WYG Planning & Environment

part of the WYG group

Barratt Homes

Havant Road, Emsworth

Extended Phase 1 Habitat Survey

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Executive Summary

Site Description and Scope of Works
The site covers approximately 6.1 hectares, located to the east of Havant in Hampshire, centred on Ordnance Survey grid reference SU734062. The site is bordered to the north west by the A27, residential development to the east and to the south by the A259. The site comprises very short, cattle grazed improved grassland with scattered scrub, bramble and defunct hedgerows. Along the north western boundary adjacent to the A27 is young tree belt plantation mainly comprising field maple and hawthorn. The eastern boundary comprises back garden fencing with planted shrubs with scrub and tall ruderal becoming established. To the south of the site is a hedgerow adjacent to the footway of the A259 comprising mainly sycamore. Scrub dominates the north eastern extent of the site and two defunct hedgerows run north to south separating the fields from one another.

Potential Constraints	Yes	No
Bats		
Has the site been assessed for bats?	✓	
Are there any structures or trees on site which have the potential to support roosting bats? (see section 5.3.2)		✓
Breeding Birds including Barn Owls		
Has the site been assessed for breeding birds including barn owls?	✓	
Will areas of hedgerow, scrub, woodland, trees or other features likely to be used by nesting birds be affected by the proposal? (see section 5.3.7)	✓	
Badgers		
Has the site been assessed for badgers?	✓	
Is there any evidence of badgers on or near the application site including setts, foraging or commuting? (see section 5.3.1)		✓
Dormice		
Has the site been assessed for dormice?	✓	
Is there suitable habitat for dormice on, or close to the application site?		✓
Great crested newts		
Has the site been assessed for great crested newts?	✓	
Is there suitable habitat for great crested newts on, or close to the application site? (see section 5.3.3)		✓
Reptiles		
Has the site been assessed for reptiles?	✓	
Is there suitable habitat on the site for reptiles? (see section 5.3.5)	✓	
Other protected species		
Has the site been assessed for otters, water voles, white-clawed crayfish	✓	
Is there suitable habitat on the site for otters, water voles, white-clawed crayfish		✓
Other features of nature conservation interest		
Does the application site support Habitats of Principal Importance or Local Biodiversity Action Plan Priority Habitats?		✓
If 'Yes' list types of habitat		
Does the application site potentially support Species of Principal Importance or Local Biodiversity Action Plan Species?	✓	
If 'Yes' list species Commuting / foraging bats, reptiles and wintering birds.		
Have details of biodiversity enhancements been included with the application?	✓	
Recommendations	**Yes**	**No**
Are further surveys recommended to inform the ecological impact assessment?	✓	

If 'Yes' list surveys

- It is recommended that a suite of updated **reptile presence/ likely absence surveys** is carried out at the site. Surveys must be undertaken during the reptile active season, which runs from March to October. These surveys were completed between 5th September and 6th October 2014.
- It is recommended that **bat activity surveys** are completed seasonally during spring, summer and autumn, along one transect route. In addition to this, an automated bat detector should be left at one location on site for three consecutive nights during spring, summer and autumn. Due to the timescales of the project, bat activity surveys were completed on three occasions over August and September and automated bat detectors were left at the location along the western boundary of the site. This approach takes place within the peak bat activity season and has been used for similar sites in the local area and been approved by the LPA ecologist in these instances. These surveys were completed between August and September 2014.
- Given the dense scrub present in parts of the site, it is recommended that a **pre-commencement badger check** is completed approximately 2 months prior to works commencing to confirm the continued absence of this species from the site.

Is mitigation (including avoidance/compensation) and enhancement recommended?	✓	

- Habitats:Ecologists have provided input into the design stage of the masterplan and as such, the boundary hedgerows have all been incorporated and where possible enhanced. The defunct hedgerows within the site will not be retained but as these were gappy, poor quality and of low ecological value this is not considered to be a constraint. It is recommended that there will be reduce lighting impacts on these retained features. It is also recommended that multi-functional green space is incorporated into the final design to reduce increase in visitor pressure to designated sites in the wider area.
- Badgers: An ecological clerk of works is recommended to be present during the clearance of scrub to confirm that no badger setts are present.
- Reptiles: Assuming the site continues to be managed in the same way prior to mitigation, it is recommended that 20 days of translocation is needed to move reptiles from the works area to a receptor area onsite. Prior to translocation the receptor area localted towards the eastern extent of the site and along the boundaries of the site will be enhanced for reptiles.
- Wintering Birds: As a precautionary measure to avoid disturbance to any birds using the off-site fields to the south of the A259, it is recommended that hoarding be placed along the southern boundary of the site, and that any pile driving (if required) does not take place between October and February.
- Nesting Birds: Vegetation clearance should be scheduled to take place between October and February wherever possible to avoid the breeding bird season. If this is not possible, then a thorough check for nesting birds should be completed immediately prior to site clearance. If any active nests are found they must be retained, together with a suitable vegetated buffer until all the young have fledged.
- Invertebrates: If any dead wood is found during site clearance, it is recommended that it be placed elsewhere within the site, to be retained within the final development as stag beetles have been recorded from the wider area.
- Bats: More detailed recommendations will be provided following the protected species surveys recommended above, however, in general, it is recommended that lighting is directed away from hedgerows and mature trees where possible within the final development, to retain dark corridors for commuting bats within and around the final development.
- Enhancements:
- Recommendations are made to provide additional nesting / roosting and feeding opportunities for birds, bats and invertebrates within the final design.

1.0 Introduction

1.1 Background

This report has been produced to review the previous findings of the extended Phase 1 habitat survey completed by WYG in 2014 in order to assess the validity of the findings in relation to the current conditions of the site and the most up to date layout plan.

WYG was commissioned by Barratt Homes in July 2014 to undertake an Extended Phase 1 habitat survey at Havant Road, Warblington. An initial visit took place on the 1st of July 2014 with a second visit on the 20th August due the northern field being inaccessible during the previous visit. An update survey was carried out on 29th June 2016 by David West, Principal Ecologist to assess whether there had been any change in site conditions since the 2014 survey.

Aluco Ecology completed an Ecological Assessment of Land North of Havant Road, Emsworth in August 2011. The habitats recorded included improved to semi-improved grassland with a reduced herb content, hedgerows, patches of bramble and scrub.

Winter bird surveys were undertaken by Aluco Ecology in winter 2010 and between 10th January 2013 to 28th March 2013 and recorded use of fields to the South of Havant Road (off site) by a low number of waders (curlew and lapwing), however no waterfowl were recorded on the proposed development site.

Aluco Ecology completed bat emergence/return surveys along the site edges to determine where bats first enter the site and transect surveys of the site were undertaken by Aluco Ecology during August and September 2011. The surveys concluded that there was no roost potential on the development site, but the transect surveys recorded common and soprano pipistrelle, Noctule, Serotine and Myotis (Brandts/Whiskered/Alcathoe).

Aluco Ecology completed a reptile presence/likely absence survey at the site between 6th August 2011 and 29th September 2011 completing a total of nine survey visits. During these surveys, one species of reptile was recorded which was the slow worm with a maximum of four adults recorded on any one visit. A breeding slow worm population at the site was confirmed with a maximum of four sub adults recorded.

1.2 Site Location and General Description

The site covers approximately 6.1 hectares, located to the east of Havant in Hampshire, centred on Ordnance Survey grid reference SU734062. The site is bordered to the north west by the A27, residential development to the east and to the south by the A259. The site comprises very short, cattle grazed improved grassland, areas of bare ground, scattered scrub and trees, bramble and defunct hedgerows. Along the north western boundary adjacent to the A27 is young tree belt plantation mainly comprising field maple and hawthorn. The eastern boundary comprises back garden fencing with planted shrubs with scrub and tall ruderal becoming established. To the south of the site is a hedgerow adjacent to the footway of the A259 comprising mainly sycamore. Scrub dominates the north eastern extent of the site and two defunct hedgerows run north to south separating the fields from one another.

1.3 Development Proposals

It is proposed to develop the site for 161 residential properties, with associated parking, access, gardens, hard and soft landscaping and areas created for local wildlife. An area of open space will be retained within the southern area of the site, in addition to several areas of public open space throughout the scheme including a buffer varying between 5.6m and 8.3m along the south eastern boundary which will be managed as tall grassland with one cut a year in September along with a tall grassland-scrub mosaic area along the eastern extent of the site. The scheme will be accessed from the southern boundary, with additional foot access provision along the south eastern boundary. There will be a trim trail that forms the circular route surrounding the development boundaries. For the most up to date layout plan please refer to Layout Plan drawing No. 18-2059-100, contained in Appendix A. The ecological investigations undertaken by WYG in 2014 included the following objectives:

- A desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest, and records of protected/notable species within the site and its environs;
- A review of existing survey information;
- An extended Phase 1 habitat survey involving a walkover of the site to record habitat types and dominant vegetation, including any invasive species, and a reconnaissance survey for evidence of protected fauna or habitats capable of supporting such species;

- An assessment of the potential ecological constraints to the proposed works at the site and recommendations for further survey, avoidance, mitigation and enhancement where appropriate.

2.0 Desk Study

2.1 Methodology

Information was gathered from Hampshire Biodiversity Information Centre (HBIC), the ecological records centre for Hampshire, regarding the presence of nature conservation designations and protected and notable species within 2 km of the proposed development site. In addition, a search for designations was made of Natural England's interactive, web-based MAGIC (Multi Agency Geographic Information for the Countryside) database.

The data search covers:

- Statutory nature conservation designations, such as National Nature Reserves and Sites of Special Scientific Interest;
- Non-statutory nature conservation designations, such as Wildlife Sites;
- Protected species, such as badgers, great crested newts and bats; and
- Notable species, such as those listed in the local Biodiversity Action Plan.

The data search did not include Tree Preservation Orders and non ecological Conservation Designations.

2.2 Data Search Results

2.2.1 Statutory Sites

According to MAGIC there are six statutory designated sites (some of which cover part or all of the same area) within 2km of the site comprising. Details of these sites are provided in **Table 1**.

Table 1: Details of statutory sites within 2 km

Designated site	Distance and direction from site	Reasons for designation
Warblington Meadow Site of	1.0 km south of the	Warblington Meadow SSSI is an unimproved grazing marsh adjoining Chichester Harbour and is of special interest for its gradation from fresh water, base-rich marsh to old reclaimed

Designated site	Distance and direction from site	Reasons for designation
Special Scientific Interest (SSSI)	site.	salt marsh and for its associated flora, with a total of 158 species of flowering plants having been recorded.
Chichester and Langstone Harbour Special Protection Area (SPA)	1.1 km south of the site.	Chichester and Langstone Harbour SPAs are located on the south coast of England in Hampshire and West Sussex. They are large, sheltered estuarine basins comprising extensive sand- and mud-flats exposed at low tide. The two harbours are joined by a stretch of water that separates Hayling Island from the mainland. Tidal channels drain the basin and penetrate far inland. The mud-flats are rich in invertebrates and also support extensive beds of algae, especially Enteromorpha species, and eelgrasses Zostera spp. The basin contains a wide range of coastal habitats supporting important plant and animal communities. The site is of particular significance for waterbirds, especially in migration periods and in winter. It also supports important colonies of breeding terns.
Solent Maritime Special Area Conservation (SAC)	1.1 km south east of the site.	The Solent encompasses a major estuarine system on the south coast of England with four coastal plain estuaries (Yar, Medina, King's Quay Shore, Hamble) and four bar-built estuaries (Newtown Harbour, Beaulieu, Langstone Harbour, Chichester Harbour). The site is the only one in the series to contain more than one physiographic sub-type of estuary and is the only cluster site. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime of four tides each day, and for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive estuarine flats, often with intertidal areas supporting eelgrass *Zostera spp.* and green algae, sand and shingle spits, and natural shoreline transitions. The mudflats range from low and variable salinity in the upper reaches of the estuaries to very sheltered almost fully marine muds in Chichester and Langstone Harbours. Unusual features include the presence of very rare sponges in the Yar estuary and a sandy 'reef' of the polychaete *Sabellaria spinulosa* on the steep eastern side of the entrance to Chichester Harbour.
Chichester and Langstone Harbour Ramsar Site	1.1 km south-east of the site.	The site comprises two large, interconnected sheltered estuarine basins providing extensive intertidal mud and sand flats with eelgrass *Zostera spp.* beds, large areas of mixed saltmarsh and extensive cord-grass *Spartina spp.* swards in an advanced state of degeneration. Fringing habitats

Designated site	Distance and direction from site	Reasons for designation
		includeshingle spits, saline, brackish and freshwater lagoons, coastal grazing marsh and deciduous woodland. The site supports important overwintering populations of migratory waterfowl. The information sheet on Ramsar wetlands within this area shows the following winter peak counts: • Dark-bellied brent goose, *Branta bernicla bernicla*, 12987 individuals, representing an average of 6% of the population. • Common shelduck , *Tadorna tadorna*, 1468 individuals, representing an average of 1.8% of the GB population. • Grey plover, *Pluvialis squatarola*, 3043 individuals, representing an average of 1.2% of the population. • Dunlin, *Calidris alpina alpina*, 33436 individuals, representing an average of 2.5% of the population.
Brook Meadow Local Nature Reserve (LNR)	1.5 km east of the site.	The site consists of 5 acres of grassland, surrounded by woodlands and flanked by two streams. Brook Meadow supports a range of birds, insects and wild flowers, with water voles present in the river.
Chichester and Langstone Harbour Site of Special Scientific Interest (SSSI)	1.6 km south east of the site.	Chichester Harbour is a large estuarine basin in which at low water extensive mud and sandflats are exposed, drained by channels which unite to make a common exit to the sea. The site is of particular significance for wintering wildfowl and waders and also breeding birds both within the Harbour and in the surrounding permanent pasture fields and woodlands. There is a wide range of habitats which have important plant communities.
Eames Farm Local Nature Reserve (LNR)	2.7km south east of the site.	In 2008 West Sussex County Council granted a 999-year lease to Chichester Harbour Trust for 71 hectares (177 acres) of farmland at Eames Farm, within Chichester Harbour Area of Outstanding Natural Beauty (AONB). The farm lies at the heart of the AONB and boasts extensive coastal grazing marsh of national and international importance for its plants and bird life.

2.2.2 Non-statutory Sites

HBIC returned information of seventeen non-statutory designated sites within 2km of the site. Brook Farm B and Warblington Castle Farm East D are the closest SINC's at 0.1 km south and south west of the site.

Refer to Table 2 for details of these designated sites.

Table 2: Details of statutory sites within 2 km

SINC Name	Distance and direction from site	Reason for designation	Species supported by SINC
Brook Farm B	0.1 km south west of the site.	Criteria 6A: Sites which support one or more notable species4. Criteria 6B: Sites which regularly support a significant population of a species which has a restricted distribution or has substantially declined in population or range. Such sites may be used seasonally or for only one part of a species life-cycle.	Dark-Bellied Brent (*Goose Branta bernicla bernicla*), Weasel's Snout (*Misopates orontium*) and Corn Spurrey (*Spergula arvensis*).
Warblington Castle Farm East D	0.1 km south of the site.	Criteria 6B: Sites which regularly support a significant population of a species which has a restricted distribution or has substantially declined in population or range. Such sites may be used seasonally or for only one part of a species life-cycle.	Dark-Bellied Brent Goose (*Branta bernicla bernicla*)
Conigar Point Meadows	0.5 km south of the site.	Criteria 2A: Agriculturally unimproved grasslands Criteria 4A: Semi-natural coastal and estuarine habitats, including saltmarsh, intertidal mudflats, sand dunes, shingle, brackish ponds, grazing marsh and maritime grasslands. Criteria 6A: Sites which support one or more notable species. Criteria 6B: Sites which regularly support a significant population of a species which has a restricted distribution or has substantially declined in population or range. Such sites may be used seasonally or for only one part of a species life-cycle.	Wild Celery (*Apium graveolens*) Field Brome (*Bromus arvensis*) Slender Hair's Ear (*Bupleurum tenuissimum*), Divided Sedge (*Carex divisa*), Long-Bracted Sedge (*Carex extensa*), Golden-Samphire (*Inula crithmoides*) and Lax-flowered sea lavender (*Limonium humil*).
Warblington Castle Farm East E	0.5 km south of the site.	Criteria 6B: Sites which regularly support a significant population of a species which has a restricted	Dark-Bellied Brent Goose (*Branta bernicla bernicla*)

SINC Name	Distance and direction from site	Reason for designation	Species supported by SINC
		distribution or has substantially declined in population or range. Such sites may be used seasonally or for only one part of a species life-cycle.	
Warblington Castle Farm West	0.7 south west of the site.	Criteria 6B: Sites which regularly support a significant population of a species which has a restricted distribution or has substantially declined in population or range. Such sites may be used seasonally or for only one part of a species life-cycle.	Dark-Bellied Brent Goose *(Branta bernicla bernicla*)
Land West of Emsworth Recreation Ground	0.9 km east of the site.	Criteria 2B: Semi-improved grasslands which retain a significant element of unimproved grassland.	N/A
Nore Grassland & Saltmarsh	1.1 km south-east of the site.	Criteria 6A: Sites which support one or more notable species4. 6B: Sites which regularly support a significant population of a species which has a restricted distribution or has substantially declined in population or range. Such sites may be used seasonally or for only one part of a species life-cycle.	Slender Hair's Ear (*Bupleurum tenuissimum*) and Sea Wormwood (*Seriphidium maritimum*)
Stream West of Emsworth Recreation Ground	1.1 km east of the site.	Criteria 6A: Sites which support one or more notable species4.	Narrow-Leaved Water-Plantain (*Alisma lanceolatum*)
Westbrook Stream, Bridge Road	1.1 km east of the site.	Criteria 6A: Sites which support one or more notable species4.	Narrow-Leaved Water-Plantain (*Alisma lanceolatum*)
Emsworth Millpond	1.1 km north west of the site.	Criteria 4A: Semi-natural coastal and estuarine habitats, including saltmarsh, intertidal mudflats, sand dunes, shingle, brackish ponds, grazing marsh and maritime grasslands.	N/A
Lumley Meadow	1.3 east of the site	Criteria 2A: Agriculturally unimproved grasslands Criteria 6A: Sites which support one or more notable species4.	Distant Sedge (*Carex distans*) and Divided Sedge (*Carex divisa*)
Southleigh Forest (South)	1.4 km north east of the site.	Pasture woodland and wooded commons, not included in any of the above, which are of considerable biological and historical interest.	N/A
Langstone Mill	1.5 km south west of	Criteria 4A: Semi-natural coastal and	Large-Leaved Lime (*Tilia*

SINC Name	Distance and direction from site	Reason for designation	Species supported by SINC
Pond	the site.	estuarine habitats, including saltmarsh, intertidal mudflats, sand dunes, shingle, brackish ponds, grazing marsh and maritime grasslands. Criteria 5B: Fens, flushes, seepages, springs, inundation grasslands etc. that support a flora and fauna characteristic of unimproved and waterlogged (seasonal or permanent) conditions. Criteria 6A: Sites which support one or more notable species. Criteria 6B: Sites which regularly support a significant population of a species which has a restricted distribution or has substantially declined in population or range. Such sites may be used seasonally or for only one part of a species life-cycle.	*platyphyllos*)
Nore Grassland & Saltmarsh	1.6 km north of the site.	Criteria 4A: Semi-natural coastal and estuarine habitats, including saltmarsh, intertidal mudflats, sand dunes, shingle, brackish ponds, grazing marsh and maritime grasslands. Criteria 6A: Sites which support one or more notable species4.	Slender Hair's Ear (*Bupleurum tenuissimum*) and Sea Wormwood (*Seriphidium maritimum*)
Barton's Copse & The Slip	1.9 km north of the site	Criteria 1A: Ancient semi-natural woodlands.	N/A
Wade Court Park	1.8 km south of the site.	Criteria 6B: Sites which regularly support a significant population of a species which has a restricted distribution or has substantially declined in population or range. Such sites may be used seasonally or for only one part of a species life-cycle. Criteria 6C: Sites which support an outstanding assemblage of species.	Little Egret (*Egretta garzetta*) - Colony
Land East of 54 Long Copse Lane	2.1 km north east of the site	Criteria 2B: Semi-improved grasslands which retain a significant element of unimproved grassland.	N/A

2.2.3 Protected and Notable Species

Invertebrates (includes White-clawed Crayfish)

HBIC returned records of 32 different invertebrate species within 2km of the site. These included the following Hampshire BAP species: Stag Beetle (*Lucanus cervus) (*this species is also protected under the Habitats Directive*);* Purple Emperor (*Apatura iris);* Silver-washed Fritillary (*Argynnis paphia);* Pearl-bordered Fritillary (*Boloria euphrosyne);* Star-wort (*Cucullia asteris)* and Mathew's Wainscot (*Mythimna favicolor)*.

Great Crested Newts

HBIC returned no records for Great Crested Newts within 2 km of the site.

Reptiles

HBIC returned 7 records of reptiles from within 2 km of the site, comprising slow worm (*Anguis fragilis*); adder (*Vipera berus*) and grass snake (*Natrix natrix*). The closest records are those for grass snake and approximately 0.89 km north of the site.

However, previous survey works by Aluco Ecology in 2011 confirmed the presence of slow worm on the proposed development site itself.

Birds

HBIC provided records of 39 species of bird within 2 km of the proposed development site. Of these, the following are protected under Schedule 1 of the Wildlife and Countryside Act 1981; Greater Scaup (*Aythya marila);* Cetti's Warbler (*Cettia cetti);* Black Tern (*Chlidonias niger);* Eurasian Marsh Harrier (*Circus aeruginosus);* Hen Harrier (*Circus cyaneus);* Montagu's Harrier (*Circus pygargus);* Long-tailed Duck (*Clangula hyemalis);* Horned Lark (*Eremophila alpestris);* Merlin (*Falco columbarius);* Peregrine Falcon (*Falco peregrinus);* Eurasian Hobby (*Falco subbuteo);* Brambling (*Fringilla montifringilla);* Black-throated Diver (*Gavia arctica);* Great Northern Diver (*Gavia immer);* Red-throated Diver (*Gavia stellata*); Little Gull (*Hydrocoloeus minutus);* Eurasian Wryneck (*Jynx torquilla);* Mediterranean Gull (*Larus melanocephalus);* Black-tailed Godwit (*Limosa limosa);* Velvet Scoter (*Melanitta fusca);* Common Scoter (*Melanitta nigra);* Red Kite (*Milvus milvus);* Whimbrel (*Numenius phaeopus);* Osprey (*Pandion haliaetus);* European Honey-buzzard (*Pernis apivorus);* Black Redstart (*Phoenicurus ochruros);* Eurasian Spoonbill (*Platalea leucorodia);* Slavonian Grebe (*Podiceps auritus);* Black-necked Grebe (*Podiceps nigricollis);* Pied Avocet (*Recurvirostra*

avosetta); Firecrest (*Regulus ignicapilla);* Little Tern (*Sternula albifrons);* Dartford Warbler (*Sylvia undata);* Common Greenshank (*Tringa nebularia);* Green Sandpiper (*Tringa ochropus);* Redwing (*Turdus iliacus);* Fieldfare (*Turdus pilaris);* Barn Owl (*Tyto alba)* and Hoopoe (*Upupa epops).*

HBIC also provided records for Waders and Brent Geese in the Solent Waders and Brent Goose Strategy (SWBGS)(2010). The proposed development site was classed as 'Uncertain' usage for wading birds. Within the SWBGS data was provided for the site itself and it was surveyed on 22/12/2007, 27/01/2008, 27/03/2009 and 29/01/2009 and no Brent Geese or waders were recorded. The neighbouring site to the north east of the proposed development, which could potentially be subject to disturbance impacts as a result of the development proposals, also has uncertain for usage classification and no Brent Geese or waders recorded when surveyed on 29/012009, 02/03/2009 and 27/03/2009.

Aluco Ecology completed winter bird surveys between winter 2012 and winter 2103. A single visit was undertaken on 15th of January 2012 and numerous visits between 10th January 2013 to 28th March 2013 and recorded use of these fields to the South of Havant Road (off site) by a low number of waders (curlew and lapwing) however no waterfowl were recorded on the proposed development site itself.

Bats

HBIC provided records for up to 13 species of bat within 2 km of the development site comprising serotine (*Eptesicus serotinus);* unidentified bat of the Myotis genus (*Myotis spp.*); Bechstein's Bat (*Myotis bechsteinii);* Brandt's Bat (*Myotis brandtii);* Daubenton's Bat (*Myotis daubentonii);* whiskered Bat (*Myotis mystacinus);* Natterer's Bat (*Myotis nattereri);* noctule (*Nyctalus noctula);* unidentified bat of the pipistrelle genus (*Pipistrellus spp.);* common pipistrelle (*Pipistrellus pipistrellus);* soprano pipistrelle (*Pipistrellus pygmaeus);* long-eared bat (*Plecotus spp.)* and brown Long-eared bat (*Plecotus auritus).* The closest records are for soprano pipistrelle, located 0.3 km south of the site.

Aluco Ecology recorded common and soprano pipistrelle, Noctule, Serotine and Whiskered bat using the site for commuting and foraging during bat surveys in 2011.

Badgers

HBIC provided one record of badger (*Meles meles*) within 2 km west of the proposed development site, the record is sensitive, so the exact grid reference is unknown but the closest it could be is 1.4 km to the west.

Otter

No records for otter (*Lutra lutra*) were provided within 2 km of the site.

Water Voles

HBIC provided 26 records of water vole (*Arvicola amphibious*) within 2 km of the proposed development site, the closest record provided was 1.6 km of east of the site.

Hazel Dormouse

No records for hazel dormouse (*Muscardinus avellanarius*) were provided within 2 km of the site.

3.0 Survey Methodology

An extended Phase 1 habitat survey was conducted within the predicted zone of influence[1] on 1st July 2014 by Assistant Ecologist Emmanuelle Amiral. A second visit to access the northern field was necessary on the 20th August due to the presence of cattle during the first visit. The surveys were conducted in clear weather conditions, with no restrictions to visibility. All areas of the site were investigated, including those parts that are not expected to be affected directly by the works but may be indirectly impacted upon. This included a 30m buffer around the site to search for evidence of badgers as recommended in English Nature's *Badgers and Development* (2002) (since superseded by CIEEM's best practice guidelines which recommend a survey for signs of badger within 50m of a proposed development. Survey of the surrounding area for signs of badgers was only possible to the north of the site as the east and southern boundaries the site is surrounded by roads and residential buildings (and therefore considered unsuitable for sett creation and foraging badger activity).The A27 runs along the western boundary of the site, constituting a barrier to dispersal onto the site from this direction.

A further survey was completed on 29th June 2016 by Principal Ecologist David West CEnv MCIEEM to determine whether there had been any change in site conditions following the 2014 survey.

3.1 Habitats

The vegetation and habitat types within the site were noted during the walkover survey in accordance with the categories specified for a Phase 1 Vegetation and Habitat Survey (Joint Nature Conservation Committee, 2010). Dominant plant species were recorded for each habitat present.

3.2 Protected and Notable Species

The site was inspected for evidence of and its potential to support protected or notable species, especially those listed under the *Conservation of Habitats and Species Regulations 2010 (as amended),* the *Wildlife & Countryside Act 1981* (as amended), including those given extra protection under the *Natural Environment and Rural Communities (NERC) Act 2006* and *Countryside & Rights of Way (CRoW) Act 2000*, and listed on the UK and local Biodiversity Action Plans.

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[1] **Zone of influence:** the area that may be affected by the biophysical changes caused by the activities associated with the development.

The following species were considered:

3.2.1 Great Crested Newt

The site was appraised for its suitability to support great crested newts. The assessment was based on guidance outlined in the Joint Nature Conservation Committees' published *Herpetofauna Workers' Manual* (Joint Nature Conservation Committee, 2003) and the *Great Crested Newt Conservation Handbook* (Langton, Beckett & Foster, 2001). No ponds where located within the site and HBIC provided no records of GCN within 2km of the site. It can be seen from OS mapping that there is a pond to the west of the site however the A27 bisects these two sites and is considered to represent a barrier to GCN.

3.2.2 Reptiles

The site was appraised for its suitability to support reptiles. The assessment was based on guidance outlined in the Joint Nature Conservation Committees' published *Herpetofauna Workers' Manual* (Joint Nature Conservation Committee, 2003).

3.2.3 Bats

The trees within the boundary were appraised by an experienced ecologist from WYG for their suitability to support breeding, resting and hibernating bats using survey methods based on those outlined in the Bat Conservation Trust's *Bat Surveys: Good Practice Guidelines* (Hundt, 2012) and English Nature's *Bat Mitigation Guidelines* (2004).

Bat roost potential of trees is determined by a variety of factors including physical attributes of the tree, and proximity to good feeding sites and safe commuting routes. A brief summary of the known factors which influence a trees potential to support bats is provided in **Table 3**.

Table 3. Factors influencing potential for trees to be used by bats (adapted from Bat Conservation Trust, 2012)

Features of trees used by bats	Signs indicating possible use by bats
• Natural holes • Woodpecker holes • Cracks/splits in major limbs • Loose bark • Behind dense, thick-stemmed ivy • Hollows/cavities • Within dense epicormic growth • Bird and bat boxes	• Tiny scratches around entry point • Staining around entry point • Bat droppings in/around/below entrance • Audible squeaking at dusk or in warm weather • Flies around entry point • Distinctive smell of bats • Smoothing of surfaces around cavity

Please note that Table 3 identifies what are generally considered to be the most important influences on bat roost preferences. There are 18 species of bats in the UK, each with its own specific requirements. Additionally males generally have different roost preferences to females and, therefore, it is not practical to assess a feature against all the possible permutations of an 'ideal' roost.

3.2.4 Badger

The site was surveyed for evidence of badger setts or other badger activity such as paths, latrines or signs of foraging. Methodologies used and any setts recorded were classified according to published criteria (Harris, Cresswell & Jefferies, 1989). A 30 m buffer zone around the expected zone of influence was surveyed, where appropriate, as recommended in English Nature's *Badgers and Development* (2002).

3.2.5 Hazel Dormouse

The site was appraised for its suitability to support dormice. The assessment was based on guidance outlined in Bright *et al*, (2006), the *English Nature Dormouse Conservation Handbook.*

3.2.6 Other Species

The site was also appraised for its suitability to support other protected or notable fauna including mammals, birds and invertebrates in accordance with the Institute for Ecology and Environmental Management's *Guidelines for Preliminary Ecological Appraisal* (2012). Evidence of any current or historical presence of such species was recorded.

3.3 Invasive Species

The site was searched for evidence of invasive plant species, such as Japanese knotweed *Fallopia japonica*, Himalayan balsam *Impatiens glandulifera*, giant hogweed *Heracleum mantegazzianum*, horizontal cotoneaster *Cotoneaster horizontalis* and rhododendron *Rhododendron ponticum* (see Appendix B Table B2 for full list).

3.4 Limitations

The comprehensiveness of any ecological assessment will be limited by the season in which surveys are undertaken. The extended Phase 1 habitat survey was completed within the optimal season for completing this type of survey, which is considered to be between April and September.

Although the site was not accessible in its entirety during the initial site visit, due to the presence of cows in the north of the site, a second site visit was completed to ensure all areas of the site were surveyed. Some sections of the land within 30m of the site could not be fully searched for evidence of badger, but a detailed search for potential badger access points / mammal paths into the site was made. Therefore there are considered to be no limitations to survey access.

To determine likely presence or absence of protected species usually requires multiple visits at suitable times of the year. As a result, this survey focuses on assessing the *potential* of the site to support species of note, which are considered to be of principal importance for the conservation of biodiversity with reference to the *National Planning Policy Framework* (NPPF, 2012), especially those given protection under UK or European wildlife legislation.

This report cannot therefore be considered a comprehensive assessment of the ecological interest of the site. However, it does provide an assessment of the ecological interest present on the day of the visit and highlights areas where further survey work may be recommended.

The findings of the survey carried out in 2014 have been reviewed within this report, and the conditions onsite are considered to remain consistent with the original assessment. As such, it is considered that the findings of the extended Phase 1 habitat survey remain valid. A further review of this data should be undertaken if works have not commenced within one year of the production of this report (i.e. February 2018) to assess whether the recommendations of the survey reflect any changes in the condition of the site.

4.0 Survey Results

An extended Phase 1 habitat plan showing the location of key ecological features is included in Appendix A.

4.1 Habitats

4.1.1 Improved to Semi-improved Grassland

The site comprises a number of fields of improved grassland (**Image 1**). At the time of the extended Phase 1 habitat survey, cows were grazing within the fields of the site. Fields of improved grassland generally had very short grass, with rough semi-improved grassland margins. Species composition included perennial rye grass (*Lolium perenne*), Yorkshire fog (*Holcus lanatus*), creeping buttercup *(Ranunculus repens)* , meadow buttercup *(Ranunculus acris)* , cock's foot *(Dactylis glomerata*), white clover (*Trifolium repens*), red clover (*Trifolium pratense*), ribwort plantain *(Plantago lanceolata)* creeping thistle *(Cirsium arvense),* cinquefoil *(Potentilla spp.),* rough meadow grass (Ophioglossum vulgutum), cut leaved cranesbills *(Geranium dissectum),* sweet vernal grass *(Anthoxanthum odoratum),* spear thistle (*Cirsium vulgare),* bentgrass *(Agrostis capillaris),* dandilion (*Taraxacum spp.*), greater ribwort plantain *(Plantago lanceolata),* yarrow *(Achillea millefolium),* wall barley *(Hordeum murinum),* chick weed *(Stellaria sp)* and Timothy-grass *(Phleum pratense).*

No cattle were present during the 2016 visit, however no significant change in this habitat from the 2014 findings was observed.

Image 1: Improved Grassland



4.1.2 Scrub; scattered and continuous

Within the site there were a number of patches of scattered scrub along most of the boundaries, which appear to be managed to some degree. Towards the northern extent of the site approximately 25% of the northern-most field is an area of dense scrub (**Image 2**) and appears to be much less formerly managed. Species composition included hawthorn (dominating species) bramble, elder, ivy, rose and sycamore.

There is also an area of outgrown and overmature hawthorn dominated scrub acting as secondary woodland with some blackthorn, elder and ash. The ground flora is dominated by common nettle but also there was evidence of cuckoo pint, garlic mustard, and the ancient woodland indicator species Butchers broom and wood avens.

There are also a number of patches of isolated scrub islands comprising hawthorn and some bramble.

No significant change in this habitat from the 2014 findings was observed during the 2016 survey. No additional areas of scrub were noted and there appeared to have been no increase in the areas identified previously.

Image 2: Scrub in northern field



4.1.3 Scattered Trees

Within the southernmost field there is a line of unmanaged scrub interspersed with scattered trees within the hedgerow (**Image 2**). The rest of the scattered trees are clustered in the northern end of the top field. Species composition included hawthorn, sycamore, rose, ivy and bramble.

No significant change in this habitat from the 2014 findings was observed during the 2016 survey. No additional scattered trees were noted none appeared to have been removed.



4.1.4 Clay Pit

During the Aluco Ecology surveys in 2011 a clay pit was noted. This clay pit was not noted during the 2014 phase 1 habitat survey undertaken by WYG, this habitat is suspected to have been lost due to reestablishment of vegetation.

No clay pit was observed during the 2016 survey.

4.1.5 Hedgerows

A number of hedgerows are present along field boundaries throughout the site. Details of these are provided in **Table 4** below.

Table 4: Hedgerows

Hedgerow Ref (HR)	Location	Description	Species Present	Other Features
HR1	Southern boundary along A259.	Intact, managed	Sycamore, hawthorn, bramble, dewberry clematis ap and the ground flora included common nettle, mallow and spear thistle.	N/A
HR2/ Tree line	Within the centre of the southern field.	Defunct, disconnected, unmanaged	Hawthorn, elder, sycamore, rose, ivy and bramble.	N/A
HR3	North western boundary boarding the A27.	Intact, managed	Field maple, hawthorn, bramble with occasional sycamore, cherry, dog rose and and ivy	Young tree plantation, fence running along entire length boarding the A27.
HR4	Top eastern	Defunct,	Beech, sycamore, bramble,	Bordering onto

Hedgerow Ref (HR)	Location	Description	Species Present	Other Features
	edge boarding residential gardens.	disconnected, unmanaged	cypress and ground flora of nettle.	residential gardens
HR5	Top end of the site dividing the northern section of the site by a north-south hedgerow	Defunct, disconnected, unmanaged	Hawthorn, ivy, bramble, elder	N/A
HR6	East to west hedgerow that divides the north to south field.	Defunct, disconnected, unmanaged	Hawthorn, bramble, ivy	Heavily dominated by tall ruderal on southern side.

None of the hedgerows listed above are considered to fit into the criteria of 'Important' under the Hedgerow Regulations 1997. Whilst the habitat in the north of the site is shown as broadleaved woodland BAP on the HBIC data search, the habitat in the northern extent of the site comprised dense and continuous scrub predominantly dominated by hawthorn. There were no standard tree species and as such it is not considered to qualify as broadleaved BAP habitat.

All hedgerows were present during the 2016 survey with no significant change in this habitat from the 2014 findings observed.

4.2 Protected and Notable Species

4.2.1 Great Crested Newt

The grassland, scrub and hedgerow habitat within the site provide potentially suitable terrestrial habitat for great crested newts. No ponds were located within the site. There is one water body located within 500m of the site. This is located 257m north west of the site. However, the A27, a trunk road, is located between the proposed development site and the pond, which is considered to represent a barrier to great crested newts migrating to the site, if present within this pond. From the review of aerial photography there are two ditches within a field to the east of the site, the ditches were assessed in December 2014. One ditch contains shallow fast following water and little aquatic vegetation was evident. Therefore this ditch is considered unsuitable to support GCN. The second ditch contained s small amount of water in shallow puddles. As the ditch did not contain very much water in December 2014 it is consider likely to be dry

during the GCN breeding season. This was confirmed during the June 2016 survey when both ditches were found to be dry. Within this site a recently excavated small pit (8m x 3m) was present. As this feature has been recently created, and no suitable water bodies are within 500m of connected habitat to this feature it is considered unlike GCN would be present. As such, the site is considered to offer ***negligible potential*** to support great crested newts.

4.2.2 Bats

Roosting bats - Trees

There is one large Pedunculate oak tree along the eastern boundary near the entry gate onto site –TN1; the tree is within a residential garden with overhanging branches onto the site. There is a bird box attached to the tree facing eastwards towards the house. There are no visible bat features on the tree itself and it is located just outside the boundary. It can be seen from the masterplan (18-1720-PS05) that the tree will not be directly impacted by the proposed works or any lighting as the surrounding area is proposed to comprise green open space. Due to the presence of the bird box, which could potential provide a roosting location for bats, the tree is considered to be of Low potential to roosting bats.

Along the western boundary there is a line of plantation woodland comprising immature field maple and hawthorn with occasional sycamore and cherry trees, and a number of trees are also present within the hedgerows within the centre of the fields labelled HR2 and HR7 and scattered trees are found within the northern extent of the site. No features were identified within these trees that would offer suitability for roosting bats. These trees were assessed again during the 2016 survey with all found to have negligible suitability for roosting bats. These trees were assessed as offering negligible suitability for roosting bats.

Foraging and commuting bats

To the west of the site there is a narrow plantation woodland boundary adjacent to the A27 (HR2), it comprises of immature sycamore and the section of the A27 is well lit. Hedgerows form the southern, eastern and north eastern boundaries of the site with scattered and continuous scrub towards the north east of the site. The hedgerow along the eastern boundary is gappy for large extents and forms the rear boundaries of the properties along Selangor Avenue. No significant change in these features was observed during the 2016 survey. As such the habitats on site are considered to be of Low potential to foraging and commuting bats, given the well lit nature of the surrounding habitat, the isolated hedgerows within the site are generally defunct, and isolated with limited species diversity and hence offering low potential for foraging and commuting bats.

4.2.3 Badger

The site was searched for evidence of badgers. Whilst a number of mammal paths were noted, these appeared to be attributed to rabbits. However, dense bramble growth was present towards the north western extent of the site and whilst every effort was made to check as much of the site as possible, there is still a low potential that badger may be present on site. However, no badger setts or evidence of foraging / commuting badgers such as paths, latrines or foraging holes where recorded within the proposed development site, and no mammal paths were noted leading into the dense scrub.

It was not possible to survey a 30mbuffer around the site as access along the northern western boundary due for health and safety reasons as this was directly adjacent to the A27, and there was no access to the north-east as this comprises private land, while land to the east of the site comprised residential rear gardens. However, many of the properties had relatively open boundaries and clear views were visible into the gardens and no setts or signs of badgers were noted. No additional signs of badgers were noted during the 2016 survey, although this survey was likewise limited by the dense scrub at the north west extent of the site and the lack of access to Highways England land between the site and A27. The site is considered to offer Low potential to foraging, commuting and sett development by badgers.

4.2.4 Hazel Dormice

The HBIC data search provided no known records for dormice with 2k search of the site. Whilst the site does support some scrub which offers a fairly limited number of food plants for dormice, the site is isolated from suitable habitat in the wider surrounding area, connecting to the relatively recently planted A27 tree belt, which offers very little understory. Many of the hedgerows on the site were defunct and gappy and hence the site and wider surroundings are considered to be of Negligible potential to dormice. No significant change was observed during the 2016 survey when habitats were also assessed as having negligible potential. It is also understood that the hedgerows and tree lines within the proposed development site boundary are being retained as part of the proposed development. The site is considered to offer ***negligible potential*** for this species.

4.2.5 Breeding bird

No birds were recorded nesting on the site at the time of extended Phase 1 habitat survey. The site provides some nesting potential with low lying scrub and hedgerows/woodland habitat. No significant change in these habitats was observed during the 2016 survey and they were still considered to be suitable

for nesting birds. Aluco Ecology (2013) recorded four widespread BAP or Red list species of Conservation Concern during 2011 including house sparrow *(Passer domesticus)*, starling *(Sturnus vulgaris)*, bullfinch (*Pyrrhula pyrrhula*) and song thrush (*Turdus philomelos*).The site is considered to offer ***Moderate potential*** to breeding birds.

4.2.6 Wintering Birds

The site is relatively small and enclosed by hedgerows with no clear lines of sight. The site is heavily grazed by cattle and it is understood from the Aluco Ecology (2013) report that since 2011 the site has been cattle grazed which reduces the sites suitability for overwintering birds. Whilst the site has been identified as holding 'uncertain' usage by overwintering birds (SWBGS, 2010), there are no records of waders or Brent geese using the site from the Solent Disturbance and mitigation Project (SWBGS, 2010) from the Aluco Ecology (2013) surveys from winter 2012 and 2013. Although cattle were not present during the 2016 survey the site still appeared to be managed through grazing. All hedgerows and tree lines remained and the site till appeared unsuitable for wintering birds. As such the site is considered to offer ***Low potential*** to over-wintering birds.

4.2.7 Reptiles

At the time of the extended Phase 1 habitat survey, the grassland at the site was cattle grazed. The site was heavily grazed with some of the margins comprising slightly longer grassland, but there were also areas of extensive bare ground particularly by the gate along the eastern boundary. No significant change was observed during the 2016 survey with the grassland still short with areas of bare ground due to poaching. The grassland / hedgerow / scrub interface provides suitable areas for reptiles to bask, shelter and forage. The hedgerows and the treeline to the north west of the site provide potentially suitable hibernacula for reptiles in the winter. Aluco Ecology (2013) recorded a low population of slow worms at the site in 2011, but given the cattle grazed nature of the site, the site is considered to be of ***Low-Moderate potential*** to reptiles.

4.2.8 Invertebrates

The scrub and scattered trees within the site boundary are likely to offer suitable habitat for invertebrate species. During the Aluco Ecology surveys in 2011, a small population of common blue butterfly were recorded within the clay pit, as a female was noted on one of Alcuo Ecology survey visits. This clay pit was not noted during the 2014 or 2016 Phase 1 habitat survey.

HBIC returned records of stag beetle within 2km of the site, however no deadwood was noted on the site during 2014 or 2016 and as such the site is considered to be of Negligible potential to stagbeetles.

The habitats on site are widespread within the wider area, and throughout Great Britain, and it is considered that invertebrate species that may be present will be widespread and common. Therefore, the site is assessed as offering ***Negligible potential*** for rare or notable invertebrate species

4.3 Invasive Species

The survey was carried out in July which is within the optimal time for identifying invasive species. The invasive species Montbretia (*Crocrosmia sp.)* was noted within an island of hawthorn (TN2). This was also observed during the 2016 survey. This species is listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) as a non-native invasive species.

5.0 Ecological Impacts and Recommendations

5.1 Statutory and Non-statutory Sites

The internationally designated sites of Chichester and Langstone Harbour Ramsar, SPA and SAC lie within 1.1km to the south of the site. These sites are designated primarily for their ornithological interest, including nationally significant numbers of wildfowl and waders during the non-breeding season, and their estuarine habitats.

No direct impacts are anticipated on the statutory protected sites within 2km of the development footprint as a result of habitat loss, although indirect impacts could potentially occur through visitor disturbance to breeding and/or wintering birds as these areas are accessible along public footpaths. South of the site are a network of fields many of which are designated as SINCs for wintering waterfowl use (primarily Brent Geese potential). Aluco Ecology completed winter bird surveys of the site and surrounding areas in 2013 and those to the south of the Havant Road (off site) showed a low use by waders only, with two species recorded (curlew and lapwing) as well as little egret. No wader use of the site itself has been recorded by Aluco, or by SWBGS (2010).

Possible impacts on the Internationally designated sites are outlined below, together with our assessment of their likelihood and magnitude.

Disturbance

The data search revealed records of some of the waders and waterfowl which from part of the reasons for the designation of the SPA within 2km of the site. Previous surveys by Aluco Ecology in 2012 and 2013 have not recorded the proposed development site being used by waders. Furthermore, whilst the site is noted as 'uncertain' usage by waders in the Solent Waders and Brent Goose Strategy SWBGS 2010. Natural England have been consulted and suggest that up to three years worth of wintering bird data is required to discount the use of the site for waders and Brent geese despite the low value of the site to overwintering birds. Currently we have wintering bird data for 22/12/2007, 27/01/2008, 27/03/2009 and 29/01/2009, a single visit within 2012 and 14 surveys between January and March 2013

It is also considered extremely unlikely that construction activities or final use of the site would indirectly cause disturbance to the birds using the Harbour and the surrounding area, as the site lies to the north of a busy A road with existing houses and businesses along both sides of the roads. Any increase in noise or

disturbance is not considered to be significant, as, in our opinion, it would be indistinguishable above existing levels of traffic noise and residential properties, once south of the road.

As a precautionary approach to ensure that the risk of disturbance during construction is minimal, hoarding will be erected along the southern boundary of the development site during the development phase to screen the SPA from the development. If any deep piling is proposed it is recommended that this is undertaken outside of the wintering bird season (i.e. avoiding October to March).

Visitor Pressure

The Harbour is internationally designated as the Chichester and Langstone Harbours SPA and Ramsar site, as well as being nationally designated as a SSSI. Due to these International designations, consultation is currently underway with Natural England with regards to potential 'alone' and 'in combination' impacts from increased recreational pressure resulting from the proposed development. Multi-functional green space will be included within the proposed development..

A footpath network leads from the south of the site through the fields designated as SINCs for their overwintering bird assemblage, from the site to Chichester harbour is approximately 1.7km. The footpath runs west to east as well as south throughout the fields which leads to the Harbour designated for overwintering bird assemblages. Hence there is a risk that there will be an increase in visitor pressure to the coast.

There is also potential for increased visitor pressure on other statutory sites in the wider area such as Brook Meadow and Warblington Meadow. These areas are already open to the public and are easily accessible by foot as they are only 1.6km east of the site.

Areas of open space have been incorporated with the layout plan (Drawing No. 18-2059-100). This open space will contribute to relieving recreational pressure on nearby designated sites, there have been initial discussions with Natural England and they have advised that additional mitigation could include providing a financial contribution to upgrade the fences surrounding arable fields to the south of the site. Wintering birds from the SPA have been recorded feeding within these fields so fence works to prevent dogs entering these fields would be beneficial for wintering birds.

5.2 Habitats

In line with the most up to date Planning Layout (drawing No. 18-2059-100) the majority of mature trees situated along the western boundary of the site along with the hedgerow running along the same area are to be retained and protected with a grassland buffer of 7-10m. Infill planting will be compelted along this boundary to increase its suitability as a commuting and foraging resource for a range of notable and protected species, including bats. A receptor site for reptiles has been incorporated into the landscape at the eastern extent and along the south eastern boundary of the site which will be protected from construction impacts with exclusion fencing and managed as rough grassland with the installation of a hibernacula as a focal release point for reptiles. Multi functional green space will be provided with tree lined roads throughout the site.

5.3 Protected and Notable Species

5.3.1 Great Crested Newts

The great crested newt and its habitat are protected under the *Wildlife and Countryside Act 1981* (as amended) and the *Conservation of Habitats and Species (Amendment) Regulations 2012* (see Appendix B).

The site has been assessed as offering negligible potential to support great crested newts. Therefore, no further survey work or mitigation measures for this species have been recommended.

5.3.2 Reptiles

All species of native reptiles are under the *Wildlife and Countryside Act 1981* (as amended). The sand lizard *Lacerta agilis* and smooth snake *Coroenella austriaca* are further protected under *Conservation of Habitats and Species (Amendment) Regulations 2012*.

Aluco Ecology completed a reptile presence/likely absence survey at the site between 6th August 2011 and 29th September 2011 completing a total of nine survey visits. During these surveys, one species of reptile was recorded which was the slow worm with a maximum of four adults recorded on any one visit. A breeding slow worm population at the site was confirmed with a maximum of four sub adults recorded. The habitats on site are still offered to provide Low to Moderate potential to reptiles, albeit the habitats are heavily grazed. As such, given the reptile surveys are over two years old, update reptile presence/likely

absence surveys are recommended to support the planning application. These surveys have been completed by a WYG ecologist within the reptile active period in 2014. Slow worms were recorded on three surveys of the seven survey occasions, with a maximum count of 2 adults recorded on 12th September 2014. A breeding population was also confirmed as one juvenile slow worm was recorded during one of the seven survey visits. In accordsnce with Frog life (1999) the site is assessed as supporting a low population of slow worms.

The eastern extent of the site has been identified as receptor site for reptiles and the south eastern buffer has been retained within the materplan which will have a tall grassland buffer between 5.6 – 8.3m providing foraging and basking habitat along with hibernacula along the hedgerow base. The grass within this area will be left to grow tall and three hibernacula will be created to act as a focal point for reptile release and to improve overall habitat suitability. In addition there will be a grassland buffer of 7-10 metres wide running along the western boundary adjacent to the tree belt running along the A27 which will connect with the ecological receptor area providing a continuous boundary for reptiles to commute. This habitat will be managed sensitively for reptiles which will involve cutting grass once a year during September to a minimum height of 6 inches. Areas where public access will be permitted will be demarcated through strimmed footpaths. It is recommended that 20 days of translocation is needed to move reptiles from the works area to a receptor area onsite.

5.3.3 Bats

Roosting Bats

All species of British bats and their roosts are fully protected under the *Wildlife & Countryside Act 1981* (as amended) and the *Conservation of Habitats and Species Regulations 2010 (as amended)* (see Appendix B).

No buildings are present on site. None of the trees assessed within the site boundary were considered suitable for bats to roost in, as they did not support any features suitable to roosting bats. There is a mature oak tree along the eastern boundary which didn't support any features suitable to roosting bats on the tree itself but a bird box was present facing in an easterly direction away from the development site which offers Low potential to roosting bats (TN1). However, this tree will not be directly impacted as a result of the development and the tree is located adjacent to the area of proposed open space and hence no further surveys are recommended.

Foraging and Commuting Bats

ODPM 06/2005: Biodiversity and Geological Conservation, the circular that accompanied the now redundant Planning Policy Statement 9 (PPS9) but which itself is still valid, requests that mitigating for impacts caused by developments to foraging and commuting routes should be considered when determining planning applications.

Aluco Ecology (2013) recorded five species of bats foraging and commuting over the site during survey in August and September 2011. However, the surveys concluded that there was no roost potential on the development site, but the transect surveys recorded common and soprano pipistrelle, Noctule, Serotine and Myotis (Brandts/Whiskered/Alcathoe).

The site is considered to have **low** potential for bats. In accordance with updated guidelines from the Bat Conservation Trust (BCT, March 2012) further **bat activity surveys are recommended** to gain an updated understanding of the usage of the site by bats, including potentially important areas for bat commuting and foraging. This will be used to help to inform the site masterplan and recommendations for avoidance, mitigation, compensation and enhancement for bats, as well as informing detailed lighting and landscape design.

In accordance with the Bat Conservation Trust (BCT) Guidelines 2012, for medium sized site (1-15 hectare) with low habitat quality it is recommended that one transect route is completed seasonally during spring,

summer and autumn. In addition to this, an automated bat detector should be left at one location on site for three consecutive nights during spring, summer and autumn.

Due to the timescales of the project, bat activity surveys were completed on three occasions over August and September, during the peak bat activity season, and automated bat detectors were left at the location along the western boundary of the site. This approach has been used for similar sites in the local area and has been approved by the LPA ecologist in these instances providing mitigation considers commuting and foraging bats. Whilst these surveys were undertaken in 2014, no update surveys were considered necessary as buffers have been retained off the boundary vegetation. The internal hedgerows were sparse and defunct and were not found to be used by foraging and commuting bats during the surveys and as such no impact is considered.

Bat foraging and commuting habitat has been incorporated into the masterplan a grassland buffer of 5.8 to 8.3m wide is being retained between the hedgerow running along the south eastern boundary of the site and any development. An area of open space will be retained within the north east of the site which will be managed as tall grassland with scattered trees along the eastern boundary. These features will provide suitable habitat for foraging and commuting bats during the operational phase of the development.

5.3.4 Badgers

Badger and their setts are protected under the *Protection of Badgers Act 1992* and the NPPF (see Appendix B) stipulates that considering their welfare and mitigating for damage to their habitat are material considerations when considering planning applications.

No evidence of badgers was recorded onsite during the extended Phase 1 habitat survey and update survey in June 2016. However, some parts of the site comprised dense bramble and as such a pre-commencement badger survey is recommended, and that an Ecological Clerk of Work checks the area where scrub is removed for evidence of badger setts. In the event a badger sett is discovered, all works should stop and a Natural England development licence in relation to badgers is obtained before works can proceed.

5.3.5 Hazel Dormouse

The site is isolated from suitable habitat in the wider surrounding area, connecting to the relatively recently planted A27 tree belt, which offers very little understory. Many of the hedgerows on the site being defunct

and gappy and hence the site and wider surroundings are considered to be of Negligible potential to dormice. As such no further surveys are recommended in relation to this species. Infill planting of the boundary hedgerows using fruit bearing native species including hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*) will increase the suitability of these features for foraging and commuting hazel dormouse should they move onto the site in the future.

5.3.6 Birds

Nesting birds

All nesting birds are protected from disturbance whilst nesting by the *Wildlife and Countryside Act 1981 (as amended).*

The habitats on site which are likely to be used as nesting sites are hedgerows, woodland and scrub. The majority of this habitat will be retained. However, defunct hedgerows and isolated scrub patches will be removed from the site. It is recommended that where possible, such habitats are preserved and any disturbance is kept to a minimum. All nesting birds are protected from disturbance whilst nesting by the *Wildlife and Countryside Act 1981* (as amended). Therefore it is recommended that any necessary felling of trees or scrub is undertaken outside nesting bird season where possible (March to September inclusive). If this is not possible, it is recommended that a nesting bird check is carried out by an ecologist immediately prior to felling. If an active bird nest is found, it must be retained along with a suitable buffer until the chicks have fledged.

Wintering Birds

Precautionary mitigation for disturbance during construction is recommended in the form of screening to be placed along the southern boundary of the site.

It is also recommended that should any pile driving be required, this takes place outside the wintering bird season (i.e. avoiding October – March).

More detailed analysis and recommendations are contained within the WYG (2017) Wintering Birds Survey Report.

5.3.7 Invertebrates

A number of invertebrate species are protected under the *Wildlife and Countryside Act 1981* (as amended) and the *Conservation of Habitats and Species (Amendment) Regulations 2012*. The current Biodiversity Action Plan (BAP) contains 411 invertebrate species (see Appendix B).

Invertebrate species present within the site are likely to be common and widespread and therefore no further surveys for invertebrates are recommended.

5.3.8 Invasive Species

The *Wildlife and Countryside Act 1981* (as amended) recognises several invasive plant species list in Schedule 9 of the Act (see Appendix B, Table B2).

A non-native plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 was recorded: Crocosmia ×crocosmiiflora (Montbretia) (TN2). It is an offence under the Wildlife and Countryside Act 1981 to cause any species listed on Schedule 9 to spread in the wild.

To comply with the law, this Schedule 9 species should be eradicated so not to cause the plant to spread on this or other sites as a result of earth moving, soil/rubble removal or other operations. Two main options exist; mechanical removal and chemical treatment. The removal of these species should be completed by appropriately qualified contractors prior to any earth-moving operations.

5.4 Enhancements

Opportunities should be sought where possible for nature conservation enhancement of the site in line with current policy guidance (NPPF, 2012).

As an enhancement it is recommended that five bat and bird boxes are included within the final development where possible to be secured onto mature trees or new buildings (see Appendix D for potential designs).Planting of new areas of soft landscaping with native species of local provenance to enhance the site's ecology. This approach should apply to any tree/scrub species planted, as well as the ground flora/grass mixes sown and will create valuable habitats for invertebrates. Planting woody species that produce fruit and berries and nectar-producing herbaceous plants that flower at different times of the year would have the greatest benefits. Some recommendations for wildlife-friendly planting are included in Appendix E.

Habitat enhancements will include additional native hedgerow planting and the retention of a 5.8-8.3 metre grassland buffer along the south eastern boundary, and a creation of a receptor site with a purpose built hibernacula for reptiles in the eastern most extent of the site. Multi functional green space will be provided with tree lined roads throughout the site.

6.0 Summary of Recommendations

- **Reptiles**: It was recommended that a suite of update reptile presence / likely absence surveys are completed at the site. These surveys have been completed by a WYG ecologist within the reptile active period in 2014. Slow worms were recorded on three survey of the seven survey occasions, with a maximum count of 2 adults recorded on 12th September 2014. A breeding population was also confirmed as one juvenile slow worm was recorded during one of the seven survey visits. The southern area of the site will be retained as open space, with the grass within this area will be left to grow tall and be created and enhanced as a receptor site for reptiles through hthe construction of a hibernacula. In addition there will be a grassland buffer of 5.8-8.3m metres wide running along the western boundary adjacent to the tree belt running along the A27 which will connect with the ecological receptor area providing a continuous boundary for reptiles to commute. It is recommended that 20 days of translocation is needed to move reptiles from the works area to a receptor area onsite.
- **Commuting and Foraging Bats:** Update bat activity surveys are recommended in line with BCT (2012) guidance, these have now been completed during summer 2014. Up to four species of bat recorded including both common and soprano pipistrelles and a bat of the *Myotis* genus considered most likely to be whiskered/ Brandt's. In-depth recommendations for protection, mitigation and enhancement measures for bats are contained within the WYG (2017) Bat Activity Survey Report.
- **Badger:** A pre-commencement badger survey is recommended to take place two months prior to works to confirm the continued absence of this species from the site. An Ecological Clerk of Work is also recommended to check the area where scrub is removed for evidence of badger setts during vegetation clearance. In the event a badger sett is discovered, all works should stop and a Natural England development licence in relation to badgers is obtained before works can proceed.
- **Breeding Birds**: It is recommended that vegetation clearance takes place between October and February wherever possible to avoid the breeding bird season. If this is not possible, then a thorough check for nesting birds should be completed immediately prior to site clearance, by a suitably qualified ecologist. If any active nests are found they must be retained, together with a suitable vegetated buffer until all the young have fledged.

- **Wintering birds**: It is recommended that wintering bird surveys are undertaken for the site between October and March. These surveys have been completed. In-depth recommendations for protection, mitigation and enhancement measures for wintering birds are contained within the WYG (2017) Wintering Birds Survey Report.

- **Invertebrates:** If any dead wood is found during site clearance, it is recommended that it be placed elsewhere within the site, to be retained within the final development as stag beetles have been recorded from the wider area.

- **Invasive species;** To comply with the law, Montbreita species should be eradicated so not to cause the plant to spread on this or other sites as a result of earth moving, soil/rubble removal or other operations. Two main options exist; mechanical removal and chemical treatment. The removal of these species should be completed by appropriately qualified contractors prior to any earth-moving operations.

- Habitat enhancements will include additional native hedgerow planting and infill planting of gappy hedgerows along the boundaries, the retention of a 5.8-6.3 metre grassland buffer along the south eastern boundary, and a receptor site for reptiles in the eastern most extent of the site. Multi functional green space will be provided with tree lined roads throughout the site.

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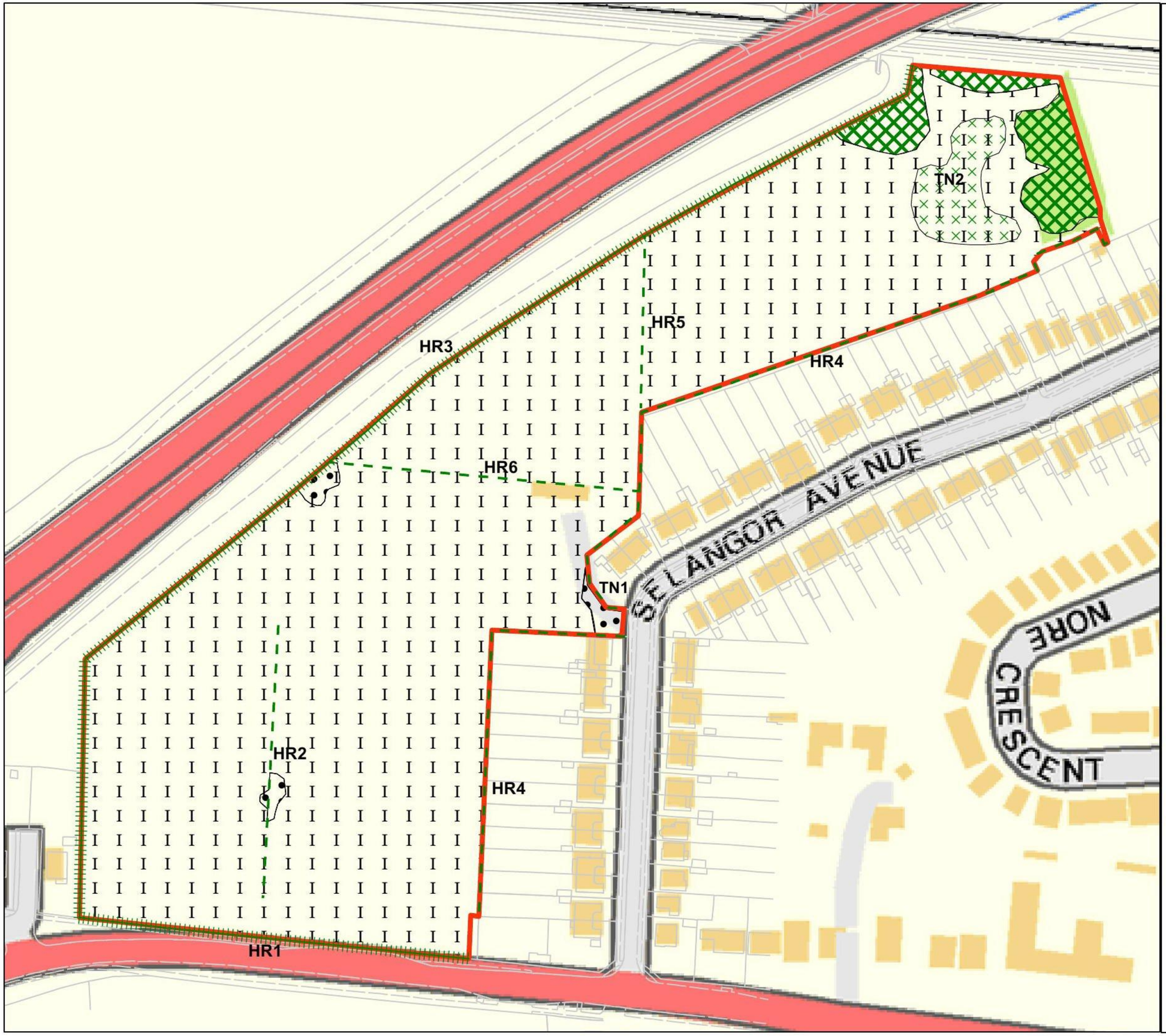
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Appendix A - Figures



N

Legend

- Species poor, defunct hedgerow
- Species poor hedge/trees
- Site boundary
- <all other values>
- Bare ground
- Dense/continuous scrub
- Scattered scrub
- Improved grassland

0 25 50 100 Metres

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Land at Havant Road Warblington

Phase 1 habitat survey map

Scale at A3:	Drawn by: Date:	Checked By: Date:	Approved By: Date:
	EA 03/12/14	EH 03/12/14	CM 03/12/14

Project No:	Office	Type	Drawing No.	Revision
A088368	45	94	Figure 1	

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Appendix B – Biodiversity and Environmental Legislation, Conventions & Threatened Lists

Introduction

The UK has ratified a number of Conventions and implemented legislation pertaining to the protection of biodiversity and habtiats, either independently or as member state of the European Union. These are defined and summarised below.

Lists of theatened, endagered and extinct species are also provided, together with a summary explanation of each.

Bern Convention (1982)

The *Convention on the Conservation of European Wildlife and Natural Habitats* (the *Bern Convention*) was adopted in Bern, Switzerland in 1979, and was ratified in 1982. Its aims are to protect wild plants and animals and their habitats listed in Appendices 1 and 2 of the of the Convention, and regulate the exploitation of speices listed in Appendix 3. The regulation imposes legal obligations on participating countires to protect over 500 plant species and more than 1000 animals.

To meet its obligations imposed by the Convention, the European Community adopted the *EC Birds Directive* (1979) and the *EC Habitats Directive* (1992 – see below). Since the Lisbon Treaty, in force since 1st December 2009, European legislation has been adopted by the European Union.

Biodiversity Action Plan (BAP)

The UK *Biodiversity Action Plan* (UKBAP – UK Steering Group, 1995; UK Biodiversity Group, 1998 - 2000) lists and prioritises habitats and species and sets national targets to be achieved. The intent of the UKBAP, however, is much broader than the protection and enhancement of less common species, and is meant to embrace the wider countryside as a whole.

The UKBAP has recently undergone a review (Biodiversity Reporting and Information Group, June 2007) resulting in the identification of 391 'Priority' Species Action Plans (SAPs), 45 'Priority' Habitat Action Plans and 162 Local Biodiversity Action Plans.

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities.

Birds Directive (BD)

The *EC Directive on the Conservation of Wild Birds* (791409/EEC) or '*Birds Directive*' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

Birds of Conservation Concern (BoCC)

This is a review of the status of all birds occuring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2009 (Eaton *et al,* 2009) and identified 52 red list species, 126 amber species, and 68 green species. The criteria are complex, but generally:

- Red list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.
- Amber list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localasied in 10 sites or fewer and those whose 20% of the European population is found in the UK.
- Green list species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed

Bonn Convention

The Convention on the Conservation of Migratory Species of Wild Animals or '*Bonn Convention*' was adopted in Bonn, Germany in 1979 and came into force in 1985. Participating states agree to work together to preserve migratory species and their habitats by providing strict protection to species listed in Appendix I of the Convention. It also establishes agreements for the conservation and management of migratory species listed in Appendix II.

In the UK, the requirements of the convention are implemented via the *Wildlfie & Countryside Act 1981* (as amended), *Widlife (Northern Ireland) Order 1985*, *Nature Conservation and Amenity Lands (Northern Ireland) Order 1985* and the *Countryside and Rights of Way Act 2000* (CRoW).

Global IUCN Red List

The International Union for Conservation of Nature (IUCN) Threatended Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Conern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the catgories is complex, and consider several principles.

Habitats Directive

The *Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Fora*, or the '*Habitats Directive*', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.

In the UK, the *Habitats Directive* is transposed into national law via the *Conservation of Habitats and Species (Amendment) Regulations 2012* in England, Scotland and Wales, and via the *Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended)* in Northern Ireland.

Protection of Badgers Act 1992 (PBA 1992)

The main legislation protecting badgers in England and Wales is the *Protection of Badgers Act 1992* (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: "any structure or place which displays signs indicating current use by a badger"

National Planning Policy Framework (2012)

Following the publication of the National Planning Policy Framework (NPPF) in March 2012, *Planning Policy Statement 9* (PPS9)*: Biodiversity and Geological Conservation (*2005) has been withdrawn. However, *ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System* (the guidance document that accompanied PPS9) has not been withdrawn and, where more detailed guidance is required than is given within the NPPF, local planning authorities will continue to rely on ODPM 06/2005.

This guidance requires local planning authorities to take account of the conservation of protected species when determining planning applications and makes the presence of a protected species a material consideration when assessing a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.

In the case of European Protected Species such as bats, planning policy emphasises that strict statutory provisions apply (including the *Conservation of Habitats and Species (Amendment) Regulations 2012*), to which a planning authority must have due regard.

Where developments requiring planning permission are likely to impact upon protected species it is necessary that protected species surveys are undertaken and submitted to meet the requirements of paragraph 98 of ODPM Circular 06/2005 which states that:

'*The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.*'

General guidance within the body of the NPPF which are also potentially relevant to the possible presence of bats at the site includes the following statements:

"The planning system should contribute to and enhance the natural and local environment by:

- *protecting and enhancing valued landscapes, geological conservation interests and soils;*
- *recognising the wider benefits of ecosystem services;*
- *minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity,*

including by establishing coherent ecological networks that are more resilient to current and future pressures"

"Local planning authorities should set criteria based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged."

"When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- *if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;"*

Species of Principal Importance in England

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the *Natural Environment and rural Communities (NERC) Act 2006*, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 habitats of principal importance and 1,150 species of principal importance.

The Conservation of Habitats and Species (Amendment) Regulations 2012

The *Conservation of Habitats and Species (Amendment) Regulations 2012* came into force on 16th August 2012 and amend the *Conservation of Habitats and Species Regulations 2010* to ensure the various provisions of Directive 92/43/EC ('the Habitats Directive') are transposed in a clear manner.

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by the European Commission, are then designated as Special Protection Areas (SPAs) within six years. The 2012 amendments include that public bodies help preserve, maintain and re-establish habitats for wild birds.

The Regulations also make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5 (see Table B1).

Table B1 Schedules of the Conservation of Habitats and Species (Amendment) Regulations 2012

Schedule 2 – European Protected Species of Animals		Schedule 5 – European Protected Species of Plant	
Common name	**Scientific name**	**Common name**	**Scientific name**
Horseshoe bats	Rhinolophidae - all species	Dock, Shore	*Rumex rupestris*
Common bats	Vespertilionidae - all species	Killarney Fern	*Trichomanes speciosum*
Wild Cat	*Felis silvestris*	Early Gentian	*Gentianella anglica*
Dolphins, porpoises and whales	Cetacea – all species	Lady's-slipper	*Cypripedium calceolus*
Dormouse	*Muscardinus avellanarius*	Creeping Marshwort	*Apium repens*
Pool Frog	*Rana lessonae*	Slender Naiad	*Najas flexilis*
Sand Lizard	*Lacerta agilis*	Fen Orchid	*Liparis loeselii*
Fisher's Estuarine Moth	*Gortyna borelii lunata*	Plantain, Floating-leaved water	*Luronium natans*
Newt, Great Crested	*Triturus cristatus*	Yellow Marsh Saxifrage	*Saxifraga hirculus*
Otter	*Lutra lutra*		
Lesser Whirlpool Ram's-horn Snail	*Anisus vorticulus*		
Smooth Snake	*Coronella austriaca*		
Sturgeon	*Acipenser sturio*		
Natterjack Toad	*Bufo calamita*		
Marine Turtles	*Caretta caretta, Chelonia mydas, Lepidochelys kempii, Eretmochelys imbricata, Dermochelys coriacea*		

The Hedgerow Regulations 1997

The *Hedgerow Regulations 1997* were made under Section 97 of the *Environment Act 1995* and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.

Wildlife and Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the '*Bern Convention*' and the *Birds Directive* are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

- kill, injure, or take any wild bird,
- take, damage or destroy the nest of any wild bird while that nest is in use, or
- take or destroy an egg of any wild bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5,
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places.
- The Act also prohibits certain methods of killing, injuring, or taking wild animals

Finally, the Act also makes it an offence (subject to exceptions) to:

- intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant,
- unless an authorised person, intentionally uproot any wild plant not included in Schedule 8,

- sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise case to grow in the wild any plant which is listed in Part II of Schedule 9.

Table B2 provides a comprehensive list of plant species listed in this schedule. It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

Table B2 Invasive plant species listed in Schedule 9 of the *Wildlife & Countryside Act 1981* (as amended)

Common name	Scientific name
Perfoliate alexanders	*Smyrnium perfoliatum*
Red algae	*Grateloupia luxurians*
Variagated yellow archangel	*Lamiastrum galeobdolon* subsp. *argentatum*
Yellow azalea	*Rhododendron luteum*
Himalayan balsam	*Impatiens glandulifera*
Cotoneaster	*Cotoneaster horizontalis*
Entire-leaved cotoneaster	*Cotoneaster integrifolius*
Himalayan cotoneaster	*Cotoneaster simonsii*
Hollyberry cotoneaster	*Cotoneaster bullatus*
Small-leaved cotoneaster	*Cotoneaster microphyllus*
False Virginia creeper	*Parthenocissus inserta*
Virginia creeper	*Parthenocissus quinquefolia*
Purple dewplant	*Disphyma crassifolium*
Fanwort or Carolina water-shield	*Cabomba caroliniana*
Water fern	*Azolla filiculoides*
Hottentot fig	*Carpobrotus edulis*
Three-cornered garlic	*Allium triquetrum*
Giant hogweed	*Heracleum mantegazzianum*

Common name	Scientific name
Water hyacinth	*Eichhornia crassipes*
Giant kelp	*Macrocystis* spp.
Giant knotweed	*Fallopia sachalinensis*
Hybrid knotweed	*Fallopia japonica* × *Fallopia sachalinensis*
Japanese knotweed	*Fallopia japonica*
Few-flowered garlic	*Allium paradoxum*
Water lettuce	*Pistia stratiotes*
Parrot's-feather	*Myriophyllum aquaticum*
Floating pennywort	*Hydrocotyle ranunculoides*
Duck potato	*Sagittaria latifolia*
Floating water primrose	*Ludwigia peploides*
Water primrose	*Ludwigia grandiflora*
Water primrose	*Ludwigia uruguayensis*
Rhododendron	*Rhododendron ponticum*
Rhododendron	*Rhododendron ponticum* × *Rhododendron maximum*
Giant rhubarb	*Gunnera tinctoria*
Japanese rose	*Rosa rugosa*
Giant salvinia	*Salvinia molesta*
Green seafingers	*Codium fragile*
Californian red seaweed	*Pikea californica*
Hooked asparagus seaweed	*Asparagopsis armata*
Japanese seaweed	*Sargassum muticum*
Laver seaweeds (except native species)	*Porphyra* spp
Australian swamp stonecrop or New Zealand pygmyweed	*Crassula helmsii*
Wakame	*Undaria pinnatifida*
Curly waterweed	*Lagarosiphon major*
Waterweeds	*Elodea* spp.

Appendix C – Data Search Research

Protected and Notable Species Records

Search Area: **Within 2km of Emsworth Site**
Date: **31/07/2014**
HBIC Ref: **4990**

See this Legislation Explanatory Document for a document explaining notable species statuses and legislation.

HBIC has its own extensive database of habitat and higher plant data for the County. In addition, HBIC hold copies of datasets belonging to partner organisations. Through data exchange agreements with these organisations HBIC is provided with regular database updates and can supply species information on their behalf. HBIC currently holds copies of the following datasets:

- Botanical Society of the British Isles' (BSBI) vascular plant database for Hampshire
- BritishBryological Society (Mosses, Liverworts, Hornworts)
- Butterfly Conservation's butterfly and moth database for Hampshire
- Hampshire Ornithological Society (HOS) bird records
- Hampshire Bat Group (HBG) Records of bat roost visits and sightings
- Data administered by the Hampshire Wildlife Trust (HWT) on behalf of the species recording groups below:
  - Hampshire Amphibian and Reptile Group (HARG)
  - Hampshire Mammal Group (HMG) (excluding records for bats and badgers)
- UK Bees, Wasps and Ants Recording Society (BWARS) the full dataset as of January 2012

It is important that these species recording groups (where relevant to the data provided) are acknowledged in any document produced by the data requester where data is incorporated into the document, as a matter of course.

The following are protected and notable species records from the above datasets within the search area recorded in the last 15 years. For plants this has been extended to 20 years:

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Amphibians & Reptiles								
Anguis fragilis	Slow-worm	NERC_s41 WCA_s5s91(t)	SU721053	The Old Farmhouse, Wade Lane, Havant, Hampshire, Po9 2tb	2009	2009	1	2

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Bufo bufo	Common Toad	NERC_s41	SU746079	White Lodge Emsworth	1999	1999	2	1
			SU748059	Church Path Emsworth	1999	1999	2	1
			SU748059	Havant Borough: 29 Church Path, Emsworth	1999	1999	1	1
			SU752062	Brook Meadow, Emsworth	2010	2010	2	1
Natrix natrix	Grass Snake	NERC_s41 WCA_s5s91(t)	SU721053	The Old Farm House Havant	1999	1999	1	1
			SU721053	The Old Farmhouse, Wade Lane, Havant, Hampshire, Po9 2tb	2006	2006	1	1
			SU722055	Havant Borough: Wade Lane, Havant	1999	1999	1	1
			SU730070	Havant Thicket	1999	1999	1	1
			SU746079	White Lodge Emsworth	1999	1999	3	1
Vipera berus	Adder	NERC_s41 WCA_s5s91(t)	SU730070	Havant Thicket	1999	1999	1	1
Birds								
Acrocephalus scirpaceus	Eurasian Reed Warbler	HBAP	SU7104	Ch Langstone Mill Pond	1996	2006	6	6
			SU7104	Lh Langstone South Moor	2004	2007	7	4
			SU720050	Ch Warblington	1999	1999	1	1
			SU7205	Ch Langstone Mill Pond	1999	2007	3	6
			SU7305	Ch Warblington Castle Farm	1994	2007	5	1
			SU7305	Ch Warblington Castle Farm Cbc	1997	2006	7	6
			SU7305	Lh Langstone Harbour	2011	2011	1	5
Alauda arvensis	Sky Lark	BOCC_Red HBAP NERC_s41	SU7104	Lh Langstone South Moor	1994	2007	3	3
			SU7106	Havant	2010	2010	1	0
			SU7305	Ch Warblington Castle Farm	1994	2007	2	45
			SU7305	Ch Warblington Castle Farm Cbc	1996	2006	8	14
Alcedo atthis	Common Kingfisher	EU_Bird_1 WCA_s1s1	SU7104	Ch Langstone Mill Pond	1996	2007	32	2
			SU7104	Lh Hayling Oysterbeds	2005	2005	1	1
			SU7104	Lh Langstone Harbour	2002	2008	6	2
			SU7104	Lh Langstone South Moor	1994	2007	32	2
			SU7104	Lh South Moorlangstone Harbour	2010	2010	1	0

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7105	Ch Langstone	1998	2009	3	1
			SU7105	Ch Langstone Mill Pond	1994	2003	2	1
			SU7105	Lh Langstone Harbour	2007	2007	1	1
			SU7105	Lh Langstone South Moor	2008	2008	1	1
			SU7105	Lh South Moor, Langstone Harbour	2012	2012	1	1
			SU7106	Havant	2005	2010	2	1
			SU720050	Ch Langstone	2003	2003	1	3
			SU7204	Ch Chichester Harbour	1994	2005	13	2
			SU7204	Ch Langstone	2005	2008	4	2
			SU7204	Ch Northney	2006	2006	1	1
			SU7204	Lh Langstone Harbour	2012	2012	1	1
			SU7205	Ch Langstone	1999	2004	3	1
			SU7205	Ch Langstone Mill Pond	2006	2006	1	1
			SU7205	Ch Warblington	2002	2006	2	1
			SU7205	Lymbourne Watercress Beds	2003	2003	1	1
			SU729042	Ch Northney	2000	2000	1	1
			SU7304	Ch Northney	2007	2007	1	1
			SU7305	Ch Warblington Castle Farm	2009	2009	1	1
			SU7405	Ch Emsworth Harbour	2004	2004	1	1
			SU7406	Ch Emsworth	2012	2012	2	1
			SU744051	Ch Warblington	2007	2008	2	1
			SU7504	Ch Emsworth Harbour	2006	2006	1	2
			SU7505	Ch Emsworth	2002	2012	2	2
			SU7505	Ch Emsworth Harbour	2008	2008	1	1
			SU7506	Ch Emsworth	1994	2000	3	1
			SU7506	Ch Emsworth River Ems	1999	1999	1	1
			SU751062	Ch Emsworth	2000	2000	2	1
			SU753056	Ch Emsworth	2000	2000	1	2
			SU754047	Ch Emsworth	2000	2000	1	1
Anas clypeata	Northern Shoveler	CR	SU7104	Ch Langstone Mill Pond	2003	2005	2	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7104	Lh Langstone Harbour	2012	2012	1	20
			SU7204	Ch Chichester Harbour	2005	2005	4	5
			SU7204	Ch Langstone	2006	2006	1	2
			SU7205	Ch Langstone Mill Pond	2006	2006	1	1
			SU7408	Southleigh Forest	2005	2005	1	1
			SU744051	Ch Warblington	2009	2009	1	1
Anas strepera	Gadwall	HBAP	SU7104	Ch Langstone Mill Pond	2003	2003	1	1
			SU7104	Lh Langstone Harbour	2003	2003	2	7
			SU7104	Lh Langstone South Moor	2000	2000	1	4
			SU7404	Ch Emsworth Harbour	2009	2009	1	2
			SU752051	Ch Emsworth Harbour	2010	2010	1	0
Anser albifrons	Greater White-fronted Goose	HBAP	SU7104	Ch Langstone Mill Pond	2001	2001	1	13
			SU7205	Ch Warblington	2001	2001	1	16
			SU7405	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	13
Anthus petrosus	Rock Pipit	CR	SU7104	Lh Langstone Harbour	2004	2004	1	4
			SU7104	Lh Langstone South Moor	1993	2007	49	11
			SU7104	Lh South Moor, Langstone Harbour	2009	2009	1	1
			SU7105	Lh Langstone South Moor	2003	2003	1	1
			SU7105	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU715050	Lh South Moor, Langstone Harbour	2012	2012	1	1
			SU7204	Ch Langstone	2008	2008	1	1
			SU7205	Ch Warblington	2006	2006	1	1
			SU725050	Ch Warblington	2010	2010	1	0
			SU7505	Ch Emsworth	2012	2012	1	1
Anthus petrosus subsp. littoralis	Scandinavian Rock Pipit	CR	SU7104	Lh Langstone South Moor	2005	2007	3	2
			SU7305	Ch Warblington Castle Farm	2006	2006	1	1
Anthus spinoletta	Water Pipit	CS	SU7104	Lh Langstone South Moor	1994	2007	30	5
			SU7104	Lh South Moorlangstone Harbour	2010	2010	2	0
Anthus trivialis	Tree Pipit	BOCC_Red NERC_s41	SU7106	Havant	2002	2002	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Ardea cinerea	Grey Heron	CS	SU7204 SU7205 SU7305 SU744051	Ch Chichester Harbour Ch Wade Court - Havant Ch Warblington Castle Farm Cbc Ch Warblington	1995 1999 2004 2007	2005 2007 2004 2009	13 5 1 6	26 13 1 2
Arenaria interpres	Ruddy Turnstone	HBAP	SU7104 SU7104 SU7204	Lh Langstone Harbour Lh Langstone South Moor Ch Chichester Harbour	2002 1999 1995	2012 2004 2005	2 2 12	30 60 288
Asio flammeus	Short-eared Owl	EU_Bird_1	SU70C	Sensitive	1995	2002	2	1
Aythya ferina	Common Pochard	HBAP CS	SU7104	Lh Langstone Harbour	2000	2012	2	20
Aythya marila	Greater Scaup	BOCC_Red NERC_s41 WCA_s1s1	SU7104	Lh Langstone Harbour	2002	2003	4	2
Branta leucopsis	Barnacle Goose	EU_Bird_1	SU7204 SU7205 SU7304 SU7305 SU7505	Ch Chichester Harbour Ch Warblington Ch Sweare Deep Ch Warblington Ch Emsworth	2005 2006 2008 2006 2005	2005 2007 2008 2006 2005	1 10 1 1 1	2 2 43 1 2
Branta ruficollis	Red-breasted Goose	EU_Bird_1	SU7205	Ch Warblington	2007	2007	1	1
Bubo bubo	Eurasian Eagle Owl	EU_Bird_1	SU7106 SU746078	Havant Ch Emsworth	2008 2008	2008 2008	1 1	1 1
Calidris alba	Sanderling	HBAP	SU7204	Ch Chichester Harbour	1995	2005	12	223
Calidris alpina	Dunlin	BOCC_Red HBAP	SU7104 SU7204 SU7205 SU7304 SU7305	Lh Langstone South Moor Ch Chichester Harbour Ch Warblington Ch Chichester Hbr Hampshire Sectors Ch Emsworth	1999 1995 2012 2003 2010	1999 2005 2012 2003 2010	1 13 2 1 1	2 11404 196 20 0
Calidris canutus	Red Knot	HBAP	SU7104	Ch Langstone Mill Pond	2007	2007	1	540

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7104	Lh Langstone Harbour	1999	2012	5	450
			SU7104	Lh Langstone South Moor	2004	2004	1	37
			SU717047	Ch Langstone	2010	2010	1	0
			SU7204	Ch Chichester Harbour	1995	2005	16	833
			SU7204	Ch Chichester Hbr Hampshire Sectors	2001	2002	2	64
			SU7204	Ch Langstone	1999	1999	2	162
			SU7204	Ch Northney	2012	2012	1	22
			SU7205	Ch Chichester Hbr Hampshire Sectors	1999	1999	1	36
			SU726050	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	24
			SU730046	Ch Chichester Hbr Hampshire Sectors	2002	2002	1	70
			SU7304	Ch Chichester Hbr Hampshire Sectors	1999	2003	3	50
			SU7304	Ch Northney	2004	2007	3	12
			SU7304	Ch Sweare Deep	2000	2010	4	62
			SU7304	Hayling Island	2005	2005	1	2
			SU7305	Ch Emsworth	2010	2012	4	87
			SU7305	Ch Emsworth Nore Barn	2010	2010	1	0
			SU7305	Ch Warblington	2012	2012	1	130
			SU7305	Ch Warblington Castle Farm	2012	2012	1	180
			SU740052	Ch Emsworth Harbour	2012	2012	1	1300
			SU740053	Ch Emsworth Nore Barn	2012	2012	1	46
			SU7405	Ch Emsworth Harbour	2010	2010	1	0
			SU7406	Ch Emsworth	2012	2012	2	90
			SU7505	Ch Emsworth	2012	2012	1	150
Carduelis cabaret	Lesser Redpoll	BOCC_Red NERC_s41	SU7104	Ch Langstone Mill Pond	2006	2006	1	3
			SU7104	Lh Langstone South Moor	2003	2003	1	1
			SU7106	Havant	2005	2005	1	1
Carduelis cannabina	Common Linnet	BOCC_Red HBAP	SU7104	Lh Langstone South Moor	1999	2006	4	50
			SU7204	Ch Chichester Harbour	2005	2005	1	40
			SU7304	Ch Chichester Harbour	2004	2004	1	35
			SU7305	Ch Warblington Castle Farm Cbc	1997	2006	7	7

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7306	Ch Warblington	2009	2009	1	63
			SU732066	Denvilles (havant)	2011	2011	1	48
			SU735056	Ch Warblington	2003	2003	1	80
			SU737054	Ch Emsworth	1999	1999	1	80
			SU7404	Ch Emsworth Harbour	2011	2011	1	2
Carduelis flammea	Common Redpoll	CI	SU750077	Hampshire Farm Pasture	2005	2005	1	0
Carduelis flavirostris	Twite	BOCC_Red	SU7104	Lh Langstone South Moor	2003	2003	20	3
			SU7105	Lh Langstone South Moor	2003	2003	2	3
Carduelis spinus	Eurasian Siskin	CI	SU7104	Ch Langstone Mill Pond	2006	2007	2	4
			SU7104	Lh Langstone South Moor	2004	2006	2	3
			SU7107	Ha Leigh Park Havant	2006	2006	1	1
Cettia cetti	Cetti's Warbler	HBAP WCA_s1s1 CS	SU7104	Ch Langstone Mill Pond	2001	2008	35	6
			SU7104	Lh Langstone South Moor	2007	2007	4	1
			SU7104	Lh South Moor, Langstone Harbour	2009	2009	1	1
			SU7105	Ch Langstone Mill Pond	2002	2003	2	1
			SU720050	Ch Langstone Mill Pond	2007	2007	1	1
			SU7204	Ch Langstone Mill Pond	2009	2009	1	1
			SU7205	Ch Langstone Mill Pond	2002	2009	13	2
			SU7205	Ch Wade Court - Havant	1999	1999	1	1
			SU730055	Ch Warblington Castle Farm	2007	2007	1	1
			SU7305	Ch Warblington	2007	2007	1	1
			SU7305	Ch Warblington Castle Farm	1993	2011	10	1
			SU7505	Ch Emsworth	2010	2010	1	0
			SU7506	Brook Meadowemsworth	2010	2010	1	0
Chlidonias niger	Black Tern	EU_Bird_1 WCA_s1s1	SU7304	Ch Sweare Deep	2005	2005	1	1
Chroicocephalus ridibundus	Black-headed Gull	CR	SU7104	Lh Langstone Harbour	1996	2012	3	2650
			SU7105	Ch Langstone	2009	2009	1	150
			SU720050	Langstone Mill Pond	2007	2007	1 *	0

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7204	Ch Chichester Harbour	2005	2005	2	14200
			SU7204	North Hayling	2009	2009	1	1
			SU7305	Ch Warblington Castle Farm Cbc	2004	2004	1	1
			SU7306	Ch Warblington	2004	2004	1	1000
			SU7308	Havant	2005	2005	1	600
			SU7405	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	1
			SU7407	Southleigh Farm	2005	2005	1	3500
			SU744051	Ch Warblington	2007	2009	17	1197
			SU748054	Emsworth Millpond	2011	2011	1 *	0
			SU7505	Ch Emsworth	2002	2002	1	1
			SU752054	Ch Chichester Harbour	2000	2000	1	3000
Ciconia ciconia	White Stork	EU_Bird_1	SU7106	Havant	2012	2012	1	5
			SU7205	Ch Warblington	2005	2005	1	1
Circus aeruginosus	Eurasian Marsh Harrier	EU_Bird_1 WCA_s1s1 CR	SU7104	Lh Langstone Harbour	2003	2007	2	1
			SU7304	Ch East/mid Hayling	2008	2008	1	1
			SU7304	Ch Sweare Deep	2008	2008	1	1
			SU7505	Ch Emsworth	2005	2005	1	1
Circus cyaneus	Hen Harrier	EU_Bird_1 BOCC_Red HBAP NERC_s41 WCA_s1s1	SU70H	Sensitive	2003	2003	1	1
			SU70M	Sensitive	2003	2003	1	1
Circus pygargus	Montagu's Harrier	EU_Bird_1 HBAP WCA_s1s1 CR	SU70	Sensitive	2005	2005	1	1
Clangula hyemalis	Long-tailed Duck	WCA_s1s1	SU7105	Ch Langstone	2005	2005	1	1
			SU7204	Ch Chichester Harbour	2005	2005	2	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7204	Ch Chichester Hbr Hampshire Sectors	2003	2003	3	2
			SU7205	Ch Warblington	2004	2004	1	1
			SU724052	Ch Chichester Hbr Hampshire Sectors	2003	2003	1	2
			SU7304	Ch Chichester Harbour	2004	2004	2	2
			SU7304	Ch Chichester Hbr Hampshire Sectors	2003	2003	1	2
Cuculus canorus	Common Cuckoo	BOCC_Red NERC_s41	SU7104	Ch Langstone Mill Pond	2001	2001	1	1
			SU7104	Lh Langstone South Moor	2004	2006	6	2
			SU7205	Ch Wade Court - Havant	2004	2004	1	2
			SU7305	Ch Warblington Castle Farm	1994	2007	7	2
			SU7305	Ch Warblington Castle Farm Cbc	1997	2006	7	2
			SU751050	Ch Emsworth	2009	2009	1	1
Egretta garzetta	Little Egret	EU_Bird_1 HBAP CR	SU7104	Ch Langstone	2004	2004	2	4
			SU7104	Ch Langstone Mill Pond	2005	2008	39	274
			SU7104	Lh Broadmarsh/bedhampton Shore	2010	2010	1	0
			SU7104	Lh Langstone Harbour	1994	1999	16	8
			SU7104	Lh Langstone South Moor	1994	2007	15	8
			SU7104	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU7105	Ch Langstone Mill Pond	2007	2012	6	139
			SU7106	Havant	2001	2003	2	1
			SU719054	Wade Court Park	2001	2001	1 *	0
			SU720050	Langstone Mill Pond	2007	2007	1 *	0
			SU7204	Ch Chichester Harbour	1993	2005	17	206
			SU7204	Ch Langstone	1999	2004	2	24
			SU7204	Ch Langstone Mill Pond	2008	2009	2	3
			SU7204	Ch Northney	1999	1999	1	6
			SU7205	Ch Langstone	1998	2004	4	35
			SU7205	Ch Langstone Mill Pond	2006	2006	2	12
			SU7205	Ch Wade Court - Havant	1995	2012	70	213
			SU7205	Ch Warblington	1998	2012	44	37
			SU7205	Ch Warblington Castle Farm	1999	1999	2	15

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7206	Havant	2009	2009	1	1
			SU721052	Ch Wade Court - Havant	1999	2010	2	4
			SU721054	Ch Wade Court - Havant	2003	2003	1	24
			SU725050	Ch Warblington	2008	2008	1	3
			SU725055	Ch Warblington Castle Farm	2001	2001	1	29
			SU727055	Ch Warblington Castle Farm	2001	2001	1	27
			SU728047	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	55
			SU728054	Ch Warblington	2012	2012	1	12
			SU7304	Ch Sweare Deep	1999	1999	1	17
			SU7305	Ch Warblington	1996	2006	7	24
			SU7305	Ch Warblington Castle Farm	1998	2007	3	10
			SU7305	Ch Warblington Castle Farm Cbc	2004	2004	1	1
			SU7305	Lh Langstone Harbour	2012	2012	1	20
			SU7308	Ha Little Leigh Farm	2002	2002	1	1
			SU7404	Ch Emsworth Harbour	2009	2009	1	117
			SU7405	Ch Emsworth Mill Pond	1997	2002	7	2
			SU7406	Ch Emsworth	2012	2012	1	1
			SU7406	Ch Emsworth River Ems	1999	1999	1	1
			SU744051	Ch Warblington	2007	2009	13	59
			SU747062	Ch Emsworth	1998	2001	6	1
			SU749065	Ch Emsworth	1999	1999	1	1
			SU7506	Ch Emsworth	1998	2000	4	5
			SU7506	Ch Emsworth River Ems	1999	1999	5	2
Emberiza calandra	Corn Bunting	BOCC_Red HBAP CS	SU735054	Ch Warblington	2000	2000	1	1
Emberiza citrinella	Yellowhammer	BOCC_Red NERC_s41	SU7104	Lh Langstone South Moor	2003	2004	2	1
			SU7305	Ch Warblington Castle Farm	2005	2007	2	1
			SU7305	Ch Warblington Castle Farm Cbc	1997	2006	5	5
			SU7408	Southleigh Forest	2011	2011	1	2

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Emberiza schoeniclus	Reed Bunting	HBAP NERC_s41	SU7104	Ch Langstone Mill Pond	2004	2004	1	1
			SU7104	Lh Langstone South Moor	1994	2007	9	3
			SU7104	South Moor, Langstone Harbour	2010	2010	1	1
			SU720050	Ch Langstone Mill Pond	2012	2012	1	1
			SU720050	Langstone Mill Pond	2010	2010	1	1
			SU7305	Ch Warblington Castle Farm	2007	2008	2	29
			SU7305	Ch Warblington Castle Farm Cbc	1997	2006	6	1
			SU732066	Denvilles (havant)	2011	2011	1	1
			SU7404	Ch Emsworth Harbour	2011	2011	2	1
			SU7505	Ch Emsworth	2012	2012	1	2
Eremophila alpestris	Horned Lark	WCA_s1s1	SU754054	Lh West Hayling Lnr (oysterbeds)	2012	2012	1	1
Falco columbarius	Merlin	EU_Bird_1 HBAP WCA_s1s1	SU7104	Lh Langstone Harbour	1993	2001	5	1
			SU7104	Lh Langstone South Moor	2002	2002	1	1
			SU7104	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU7106	Havant	1995	2012	3	1
			SU719046	Lh Langstone Harbour	2003	2003	1	1
			SU7204	Ch Chichester Harbour	2004	2005	2	1
			SU7205	Ch Warblington	2002	2002	1	1
Falco peregrinus	Peregrine Falcon	EU_Bird_1 WCA_s1s1 CR	SU70	Sensitive	1994	2010	5	1
			SU70	Sensitive	1995	2005	11	2
			SU70	Sensitive	2000	2012	3	1
			SU70	Sensitive	2002	2002	1	1
			SU70	Sensitive	2002	2007	2	2
			SU70	Sensitive	2003	2003	1	1
			SU70	Sensitive	2003	2012	2	1
			SU70	Sensitive	2004	2004	1	2
			SU70	Sensitive	2005	2005	1	1
			SU70	Sensitive	2008	2008	1	1
			SU70	Sensitive	2008	2008	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Falco subbuteo	Eurasian Hobby	HBAP WCA_s1s1 CI	SU70C	Sensitive	1995	2010	3	1
			SU70D	Sensitive	1999	2012	3	2
			SU70H	Sensitive	1994	2004	3	1
			SU70H	Sensitive	2000	2004	5	1
			SU70H	Sensitive	2009	2009	1	1
			SU70I	Sensitive	1996	2006	4	2
			SU70I	Sensitive	2012	2012	1	1
			SU70J	Sensitive	1999	2001	2	1
			SU70M	Sensitive	2010	2010	1	0
Ficedula hypoleuca	Pied Flycatcher	CR	SU7104	South Moor, Langstone Harbour	2010	2010	1	1
			SU7205	Ch Warblington	2008	2008	2	1
			SU7304	Ch Northney Paddocks	2009	2009	2	4
Fringilla montifringilla	Brambling	WCA_s1s1	SU7104	Lh Langstone South Moor	2003	2003	1	2
			SU7105	Lh South Moor, Langstone Harbour	2012	2012	1	1
			SU717050	Ch Langstone	2003	2003	1	2
			SU7406	Ch Emsworth	2011	2011	1	2
Gallinago gallinago	Common Snipe	HBAP CS	SU7104	Lh Langstone South Moor	1996	2008	16	39
			SU7106	Havant	2010	2010	1	0
			SU715051	Lh South Moor, Langstone Harbour	2009	2009	1	8
			SU7204	Ch Chichester Harbour	2005	2005	1	80
			SU7305	Ch Warblington Castle Farm Cbc	2004	2004	1	1
Gavia arctica	Black-throated Diver	EU_Bird_1 WCA_s1s1	SU7104	Lh Langstone Harbour	1997	2002	2	2
			SU7304	Ch Northney	2007	2007	2	1
			SU7304	Ch Sweare Deep	2007	2007	1	1
Gavia immer	Great Northern Diver	EU_Bird_1 WCA_s1s1	SU7104	Lh Langstone Harbour	2006	2006	1	1
			SU7304	Ch Sweare Deep	2008	2008	1	1
			SU7404	Ch Emsworth Channel	2008	2008	1	1
Gavia stellata	Red-throated Diver	EU_Bird_1 WCA_s1s1	SU7104	Ch Emsworth	2006	2006	1	1
			SU7104	Lh Langstone Harbour	2006	2006	1	1
			SU7104	Lh Langstone South Moor	2006	2006	2	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7304	Ch Northney	2007	2007	1	1
			SU731044	Ch Chichester Hbr Hampshire Sectors	2002	2002	1	1
			SU7404	Ch Chichester Hbr Hampshire Sectors	2003	2003	1	1
			SU7404	Ch Emsworth Channel	2005	2005	2	1
			SU7405	Ch Emsworth Harbour	2007	2007	1	1
Haematopus ostralegus	Eurasian Oystercatcher	CS	SU7104	Lh Langstone Harbour	1995	2001	2	277
			SU7104	Lh Langstone South Moor	2005	2007	11	68
			SU7106	Havant	2004	2004	1	1
			SU7204	Ch Chichester Harbour	1995	2005	13	1574
			SU7205	Ch Warblington	2006	2007	5	25
			SU7207	Su70	2000	2000	1	3
			SU7305	Ch Warblington	2006	2006	1	2
			SU7305	Ch Warblington Castle Farm	1994	2010	2	2
Hydrocoloeus minutus	Little Gull	EU_Bird_1 WCA_s1s1	SU7104	Lh Langstone Harbour	1994	2001	2	1
			SU7204	Ch Chichester Harbour	2005	2005	1	2
			SU7204	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	1
			SU7204	Ch Northney	2003	2003	1	1
Jynx torquilla	Eurasian Wryneck	BOCC_Red WCA_s1s1	SU7104	Lh Langstone South Moor	2008	2008	1	1
Larus argentatus	Herring Gull	BOCC_Red CR	SU7104	Lh Langstone Harbour	2012	2012	1	50
			SU7106	Havant	2012	2012	1	1
			SU7204	Ch Chichester Harbour	2005	2005	4	1200
			SU7204	Ch Chichester Hbr Hampshire Sectors	2001	2001	2	420
			SU7304	Ch Chichester Hbr Hampshire Sectors	2003	2003	2	750
			SU7305	Ch Warblington Castle Farm Cbc	2004	2004	1	1
			SU744051	Ch Warblington	2007	2009	13	19
			SU7505	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	300
			SU7505	Ch Emsworth	2006	2006	1	1
Larus fuscus	Lesser Black-backed Gull	CR	SU7104	Lh Langstone Harbour	1999	1999	1	1
			SU7204	Ch Chichester Harbour	2005	2005	5	35

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7204	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	33
			SU7304	Ch Sweare Deep	1999	2000	3	25
			SU7305	Ch Warblington Castle Farm Cbc	2004	2004	1	1
			SU7405	Ch Chichester Hbr Hampshire Sectors	2001	2001	2	84
			SU7405	Ch Emsworth Harbour	2009	2009	1	2
			SU7407	Southleigh Farm	1999	2005	2	30
			SU744051	Ch Warblington	2007	2009	3	1
			SU7505	Ch Emsworth	1999	2012	2	24
Larus marinus	Great Black-backed Gull	CR	SU7204	Ch Chichester Harbour	2004	2005	5	400
			SU7204	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	81
			SU7204	Ch Warblington	2006	2006	1	76
			SU7304	Ch Langstone	2004	2004	1	495
			SU7304	Ch Northney	2005	2005	1	224
			SU7305	Ch Warblington Castle Farm Cbc	2004	2004	1	1
			SU7308	Ha Little Leigh Farm	2001	2001	1	5
			SU7407	Southleigh Farm	1999	2005	4	328
			SU744051	Ch Warblington	2007	2009	4	3
Larus melanocephalus	Mediterranean Gull	EU_Bird_1 HBAP WCA_s1s1 CR	SU70C	Sensitive	1994	2010	49	125
			SU70C	Sensitive	1999	2012	15	50
			SU70D	Sensitive	2001	2012	2	6
			SU70H	Sensitive	1995	2005	9	68
			SU70H	Sensitive	1999	2010	72	53
			SU70H	Sensitive	2001	2003	2	12
			SU70H	Sensitive	2001	2006	5	36
			SU70H	Sensitive	2001	2012	5	4
			SU70H	Sensitive	2002	2002	1	1
			SU70H	Sensitive	2003	2003	1	1
			SU70H	Sensitive	2003	2003	1	6
			SU70H	Sensitive	2003	2003	1	69
			SU70H	Sensitive	2006	2006	1	73

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU70H	Sensitive	2010	2012	2	2
			SU70H	Sensitive	2012	2012	1	4
			SU70I	Sensitive	2002	2002	1	2
			SU70I	Sensitive	2003	2003	1	1
			SU70J	Sensitive	2001	2001	1	1
			SU70M	Sensitive	1996	2005	21	2
			SU70M	Sensitive	1996	2008	58	29
			SU70M	Sensitive	2001	2001	1	1
			SU70M	Sensitive	2003	2003	1	1
			SU70M	Sensitive	2008	2009	2	9
			SU70N	Sensitive	2012	2012	2	4
Limosa lapponica	Bar-tailed Godwit	EU_Bird_1 HBAP	SU7104	Ch Langstone	2006	2006	1	160
			SU7104	Lh Langstone Harbour	1996	2001	6	785
			SU7104	Lh Langstone South Moor	1999	1999	1	3
			SU7105	Ch Langstone	2000	2009	3	300
			SU7105	Lh Langstone Harbour	2003	2010	4	82
			SU717047	Ch Langstone	2010	2010	1	0
			SU7204	Ch Chichester Harbour	1995	2005	30	863
			SU7204	Ch Chichester Hbr Hampshire Sectors	1999	2003	9	930
			SU7204	Ch Langstone	2005	2005	1	200
			SU7204	Ch Northney	2005	2005	2	111
			SU7204	Hayling Island	2004	2004	1	100
			SU7205	Ch Chichester Hbr Hampshire Sectors	1999	1999	2	400
			SU7205	Ch Langstone	1999	2008	2	250
			SU7205	Ch Warblington	2000	2007	4	250
			SU722048	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	100
			SU723050	Ch Chichester Harbour	2000	2000	1	200
			SU725048	Ch Warblington	2006	2007	2	1100
			SU725052	Ch Chichester Harbour	2000	2000	1	200
			SU726050	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	100

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU730046	Ch Chichester Hbr Hampshire Sectors	2002	2002	1	60
			SU7304	Ch Chichester Hbr Hampshire Sectors	1999	2003	3	230
			SU7304	Ch Sweare Deep	2000	2010	4	150
			SU7305	Ch Emsworth	2012	2012	1	100
			SU7305	Ch Emsworth Nore Barn	2008	2008	1	1
			SU7305	Ch Warblington	2012	2012	1	2
			SU7305	Ch Warblington Castle Farm	2008	2012	3	50
			SU7305	Lh Langstone Harbour	2012	2012	1	2
Limosa limosa	Black-tailed Godwit	BOCC_Red HBAP WCA_s1s1 CI	SU7104	Lh Langstone Harbour	1996	2001	4	153
			SU7104	Lh Langstone South Moor	2006	2006	1	1
			SU7104	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU7105	Ch Langstone	2006	2007	5	110
			SU7105	Lh Langstone Harbour	2008	2008	1	65
			SU717047	Ch Langstone	2010	2010	3	0
			SU7204	Ch Chichester Harbour	1995	2006	24	995
			SU7204	Ch Chichester Hbr Hampshire Sectors	1998	2003	9	120
			SU7204	Ch Langstone	2004	2005	2	90
			SU7204	Ch Northney	2008	2008	1	50
			SU7204	Hayling Island	2005	2005	1	60
			SU7205	Ch Chichester Harbour	2004	2004	1	58
			SU7205	Ch Warblington	2005	2007	3	70
			SU725050	Ch Warblington	2009	2009	1	80
			SU7304	Ch Chichester Hbr Hampshire Sectors	1998	2003	4	111
			SU7305	Ch Emsworth	2010	2012	2	82
			SU7305	Ch Emsworth Nore Barn	2006	2006	6	154
			SU7305	Ch Warblington Castle Farm	2009	2009	1	48
			SU740052	Ch Emsworth Channel	2010	2010	1	0
			SU740052	Ch Emsworth Harbour	2012	2012	2	160
			SU740053	Ch Emsworth Nore Barn	2012	2012	2	94
			SU7405	Ch Emsworth	2005	2005	1	62

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU744051	Ch Warblington	2008	2009	2	7
			SU750050	Ch Chichester Harbour	2000	2000	1	26
			SU7505	Ch Chichester Hbr Hampshire Sectors	1998	2003	2	200
			SU7505	Ch Emsworth Harbour	2006	2008	2	66
Locustella naevia	Common Grasshopper Warbler	BOCC_Red HBAP NERC_s41 CR	SU7104	Lh Langstone South Moor	1997	2004	2	1
			SU755055	Ch Warblington	2000	2000	1	1
Luscinia megarhynchos	Common Nightingale	HBAP CS	SU730065	Ch Warblington	2000	2000	1	1
			SU751061	Ch Emsworth	2000	2000	1	1
Melanitta fusca	Velvet Scoter	WCA_s1s1	SU7104	Lh Langstone Harbour	2007	2007	1	2
			SU7404	Ch Chichester Hbr Hampshire Sectors	2003	2003	1	1
Melanitta nigra	Common Scoter	BOCC_Red HBAP NERC_s41 WCA_s1s1	SU7104	Lh Langstone Harbour	1996	2003	2	1
			SU7104	Lh Langstone South Moor	2006	2006	1	1
			SU7204	Ch Chichester Harbour	2005	2005	1	3
			SU7204	Lh Langstone Harbour	2007	2007	1	2
Mergus merganser	Goosander	HBAP CR	SU7105	Ch Langstone	1999	1999	1	1
			SU7204	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	1
			SU7205	Ch Warblington	1999	1999	1	1
			SU7304	Ch Sweare Deep	2000	2000	1	1
			SU7405	Ch Emsworth Mill Pond	1999	2000	8	1
			SU7505	Ch Emsworth	2000	2000	1	1
Mergus serrator	Red-breasted Merganser	HBAP	SU7104	Lh Broadmarsh/bedhampton Shore	2010	2010	1	0
			SU7104	Lh Langstone Harbour	2002	2006	6	82
			SU7105	Lh South Moor, Langstone Harbour	2012	2012	1	58
			SU7105	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU7204	Ch Chichester Harbour	1995	2005	12	194
			SU7204	Ch Chichester Hbr Hampshire Sectors	2001	2003	4	42
			SU725050	Ch Warblington	2010	2010	1	0
			SU7304	Ch Sweare Deep	2008	2008	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU734049	Ch Chichester Hbr Hampshire Sectors	2002	2002	1	32
			SU7405	Ch Emsworth Mill Pond	1998	2007	24	7
			SU744051	Ch Warblington	2007	2009	9	88
Milvus migrans	Black Kite	EU_Bird_1	SU7107	Havant	2009	2009	1	1
Milvus milvus	Red Kite	EU_Bird_1 HBAP WCA_s1s1 CR	SU70D	Sensitive	2010	2012	5	1
			SU70H	Sensitive	2010	2010	1	0
			SU70J	Sensitive	2004	2004	1	1
			SU70M	Sensitive	2008	2008	1	1
			SU70M	Sensitive	2012	2012	1	1
			SU70N	Sensitive	2008	2008	1	1
			SU70N	Sensitive	2012	2012	1	1
			SU70P	Sensitive	2003	2003	1	1
Motacilla flava	Yellow Wagtail	BOCC_Red HBAP CR	SU7104	Lh Langstone South Moor	1994	2007	19	30
			SU7104	Lh South Moor, Langstone Harbour	2009	2009	2	12
			SU7104	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU7105	Lh Langstone South Moor	1995	2006	2	67
			SU7106	Havant	2002	2002	1	1
			SU7204	Ch Northney	2007	2010	3	8
			SU7205	Ch Warblington	2001	2012	3	15
			SU7304	Ch Northney Paddocks	2009	2010	2	2
Muscicapa striata	Spotted Flycatcher	BOCC_Red HBAP NERC_s41	SU7104	Lh Langstone South Moor	1994	2007	5	1
			SU7104	South Moor, Langstone Harbour	2010	2010	1	1
			SU7105	Ch Langstone Mill Pond	2012	2012	1	2
			SU7205	Ch Langstone Mill Pond	2006	2006	1	1
			SU7205	Ch Wade Court - Havant	2006	2006	1	2
			SU7304	Ch Northney	2009	2009	1	2
			SU7304	Ch Northney Paddocks	2009	2009	3	8
			SU7304	Northney Paddocks	2010	2010	2	2
			SU7305	Ch Warblington Castle Farm	1994	2006	3	1
			SU7305	Ch Warblington Castle Farm Cbc	1999	1999	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU751061	Ch Emsworth	2000	2000	1	1
Numenius arquata	Eurasian Curlew	NERC_s41	SU7104	Lh Langstone Harbour	1994	2012	7	59
			SU7104	Lh Langstone South Moor	2004	2007	14	34
			SU7204	Ch Chichester Harbour	1995	2005	13	1683
			SU7205	Ch Warblington	2006	2012	3	110
			SU7305	Ch Emsworth	2012	2012	2	5
			SU7305	Ch Warblington	2006	2006	1	1
			SU7305	Ch Warblington Castle Farm	2010	2012	3	30
			SU7305	Ch Warblington Castle Farm Cbc	2004	2004	1	1
			SU7405	Ch Emsworth Harbour	2010	2010	1	0
			SU744051	Ch Warblington	2008	2009	2	20
Numenius phaeopus	Whimbrel	BOCC_Red WCA_s1s1	SU7104	Ch Langstone Mill Pond	2007	2007	1	1
			SU7104	Lh Langstone Harbour	1993	2003	8	105
			SU7104	Lh Langstone South Moor	1999	2006	3	11
			SU717047	Ch Langstone	2012	2012	1	4
			SU7204	Ch Chichester Harbour	1995	2005	10	105
			SU7204	Ch Chichester Hbr Hampshire Sectors	2002	2002	1	3
			SU7204	Ch Northney	2009	2009	1	1
			SU7204	Hayling Island	2005	2005	1	1
			SU7204	North Hayling	2009	2009	2	2
			SU7205	Ch Warblington Castle Farm	2004	2004	1	2
			SU7206	Havant	1998	2008	2	15
			SU730042	Ch Chichester Hbr Hampshire Sectors	2002	2002	1	1
			SU7304	Ch Chichester Hbr Hampshire Sectors	2002	2002	2	7
			SU7304	Ch Northney	2005	2005	1	3
			SU7304	Ch Northney, North Common	2009	2009	1	1
			SU7304	Ch Sweare Deep	2007	2007	1	1
			SU7305	Ch Emsworth	2012	2012	1	1
			SU7404	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	2
			SU7404	Ch Emsworth Harbour	2008	2008	2	2

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7406	Ch Emsworth Nore Barn	2009	2009	1	1
			SU7505	Ch Chichester Hbr Hampshire Sectors	2003	2003	1	1
Oenanthe oenanthe	Northern Wheatear	CS	SU7104	Lh Broadmarsh/bedhampton Shore	2010	2010	1	0
			SU7104	Lh Langstone South Moor	1993	2008	93	20
			SU7104	Lh South Moorlangstone Harbour	2010	2010	3	0
			SU7105	Lh South Moor, Langstone Harbour	2011	2011	2	2
			SU7204	Ch Warblington	2011	2011	1	0
			SU7205	Ch Langstone	2006	2006	1	1
			SU7205	Ch Warblington	1994	2010	6	5
			SU7305	Ch Warblington Castle Farm	1998	2012	5	5
			SU7305	Ch Warblington Castle Farm Cbc	1999	2004	2	1
			SU7405	Ch Emsworth	2009	2009	1	1
Pandion haliaetus	Osprey	EU_Bird_1 WCA_s1s1	SU7104	Lh Hayling Oysterbeds	2007	2007	1	1
			SU7104	Lh Langstone Harbour	2002	2002	1	2
			SU7104	Lh Langstone South Moor	2006	2008	2	1
			SU7104	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU725048	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	1
			SU7304	Ch East Hayling	1999	1999	1	1
			SU7304	Ch Northney	2010	2010	1	0
			SU7304	Ch Sweare Deep	2004	2005	2	1
			SU7304	Hayling Island	2001	2007	2	1
			SU7405	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	1
			SU7405	Ch Emsworth Harbour	2007	2007	1	1
			SU7406	Ch Emsworth	2012	2012	1	1
			SU7505	Ch Emsworth	2001	2004	2	1
Panurus biarmicus	Bearded Tit	HBAP WCA_s1s1 CR	SU7505	Ch Emsworth	2001	2001	1	10
Passer domesticus	House Sparrow	BOCC_Red NERC_s41	SU7204	Ch Warblington	2011	2011	1	2
			SU7305	Ch Emsworth	2012	2012	1	20

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7305	Ch Warblington Castle Farm	2007	2012	14	40
			SU7305	Ch Warblington Castle Farm Cbc	1997	2006	6	19
			SU7305	Lh Langstone Harbour	2011	2011	2	25
			SU7305	Warblington Castle Farm	2010	2010	1	33
			SU7406	Ch Emsworth	1999	2011	2	50
			SU7408	Southleigh Forest	2011	2011	2	13
			SU7508	Ch Westbourne	2012	2012	2	60
Pernis apivorus	European Honey-buzzard	EU_Bird_1 HBAP WCA_s1s1 CR	SU70	Sensitive	2000	2012	3	1
Phoenicurus ochruros	Black Redstart	WCA_s1s1 CR	SU70D	Sensitive	2012	2012	1	1
			SU70H	Sensitive	2004	2007	3	1
			SU70H	Sensitive	2005	2005	1	1
			SU70N	Sensitive	2009	2009	1	1
Phoenicurus phoenicurus	Common Redstart	CI	SU7104	Lh Langstone South Moor	1994	2007	15	3
			SU7205	Ch Wade Court - Havant	2005	2005	1	1
			SU7304	Ch Northney	2009	2009	1	1
			SU7304	Ch Northney Paddocks	2009	2009	2	3
			SU7305	Ch Warblington Castle Farm Cbc	1999	1999	1	1
Platalea leucorodia	Eurasian Spoonbill	EU_Bird_1 WCA_s1s1	SU7104	Ch Langstone Mill Pond	2002	2002	1	1
			SU7205	Ch Langstone Mill Pond	2007	2007	1	1
			SU7205	Ch Warblington	2002	2002	2	1
			SU7404	Ch Chichester Hbr Hampshire Sectors	2002	2003	2	1
			SU7405	Ch Emsworth Mill Pond	2002	2002	3	1
Pluvialis apricaria	European Golden Plover	EU_Bird_1 HBAP	SU7104	Ch Chichester Hbr Hampshire Sectors	1997	1999	4	400
			SU7104	Ch Emsworth	2006	2006	1	500
			SU7104	Ch Langstone	2005	2006	3	1200
			SU7104	Ch Langstone Mill Pond	1997	2007	3	600

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7104	Lh Langstone South Moor	1995	2005	5	700
			SU7105	Ch Chichester Hbr Hampshire Sectors	1999	1999	1	150
			SU7105	Ch Langstone	2000	2009	5	1000
			SU7105	Lh Langstone Harbour	2007	2008	2	300
			SU7204	Ch Chichester Harbour	1994	2005	47	5000
			SU7204	Ch Chichester Hbr Hampshire Sectors	1998	2003	21	2500
			SU7204	Ch Northney	2005	2005	3	2500
			SU7204	Hayling Island	2005	2006	2	700
			SU7205	Ch Chichester Hbr Hampshire Sectors	1997	2001	5	300
			SU7205	Ch Langstone	1999	1999	1	160
			SU7205	Ch Warblington	2007	2007	1	80
			SU722047	Ch Chichester Hbr Hampshire Sectors	2002	2002	1	250
			SU722049	Ch Chichester Harbour	2000	2000	1	250
			SU723050	Ch Chichester Harbour	2000	2000	3	300
			SU724050	Ch Langstone	2002	2002	1	380
			SU725052	Ch Chichester Harbour	2000	2000	1	121
			SU726050	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	70
			SU7304	Ch Chichester Hbr Hampshire Sectors	1998	2001	2	850
			SU7304	Ch Northney	2005	2006	2	1100
			SU7304	Ch Sweare Deep	1997	2008	3	800
			SU7304	Ch Warblington	2006	2006	1	400
			SU7404	Ch Emsworth Harbour	2009	2009	1	125
			SU7404	Ch Northney	2004	2004	1	550
			SU7407	Southleigh Farm	1999	1999	1	50
			SU7505	Ch Emsworth Harbour	2008	2008	1	300
Pluvialis squatarola	Grey Plover	HBAP CI	SU7204	Ch Chichester Harbour	1995	2005	13	2026
			SU7205	Ch Warblington	2005	2005	1	1
			SU744051	Ch Warblington	2008	2008	1	30
Podiceps auritus	Slavonian Grebe	EU_Bird_1 HBAP	SU7104	Lh Langstone Harbour	1994	2003	15	3
			SU7105	Lh Langstone Harbour	2003	2003	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
		WCA_s1s1	SU7204	Ch Chichester Harbour	2005	2005	1	6
Podiceps cristatus	Great Crested Grebe	CI	SU7104	Lh Langstone Harbour	1998	1999	3	103
			SU7204	Ch Chichester Harbour	1995	2005	10	37
			SU7405	Ch Emsworth Mill Pond	2007	2007	1	1
			SU744051	Ch Warblington	2007	2007	1	1
Podiceps nigricollis	Black-necked Grebe	HBAP WCA_s1s1	SU7104	Lh Langstone Harbour	2000	2006	12	17
			SU7204	Ch Langstone	2012	2012	1	2
			SU7205	Ch Warblington	1994	2007	3	3
			SU725050	Ch Warblington	2012	2012	1	2
Poecile palustris	Marsh Tit	BOCC_Red	SU7208	Ha Leigh Park Havant	2000	2000	1	1
			SU7305	Ch Warblington Castle Farm Cbc	1999	1999	1	1
			SU733061	Ch Warblington Castle Farm Cbc	1999	1999	1	1
			SU7408	Ch Emsworth	2005	2005	1	1
			SU7408	Hollybank Woods	2006	2006	1	1
			SU7408	Southleigh Forest	2006	2006	1	1
			SU744082	Hollybank Woods	1999	1999	1	1
			SU747084	Ch Emsworth	2004	2004	1	1
Pyrrhula pyrrhula	Common Bullfinch	HBAP	SU7104	Ch Langstone Mill Pond	2007	2007	1	3
			SU7104	Lh Langstone South Moor	2004	2007	4	2
			SU7206	Denvilles (havant)	2011	2011	2	0
			SU7305	Ch Warblington Castle Farm	2011	2012	2	4
			SU7305	Ch Warblington Castle Farm Cbc	1999	1999	1	1
			SU7508	Ch Westbourne	2012	2012	1	2
Rallus aquaticus	Water Rail	CS	SU7104	Ch Langstone Mill Pond	1999	2007	8	2
			SU7104	Lh Langstone South Moor	1999	1999	1	1
			SU7105	Havant	2005	2005	1	1
			SU719052	Ch Wade Court - Havant	2004	2004	1	2
			SU7205	Ch Langstone Mill Pond	2005	2005	2	2
			SU7305	Ch Warblington Castle Farm	1996	2008	2	1
			SU7406	Ch Emsworth	2012	2012	2	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU751061	Brook Meadow, Emsworth	2008	2008	2	1
			SU751063	Brook Meadow, Emsworth	2012	2012	2	1
Recurvirostra avosetta	Pied Avocet	EU_Bird_1 WCA_s1s1 CR	SU7104	Lh Langstone Harbour	2006	2006	1	2
			SU717047	Ch Langstone	2010	2010	1	0
Regulus ignicapilla	Firecrest	HBAP WCA_s1s1 CS	SU70C	Sensitive	2006	2006	1	1
			SU70C	Sensitive	2008	2008	1	1
			SU70D	Sensitive	2008	2008	1	1
			SU70H	Sensitive	1996	2005	2	1
			SU70H	Sensitive	2004	2004	1	1
			SU70H	Sensitive	2012	2012	1	1
			SU70I	Sensitive	2010	2010	1	1
			SU70I	Sensitive	2012	2012	1	2
			SU70J	Sensitive	2000	2003	2	1
			SU70P	Sensitive	2004	2004	1	1
Riparia riparia	Sand Martin	CS	SU7104	Lh Langstone South Moor	1996	2007	4	6
			SU7104	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU7304	Ch Sweare Deep	2007	2007	1	3
			SU7405	Ch Emsworth Harbour	2010	2010	1	0
Saxicola rubetra	Whinchat	HBAP CR	SU7104	Lh Langstone South Moor	1994	2007	27	4
			SU7104	Lh South Moor, Langstone Harbour	2009	2009	1	1
			SU7104	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU7205	Ch Warblington Castle Farm	2005	2005	1	1
			SU7305	Ch Emsworth	2010	2010	1	0
			SU7305	Ch Warblington Castle Farm Cbc	2004	2004	1	1
Stercorarius parasiticus	Arctic Skua	BOCC_Red	SU7104	Lh Langstone South Moor	2000	2000	2	1
Sterna hirundo	Common Tern	EU_Bird_1 CR	SU7104	Lh Langstone Harbour	1995	2000	2	25
			SU7104	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU720074	Havant	2000	2000	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7304	Ch Chichester Harbour	2004	2004	1	5
			SU744051	Ch Warblington	2007	2008	2	1
Sterna paradisaea	Arctic Tern	EU_Bird_1	SU7104	Lh Langstone Harbour	2001	2003	2	19
			SU7304	Ch Sweare Deep	1999	2005	2	1
Sterna sandvicensis	Sandwich Tern	EU_Bird_1 CR	SU7104	Ch Langstone	2004	2004	1	1
			SU7104	Lh Langstone Harbour	1993	2003	2	1
			SU7104	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU7105	Ch Langstone	2007	2007	1	1
			SU7106	Havant	2012	2012	1	2
			SU720050	Ch Warblington	2010	2010	1	0
			SU7204	Ch Chichester Harbour	2004	2005	14	5
			SU7204	Ch Chichester Hbr Hampshire Sectors	2003	2003	2	1
			SU7204	Ch Langstone	2005	2012	4	10
			SU7204	Ch Northney	2006	2006	1	2
			SU7205	Ch Langstone	2007	2007	1	3
			SU7205	Ch Warblington	2007	2012	3	1
			SU7206	Ch Langstone	2005	2005	1	1
			SU7304	Ch Sweare Deep	2004	2004	2	1
			SU7304	Lh Langstone Harbour	2010	2010	1	0
			SU7305	Ch Chichester Hbr Hampshire Sectors	2007	2007	1	1
			SU7305	Ch Emsworth Nore Barn	2006	2006	1	1
			SU7404	Ch Emsworth Channel	2007	2007	1	1
			SU7405	Ch Emsworth Harbour	2008	2010	4	7
			SU741051	Ch Emsworth Nore Barn	2008	2008	1	3
			SU744051	Ch Warblington	2007	2008	3	4
			SU7505	Ch Emsworth Harbour	2008	2008	1	1
Sternula albifrons	Little Tern	EU_Bird_1 HBAP WCA_s1s1 CR	SU7104	Lh Langstone Harbour	1999	1999	1	4

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Streptopelia turtur	European Turtle Dove	BOCC_Red HBAP NERC_s41	SU751050	Ch Emsworth	2009	2009	1	1
			SU751061	Brook Meadow, Emsworth	2008	2008	1	1
Sturnus vulgaris	Common Starling	BOCC_Red	SU7104	Lh Langstone South Moor	2006	2006	1	1250
			SU7205	Ch Warblington	2007	2007	1	200
			SU7305	Ch Warblington	2006	2006	1	12
			SU7305	Ch Warblington Castle Farm	2012	2012	1	100
			SU7305	Ch Warblington Castle Farm Cbc	1997	2006	6	8
			SU7406	Ch Emsworth	1999	2011	2	90
Sylvia undata	Dartford Warbler	EU_Bird_1 HBAP WCA_s1s1 CI	SU70C	Sensitive	2000	2000	3	1
			SU70P	Sensitive	2006	2006	1	1
Tadorna tadorna	Common Shelduck	CI	SU7104	Ch Langstone Mill Pond	2001	2001	1	1
			SU7104	Lh Langstone South Moor	2006	2006	1	6
			SU7105	Lh Langstone Harbour	2007	2007	1	60
			SU7204	Ch Chichester Harbour	1995	2005	14	825
			SU7204	Ch Northney	2006	2006	1	102
			SU7205	Ch Warblington	2006	2006	1	10
			SU7304	Ch Sweare Deep	1996	2005	2	24
			SU7304	Ch Warblington	2005	2005	1	64
			SU7305	Ch Warblington Castle Farm	2010	2010	1	0
			SU7305	Ch Warblington Castle Farm Cbc	1996	2004	3	1
			SU736051	Ch Chichester Hbr Hampshire Sectors	2007	2007	1	2
			SU7405	Ch Emsworth Nore Barn	2012	2012	1	38
			SU744051	Ch Warblington	2007	2009	7	124
			SU7505	Ch Emsworth Harbour	2007	2007	1	54
Tringa nebularia	Common Greenshank	WCA_s1s1	SU7104	Ch Langstone	2006	2006	2	4
			SU7104	Lh Langstone Harbour	2006	2007	4	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7104	Lh Langstone South Moor	1996	2006	4	2
			SU7104	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU7105	Ch Langstone	2000	2007	3	3
			SU7105	Lh Langstone Harbour	2007	2010	3	1
			SU715050	Lh South Moor, Langstone Harbour	2012	2012	1	1
			SU717047	Ch Langstone	2012	2012	1	8
			SU720050	Ch Langstone	2012	2012	1	3
			SU720050	Ch Warblington	2010	2010	2	0
			SU7204	Ch Chichester Harbour	1995	2005	8	15
			SU7204	Ch Chichester Hbr Hampshire Sectors	2002	2003	2	1
			SU7204	Ch Langstone	1999	2002	2	2
			SU7204	Ch Northney	2007	2010	4	2
			SU7204	Ch Warblington	2003	2012	3	7
			SU7204	Lh Langstone Harbour	2007	2012	5	4
			SU7205	Ch Chichester Hbr Hampshire Sectors	1999	1999	1	1
			SU7205	Ch Warblington	1996	2012	7	4
			SU725045	Ch Chichester Hbr Hampshire Sectors	2001	2001	1	2
			SU725050	Ch Warblington	2012	2012	1	2
			SU7304	Ch Chichester Hbr Hampshire Sectors	2003	2003	2	3
			SU7304	Ch Northney	2003	2003	1	2
			SU7304	Ch Sweare Deep	1995	2008	4	4
			SU7305	Ch Chichester Hbr Hampshire Sectors	1999	2007	2	7
			SU7305	Ch Emsworth	1998	2012	9	5
			SU7305	Ch Emsworth Nore Barn	2006	2009	33	15
			SU7305	Ch Warblington Castle Farm	1995	2010	6	2
			SU736052	Ch Chichester Hbr Hampshire Sectors	2003	2003	1	1
			SU740053	Ch Emsworth Nore Barn	2008	2008	5	7
			SU7404	Ch Emsworth Harbour	2008	2008	1	18
			SU7405	Ch Emsworth	1998	2003	2	1
			SU7405	Ch Emsworth Harbour	2004	2010	4	6

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7406	Ch Emsworth Nore Barn	2009	2009	1	2
			SU747053	Ch Chichester Harbour	2000	2000	1	1
			SU7505	Ch Emsworth	1993	2012	16	25
			SU7505	Ch Emsworth Harbour	1999	2009	31	11
			SU751054	Ch Chichester Harbour	2000	2000	5	7
			SU752051	Ch Emsworth Harbour	2007	2007	21	10
Tringa ochropus	Green Sandpiper	WCA_s1s1	SU7104	Ch Langstone Mill Pond	1997	2006	5	1
			SU7104	Lh Langstone Harbour	2003	2003	1	1
			SU7104	Lh Langstone South Moor	1994	2005	47	2
			SU7104	Lh South Moorlangstone Harbour	2010	2010	3	0
			SU7105	Ch Langstone	1999	1999	1	2
			SU7105	Lh Langstone South Moor	2003	2003	1	1
			SU7106	Havant	2001	2012	4	5
			SU716052	Ch Langstone	2000	2000	1	1
			SU720051	Ch Langstone	1999	1999	1	1
			SU720059	Havant	2012	2012	1	2
			SU720060	Havant	2012	2012	1	1
			SU7204	Ch Langstone	1999	1999	1	1
			SU7205	Ch Langstone	1999	1999	1	1
			SU7205	Ch Wade Court - Havant	1994	2002	36	1
			SU7205	Ch Warblington	1995	2000	4	1
			SU721052	Ch Wade Court - Havant	1999	1999	1	1
			SU721060	Havant	2012	2012	1	2
			SU727077	Havant	2003	2003	1	1
			SU7305	Ch Emsworth	2008	2008	1	1
			SU7305	Ch Warblington Castle Farm	1997	1999	2	2
			SU7305	Ch Warblington Castle Farm Cbc	1999	2003	2	1
			SU7308	Ha Little Leigh Farm	2002	2002	2	1
			SU735051	Ch Conigar Point	2009	2009	1	1
			SU7505	Ch Emsworth	1994	2001	10	3

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7505	Ch Emsworth Slipper Pond	2008	2008	1	2
			SU7506	Ch Emsworth	1993	2001	8	2
			SU7506	Ch Emsworth River Ems	2002	2002	2	3
Tringa totanus	Common Redshank	HBAP	SU7204	Ch Chichester Harbour	1995	2005	15	1754
			SU7204	Lh Langstone Harbour	2012	2012	1	120
			SU7206	Su70	2000	2000	1	2
			SU7304	Ch Chichester Harbour	2004	2004	1	136
			SU7304	Ch Northney	1995	2007	2	279
			SU7304	Ch Northney, North Common	2009	2009	1	245
			SU7304	Ch Sweare Deep	1999	1999	1	102
			SU744051	Ch Warblington	2008	2008	1	30
Turdus iliacus	Redwing	BOCC_Red WCA_s1s1	SU7104	Lh Langstone South Moor	2005	2005	1	16
			SU7104	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU7107	Havant	2004	2004	2	10
			SU7204	Ch Warblington	2011	2011	1	37
			SU7205	Ch Wade Court - Havant	1994	2004	5	150
			SU7205	Ch Warblington	1996	2006	2	40
			SU7206	Denvilles (havant)	2011	2011	1	0
			SU724059	Havant	2003	2003	1	50
			SU7305	Ch Warblington Castle Farm	2004	2004	1	65
			SU7305	Ch Warblington Castle Farm Cbc	2004	2004	1	1
			SU7405	Ch Emsworth	2010	2010	1	0
			SU7507	Ch Emsworth	2012	2012	1	30
			SU751057	Ch Emsworth	2009	2009	1	1
Turdus philomelos	Song Thrush	BOCC_Red HBAP	SU7104	Lh South Moorlangstone Harbour	2010	2010	1	0
			SU7206	Denvilles (havant)	2011	2011	1	0
			SU7305	Ch Warblington	2006	2006	1	1
			SU7305	Ch Warblington Castle Farm	2007	2007	1	2
			SU7305	Ch Warblington Castle Farm Cbc	1997	2006	7	7
			SU7404	Ch Emsworth Harbour	2011	2011	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7408	Southleigh Forest	2011	2011	1	5
Turdus pilaris	Fieldfare	BOCC_Red WCA_s1s1	SU7104	Lh Langstone South Moor	2003	2004	2	15
			SU7106	Havant	2003	2003	1	6
			SU729055	Ch Warblington Castle Farm	2010	2010	1	0
			SU7304	Ch Northney Paddocks	2010	2010	1	0
			SU7305	Ch Emsworth	2010	2010	1	0
			SU7305	Ch Warblington Castle Farm	2010	2010	1	0
			SU7405	Ch Emsworth	2010	2010	1	0
Tyto alba	Barn Owl	WCA_s1s1	SU7104	Lh Langstone South Moor	1999	2003	2	1
			SU7105	Lh Brockhampton Stream	2010	2010	1	0
			SU7205	Ch Wade Court - Havant	2003	2003	1	1
			SU7305	Ch Warblington Castle Farm	2010	2010	1	0
			SU735054	Ch Warblington Castle Farm	2010	2010	1	0
Upupa epops	Hoopoe	WCA_s1s1	SU7105	Ch Langstone	2005	2005	1	1
Vanellus vanellus	Northern Lapwing	BOCC_Red HBAP NERC_s41	SU7104	Lh Langstone South Moor	2006	2007	4	60
			SU7105	Lh Langstone Harbour	2007	2007	2	150
			SU7204	Ch Chichester Harbour	1995	2005	18	3473
			SU7204	Ch Chichester Hbr Hampshire Sectors	1998	2002	5	350
			SU7204	Lh Langstone Harbour	2012	2012	1	200
			SU7205	Ch Chichester Harbour	1998	2004	3	301
			SU7205	Ch Warblington	2006	2006	1	260
			SU7206	Havant	2009	2009	1	13
			SU7304	Ch Chichester Harbour	2004	2004	2	300
			SU7305	Ch Emsworth	2012	2012	1	100
			SU7305	Ch Warblington	2006	2006	1	200
			SU7305	Ch Warblington Castle Farm	2007	2007	2	1
			SU7407	Southleigh Farm	1999	1999	1	250
			SU744051	Ch Warblington	2007	2009	3	50
			SU7505	Ch Emsworth	1995	2012	3	200

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Higher plants - Flowering Plants								
Alisma lanceolatum	Narrow-leaved Water-plantain	CR	SU746065 SU747060 SU747060	Land West of Emsworth Recreation Ground (1) Bridge Road Car Park, Emsworth Bridge Road Car Park Verge	2011 2006 2009	2011 2006 2009	1 * 1 1 *	0 1 0
Alopecurus pratensis x geniculatus = A. x brachystylus	Foxtail	CR	SU724041	Northney	2000	2000	1	1
Anagallis arvensis subsp. foemina	Blue Pimpernel	NS	SU7205	Havant Town East	2008	2008	1	0
Arabis hirsuta	Hairy Rock-cress	CS	SU7308 SU735083	Barton's Copse Comley Hill	1997 1997	1997 1997	1 1	0 1
Bromus commutatus	Meadow Brome	CS	SU751061	Lumley Meadow (known as Brook Meadow)	2006	2006	1 *	0
Bromus racemosus	Smooth Brome	CS	SU735054 SU735054	Church Path Meadow Church Path Meadow	1997 1997	1997 1997	1 1 *	1 0
Bupleurum tenuissimum	Slender Hare's-ear	IUCN_GB_2001:VU NS HBAP NERC_s41 CR	SU7104 SU7104 SU735051 SU738053 SU743044	Havant Langstone South Moor Langstone Conigar Point Meadow Nore Grassland & Saltmarsh Fowley Island	2008 1999 1997 2011 1997	2008 1999 2011 2011 1997	1 1 2 * 1 * 1	0 1 0 0 1
Carex divisa	Divided Sedge	IUCN_GB_2001:VU NS HBAP NERC_s41 CS	SU729051 SU735051 SU751060 SU751061	Warblington Marsh, Havant Conigar Point Meadow Brook Meadows, Lumley Lumley Meadow (known as Brook Meadow)	2011 2011 2012 1998	2011 2011 2012 2006	1 1 * 1 2 *	0 0 0 0
Carex extensa	Long-bracted Sedge	CS	SU729050 SU729051 SU735051	Warblington Meadows Warblington Sssi Conigar Point Meadow	2011 2008 2011	2011 2008 2011	1 1 1 *	0 0 0
Crepis biennis	Rough Hawk's-	CR	SU7308	Comley Hill	1997	1997	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
	beard							
Cynoglossum officinale	Hound's-tongue	IUCN_GB_2001:NT sHS	SU725043	Duckard Point, Hayling Island	2011	2012	2	50
Eleocharis uniglumis	Slender Spike-rush	CS	SU751060	Brook Meadows, Lumley	2012	2012	1	0
Festuca rubra subsp. litoralis	Red Fescue	CR	SU738053	Emsworth Harbour	2012	2012	1	0
Geranium rotundifolium	Round-leaved Crane's-bill	CS	SU7104	Havant Langstone Ship Inn	2008	2008	1	0
			SU7306	Havant Town East	2008	2008	1	0
			SU7406	Nr Emsworth Railway Station	1997	1997	1	1
Hippophae rhamnoides	Sea-buckthorn	NS CI	SU748055	Emsworth	1997	1997	1	1
Inula crithmoides	Golden-samphire	NS HBAP	SU7104	Langstone	1999	1999	1	0
			SU724052	Warblington	2006	2006	1	6
			SU726052	Warblington	2006	2006	1	10
			SU7305	Nr Church Path, Warblington	1997	1997	1	1
			SU731042	Hayling Island	2000	2000	1	1
			SU735051	Conigar Point Meadow	2011	2011	1 *	0
			SU738053	Nore Grassland & Saltmarsh	2011	2011	1 *	0
Juncus subnodulosus	Blunt-flowered Rush	CS	SU730052	Warblington Meadows	1998	1998	1	1
			SU730052	Warblington Meadow	1998	1998	1 *	0
Leucojum aestivum subsp. pulchellum	Summer Snowflake	HBAP	SU7104	Langtone, Mill Lane	2014	2014	1	0
Limonium humile	Lax-flowered Sea-lavender	NS CS	SU721049	Langstone Bridge	1998	1998	1	1
			SU721050	Wade Court	1997	1997	1	1
			SU735051	Conigar Point Meadow	2011	2011	1 *	0
Linaria repens	Pale Toadflax	CS	SU748055	Emsworth	1997	1997	1	1
Medicago polymorpha	Toothed Medick	NS CR	SU729051	Warblington Sssi	2008	2008	1	0
Misopates	Weasel's-snout	IUCN_GB_2001:VU	SU7206	Havant New Lane	2008	2008	2	0

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
orontium			SU723068	Allotments By New Lane In Havant	2005	2005	1	0
			SU723068	Denvilles	1997	1997	1	1
			SU736056	Brook Farm B (land West of Emsworth)	2007	2007	1 *	0
			SU736057	Brook Farm, Warblington	2007	2007	1	0
Ononis spinosa	Spiny Restharrow	CS	SU743044	Fowley Island	1997	1997	1	1
Orchis morio	Green-winged Orchid	IUCN_GB_2001:NT HBAP	SU749078	Nr Most Of Horndean Road	1997	1997	2	1
Orobanche hederae	Ivy Broomrape	CR	SU7106	Havant Town	2008	2008	1	0
Parapholis incurva	Curved Hard-grass	NS HBAP CS	SU7205	Wade Court	1997	1997	2	1
Poa infirma	Early Meadow-grass	NS	SU725042	Northney Marina	2000	2000	1	1
Ranunculus baudotii	Brackish Water-crowfoot	CS	SU7106	Havant Town Centre	2008	2008	1	0
			SU717062	Havant Park	1997	1997	1	1
Ranunculus penicillatus	Stream Water-crowfoot	HBAP	SU715057	Langstone	1998	1998	1	1
			SU717061	Havant Park	2012	2012	1	0
			SU752060	Lumley	1998	1998	1	1
Raphanus raphanistrum subsp. maritimus	Sea Radish	CS	SU7104	South Moor	1997	1997	1	1
Rorippa amphibia	Great Yellow-cress	CS	SU751061	Lumley Meadow (known as Brook Meadow)	2006	2006	1 *	0
Rosa rubiginosa	Sweet-briar	CS	SU725041	Northney, Hayling Island	2011	2011	1	0
Salvia verbenaca	Wild Clary	CR	SU749069	Christopher Way, Emsworth	2010	2010	1	24
Sambucus ebulus	Dwarf Elder	CR	SU7206	Havant Town	2008	2008	1	0
			SU721059	Wade Court	1997	1997	1	1
			SU721060	Denvilles	1998	1998	1	1
Samolus valerandi	Brookweed	CS	SU7104	Havant Langstone South Moor	2008	2008	1	0
			SU7205	Havant Warblington Sssi	2008	2008	1	0
			SU729051	Warblington Castle Farm, Warblington	1987	1995	2	115

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU729051	Warblington Marsh, Havant	2011	2011	1	0
			SU729051	Warblington Sssi	2008	2008	1	0
			SU72970508	Wade Court, Langstone	1997	1997	1	1
			SU730052	Nr Church Path	1997	1997	1	1
			SU730052	Warblington Meadow	1983	1998	2 *	0
			SU731053	Sssi Marsh At Warblington In Havant	2005	2005	1	0
Sarcocornia perennis	Perennial Glasswort	NS	SU743044	Fowley Island	1998	1998	1	1
Saxifraga tridactylites	Rue-leaved Saxifrage	CS	SU7106	Havant Town	2008	2008	1	0
			SU719062	Havant Park	2012	2012	1	0
			SU7206	Havant Town	2008	2008	1	0
Securigera varia	Crown Vetch	CI	SU7208	Havant Leigh Park	2008	2008	1	0
Sedum anglicum	English Stonecrop	CS	SU729051	Warblington Sssi	2008	2008	1	0
			SU729053	Wade Court	1997	1997	1	1
Seriphidium maritimum	Sea Wormwood	CS	SU7104	Langstone	1999	1999	1	0
			SU718046	South Moor	1999	1999	2	1
			SU718047	Langstone Bridge N	2000	2000	1	0
			SU738053	Nore Grassland & Saltmarsh	2011	2011	1 *	0
Spartina maritima x alterniflora = S. x townsendii	Townsend's Cord-grass	IUCN_GB_2001:EN NS NERC_s41 CR	SU739054	Nr Church Path	1999	1999	1	1
Spergula arvensis	Corn Spurrey	IUCN_GB_2001:VU	SU7305	Havant Warblington Farm	2008	2008	1	0
			SU736056	Brook Farm B (land West of Emsworth)	2007	2007	1 *	0
			SU747079	Land North of Hollybank Lane and Long Copse Lane, Emsworth	2011	2011	1 *	0
Spiranthes spiralis	Autumn Lady's-tresses	IUCN_GB_2001:NT	SU749078	Nr Most Of Horndean Road	1997	1997	1	1
Stachys arvensis	Field Woundwort	IUCN_GB_2001:NT	SU732053	Nr Church Path	1999	1999	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Torilis arvensis	Spreading Hedge-parsley	IUCN_GB_2001:EN NS HBAP NERC_s41 CR	SU721053	The Old Farm House Havant	2010	2010	1	8
Trifolium glomeratum	Clustered Clover	NS CS	SU7306	Havant East A27 Underpass	2008	2008	1	0
			SU731060	Warblington	2012	2012	1	1
			SU732060	Old A259 Alignment, Warblington	2007	2007	1	0
Trifolium squamosum	Sea Clover	NS HBAP CR	SU735051	Conigar Point, Warblington	2009	2009	1	0
			SU736050	Conigar Point	2012	2012	1	55
Zostera noltei	Dwarf Eelgrass	IUCN_GB_2001:VU NS HBAP CS	SU7304	Off Conigar Point	2001	2001	1	0
Invertebrates - Coleoptera								
Lucanus cervus	Stag Beetle	EU_Hab_2np NS HBAP NERC_s41	SU7106	Havant Area 7106	2002	2002	1	1
			SU7106	Su7106	2002	2002	1	1
			SU717065	Su717065	2002	2002	1	1
			SU718059	Su718059	2006	2006	4	1
			SU718068	Su718068	2002	2002	1	1
			SU720066	Su720066	2002	2002	1	1
			SU7206	Su7206	2007	2007	1	1
			SU721060	Su721060	2002	2002	1	1
			SU722063	Su722063	2007	2007	1	1
			SU7225706241	20 Oaklands Road, Havant	2010	2010	1	0
			SU723076	Su723076	2006	2006	1	1
			SU724062	Su724062	2002	2002	1	1
			SU725060	Su725060	2006	2006	2	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU725062	Su725062	2007	2007	2	1
			SU726066	Su726066	2002	2002	1	0
			SU728071	Su728071	2007	2007	1	1
			SU739055	Su739055	2006	2006	1	1
			SU7405	Emsworth Area 7405	2008	2008	1	1
			SU7405	Su7405	2002	2002	2	1
			SU743057	Su743057	2002	2002	3	1
Invertebrates - Diptera								
Criorhina asilica	Criorhina asilica	NN	SU745082	Hollybank Woods, Emsworth	2004	2004	1	1
Volucella zonaria	Volucella zonaria	NN	SU7205	Wade Court Park, Havant.	2002	2002	1	1
Invertebrates - Lepidoptera								
Acronicta rumicis	Knot Grass	NERC_s41	SU7408	1-km Square Su7408	2000	2000	1	0
			SU743083	Southleigh Forest	1999	1999	1	1
Agdistis bennetii	Saltmarsh Plume	CR	SU723042	Northney Saltmarsh, Hayling	1984	1999	2	0
			SU724043	Langstone Hotel Bay	2009	2009	2	0
Apatura iris	Purple Emperor	IUCN_GB_2001:NT HBAP CS	SU7408	Havant Thicket	2013	2013	2	2
			SU7408	Southleigh Forest	2013	2013	2	4
			SU7408	Southleigh Woods	2012	2012	1	4
Apoda limacodes	Festoon	HBAP	SU7506	Brook Meadow Nr, Emsworth	2005	2005	2	1
Argynnis paphia	Silver-washed Fritillary	HBAP CI	SU7408	Havant Thicket	2013	2013	2	12
			SU7408	Southleigh Forest	2013	2013	2	13
			SU7408	Southleigh Woods	2012	2012	1	2
			SU743080	Southleigh Forest, Havant	2010	2010	1	4
			SU744080	Southleigh Forest, Havant	2011	2011	1	7
			SU745084	Hollybank Woods, Emsworth	2012	2012	1	3
			SU748060	Emsworth	2010	2010	1	3

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Boloria euphrosyne	Pearl-bordered Fritillary	IUCN_GB_2001:EN HBAP NERC_s41 CS	SU7408	Southleigh Forest	2004	2004	1	2
Cochylis molliculana	Ox-tongue Conch	CS	SU7506	Brook Meadow Nr, Emsworth	2005	2005	2	2
Coenonympha pamphilus	Small Heath	IUCN_GB_2001:NT NERC_s41	SU7408	Southleigh Forest	2013	2013	1	1
Coleophora salicorniae	Glasswort Case-bearer	CR	SU723042	Northney Saltmarsh, Hayling	1999	1999	1	1
Cosmiotes consortella	Field Dwarf	CR	SU743083	Southleigh Forest	2000	2000	1	1
Cucullia asteris	Star-wort	HBAP	SU7204 SU7304	1-km Square Su7204 1-km Square Su7304	2000 2000	2000 2000	1 1	0 0
Cymatophorima diluta	Oak Lutestring	NERC_s41	SU7408 SU7408 SU743083	1-km Square Su7408 Southleigh Forest Southleigh Forest	2000 2000 2000	2000 2000 2000	1 1 1	0 3 0
Diarsia rubi	Small Square-spot	NERC_s41	SU7205	Wade Court Park, Havant.	2001	2001	1	1
Epinotia tedella	Common Spruce Bell	CR	SU743083	Southleigh Forest	1999	1999	1	0
Eucosma obumbratana	Two-coloured Bell	CR	SU7506	Brook Meadow Nr, Emsworth	2005	2005	2	1
Eucosma tripoliana	Saltmarsh Bell	CR	SU723042	Northney Saltmarsh, Hayling	1999	1999	1	1
Goniodoma limoniella	Silver-streaked Case-bearer	CR	SU7204	Northney	2011	2011	1	1
Gynnidomorpha vectisana	Small Saltern Conch	CR	SU723042	Northney Saltmarsh, Hayling	1984	1999	3	0
Heliozela hammoniella	Birch Lift	CR	SU743083	Southleigh Forest	1999	1999	1	2
Hepialus humuli	Ghost Moth	NERC_s41	SU7204	1-km Square Su7204	2000	2000	1	0

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Hipparchia semele	Grayling	IUCN_GB_2001:VU NERC_s41	SU731054	Warblington	2011	2011	1	1
Hoplodrina blanda	Rustic	NERC_s41	SU7408	1-km Square Su7408	2000	2000	1	0
			SU743083	Southleigh Forest	1999	1999	1	0
			SU7506	Brook Meadow Nr, Emsworth	2005	2005	2	1
Hydraecia micacea	Rosy Rustic	NERC_s41	SU7204	1-km Square Su7204	1980	2000	2	0
Lacanobia suasa	Dog's Tooth	CS	SU7204	1-km Square Su7204	2000	2000	1	0
Lasiommata megera	Wall	IUCN_GB_2001:NT NERC_s41 CS	SU729064	Warblington Station	2006	2006	1	1
			SU734040	Hayling Island	2011	2011	1	1
Leucoma salicis	White Satin Moth	CS	SU7204	1-km Square Su7204	2000	2000	1	0
Leucoptera spartifoliella	Broom Bent-wing	CR	SU743083	Southleigh Forest	1999	1999	1	0
Limenitis camilla	White Admiral	IUCN_GB_2001:VU NERC_s41	SU7408	Havant Thicket	2013	2013	2	5
			SU743080	Southleigh Forest, Havant	2010	2010	1	1
			SU744080	Southleigh Forest, Havant	2011	2011	1	1
			SU745084	Hollybank Woods, Emsworth	2012	2012	1	2
Mythimna favicolor	Mathew's Wainscot	HBAP	SU7204	1-km Square Su7204	2000	2000	1	0
Pelurga comitata	Dark Spinach	NERC_s41 CS	SU7204	1-km Square Su7204	2000	2000	1	0
Spilosoma luteum	Buff Ermine	NERC_s41	SU7506	Brook Meadow Nr, Emsworth	2005	2005	2	1
Tyria jacobaeae	Cinnabar	NERC_s41	SU7104	South Moor	2005	2005	1	12
			SU7204	1-km Square Su7204	2000	2000	1	0
			SU746063	Nr Emsworth Railway Station	2006	2006	1	1
Watsonalla binaria	Oak Hook-tip	NERC_s41	SU7408	1-km Square Su7408	2000	2000	1	0
			SU743083	Southleigh Forest	1999	1999	1	1
Mammals - Marine								

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Phoca vitulina	Common Seal	EU_Hab_2np EU_Hab_5 NERC_s41	SU718046	Broad Point 50 Metres Off Long Island, Langstone Harbour	2010	2010	1	1
Mammals - Terrestrial (bats)								
Eptesicus serotinus	Serotine	EU_Hab_4 HBAP WCA_s5s94b WCA_s5s94c HabReg_s2	SU7106	Sensitive	2003	2003	1	1
			SU7205	Sensitive	2001	2001	1	0
			SU7205	Sensitive	2002	2010	2	1
			SU7205	Sensitive	2011	2011	1	3
			SU7305	Sensitive	2011	2011	1	1
			SU7406	Sensitive	2012	2012	2	0
			SU7407	Sensitive	2009	2009	3	0
			SU7506	Sensitive	2010	2010	1	1
			SU7507	Sensitive	2009	2009	1	0
			SU7507	Sensitive	2009	2009	1	0
Myotis	Unidentified Bat	WCA_s5s94b WCA_s5s94c HabReg_s2	SU7105	Sensitive	2012	2012	1	1
			SU7205	Sensitive	2011	2011	1	1
			SU7205	Sensitive	2011	2011	1	2
			SU7205	Sensitive	2013	2013	1	1
			SU7205	Sensitive	2013	2013	2	1
			SU7305	Sensitive	2010	2010	1	1
			SU7308	Sensitive	2011	2011	4	1
			SU7407	Sensitive	2009	2009	4	0
			SU7408	Sensitive	2011	2011	1	1
			SU7506	Sensitive	2009	2009	1	1
			SU7506	Sensitive	2010	2010	1	1
			SU7507	Sensitive	2009	2009	2	0
			SU7507	Sensitive	2009	2009	4	0
			SU7508	Sensitive	2011	2011	1	1
Myotis bechsteinii	Bechstein's Bat	EU_Hab_2np	SU70N	Sensitive	2009	2009	1	51

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
		EU_Hab_4 HBAP NERC_s41 WCA_s5s94b WCA_s5s94c HabReg_s2 CI	SU70P SU70P	Sensitive Sensitive	2009 2009	2009 2009	2 4	1 26
Myotis brandtii	Brandt's Bat	EU_Hab_4 WCA_s5s94b WCA_s5s94c HabReg_s2	SU7405	Sensitive	2007	2007	1	1
Myotis daubentonii	Daubenton's Bat	EU_Hab_4 WCA_s5s94b WCA_s5s94c HabReg_s2	SU7205 SU7205 SU7505	Sensitive Sensitive Sensitive	2001 2002 2013	2001 2002 2013	1 1 1	0 0 0
Myotis mystacinus	Whiskered Bat	EU_Hab_4 WCA_s5s94b WCA_s5s94c HabReg_s2	SU7508	Sensitive	2009	2009	1	1
Myotis nattereri	Natterer's Bat	EU_Hab_4 WCA_s5s94b WCA_s5s94c HabReg_s2	SU7205 SU7505	Sensitive Sensitive	2009 2003	2009 2003	1 1	1 1
Nyctalus noctula	Noctule Bat	EU_Hab_4 NERC_s41	SU7104 SU7105	Sensitive Sensitive	2011 2012	2011 2012	1 1	2 2

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
		WCA_s5s94b WCA_s5s94c HabReg_s2	SU7106	Sensitive	2000	2012	4	1
			SU7106	Sensitive	2010	2010	1	1
			SU7106	Sensitive	2012	2012	1	1
			SU7205	Sensitive	2007	2007	1	1
			SU7205	Sensitive	2011	2011	1	1
			SU7205	Sensitive	2011	2011	1	1
			SU7305	Sensitive	2011	2011	1	1
			SU7308	Sensitive	2011	2011	3	1
			SU7506	Sensitive	2010	2010	1	1
			SU7507	Sensitive	2009	2009	1	0
			SU7507	Sensitive	2009	2009	2	0
Pipistrellus	Pipistrelle Bat species	WCA_s5s94b WCA_s5s94c HabReg_s2	SU7106	Sensitive	1999	2010	10	5
			SU715053	Sensitive	2001	2001	1	0
			SU716053	Sensitive	2001	2001	1	11
			SU716056	Sensitive	1986	1990	2	60
			SU717055	Sensitive	1987	1987	1	100
			SU717069	Sensitive	2009	2009	1	1
			SU718055	Sensitive	1987	1997	3	90
			SU718068	Sensitive	2009	2009	1	3
			SU720051	Sensitive	2011	2011	1	1
			SU721053	Sensitive	2010	2010	1	1
			SU721054	Sensitive	1987	1987	15	548
			SU721059	Sensitive	2002	2002	1	0
			SU722053	Sensitive	2001	2001	1	0
			SU729065	Sensitive	2005	2005	1	2
			SU732070	Sensitive	2002	2002	1	0
			SU745079	Sensitive	1999	2008	2	1
			SU749059	Sensitive	2009	2009	1	1
			SU750058	Sensitive	2013	2013	3	3
			SU750059	Sensitive	2013	2013	2	0

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU750060	Sensitive	2013	2013	1	0
			SU750061	Sensitive	2013	2013	1	0
			SU750065	Sensitive	2007	2007	1	1
			SU751059	Sensitive	2013	2013	2	0
			SU751060	Sensitive	2013	2013	3	0
			SU751063	Sensitive	2013	2013	1	0
			SU752058	Sensitive	2013	2013	1	0
			SU752063	Sensitive	2013	2013	2	0
Pipistrellus pipistrellus	Common Pipistrelle	EU_Hab_4 HBAP WCA_s5s94b WCA_s5s94c HabReg_s2	SU7106	Sensitive	2000	2012	6	8
			SU7106	Sensitive	2000	2012	6	8
			SU713066	Sensitive	2010	2010	1	2
			SU713066	Sensitive	2010	2010	1	2
			SU714067	Sensitive	2010	2010	1	5
			SU714067	Sensitive	2010	2010	1	5
			SU717068	Sensitive	2012	2012	1	1
			SU717068	Sensitive	2012	2012	1	1
			SU719050	Sensitive	2012	2012	1	1
			SU719050	Sensitive	2012	2012	1	1
			SU720050	Sensitive	2009	2013	2	1
			SU720050	Sensitive	2009	2013	2	1
			SU720051	Sensitive	2013	2013	1	1
			SU720051	Sensitive	2013	2013	1	1
			SU720055	Sensitive	2013	2013	1	2
			SU720055	Sensitive	2013	2013	1	2
			SU720056	Sensitive	2012	2013	2	2
			SU720056	Sensitive	2012	2013	2	2
			SU721052	Sensitive	2009	2010	3	1
			SU721052	Sensitive	2009	2010	3	1
			SU721053	Sensitive	2010	2013	2	3
			SU721053	Sensitive	2010	2013	2	3

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU721054	Sensitive	2009	2013	2	2
			SU721054	Sensitive	2009	2013	2	2
			SU721056	Sensitive	2013	2013	1	1
			SU721056	Sensitive	2013	2013	1	1
			SU722057	Sensitive	2011	2013	3	2
			SU722057	Sensitive	2011	2013	3	2
			SU722059	Sensitive	2013	2013	1	1
			SU722059	Sensitive	2013	2013	1	1
			SU725055	Sensitive	2010	2010	1	1
			SU725055	Sensitive	2010	2010	1	1
			SU727057	Sensitive	2010	2013	2	1
			SU727057	Sensitive	2010	2013	2	1
			SU728055	Sensitive	2013	2013	1	1
			SU728055	Sensitive	2013	2013	1	1
			SU729077	Sensitive	2002	2002	1	1
			SU729077	Sensitive	2002	2002	1	1
			SU729077	Sensitive	2002	2002	1	1
			SU731054	Sensitive	2013	2013	1	1
			SU731054	Sensitive	2013	2013	1	1
			SU735056	Sensitive	2011	2011	1	1
			SU735056	Sensitive	2011	2011	1	1
			SU735059	Sensitive	2010	2010	1	1
			SU735059	Sensitive	2010	2010	1	1
			SU735083	Sensitive	2011	2011	6	1
			SU735083	Sensitive	2011	2011	6	1
			SU736052	Sensitive	2012	2012	1	1
			SU736052	Sensitive	2012	2012	1	1
			SU736063	Sensitive	2012	2012	1	1
			SU736063	Sensitive	2012	2012	1	1
			SU737053	Sensitive	2012	2012	1	1
			SU737053	Sensitive	2012	2012	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU738055	Sensitive	2012	2012	1	1
			SU738055	Sensitive	2012	2012	1	1
			SU738058	Sensitive	2010	2010	1	2
			SU738058	Sensitive	2010	2010	1	2
			SU739055	Sensitive	2012	2012	1	1
			SU739055	Sensitive	2012	2012	1	1
			SU741055	Sensitive	2007	2007	1	1
			SU741055	Sensitive	2007	2007	1	1
			SU748079	Sensitive	2011	2011	1	6
			SU748079	Sensitive	2011	2011	1	6
			SU749078	Sensitive	2010	2010	1	13
			SU749078	Sensitive	2010	2010	1	13
			SU750058	Sensitive	2013	2013	2	2
			SU750058	Sensitive	2013	2013	2	2
			SU750059	Sensitive	2013	2013	1	0
			SU750059	Sensitive	2013	2013	1	0
			SU751060	Sensitive	2013	2013	1	0
			SU751060	Sensitive	2013	2013	1	0
			SU751062	Sensitive	2010	2013	2	1
			SU751062	Sensitive	2010	2013	2	1
			SU752063	Sensitive	2010	2013	4	1
			SU752063	Sensitive	2010	2013	4	1
			SU752077	Sensitive	2009	2009	1	0
			SU752077	Sensitive	2009	2009	1	0
			SU752083	Sensitive	2011	2011	1	4
			SU752083	Sensitive	2011	2011	1	4
Pipistrellus pygmaeus	Soprano Pipistrelle	EU_Hab_4 HBAP NERC_s41 WCA_s5s94b	SU7106	Sensitive	2010	2012	2	11
			SU718049	Sensitive	2011	2011	1	2
			SU718069	Sensitive	2010	2010	1	1
			SU719050	Sensitive	2011	2012	3	2

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
		WCA_s5s94c HabReg_s2	SU720049	Sensitive	2011	2012	2	2
			SU720050	Sensitive	2009	2013	3	1
			SU720051	Sensitive	2009	2009	1	1
			SU720055	Sensitive	2011	2013	3	2
			SU720056	Sensitive	2012	2013	2	2
			SU720059	Sensitive	2013	2013	1	1
			SU721047	Sensitive	2010	2010	1	2
			SU721052	Sensitive	2009	2009	1	1
			SU721053	Sensitive	2009	2009	1	1
			SU721054	Sensitive	2009	2013	4	2
			SU721055	Sensitive	2012	2012	1	1
			SU722054	Sensitive	2007	2007	1	2
			SU722057	Sensitive	2011	2013	3	2
			SU723072	Sensitive	2003	2003	1	1
			SU725053	Sensitive	2010	2010	1	1
			SU726060	Sensitive	2014	2014	1	0
			SU727057	Sensitive	2010	2013	2	1
			SU731054	Sensitive	2013	2013	1	1
			SU734059	Sensitive	2011	2011	1	1
			SU735059	Sensitive	2010	2010	1	3
			SU735083	Sensitive	2011	2011	5	1
			SU736052	Sensitive	2012	2012	1	1
			SU736063	Sensitive	2012	2012	1	1
			SU737053	Sensitive	2012	2012	1	1
			SU738055	Sensitive	2012	2012	1	1
			SU738058	Sensitive	2010	2010	1	7
			SU739054	Sensitive	2012	2012	1	1
			SU739055	Sensitive	2012	2012	1	1
			SU749077	Sensitive	2009	2009	3	0
			SU749078	Sensitive	2010	2010	1	2

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU750058	Sensitive	2013	2013	1	1
			SU750060	Sensitive	2013	2013	3	0
			SU750061	Sensitive	2013	2013	1	0
			SU751059	Sensitive	2009	2013	3	1
			SU751060	Sensitive	2009	2013	5	1
			SU751078	Sensitive	2009	2009	3	0
			SU752058	Sensitive	2013	2013	1	0
			SU752059	Sensitive	2010	2010	1	1
			SU752063	Sensitive	2013	2013	1	0
			SU752070	Sensitive	2012	2012	1	1
			SU752077	Sensitive	2009	2009	3	0
			SU752083	Sensitive	2011	2011	1	2
Plecotus	Long-eared Bat species	WCA_s5s94b WCA_s5s94c HabReg_s2	SU735083	Sensitive	2011	2011	2	1
			SU745079	Sensitive	2008	2008	1	0
			SU749077	Sensitive	2009	2009	1	0
			SU751078	Sensitive	2009	2009	1	0
			SU752077	Sensitive	2009	2009	1	0
Plecotus auritus	Brown Long-eared Bat	EU_Hab_4 NERC_s41 WCA_s5s94b WCA_s5s94c HabReg_s2	SU713064	Sensitive	1999	1999	1	0
			SU735056	Sensitive	2011	2011	1	1
			SU737073	Sensitive	2002	2002	1	0
			SU745079	Sensitive	1999	1999	1	0
			SU748058	Sensitive	2006	2006	1	1
			SU750083	Sensitive	2008	2008	1	1
			SU751068	Sensitive	2000	2000	1	0
			SU751082	Sensitive	2009	2009	1	1
Mammals - Terrestrial (non-bats)								
Apodemus flavicollis	Yellow-necked Mouse	HBAP	SU721053	The Old Farmhouse, Havant	2012	2012	1	1
Arvicola	European Water	HBAP	SU71500571	Havant	2013	2013	1	0

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
amphibius	Vole	NERC_s41 WCA_s5s91(k) WCA_s5s91(t) WCA_s5s94a WCA_s5s94b WCA_s5s94c CI	SU71500623	Havant	2013	2013	1	0
			SU715059	Havant	2009	2009	1	2
			SU71510614	Havant	2013	2013	1	0
			SU71510618	Havant	2013	2013	1	0
			SU71520582	Havant	2013	2013	1	0
			SU71520608	Havant	2013	2013	1	1
			SU71520610	Havant	2013	2013	1	0
			SU71520613	Havant	2013	2013	1	0
			SU71530601	Havant	2013	2013	1	0
			SU71530603	Havant	2013	2013	1	0
			SU71600610	Havant	2013	2013	2	0
			SU71600611	Havant	2013	2013	1	0
			SU71600612	Havant	2013	2013	2	0
			SU716061	Park Road South, Havant	2011	2011	2	2
			SU71610608	Havant	2013	2013	1	0
			SU71620611	Havant	2013	2013	1	0
			SU71650610	Havant	2013	2013	1	0
			SU750059	River Ems - Section D	2008	2009	2	34
			SU750060	River Ems - Section C	2008	2009	3	70
			SU750061	River Ems	2005	2007	3	50
			SU750061	River Ems - Section B	2008	2009	2	23
			SU750062	River Ems - Section A	2008	2009	3	39
			SU751060	River Ems 1	2002	2002	1	0
			SU751060	River Ems Just South Of The Sluice Gate On Brook Meadow	2008	2008	1	2
			SU752063	River Ems 2	2002	2002	1	0
Erinaceus europaeus	West European Hedgehog	NERC_s41	SU719064	Havant	2008	2008	1	1
			SU745058	Bosmere Gardens, Emsworth	2007	2007	1	1
			SU748054	Millpond, Emsworth	2007	2007	1	1
Meles meles	Eurasian Badger	PBA	SU7206	Sensitive	2006	2006	1	2

* Indicates some of these records are unconfirmed

Confidential records
HBIC holds a small number of records that are to be treated as confidential. Confidentiality can be for a variety of reasons and may relate to a whole site or only to specific species. These records may be withheld or released depending on the nature of the data request and in accordance with the Environmental Information Regulations 2004.

Sensitive species
A small number of species are considered as sensitive by the relevant specialist species recording groups and will be indicated as such on all lists. Species may be considered sensitive for a variety of reasons. Location details for these records will not disclosed unless the relevant species recording group has given their permission. Grid references will be altered to give a less precise position. Contact HBIC if further information is needed on these records.

Further notes

- Records of species such as the Nationally Rare Box (*Buxus sempervirens*) may not appear on the list as there may be many records but their provenance is not known.
- The location names, where shown, are the originals given by the recorders and may not match any formal name for the location or other colloquial names by which the location may also be known.
- The grid references, where shown, are the originals given by the recorders and may indicate the specific location of the species, a central grid reference representing a larger survey area, or a grid square.
- Where species have been deemed as 'sensitive' by the relevant specialist species recording group the location name will not be shown and the grid reference will have been altered to give a less precise position specified by the species recording group.
- Many of the records have been supplied by specialist species recording groups. Whilst every reasonable effort is made to validate information supplied to the Hampshire Biodiversity Information Centre the accuracy or comprehensiveness of this information cannot be guaranteed.
- Records do not necessarily represent evidence of breeding at a site; please contact HBIC if further details are required for any of these records.
- Whilst a species may have been recorded at a site, this does not indicate that the species is still present. Equally, the absence of a species from a site does not signify that it is absent, only that it has not been recorded, that the site has not been surveyed for this species, or that HBIC has not been informed of its presence.
- Quantities of '0' (zero) indicate that the species was 'present' but the number of individuals seen was not recorded. Negative quantities correspond to the DAFOR scale (plus very rare and 'locally' criteria) as follows:
    - -1 = Dominant (DAFOR)
    - -2 = Abundant (DAFOR)
    - -3 = Frequent (DAFOR)

  - -4 = Occasional (DAFOR)
  - -5 = Rare (DAFOR)
  - -6 = Very Rare
  - -21 = Locally Dominant
  - -22 = Locally Abundant
  - -23 = Locally Frequent
- Negative quantities of '-7' (minus seven) indicates that the species was 'not found'. These records are not included in protected and notable species lists.
- Max_Count values of '0' (zero) indicate that none of the records had a positive quantity count and hence the highest count numerical value was '0' (indicating 'present'). Max_Count values of blank indicate that none of the records had a numerical count value and instead they all had frequency values (e.g. using the DAFOR scale).

Status codes and abbreviations:

EU_Bird_1	Annex I of the Birds Directive
EU_Hab_2	Annex II of the Habitats Directive (priority species)
EU_Hab_2np	Annex II of the Habitats Directive (non-priority species)
EU_Hab_4	Annex IV of the Habitats Directive
EU_Hab_5	Annex V of the Habitats Directive
IUCN_(pre 94)	See IUCN (pre 1994) guidelines
IUCN_(1994)	See IUCN (1994) guidelines
IUCN_(2001)	See IUCN (2001) guidelines
BOCC_Red	Birds of Conservation Concern Red list
NR	Nationally rare (occurring in 15 or fewer 10km squares in Great Britain)
NS	Nationally scarce (occurring in 16 - 100 10km squares in Great Britain)
NN	Nationally notable (occurring in 16 - 100 10km squares in Great Britain or less than 20 Vice Counties)
HBAP	Hampshire Biodiversity Action Plan species
NERC_s41	Priority Species listed under Section 41 of the Natural Environment and Rural Communities Act 2006
WCA_s1p1	Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended)
WCA_s5s91(k)	Schedule 5 Section 9 Part 1 (killing/injuring) of the Wildlife and Countryside Act 1981 (as amended)
WCA_s5s91(t)	Schedule 5 Section 9 Part 1 (taking) of the Wildlife and Countryside Act 1981 (as amended)
WCA_s5s94a	Schedule 5 Section 9 Part 4a of the Wildlife and Countryside Act 1981 (as amended)
WCA_s5s94b	Schedule 5 Section 9 Part 4b of the Wildlife and Countryside Act 1981 (as amended)
WCA_s5s94c	Schedule 5 Section 9 Part 4c of the Wildlife and Countryside Act 1981 (as amended)

WCA_s8	Schedule 8 of the Wildlife and Countryside Act 1981 (as amended)
HabReg_2	Schedule 2 of Conservation of Habitats and Species Regulations 2010 (European Protected Species animal)
HabReg_5	Schedule 5 of Conservation of Habitats and Species Regulations 2010 (European Protected Species plant)
PBA	Protection of Badgers Act 1992
NI	National Interest
CR	County Rare
CS	County Scarce
CI	County Interest
nHR	North Hampshire Rare (VC12)
sHR	South Hampshire Rare (VC11)
nHS	North Hampshire Scarce (VC12)
sHS	South Hampshire Scarce (VC11)

sharing information about Hampshire's wildlife

The Hampshire Biodiversity Information Centre Partnership includes local authorities, government agencies, wildlife charities and biological recording groups.

Hampshire Biodiversity Information Centre

Bat Species Records

Search Area: **Within 5km of Emsworth Site**
Date: **31/07/2014**
HBIC Ref: **4990**

See this Legislation Explanatory Document for a document explaining notable species statuses and legislation.

HBIC has it's own extensive database of habitat and higher plant data for the County. In addition, HBIC hold copies of datasets belonging to partner organisations. Through data exchange agreements with these organisations HBIC is provided with regular database updates and can supply species information on their behalf. HBIC currently holds copies of the following dataset:

- Hampshire Bat Group (HBG) Records of bat roost visits and sightings

It is important that the Hampshire Bat Group is acknowledged in any document produced by the data requester where data is incorporated into the document, as a matter of course.

The following are Bat species records from the above datasets within the search area recorded in the last 15 years:

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Mammals - Terrestrial (bats)								
Eptesicus serotinus	Serotine	EU_Hab_4 HBAP WCA_s5s94b WCA_s5s94c HabReg_s2	SU6804	Sensitive	1950	1950	1	0
			SU6804	Sensitive	2005	2005	1	3
			SU6906	Sensitive	2011	2011	1	2
			SU7006	Sensitive	2008	2008	1	0
			SU7010	Sensitive	2005	2005	1	1
			SU7106	Sensitive	2003	2003	1	1
			SU7107	Sensitive	2001	2001	1	0
			SU7107	Sensitive	2002	2014	43	28
			SU7107	Sensitive	2007	2007	1	7
			SU7109	Sensitive	2005	2005	1	3

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7110	Sensitive	2008	2013	6	17
			SU7110	Sensitive	2010	2010	1	2
			SU7205	Sensitive	2001	2001	1	0
			SU7205	Sensitive	2002	2010	2	1
			SU7205	Sensitive	2011	2011	1	3
			SU7305	Sensitive	2011	2011	1	1
			SU7309	Sensitive	2010	2010	3	1
			SU7310	Sensitive	2008	2008	1	1
			SU7310	Sensitive	2013	2013	6	1
			SU7406	Sensitive	2012	2012	2	0
			SU7407	Sensitive	2009	2009	3	0
			SU7506	Sensitive	2010	2010	1	1
			SU7507	Sensitive	2009	2009	1	0
			SU7507	Sensitive	2009	2009	1	0
Myotis	Unidentified Bat	WCA_s5s94b WCA_s5s94c HabReg_s2	SU6906	Sensitive	2011	2011	1	1
			SU6907	Sensitive	2011	2011	1	2
			SU6908	Sensitive	2011	2011	1	0
			SU6908	Sensitive	2012	2012	1	0
			SU6909	Sensitive	2011	2011	1	0
			SU7006	Sensitive	2008	2008	1	1
			SU7006	Sensitive	2010	2010	1	1
			SU7008	Sensitive	2012	2012	1	1
			SU7008	Sensitive	2012	2012	1	1
			SU7009	Sensitive	2010	2010	1	0
			SU7010	Sensitive	2005	2005	1	1
			SU7105	Sensitive	2012	2012	1	1
			SU7107	Sensitive	2012	2012	1	1
			SU7107	Sensitive	2013	2013	1	1
			SU7109	Sensitive	2005	2005	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7109	Sensitive	2005	2005	1	1
			SU7205	Sensitive	2011	2011	1	1
			SU7205	Sensitive	2011	2011	1	2
			SU7205	Sensitive	2013	2013	1	1
			SU7205	Sensitive	2013	2013	2	1
			SU7209	Sensitive	2005	2005	1	1
			SU7210	Sensitive	2005	2005	1	1
			SU7305	Sensitive	2010	2010	1	1
			SU7308	Sensitive	2011	2011	4	1
			SU7309	Sensitive	2010	2010	2	1
			SU7407	Sensitive	2009	2009	4	0
			SU7408	Sensitive	2011	2011	1	1
			SU7408	Sensitive	2011	2011	3	3
			SU7506	Sensitive	2009	2009	1	1
			SU7506	Sensitive	2010	2010	1	1
			SU7506	Sensitive	2009	2009	1	1
			SU7507	Sensitive	2009	2009	2	0
			SU7507	Sensitive	2009	2009	4	0
			SU7508	Sensitive	2011	2011	1	1
Myotis bechsteinii	Bechstein's Bat	EU_Hab_2np EU_Hab_4 HBAP NERC_s41 WCA_s5s94b WCA_s5s94c HabReg_s2 CI	SU70E	Sensitive	2006	2006	1	1
			SU70E	Sensitive	2008	2008	1	1
			SU70J	Sensitive	2008	2008	1	22
			SU70J	Sensitive	2008	2008	2	5
			SU70J	Sensitive	2009	2009	1	1
			SU70N	Sensitive	2009	2009	1	51
			SU70P	Sensitive	2005	2005	1	4
			SU70P	Sensitive	2008	2008	2	2
			SU70P	Sensitive	2009	2009	2	1
			SU70P	Sensitive	2009	2009	4	26
			SU71K	Sensitive	2009	2009	2	1
			SU71K	Sensitive	2009	2009	2	7

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
Myotis brandtii	Brandt's Bat	EU_Hab_4 WCA_s5s94b WCA_s5s94c HabReg_s2	SU7110	Sensitive	2008	2008	1	1
			SU7405	Sensitive	2007	2007	1	1
			SU7410	Sensitive	2008	2008	1	1
Myotis daubentonii	Daubenton's Bat	EU_Hab_4 WCA_s5s94b WCA_s5s94c HabReg_s2	SU6804	Sensitive	2005	2005	1	10
			SU6805	Sensitive	2012	2012	1	1
			SU7205	Sensitive	2001	2001	1	0
			SU7205	Sensitive	2002	2002	1	0
			SU7505	Sensitive	2013	2013	1	0
Myotis mystacinus	Whiskered Bat	EU_Hab_4 WCA_s5s94b WCA_s5s94c HabReg_s2	SU6905	Sensitive	1985	1985	1	1
			SU7110	Sensitive	2008	2008	2	2
			SU7209	Sensitive	2008	2008	2	1
			SU7310	Sensitive	2005	2005	1	1
			SU7310	Sensitive	2008	2008	1	1
			SU7408	Sensitive	2009	2009	1	1
			SU7410	Sensitive	2008	2009	2	2
			SU7410	Sensitive	2008	2009	3	3
			SU7508	Sensitive	2009	2009	1	1
Myotis mystacinus/brandtii	Whiskered/Brandt's Bat	WCA_s5s94b WCA_s5s94c HabReg_s2	SU7107	Sensitive	2001	2001	1	1
			SU7109	Sensitive	2005	2005	1	3
			SU7110	Sensitive	2005	2005	1	3
			SU7110	Sensitive	2009	2009	2	1
			SU7209	Sensitive	2008	2008	1	1
			SU7209	Sensitive	2008	2008	1	20
			SU7211	Sensitive	2002	2002	1	1
			SU7309	Sensitive	2010	2010	1	1
Myotis nattereri	Natterer's Bat	EU_Hab_4 WCA_s5s94b WCA_s5s94c	SU7109	Sensitive	2005	2005	1	1
			SU7109	Sensitive	2005	2005	1	4
			SU7109	Sensitive	2008	2008	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
		HabReg_s2	SU7110	Sensitive	2008	2009	4	3
			SU7205	Sensitive	2009	2009	1	1
			SU7209	Sensitive	2005	2005	1	1
			SU7209	Sensitive	2008	2008	3	3
			SU7209	Sensitive	2008	2009	2	21
			SU7303	Sensitive	2009	2009	1	1
			SU7308	Sensitive	2009	2009	1	1
			SU7308	Sensitive	2009	2009	1	1
			SU7309	Sensitive	2010	2010	2	1
			SU7408	Sensitive	2009	2009	1	1
			SU7410	Sensitive	2008	2008	1	1
			SU7505	Sensitive	2003	2003	1	1
Nyctalus leisleri	Lesser Noctule	EU_Hab_4 WCA_s5s94b WCA_s5s94c HabReg_s2	SU7309	Sensitive	2010	2010	1	1
Nyctalus noctula	Noctule Bat	EU_Hab_4 NERC_s41 WCA_s5s94b WCA_s5s94c HabReg_s2	SU6804	Sensitive	1963	1963	1	0
			SU6804	Sensitive	2004	2005	2	10
			SU6804	Sensitive	2005	2005	1	10
			SU6805	Sensitive	2012	2012	1	1
			SU6904	Sensitive	1988	1988	1	0
			SU6908	Sensitive	2011	2011	1	0
			SU6908	Sensitive	2011	2012	2	0
			SU7006	Sensitive	2008	2008	1	1
			SU7006	Sensitive	2010	2011	5	2
			SU7008	Sensitive	2014	2014	1	1
			SU7009	Sensitive	2010	2011	2	0
			SU7104	Sensitive	2011	2011	1	2
			SU7105	Sensitive	2012	2012	1	2

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU7106	Sensitive	2000	2012	4	1
			SU7106	Sensitive	2010	2010	1	1
			SU7106	Sensitive	2012	2012	1	1
			SU7107	Sensitive	2007	2007	1	1
			SU7107	Sensitive	2007	2007	1	1
			SU7107	Sensitive	2007	2014	7	1
			SU7107	Sensitive	2013	2013	1	1
			SU7109	Sensitive	2003	2003	1	1
			SU7109	Sensitive	2005	2005	1	2
			SU7109	Sensitive	2005	2005	2	3
			SU7110	Sensitive	2008	2010	3	7
			SU7205	Sensitive	2007	2007	1	1
			SU7205	Sensitive	2011	2011	1	1
			SU7205	Sensitive	2011	2011	1	1
			SU7210	Sensitive	2012	2012	1	1
			SU7303	Sensitive	2009	2010	2	2
			SU7305	Sensitive	2011	2011	1	1
			SU7308	Sensitive	2011	2011	3	1
			SU7309	Sensitive	2010	2010	3	1
			SU7310	Sensitive	2013	2013	1	1
			SU7408	Sensitive	2011	2011	1	1
			SU7506	Sensitive	2010	2010	1	1
			SU7507	Sensitive	2009	2009	1	0
			SU7507	Sensitive	2009	2009	2	0
Pipistrellus	Pipistrelle Bat species	WCA_s5s94b WCA_s5s94c HabReg_s2	SU685055	Sensitive	1999	1999	2	0
			SU685071	Sensitive	1998	1998	1	3
			SU686074	Sensitive	2002	2002	1	1
			SU688062	Sensitive	1999	2000	2	2
			SU699074	Sensitive	1986	2000	2	62
			SU703072	Sensitive	2002	2002	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU704072	Sensitive	2002	2002	1	0
			SU704077	Sensitive	2003	2003	1	1
			SU704086	Sensitive	1999	1999	1	0
			SU708062	Sensitive	2011	2011	4	2
			SU709072	Sensitive	2012	2012	1	1
			SU7106	Sensitive	1999	2010	10	5
			SU7110	Sensitive	2008	2013	3	3
			SU712069	Sensitive	2008	2009	2	1
			SU713073	Sensitive	2008	2010	4	2
			SU714101	Sensitive	2008	2008	1	4
			SU715053	Sensitive	2001	2001	1	0
			SU716053	Sensitive	2001	2001	1	11
			SU716056	Sensitive	1986	1990	2	60
			SU716082	Sensitive	2002	2002	1	1
			SU717055	Sensitive	1987	1987	1	100
			SU717069	Sensitive	2009	2009	1	1
			SU718055	Sensitive	1987	1997	3	90
			SU718068	Sensitive	2009	2009	1	3
			SU720051	Sensitive	2011	2011	1	1
			SU721016	Sensitive	2013	2013	1	1
			SU721017	Sensitive	2013	2013	1	1
			SU721033	Sensitive	2008	2008	1	1
			SU721053	Sensitive	2010	2010	1	1
			SU721054	Sensitive	1987	1987	15	548
			SU721059	Sensitive	2002	2002	1	0
			SU722053	Sensitive	2001	2001	1	0
			SU723018	Sensitive	2013	2013	1	1
			SU723032	Sensitive	2008	2008	1	1
			SU724088	Sensitive	2010	2010	1	0
			SU724096	Sensitive	2008	2008	1	2

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU724104	Sensitive	2012	2012	2	1
			SU726094	Sensitive	2013	2013	1	0
			SU727100	Sensitive	2003	2003	1	1
			SU729065	Sensitive	2005	2005	1	2
			SU729102	Sensitive	2007	2007	1	0
			SU730102	Sensitive	2013	2013	4	1
			SU731037	Sensitive	2009	2009	1	1
			SU731101	Sensitive	2008	2009	2	2
			SU732022	Sensitive	2002	2002	1	8
			SU732070	Sensitive	2002	2002	1	0
			SU734023	Sensitive	1995	1995	1	67
			SU741109	Sensitive	2008	2009	4	6
			SU745079	Sensitive	1999	2008	2	1
			SU747101	Sensitive	2009	2009	1	1
			SU749059	Sensitive	2009	2009	1	1
			SU750058	Sensitive	2013	2013	3	3
			SU750059	Sensitive	2013	2013	2	0
			SU750060	Sensitive	2013	2013	1	0
			SU750061	Sensitive	2013	2013	1	0
			SU750065	Sensitive	2007	2007	1	1
			SU751059	Sensitive	2013	2013	2	0
			SU751060	Sensitive	2013	2013	3	0
			SU751063	Sensitive	2013	2013	1	0
			SU752058	Sensitive	2013	2013	1	0
			SU752063	Sensitive	2013	2013	2	0
			SU767087	Sensitive	2005	2005	1	1
Pipistrellus pipistrellus	Common Pipistrelle	EU_Hab_4 HBAP WCA_s5s94b WCA_s5s94c	SU685042	Sensitive	2005	2005	1	5
			SU685042	Sensitive	2005	2005	1	5
			SU685045	Sensitive	1963	1999	2	0
			SU685045	Sensitive	1963	1999	2	0

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
		HabReg_s2	SU686051	Sensitive	2012	2012	1	1
			SU686051	Sensitive	2012	2012	1	1
			SU686058	Sensitive	2013	2013	1	1
			SU686058	Sensitive	2013	2013	1	1
			SU6904	Sensitive	1988	1988	1	0
			SU6904	Sensitive	1988	1988	1	0
			SU695067	Sensitive	2010	2010	2	1
			SU695067	Sensitive	2010	2010	2	1
			SU695068	Sensitive	2011	2011	1	1
			SU695068	Sensitive	2011	2011	1	1
			SU695069	Sensitive	2011	2011	1	2
			SU695069	Sensitive	2011	2011	1	2
			SU696067	Sensitive	2011	2011	1	4
			SU696067	Sensitive	2011	2011	1	4
			SU696086	Sensitive	2011	2011	1	0
			SU696086	Sensitive	2011	2011	1	0
			SU697088	Sensitive	2011	2012	2	0
			SU697088	Sensitive	2011	2012	2	0
			SU697089	Sensitive	2011	2011	1	0
			SU697089	Sensitive	2011	2011	1	0
			SU698092	Sensitive	2011	2011	1	0
			SU698092	Sensitive	2011	2011	1	0
			SU699088	Sensitive	2014	2014	1	1
			SU699088	Sensitive	2014	2014	1	1
			SU699090	Sensitive	2011	2011	1	0
			SU699090	Sensitive	2011	2011	1	0
			SU700086	Sensitive	2014	2014	1	1
			SU700086	Sensitive	2014	2014	1	1
			SU700089	Sensitive	2011	2011	1	0
			SU700089	Sensitive	2011	2011	1	0

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU700090	Sensitive	2010	2011	4	0
			SU700090	Sensitive	2010	2011	4	0
			SU701058	Sensitive	2008	2009	2	1
			SU701058	Sensitive	2008	2009	2	1
			SU701083	Sensitive	2012	2012	1	1
			SU701083	Sensitive	2012	2012	1	1
			SU701088	Sensitive	2014	2014	1	1
			SU701088	Sensitive	2014	2014	1	1
			SU701089	Sensitive	2011	2011	1	0
			SU701089	Sensitive	2011	2011	1	0
			SU702093	Sensitive	2010	2010	1	0
			SU702093	Sensitive	2010	2010	1	0
			SU703081	Sensitive	2012	2012	1	1
			SU703081	Sensitive	2012	2012	1	1
			SU707060	Sensitive	2008	2009	3	1
			SU707060	Sensitive	2008	2009	3	1
			SU707078	Sensitive	2013	2013	1	2
			SU707078	Sensitive	2013	2013	1	2
			SU708062	Sensitive	2010	2011	5	2
			SU708062	Sensitive	2010	2011	5	2
			SU708077	Sensitive	2012	2013	2	1
			SU708077	Sensitive	2012	2013	2	1
			SU7106	Sensitive	2000	2012	6	8
			SU7106	Sensitive	2000	2012	6	8
			SU7110	Sensitive	2008	2013	12	41
			SU7110	Sensitive	2008	2013	12	41
			SU711068	Sensitive	2012	2012	2	1
			SU711068	Sensitive	2012	2012	2	1
			SU711069	Sensitive	2012	2012	1	1
			SU711069	Sensitive	2012	2012	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU711073	Sensitive	2012	2012	1	1
			SU711073	Sensitive	2012	2012	1	1
			SU712069	Sensitive	2012	2012	1	1
			SU712069	Sensitive	2012	2012	1	1
			SU712072	Sensitive	2013	2013	1	1
			SU712072	Sensitive	2013	2013	1	1
			SU712096	Sensitive	2005	2005	1	1
			SU712096	Sensitive	2005	2005	1	1
			SU713066	Sensitive	2010	2010	1	2
			SU713066	Sensitive	2010	2010	1	2
			SU713073	Sensitive	2007	2014	6	2
			SU713073	Sensitive	2007	2014	6	2
			SU714067	Sensitive	2010	2010	1	5
			SU714067	Sensitive	2010	2010	1	5
			SU717034	Sensitive	2012	2012	1	1
			SU717034	Sensitive	2012	2012	1	1
			SU717068	Sensitive	2012	2012	1	1
			SU717068	Sensitive	2012	2012	1	1
			SU717084	Sensitive	2001	2001	3	0
			SU717084	Sensitive	2001	2001	3	0
			SU717084	Sensitive	2001	2001	1	0
			SU718032	Sensitive	2012	2012	1	1
			SU718032	Sensitive	2012	2012	1	1
			SU718091	Sensitive	2011	2011	1	1
			SU718091	Sensitive	2011	2011	1	1
			SU719050	Sensitive	2012	2012	1	1
			SU719050	Sensitive	2012	2012	1	1
			SU720050	Sensitive	2009	2013	2	1
			SU720050	Sensitive	2009	2013	2	1
			SU720051	Sensitive	2013	2013	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU720051	Sensitive	2013	2013	1	1
			SU720055	Sensitive	2013	2013	1	2
			SU720055	Sensitive	2013	2013	1	2
			SU720056	Sensitive	2012	2013	2	2
			SU720056	Sensitive	2012	2013	2	2
			SU720090	Sensitive	2013	2013	1	6
			SU720090	Sensitive	2013	2013	1	6
			SU721052	Sensitive	2009	2010	3	1
			SU721052	Sensitive	2009	2010	3	1
			SU721053	Sensitive	2010	2013	2	3
			SU721053	Sensitive	2010	2013	2	3
			SU721054	Sensitive	2009	2013	2	2
			SU721054	Sensitive	2009	2013	2	2
			SU721056	Sensitive	2013	2013	1	1
			SU721056	Sensitive	2013	2013	1	1
			SU721056	Sensitive	2013	2013	1	1
			SU722057	Sensitive	2011	2013	3	2
			SU722057	Sensitive	2011	2013	3	2
			SU722059	Sensitive	2013	2013	1	1
			SU722059	Sensitive	2013	2013	1	1
			SU722089	Sensitive	2012	2012	1	1
			SU722089	Sensitive	2012	2012	1	1
			SU722104	Sensitive	2010	2010	1	1
			SU722104	Sensitive	2010	2010	1	1
			SU723086	Sensitive	2008	2008	1	1
			SU723086	Sensitive	2008	2008	1	1
			SU724087	Sensitive	2007	2010	2	6
			SU724087	Sensitive	2007	2010	2	6
			SU724088	Sensitive	2013	2013	1	2
			SU724088	Sensitive	2013	2013	1	2
			SU725055	Sensitive	2010	2010	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU725055	Sensitive	2010	2010	1	1
			SU726104	Sensitive	2012	2012	1	1
			SU726104	Sensitive	2012	2012	1	1
			SU727057	Sensitive	2010	2013	2	1
			SU727057	Sensitive	2010	2013	2	1
			SU728055	Sensitive	2013	2013	1	1
			SU728055	Sensitive	2013	2013	1	1
			SU729077	Sensitive	2002	2002	1	1
			SU729077	Sensitive	2002	2002	1	1
			SU730102	Sensitive	2013	2013	7	5
			SU730102	Sensitive	2013	2013	7	5
			SU731037	Sensitive	2009	2009	1	2
			SU731037	Sensitive	2009	2009	1	2
			SU731054	Sensitive	2013	2013	1	1
			SU731054	Sensitive	2013	2013	1	1
			SU731054	Sensitive	2013	2013	1	1
			SU732038	Sensitive	2010	2010	1	2
			SU732038	Sensitive	2010	2010	1	2
			SU734096	Sensitive	2010	2010	3	5
			SU734096	Sensitive	2010	2010	3	5
			SU735056	Sensitive	2011	2011	1	1
			SU735056	Sensitive	2011	2011	1	1
			SU735059	Sensitive	2010	2010	1	1
			SU735059	Sensitive	2010	2010	1	1
			SU735083	Sensitive	2011	2011	6	1
			SU735083	Sensitive	2011	2011	6	1
			SU736052	Sensitive	2012	2012	1	1
			SU736052	Sensitive	2012	2012	1	1
			SU736063	Sensitive	2012	2012	1	1
			SU736063	Sensitive	2012	2012	1	1
			SU737053	Sensitive	2012	2012	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU737053	Sensitive	2012	2012	1	1
			SU738055	Sensitive	2012	2012	1	1
			SU738055	Sensitive	2012	2012	1	1
			SU738058	Sensitive	2010	2010	1	2
			SU738058	Sensitive	2010	2010	1	2
			SU739055	Sensitive	2012	2012	1	1
			SU739055	Sensitive	2012	2012	1	1
			SU741055	Sensitive	2007	2007	1	1
			SU741055	Sensitive	2007	2007	1	1
			SU748079	Sensitive	2011	2011	1	6
			SU748079	Sensitive	2011	2011	1	6
			SU749078	Sensitive	2010	2010	1	13
			SU749078	Sensitive	2010	2010	1	13
			SU749084	Sensitive	2011	2011	1	1
			SU749084	Sensitive	2011	2011	1	1
			SU750058	Sensitive	2013	2013	2	2
			SU750058	Sensitive	2013	2013	2	2
			SU750059	Sensitive	2013	2013	1	0
			SU750059	Sensitive	2013	2013	1	0
			SU751060	Sensitive	2013	2013	1	0
			SU751060	Sensitive	2013	2013	1	0
			SU751062	Sensitive	2010	2013	2	1
			SU751062	Sensitive	2010	2013	2	1
			SU752063	Sensitive	2010	2013	4	1
			SU752063	Sensitive	2010	2013	4	1
			SU752077	Sensitive	2009	2009	1	0
			SU752077	Sensitive	2009	2009	1	0
			SU752083	Sensitive	2011	2011	1	4
			SU752083	Sensitive	2011	2011	1	4
			SU767087	Sensitive	2005	2005	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU767087	Sensitive	2005	2005	1	1
Pipistrellus pygmaeus	Soprano Pipistrelle	EU_Hab_4 HBAP NERC_s41 WCA_s5s94b WCA_s5s94c HabReg_s2	SU685042	Sensitive	2005	2005	1	10
			SU686051	Sensitive	2012	2012	1	1
			SU695067	Sensitive	2010	2010	1	1
			SU695069	Sensitive	2011	2011	1	2
			SU695070	Sensitive	2011	2011	1	2
			SU697088	Sensitive	2011	2011	1	0
			SU697090	Sensitive	2010	2010	1	0
			SU699094	Sensitive	2011	2011	1	0
			SU700090	Sensitive	2011	2011	1	0
			SU701058	Sensitive	2008	2008	2	1
			SU707060	Sensitive	2008	2009	3	1
			SU708062	Sensitive	2010	2011	5	1
			SU708077	Sensitive	2012	2012	1	1
			SU710073	Sensitive	2013	2013	1	1
			SU7106	Sensitive	2010	2012	2	11
			SU7110	Sensitive	2008	2008	1	3
			SU711068	Sensitive	2012	2012	1	1
			SU711069	Sensitive	2012	2012	1	1
			SU711073	Sensitive	2012	2013	2	1
			SU712096	Sensitive	2005	2005	1	1
			SU713073	Sensitive	2009	2009	1	1
			SU714100	Sensitive	2005	2005	1	1
			SU717097	Sensitive	2005	2005	1	1
			SU718049	Sensitive	2011	2011	1	2
			SU718069	Sensitive	2010	2010	1	1
			SU719050	Sensitive	2011	2012	3	2
			SU720049	Sensitive	2011	2012	2	2
			SU720050	Sensitive	2009	2013	3	1
			SU720051	Sensitive	2009	2009	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU720055	Sensitive	2011	2013	3	2
			SU720056	Sensitive	2012	2013	2	2
			SU720059	Sensitive	2013	2013	1	1
			SU720090	Sensitive	2013	2013	1	2
			SU721016	Sensitive	2013	2013	1	1
			SU721047	Sensitive	2010	2010	1	2
			SU721052	Sensitive	2009	2009	1	1
			SU721053	Sensitive	2009	2009	1	1
			SU721054	Sensitive	2009	2013	4	2
			SU721055	Sensitive	2012	2012	1	1
			SU722016	Sensitive	2013	2013	1	3
			SU722054	Sensitive	2007	2007	1	2
			SU722057	Sensitive	2011	2013	3	2
			SU723072	Sensitive	2003	2003	1	1
			SU724096	Sensitive	2008	2008	1	20
			SU725053	Sensitive	2010	2010	1	1
			SU726060	Sensitive	2014	2014	1	0
			SU727057	Sensitive	2010	2013	2	1
			SU730102	Sensitive	2013	2013	8	3
			SU731037	Sensitive	2009	2009	1	2
			SU731054	Sensitive	2013	2013	1	1
			SU733018	Sensitive	2004	2004	1	227
			SU734059	Sensitive	2011	2011	1	1
			SU734096	Sensitive	2010	2010	3	2
			SU735059	Sensitive	2010	2010	1	3
			SU735083	Sensitive	2011	2011	5	1
			SU736052	Sensitive	2012	2012	1	1
			SU736063	Sensitive	2012	2012	1	1
			SU737053	Sensitive	2012	2012	1	1
			SU738055	Sensitive	2012	2012	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU738058	Sensitive	2010	2010	1	7
			SU739054	Sensitive	2012	2012	1	1
			SU739055	Sensitive	2012	2012	1	1
			SU747085	Sensitive	2011	2011	1	1
			SU749077	Sensitive	2009	2009	3	0
			SU749078	Sensitive	2010	2010	1	2
			SU750058	Sensitive	2013	2013	1	1
			SU750060	Sensitive	2013	2013	3	0
			SU750061	Sensitive	2013	2013	1	0
			SU751059	Sensitive	2009	2013	3	1
			SU751060	Sensitive	2009	2013	5	1
			SU751078	Sensitive	2009	2009	3	0
			SU752058	Sensitive	2013	2013	1	0
			SU752059	Sensitive	2010	2010	1	1
			SU752063	Sensitive	2013	2013	1	0
			SU752070	Sensitive	2012	2012	1	1
			SU752077	Sensitive	2009	2009	3	0
			SU752083	Sensitive	2011	2011	1	2
Plecotus	Long-eared Bat species	WCA_s5s94b WCA_s5s94c HabReg_s2	SU701083	Sensitive	2012	2012	1	1
			SU717097	Sensitive	2005	2005	1	1
			SU727104	Sensitive	2013	2013	1	0
			SU730102	Sensitive	2013	2013	1	1
			SU731037	Sensitive	2009	2009	1	1
			SU734096	Sensitive	2010	2010	2	1
			SU735083	Sensitive	2011	2011	2	1
			SU745079	Sensitive	2008	2008	1	0
			SU749077	Sensitive	2009	2009	1	0
			SU751078	Sensitive	2009	2009	1	0
			SU752077	Sensitive	2009	2009	1	0
Plecotus auritus	Brown Long-eared Bat	EU_Hab_4	SU685045	Sensitive	1950	1950	1	0

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
		NERC_s41 WCA_s5s94b WCA_s5s94c HabReg_s2	SU686051	Sensitive	2012	2012	1	1
			SU7010	Sensitive	2008	2008	1	1
			SU702078	Sensitive	1999	1999	1	1
			SU712097	Sensitive	2008	2008	2	5
			SU713064	Sensitive	1999	1999	1	0
			SU714101	Sensitive	2008	2008	5	16
			SU717095	Sensitive	2008	2008	2	1
			SU722089	Sensitive	2012	2012	1	1
			SU723093	Sensitive	1997	2008	5	11
			SU724096	Sensitive	2008	2008	1	22
			SU724104	Sensitive	1996	1996	1	15
			SU724105	Sensitive	1996	1996	1	0
			SU726099	Sensitive	1999	1999	1	0
			SU727097	Sensitive	1999	1999	1	25
			SU727101	Sensitive	1998	1998	1	0
			SU728108	Sensitive	2005	2005	1	0
			SU729112	Sensitive	2010	2010	1	1
			SU731101	Sensitive	2008	2008	1	1
			SU732107	Sensitive	2006	2006	1	0
			SU733106	Sensitive	2008	2008	1	0
			SU735056	Sensitive	2011	2011	1	1
			SU737073	Sensitive	2002	2002	1	0
			SU738089	Sensitive	2009	2009	1	1
			SU741109	Sensitive	2009	2009	2	5
			SU742087	Sensitive	2009	2009	1	3
			SU745079	Sensitive	1999	1999	1	0
			SU747101	Sensitive	2008	2008	1	1
			SU748058	Sensitive	2006	2006	1	1

Taxon Name	Common Name	Status	Grid Ref.	Location	First Year	Last Year	No. of Records	Max Count
			SU748086	Sensitive	2011	2011	1	1
			SU750083	Sensitive	2008	2008	1	1
			SU751068	Sensitive	2000	2000	1	0
			SU751082	Sensitive	2009	2009	1	1
			SU772067	Sensitive	2012	2012	1	1

Confidential records

HBIC holds a small number of records that are to be treated as confidential. Confidentiality can be for a variety of reasons and may relate to a whole site or only to specific species. These records may be withheld or released depending on the nature of the data request and in accordance with the Environmental Information Regulations 2004.

Sensitive species

A small number of species are considered as sensitive by the relevant specialist species recording groups and will be indicated as such on all lists. Species may be considered sensitive for a variety of reasons. Location details for these records will not disclosed unless the relevant species recording group has given their permission. Grid references will be altered to give a less precise position. Contact HBIC if further information is needed on these records.

Further notes

- The location names, where shown, are the originals given by the recorders and may not match any formal name for the location or other colloquial names by which the location may also be known.
- The grid references, where shown, are the originals given by the recorders and may indicate the specific location of the species, a central grid reference representing a larger survey area, or a grid square.
- Where species have been deemed as ‘sensitive’ by the relevant specialist species recording group the location name will not be shown and the grid reference will have been altered to give a less precise position specified by the species recording group.
- Many of the records have been supplied by specialist species recording groups. Whilst every reasonable effort is made to validate information supplied to the Hampshire Biodiversity Information Centre the accuracy or comprehensiveness of this information cannot be guaranteed.
- Records do not necessarily represent evidence of breeding at a site; please contact HBIC if further details are required for any of these records.

- Whilst a species may have been recorded at a site, this does not indicate that the species is still present. Equally, the absence of a species from a site does not signify that it is absent, only that it has not been recorded, that the site has not been surveyed for this species, or that HBIC has not been informed of its presence.
- Max_Count values of '0' (zero) indicate that none of the records had a positive quantity count and hence the highest count numerical value was '0' (indicating 'present').

Status codes and abbreviations:

EU_Hab_2np	Annex II of the Habitats Directive (non-priority species)
EU_Hab_4	Annex IV of the Habitats Directive
HBAP	Hampshire Biodiversity Action Plan species
NERC_s41	Priority Species listed under Section 41 of the Natural Environment and Rural Communities Act 2006
WCA_s5s94b	Schedule 5 Section 9 Part 4b of the Wildlife and Countryside Act 1981 (as amended)
WCA_s5s94c	Schedule 5 Section 9 Part 4c of the Wildlife and Countryside Act 1981 (as amended)
WCA_s8	Schedule 8 of the Wildlife and Countryside Act 1981 (as amended)
HabReg_s2	Schedule 2 of Conservation of Habitats and Species Regulations 2010 (European Protected Species animal)
CI	County Interest

sharing information about Hampshire's wildlife
The Hampshire Biodiversity Information Centre Partnership includes local authorities, government agencies, wildlife charities and biological recording groups.

Hbic
Hampshire Biodiversity Information Centre

Details of the Solent Wader and Brent Goose Strategy sites within your search area:

Site Code	Maximum Count of Waders in 2010 strategy	Wader Site Classification in 2010 strategy	Maximum Count of Brent Geese in 2010 strategy	Brent Goose Site Classification in 2010 strategy	Brent Geese found in 2002 strategy	Data Summary	Easting	Northing
C10F	1759	Important	416	Important		Waders and Brent in 2010 strategy	475727	104272
C9D	4	Uncertain	44	Uncertain		Waders and Brent in 2010 strategy	476371	104909
H103	1	Uncertain	0			Waders in 2010 strategy	473608	104972
H11	2	Uncertain	0		Yes	Waders in 2010 strategy	471172	106225
H12	0	Uncertain	0			Surveyed for 2010 strategy without positive results	471561	105773
H13	0	Uncertain	0			Surveyed for 2010 strategy without positive results	471667	106050
H14	0	Uncertain	0			Surveyed for 2010 strategy without positive results	471623	106516
H15	0	Uncertain	0			Surveyed for 2010 strategy without positive results	472350	106464
H16A	0	Uncertain	0			Surveyed for 2010 strategy without positive results	473548	107040
H16B	0	Uncertain	0			Surveyed for 2010 strategy without positive results	473683	107250
H16C	0	Uncertain	0			Surveyed for 2010 strategy without positive results	473820	107148
H16D	0	Uncertain	0			Surveyed for 2010 strategy without positive results	474123	107017
H16E	0	Uncertain	0			Surveyed for 2010 strategy without positive results	473272	106629
H16F	0	Uncertain	0			Surveyed for 2010 strategy without positive results	473689	106673
H16G	0	Uncertain	0			Surveyed for 2010 strategy without positive results	474208	106670
H16H	0	Uncertain	0			Surveyed for 2010 strategy without positive results	474486	106609
H17	0	Uncertain	0			Surveyed for 2010 strategy without positive results	474287	106321
H18	0	Uncertain	0			Surveyed for 2010 strategy without positive results	474630	106650
H19	0	Uncertain	0			Surveyed for 2010 strategy without positive results	473195	106331
H20	0	Uncertain	0			Surveyed for 2010 strategy without positive results	474151	106444
H21	0	Uncertain	0			Surveyed for 2010 strategy without positive results	473482	106228
H22A	0	No recorded use	0		Yes	Positive records from 2002 strategy only	473639	105927

Site Code	Maximum Count of Waders in 2010 strategy	Wader Site Classification in 2010 strategy	Maximum Count of Brent Geese in 2010 strategy	Brent Goose Site Classification in 2010 strategy	Brent Geese found in 2002 strategy	Data Summary	Easting	Northing
H22B	0	No recorded use	0		Yes	Positive records from 2002 strategy only	473674	105593
H23A	0	No recorded use	0			Surveyed for 2010 strategy without positive results	472774	105813
H23B	2	Uncertain	0			Waders in 2010 strategy	472988	105716
H23C	0	No recorded use	0			Surveyed for 2010 strategy without positive results	472970	105337
H23D	0	No recorded use	0		Yes	Positive records from 2002 strategy only	473282	105618
H23E	0	No recorded use	2000	Uncertain	Yes	Brent in 2010 strategy	473281	105170
H23F	8	Uncertain	7	Uncertain		Waders and Brent in 2010 strategy	473467	105554
H24A	0	No recorded use	270	Uncertain		Brent in 2010 strategy	472578	105562
H24B	34	Uncertain	150	Uncertain		Waders and Brent in 2010 strategy	472735	105544
H24C	81	Uncertain	700	Uncertain		Waders and Brent in 2010 strategy	472494	105374
H24D	1	Uncertain	900	Important		Waders and Brent in 2010 strategy	472613	105328
H24E	9	Uncertain	0	Uncertain		Waders in 2010 strategy	472728	105310
H25A	0	No recorded use	0			Surveyed for 2010 strategy without positive results	472085	105548
H25B	160	Uncertain	0	Uncertain		Waders in 2010 strategy	472319	105593
H25C	0	No recorded use	130	Uncertain		Brent in 2010 strategy	472289	105347
H25D	7	Uncertain	0			Waders in 2010 strategy	472032	105209
H26	0	No recorded use	0			Surveyed for 2010 strategy without positive results	471853	105132
H27	20	Uncertain	0			Waders in 2010 strategy	471540	105139
H28B	0	Uncertain	0			Surveyed for 2010 strategy without positive results	471305	105114
H64	0	No recorded use	40	Uncertain		Brent in 2010 strategy	473134	103955
H77	351	Important	245	Important		Waders and Brent in 2010 strategy	472850	104043
H91	486	Important	250	Important		Waders and Brent in 2010 strategy	474343	104452

Site Code	Maximum Count of Waders in 2010 strategy	Wader Site Classification in 2010 strategy	Maximum Count of Brent Geese in 2010 strategy	Brent Goose Site Classification in 2010 strategy	Brent Geese found in 2002 strategy	Data Summary	Easting	Northing
H92	832	Important	40	Important		Waders and Brent in 2010 strategy	472859	104679
H93	453	Important	396	Important		Waders and Brent in 2010 strategy	473148	104153
H94	63	Important	265	Uncertain		Waders and Brent in 2010 strategy	473689	103751

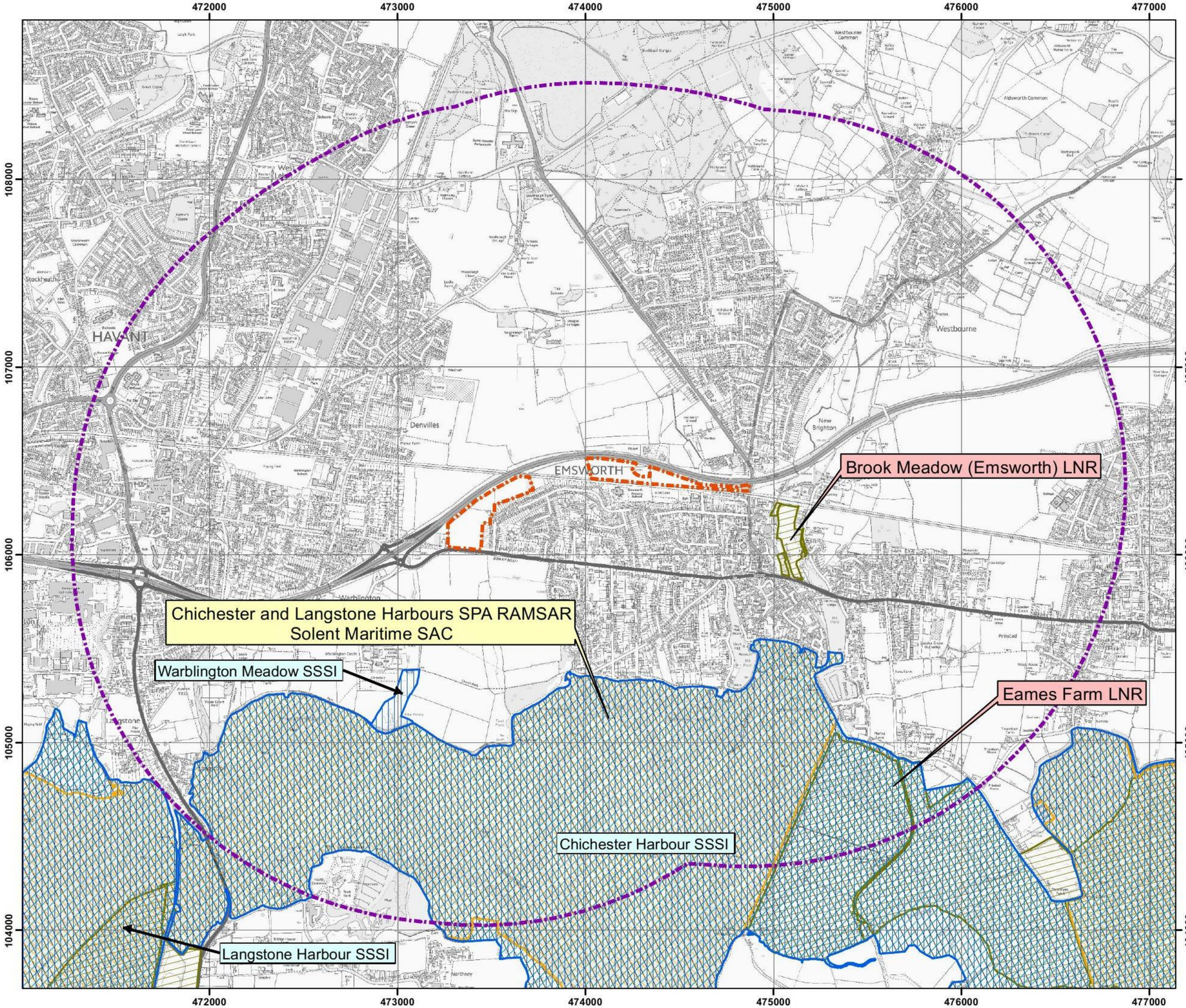
Notes:

- This information is based on the 'Wader and Brent Goose Strategy 2010' but refers to information held separately in the 'Brent Goose Strategy 2002' where the more recent data is deficient. Both strategies are published by the Hampshire and Isle of Wight Wildlife Trust.
- The 'site code' field relates to the unique reference given to each polygon within both strategies. This 'site code' field can be found on the map accompanying this document.
- In the above table, if the classification is blank, the Maximum count field should also be blank (rather than '0').
- During the 2010 survey work, a method of scoring the confidence for the inclusion of sites was employed (for methodology please refer to the 2010 strategy report). The classification fields in the table above refer to this level of confidence, explained more fully in the confidence table below;

Classification Explanation (Level of Confidence)	
Important	Sites which are classed as important for Waders and/or Brent Geese
Uncertain	Sites that fell below the minimum confidence threshold, meaning that sites need further survey work to inform their assessment
No recorded use	Surveyors recorded when birds were not seen at a site. Where regular negative counts were recorded, and the confidence threshold was met, sites were classified as "no recorded use"
Blank	Confidence scoring was not carried out

- Where up-to-date data does not exist in the 2010 update for sites identified as "important" in the 2002 Strategy, the 2002 Strategy remains the best available data source. It is recommended that those sites identified as important in 2002 but lacking updated data be considered as "uncertain" and warranting further investigation.

- **If you would like the full dataset for the 2010 strategy, which includes more detailed GIS layers, this can be supplied by CD. Please contact HBIC for further information.**



Hampshire Biodiversity Information Centre

HBIC Ref: 4990

Statutory designated sites within 2 km of Emsworth Site

Legend

- 2km Search Area
- Site Boundary
- SSSI
- SAC
- SPA
- LNR
- RAMSAR

N

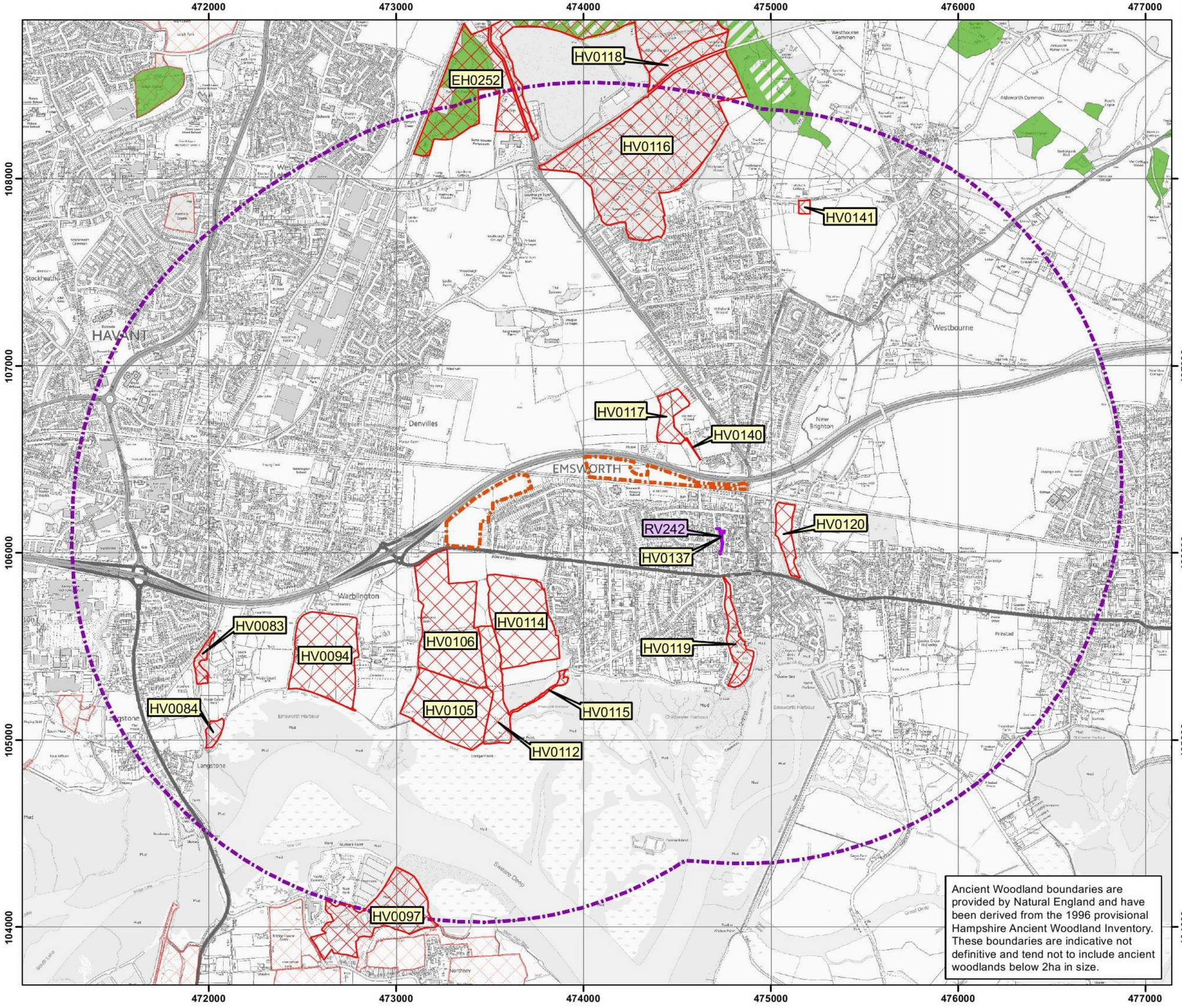
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Scale at A3: 1:19,000

0 0.1250.25 0.5 0.75 1 Kilometers

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Please note: The boundaries for statutory sites have been provided as digital data from Natural England (NE); this digital data is indicative not definitive. Paper maps produced by NE at the time the sites were designated show the official site boundaries.



Hampshire Biodiversity Information Centre

HBIC Ref: 4990

Non-statutory designated sites within 2 km of Emsworth Site

(Wader & Brent Goose 2010 Strategy Sites shown on a separate map)

Legend

- 2km_Search_Area
- Site Boundary
- RVEIs
- SINCs
- Surrounding SINCs

Ancient Woodland Inventory

- Semi-Natural
- Replanted

N

Created: 31/07/2014

Scale at A3: 1:19,000

0 0.125 0.25 0.5 0.75 1 Kilometers

Ancient Woodland boundaries are provided by Natural England and have been derived from the 1996 provisional Hampshire Ancient Woodland Inventory. These boundaries are indicative not definitive and tend not to include ancient woodlands below 2ha in size.

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Details of Sites of Importance for Nature Conservation (SINCs) within the search area:

Please see Criteria for SINCs in Hampshire for more information on Sites of Importance for Nature Conservation in Hampshire.

Status	SINC Ref	SINC Name	Central Grid Ref.	SINC Criteria	Species supported that meet Section 6 of SINC Selection Criteria	Area (ha)
SINC	EH0252	Barton's Copse & The Slip	SU73400850	1A		18.28
SINC	EH0294	Southleigh Forest	SU74400930	1D	Apatura iris (Purple Emperor) [CS] Illecebrum verticillatum (Coral Necklace) [NR]	79.10
SINC	HV0083	Wade Court Park	SU71980531	6B/6C	Egretta garzetta (Little Egret) [CR] - Colony	1.13
SINC	HV0084	Langstone Mill Pond	SU72050500	4A/5B/6A	Tilia platyphyllos (Large-Leaved Lime) [NS]	0.98
SINC	HV0094	Warblington Castle Farm West	SU72670544	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	14.60
SINC	HV0097	North Common & Saltmarsh	SU72800390	2B/4A/6A/6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP] Carex divisa (Divided Sedge) [NR] Inula crithmoides (Golden-Samphire) [NS] Ononis spinosa (Spiny Restharrow) [CS] Petroselinum segetum (Corn Parsley) [CS] Seriphidium maritimum (Sea Wormwoo	13.84
SINC	HV0105	Warblington Castle Farm East E	SU73300520	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	13.51
SINC	HV0106	Warblington Castle Farm East D	SU73300560	6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP]	18.58
SINC	HV0112	Conigar Point Meadows	SU73500530	2B/4A/6A	Apium graveolens (Wild Celery) [CS] Bromus arvensis (Field Brome) [CI] Bupleurum tenuissimum (Slender Hair's Ear) [NR] Carex divisa (Divided Sedge) [NR] Carex extensa (Long-Bracted Sedge) [CS] Inula crithmoides (Golden-Samphire) [NS] Limonium humil	6.07

Status	SINC Ref	SINC Name	Central Grid Ref.	SINC Criteria	Species supported that meet Section 6 of SINC Selection Criteria	Area (ha)
SINC	HV0114	Brook Farm B	SU73700560	6A/6B	Branta bernicla bernicla (Dark-Bellied Brent Goose) [UKBAP] Misopates orontium (Weasel's Snout) [NR] Spergula arvensis (Corn Spurrey) [NR]	14.41
SINC	HV0115	Nore Grassland & Saltmarsh	SU73870531	4A/6A	Bupleurum tenuissimum (Slender Hair's Ear) [NR] Seriphidium maritimum (Sea Wormwood) [CS]	0.62
SINC	HV0116	Southleigh Forest (South)	SU74400830	1D		47.66
SINC	HV0117	Land West of Emsworth Recreation Ground	SU74450668	2B		3.15
SINC	HV0118	Southleigh Forest (North of Emsworth Common Road)	SU74550866	1D		3.79
SINC	HV0119	Emsworth Millpond	SU74800548	4A		3.59
SINC	HV0120	Lumley Meadow	SU75100610	2A/6A	Carex distans (Distant Sedge) [CS] Carex divisa (Divided Sedge) [NR]	2.76
SINC	HV0137	Westbrook Stream, Bridge Road	SU74730600	6A	Alisma lanceolatum (Narrow-Leaved Water-Plantain) [CR]	0.07
SINC	HV0140	Stream West of Emsworth Recreation Ground	SU74580656	6A	Alisma lanceolatum (Narrow-Leaved Water-Plantain) [CR]	0.07
SINC	HV0141	Land East of 54 Long Copse Lane	SU75180785	2B		0.44

Details of Road Verges of Ecological Importance (RVEIs) within the search area:

Please see RVEIs in Hampshire for further details of Road Verges of Ecological Importance in Hampshire.

RVEI Reference	RVEI Name	Grid Reference	Description	Designation	Interest Type	Interest Features	Period of Interest	Management required	Length (m)
RV242	U609 Bridge Road, Emsworth	SU74730608	Strip of grass between Bridge Road Car park and Westbrook Stream	SINC	Community	Alisma lanceolatum (Narrow Leaved Water Plantain CR)	Apr-Sep	September cut only	120

Appendix D – Wildlife Boxes

Introduction

The information in this appendix relates to bat and bird boxes that can be easily incorporated into building and landscape plans. The information provided is not exhaustive and provides examples of some of the types of boxes available.

Including bat and bird boxes throughout the development site has a number of benefits:

- Any roosting or resting places lost as a result of the work will be replaced;
- The ecological value of the site will be enhanced;
- Priority species within the UK and local Biodiversity Action Plans (BAPs) will be encouraged.

Bats

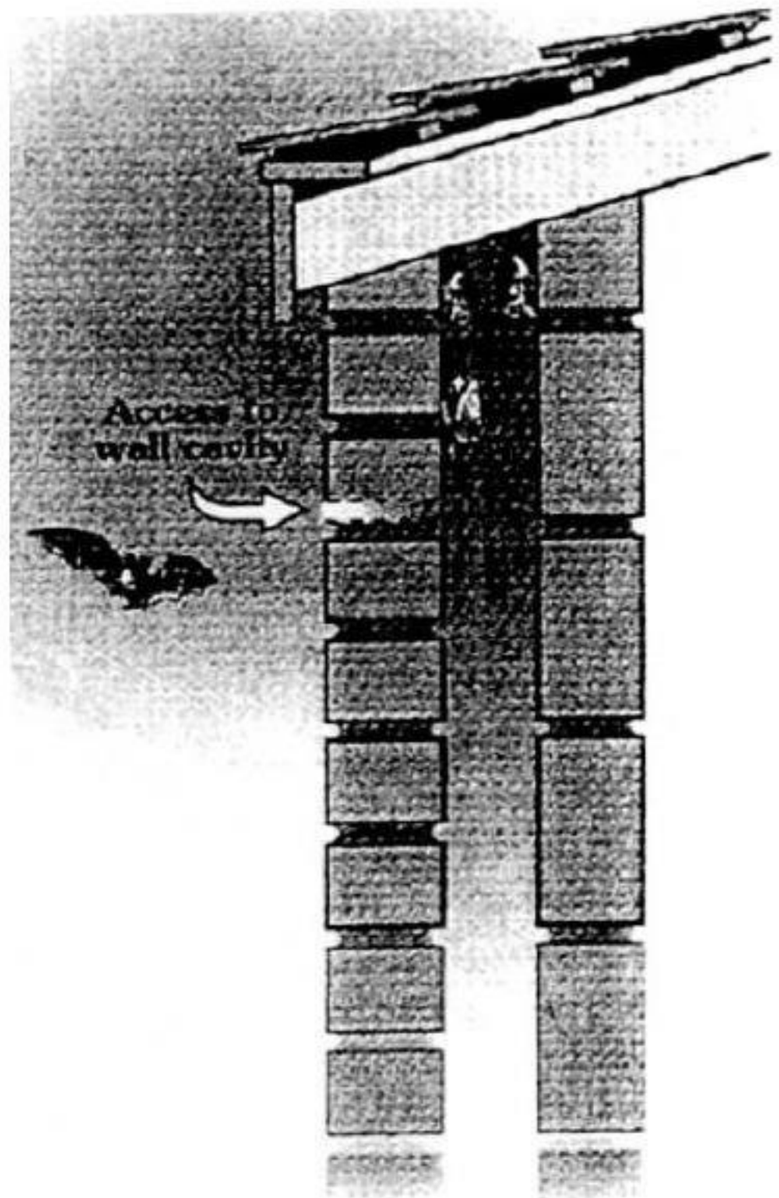
<u>For Buildings</u>

The inclusion of a variety of bat bricks, tubes and boxes for buildings is recommended to encourage a diversity of bat species. Bat bricks and tubes require no maintenance.

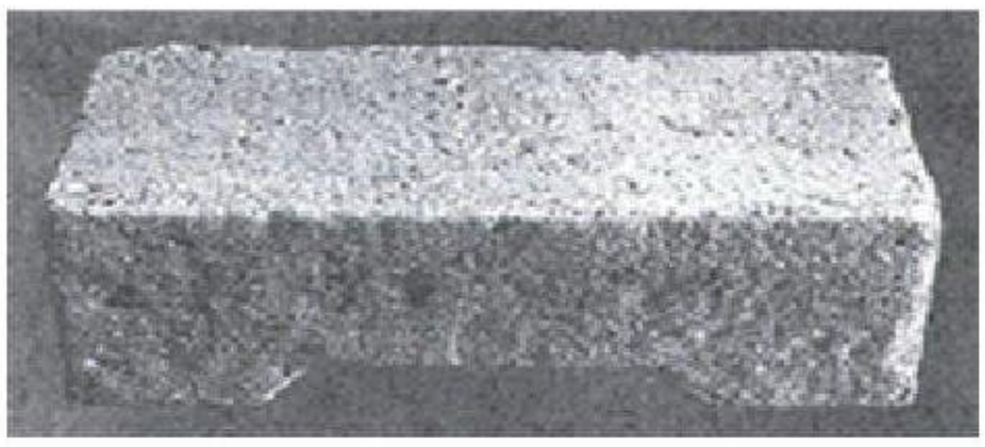
Bat Access and Roost Bricks

Source: Marshalls Clay Products (approved by the Bat conservation Trust)

'... Marshall Clay Products have been producing a Bat Access Brick specially designed to help the country's badly depleted bat population by provided access to wall cavities or roof spaces where most bat colonies tend to be (see diagram). In recent years bats have been declining at an alarming rate. Nearly all colonies tend to be on the outside of houses, in wall cavities, under slates, flashing or tiles, et c. ... Contrary to popular opinion, bats do not make pests and do absolutely no damage to buildings or roof timbers, indeed many people encourage bat colonies in their area because of the large number of insect pests, woodworm, et c. which they eat. Most colonises will use a house for only a few weeks in summer before dispersing in autumn.'



A Bat Brick should ideally be placed as high as possible at the gable apex or close to the soffit.



Marshall's Bat Access Brick, which is now also available in stone.

Marshalls Clay Products - Quarry Lane, Howley Park, Woodkirk, Dewsbury, West Yorkshire, WF12 7JJ – Tel: (01132) 203535, Fax: (01132) 203555.

Bat Tube

Brick bat tubes are designed for buildings, or underneath bridges, arches or tunnels, where conditions are relatively humid. They are particularly useful for new buildings or bridges to attract bats, or to provide new roost sites where existing buildings with bats are being renovated.



This long box can be installed within brick masonry, beneath plasterwork or wood panelling, or incorporated into concrete structures such as factory buildings or bridges. Inside it contains a woodcrete surface, a roughened wood board, and a metal mesh, providing a choice of roosting areas depending on the weather conditions and the bats' habits. This box is maintenance-free as the entrance slit is at the bottom.

No painting required, but if painting is necessary a natural breathable paint should be used.

Width: 20cm; Height: 47.5cm; Depth: 12.5cm; Entrance Width: 15cm; Entrance Depth: 2cm; Weight: 13kg

Bat Box

This type of box is made of woodcrete and is expected to last approximately 25 years. It has a narrow crevice-like internal space to attract Pipistrelle and Noctule bats. Woodcrete (75% wood sawdust, concrete and clay mixture).

Width: 27cm; Height: 43cm; Weight: 8.3kg.



For Trees



Woodcrete boxes have the highest rates of occupation of all box types. The 75% wood sawdust, concrete and clay mixture allows natural respiration, stable temperature, and durability. They are long lasting (approx. 25 years) and are rot- and predator-proof. Hang from a tree branch near the trunk, or fix to a trunk with the supplied 'tree-friendly' aluminium nail. Attractive to smaller British bats.

Material: Woodcrete (75% wood sawdust, concrete and clay mixture); Diameter: 16cm; Height: 33cm; Weight: 4kg.

Bird Boxes

A variety of bird box designs could be installed throughout the development site to attract a diversity of species. Open fronted boxes will attract species such as robins, pied wagtails and spotted flycatchers, while boxes with entrance holes will attract tits, wrens and tree sparrows. Roost pockets will be used by roosting birds over the winter and by smaller species, such as wrens, for nesting in the spring.

Open Fronted Boxes



This box is attractive to robins, pied wagtails, spotted flycatcher, wrens and black redstarts and is best sited on the walls of buildings with the entrance on one side.

These woodcrete boxes are designed to mimic natural nest sites and provide a stable environment for chick rearing and winter roosting. They can be expected to last 25 years or more without maintenance.

Boxes with Entrance Holes

This box is attractive to smaller birds such as tits, wrens and tree sparrows. Sparrow terraces are also available.



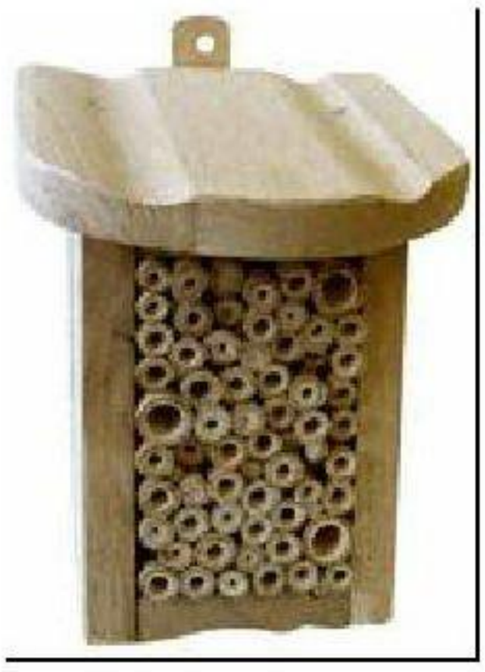
Insect Boxes

As with the bat and bird boxes, a variety of insect boxes is recommended to encourage a diversity of species.

Wooden Insect House

A general insect habitat for beneficial insects in summer and, later in the year, over wintering ladybirds and lacewings. Locate in a sheltered place near nectar or pollen plants or by a pond.

Durable and strong construction in acacia, oak or larch with no maintenance necessary. Dimensions: 22 × 13.5 × 13.5cm.



Woodcrete Insect House



An insect nest made from long-lasting, insulating, woodcrete, with holes of different sizes providing homes for a variety of beneficial insects such as bees and solitary wasps.

Dimensions: 14 × 8 × 26cm; Weight: 3.65kg

Insect House with Inspection Tubes



This nesting and hibernation box for insects has a woodcrete exterior with a wooden front panel which can be removed for observation. Through the transparent tubes you can see the usually hidden lifecycle of many solitary types of bees and hymenoptera including egg-laying, development of larvae and sealing of brood chambers.

Typical inhabitants are wild bees and thread-waisted wasps. All the species attracted to this box are harmless non-aggressive pollinating insects. Dimensions: 33 × 21 × 51 cm; Weight: 7.1kg.

Appendix E – Wildlife-friendly Planting

Table E1 Shrub species of native origin or generally thought to be beneficial to wildlife

(Source: *'Gardening with wildlife in mind'*, Natural England, 2008)

Common name	Scientific name
Hazel	*Corylus avellana*
Elder	*Sambucus nigra*
Goat willow	*Salix caprea*
Hawthorn	*Crataegus monogyna*
Dog rose	*Rosa canina*
Butterfly bush	*Buddleia davidii*
Guelder rose	*Viburnum opulus*
Gorse	*Ulex europaeus*
Broom	*Cytisus scoparius*
Wayfaring tree	*Viburnum lantana*
Shrubby cinquefoil	*Potentilla fruticosa*
Raspberry	*Rubus idaeus*
Alder buckthorn	*Frangula alnus*
Wild privet	*Ligustrum vulgare*
Barberry	*Berberis × stenophylla*
Barberry	*Berberis vulgaris*
Bell heather	*Erica cinerea*
Bilberry	*Vaccinium myrtillus*
Black currant	*Ribes nigrum*
Blackthorn	*Prunus spinosa*
Buckthorn	*Rhamnus catharticus*
Butcher's-broom	*Ruscus aculeatus*
Cherry laurel	*Prunus laurocerasus*
Cowberry	*Vaccinium vitis-idaea*
Cross-leaved heath	*Erica tetralix*
New Zealand holly	*Olearia macrodonta*
Daphne	*Daphne odora*
Dogwood	*Cornus sanguinea*
Field rose	*Rosa arvensis*
Firethorn	*Pyracanthus angustifolia*
Flowering Currant	*Ribes sanguineum*
Gooseberry	*Ribes uva-crispa*
Hebe 'Midsummer Beauty'	*Hebe species*
Hedgehog Rose	*Rosa rugosa*
Himalayan honeysuckle	*Leycesteria formosa*
Holly	*Ilex aquifolium*
Japanese quince	*Chaenomeles japonica*
Lilac	*Syringa vulgaris*
Mexican orange	*Choisya ternata*
Mezereon	*Daphne mezereum*
Midland Hawthorn	*Crataegus laevigata*
Oregon Grape	*Mahonia aquifolium*
Osier	*Salix viminalis*
Portugal laurel	*Prunus lusitanica*
Privet	*Lustrum ovalifolium*
Purple Willow	*Salix purpurea*

Common name	Scientific name
Snowy Mespilus	*Amelanchier canadensis, Amelanchier lamarckii*
Spindle	*Euonymus europaeus*
Spurge laurel	*Daphne laureola*
Sweet briar	*Rosa rubiginosa*
Wild privet	*Ligustrum vulgare*

Table E2 Tree species of native origin or generally thought to be beneficial to wildlife

(Source: '*Gardening with wildlife in mind'*, Natural England, 2008)

Common name	Scientific name
Pedunculate oak	*Quercus robur*
Ash	*Fraxinus excelsior*
Wych Elms	*Ulmus glabra*
Whitebeams	*Sorbus aria agg.*
Rowan	*Sorbus aucuparia*
Aspen	*Populus tremula*
Apple	*Malus domestica*
Bird Cherry	*Prunus pardus*
Common Alder	*Alnus glutinosa*
Crab apple	*Malus sylvestris*
Crack Willow	*Salix fragilis*
Downy Birch	*Betula pubescens*
False Acacia	*Robinia pseudoacacia*
Field Maple	*Acer campestre*
Hornbeam	*Carpinus betulus*
Juniper	*Juniperus communis*
Large-leaved lime	*Tilia platyphyllos*
Small-leaved lime	*Tilia cordata*
Pear	*Pyrus communis*
Scots Pine	*Pinus sylvestris*
Sessile oak	*Quercus petraea*
Silver birch	*Betula pendula*
Sweet chestnut	*Castanea sativa*
Wild Cherry	*Prunus avium*
Wild service-tree	*Sorbus torminalis*
Yew	*Taxus baccata*

Table E3 Gardening for bats

Aim at having flowers in bloom throughout the year, including both annuals and herbaceous perennials. Below are some suggestions, but this is not an exhaustive list. Flowering times are approximate, varying dependent on region. Regular dead-heading extends flowering period in many flowers.

A=annual, HA= hardy, annual, HHA=half-hardy annual, P=perennial, W=wild flower.

Flowers for borders			
St. John's Wort	*Hypericum*	P	March
Marigolds	*Calendula*	H/A	March-October
Aubrietia	*Aubrietia deltoidea*	P	March-June
Honesty	*Lunaria rediviva*	HB	March
Forget-me-not	*Myosotis* sp.	A/P	March-May
Elephant ears	*Bergenia*	P	April
Wallflowers	*Erysimum*	B	April-June
Cranesbills	*Geranium sp.*	P	May-September
Yarrow	*Achillea*	P	May-
Poppies	*Papaver* sp.	A	May- July
Dames violet	*Hesperis matronalis*	P	May-August
Red Valerian	*Centranthus rubber*	P	May-Sept
Poached egg plant	*Limnanthes*	HA	June-August
Knapweed	*Centaurea nigra*	P	June-September
Phacelia		HA	June-September
Ox-eye daisy	*Leucanthemum vulgare*	P	June-August
Evening primrose	*Oenothera biennis*	B	June-September
Candytuft	*Iberis umbellate*	HA	June-September
Sweet William	*Dianthus barbatus*	B	June-July
Blanket flowers	*Gaillardia*	P	June -
Verbena	*Verbena bonariensis*	HHA	June-October
Scabious	*Knautia arvensis*	P	July-August
Night-scented stock	*Mattiola bicornia*	HA	July-August
Pincushion flower	*Scabious* sp.	A/P	July-September
Cherry pie	*Heliotrope*	HHA	July-October
Mexican aster	*Cosmos* sp.	A/P	July-October
Cone flower	*Rudbeckia sp.*	A/P	August-November
Mallow	*Lavateria sp.*	P	August-October

Michaelmas daisy	*Aster* sp.	P	August-September
Ice plant 'Pink lady'	*Sedum spectabile*	P	September
Herbs – both leaves and flowers are fragrant			
Fennel	*Foeniculum vulgare*		July-September
Bergamont	*Monarda didyma*		June-September
Sweet Cicely	*Myrrhis odorata*		April-June
Hyssop	*Hyssopus officinalis*		July-September
Feverfew	*Tanacetum parthenium*		June-September
Borage	*Borago officinalis*		May-September
Rosemary	*Rosmarinus officinalis*		March-May
Lemon balm	*Melissa officinalis*		
Coriander	*Coprianrum sativum*		June-August
Lavenders	*Lavendula* sp.		
Marjoram	*Origanum* sp.		
Trees, shrubs and climbers important to insects			
Oak	*Quercus* sp.		large gardens only
Silver birch	*Betula pendula*		
Common alder	*Alnus glutinosa*		Suitable for coppicing
Hazel	*Corylus avellana*		Suitable for coppicing
Elder	*Sambucus nigra*		Small
Goat willow	*Salix caprea*		Suitable for coppicing
Hawthorn	*Crataegus monogyna*		Suitable for coppicing
Honeysuckle	*Lonicera* sp.		Grow a variety for succession
Dog rose	*Rosa canina*		Climber
Bramble	*Rubus fruticosus*		Climber
Ivy	*Hedera helix*		Climber
Buddleia	*Buddleija davidii*		Shrub
Guelder rose	*Vibernum opulus*		Shrub
Gorse	Ulex *sp.*		Shrub
Plants for pond edges and marshy areas			
Purple loosestrife	*Lytrhum salicaria*	W	June-August
Meadow sweet	*Filipendula ulmaria*	W	June-September
Lady's smock	*Cardamine pratensis*	W	April-June
Water mint	*Mentha aquatica*	W	July-September
Angelica	*Angelica sylvestris*	W	July-September
Hemp agrimony	*Eupatorium cannabinum*	W	March-May

Marsh marigold	*Caltha palustris*	W	June-September
Creeping Jenny	*Lysimachia nummularium*	W	May-August
Fringed water lily	*Nymphoides peltata*	W	June-September
Water forget-me-not	*Myosotis scorpioides*	W	June-September

Allow part lawns to grow long in summer and cut in autumn, removing the clippings. Avoid using fertilisers. Compost heaps are food producers of insects too.

(Source: *'Gardening for bats'*, Bat Conservation Trust, 2004)