltd.	
<b>Survey Comment</b>	Report to assess ecological impacts arising from construction of an 8m diameter, 19.2m high "smock mill" and associated access road and car park. Includes collated data from National Trust biological surveys as well as extracts from other sources. CPM also surveyed site to identify main habitat types in the development site and its surroundings, to describe obvious plant species present, and to check for animal activity, particularly protected species. [spp data extracted].	
<b>Date</b>	17.04.02	
<b>Site Name</b>	Proposed "Smock Mill" Site, Highdown Hill	TQ092041
<b>Site Comment</b>	Proposed development site within an old chalk pit.	
<b>Copies Available</b>	SxBRC Digital	

## Glossary of Abbreviations

### Organisations:

BBCS	British Butterfly Conservation Society (now Butterfly Conservation)	<a href="http://www.sussex-butterflies.org.uk">www.sussex-butterflies.org.uk</a>
BMONH	Booth Museum of Natural History	Tel: 03000 290900
BSBI	Botanical Society of the British Isles	<a href="http://www.bsbi.org.uk">www.bsbi.org.uk</a>
BTO	British Trust for Ornithology	Tel: 01842 750050
EA	Environment Agency	Tel: 08708 506506 (Southern Regional Office)
EN	English Nature (now Natural England)	Tel: 03000 600 300 (Sussex Team)
ESCC	East Sussex County Council	Tel: 01273 481621 (County Ecologist)
FC	Forestry Commission	Tel: 01420 23337 (SE England)
FWAG	Farming and Wildlife Advisory Group	Tel: 01273 891190 (Sussex Area)
NCC	Nature Conservancy Council (now NE)	Contact NE
NE	Natural England	Tel: 03000 600 300 (Sussex Team)
NRA	National Rivers Authority (now EA)	Contact EA
NT	National Trust	Tel: 01372 453401 (South East Office)
RSPB	Royal Society for the Protection of Birds	Tel: 01273 775333 (SE Regional Office)
SBRS	Sussex Botanical Recording Society	<a href="http://www.sussexflora.org.uk">www.sussexflora.org.uk</a>
SOS	Sussex Ornithological Society	<a href="http://www.sos.org.uk">www.sos.org.uk</a>
SxBRC	Sussex Biodiversity Record Centre	Tel: 01273 497521
SxWT/SWT	Sussex Wildlife Trust	Tel: 01273 492630
WSCC	West Sussex County Council	Tel: 01243 756691 (County Ecologist)

### Designations

AONB	Area of Outstanding Natural Beauty
COGS	County Geological/Geomorphological Site
LNR	Local Nature Reserve
NNR	National Nature Reserve
NP	National Park
RAMSAR	RAMSAR (internationally important wetlands)
RIGS	Regionally Important Geological/Geomorphological Site
SAC	Special Area of Conservation
SNCI	Site of Nature Conservation Importance
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest

### Surveys:

Phase I	A broad habitat survey with a dominant species list and land use information.
Phase II	Mapping of vegetation communities with species lists and abundance/distribution.
Phase III	A detailed survey including ecological processes and long term monitoring information.
NVC	National Vegetation Classification.

## SITE OF NATURE CONSERVATION IMPORTANCE (SNCI)

Sites of Nature Conservation Importance (SNCIs) are non-statutory designations which are identified at a county level. They typically form a network of sites that are recognised to be of local conservation importance and are often included in Local Authority development plans. In other areas of the country they are sometimes called SINCs (Sites of Importance for Nature Conservation) or County Wildlife sites.

There are many sites within East and West Sussex and Brighton and Hove that are not recognised under the national designation of SSSI (Site of Special Scientific Interest) but are of considerable wildlife value due to the special interest of their flora or fauna. In May 1990 a Sussex-wide project was instigated to identify which non-designated sites were important for wildlife. The selected sites are now known as SNCIs. The aim of this identification was to protect such sites from land management changes, which may lessen their nature conservation interest, and to encourage sensitive management to maintain and enhance their importance.

Sites within both rural and urban areas were considered but the evaluation process considers two types of site under slightly different criteria:

- **Rural sites**, that may contain habitats such as heathland or ancient woodland, must be of county-wide importance.
- **Urban sites** must recognise the importance to safeguard important urban wildlife sites, to link all significant greenspaces and to ensure that people in towns have easy access to wildlife areas.

The selection of SNCIs was made, after extensive survey work, by a panel of expert ecologists. This panel included representatives from the relevant County Council, English Nature (now Natural England) and the Sussex Wildlife Trust. A range of specialists with either specific species knowledge or a sound knowledge of the county's ecology were also involved with the selection process. Assessment and identification of SNCIs is a continuing process with new sites being identified and others deleted as ecological knowledge of the total resource and specific sites increase.

In West Sussex SNCI selection is steered by the County Council, whereas in East Sussex it is steered by the District Councils. Currently there are over 600 SNCIs in Sussex.

Although SNCIs have no statutory protection they need to be considered in the planning process through Planning Policy Guidance such as PPG9 which refers to the Town & Country Planning Act 1990 Section 30. This states that nature conservation issues should be included in the surveys of local authority areas to ensure that the plans are based on fully adequate information about local species, habitats, geology and landform. Plans should be concerned not only with designated areas but also with other land of conservation value and the possible provision of new habitats.

SNCI site accounts outline the characteristics of the area based on its semi-natural vegetation and the underlying geology and are in three main sections :-

- **Summary** which highlights the nature conservation importance of the site
- **Site description or site notes** which gives further descriptive details about the site and its associated species
- **Management recommendations** which give a brief indication of the type of management that would best maintain the nature conservation interest of the site.

It is important to realise that classification as an SNCI in no way reduces the value of other wildlife sites. Sites of SNCI quality may not have been surveyed for various reasons. All areas of semi-natural vegetation are important to wildlife. Many rare plants and animals occur in seemingly otherwise uninteresting sites and may be overlooked by the survey.

## SITE OF NATURE CONSERVATION IMPORTANCE (SNCI)

### West Sussex

<b>Site Name:</b>	The Gallops & No Man's Land		
<b>Site Ref:</b>	W01	<b>Owner:</b>	Worthing Borough Council
<b>District:</b>	Worthing	<b>Size (ha):</b>	19.8
<b>Parish:</b>	N/A	<b>Date:</b>	Identified May 1992
<b>National Grid Ref:</b>	TQ124069	<b>Author:</b>	Jill Barton
<b>Habitat:</b>	Chalk grassland, scrub and semi-natural woodland		

#### Summary

This site consists of areas of calcareous grassland set within a mosaic of ranker grassland, scrub and secondary woodland. The species-rich chalk grassland forms valuable wildlife habitat as well as being a fragment of a much threatened habitat. The poorer habitats also present add to the diversity and thus the general wildlife interest of the site.

#### Site description

North of Bost Hill Lane, the grassland contains species associated with high quality calcareous grassland. These include Upright Brome *Bromus erectus*, Red Fescue *Festuca rubra*, Crested Dog's-tail *Cynosurus cristatus*, Yellow Oat-grass *Trisetum flavescens*, Sweet Vernal grass *Anthoxanthum odoratum*, Rough Hawkbit *Leontodon hispidus*, Salad Burnet *Sanguisorba minor*, Lady's Bedstraw *Galium verum* and Common Knapweed *Centaurea nigra*.

South of Bost Hill Lane and bordering it, is a bank of taller grassland which merges into closely mown grassland. Here are found much the same species as above, plus Fairy Flax *Linum catharticum*, Mouse-ear Hawkweed *Hieracium pilosella*, Bulbous Buttercup *Ranunculus bulbosus* and Sheep's-fescue *Festuca ovina*.

Further south are two small areas of very high quality grassland isolated within much poorer quality rank grassland. They contain Wild Carrot *Daucus carota*, Common Knapweed, Field Scabious *Knautia arvensis*, Eyebright *Euphrasia* sp., Kidney Vetch *Anthyllis vulneraria*, Squinancywort *Asperula cynanchica*, Harebell *Campanula rotundifolia*, Small Scabious *Scabiosa columbaria* as well as many species listed above.

Amongst these grassy areas, scrub occurs both as scattered bushes and in clumps. Species include Dogwood, Elder, Hawthorn and Blackthorn. This scrub has developed into secondary woodland in places. Oak is abundant with frequent Ash, Bird Cherry, Crab-apple, Field Maple and Elms occur occasionally.

#### Management recommendations

At present, management of this site is restricted to mowing a strip of grassland at the bottom of the valley. Scrub needs to be kept in check and the chalk grassland would benefit from management of some kind. Detailed management prescriptions need to be drawn up.

## SITE OF NATURE CONSERVATION IMPORTANCE (SNCI)

### West Sussex

<b>Site Name:</b>	<b>Highdown Hill &amp; the Miller's Tomb</b>		
<b>Site Ref:</b>	Ar16 / W02	<b>Owner:</b>	National Trust & Worthing Borough Council
<b>District:</b>	Arun & Worthing	<b>Size (ha):</b>	22.9
<b>Parish:</b>	Ferring & Worthing	<b>Date:</b>	Identified May 1992. Revised May 1997.
<b>National Grid Ref:</b>	TQ095042	<b>Author:</b>	Simon Curson
<b>Habitat:</b>	Chalk grassland, scrub and chalk pits		

#### Summary

The Miller's Tomb SNCI, identified in 1992, comprises a small area of species-rich chalk grassland. The SNCI was extended in 1997 to include Highdown Hill. The whole site comprises relatively unimproved chalk grassland and scrub on the south facing scarp of a small outlier of the South Downs near Worthing. Although heavily used for informal recreation, the site supports several uncommon plants and animals.

#### Site description

The grassland has received fertiliser in the past when a hay crop was taken and is now mostly grass dominated with species such as Upright Brome *Bromus erectus*, Red Fescue *Festuca rubra* and Tall Fescue *Festuca arundinacea* prominent. Despite this some typical chalk grassland herbs are present including Hairy Violet *Viola hirta*, Fairy Flax *Linum catharticum*, Glaucous Sedge *Carex flacca*, the rare Round-headed Rampion *Phyteuma tenerum* and large quantities of Sainfoin *Onobrychis viciifolia*, especially on the reservoir. On the areas of deeper soil Bulbous Buttercup *Ranunculus bulbosa*, Salad Burnet *Sanguisorba minor*, Ribwort Plantain *Plantago lanceolata* and Rough Hawk's-beard *Crepis biennis* occur.

Chalk scrub is found around the old chalk pits and site boundaries, typically comprising Hawthorn, Ash, Dogwood, Elder, Privet, Buckthorn and Traveller's Joy *Clematis vitalba*. Associated with the scrub are patches of taller grassland containing False Oat-grass *Arrhenatherum elatius*, Hoary Ragwort *Senecio erucifolius*, Wild Parsnip *Pastinaca sativa*, Common Knapweed *Centaurea nigra* and Hemp Agrimony *Eupatorium cannabinum*. A clump of trees including Beech, Holm Oak, Ash and Scots Pine is present on the hill fort.

The mosaic of short turf, taller herbs and scrub makes the site a valuable habitat for birds and invertebrates. Fauna recorded here include Carthusian snail, a Red Data Book species, Long-winged Cone-head, Common Lizard, Glow-worm, the scarce Chalkhill Blue and 17 commoner butterfly species and a range of birds including Long-tailed Tit, Whitethroat, Chiffchaff, Linnet, Bullfinch and occasional Nightingales.

#### Management recommendations

Grazing the site would be the most beneficial management for the site; however this may not be practical due to the high recreational pressure. Cutting the grassland areas annually and removing the cuttings may be the most practical method of maintaining the grassland. The areas of tall herb and scrub would benefit most if left to develop naturally. However it would be best to control any further spread of the scrub.

## SITE OF NATURE CONSERVATION IMPORTANCE (SNCI)

### West Sussex

<b>Site Name:</b>	The Sanctuary, High Salvington		
<b>Site Ref:</b>	W03	<b>Owner:</b>	Worthing Borough Council
<b>District:</b>	Worthing	<b>Size (ha):</b>	19.5
<b>Parish:</b>	N/A	<b>Date:</b>	Identified May 1992
<b>National Grid Ref:</b>	TQ117067	<b>Author:</b>	Simon Curson
<b>Habitat:</b>	Chalk grassland, scrub and semi-natural woodland		

#### Summary

The site consists of a south-facing coombe and slope, located on the edge of High Salvington. The north and west part of the site is a mosaic of species-rich scrub, secondary woodland and chalk grassland, which is managed as a bird sanctuary. The rest is open, herb-rich grassland.

The site represents a scarce habitat in the Borough. Meadow Clary *Salvia pratensis*, a Red Data Book species, occurs here in one of only two sites in West Sussex.

#### Site description

The bird sanctuary consists of woodland, scrub and grassland. Older woodland is dominated by Oak over Hazel coppice, with a fern-rich ground flora. More recent woodland has Oak and Ash, with a shrub layer of Hawthorn, Blackthorn, Elder and Holly and a sparse ground flora, due to dense shade. The scrub has similar species with Dogwood, Willow, Old Man's Beard *Clematis vitalba* and Dog Rose *Rosa canina*, and tall herbs on the margins. Species-rich chalk grassland occurs in rabbit-grazed clearings, supporting such typical species as Wild Basil *Clinopodium vulgare*, Harebell *Campanula rotundifolia* and Small Scabious *Scabiosa columbaria*.

The open grassland is divided into two fields by a hedge. It appears to be an old meadow with rye Grass *Lolium perenne* seeded in, but supports a wide variety of species. The main grasses include Cock's-foot *Dactylis glomerata*, Sweet Vernal grass *Anthoxanthum odoratum*, Crested Dog's-tail *Cynosurus cristatus* and Meadow Fescue *Festuca pratensis*. Typical herbs include Wild Carrot *Daucus carota*, Yarrow *Achillea millefolium* and Common Knapweed *Centaurea nigra*, with clumps of Bramble *Rubus fruticosus* and Dog Rose. Coarser grassland occurs in areas of enrichment and disturbance.

The combination of grassland and scrub is important for birds and invertebrates.

#### Management recommendations

The woodland and scrub provide valuable cover for birds, but some clearance would benefit the chalk grassland, which represents the rarer habitat in the County. The fields should be cut in late July and all cuttings removed. Grazing appears to be impractical due to high public use of the site.

## SITE OF NATURE CONSERVATION IMPORTANCE (SNCI)

### West Sussex

<b>Site Name:</b>	Titnore & Goring Woods Complex		
<b>Site Ref:</b>	W04	<b>Owner:</b>	Private
<b>District:</b>	Worthing	<b>Size (ha):</b>	78.6
<b>Parish:</b>	N/A	<b>Date:</b>	Identified May 1992. Revised May 1994.
<b>National Grid Ref:</b>	TQ100050	<b>Author:</b>	Jill Barton
<b>Habitat:</b>	Semi-natural woodland and pond		

#### Summary

This woodland complex is the largest in Worthing Borough. Much of it is ancient in origin, although its structure and species composition vary considerably, due to management. The site is of outstanding importance as a large area of semi-natural habitat close to a heavily built-up area.

#### Site description

The majority of the woodland is dominated by Oak with Ash, Elm, Birch and Beech. The shrub layer is very variable, with area of Hazel or Sweet Chestnut coppice or a mixture of Holly, Hawthorn, Blackthorn, Willow and Elder. The ground flora is predominantly Bramble *Rubus fruticosus*, Bluebell *Hyacinthoides non-scripta* and Bracken *Pteridium aquilinum*, with Wood Sage *Teucrium scorodonia*, Male Fern *Dryopteris filix-mas* and Honeysuckle *Lonicera periclymenum* also typical. It tends to be sparse in dense shade. Ash occurs where the ground is damp and base-enriched, with Hazel and some Field Maple and Wild Privet under, and a ground flora of sedges *Carex* spp, ferns, Yellow Flag *Iris pseudacorus* and Dog's Mercury *Mercurialis perennis*.

Old boundary banks support a rich flora, including ancient woodland indicators such as Primrose *Primula vulgaris* and Hart's-tongue Fern *Phyllitis scolopendrium*. Parts of the woodland have been thinned to occasional Oak standards over sown Rye-grass *Lolium perenne*. Scots Pine is very occasional in parts of the wood.

#### Management recommendations

Much of the site is well-managed coppice with standards. Re-coppicing should be encouraged to maintain the diversity of the ground flora and wildlife value of the woodland. The conversion of woodland to occasional trees over improved pasture destroys the character and value of the site and should be discouraged.

## SITE OF NATURE CONSERVATION IMPORTANCE (SNCI)

### West Sussex

<b>Site Name:</b>	Ham Farm Wood	<b>Owner:</b>	Worthing Borough Council
<b>Site Ref:</b>	W05	<b>Size (ha):</b>	2.3
<b>District:</b>	Worthing	<b>Date:</b>	Identified May 1992
<b>Parish:</b>	N/A	<b>Author:</b>	Jill Barton
<b>National Grid Ref:</b>	TQ112044		
<b>Habitat:</b>	Semi-natural woodland		

#### Summary

The site represents the only area of ancient woodland within the built-up area of Worthing. Despite its proximity to housing it is remarkably undisturbed and is a valuable urban wildlife site.

#### Site description

The wood is surrounded by recently-built housing with an open area of parkland on its eastern boundary. The canopy is dominated by Oak, with Ash, Field Maple and English Elm. The shrub layer is mainly Hazel and Sweet Chestnut coppice, with some multi-stemmed Ash and Sycamore. Holly and Hawthorn are also present, and there are some very large old Field Maple coppice stools scattered. The ground flora is dominated by Bramble *Rubus fruticosus*, Bluebell *Hyacinthoides non-scripta* and Bracken *Pteridium aquilinum*, with Wood Sage *Teucrium scorodonia*, Honeysuckle *Lonicera periclymenum* and Male Fern *Dryopteris filix-mas*. A small, dry pond in the north-east part of the wood supports Tufted Hair-grass *Deschampsia caespitosa*, Yorkshire Fog *Holcus lanatus* and thistles *Cirsium* spp. The ponds in the southern part of the wood are surrounded by Crack Willow, Grey Willow, Goat Willow and Hazel coppice over lush grasses and Yellow Flag *Iris pseudacorus*.

The wood provides nesting sites and cover for a variety of birds.

The site is crossed by a surfaced path which is well used.

#### Management recommendations

Management appears to be sympathetic, and the amount of disturbance slight. Dead wood has been left in place, which provides a habitat for invertebrates and fungi in particular. The site would benefit from re-coppicing, to open up the canopy and encourage growth of the ground flora.

## SITE OF NATURE CONSERVATION IMPORTANCE (SNCI)

### West Sussex

<b>Site Name:</b>	<b>Offington Cemetery</b>	<b>Owner:</b>	Worthing Borough Council
<b>Site Ref:</b>	W06	<b>Size (ha):</b>	2.8
<b>District:</b>	Worthing	<b>Date:</b>	Identified May 1992
<b>Parish:</b>	N/A	<b>Author:</b>	Jill Barton
<b>National Grid Ref:</b>	TQ129057		
<b>Habitat:</b>	Chalk grassland and scrub		

#### Summary

This is the largest area of unimproved herb-rich calcareous grassland in urban Worthing. It is of great wildlife value to the Borough with cover for birds provided by scrub and large numbers of ant-hills scattered throughout it. It is also a fair-sized remnant of a nationally threatened habitat type.

#### Site description

This site comprises the south-western quarter of Offington Cemetery. It is bordered by the Cemetery on the north and east sides and by the A27 on the other sides. Although there are areas of grassland of equal value within the rest of the Cemetery, they are found on the banks of the main drive and they are too small and too difficult to delineate to be included in the SNCI.

The south-western quarter is a heavily horse grazed pasture with patches of Bramble *Rubus fruticosus*, Dog Rose and Hawthorn scrub and scattered ant-hills. The ant-hills and many of the plants found, are indicative of unimproved grassland. These include Common Bent *Agrostis capillaris*, Crested Dog's-tail *Cynosurus cristatus*, Sweet Vernal grass *Anthoxanthum odoratum*, amongst the grasses. The herbs found include Yarrow *Achillea millefolium*, Mouse-ear *Cerastium* sp, Hawkweed *Hieracium* sp, Bulbous Buttercup *Ranunculus bulbosus*, Meadow Buttercup *Ranunculus acris*, Common Sorrel *Rumex acetosa*, Common Knapweed *Centaurea nigra* and Oxeye Daisy *Leucanthemum vulgare*.

The high grazing pressure means that much of this site is a tight, densely packed, short-leaved sward. The intimate mixture of herbs and grasses, the species present and the anti-hills reveal the unimproved nature of this site.

#### Management recommendations

Some of the scrub could be cut down and the grazing limited during the flowering season, April to late July. This would allow the herbs to set seed and increase the diversity of the grassland. In general, past management has been sympathetic.

## SITE OF NATURE CONSERVATION IMPORTANCE (SNCI)

### West Sussex

<b>Site Name:</b>	Clapham Wood		
<b>Site Ref:</b>	Ar08 / W09	<b>Owner:</b>	Private
<b>District:</b>	Arun & Worthing	<b>Size (ha):</b>	155.8
<b>Parish:</b>	Clapham	<b>Date:</b>	Identified May 1992
<b>National Grid Ref:</b>	TQ105070	<b>Author:</b>	Graham Roberts
<b>Habitat:</b>	Semi-natural woodland		

#### Summary

Clapham Wood is an extensive, ancient semi-natural woodland on the undulating dip slope of the South Downs. The ground flora is rich and includes a number of interesting species. The wood was moderately affected by the storm of October 1987 and unfortunately several large blocks of woodland were subsequently cleared for pasture. Much of the wood is not managed but some areas are still coppiced.

#### Site description

Clapham Wood occupies a variety of soil types. On the hill top soils are mostly heavy clays with a fairly low lime content. This supports a woodland community consisting mostly of Oak standards over Hazel or Sweet Chestnut coppice. The ground flora is characterised by a carpet of Bluebells *Hyacinthoides non-scripta*, with patches of Wood Anemone *Anemone nemorosa*. Bramble *Rubus fruticosus* and Bracken *Pteridium aquilinum* are also present.

The chalky soils of the hill slopes carry a very different flora. Oak, Ash, Field Maple and Hazel are most frequent, with patches of Dogwood, Spindle, Wild Privet and Wayfaring Tree. The ground flora is particularly rich. Bluebell and Wood Anemone are still common but with swathes of Dog's Mercury *Mercurialis perennis* and patches of Sanicle *Sanicula europaea*, Primrose *Primula vulgaris*, Common Dog-violet *Viola riviniana*, Lesser Celandine *Ranunculus ficaria*, Wild Strawberry *Fragaria vesca*, Pignut *Conopodium majus*, Stinking Iris *Iris foetidissima*, Nettle-leaved Bellflower *Campanula trachelium* and Early-purple Orchid *Orchis mascula*.

The wood has many tracks and paths, some of which support interesting floras. Tuberous Comfrey *Symphytum tuberosum*, a very rare plant in West Sussex occurs along a track.

Clapham Wood has a moderately diverse range of breeding birds, including Goldcrest, Chiffchaff, Blackcap, Treecreeper, Marsh Tit, Nuthatch, Cuckoo, Great Spotted Woodpecker and Green Woodpecker.

#### Management recommendations

Much of the woodland would benefit from active management, particularly in the form of coppicing and selective thinning. Ride management, notably coppicing of the adjacent shrub layer, would enhance the site for both wildlife and Pheasants. Any tree planting should be with native broadleaved species such as Oak, Ash and Cherry.

## KEY NATIONAL AND INTERNATIONAL SITE DESIGNATIONS

### National Nature Reserve (NNR)

National Nature Reserves are statutory reserves established under the Wildlife and Countryside Act 1981. NNRs may be owned by the relevant national body (e.g. Natural England in England) or established by agreement. A few are owned and managed by non-statutory bodies, for example the Sussex Wildlife Trust. NNRs cover a selection of the most important sites for nature conservation in the UK. There are six NNRs in Sussex.

### Special Area of Conservation (SAC)

Special Areas of Conservation are sites designated by Member States under the EC Habitats Directive. The aim is to establish a European network of important high quality conservation sites that will make a significant contribution to conserving habitats and species considered to be most in need of conservation at a European level. There are 12 SAC sites in Sussex.

### Special Protection Area (SPA)

Special Protection Areas are designated under the EC Birds Directive, to conserve the habitat of certain rare or vulnerable birds and regularly occurring migratory birds. Any significant pollution or disturbance to or deterioration of these sites has to be avoided. All SPAs are also designated as SSSIs. There are six SPA sites in Sussex.

### Ramsar

Ramsar sites are designated under the Convention on Wetlands of International Importance. Under the Convention, each government must select its best wetlands according to very clear criteria, which include: a wetland that regularly supports 20,000 or more waterbirds; a wetland that regularly supports 1% of the individuals in a population of one species or subspecies of waterbird. Wetlands are broadly defined to include marsh, fen, peatland and water. All designated Ramsar sites are also designated as SSSIs. There are four Ramsar sites in Sussex.

### National Park

National Parks are beautiful, spectacular and often dramatic expanses of countryside. In the UK people live and work in the National Parks and the farms, villages and towns are protected along with the landscape and wildlife. They differ from Areas of Outstanding Natural Beauty (AONBs) in that each National Park has its own authority for planning control and other services.

The creation of the South Downs National Park (SDNP) was confirmed on 12th November 2009 and came into being on 1st April 2010.

Further information can be found on the [SDNP Authority website](#).

### Area of Outstanding Natural Beauty (AONB)

Areas of Outstanding Natural Beauty are areas of high scenic quality that have statutory protection in order to conserve and enhance the natural beauty of their landscapes. They differ from National Parks in their more limited opportunities for extensive outdoor recreation and by the way they are managed. AONBs are designated by Natural England under the Countryside and Rights of Way Act 2000.

There are two AONBs in Sussex covering approx. 114,000 hectares; Chichester Harbour and High Weald. Each has an associated body concerned with the area's conservation:

**Chichester Harbour Conservancy** [www.conservancy.co.uk](http://www.conservancy.co.uk)

**High Weald AONB Unit** [www.highweald.org](http://www.highweald.org)

### Marine Conservation Zone (MCZ)

MCZs protect a range of nationally important marine wildlife, habitats, geology and geomorphology. In November 2013 27 MCZs were designated in English inshore and English and Welsh offshore waters in the first tranche of sites. Three of these sites were designated off Sussex; Kingmere, Beachy Head West and Pagham Harbour. More MCZs will be designated in future rounds or 'tranches', although it is uncertain how many.

Further information can be found on the [JNCC website](#).

## **Local Nature Reserve (LNR)**

Local Nature Reserves are for both people and wildlife. All district and county 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 SSSIs. There are 36 LNRs in Sussex.

## **Country Park**

Country Parks were established as a result of the 1968 Countryside Act to provide a wide range of opportunities for recreation, health, education and improve the quality of life for local communities. Natural England recognises Country Parks as significant places that contribute to England's accessible natural green space. There are 11 Country Parks in Sussex, the details of which can be obtained from the local authorities.

## **Local Geological Site (LGS)**

Previously known as Regionally Important Geological/Geomorphological Sites (RIGGS), LGS are non-statutory designations that have been identified by local geodiversity groups as being of importance. There are over 120 LGS in Sussex which have been assessed by the Sussex Geodiversity Partnership. The features identified as being important become a material consideration in any future development, and should be taken into account by the relevant local authority.

A selection of LGS with public access in Sussex can be viewed on the [Sussex Geodiversity Partnership's website](#).

## **Marine Site of Nature Conservation Importance (MSNCI)**

Marine Sites of Nature Conservation Importance are non-statutory sites identified on account of the special interest of their marine habitats, the fauna and flora, or for unusual geological and geomorphological features. They are an extension of the series of terrestrial SNCIs. The identification of these sites is to highlight their importance for marine wildlife and to emphasise the risks of certain operations damaging their interest. There are 23 MSNCIs off the Sussex coast.

## **Environmental Stewardship**

Environmental Stewardship is an agri-environment scheme managed by Natural England that provides funding to farmers and other land managers to deliver effective environmental management.

There are four elements to Environmental Stewardship, three of which are relevant in Sussex:

**Entry Level Stewardship (ELS)** goes beyond the Single Payment Scheme requirement to maintain land in good agricultural and environmental condition.

**Organic Entry Level Stewardship (OELS)** is the organic strand of ELS. It is geared to organic and organic/conventional mixed farming systems and is open to all farmers not receiving Organic Farming Scheme aid.

**Higher Level Stewardship (HLS)** involves more complex types of management where agreements are tailored to local circumstances.

Further information can be found on the [Natural England website](#).

**Further information on many of the designations listed above can be found on the [Natural England website](#).**

# West Sussex Local Geological Site (LGS) Survey 2010



## Condition Monitoring Form for NI 197 Reporting

Woods Mill, Henfield, West Sussex BN5 9SD. Tel: 01273 497521  
Email: sxbrcl@sussexwt.org.uk Website: www.sxbrc.org.uk

1. Site Information									
<b>Site Name &amp; LGS ID</b>		<b>Gasper Pit 17, Cote Bottom, High Salvington TQ10/62</b>							
<b>Site Type</b>		ED		<b>Grid Reference</b>		TQ116065			
<b>Date of Visit</b>		21/04/2010		<b>Local Authority</b>					
<b>Surveyor</b>		Peter Anderton		<b>Landowner</b>					
<b>1:50,000 BGS Sheet no.</b>		318/333		<b>1:25,000 OS Sheet no.</b>		121			
<b>LGS designation</b>	<b>Scientific</b>	<b>X</b>	<b>Educational</b>	<b>X</b>	<b>Aesthetic</b>		<b>Historical</b>		
<b>Interest Feature(s):</b> Disused chalk quarry exposing Culver Chalk Formation. This site is the only locality exposing higher zones than those exposed in TQ10/07 and TQ10/10. The primary exposure (A) at the south end of the quarry is about 20m long and 6m high. Other undocumented exposures, B & C, occur on the slopes at the northern head of the quarry. <b>Stratigraphy:</b> upper Tarrant Chalk and lower Spetisbury Chalk members, Culver Chalk Formation, White Chalk Subgroup, late Cretaceous in age. Type locality for the Cote Bottom Flint layer. <b>Sedimentology:</b> soft white chalk limestone with flint layers showing irregular and tabular flints. Deposited in relatively deep (→100m) open marine environment. <b>Palaeontology:</b> a special form of <i>Echinocorys</i> has been found here.									
<b>Previous management and dates (if any)</b>									

2. Primary Factors					
<b>Bedrock feature</b>	<b>Is (are) the feature(s) exposed?</b>	<b>Y</b>	<b>If No, can it (they) practically be re-exposed?</b>		
	<b>Is (are) the feature(s) being affected by the following factors?</b>				
	<b>Factor</b>	<b>Y/N</b>	<b>Comments</b>		
	Vegetation	<b>Y</b>	Trees cover most of the quarry slopes. The primary exposure A is obscured by ivy and overhanging vegetation except for a central section which appears to have been cleared. Much of exposure B is covered by vegetation.		
	Scree/Mass Movement	<b>N</b>			
	Flooding	<b>N</b>			
	Dumping/Landfill	<b>N</b>			
	Quarrying/Engineering Works	<b>N</b>			
Development (housing/industrial)	<b>N</b>				
Others (please define) -	<b>N</b>				
<b>Superficial deposit feature</b>	<b>Is (are) the feature(s) exposed?</b>	<b>N/A</b>	<b>If No, can it (they) practically be re-exposed?</b>		
	<b>Is (are) the feature(s) being affected by the following factors?</b>				
	Vegetation (Trees or crop planting)				
	Agricultural practices (deep ploughing)				
	Quarrying/Engineering Works				
	Development (housing/industrial)				
Others (please define) -					

<b>Geomorphology feature</b>	<b>Is (are) the geomorphological feature(s) being allowed to evolve naturally?</b>		<b>N/A</b>
	<b>Is (are) the feature(s) being affected by the following factors?</b>		
	Vegetation	<b>N</b>	
	Sea Defences	<b>N</b>	
	River Management	<b>N</b>	
	Ground Stabilisation (slopes/sand dunes)	<b>N</b>	
	Water level change	<b>N</b>	
	Development (housing/industrial)	<b>N</b>	
Others (please define) -	<b>N</b>		

<b>3. Secondary Factors</b>			
<b><i>Factors that do not directly affect the feature(s) but may need to be managed in order for feature(s) to maintain a desirable condition</i></b>			
	<b>Factor</b>	<b>Y/N</b>	<b>Comments</b>
<b>Site access</b>	<b>Are any of the following causing difficulties in accessing the site?</b>		
	Physical obstacles	<b>Y</b>	Vegetation hinders access to the right (SW) side of the primary exposure A, but the central and left parts of the face are accessible. Trees and shrubs hinder access to exposure B.
	Landowner permissions	<b>N</b>	
	Protected species/habitats	<b>N</b>	
	Other (please define) Parking	<b>N</b>	There is a local nature reserve to the northeast with a car park at the edge of High Salvington.
<b>Furniture</b>	<b>Are any of the following in an undesirable condition?</b>		
	Interpretation Boards	<b>N</b>	
	Benches/Fences/Gates	<b>N</b>	
	Earthworks	<b>N/A</b>	
Other (please define)			
<b>Other features</b>	<b>Are there any other features of interest that should be considered?</b>		
	Biodiversity	<b>N</b>	
	Historic Environment	<b>N</b>	
	Other (please define)		

#### 4. Site Status

**Overall, is the site in a desirable condition for use(s) of the feature(s) identified?**

**Yes / No / Uncertain**

**If Yes - what management is required (if any) for the feature(s) to maintain a desirable condition:**

Primary exposure A seems to have been partially cleared of vegetation to make the central section visible and accessible. This should be kept clear on a continuing basis. Exposure B is on a slope amongst trees and would be difficult to manage. Exposure C is a bare slope exposing chalk upslope, convenient for fossil collecting, and scree downslope. It may have been cleared deliberately and could be kept clear in future.

**For the above, is the management: *Being undertaken* / *Going to be undertaken* / *Not going to be undertaken* / *Not possible***

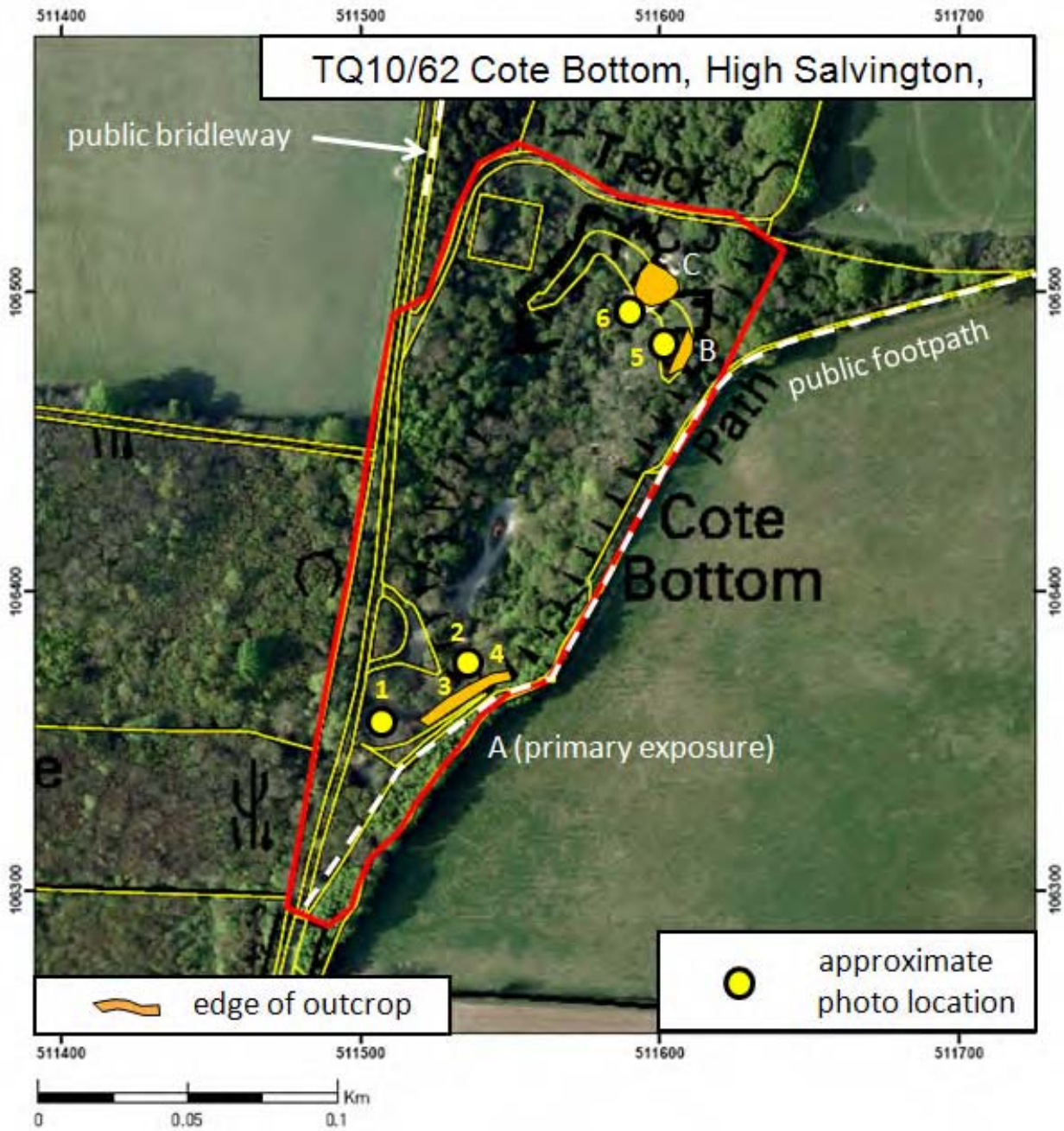
**If Uncertain or No - what management is required for the feature(s) to reach and maintain a desirable condition:**

**For the above, is the management: *Being undertaken* / *Going to be undertaken* / *Not going to be undertaken* / *Not possible***

**Are there any secondary factors that need further management?**

**Yes / No / Not applicable**

**Suggested management in order for the feature(s) to reach/maintain a desirable condition:**



RGB Aerial Photography - ©GeoPerspectives, 2007. (WSSC).

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Key to Map:

 LGS





1. Primary exposure A close to the quarry entrance. Note the cleared central section. Grid ref. TQ11510636. Direction ENE.



2. Central cleared section of primary exposure A showing blocky, well-jointed chalk representing the upper Tarrant/lower Spetisbury Chalk members. Height 6m. Grid ref. TQ11540638. Direction SE.



3. Right (SW) side of primary exposure A mostly obscured by vegetation. Grid ref. TQ11540638. Direction SSW.



4. Detail of lower face to left of cleared section in photo 2, showing prominent layer of irregular flints near top (probably the Cote Bottom Flint) and thinner flint layers towards the base including a layer of tabular flints. 1m pole for scale. Grid ref. TQ11540638. Direction SE.



5. Exposure B on a steep vegetated slope near the head of the quarry. Grid ref. TQ11600648. Direction east.



6. Exposure C is a bare chalk slope at the head of the quarry. Grid ref. TQ11590649. Direction NE.

## ANCIENT & VETERAN TREES

Ancient trees form a vital part of our landscape, heritage and biodiversity. They are scattered through most parts of the UK landscape where they are found in exceptionally large numbers compared with north east Europe. Ancient trees can be most easily found in the vestiges of the once extensive Royal Hunting Forests, such as Ashdown Forest, and medieval parks. Others occur in historic parkland, landscaped gardens, woodland, wood pasture and ancient wooded commons. There are also small groups and individual trees scattered around housing estates, urban parks, village greens and churchyards. Some ancient trees are found on farmland, usually in hedgerows or old boundary features.

In Sussex, some of the largest recorded girths belong to: the Queen Elizabeth oak of 12.67m at Cowdray Park, a yew of 8.5m in Wilmington churchyard; a beech of 8.4m on Ashdown Forest; and a sweet chestnut of 7.2m at Herstmonceux Castle.

There are different definitions for mature trees, depending mainly on their stage of life:

**Ancient trees.** Biologically, aesthetically or culturally interesting because of their great age; In ancient or post-mature stage of life; Have a large girth relative to others of the same species.

**Veteran trees.** Usually in the second or mature stage of life; Have important wildlife and habitat features including hollowing or associated decay fungi, holes, wounds and large dead branches.

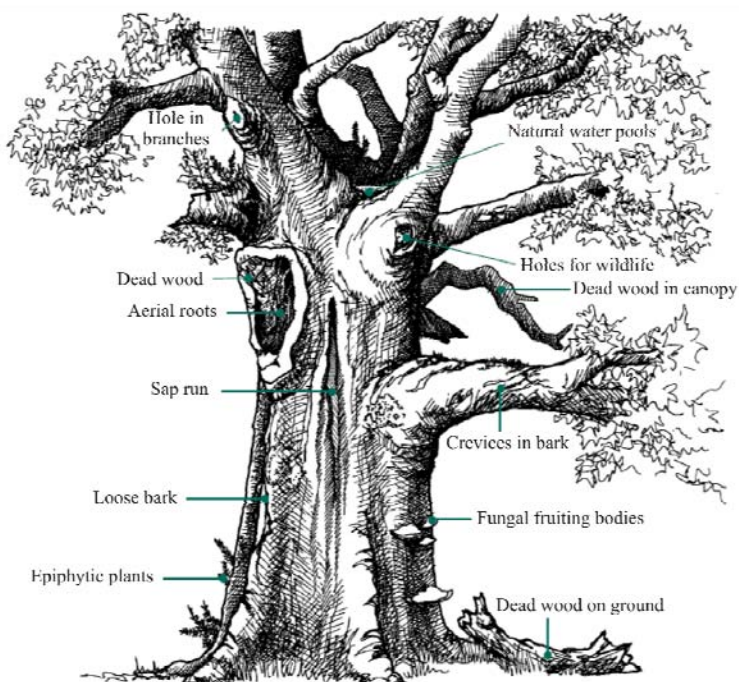
**Notable trees.** Locally important or of significance to the community; Specimen trees or considered to be the potential next generation of veteran trees.

### Ancient tree ecology

Ancient trees are unique as a wildlife habitat because of the exceptionally species-rich communities associated with wood decay and the bare surfaces of trunks, bough and roots. Clusters of ancient trees are even more important because together they offer a wide range of niche homes for many specialist species in one small area.

Approximately 1,700 (6%) invertebrate species in the British Isles are dependent on decaying wood to complete their life cycles. Species associated with decaying wood include: rare click beetles such as the violet click beetle *Limoniscus violaceus*, the wasp mimic crane fly *Ctenophora flaveolata* and the oak longhorn beetle *Rhagium mordax*. The black-headed cardinal beetle *Pyrochroa coccinea* is an insect associated with veteran trees and old growth woodland.

Old trees with splits, cracks, loose bark, holes and crevices are especially attractive to bats and in particular to woodland specialists such as the rare Barbastelle and Bechstein's bat.



Characteristic features of a veteran tree

Source: *Veteran Trees: A guide to good management*. Natural England, 2000.

### The Ancient Tree Hunt

The Ancient Tree Hunt is a nationwide search to map all of the old trees in the UK in order to plan for their active conservation. This project, led by the Woodland Trust in partnership with the Ancient Tree Forum and Tree Register of the British Isles, was launched in 2007.

Most of the trees recorded can be viewed on their website: [www.ancient-tree-hunt.org.uk](http://www.ancient-tree-hunt.org.uk)

# ANCIENT WOODLAND

Ancient woodland is defined by Natural England as an area that has had a continuous woodland cover since at least 1600 AD.

Sussex is one of the most wooded parts of lowland Britain with ancient woodland covering approximately 39,000ha (10%) of the county. Bluebell woods associated with coppicing, open wood pasture associated with deer parks and the small Wealden woods in ghyll valleys are a key part of Sussex's distinctive and varied landscape.



Bluebell

The habitat can be split into two broad categories:-

**Ancient semi-natural woodland** - is composed predominantly of trees and shrubs native to the site that do not obviously originate from planting. However, woodlands with small planting of trees native to the site would still be included in this category. The stands may have been managed by coppicing or pollarding in the past or the tree and shrub layer may have grown up by natural regeneration.

**Plantations on ancient woodland sites** - are areas of ancient woodland where the former native tree cover has been felled and replaced by planted trees, predominantly of species not native to the site. These will include conifers such as Norway spruce or Corsican pine, and also non-native broadleaves such as sweet chestnut. These sites often retain some ancient woodland features such as soils, ground flora, fungi, and woodland archaeology and as such they can respond well to restoration management.

## The importance of ancient woodland

Ancient woodland is of prime ecological and landscape importance, providing a vital part of a rich and diverse countryside. In particular, ancient woodland:

- is exceptionally rich in wildlife, and supports many rare and threatened species
- may contain surviving descendants and features from the original natural forests
- acts as reservoirs from which wildlife can spread into new woodlands
- has valuable soils due to their undisturbed nature
- is an integral part of England's historic landscapes and the biological and visual functioning of a landscape
- contains a wealth of features of historical and archaeological importance little altered by modern cultivation or disturbance

## Ancient Woodland Inventory

The Ancient Woodland Inventory was set up in 1981 by the Nature Conservancy Council (now Natural England). It originally only included sites over two hectares in size. Advances in digital mapping techniques mean it is now possible to map woodlands under two hectares with greater accuracy. This has led to a revision of the Ancient Woodland Inventory within the South East. The surveys for the revision of the inventory for Sussex were completed in 2010 and have been adopted by Natural England. However, the inventory will always be classed as "provisional" because it is reviewed and updated as new information comes to light.

Further information about the Ancient Woodland Inventory can be found on the [Natural England website](#).

(Illustration courtesy of Natural England.)

## LOWLAND CALCAREOUS GRASSLAND

Lowland calcareous grasslands develop on shallow lime-rich soils generally overlying limestone rocks - in Sussex it occurs exclusively on chalk.

### **Why is it important?**

- Chalk grassland can support over 50 species of flowering plant per square metre, including a number of nationally scarce species.
- Many species of rare invertebrates are found including hoverflies, molluscs and moths.
- Rare assemblages of mosses and lichens can be found on some chalk grasslands.
- The grasslands and associated patches of scrub provide breeding and feeding habitat for many birds including scarce species such as stone curlew.



Round-headed rampion

### **Lowland calcareous grassland in Sussex**

The South Downs represents one of the major areas of chalk grassland in the UK. It is estimated that the habitat now covers only around 3% of the South Downs, where it is predominantly confined to steeper slopes. It continues to support a rich diversity of animals and plants including many rare species.

### **What are the threats?**

- Agricultural intensification by use of fertilisers, liming, reseeding and ploughing.
- Lack of grazing stock results in dominance of coarse grasses and scrub, and a decline in overall botanical diversity.
- Recreation effects including disturbance of wildlife, compaction of soil, trampling and increased nutrients in soil. High public access can also cause conflicts where grazing animals are present.
- Isolation and fragmentation of sites reduces dispersal opportunities making species more susceptible to extinction.
- Losses can result from development including redevelopment of abandoned chalk quarries which can develop good quality grassland.

### **Some associated species**

- Linnet *Carduelis cannabina*
- Whitethroat *Sylvia communis*
- Adonis blue *Polyommatus bellargus*
- Glow-worm *Lampyris noctiluca*
- Round-headed rampion *Phyteuma orbiculare*
- Yellow-wort *Blackstonia perfoliata*

(Illustration courtesy of Natural England.)

## TRADITIONAL ORCHARDS

Traditional orchards are areas of land on which a range of fruit and nut trees are cultivated that are managed in a low intensity way. Permanent grassland beneath the trees was traditionally grazed by livestock.



### ***Why are they important?***

- The mosaic of habitats such as hedgerows, dead wood and fruit trees make traditional orchards important for a wide range of species.
- Traditional orchards provide the conditions needed for many bryophytes and lichens.
- Holes and crevices in old trees provide habitat for bats and nest sites for birds such as redstart and bullfinch.
- Dead and decaying wood makes traditional orchards hugely important for invertebrates, lichens and fungi.

### ***Traditional orchards in Sussex***

The traditional orchards inventory\* lists over 900 sites in Sussex covering an area of approximately 300 hectares. It is estimated that around half of these orchards are currently in a poor condition.

### ***What are the threats?***

- Changes in farming policy and markets has led to a decline in income from traditional orchard produce.
- A decline in the skills and knowledge to manage traditional orchards can lead to neglect.
- Loss of orchards can occur as fruit trees dying of old age are not replaced.
- Lack of protection under the current planning system.

### ***Some associated species***

- Lesser spotted woodpecker *Picoides minor*
- Noctule *Nyctalus noctula*
- Lichen running-spider *Philodromus margaritatus*
- Noble chafer *Gnorimus nobilis*
- Mistletoe *Viscum album*
- A lichen *Ramonia chrysophaea*

### ***\* The Traditional Orchard Inventory for England***

The traditional orchard data used in Sussex Biodiversity Record Centre reports are the result of a project run by the People's Trust for Endangered Species (PTES) on behalf of Natural England. The resulting inventory is based on combining existing survey data with aerial photograph interpretation, together with ground-truthing survey work by local volunteers. The inventory is provisional, and is still being refined and updated as new data becomes available. The project was completed in March 2011.

For the purpose of the inventory, traditional orchards are defined as sites where at least five fruit trees must be present with no more than 20m between their crown edges.

### ***Further information***

Orchard Network: [www.orchardnetwork.org.uk](http://www.orchardnetwork.org.uk)

## WOOD-PASTURE & PARKLAND

Many parks were established in medieval times for aesthetic reasons, to provide grazing for farm animals or deer and to provide wood from pollarded trees. In later centuries, new landscaped parks were created from these medieval parks or by enclosing ordinary farmland. Wood-pasture and parkland is therefore the result of a distinctive, historic land-use system, and represents a vegetation structure rather than being a particular plant community.

Typically this structure consists of veteran trees with wide, spreading crowns growing in a matrix of grazed grassland or heathland. It is a habitat of cultural and historical significance and can also be of great ecological importance due to the wide range of species it supports. For these reasons, and due the threats facing the habitat, it is a UK Biodiversity Action Plan (BAP) habitat.



Pedunculate Oak

### Current status and distribution

There are no reliable statistics on the extent of this habitat in the UK, but it is most common in southern Britain. Sussex is particularly rich in wood-pasture and parkland with several large old deer parks, such as Petworth Park and Parham Park.

### Ecological significance

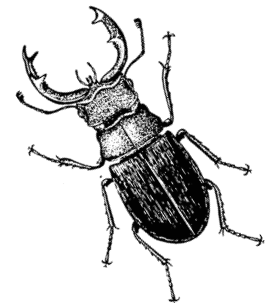
Wood-pasture and parkland is important for wildlife for a number of reasons:

- The mosaic of habitats together with the presence of veteran trees provides the conditions needed by certain species for every stage of their life cycle.
- There is often a continuity of old trees over hundreds of years, or even in some cases back to the post ice-age 'wildwood'. The trees have often been pollarded; this management technique extends their life and creates rot holes and crevices which are used by bats, hole-nesting birds and invertebrates.
- Sussex has the majority of the UK's mature English Elms following the loss of millions to Dutch Elm Disease.
- Rotten wood within ancient tree trunks supports saproxylic invertebrates (those that rely on dead wood for all or part of their life cycle) and are amongst the most threatened group of species in Europe. One such species is the click beetle *Lacon querceus*, which develops in dry red-rotten oak wood in veteran trunks and fallen boughs. The Stag Beetle is another saproxylic beetle often associated with pasture parkland.
- The old tree trunks also support unique communities of lichens, mosses and liverworts which depend on the stability of the surface provided by veteran trees. Two BAP Priority Species of lichen found on old trees include *Bacidia incompta* and *Enterographa sorediata*.

### Threats facing the habitat include:

- Isolation and fragmentation of the remaining parklands.
- Inappropriate grazing resulting in the loss of plant diversity and habitat structure.
- Agricultural intensification including reseeding, ploughing and use of fertilisers.
- Neglect and loss of veteran trees, and over-tidying of deadwood.

(Illustrations courtesy of Natural England.)



Stag Beetle

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