The Ecology Consultancy

Frith Wood, near Egerton, Kent / Preliminary Ecological Appraisal /**Report for Touchwood Trees**

The Ecology Consultancy

Frith Wood, near Egerton, Kent

Preliminary Ecological Appraisal

Report for Touchwood Trees

Author	Naomi Forbes BSc MIEEM		
Job No	120759		
	Date	**Checked by**	**Approved by**
Initial	21/09/2012	Rachel Saunders	John Newton
Revision			
Revision			

The Ecology Consultancy, The Old Granary Upper Stoneham, Lewes, East Sussex
T. 01273 471369 **E**. enquiries@ecologyconsultancy.co.uk **W**. www.ecologyconsultancy.co.uk

Contents

Executive Summary

The Ecology Consultancy was commissioned to carry out a preliminary ecological appraisal of land at Frith Wood, near Egerton in Kent. This evaluation comprised an extended Phase 1 habitat survey and protected species risk assessment. This report has been produced to accompany a retrospective planning application for an Iron Age Round House which provides a focal point for educational and community activities at the site. Touchwood Trees supports local community projects with an emphasis on education, local history and nature conservation. The main findings of the surveys are as follows:

- A Phase 1 habitat of the site carried out on the 31st August 2012 found that the site was largely ancient semi-natural woodland dominated by overstood hornbeam coppice woodland with oak standard with a more recent area of plantation in the centre.
- The site is located within the National Character Area (NCA) of the 'Low Weald'. Woodland which includes significant areas of semi natural ancient woodland, hedgerows, shaws and ancient trees.
- The closest statutory designated site for nature conservation is Hoads Wood Site of Special Scientific Interest (SSSI) located 5.6km to the east.
- The closest non-statutory designated site Dering Wood Local Wildlfe Site (LWS) located 280m to the south-east of the site.
- The ancient semi-natural woodland was assessed as being of local value and is considered likely to perform an important ecological function by providing connectivity through the landscape for a diversity of wildlife including bats, dormice, birds and invertebrates.
- Due to its limited size and sustainable nature the construction of the Iron Age Round House is considered unlikely to have had a detrimental impact on the existing habitats and the species that occupy them. Conversely by introducing the new habitats of ponds and the round house biodiversity is likely to have increased within the woodland through the provision of additional ecological niches.
- It is widely accepted that an appropriate coppicing regime will increase local biodiversity and this has been evidenced through the increase in species recorded onsite. The Forestry Commission and Natural England have been consulted regarding the woodland management plan.

- The Iron Age Round House has been constructed within a natural woodland glade as a focal point for local community and educational activities regarding the woodland, it will over time biodegrade naturally.

1 Introduction

BACKGROUND

1.1 The Ecology Consultancy was commissioned by Touchwood Trees Ltd, an environmental and educational focused company to prepare an ecological report supporting their planning retrospective application to Ashford Borough Council. The company specialises in the transformation of public and educational spaces through the creation of natural artworks, forestry development and wood products. The planning application is in regard to the construction of an Iron Age Round House using largely traditional local materials.

SCOPE OF REPORT

1.2 This report is based on a desk-top study and field survey using standard Phase 1 survey methodology (JNCC, 2010). This approach is designed to identify the broad habitat types present, to assess the potential of habitats to support protected species and to assist in providing an overview of the ecological interest at a site. It is generally the most widely used and professionally recognised method for initial ecological site appraisal.

SITE CONTEXT AND STATUS

1.3 The site is the central part of Frith Wood, an area designated as ancient semi-natural woodland. The woodland holding covers an area of approximately 8 hectares (ha). Frith Wood is adjacent and to the north of the extensive area of Dering Wood, a Local Wildlife Site (LWS) which is managed by The Woodland Trust. Mature woodland borders the site to the west, south and east, whilst the small hedged fields of Shaw Farm form the northern site boundary. The National Grid reference for the centre of the site is TQ 899 452.

DESCRIPTION OF THE PROPOSALS

1.4 An Iron Age Roundhouse has been constructed in a woodland clearing (T1) approximately 60m from the public footpath along the western site boundary. This building has been constructed using traditional methods, largely using materials from woodland area (T2). The building structure has employed ash and oak beams and hazel wattle walls, and has been thatched using common reed *Phragmites australis* collected from the Norfolk Broads.

1.5 Other recent changes in the woodland have been the construction of several wildlife ponds as part of the Million Ponds Project[1] (Photograph 1).

[1] http://www.pondconservation.org.uk/millionponds

2 Methodology

DESK TOP STUDY

2.1 Information regarding protected and notable species, habitat and areas within a 2km radius of the site was supplied by the Kent and Medway Record Centre (KMBRC). In addition, a search was completed using an on-line mapping service for statutorily designated sites (MAGIC 2011).

HABITAT SURVEY

2.2 The habitat survey following standard Phase 1 survey methodology (JNCC, 2010) was carried out on 31st August 2012 and covered all accessible parts of the site, including boundary features. Habitats were described and mapped. A list of plant species was compiled (Appendix 3), together with an estimate of abundance made according to the DAFOR[2] scale. A Habitat Plan of the site is included in Appendix 1 together with photographs in Appendix 2.

2.3 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 (2010) for vascular plant species.

PROTECTED SPECIES ASSESSMENT

2.4 The potential of the site to provide habitat for protected species was assessed from field observations carried out at the same time as the habitat survey and the results of the desk top study. The site was inspected for indications of the presence of protected species as follows:

- The presence of nesting habitat for breeding birds, such as mature trees, dense scrub and hedgerows for evidence of bird nesting including bird song, old nests, faecal marks etc.;
- The presence of features in, and on trees, indicating potential for roosting bats *Chiroptera* such as fissures, holes, loose bark and ivy. Evidence of the presence of bats such as, staining, droppings and feeding remains were also looked for.

[2] DAFOR Scale
The DAFOR scale has been used to try and measure the frequency and cover of the different plant species as follows:
Dominant (D) - >75% cover Abundant (A) – 51-75% cover Frequent (F) – 26-50% cover Occasional (O) – 11-25% cover Rare (R) – 1-10% cover Locally Frequent (LF) is also used where the frequency and distribution is patchy

- Scrub/grassland mosaic and potential hibernation sites for common reptiles;
- Cover and topography suitable for badger *Meles meles* sett construction, as well as evidence of badger including runs, push-throughs, setts, hair and latrines.
- The presence of suitable habitat within the woodland and local connectivity to support dormouse *Muscardinus avellanarius*
- Assessment of any on-site water bodies as to their potential to support breeding amphibians specifically great crested newts *Triturus cristatus*, and suitable terrestrial habitats including rough grassland, scrub, hedgerows, woodland and refuges (logs and rubble piles).

2.5 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 records 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 records 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.
- **Medium** – on-site habitat of moderate quality, providing all of the known key requirements of given species/species group. Local records form 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.
- **Present** – presence confirmed from the current survey or by recent, confirmed records.

2.6 The purpose of this assessment is to identify whether more comprehensive Phase 2 surveys for protected species or mitigation should be recommended.

SITE EVALUATION

2.7 The site has also been evaluated by broadly following guidance issued by the Institute of Ecology and Environmental Management (2006) which evaluates sites according to a geographic scale (significance at the international level down to the local level) and using a range of criteria for assigning ecological value, as follows:

- Presence of sites or features designated for their nature conservation interest. Examples include internationally or nationally designated sites such as SACs and SSSIs, locally designated sites such as Local Nature Reserves (LNRs) and Sites of Nature Conservation Importance (SNCIs);
- 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;
- Secondary and supporting value, for example, habitats or features which provide a buffer to valued features or which serve to link otherwise isolated features;
- Presence of legally protected sites or species; and
- Presence of UKBAP, and/or East Sussex BAP habitats and species.

LIMITATIONS

2.8 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.

Data Search

2.9 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 simply be under-recorded.

Habitat Survey

2.10 The Phase 1 habitat survey does not constitute a full botanical survey, or a Phase 2 pre-construction survey that would include accurate GIS mapping for invasive or protected plant species. The survey was carried out late in the season and therefore will not have recorded woodland flora with an early phenology, however it was considered sufficient to assess the general character of this woodland site.

Protected Species Assessment

2.11 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. It is only valid at the time the survey was carried out. Additional surveys may be recommended if on the basis of the preliminary assessment or during subsequent surveys it is considered reasonably likely that protected species may be present.

3 Results

DESK TOP STUDY

Designated Nature Conservation Sites

3.1 Statutory sites: There are no statutory[3] designated sites for nature conservation within 2km of the site. The closest designated site for nature conservation is Hoads Wood SSSI located 5.6km east of the site, a 78ha site of ancient semi-natural woodland which supports several rare moths.

3.2 Non-statutory sites: There are nine non-statutory sites for nature conservation, eight of which are Local Wildlife Sites[4] (LWS), the closest being 'Dering Wood' (also designated as a Kent Wildlife Trust reserve) and located 280m to the south of the site. These LWS are a mixture of woodland and grassland habitats which are characteristic of the local landscape of the Low Weald.

3.3 KMBRC supplied records for protected and rare species, those covered by the UK BAP (that are also Species of Principal Importance for Biodiversity under the NERC[5] Act) (see Appendix 4), and for otherwise notable species such as Birds of Conservation Concern[6] (BoCC) from within a 2km radius.

Bats

3.4 The data search returned 245 records for eight identified species of bats from within a 5km radius of the site. These are common pipistrelle *Pipistrellus pipistrellus,* soprano pipistrelle *P. pygmaeus,* Nathusius' pipistrelle *pipistrellus nathusii*, brown long-eared

[3] Principally sites receiving protection under the Wildlife and Countryside Act, 1981 (as amended) and including Local Nature Reserves (LNR), Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC), Special Protected Areas (SPA), amongst others.

[4] Local Wildlife Sites in Kent are selected by reference to a clear set of criteria, based on the importance of the sites for particular wildlife habitats or wild species

[5] There are 49 bird species on the England Biodiversity List which was drawn up to meet the requirements of Section 41 of the Act. Further details of the NERC Act can be found at: www.opsi.gov.uk/acts/acts2006/ukpga_20060016_en_1

[6] Birds of Conservation Concern status is prioritised into high concern (Red), medium concern (Amber) and low concern (Green) (Eaton et al, 2009). 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 have not shown a substantial recent recovery. 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.

bat *Plecotus auritus*, serotine *Eptesicus serotinus,* whiskererd bat *Myotis mystacinus,* Natterer's bat *M. nattereri* and noctule *Nyctalus noctula.* In addition there are number of unidentified bat species records. The closest bat record to the site is a 2009 record for common pipistrelle 1 .02km to the north-west of the site.

Birds

3.5 KMBRC returned records for 72 bird species from within the 2km data search radius. Of these, notable[7] birds which could potentially utilise habitats on site are woodcock *Scolopax rusticola*, turtle dove *Streptopelia turtur*, cuckoo *Cuculus canorus*, nightingale *Luscinia megarhynchos*, spotted flycatcher *Muscicapa striata*, and tree sparrow *Passer montanus.*

Reptiles

3.6 KMBRC data returned nine records (1997-2002) for common lizard *Zootoca vivipara* from within the 2km search area. Both records are from Dering Wood, 280m to the south of the site.

3.7 KMBRC data returned a single 2000 record for slow worm *Anguis fragilis* from within the 2km search area from Dering Wood, 450m to the east of the site.

3.8 KMBRC data returned six records for grass snake *Natrix natrix,* (1999-2009) from within the 2km data search area. Both records being from Dering Wood, 280m to the south of the site.

Amphibians

3.9 There are four records (1999-2009) for great crested newt *Triturus cristatus* from the 2km data search area. The closest of these records dates from 1999 and is from a location 1.2km to the south-east.

3.10 KMBRC data returned five records (1984-2011) for common toad *Bufo bufo,* from within the 2km data search area the closest being a 2004 record from Dering Wood.

[7] Notable birds include Schedule 1 birds, BoCC red and amber listed birds and Species of Principal Importance for biodiversity – See Appendix 4.

3.11 KMBRC data returned a single recent 2011 record for smooth newt *Lissotriton vulgaris,* from a location 1.3km to the north-west of the site

3.12 KMBRC data returned six records (1998-2011) for common frog *Rana temporaria,* from within the 2km data search area the closest being a 2011 record from Dering Woods a location 0.92km to the south of the site.

Mammals

3.13 KMBRC data returned 20 records for common dormouse *Mucardinus avellenarius* (1998-2004) from within the 2km data search area all being from Dering Wood.

3.14 KMBRC data returned one recent (2011) record for hedgehog *Erinaceus europaeus*, from within the 0.6km to the east of the site.

Invertebrates

3.15 The 2km data search returned three 1999 records for downy emerald *Cordulia aenea* – a locally common species which has a restricted range predominantly in the south-east of the UK.

3.16 Moth and butterfly Species of Principal Importance for biodiversity for which there is suitable on-site habitat include the following:

- Cinnabar *Tyria jacobaeae*
- Deep-brown Dart *Aporophyla lutulenta*
- Rosy Rustic *Hydraecia micacea*
- Rustic *Hoplodrina blanda*

3.17 Bee records from within the data search area also included the following nationally scarce bees

- Solitary miner bee *Eucera longicornis*
- Brown-banded carder bee *Bombus humilis*

3.18 The woodland and aquatic habitats present within this site are likely to support a wide diversity of invertebrate species including species listed as 'Species of Principal Importance for biodiversity'.

Fungi

3.19 There are records for a large number of fungi species within the 2km data search area that are listed in the Kent Red Data Book Species Inventory. The woodland potentially includes suitable habitat to support these species.

Invasive species

3.20 A large number of records of invasive species including Schedule 9 species were returned from the 2km data search area. Those for which there is suitable on-site habitat are rhododendron *Rhododendron ponticum,* Japanese knotweed *Fallopia japonica,* varigated yellow archangel *Lamiastrum galeobdolon subsp. argentatum, Campylopus introflexus,* winer heliotrope *Petasites fragrans* and cherry laurel *Prunus laurocerasus.*

HABITAT SURVEY

Overview

3.21 The site formed part of a larger woodland block which was dominated by oak and hornbean semi-natural ancient woodland with a largely closed canopy. This woodland site is bounded by woodland tracks and a public footpath. A coppicing regime has been re-introduced during the past five years. Regular coppicing will result in more light reaching the woodland floor thereby increasing the floral diversity and the general biodiversity of the woodland. In addition to this, new ponds and a new east-west ride has been created providing suitable habitat to support invertebrate groups such as dragonflies and butterflies.

Broad-leaved semi-natural woodland

3.22 The ancient semi-natural woodland of Frith Wood is largely old overstood coppiced hornbeam with mature standard pedunculate oaks. It is approximately 40 years since the woodland has been managed as coppice and the woodland canopy is generally closed. Historical woodland features of bank and ditch systems were evident in the northern section of the woodland as were a network of more recent woodland drainage ditches.

3.23 Other species present included Scots pine *Pinus sylvestris,* locally frequent silver birch *Betula pendula* and aspen *Populus tremula,* occasional sweet chestnut *Castanea sativa,* horse chestnut *Aesculus hippocastanum* and alder *Alnus glutinosa.* In the central area of the woodland (T2) where recent coppicing had taken place young

aspen were regenerating. Occasional non-native species such as mature Turkey oak *Quercus cerris* were also occasionally present.

3.24 The woodland understorey was very sparse and comprised occasional holly *Ilex aquifoilium,* hawthorn *Crataegus monogyna,* honeysuckle *Lonicera periclymenum* and hazel *Corylus avellana.* Bramble *Rubus fruticosus* agg. was locally dominant in cleared coppiced area T2.

3.25 The woodland ground flora was very sparse due to the lack of light but mosses such as wood hair moss *Polytrichum formosum* were locally clumped. The majority of perennial vegetation was recorded along the woodland rides and footpath edge where wood sage *Teucrium scorodonium*, creeping jenny *Lysimachia nummularia,* enchanter's nightshade *Circaea lutetiana* wood speedwell *Veronica montana* and bugle *Ajuga reptans* were all locally frequent. Other woodland ride flora frequently present included wild strawberry *Fragraria vesca,* perforate St John's-wort *Hypericum perforatum,* water-pepper *Persicaria hydropiper,* common figwort *Scrophularia nodosa* and selfheal *Prunella vulgaris.*

3.26 Ferns such as broad-leaved Buckler fern *Dryopteris dilitata* and male fern *D. filix-mas* were both locally frequent and bracken also formed occasional stands at pathway edges.

3.27 Due to the late timing of the botanical survey the majority of ancient woodland ground flora indicator species (AWIs) were not visible. Those that were recorded in the woodland were primrose *Primula vulgaris,* pendulous sedge *Carex pendula* and wood speedwell *Veronica montana.* Anecdotal evidence is that wood anemone *Anemone sylvestris* and English bluebell *Hyacinthoides non-scripta,* both AWI species, are locally frequent throughout the ancient semi-natural woodland. Common dog violet *Viola riviana* was also recorded as locally frequent.

Building

3.28 The Iron Age Round-house was completed in 2011. The timber frame was constructed using local ash and oak with a hazel wattle and clay daub low wall - all materials from the woodland. The roof was thatched with hand cut common reed from the Norflok Broads

Standing water

3.29 The ponds were relatively newly created, (the first pond having been dug in 2009) and therefore only just beginning to become colonised by vegetation and invertebrates. Marginal vegetation recorded was arrowhead *Sagittaia sagittifolia* and frequent soft rush *Juncus effusus.*

Target Notes

Target Note 1: Woodland clearing where the roundhouse has been constructed
Target Note 2: Coppiced area (2011)
Target Note 3: Coppiced area (2008)

Fauna

3.30 The site provides suitable foraging and nesting habitat for a range of bird species and the following bird species were recorded within and around the site during the Phase 1 survey; green woodpecker *Picus viridus*, blackbird *Turdus merula*, robin *Erithracus rubecula,* magpie *Pica pica,* long-tailed tit *Aegithalos caudatus,* woodpigeon *Columba palumbus*, wren *Troglodytes,troglodytes,* great tit *Parus major,* blue tit *Cyanistes caeruleus,* chaffinch *Fringilla coelebs* and jay *Garrulus glandarius, .*

3.31 The site also provided suitable habitat for large and small mammals: signs of the presence of rabbit *Oryctolagus cuniculus,* mole *Talpa europaeus*, fox *Vulpes vulpes* and grey squirrel *Sciurus carolinensis* were all recorded during the survey.

3.32 Butterflies recorded on-site were speckled wood *Pararge aegeria* and red admiral *Vanessa atalanta.* Dark bush cricket *Pholidoptera griseoaptera*, common darter *Sympetrum striolatum* and migrant hawker *Aeshna mixta* were also recorded.

PROTECTED AND INVASIVE SPECIES ASSESSMENT

3.33 The habitats at the site were evaluated as to their likelihood to provide sheltering, roosting, nesting and foraging habitat for the following species:

- Breeding birds;
- Reptiles;
- Dormouse
- Bats, and
- Great crested newt.

3.34 These species were selected for further consideration because potentially suitable habitat is present on site. The results of the field survey are presented in the Table 1 below. The relevant legislation and policies relating to protected species is presented within Appendix 4.

3.35 The potential presence of invasive species including those listed in Section 14 and Part 2 of Schedule 9 of the Wildlife and Countryside Act (1981) has also been considered

Table 1: Assessment of potential presence of protected and/or BAP priority and notable species at the proposed development site

Species	Main legislation and policy (see Appendix Four)	Reason for consideration	Likelihood of occurrence
Breeding birds	Wildlife and Countryside Act 1981 (as amended) Schedule 1 and 8	Woodland, scrub and mature trees provide suitable breeding habitat for a large number of widespread species. KMBRC provided records for 72 bird species from within the 2 km data search area.	**HIGH -** The woodland was generally quite dense, but often lacked a well-structured understorey. However it did, overall, provide suitable breeding habitat for widespread species such as robin, dunnock, blackbird, long-tailed, great and blue tit. 11 bird species were recorded during the survey.
Widespread reptiles	Wildlife and Countryside Act, 1981 (as amended) Schedule 5 (partial protection)	Woodland edge, woodland rides and ponds provide suitable hibernation sites and foraging habitat for widespread reptiles such as slow worm, common lizard and grass snake. There are records for slow-worm, common lizard, and grass snake from the data search area.	**HIGH –** Habitat boundary vegetation of woodland ride and woodland edge, long grassland, provided suitable habitat to support widespread reptiles such as slow worm, common lizard and grass snake. There was good connectivity to additional suitable offsite reptile habitat along field edges and hedgerows.
Bats	Wildlife and Countryside Act 1981 (as amended); Schedule 5. The Conservation of Habitats and Species Regulations 2010 (as amended) Schedule 2.	Woodland and mature trees provide suitable habitat to support bats. There are records for eight identified species of bat from the 2 km data search area.	**HIGH -** The woodland provided suitable bat commuting and foraging habitat and mature woodland trees offered potential bat roosting opportunities.
Great crested newt	Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended). Wildlife and Countryside Act 1981 (as amended); Schedule	Ponds and seasonally wet areas provide suitable breeding habitat for great crested newt. Hedgerows, grassland and scrub provide suitable terrestrial habitat for foraging and hibernating amphibians. There are 4 records for great crested newt from the data search area, the closest from approximately 1.2km to the south-east of the site.	**HIGH -** OS maps 1:1000 show that there 4 offsite ponds that potentially provide suitable breeding habitat for great crested newt within a distance of 500 m of the site boundaries. In addition to this three ponds have been newly created within the site that provide suitable breeding habitat. There are no major barriers to dispersal between ponds
Dormouse	Schedule 2 of the Conservation of Habitats and Species Regulations 2010.	Woodland, hedgerows and scrub provide suitable nesting habitat. Food and nesting building plants, such as hazel, bramble and honeysuckle were present in limited quantities.	**HIGH -** The woodland is connected via hedgerows to the Low Weald farmland landscape and to additional large areas of woodland such as Dering Wood (where dormouse are present). The woodland largely lacked an understorey layer and therefore

Table 1: Assessment of potential presence of protected and/or BAP priority and notable species at the proposed development site

Species	Main legislation and policy (see Appendix Four)	Reason for consideration	Likelihood of occurrence
	Wildlife and Countryside Act 1981 (as amended); Schedule	There are 20 records for dormouse from within a 2 km data search radius, all from the adjacent Dering Wood 0.28km to the south of the site.	good structure however there were a variety of suitable dormouse resources present within and around the woodland, including hazel, honeysuckle, hawthorn and bramble.
Badger	Protection of Badgers Act 1992.	A widespread species in the UK, ranging over large distances. Hedgerows, grassland, scrub and woodland provide suitable foraging and breeding habitat.	**MEDIUM –** No badger excavations or pathways were recorded within the woodland, however it was considered very likely that badger would utilise the woodland habitat
Invasive species	Section 14 and Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)	Japanese knotweed is widespread in many habitats, commonly found on disturbed sites, old gardens and herb/grassland/scrub mosaics around woodland and stream/ditch edges. Giant hogweed *Heracleum mantegazzianum* and Himalayan balsam are common along water courses. A number of commonly planted ornamental species are also on the revised Schedule 9.	**LOW -** No Schedule 9 species were recorded during the survey, however this does not preclude the possibility of their presence.

4 Evaluation

GEOGRAPHIC EVALUATION

Features of International Importance

4.1 Features of International Importance are principally sites covered by international legislation or conventions. The Conservation of Habitats and Species Regulations 2010 (as amended) 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 with certain habitats and populations of species that are important for nature conservation in a European context SACs and SPAs.

4.2 The closest site of international importance Dungeness, Romney Marsh and Rye SPA and SAC located approximately 22km to the south-east of the site. The site does not provide any supporting habitat for these designated wetland sites.

Features of National Importance

4.3 Features of national importance include SSSIs which are designated under the Wildlife and Countryside Act 1981 (as amended). The closest site of national importance is Hoads Woods SSSI site located approximately 5.6km to the east. Mobile species such bats, invertebrates and birds using habitats within this SSSI potentially also utilise Frith Woodland as there is good connectivity between these woodlands.

Features of Regional Value; i.e. Ashford District

4.4 It is considered that the site would not meet criteria for designation as a Local Wildlife Site using accepted criteria (Defra 2006)[8]. Similarly, it is unlikely that the site supports populations or assemblages of species that are significant at this level. Due to its relatively small size and the fact that the larger adjacent 'Dering Wood' has already been selected as a Local Wildlife Site it is unlikely that Frith Wood would be selected as a Site of Nature Conservation Importance on the basis of the current survey.

[8] http://archive.defra.gov.uk/rural/documents/protected/localsites.pdf

Features of Local Importance

4.5 All habitats present are considered to be of local value to wildlife, due to their extended history (being ancient semi-natural woodland- i.e. wooded for over 400 years) but also due to their contribution to a wider ecological network of woodland copses and fields, which provide suitable habitat for species such as commuting and foraging bats, breeding birds, dormice, and for diverse invertebrate species.

Features of Value Immediate Vicinity (c. 250m) of the Project

4.6 All habitats are important at this level, providing suitable habitat to support a range of local wildlife including foraging birds, bats and invertebrates.

4.7 Overall the site provides suitable habitat to support several protected and BAP species groups including widespread reptiles, breeding birds, bats, dormice and invertebrates. These populations, especially the more mobile species are likely to utilise the site in conjunction with other nearby areas of woodland.

Summary

4.8 Overall on the basis of the above criteria, habitats within the site are considered to be local ecological value – the majority of it being ancient semi-natural woodland, a habitat considered generally to be of high value to wildlife due to its longevity and variety of ecological niches. In addition it performs an important ecological function by allowing wildlife, including badgers, bats and diverse birds to move through and around the site. The ancient woodland qualifies as 'Lowland Mixed Deciduous Woodland[9]' and is a classic example of this type. The site potentially supports BAP and protected species including foraging and roosting bats, breeding birds, dormouse, great crested newt and widespread reptiles.

LOCAL PLANNING POLICY

4.9 On the basis of the completed survey it is considered that the non-statutory South East Plan (2009) contains the following nature conservation policies relevant to the site. A summary of these policies is detailed in Table 2 below. The full text of the relevant policies is contained in Appendix 4.

[9] http://jncc.defra.gov.uk/page-5706

Table 2: The South East Plan (2009) and Wealden District Council Local Plan Nature Conservation polices relevant to the site.

Policy	Relevance to the site
South East Plan (2009)	
Policy CC1: Sustainable Development The principal objective of the Plan is to achieve and to maintain sustainable development in the region. Sustainable development priorities for the South East are identified as: (i) achieving sustainable levels of resource use (ii) ensuring the physical and natural environment of the South East is conserved and enhanced (iii) reducing greenhouse gas emissions associated with the region (iv) ensuring that the South East is prepared for the inevitable impacts of climate change (v) achieving safe, secure and socially inclusive communities across the region, and ensuring that the most deprived people also have an equal opportunity to benefit from and contribute to a better quality of life. All authorities, agencies and individuals responsible for delivering the policies in this Plan shall ensure that their actions contribute to meeting the objectives set out in this policy and in the Regional Sustainability Framework [10]	The proposal supports an ecologically sustainable educational project
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.	A woodland management plan has been produced for Frith Woodland in order to ensure that the woodland is managed in a positive and sustainable way

[10] *The South East Regional Sustainability Framework -'Towards a Better Quality of Life',* South East of England Regional Assembly and Partners, June 2008.

http://www.southeast-ra.gov.uk/documents/sustainability/rsf_2008/rsf_main.pdf

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	The long-term aims are to involve the local community, and especially children's groups in this educational and sustainable project.
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	There is an opportunity to conserve and potentially increase local biodiversity through local habitat management. Recommendations are made in Section 5.
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* *promoting the growth and procurement of sustainable timber products*.	Reinstatement of the coppice regime has both increased the biodiversity of the woodland and promoted the sustainable use of woodland products such as timber and fuel.

5 Conclusions and Recommendations

CONCLUSIONS

5.1 The Phase 1 habitat survey identified the following natural and semi-natural habitats within the site; broad-leaved woodland, plantation and ponds. The ancient semi-natural woodland is considered to be of local ecological value, qualifies as a UK BAP Priority habitat and forms part of a larger woodland block including Dering Wood – a Local Wildlife Site.

5.2 Habitats surrounding the site were considered suitable for a number of protected species groups including widespread reptiles, badger, great crested newts, dormice breeding birds and bats. The Iron Age Round House has already been constructed within a pre-existing clearing and has utilised materials largely from the woodland itself. It is considered unlikely to have had any adverse impact upon any potential protected species. Due to the planned sustainable nature of the enterprise and the low number of people visiting and involved with the project no adverse impacts to biodiversity are anticipated.

5.3 The construction of the Iron Age Round House has utilised largely local materials such as hazel, oak and ash timber and clay from the woodland. This has not been to the detriment of habitats or species present within this working woodland. The character of woodland changes over time and management has a major influence in this respect. Management has been largely absent from Frith Woodland for forty years in which time the woodland canopy has closed and the woodland has become dark - this has been to the detriment of the wildlife present. It is widely accepted that an appropriate coppicing regime will increase local biodiversity and this has been evidenced through the increase in species recorded in the site. The Iron Age Round House has been constructed as a focal point for local community and educational activities regarding the woodland, it will over time biodegrade naturally.

Woodland management

5.4 Currently the majority of the woodland suffers from a lack of light. Reinstatement of a coppicing system in parts of the woodland has already taken place in selected areas. Coppicing will improve habitat and structural diversity which will enhance the woodland generally and increase its suitability for dormice, a species of principle importance for biodiversity which may potentially be present and has thriving populations in adjacent woodland.

5.5 Further areas with evidence of historical coppicing (multi-stemmed trees with large stools) and with a rich ground flora that may currently be shaded out, should also be considered for coppicing. Very old trees should not be coppiced as they may fail to regenerate successfully and the character of the woodland should not be compromised through this.

5.6 Woodland areas include some fallen dead wood which provides important habitat especially for invertebrates. Where fallen deadwood does not pose a health and safety risk it should be left to provide valuable invertebrate habitat. Timber should preferably be stacked in discrete wood piles.

Enhancement

5.7 *Dormouse:* Enhancements to the existing woodland for dormouse should aim to provide corridors with a continuous shrub layer of dense foliage under larger canopy trees; this may incorporate planting additional hazel. An essential factor in good dormouse habitat is the variety of arboreal foods (Richards *et al.,* 1984) including flowers (nectar and pollen), fruits (berries and nuts), buds and young leaves and insects (aphids and caterpillars). A high degree of diversity among tree and shrub species is desirable in order to ensure that an unbroken sequence of foods is available throughout the summer. Conditions for dormice may therefore be improved by appropriate planting, coppicing, thinning or felling (Bright *et al.,* 2006). Important species include hazel, oak and honeysuckle; others of value are ash, blackthorn and hawthorn. Bramble, ivy, honeysuckle and rose should be left or allowed to develop as these provide important food and nest building resources for dormouse.

5.8 The Forestry Commission's guidance on coppicing woodlands regarding dormice is *'coppice no more than 25% of the area of habitat in any one year, and ideally less'* (Forestry Research and Natural England, 2007*).* It is, however, recommended that further mitigation be carried out to avoid any potential impact on dormice. The People's Trust for Endangered Species (PTES) recommend to '*undertake any tree, scrub or coppice work between November and March to avoid disturbing nesting dormice*' (White & Hunt, 2008). In addition, a search of the base of the coppice stool should be carried out prior to coppicing for evidence of hibernating dormice. If a hibernating dormouse is found then it should not be moved, with the stool either left until the following year or a suitably qualified ecologist consulted for advice on how to proceed. Dormice are a European Protected Species protected under the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation (Natural Habitats, &c) Regulations 1994.

5.9 *Ponds:* Ponds should be designed to enable wildlife to easily enter and leave the water, and careful profiling is also vital for invertebrates and plant diversity. A gently sloping profile around the circumference of the pond will create habitat for invertebrates and larvae development etc which require warmer water conditions created by the shallow water. A deep shelf should be avoided; this may create an island of water during the summer drying season and leave animals stranded out of water. A slope of less than 1:5 (12°) and preferably less than 1:20 (3°) is most suitable (Pond Conservation, 2011). The slope angle available will depend on the overall size and depth of the new pond to be created. A depth of more than 30cm is required in order to prevent drying out and to prevent deeper water from freezing during the winter months.

5.10 The plants within a pond play an important role in water quality, egg-laying opportunities and also provide shelter and food for wildlife. The ponds should be planted with native marginal vegetation. A wildlife pond will naturally be colonised by both flora and fauna within a short period of time, however initial basic planting should be carried out when the pond is created. Tall emergent vegetation should be avoided as this will shade out other vegetation and reduce plant diversity (Pond Conservation, 2011a). When transferring existing plants, or planting new plants, care should be taken to avoid plants listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

References

Bright P, Morris, P and Mitchell-Jones, T (2006). *The Dormouse Conservation Handbook* (Second Edition) English Nature, Peterborough London

Forestry Research and Natural England. (2007*). Guidance on Managing Woodlands with Dormice in England.* Interim Guidance – Version 2. [On-line]. Available from http://www.forestry.gov.uk/pdf/england-protectedspecies-dormouse.pdf/$FILE/england-protectedspecies-dormouse.pdf [Accessed: 20/09/12].

HMSO - Her Majesty's Stationery Office. (1981). The Wildlife and Countryside Act (WCA) (as amended).

HMSO - Her Majesty's Stationery Office. (2000).The Countryside and Rights of Way Act (CRoW)

HMSO - Her Majesty's Stationery Office. (2010). The Conservation of Habitats and Species Regulations 2010. HMSO, London.

Joint Nature Conservation Committee (2010). *Handbook for Phase 1 habitat survey - A technique for Environmental Audit* JNCC, Peterborough. [on-line]. Available from http://www.jncc.gov.uk/page-2468 [Accessed: 17.04.2012].

Joint Nature Conservation Committee (2010a). *UK Biodiversity Action Plan: New List of Priority Species and Habitats*. JNCC, Peterborough. [on-line]. Available from http://www.ukbap.org.uk/NewPriorityList.aspx [Accessed: 17.04.2012].

Multi-Agency Geographic Information for the Countryside (MAGIC) (2010). *MAGIC* Natural England, Leeds. [on-line]. Available from: www.magic.gov.uk [Accessed: 17.04.2012].

Pond Conservation. (2009). *Clean water ponds for wildlife.* Pond Conservation [On-line]. Available from http://www.pondconservation.org.uk/Resources/ Pond%20Conservation/ Documents/PDF/MPP-toolkit-sheet2.pdf [Accessed 14/09/2012].

Pond Conservation. (2011). *Creating ponds for amphibians and reptiles*. Pond Conservation [On-line]. Available from http://www.pondconservation.org.uk/Resources/ Pond%20Conservation/Documents/PDF/Amphibians.pdf [Accessed 14/09/2012].

Richards CGJ, White AC, Hurrell E, (1984) Habitat requirements of dormice *Muscardinus avellanarius* in relation to woodland management in Southwest England. Biological Conservation, Volume 54, Issue 4, 1990, Pages 307–326

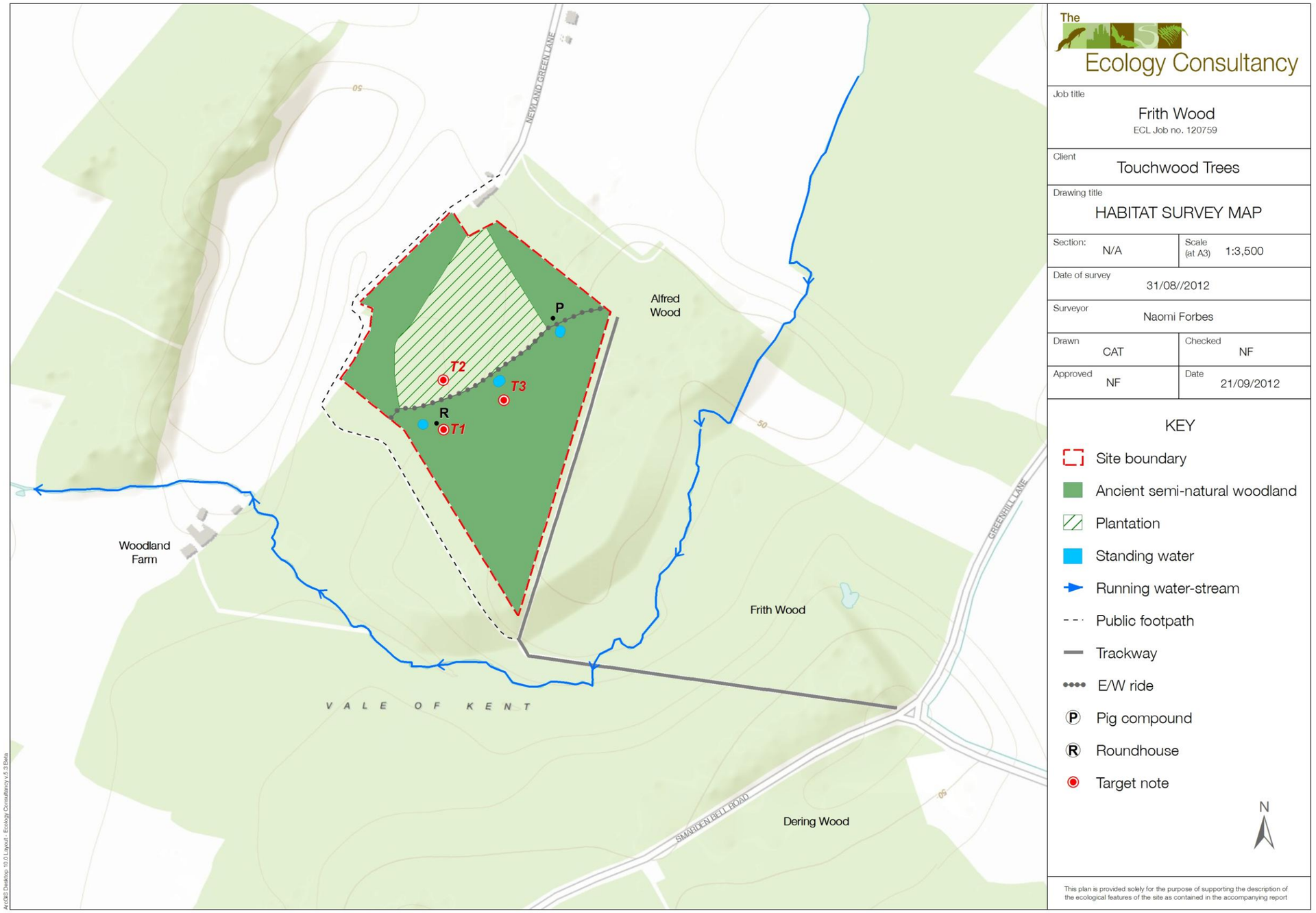
Stace, C.A. (2010). *New Flora of the British Isles (3rd Ed.)*. Cambridge University Press, Cambridge.

Sussex Biodiversity Partnership(2001). *From Rio To Sussex: Sussex Biodiversity Action Plan.* [on-line]. Available from http://www.biodiversitysussex.org [Accessed: 17.04.2012].

White, I & Hunt, I. (2008). Managing Small Woodlands for Dormice: A Guide for Owners and Managers. PTES, London. [On-line]. Available from http://www.ptes.org/?page=184 [Accessed: 20/09/12].

Appendix 1: Habitat Map

Figure 1: Habitat Map



Appendix 2: Photographs

Photograph 1
Iron Age roundhouse, with newly constructed pond in the foreground. The Saxon-style replica has been created using timber and from Frith Wood and reed thatching from Norfolk and blends well into the woodland background

Photograph 2
A.large part of the woodland is densely vegetated with a closed canopy and very little light reaching the woodland floor

Photograph 3
Timber stacked closed to the north/south woodland ride

Photograph 4
East-west ride created supporting short perennial vegetation and adjacent shallow pond.

Photograph 5

Abundant bramble covering the woodland floor in a recently coppiced cant

Photograph 6
Woodland bank in the eastern section of the woodland supporting oak standards and old hornbeam coppice stools.

Appendix 3: Plant Species List

Plant Species List for Frith Wood, Egerton compiled from the Phase 1 field survey carried out on 31st August 2012.

Scientific nomenclature follows Stace (2010) 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, L = locally c=clumped, e=edge only, g=garden origin, p=planted, y = young, s=seedling or sucker, t=tree, h=hedge, w=water ? = identification uncertain.

SCIENTIFIC NAME	COMMON NAME	ABUNDANCE	QUALIFIER
Acer pseudoplatanus	Sycamore	O	t
Aesculus hippocastanum	Horse chestnut	R	t
Ajuga reptans	Bugle	O	
Alchemilla sp.	Lady's-mantle	R	
Alnus glutinosa	Alder	R	t
Betula pendula	Silver birch	O	t
Cardamine flexuosa	Wavy bitter-cress	R	
Carex pendula	Pendulous sedge	O	
Castanea sativa	Sweet chestnut	O	
Chamerion angustifolium	Rosebay willowherb	Lf	
Circaea lutetiana	Enchanter's-nightshade	F	
Cirsium palustre	Marsh thistle	O	
Cirsium vulgare	Spear thistle	O	
Corylus avellana	Hazel	F	
Dryopteris dilatata	Broad buckler-fern	Lf	
Dryopteris filix-mas	Male-fern	O	
Epilobium hirsutum	Great willowherb	O	
Epilobium montanum	Broad-leaved willowherb	Lf	
Festuca rubra	Red fescue	Lf	
Fraxinus excelsior	Ash	O	t
Fragaria vesca	Wild strawberry	O	
Glechoma hederacea	Ground-ivy	Lf	
Hypericum perforatum	Perforate St John's-wort	O	
Hypochaeris radicata	Cat's-ear	O	
Ilex aquifolium	Holly	Lf	
Juncus effusus	Soft-rush	O	
Lonicera periclymenum	Honeysuckle	O	
Luzula campestris	Field wood-rush	R	

Lysimachia nummularia	Creeping-Jenny	Lf	
Malva moschata	Musk-mallow	O	
Myosotis arvensis	Field forget-me-not	Lf	
Persicaria hydropiper	Water-pepper	Lf	
Picea abies	Norway spruce	O	t
Pinus sylvestris	Scots pine	O	t
Potentilla anglica	Trailing tormentil	Lf	
Potentilla erecta	Tormentil	O	
Potentilla reptans	Creeping cinquefoil	lf	
Primula vulgaris	Primrose	O	
Prunella vulgaris	Selfheal	Lf	
Pteridium aquilinum	Bracken	Lf	
Quercus cerris	Turkey oaks	R	t
Quercus robur	Pedunculate oak	F	t
Ranunculus acris	Meadow buttercup	O	
Ranunculus repens	Creeping buttercup	Lf	
Rubus fruticosus agg.	Bramble	Lf	
Sagina procumbens	Procumbent pearlwort	Lf	
Sagittaria sagittifolia	Arrowhead	r	
Scrophularia nodosa	Common figwort	O	
Teucrium scorodonia	Wood sage	Lf	
Veronica montana	Wood speedwell	F	
Viola riviniana	Common dog-violet	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 Directive[11] 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(as amended) (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.

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.**

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

- 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 sett[12] or any part thereof
- Intentionally or recklessly disturb[13] 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

[12] 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

[13] 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.

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

A Development Licence[14] 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 migrate[3]

  b) to affect significantly the local distribution or abundance of the 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.

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.

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

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 roost[15].

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

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 August[16]. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

---

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

[16] 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.

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.

Dormouse

Dormice *Muscardinus avellanarius* 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. dormice)
- Deliberate disturbance of dormice as:
    - a) to impair their ability:
        - (i) to survive, breed, or reproduce, or to rear or nurture young;
        - (ii) to hibernate or migrate
    - b) to affect significantly the local distribution or abundance of the 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.

Dormice 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 dormice 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 dormouse breeding or resting places (N.B. this is usually taken to mean dormouse 'habitat') 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.

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.

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 of Habitats & Species Regulations 2010. 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 of Habitats & Species Regulations 2010. 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 (SNCIs). 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

The National Planning Policy Framework replaces PPS9 (from April 2012) and emphasises the need for sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and priority species. An emphasis is also made for the need for ecological networks via preservation, restoration and re-creation. The protection and recovery of priority species – presumably those listed as UK Biodiversity Action Plan priority species – is also listed as a requirement of planning policy. In determining planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from adverse harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland

D REGIONAL AND LOCAL PLANNING POLICY

The South East Plan (2009) includes the following Core Regional Policies that are relevant to the site.

Policy CC1: Sustainable Development

"The principal objective of the Plan is to achieve and to maintain sustainable development in the region. Sustainable development priorities for the South East are identified as:

(i) achieving sustainable levels of resource use

(ii) ensuring the physical and natural environment of the South East is conserved and enhanced

(iii) reducing greenhouse gas emissions associated with the region

(iv) ensuring that the South East is prepared for the inevitable impacts of climate change

(v) achieving safe, secure and socially inclusive communities across the region, and ensuring that the most deprived people also have an equal opportunity to benefit from and contribute to a better quality of life.

Policy CC4: Sustainable Design and Construction

"The design and construction of all new development, and the redevelopment and refurbishment of existing building stock will be expected to adopt and incorporate sustainable construction standards and techniques. This will include:

consideration of how all aspects of development form can contribute to securing high standards of sustainable development including aspects such as energy, water efficiency and biodiversity gain",,,,,

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"

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 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' below. 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 (Diagram NRM3) should be pursued

(ii) 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.*

(iii) 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.

(iv) They shall require green infrastructure to be identified, developed and implemented in conjunction with new development".

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."

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

Ashford Local Development Framework (adopted July 2008)

POLICY CS11: Biodiversity and Geological Conservation

Development proposals should avoid harm to biodiversity and geological conservation interests, and seek to maintain and, where practicable, enhance and expand biodiversity by restoring or creating suitable semi-natural habitats and ecological networks to sustain wildlife in accordance with the aims of the National and Kent Biodiversity Action Plans. If, exceptionally, there are circumstances in which other considerations justify permitting development that causes harm to such interests, appropriate mitigation or compensation measures will be required

E UK BIODIVERSITY ACTION PLAN

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 recourses. 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 and starling;

- Reptiles such as slow-worm, grass snake and common lizard;
- Amphibians such as common toad; great created newt
- Small mammals such as hedgehog;
- Bats, such soprano pipistrelle and brown long eared bat *Plecotus auritus*.

The Ecology Consultancy

The Ecology Consultancy 6-8 Cole Street London SE1 4YH **T.** 020 7378 1914 **W.** www.ecologyconsultancy.co.uk

The Old Granary Upper Stoneham Lewes East Sussex BN8 5RH **T.** 01273 471369
79 Thorpe Road Norwich NR1 1UA **T.** 01603 628408
Suite 10 3 Coates Place Edinburgh EH3 7AA **T.** 0131 225 8610