

Normansal Avenue Play Park, Seaford

Ecological Surveys

Report for Lewes District Council

Author	Naomi Forbes BSc AIEEM	
Status	Date	Approved by
Initial	15/06/2010	GC
Revision	25/08/2010	PWS
Final	02/09/2010	PWS
EC job number	2010/383	

Contents

Contents 1

Executive Summary	1
1 Introduction.....	2
2 Methodology.....	4
3 Results	9
4 Conclusions and Recommendations	25
Appendix 1: Habitat Plan.....	30
Appendix 2: Photographs.....	32
Appendix 3: Plant species list.....	35
Appendix 4: Legislation and policy	38

LIABILITY

Ecology Consultancy Limited has prepared this report for the sole use of Lewes District Council in accordance with the agreement under which our services were performed. No warranty, express or implied, is made as to the advice in this report or any other service provided by us. This report may not be relied upon by any other party without the prior written permission of Ecology Consultancy Limited. The content of this report is, at least in part, based upon information provided by others and on the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from any third party has not been independently verified by ECL, unless otherwise stated in the report.

COPYRIGHT

© This report is the copyright of Ecology Consultancy Limited. Any unauthorised reproduction or usage by any person is prohibited

The Ecology Consultancy is the trading name of Ecology Consultancy Ltd

Executive Summary

A Phase 1 habitat survey and protected species risk assessment was carried out at Chalvington Field, Normansal Avenue, Seaford in East Sussex in May 2010, in order to determine whether any ecological constraints could affect development proposals for the site. The proposal is to construct a new children's playground within a strip of woodland on the edge of Chalvington Field on the northern boundary of Seaford. The main findings of the survey are as follows:

- The nearest statutorily designated site for nature conservation is Seaford to Beachy Head Site of Special Scientific Interest located approximately one kilometre (km) to the north of the site.
- The nearest non-statutory designated site for nature conservation is Blatchington Reservoir Site of Nature Conservation Importance located approximately 1.03 km. to the north-west of the site.
- The proposed site is located within a strip of broad-leaved self-established woodland with a large scrub component which divides two sections of Chalvington Field.
- On the basis of the Phase 1 survey, the surveyed site is considered to have moderate intrinsic wildlife interest, being comprised largely of self-established broad-leaved woodland and scrub of a moderate age with a limited area of unimproved neutral grassland close to the eastern boundary.
- The surveyed area was of moderate size, measuring approximately 0.2 hectares and included habitat to support potential protected species including breeding birds, badger, reptiles and bats.
- A walkover survey of all accessible woodland within 350 metres of the proposed playground site was carried out to search for all signs of badger presence.
- Mitigation recommendations regarding other protected species and species groups such as reptiles and breeding birds are outlined in Section 4.
- Woodland and grassland enhancement measures which are designed to increase local biodiversity are outlined in Section 4.11.

1 Introduction

BACKGROUND

- 1.1 The Ecology Consultancy was commissioned by Lewes District Council to carry out an ecological assessment of land at Chalvington Field; a public recreation ground located on Normansal Avenue, within the northern extent of Seaford in East Sussex, where there is a proposal to construct a children's adventure playground.
- 1.2 The council have requested this assessment to obtain an independent opinion of the wildlife interest and relative conservation value of the area, and to ascertain any potential constraints or opportunities for enhancement.

SCOPE OF THE REPORT

- 1.3 This report is largely based upon the results of a desk top study and a field survey undertaken using the standard Phase 1 survey methodology (JNCC 1993). This approach is designed to identify the broad habitat types present, to assess the potential of the habitats to support protected species, and to assist in providing an overview of the ecological interest of a site. It is the most widely used and professionally recognised method for the initial ecological appraisal of a site.
- 1.4 During the extended Phase 1 survey all trees present on site were assessed for their bat roost potential and were assigned a probability category, as per current guidelines (BCT, 2007).
- 1.5 The survey findings are presented in this report, together with a preliminary ecological evaluation of the site. Possible impacts of the development on ecological receptors are identified and discussed, as are opportunities for enhancement.
- 1.6 The extended Phase 1 survey identified potential for badgers *Meles meles* to be present on site, following the identification of mammal excavations within the survey area. The results of a subsequent targeted badger survey are therefore also included within this report.

SITE CONTEXT AND STATUS

- 1.7 The survey area was a strip of semi-natural mixed woodland at Chalvington Field, on the northern boundary of Seaford. The proposed location of the new adventure playground lies within this small area of woodland, which is in turn surrounded on all sides by the amenity grassland comprising the recreation field (Photograph 5, Appendix 2). This area of green space is approximately 3.3 ha in total area, and the approximate National Grid Reference

for the centre of the site is TQ 491 005. The surveyed area of woodland shown on the Habitat Plan (Appendix 1) measured approximately 0.22 hectares (ha).

- 1.8 The nearest statutory designated site is Seaford to Beachy Head Site of Special Scientific Interest (SSSI), which is 1102 ha in extent. Its closest boundary lies approximately 1 km to the north-east of the survey area.
- 1.9 The nearest non-statutory designated site is Blatchington Reservoir Site of Nature Conservation Importance located approximately 1 km to the north-east of the survey area. The steep sides of the reservoir support rough grassland with calcareous herbs and areas of species-rich calcareous grassland.

DESCRIPTION OF THE DEVELOPMENT

- 1.10 The proposal involves the construction of a children's adventure play park, using natural materials and following the contours of a natural depression within the surveyed woodland area. The proposal will necessitate the removal of some sycamore *Acer pseudoplatanus* and young elm *Ulmus sp.* trees and hawthorn *Crataegus monogyna* blackthorn *Prunus spinosa* scrub. Landscaping proposals within the Chalvington Field area include a relaxation of the mowing regime at the woodland and hedge edges to allow long grass margins to develop and the planting of native tree and scrub species.

2 Methodology

DESK TOP STUDY

- 2.1 Information regarding the present and historical ecological interest of the site and a surrounding 2km radius was requested from Sussex Biological Records Centre (SxBRC). In addition, a search was completed using an on-line mapping service (www.magic.gov.uk) for statutorily designated sites.
- 2.2 It is important to note that, even where data is held, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.

HABITAT SURVEY

- 2.3 The Phase 1 habitat survey followed the standard methodology (JNCC 1993) and covered the whole site, including boundary features. All broad habitat types present were described and mapped. A list of plant species was compiled, together with an estimate of abundance made according to the DAFOR scale. The Phase 1 habitat survey was carried out on the 7th May 2010. Weather conditions were sunny and the temperature was approximately 12°C.
- 2.4 A Habitat Plan of the site is included in Appendix 1, with photographs of the dominant habitats presented in Appendix 2. A full list of plant species identifiable at the site during this survey, along with an assessment of their abundance, appears in Appendix 3.
- 2.5 Incidental records of birds and other fauna noted during the course of the habitat survey were also compiled. Scientific names are given after the first mention of a species, thereafter, common names only are used. Nomenclature follows Stace (1997) for vascular plant species.

PRELIMINARY PROTECTED SPECIES ASSESSMENT

- 2.6 The potential of the site to provide habitat for protected species was assessed from field observations carried out at the same time as the Phase 1 habitat survey, combined with the results of the desk top study. The site was inspected for indications of the presence of protected species as follows:
- Nesting habitat for breeding birds, such as dense scrub, shrubbery, rank grassland and hedgerows;

- The presence of trees exhibiting features comprising potential access/egress points or roost sites for bats (such as cracks, splits, woodpecker holes and dense ivy *Hedera helix* cover);
- Scrub/grassland mosaic habitats and potential hibernation sites for common reptile species; and,
- Evidence of badger; including setts, runs, snuffle holes and hairs.

2.7 The likelihood of occurrence is ranked as follows and relies on the findings of the current survey and an evaluation of existing data.

- Negligible – while presence cannot be absolutely discounted, the site includes very limited or poor quality habitat for a particular species or species group. No local returns from a data search, surrounding habitat considered unlikely to support wider populations of a species/species group. The site may also be outside or peripheral to known national range for a species;
- Low – on-site habitat of poor to moderate quality for a given species/species group. Few or no returns from data search, but presence cannot be discounted on the basis of national distribution, nature of surrounding habitats, habitat fragmentation, recent on-site disturbance, etc;
- Moderate – on-site habitat of moderate quality, providing all of the known key requirements of given species/species group. Local returns from the data search, within national distribution, suitable surrounding habitat. Factors limiting the likelihood of occurrence may include small habitat area, habitat severance, and disturbance;
- High – on-site habitat of high quality for given a species/species group. Local records provided by desk-top study. The site is within/peripheral to a national or regional stronghold. Good quality surrounding habitat and good connectivity; and,
- Present – presence confirmed from the current survey or by recent, confirmed records.

2.8 The purpose of this assessment is to identify whether more comprehensive Phase 2 surveys for protected species should be recommended and to identify any areas that should remain undisturbed.

BADGER SURVEY

2.9 The extended Phase 1 habitat survey identified the presence of mammal excavations within the survey area (see Section 3.25: Table 3). A badger survey was therefore

subsequently undertaken on site to assess the status of any setts present and the level of badger activity within the survey area.

- 2.10 Initially, a badger watch of the identified sett on two separate evenings was recommended, however due to large amounts of human disturbance close to the excavations this proved impossible and instead a survey of all surrounding woodland and connected hedges was carried out, where access permitted, to search for additional evidence of badger activity within the wider area. The survey consisted of searching for badger field signs, including setts, pathways, footprints, latrines, feeding signs such as snuffle holes, and badger hairs. This evaluation was based on methodology developed for the National Survey for Badgers (Cresswell et al, 1990).

SITE EVALUATION

2.11 Following completion of the Phase 1 habitat survey, the site has been evaluated using a combination of the guidance issued by the Institute of Ecology and Environmental Management (IEEM, 2006) (which evaluates sites according to a geographic scale; significance at the international level down to the local level) and a range of other socio-economic criteria for assigning ecological value, as detailed below:

- Presence of sites or features designated for their nature conservation interest. Examples include internationally or nationally designated sites such as Special Areas of Conservation (SACs) and SSSIs, locally designated sites such as Local Nature Reserves (LNRs) and Sites of Nature Conservation Importance (SNCl)s);
- Biodiversity value, for example; habitats or species which are rare or uncommon, species rich assemblages, species which are endemic or on the edge of their range, large populations or concentrations of uncommon or threatened species, and/or plant communities that are typical of valued natural/semi-natural vegetation types;
- Potential value, as addressed by targets to increase the biodiversity value of SSSIs, international sites and some Biodiversity Action Plan (BAP) species and habitats. If detailed plans exist to enhance the value of such areas then it may be appropriate to value them as if the intended resource already existed;
- Secondary and supporting value, for example; habitats or features which provide a buffer to valued features or which serve to link otherwise isolated features;
- Social value in regard to the extent to which a site and its wildlife provide a resource that people use or enjoy;
- Economic value for example those relating to impacts on ecological features and resources that are financially viable such as paying for visits to bird hides or a shell fishery in an estuary;
- Presence of legally protected sites or species; and/or,
- Presence of UKBAP, and/or East Sussex BAP habitats and species.

LIMITATIONS

2.12 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and prediction of the natural environment. The Phase 1 survey was carried out relatively early in

the growing season and some later flowering plant species may therefore have been under-recorded. Several species present as emergent growth were unidentifiable also.

2.13 This Phase 1 habitat survey does not constitute a full botanical survey. The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the site. This is based on the suitability of the habitat, known distribution of the species in the local area provided in response to our enquiries and any direct evidence on the site. It should not be taken as providing a full and definitive survey of any protected species group, and is only valid at the time the survey was carried out.

2.14 As detailed in Section 2.10 the recommended badger watch of the identified sett was unable to be carried out due to disturbance in the immediate area.

3 Results

DESK TOP STUDY

3.1 The following information regarding the present and historical ecological interest of the site was supplied by the SxBRC. The data covers a standard 2km radius search area centred on the field survey area and includes information on the following:

- Land designated as SNCIs; as being of local conservation importance and often recognized in Local Authority development plans; and,
- Protected, rare, BAP priority and other notable species.

Sites designated for their nature conservation interest

3.2 There are no internationally designated sites located within 2km of the proposed development site.

3.3 A single nationally designated site is located within the search area; Seaford to Beachy Head SSSI, situated approximately 1km to the north-east of the survey area. This site contains a diverse range of habitats, including herb-rich chalk grassland, chalk heath (a unique, rare, habitat found on chalk soils), maritime grassland, foreshore and chalk cliffs, river meanders, and Greensand reef. Together, these habitats support a number of nationally rare, nationally scarce, and nationally significant plants, invertebrates and birds.

3.4 There are five non-statutory designated sites within 2km of the site. All are SNCIs, 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 Planning Authority (LPA) development plans. In other areas of the country they are sometimes called Sites of Importance for Nature Conservation (SINCs) or County Wildlife Sites (CWSs). Details are provided in Table 1 below.

Table 1 – Non-statutory designated sites within a 2km radius of Chalvington Field, East Sussex.

Site Name	Reason for designation	Area (ha)	Distance from site (km)
Bishopstone Downs SINC	Two blocks of unimproved chalk grassland on an east-facing slope on the dip slope south of Firle Escarpment. Both have a fairly deep soil so that the grassland has a mesotrophic element but a good range of calcicoles is present, nonetheless. The site is believed to be of interest for butterflies.	32.5	2.0 west

Blackstone Down SNCI	This is an extensive escarpment inland of the main scarp. Much of the slope is covered by dense scrub and tor grass <i>Brachypodium pinnatum</i> is present, but, there are still areas of species rich grassland and also patches of chalk heath. It forms an important link between the northern escarpment and the coastal chalk grasslands and is one of the most remote areas of downland in East Sussex.	53.4	1.08 north-east
Denton Hill Downs SNCI	A collection of three north-facing downs around Denton Hill. All three areas are similar in having fairly deep soils so that the sward tends to be rather mesotrophic but parts are very species-rich. Species of interest present include autumn lady's tresses <i>Spiranthes spiralis</i> , chalk milkwort <i>Polygala calcarea</i> and horseshoe vetch <i>Hippocrepis comosa</i> .	40.0	1 north-west
Seaford Green Site, Marine Parade SNCI	This site is of considerable value for wildlife. It is an area of open ground in a largely urban environment and has both tall ruderal and maritime grassland vegetation on its banks, the latter is typical of sites which are regularly inundated with salt water. Maritime habitats are rare along the south coast, due to the pressure of development, and every such area should be protected and managed for wildlife. The interest of the site is increased due to its proximity to the Tide Mills complex.	2.4	2.0 south-west
Blatchington Reservoir SNCI	The steep sides of the reservoir support rough grassland with calcareous herbs present and the short, tight sward of the top is species-rich calcareous grassland. The southern half, in particular, is especially rich and supports bee orchid <i>Ophrys apifera</i> .	0.4	1.01 north-east

Birds

3.5 SxBRC provided records of 208 species of birds within 2km of the site. This list includes birds from diverse groups, such as wildfowl, raptors, game, sea and woodland species. The following species records include only those listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), and Red and Amber-listed British Trust for Ornithology (BTO)/Royal Society for the Protection of Birds (RSPB) Birds of Conservation Concern¹ that are considered relevant to the habitats present on the site.

¹ Birds of Conservation Concern status is prioritised into high concern Red, medium concern Amber and least concern Green (Gregory et al, 2002). Red-list species are those that are globally threatened according to the IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and not shown a substantial recent recovery.

Table 2 – Bird species records relevant to the site.

Scientific Name	Common Name	BoCC Status	BAP Status
Herring gull	<i>Larus argentatus</i>	Red	UKBAP
Black-headed gull	<i>Chroicocephalus ridibundus</i>	Amber	N/A
House sparrow	<i>Passer domesticus</i>	Red	UKBAP
Willow warbler	<i>Phylloscopus trochilus</i>	Amber	N/A
Green woodpecker	<i>Picus viridis</i>	Amber	N/A
Dunnock	<i>Prunella modularis</i>	Amber	UKBAP
Starling	<i>Sturnus vulgaris</i>	Red	UKBAP
Song thrush	<i>Turdus philomelos</i>	Red	UKBAP

Reptiles

- 3.6 There are eighteen (1989-2003) records of slow-worm *Anguis fragilis* from within the data search area. The closest record is approximately 0.3km to the south-east of the site.
- 3.7 There are nine (1991 and 2002) records of grass snake *Natrix natrix*, the closest of which is located approximately 0.36km to the south-east of the site.
- 3.8 There are four (1996-2002) records of adder *Vipera berus*, the closest of which is located approximately 2km to the south of the site.
- 3.9 There are eight (1993-2003) records of common lizard *Zootaca vivipara*, the closest of which is approximately 0.39km to the east of the site.

Amphibians

- 3.10 There are ten records of great crested newt *Triturus cristatus* from the 2km data search area, the closest being from a location 1.27 km to the south of the field survey area.

Bats

- 3.11 There are records of five bat species from within the 2km data search area, and also several records of unidentified bats:
- Brown long-eared bat *Plecotus auritus* (three records 1990-2005);

Amber-list species are those with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations. Green-list species are those that fulfill none of the criteria.

- Daubenton's bat *Myotis daubentonii* (five records 2003-2007);
- Natterer's bat *M.nattereri* (a single 2006 record);
- Serotine *Eptesicus serotinus* (four records 1986-2005);
- Common pipistrelle *Pipistrellus pipistrellus* (a single 2002 record); and,
- Unidentified bat species (five records in 2007).

3.12 The closest record is of a serotine bat from approximately 1.86m south of the site, recorded in 1986.

Other mammals

3.13 There are three records of brown hare *Lepus europaeus* (1986-2007) from within the data search area. Brown hare is much less common in Sussex than it used to be, but is still widely recorded (SxBRC 2010).

HABITAT SURVEY

Overview

3.14 The survey site comprised a section of largely broad-leaved (self-established) secondary woodland and scrub dividing the amenity grassland areas of Chalvington Field. The ground sloped from north to south and the centre of the site was a depression, resembling a small crater (Photograph 2, Appendix 2). Within the woodland there was a network of informal paths, which were very well-trodden, indicating that the site is in regular use by local residents and is evidently used in particular by children as a play area.

Semi-natural broad-leaved woodland

3.15 The surveyed woodland had a generally open canopy with mature and semi-mature trees dominated by sycamore and ash *Fraxinus excelsior* with occasional hornbeam *Carpinus betulus* and maple *Acer sp.* Coniferous species, such as pine *Pinus sp.* and Monterey cypress *Cupressus macrocarpa* were also present in small numbers.. The woodland is regenerating with many young sapling trees, in particular sycamore and ash (Photograph 3, Appendix 2).

3.16 The shrub layer included frequent elder *Sambucus nigra*, wild privet *Ligustrum vulgare*, evergreen spindle *Euonymus europaeus*, blackthorn, hawthorn, and bramble *Rubus fruticosus agg.*

3.17 Ground cover species present included frequent cow parsley *Anthriscus sylvestris*, common nettle *Urtica dioica*, cleavers *Galium aparine*, dandelion *Taraxacum agg.* and lesser celandine *Ranunculus ficaria*, with occasional stinking iris *Iris foetidissima*,

common toadflax *Linaria vulgaris*, false brome *Brachypodium sylvaticum*, rough meadow-grass *Poa trivialis*, Adria bellflower *Campanula portenschlagiana* and sweet violet *Viola odorata*.

Semi-improved neutral grassland

- 3.18 A small area of grassland on the eastern edge of the survey area included grass species common to this habitat, such as cock's-foot *Dactylis glomerata*, creeping bent *Agrostis stolonifera*, rough meadow-grass, false oat-grass *Arrhenatherum elatius*, common rye-grass *Lolium perenne*, red fescue *Festuca rubra* and barren brome *Anisantha sterilis*. Broad-leaved plants included cut-leaved crane's-bill *Geranium dissectum*, curled dock *Rumex crispus* and common vetch *Vicia sativa*.

Scrub

- 3.19 Scrub areas outside of the woodland canopy were dominated by elder and bramble. Scrub on the northern boundary was dominated by hawthorn and blackthorn.

Target Note 1

- 3.20 Badger sett.

Target Note 2

- 3.21 Main badger sett.

Fauna

- 3.22 Birds recorded at the site during the survey were great tit *Parus major*, blackbird *Turdus merula*, chaffinch *Fringilla coelebs*, woodpigeon *Columba palumbus*, wren *Troglodytes troglodytes*, carrion crow *Corvus corone* and magpie *Pica pica*.
- 3.23 Red Admiral *Vanessa atalanta*, large white *Pieris brassicae*, small white *Pieris rapae*, holly blue *Celastrina argiolus*, meadow brown *Maniola jurtina* and speckled wood *Pararge aegeria* butterflies were also recorded at the site.

PROTECTED SPECIES ASSESSMENT

- 3.24 The habitats at the site were evaluated as to their likelihood to provide sheltering, roosting, nesting and foraging habitat for the following species;
- Bats;
 - Breeding birds;
 - Common reptile species;
 - Badger; and,

- Great crested newt.

3.25 These species were selected for further consideration because the results of the desk-top study revealed that they occur in the vicinity of the site and potentially suitable habitat is present on-site. The results of the field survey, combined with information from the desk-top study, are presented in Table 3, overleaf. The relevant legislation and policies relating to protected species is presented within Appendix 4.

Table 3 - Assessment of potential presence of protected and BAP priority species and habitats at the proposed development site

Species	Main legislation and policy (see Appendix 4)	Reason for consideration	Likelihood of occurrence
Bats	Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Schedule 2 of The Conservation of Habitats and Species Regulations 2010.	Mature trees with features such as cracks, crevices, mature ivy and loose bark provide potential bat roosting habitat. Woodland provides bat commuting and foraging habitat. There are records for five species of bat from within the 2km data search area.	Moderate: The woodland had moderate potential for roosting bat and high potential for commuting and foraging. A small number of mature trees within the wider area including ash, pine and hornbeam featured cracks, loose bark and splits that would potentially support a bat roost. The woodland provided suitable bat foraging and commuting habitat and had connectivity via hedgerows to other woodland areas in the wider countryside.
Breeding birds	Sections 1-8 of the Wildlife and Countryside Act 1981 (as amended).	Woodland trees and scrub provide potential nesting and foraging habitat for a variety of common woodland birds. SxBRC returned 208 bird species records from the 2km data search area.	High: The proposed development area itself included scrub and shrubbery which provided suitable bird nesting habitat, especially at habitat boundaries where there was denser cover. However the centre of the site was open, disturbed and had less cover. Potential breeding bird species recorded during the walkover survey included blackbird, robin, wren, chaffinch, woodpigeon and carrion crow.
Common reptiles	Schedule 5 (partial protection) of the Wildlife and Countryside Act 1981 (as amended).	Long grass and refugia, such as stones, scrub and shrubbery, provide suitable habitat for common reptiles such as slow-worm. SxBRC returned records for slow-worm, common lizard, adder and grass snake from within the 2km data search area.	Low/Moderate: Habitat on the eastern woodland edge provides suitable habitat for reptiles such as slow-worm and common lizard as it is only moderately shaded. However the site is generally a shaded, disturbed, area surrounded by large areas of managed amenity grassland. Any reptiles that may be on the site would be restricted to the small area of rough grassland.
Badger	The Protection of Badgers Act 1992.	Banks in woodland, scrub and hedges, provide suitable habitat for badger setts. Areas of bramble provide suitable foraging.	High/Present: Suitable habitat to support badgers was present within the woodland. There is what would appear to be a badger sett on the site, which had at least six entrances, some which were recent. However there were no

Table 3 - Assessment of potential presence of protected and BAP priority species and habitats at the proposed development site

Species	Main legislation and policy (see Appendix 4)	Reason for consideration	Likelihood of occurrence
			definitive signs of current badger use such as hair and used latrines. It is likely that the sett is used but not full time. A subsequent walk-over of woodland within the wider site revealed a main badger sett in scrub woodland approximately 200 metres to the north (Target Note 2) of the proposed playground area.
Great crested newt	Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Schedule 2 of The Conservation of Habitats and Species Regulations 2010.	Scrub, grassland and tall ruderal vegetation provide potentially suitable terrestrial habitat for great crested newt. Ten records for great crested newt were returned from the 2 km data search area, the closest being from 1.27 km to the south of the site.	Low/Negligible The woodland area does provide some limited terrestrial habitat for great crested newts although the high level of ground compaction will limit opportunities for cover. The small patch of grassland is suitable for cover and foraging but too small to be of any real value. OS 1:25,000 maps show only one pond (potential breeding habitat) within 500 metres. The amenity grassland around the site is unsuitable and does not provide any cover for commuting animals.
Stag beetle	Wildlife and Countryside Act 1981 (as amended), the Habitat Regulations and the NERC Act.	Dead wood habitat provides suitable habitat for stag beetle larvae. The data search returned one 2005 record for stag beetle from Seaford.	Low/ Medium There is some dead wood within the woodland however stag beetle is considered to be uncommon in East Sussex

BATS: TREE ASSESSMENT

- 3.26 All of the semi mature and mature trees within the proposed development area were assessed for their potential to support roosting bats. The position of these trees on the Habitat Plan is only indicative as no formal tree assessment has previously been carried out.
- 3.27 Overall, the trees within the proposed development area comprise young and semi-mature species with no potential to support bat roosts. Several trees adjacent to this area, including hornbeam and Scot's pine, have features (such as loose bark and dead wood) with some limited potential to support roosting bats.
- 3.28 None of the trees within the site had a **Moderate** to **High** potential to support a bat roost and, of the thirteen trees assessed, ten had **No Value** for roosting bats and four had **Low Value**. The remainder of the trees within the site were immature and were not considered suitable for use by bat species.

Table 4 – Tree assessment for bat potential

Tree ID #	Tree species	Features present ² with orientation (N,S,E,W); height above ground (m) and signs of use ³									Cowan (2006) criteria score ⁴
		Tree girth/cm at chest height (approximate)	Woodpecker holes	Knot/ rot holes	Split/ broken limbs	Dead wood (diameter cm)	Flaking bark	Epicormic growth	Total ivy cover % (Stem ivy cover %)	Bird/ bat boxes	
1	Pedunculate oak	30 - 40	-	-	✓	10-15	-	-		-	1
2	Ash	30	-	-	-		-	-		-	0
3	Ash	25 - 30	-	-	-		-	-		-	0
4	Ash	30	-	-	-		-	-		-	0
5	Elm, multi-stemmed	30 - 40	-	-	-		-	-		-	0
6	Ash	25	-	-	-		-	-		-	0
7	Sycamore	50	-	-✓ IG	-		-	-		-	1
8	Sycamore	25	-	-	-		-	-		-	0

² FI: Fully inspected (e.g. endoscope/mirrors); IG: Inspected from ground (e.g. binoculars); NI: Not inspected

³ Scratching (SCR); Droppings (DRP); Staining (STN); Smell (SML); Sound (SND); Bats present (BAT)

⁴ Cowan, A. (2006). **0: No value**; **1:Low value** (one or two minor features, possibly associated with feeding or night roosts, easily replaced, sparse ivy, minor branch splits, small areas of loose bark, features less than 10 years old); **2:Moderate value** (features which may provide a more secure site for small groups and individuals, fairly common features, dense ivy, significant branch splits, small cavities, present for between 10-30years); **3: High value** (features of particular significance, suitable for high priority roosts and large numbers of bats, conditions rare or uncommon in local area, large cavities, extensive branch splits, multiple opportunities in same tree, features may have been available for >30years); **4: Confirmed bat roost** (evidence of use).

9	Ash	30	-	-	-		-	-	30% 10%-low cover	-	0
10	Sycamore Multi- stemmed	20-60	-	-	-		-	-		-	0
11	Hornbeam	80	-	-	✓	10-15	✓	-		-	1
12	Ash	35	-	-	-	-	-	-		-	0
13	Hornbeam	40	-	-	-	-	✓	-		-	1

BADGER SURVEY

3.29 **Survey Area** – This included all accessible woodland and hedgerows with 350m of the proposed play park which provided potentially suitable habitat for badger.

3.30 The majority of the surveyed habitat displayed few indications of the presence of badger. Most of the field signs detailed below can be attributed to rabbit *Oryctolagus cuniculus* or fox *Vulpes vulpes*:

- Occasional mammal pathways were present leading under garden fences to private properties appeared to have been made by foxes;
- Single shallow round holes in the ground and at the base of trees within the woodland strip, excavated by either rabbit or fox; and,
- Definitive rabbit burrows forming a small warren in the hedgerow/field boundary to the north of the woodland strip with copious rabbit droppings present.

3.31 However a large sett comprising multiple excavations was located in the isolated area of wooded scrub (Target Note 2) within the cornfield approximately 0.2 kilometres to the north of the proposed playground site (see Photograph 6, Appendix 2). This appeared to be a main sett due to the large number of excavations.

EVALUATION

Features of International Importance

3.32 Features of International importance are principally sites covered by international legislation or conventions. The Habitats Regulations implements the Natural Habitats and Wild Fauna and Flora (92/43/EC) (Habitats Directive) in England and Wales. The Regulations mainly deal with the protection of sites that are important for nature conservation in a European context (SACs and Special Protection Areas (SPAs)). However, they also give protection to certain species of flora and fauna, including bats and great crested newts.

3.33 There are no habitats within the site that are included in Annex 1 of the Habitats Directive 1992. The closest site of International importance is Pevensy Levels RAMSAR site approximately 12 kilometres to the east, designated for its important wetland communities, including nationally rare and scarce aquatic plants and invertebrates and also for its notable assemblage of breeding and wintering

wildfowl. There is no potential for the proposals to generate impacts that could have an adverse effect on the integrity of this site.

3.34 As noted in Table 3 the site has potential to support bats, however it is unlikely to exceed local value in this respect (see 3.41 below).

3.35 No IUCN Red list species or Red List BoCC were noted during the current survey. However, there is potential for some Red list bird species to be present, including house sparrow and song thrush.

Features of National Importance

3.36 Features of national importance include SSSIs, which are designated under the Wildlife and Countryside Act 1981 (as amended) as well as species such as common reptile species which are subject to national legislation rather than international legislation.

3.37 The closest is Beachy Head to Seaford SSSI, located approximately 1km to the north-east of the site. The proposed development is highly unlikely to have any negative impact on this site due to the distance from the site and the low impact nature of the proposal.

3.38 Habitat within the proposed development area itself is potentially suitable to support limited numbers common reptile species, such as slow-worm and grass snake, which (in terms of the conservation of these species) would be significant at the local level only.

3.39 The site itself can be classified as Lowland Mixed Deciduous Woodland which is a UKBAP priority habitat; however it is not an outstanding example of this habitat and includes several non-native species such as sycamore and evergreen spindle. No vascular plants that are recorded on the UKBAP priority list were found during the Phase 1 survey. There is the potential for, amongst others, the following animal species on the UKBAP priority list to be present at the site:

- Noctule bat *Nyctalus noctula*;
- Soprano pipistrelle *Pipistrellus pygmaeus*;
- Brown long eared bat;
- Common toad *Bufo bufo*;
- Common lizard;

- House sparrow;
- Starling;
- Slow worm; and,
- Stag beetle *Lucanus cervus*.

Features of Regional Value

- 3.40 It is considered that none of the habitats present at the site would meet criteria for designation as an SNCI. Similarly, it is unlikely that the site supports rare species, or populations or assemblages of species that are significant at this level.

Features of Local (i.e. Seaford) Importance

- 3.41 As noted above, any populations of reptiles, invertebrates, bats or national or local BAP species present at the site may be of significance at this level. Trees within the immediate area of the proposed development have been assessed as having low/moderate potential to support bat roosts, and the wider woodland also has moderate foraging potential.

- 3.42 The proposal is unlikely to result in any fragmentation of foraging habitat due to its small size and predicted low impact on trees in the immediate area. The proposed development site is unlikely to exceed local importance for bats, and for the reasons stated it is predicted there will be no adverse effects on bats using the site for foraging and commuting. The site is likely to support low numbers of common reptile species such as slow-worm and grass snake. The woodland edge habitat provides suitable habitat to support a variety of invertebrates.

Features of Value within the Zone of Influence of the Project

- 3.43 All on-site habitats and the breeding bird assemblage likely to be present are regarded as being of value at this level. The habitats present of scrub, woodland and neutral grassland within the survey area are considered to have moderate intrinsic ecological value.

Features of Secondary and Supporting Value

- 3.44 The woodland does form part of a corridor that connects habitat areas via hedgerows and provides cover for wildlife moving between habitat suitable areas and is of potential value to species such as foraging and commuting bats, badger, birds and invertebrates.

Social Value

- 3.45 The primary value of this site is in its amenity use to local residents using the public open space for dog walking and general recreation.

Economic Value

- 3.46 The habitats and species within the site do not provide a resource that could be exploited for their economic value.
- 3.47 On the basis of the above evaluation it is considered that mature and semi-mature trees, scrub and grassland in and around the site are of value to local wildlife within the zone of influence of the proposed development, as habitat for breeding and foraging birds, commuting and foraging bats, common reptiles, badger and a variety of invertebrates. The site is not likely to be selected as a SNCI on the basis of the current survey.
- 3.48 Where necessary, proposals for mitigation and additional survey are made below.

LOCAL PLANNING POLICY

- 3.49 On the basis of the surveys completed it is considered that a number of regional plan policies contained in the South East Plan 2009 and saved policies from the Lewes District Council Local Development Framework are relevant to site, as follows in Table 4 below. The full text of the relevant policies is contained in Appendix 4.

Table 5 - The South East Plan (2009) Nature Conservation policies relevant to the site.

Policy	Relevance to the site
<p>Policy NRM5: <i>Conservation and improvement of biodiversity.</i></p> <p>Local planning authorities and other bodies shall avoid a net loss of biodiversity, and actively pursue opportunities to achieve a net gain across the region</p>	<p>There is an opportunity to conserve and potentially increase local biodiversity through local habitat management.</p> <p>Recommendations are made in Section 4.11.</p>

<p>Policy ST11 <i>Landscaping of Development</i> The District Council will, where appropriate, require applications for development to include a framework for landscaping and maintenance which clearly shows which features are to be retained and all new landscaping measures. Where practicable recontouring, infilling and top-soiling should use material excavated from the site. Such schemes will be required to be submitted before the application is determined. Provision will be required to be made for the future maintenance of the landscaping scheme. This may be achieved by means of a legal agreement in appropriate circumstances.</p>	<p>The project may involve a limited amount of re-profiling and re-contouring around the play park and should aim to only use material excavated from the site which will avoid importing any exotic species.</p>
---	---

4 Conclusions and Recommendations

CONCLUSION

- 4.1 The proposed development site comprises a mature/semi-mature semi-natural woodland strip that is currently well-used by the general public, as indicated by the well-worn paths throughout the woodland. Self-established sycamore and ash are present at low densities along with occasional other tree species. Areas of scrub located within the proposed development area were dominated by bramble, elder and hawthorn.
- 4.2 The limited size of, and high levels of disturbance within, the woodland strip have potential to limit the wildlife value of the site. However, it was considered to be of local value to wildlife, including breeding birds, foraging and commuting bats, badgers, reptiles and a variety of invertebrate species.
- 4.3 The design of the adventure play park will fit in with the contours of the woodland and will take into account all identified features of ecological value, such as long grassland providing potential reptile habitat and existing badger habitat. The final design will minimise any impact upon these features and suitable mitigation and enhancement measures are outlined below.
- 4.4 Recommended enhancement measures (4.15) will increase the biodiversity of the woodland area in line with local planning policy (Section 3.49) *Policy NRM5: Conservation and improvement of biodiversity* through providing additional appropriate and suitable habitat for species groups such as invertebrates, reptiles, breeding birds and mammals.

MITIGATION

Habitat Retention

- 4.5 The majority of trees assessed to be of ecological value, including hornbeam and oak standards fall outside of the development area and are unlikely therefore to be impacted. Trees within the boundary vegetation should be retained as they contribute to the woodland structure and integrity. Removal of sapling ash and sycamore will not have a significant impact and conversely may enhance the woodland by allowing more light to penetrate through the canopy to ground level.

- 4.6 The hawthorn and blackthorn scrub present on the northern and western boundaries should be retained intact as far as possible, as this is a relatively undisturbed and inaccessible area of habitat for reptiles, breeding birds, small mammals and badger.
- 4.7 Areas of rough grassland, and discrete areas of bramble on the eastern boundary, which provide potentially suitable habitat for reptile species should be retained where possible. Bramble scrub and rough grassland can also provide important foraging resources for badger

Badger

- 4.8 Recent activity was noted in May 2010 at one of the entrances of the badger sett previously identified on site. Field signs observed included recent soil excavation from one of the badger holes, coinciding with the end of the peak badger activity season (February to April). No such activity has been observed during the subsequent summer months. It can therefore be concluded that the badger sett may only be in use intermittently, although activity may well recommence in the autumn. The presence of a main badger sett (T2) within 200m of the onsite badger sett (T1) indicates that both setts are probably used by the same social group of badgers at least occasionally. T1 is therefore considered to comprise a subsidiary sett to T2.
- 4.9 As previously mentioned, the level of human disturbance within the area of woodland is high, and may well be a factor in preventing recent badger use. The creation of the playground in close proximity to the badger sett is likely to further deter badger from using this subsidiary sett as they are generally very secretive animals. Due to the presence of a main badger sett (T2) in close proximity to T1, together with large amounts of contiguous suitable badger habitat, the subsidiary sett can be regarded as not being of high conservation value.
- 4.10 Badgers may be deterred from using this sett in the future or it may be in their welfare interest to close the sett. Closure of the sett would only be considered if an increase in activity was evident. If the sett is to be closed this must be timed to occur between July 1st and November and a License to disturb badgers will be required from Natural England.
- 4.11 It is recommended that native scrub species such as holly and wild privet are planted between the playground boundary and the sett entrances to deter people from entering the area and also to decrease disturbance to any animals potentially present.

Habitat Creation

- 4.12 A limited area of habitat suitable for reptiles and terrestrial amphibians is present on the eastern boundary of the site (see Photograph 1; Appendix 2). To mitigate for any habitat lost it is recommended that the amount of suitable reptile habitat on site is increased through habitat management. This can be achieved via a relaxation of the mowing regime within the grassland edge along the western boundary of the woodland. This will create a long grass buffer zone contiguous with the existing unmanaged neutral grassland and will provide habitat suitable for reptiles, small mammals and a variety of invertebrates.
- 4.13 It is also proposed that a scallop-edged strip of meadow on the outer edge of the mown recreation field is sparsely planted with native tree and scrub species, such as rowan *Sorbus aucuparia*, guelder rose *Viburnum opulus* and alder buckthorn *Frangula alnus*. The meadow in this area could be sown with an appropriate chalk grassland seed mixture of local provenance. This new planting will increase local biodiversity by creating new habitats that support local populations of invertebrates, reptiles and birds.

Vegetation clearance

- 4.14 Generally the proposed development area has an open structure with denser vegetation on the outer boundaries which should be retained. Trees and scrub within the site provide suitable habitat for common breeding birds. In order to avoid impacts on breeding birds any necessary vegetation clearance should be carried out outside of the main bird nesting season which runs from March to September inclusive.

Woodland Enhancement

- 4.15 There is an opportunity to enhance the woodland surrounding the proposed development through sympathetic management
- 4.16 *Log Piles*. It is recommended that any logged wood or material arising from clearance be stacked neatly within the area. The creation of log piles could provide deadwood habitat for invertebrates such as stag beetle – a UK BAP species as well as hibernation sites for reptiles and amphibians such as common toad *Bufo bufo* a UK BAP Priority species.
- 4.17 *Bird and Bat Boxes* A number of bird and bat boxes should be positioned in appropriate locations on mature trees. The inclusion of bird nesting and bat roosting boxes on semi-mature trees could benefit a variety of common breeding birds

including house sparrow (a UK BAP species) and bat species such as soprano pipistrelle (a UK BAP species). 'Schwegler woodcrete' boxes are recommended as they are durable and long-lasting (20-25 years), protect occupants from draughts, fluctuations in temperature and humidity and are simple to install, inspect and clean (Schwegler 2006). Bird boxes should be a mixture of open fronted and hole types to provide suitable nesting habitat for a wide variety of bird species that potentially utilise the woodland area. The correct positioning of bat boxes on a number of mature boundary trees should provide suitable roosting sites for different species of bat. The boxes should be at least four metres from the ground and as a general rule they should be sited with the front facing south-west to south-east. However, boxes facing other aspects may be used and a common practice is to site three boxes on a single tree; ideally put up two or three boxes on the same tree facing different directions.

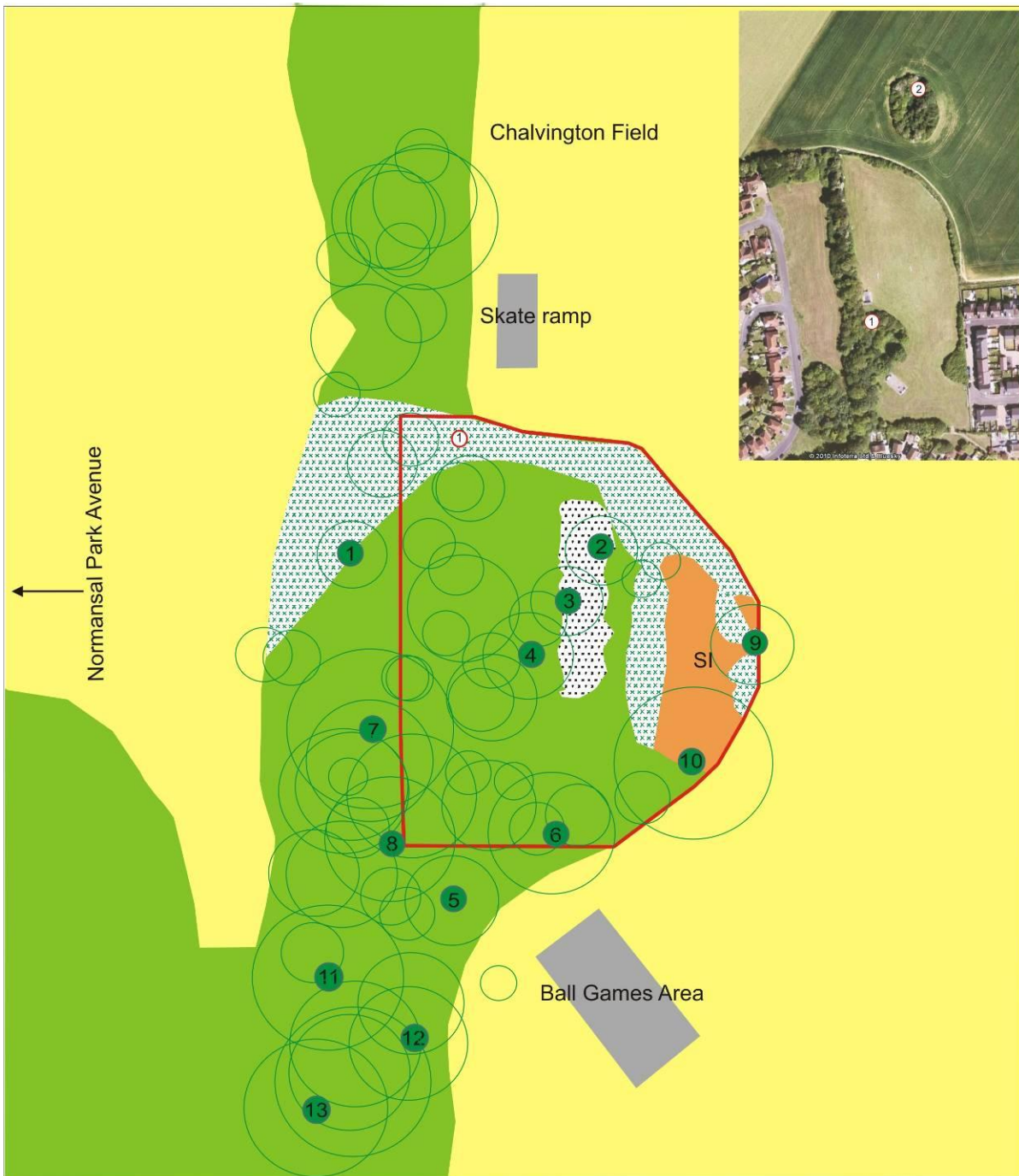
4.18 Non-native shrubbery such as evergreen spindle should be removed together with sycamore seedlings and any new tree planting should utilise native species of local provenance such as pedunculate oak *Quercus robur* which will contribute to the replacement of any tree species lost.

4.19 The biodiversity of the woodland can be increased and the structure of the woodland improved through selective new areas of under-storey planting utilising calcicolous native species such as buckthorn *Rhamnus cathartica*, spindle *Euonymus europaeus*, field maple *Acer campestre*, wayfaring tree *Viburnum lantana* and traveller's joy *Clematis vitalba*.

References

- Bat Conservation Trust (2007). *Bat Surveys: Good Practice Guidelines*, BCT, London.
- Cresswell P., Harris S., & Jefferies D.J. (1990). *The history, distribution, status and habitat requirements of the badger in Britain*. Nature Conservancy Council, Peterborough.
- IEEM (2006). *Guidelines for Ecological Impact Assessment in the UK*. Institute of Ecology and Environmental Management. 26 June 2006
- JNCC. 1993. *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit*. England Field Unit, Nature Conservancy Council. Reprinted by Joint Nature Conservation Committee, Peterborough.
- London Biodiversity Partnership. 2001. *The London Biodiversity Audit – Volume 2 of the London Biodiversity Action Plan*.
<http://www.lbp.org.uk/03action.html>
- Lewis District Council <http://www.lewes.gov.uk>
South-East Plan 2009 www.go-se.gov.uk/gose/planning/regionalPlanning/815640/
- Sussex Biological Records Centre (SxBRC 2010) Desktop Biodiversity *Report Land at Normansall Park Avenue, Seaford + 2km radius ESD/10/166*
- Stace, C.A. 1997. *New Flora of the British Isles* (2nd Ed.). Cambridge University Press, Cambridge.
- Sussex BAP www.biodiversitysussex.org/file_download/70/

Appendix 1: Habitat Plan



This plan is provided solely for the purpose of supporting the description of the ecological features of the site as contained in the accompanying report. The location of trees is indicative only.

KEY		Job Title	The Ecology Consultancy	
Site boundary	Scattered scrub	Chalvington Field, Seaford		
Amenity grassland	Individual tree	Client	The Old Granary, Upper Stoneham, Lewes BN8 5RH	
Semi-improved neutral grassland	Target note	Lewes District Council	Drawn	Approved
Broadleaf woodland	Trees	Drawing Title	NF	NF
Bare Ground		Phase One Survey	Scale (at A4)	Date
		Date of Survey	Not to scale	01/06/10
		May 2010	Surveyor	
			NF	

Appendix 2: Photographs

Photograph 1

Open area of long grass on the eastern boundary providing suitable reptile habitat.



Photograph 2

Crater area of the woodland-proposed site for play area



Photograph 3

Woodland including several semi-mature hornbeam adjacent to proposed playground site



Photograph 4

Mammal excavation (Target Note 1)
indicating recent activity



Photograph 5

Recreation ground showing scrub
edge of woodland in the mid-ground.



Photograph 6

Target Note 2 – Excavation in main
badger sett



Appendix 3: Plant species list

**Plant Species List for Normansal Recreation Park, East Sussex compiled from the Phase 1
field survey carried out in May 2010.**

Scientific nomenclature follows Stace (1997) for vascular plant species and Blockeel & Long (1998) for bryophyte species. Vascular plant common names follow the Botanical Society of the British Isles 2003 list, published on its web site, www.bsbi.org.uk. Please note that this plant species list was generated as part of a Phase 1 Habitat survey, does not constitute a full botanical survey and should be read in conjunction with the associated Phase 1 Report.

Abundance was estimated using the DAFOR scale as follows:

D = dominant, A = abundant, F = frequent, O = occasional, R = rare

c=clumped, e=edge only, g=garden origin, p=planted, s=seedling or sucker, t=tree, h = hedge,

? = identification uncertain

SCIENTIFIC	ENGLISH	Abundance	Qualifier
Common name	Scientific Name	Abundance	Qualifier
Sycamore	<i>Acer pseudoplatanus</i>	O	t, y
Maple	<i>Acer sp.</i>	R	t, y
Barren brome	<i>Anisantha sterilis</i>	LF	
Cow parsley	<i>Anthriscus sylvestris</i>	F	
Lords-and-Ladies	<i>Arum maculatum</i>	O	
False oat-grass	<i>Arrhenatherum elatius</i>	LF	
False brome	<i>Brachypodium sylvaticum</i>	LF	
Adria bellflower	<i>Campanula portenschlagiana</i>	R	g
Hornbeam	<i>Carpinus betulus</i>	O	t
Hazel	<i>Corylus avellana</i>	O	
Hawthorn	<i>Crataegus monogyna</i>	O	
Monterey cypress	<i>Cupressus macrocarpa</i>	R	t
Evergreen spindle	<i>Euonymus japonicus</i>	O	g
Ash	<i>Fraxinus excelsior</i>	O	t
Cleavers	<i>Galium aparine</i>	F	
Cut-leaved crane's-bill	<i>Geranium dissectum</i>	R	
Tutsan	<i>Hypericum androsaemum</i>	R	
Holly	<i>Ilex aquifolium</i>	O	t, y
Stinking iris	<i>Iris foetidissima</i>	O	
Wild privet	<i>Ligustrum vulgare</i>	O	
Purple toadflax	<i>Linaria purpurea</i>	O	
Pine	<i>Pinus sp.</i>	O	t

Rough meadow-grass	<i>Poa trivialis</i>	LF	
Cherry	<i>Prunus cerasifera x pissardii</i>	R	t, g
Blackthorn	<i>Prunus spinosa</i>	LF	
Holm oak	<i>Quercus ilex</i>	O	y
Pedunculate oak	<i>Quercus robur</i>	R	t
Lesser celandine	<i>Ranunculus ficaria</i>	LF	
Bramble	<i>Rubus fruticosus agg.</i>	LF	
Curled dock	<i>Rumex crispus</i>	O	
Elder	<i>Sambucus nigra</i>	O	
Dandelion	<i>Taraxacum sp.</i>	LF	
Common nettle	<i>Urtica dioica</i>	LF	
Common vetch	<i>Vicia sativa</i>	R	
Sweet violet	<i>Viola odorata</i>	LF	?

Appendix 4: Legislation and policy

Important Notice: This section contains details of legislation and planning policy applicable in Britain only (i.e. not including the Isle of Man, Northern Ireland, the Republic of Ireland or the Channel Islands) and is provided for general guidance only. While every effort has been made to ensure accuracy, this section should not be relied upon as a definitive statement of the law.

A NATIONAL LEGISLATION AFFORDED TO SPECIES

The objective of the EC Habitats Directive⁵ is to conserve the various species of plant and animal which are considered rare across Europe. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2010 (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

The Wildlife and Countryside Act 1981 (as amended) is a key piece of national legislation which implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection obligations of Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Since the passing of the Wildlife & Countryside Act 1981, various amendments have been made, details of which can be found on www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000) and Nature Conservation (Scotland) Act 2004.

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991
- Countryside and Rights of Way (CRoW) Act 2000
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Species and species groups that are protected or otherwise regulated under the aforementioned domestic and European legislation, and that are most likely to be affected by development activities, include herpetofauna (amphibians and reptiles), badger, bats, birds, dormouse, invasive plant species, otter, plants, red squirrel, water vole and white clawed crayfish.

⁵ Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora

Explanatory notes relating to species protected under The Conservation of Habitats and Species Regulations 2010 (which includes smooth snake, sand lizard, great crested newt and natterjack toad), all bat species, otter, dormouse and some plant species) are given below. **These should be read in conjunction with the relevant species sections that follow.**

- In the Directive, the term ‘deliberate’ is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.
- The Conservation of Habitats and Species Regulations 2010 does not define the act of ‘migration’ and therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered.
- In order to obtain a European Protected Species Mitigation (EPSM) licence, the application must demonstrate that it meets all of the following three ‘tests’: i) the action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment; ii) that there is no satisfactory alternative and iii) that the action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

Herpetofauna (Amphibians and Reptiles)

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita* and great crested newt *Triturus cristatus* receive full protection under The Conservation of Habitats and Species Regulations 2010 through their inclusion on Schedule 2. The pool frog *Pelophylax lessonae* is also afforded full protection under the same legislation. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of species listed on Schedule 2
- Deliberate disturbance of any Schedule 2 species as:
 - a) to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young;
 - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate
 - b) to affect significantly the local distribution or abundance of the species
- Deliberate taking or destroying of the eggs of a Schedule 2 species
- Damage or destruction of a breeding site or resting place
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

With the exception of the pool frog, these species are also currently listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). Species such as the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis* are listed in respect to Section 9(1) & (5). For these species, it is prohibited to:

- Intentionally (or recklessly in Scotland) kill or injure these species
- Sell, offer or expose for sale, possess or transport for purpose of sale these species, or any part thereof.

Common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Lissotriton vulgaris* and palmate newt *L. helveticus* are listed in respect to Section 9(5) only which affords them protection against sale, offering or exposing for sale, possession or transport for the purpose of sale.

How is the legislation pertaining to herpetofauna liable to affect development works?

A European Protected Species (EPS) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect the breeding sites or resting places of those amphibian and reptile species protected under The Conservation Habitats and Species Regulations 2010. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the Wildlife and Countryside Act 1981 (as amended).

Badger

Badgers *Meles meles* receive protection under The Protection of Badgers Act 1992 which consolidates the previous Badger Acts of 1973 and 1991. The Act makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett⁶ or any part thereof
- Intentionally or recklessly disturb⁷ a badger when it is occupying a badger sett
- Intentionally or recklessly cause a dog to enter a badger sett
- Sell or offers for sale, possesses or has under his control, a live badger

How is the legislation pertaining to badgers liable to affect development works?

A Development Licence⁸ will be required from the relevant countryside agency (e.g. Natural England) for any development works liable to affect an active badger sett, or to disturb badgers whilst in the sett. Depending on the nature of the works and the specifics of the sett and its environs, badgers could be disturbed by work near the sett even if there is no direct interference or damage to the sett itself. The countryside agencies have issued guidelines on what constitutes a licensable activity. N.B. there is no provision in law for the capture of badgers for development purposes and therefore it is not possible to obtain a licence to translocate badgers from one area to another.

Bats

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2010 through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species as:
 - a) to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young;
 - (ii) to hibernate or migrate³
 - b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

⁶ A badger sett is defined in the legislation as *"any structure or place which displays signs indicating current use by a badger"*. This includes seasonally used setts. Natural England (2009) have issued guidance on what is likely to constitute current use of a badger sett: www.naturalengland.org.uk/Images/WMLG17_tcm6-11815.pdf

⁷ For guidance on what constitutes disturbance and other licensing queries, see Natural England (2007) Badgers & Development: A Guide to Best Practice and Licensing. www.naturalengland.org.uk/Images/badgers-dev-guidance_tcm6-4057.pdf, Natural England (2009) Interpretation of 'Disturbance' in relation to badgers occupying a sett www.naturalengland.org.uk/Images/WMLG16_tcm6-11814.pdf, Scottish Natural Heritage (2002) Badgers & Development. www.snh.org.uk/publications/online/wildlife/badgersanddevelopment/default.asp and Countryside Council for Wales (undated) Badgers: A Guide for Developers. www.ccw.gov.uk.

⁸ Natural England will only consider issuing a licence where detailed planning permission (if applicable to operation) has already been granted

- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Bats are also currently protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

How is the legislation pertaining to bats liable to affect development works?

A European Protected Species (EPS) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Though there is no case law to date, the legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost⁹.

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the Wildlife and Countryside Act 1981 (as amended). Among other things, this makes it an offence to:

- Intentionally (or recklessly in Scotland) kill, injure or take any wild bird
- Intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.
- In Scotland only, intentionally or recklessly obstruct or prevent any wild bird from using its nest

⁹ Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected? Mammal News, No. 150. The Mammal Society, Southampton.

Certain species of bird, for example the barn owl, black redstart, hobby, bittern and kingfisher receive additional special protection under Schedule 1 of the Act and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC). This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young
- Intentional or reckless disturbance of dependent young of such a bird
- In Scotland only, intentional or reckless disturbance whilst lekking
- In Scotland only, intentional or reckless harassment

How is the legislation pertaining to birds liable to affect development works?

To avoid contravention of the Wildlife and Countryside Act 1981 (as amended), works should be planned to avoid the possibility of killing or injuring any wild bird, or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August¹⁰. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Those species of bird listed on Schedule 1 are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Wild Mammals (Protection) Act 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to:

- Mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

¹⁰ It should be noted that this is the main breeding period. Breeding activity may occur outside this period (depending on the particular species and geographical location of the site) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.

Plants

With certain exceptions, all wild plants are protected under the Wildlife and Countryside Act 1981 (as amended). This makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Certain rare species of plant, for example some species of orchid, are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits *any* person:

- Intentionally (or recklessly in Scotland) picking, uprooting or destruction of any wild Schedule 8 species (or seed or spore attached to any such wild plant in Scotland only)
- Selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof

In addition to the UK legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2010. These are species of European importance. Regulation 45 makes it an offence to:

- Deliberately pick, collect, cut, uproot or destroy a wild Schedule 5 species
- Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

How is the legislation pertaining to protected plants liable to affect development works?

A European Protected Species (EPS) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect species of plant listed under The Conservation of Habitat and Species Regulations 2010. The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Invasive Plant Species

Certain species of plant, including Japanese knotweed *Fallopia japonica*, giant hogweed *Heracleum mantegazzianum* and Himalayan balsam *Impatiens glandulifera* are listed on Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) in respect to Section 14(2). Such species are generally non-natives whose establishment or spread in the wild may be detrimental to native wildlife. Inclusion on Part II of Schedule 9 therefore makes it an offence to plant or otherwise cause these species to grow in the wild.

How is the legislation pertaining to invasive plants liable to affect development works?

Although it is not an offence to have these plants on your land *per se*, it is an offence to *cause* these species to grow in the wild. Therefore, if they are present on site and development activities (for example movement of spoil, disposal of cut waste or vehicular movements) have the potential to cause the further spread of these species to new areas, it will be necessary to ensure appropriate measures are in place to prevent this happening prior to the commencement of works.

Plants: Injurious Weeds

Under the Weeds Act 1959 any land owner or occupier may be required prevent the spread of certain 'injurious weeds' such as spear thistle *Cirsium vulgare*, creeping thistle *Cirsium arvense*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, and common ragwort *Senecio jacobaea*. It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines and is not legally binding.

B NATIONAL AND EUROPEAN LEGISLATION AFFORDED TO HABITATS

Statutory Designations: National

Nationally important areas of special scientific interest, by reason of their flora, fauna, or geological or physiographical features, are notified by the countryside agencies as statutory **Sites of Special Scientific Interest** (SSSIs) under the National Parks and Access to the Countryside Act 1949 and latterly the Wildlife & Countryside Act 1981 (as amended). As well as underpinning other national designations (such as **National Nature Reserves** which are declared by the countryside agencies under the same legislation), the system also provides statutory protection for terrestrial and coastal sites which are important within a European context (Natura 2000 network) and globally (such as Wetlands of International Importance). See subsequent sections for details of these designations. Improved provisions for the protection and management of SSSIs have been introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and the Nature Conservation (Scotland) Act 2004.

The Wildlife & Countryside Act 1981 (as amended) also provides for the making of **Limestone Pavement Orders**, which prohibit the disturbance and removal of limestone from such designated areas, and the designation of **Marine Nature Reserves**, for which byelaws must be made to protect them.

Statutory Designations: International

Special Protection Areas (SPAs), together with **Special Areas of Conservation** (SACs) form the **Natura 2000** network. The Government is obliged to identify and classify SPAs under the EC Birds Directive (Council Directive 2009/147/EC (formerly 79/409/EEC)) on the Conservation of Wild Birds). SPAs are areas of the most important habitat for rare (listed on Annex I of the Directive) and migratory birds within the European Union. Protection afforded SPAs in terrestrial areas and territorial marine waters out to 12 nautical miles (nm) is given by The Conservation (Natural Habitats, &c. Regulations 1994 (as amended). The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) provide a mechanism for the designation and protection of SPAs in UK offshore waters (from 12- 200 nm).

The Government is obliged to identify and designate SACs under the EC Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora). These are areas which have been identified as best representing the range and variety of habitats and (non-bird) species listed on Annexes I and II to the Directive within the European Union. SACs in terrestrial areas and territorial marine waters out to 12 nautical miles are protected under The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended)

provide a mechanism for the designation and protection of SACs in UK offshore waters (from 12- 200 nm).

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and wise use, in particular recognizing wetlands as ecosystems that are globally important for biodiversity conservation. Wetlands can include areas of marsh, fen, peatland or water and may be natural or artificial, permanent or temporary. Wetlands may also incorporate riparian and coastal zones adjacent to the wetlands. Ramsar sites are underpinned through prior notification as Sites of Special Scientific Interest (SSSIs) and as such receive statutory protection under the Wildlife & Countryside Act 1981 (as amended) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. This effectively extends the level of protection to that afforded to sites which have been designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs).

Statutory Designations: Local

Under the National Parks and Access to the Countryside Act 1949 **Local Nature Reserves** (LNRs) may be declared by local authorities after consultation with the relevant countryside agency. LNRs are declared for sites holding special wildlife or geological interest at a local level and are managed for nature conservation, and provide opportunities for research and education and enjoyment of nature.

Non-Statutory Designations

Areas considered to be of local conservation interest may be designated by local authorities as a **Wildlife Site**, under a variety of names such as **County Wildlife Sites** (CWS), **Listed Wildlife Sites** (LWS), **Local Nature Conservation Sites** (LNCS), **Sites of Biological Importance** (SBIs), **Sites of Importance for Nature Conservation** (SINCS), or **Sites of Nature Conservation Importance** (SNICIs). The criteria for designation may vary between counties.

Together with the statutory designations, these are defined in local and structure plans under the Town and Country Planning system and are a material consideration when planning applications are being determined. The level of protection afforded to these sites through local planning policies and development frameworks may vary between counties.

Regionally Important Geological and Geomorphological Sites (RIGS) are the most important places for geology and geomorphology outside land holding statutory designations such as SSSIs. Locally-developed criteria are used to select these sites, according to their value for education, scientific study, historical significance or aesthetic qualities. As with local Wildlife Sites, RIGS are a material consideration when planning applications are being determined.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 are intended to protect 'important' countryside hedgerows from destruction or damage. A hedgerow is considered important if (a) has existed for 30 years or more; and (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

Under the Regulations, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. Hedgerows on or adjacent to common land, village greens, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys are covered by these regulations. Hedgerows *'within or marking the boundary of the curtilage of a dwelling-house'* are not.

C NATIONAL PLANNING POLICY

Guidance on nature conservation is issued by the Government in the form of Planning Policy Statement 9: Nature Conservation (PPS 9) and circular 06/2005 on biodiversity and the planning system. The key principles in this guidance include the aim that all planning decisions should prevent harm to biodiversity.

PPS 9 offers the following guidance on Species and Habitats of Principal Importance for Biodiversity designated under section 74 of the Countryside and Rights of Way Act 2000 (which generally comprise UK Biodiversity Action Plan priority habitats species):

“Planning authorities should ensure that these species and habitats are protected from the adverse effects of development, where appropriate, by using planning conditions and obligations. Planning authorities should refuse permission where harm to the species or their habitats would result unless the need for and benefits of the development clearly outweigh that harm.”

Ancient woodland and other important natural habitats

Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. Local planning authorities should identify any areas of ancient woodland in their areas that do not have statutory protection (e.g. as a SSSI). They should not grant planning permission for any development that would result in its loss of deterioration unless the need for, and benefits of, the development in that location outweigh the loss of the woodland habitat. Aged or ‘veteran’ trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided. Planning authorities should encourage the conservation of such trees as part of development proposals

PPS 9 also states that in the case of previously developed land or ‘wasteland’:

“where such sites have significant biodiversity interest of recognised local importance, local planning authorities, together with developers, should aim to retain this interest or incorporate it into any development of the site.”

In general, planning authorities should also

“maximise opportunities for building in beneficial biodiversity features as part of good design ... using planning obligations where appropriate.”

D LOCAL PLANNING POLICY

The South East Plan (2009) contains the following policies that are relevant to the site;

Chapter 5: Cross Cutting Policies

POLICY CC6: SUSTAINABLE COMMUNITIES AND CHARACTER OF THE ENVIRONMENT

Actions and decisions associated with the development and use of land will actively promote the creation of sustainable and distinctive communities. This will be achieved by developing and implementing a local shared vision which:

- i. respects, and where appropriate enhances, the character and distinctiveness of settlements and landscapes throughout the region
- ii. uses innovative design processes to create a high quality built environment which promotes a sense of place. This will include consideration of accessibility, social inclusion, the need for environmentally sensitive development and crime reduction

Chapter 9: Natural Resource Management

POLICY NRM5: CONSERVATION AND IMPROVEMENT OF BIODIVERSITY

Local planning authorities and other bodies shall avoid a net loss of biodiversity, and actively pursue opportunities to achieve a net gain across the region.

- i. They must give the highest level of protection to sites of international nature conservation importance (European sites (6)). Plans or projects implementing policies in this RSS are subject to the Habitats Directive. Where a likely significant effect of a plan or project on European sites cannot be excluded, an appropriate assessment in line with the Habitats Directive and associated regulations will be required.
- ii. If after completing an appropriate assessment of a plan or project local planning authorities and other bodies are unable to conclude that there will be no adverse effect on the integrity of any European sites, the plan or project will not be approved, irrespective of conformity with other policies in the RSS, unless otherwise in compliance with 6(4) of the Habitats Directive.

iii. For example when deciding on the distribution of housing allocations, local planning authorities should consider a range of alternative distributions within their area and should distribute an allocation in such a way that it avoids adversely affecting the integrity of European sites. In the event that a local planning authority concludes that it cannot distribute an allocation accordingly, or otherwise avoid or adequately mitigate any adverse effect, it should make provision up to the level closest to its original allocation for which it can be concluded that it can be distributed without adversely affecting the integrity of any European sites.

iv. They shall avoid damage to nationally important sites of special scientific interest and seek to ensure that damage to county wildlife sites and locally important wildlife and geological sites is avoided, including additional areas outside the boundaries of European sites where these support the species for which that site has been selected.

v. They shall ensure appropriate access to areas of wildlife importance, identifying areas of opportunity for biodiversity improvement and setting targets reflecting those in the table headed 'Regional Biodiversity Targets - Summary for 2010 and 2026' (Refer to South East Plan, 2009). Opportunities for biodiversity improvement, including connection of sites, large-scale habitat restoration, enhancement and re-creation in the areas of strategic opportunity for biodiversity improvement should be pursued

vi. They shall influence and applying agri-environment schemes, forestry, flood defence, restoration of mineral extraction sites and other land management practices to: deliver biodiversity targets increase the wildlife value of land reduce diffuse pollution protect soil resources.

vi. They shall promote policies that integrate the need to accommodate the changes taking place in agriculture with the potential implications of resultant development in the countryside.

vii. They shall require green infrastructure to be identified, developed and implemented in conjunction with new development.

POLICY NRM7: WOODLANDS

In the development and implementation of local development documents and other strategies, local authorities and other bodies will support the implementation of the Regional Forestry and Woodland Framework, ensuring the value and character of the region's woodland are protected and enhanced. This will be achieved by:

- i. protecting ancient woodland from damaging development and land uses
- ii. promoting the effective management, and where appropriate, extension and creation of new woodland areas including, in association with areas of major development, where this helps to restore and enhance degraded landscapes, screen noise and pollution, provide recreational opportunities, helps mitigate climate change, and contributes to floodplain management
- iii. replacing woodland unavoidably lost through development with new woodland on at least the same scale
- iv. promoting and encouraging the economic use of woodlands and wood resources, including wood fuel as a renewable energy source
- v. promoting the growth and procurement of sustainable timber products.

Chapter 11: Countryside and Landscape Management

POLICY C4: LANDSCAPE AND COUNTRYSIDE MANAGEMENT

Outside nationally designated landscapes, positive and high quality management of the region's open countryside will be encouraged and supported by local authorities and other organisations, agencies, land managers, the private sector and local communities, through a combination of planning policies, grant aid and other measures.

In particular, planning authorities and other agencies in their plans and programmes should recognise, and aim to protect and enhance, the diversity and local distinctiveness of the region's landscape, informed by landscape character assessment.

Positive land management is particularly needed around the edge of London and in other areas subject to most growth and change. In such areas long-term goals for landscape conservation and renewal and habitat improvement should be set, and full advantage taken of agri-environmental funding and other management tools.

Local authorities should develop criteria-based policies to ensure that all development respects and enhances local landscape character, securing appropriate mitigation where damage to local landscape character cannot be avoided.

Lewes District Council Local Development Framework 2007 saved policies

POLICY ST11; LANDSCAPING OF DEVELOPMENT

The District Council will, where appropriate, require applications for development to include a framework for landscaping and maintenance which clearly shows which features are to be retained and all new landscaping measures. Where practicable recontouring, infilling and top-soiling should use material excavated from the site. Such schemes will be required to be submitted before the application is determined. Provision will be required to be made for the future maintenance of the landscaping scheme. This may be achieved by means of a legal agreement in appropriate circumstances.

E UK BIODIVERSITY ACTION PLANS

The UK BAP was initiated to comply with obligations under the Convention on Biological Diversity 1992. It describes the UK's biological resources and commits to developing detailed plans to conserve these resources. The UK BAP comprises Habitat Action Plans (HAPs) and Species Action Plans (SAPs). In addition, local authorities promote habitat and species conservation at a regional level through development of Local BAPs (LBAPs).

UK Priority BAP species and habitats, that are potentially relevant to the site include;

- Birds such as house sparrow, dunnock, starling and song thrush;
- Reptiles such as slow worm, adder, grass snake and common lizard;
- Amphibians such as great crested newt *Triturus cristatus* and common toad *Bufo bufo*;
- Small mammals such as hedgehog *Erinaceus europaeus*;
- Habitats such as Lowland mixed deciduous woodland.

F LOCAL BIODIVERSITY ACTION PLAN

Sussex Biodiversity Action Plan includes the following habitat and species action plans relevant to the site:

- Woodland;
- Ponds;
- Veteran trees;
- Nathusius' pipistrelle *Pipistrellus nathusii*;
- Common pipistrelle
- Soprano pipistrelle *Pipistrellus pygmaeus*.



Ecology Consultancy

■ **London**

Head Office
6-8 Cole Street
London
SE1 4YH
T. 020 7378 1914
E. enquiries@ecologyconsultancy.co.uk
W. www.ecologyconsultancy.co.uk

■ **Lewes**

The Old Granary
Upper Stoneham Farm
Lewes
East Sussex BN8 5RH
T. 01273 897365
E. enquiries@ecologyconsultancy.co.uk
W. www.ecologyconsultancy.co.uk

■ **Norwich**

Unit 7 Lodge Farm Barns
New Road
Bawburgh
Norwich NR9 3LZ
T. 01603 271811
E. enquiries@ecologyconsultancy.co.uk
W. www.ecologyconsultancy.co.uk