

Ecological Survey and Assessment – land adjacent to the Nursling Sub Station, off Station Road, Nursling, Hampshire.



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This report describes the findings of an ecological survey and assessment undertaken by Phil Lomax BSc(Hons) CBiol MSB MIEEM during 2012. The contents of this report are the copyright of the author. For further details and enquiries, please contact: [REDACTED]

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Background

This is an ecological survey and assessment of the land adjacent to the Nursling Sub Station, off Station Road, Nursling. The National Grid has submitted a planning application to Test Valley Borough Council as local planning authority for the development of this land (Planning Application 12/02151/CLPS). The site is shown at Figure 1. The land is believed to be owned by the National Grid and lies outside the current operational compound.

In the winter of 2011-12, contractors drilled several boreholes and took core samples from the site and also installed at least two dip wells for the purpose of monitoring water table levels on the site. This activity indicated that consideration was being given to the future development of this land and prompted this survey.

National Grid indicates in the above planning application that it has been undertaking a number of ecological surveys to establish the presence of several protected species on the site including:

- Reptiles
- Great Crested Newt
- Dormouse
- Bats
- Badgers

In its supporting statement, the applicants state that the finding of these surveys *“will be used to inform the requirement for protected species licenses and the detailed environmental management plan and mitigation for the works prior to and during construction at the site.”* However, the applicants did not include any details of its ecological surveys to accompany the above planning application.

The purpose of this report is to draw attention to the significant biodiversity of this land both in a local and wider regional and national context. Any consideration of possible future alternative uses of this land needs to be based on consideration of its current ecological value as required by the National Planning Policy Framework (NPPF):

109. 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;*

118. 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;*

Local planning authorities must also give consideration to the relevant requirements of the Natural Environment and Rural Communities (NERC) Act 2006 in considering development proposals. Part 3 of this Act places a duty on all public authority's to conserve biodiversity. The National Grid, as a public utility company also has the same duties under the Act:

40 (1) Every public authority must, in exercising its functions, have regard , so far as is consistent with th proper exercise of those functions, to the purpose of conserving biodiversity.

(3) Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.

41 (1) The Secretary of State must, as respects England, publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity.

To meet theses duties therefore, applicants for planning permission and local planning authorities determining planning applications must establish what effects the proposed development is likely to have on such habitats and species and what measures can be taken to conserve them, including restoring or enhancing them.

The over-riding requirements for all development proposals therefore are that they should result in no net loss of biodiversity and indeed should seek opportunities to restore or enhance biodiversity. The National Grid has submitted no ecological survey and assessment with the above application and no proposals as to how these duties will be met. Without such detailed surveys and assessment, neither the National Grid nor the local planning authority can conclude either that there will be no net loss of biodiversity and whether the development proposals meet the NERC Act biodiversity conservation duties. This report concludes that the application site is in fact of such a high biodiversity value that it qualifies as a SINC (Site of Importance for Nature Conservation)¹ as it meets the following SINC designation criteria:

Neutral/acid/calcareous grassland

2A Agriculturally unimproved grasslands.

Wetlands

5B Fens, flushes, seepages, springs, inundation grasslands etc. that support a flora and fauna characteristic of unimproved and waterlogged (seasonal or permanent) conditions.

¹ <http://www3.hants.gov.uk/hbic-sinccriteria.pdf>

Species

6A Sites which support one or more notable species.

6C Sites which support an outstanding assemblage of species.

In accordance with the approved Test Valley Borough Local Plan any development proposed on SINC sites is subject to planning policy ENV 04:

SITES OF IMPORTANCE FOR NATURE CONSERVATION

Development which would have an adverse impact on the wildlife interest of a Site of Importance for Nature Conservation (SINC), either directly or indirectly, will only be permitted if it can be demonstrated that:

1. the need for the development outweighs the county importance of the designation; and
2. the benefits from the development outweigh the adverse impact on the site's wildlife interest.

Where development is permitted any adverse impacts should be kept to a minimum and measures to compensate for the harm to the site's wildlife interest will be sought.

Furthermore, as the site supports a number of protected species it is also subject to policy ENV 05:

PROTECTED SPECIES

Development which would affect a legally protected species or a site supporting a legally protected species will only be permitted if:

1. individual members of the species and, in all relevant cases, their breeding and resting places are not harmed; and
2. in all relevant cases, discrete colonies of the species affected can be sustained.

Where development is permitted disturbance to the species and, in all relevant cases, their breeding and resting places should be reduced to a minimum.

Introduction

The site is a popular local amenity, well used by dog walkers from Nursling and Rownhams and there is a public right of way running diagonally through the site from east to west which links to the Test Way. The site also supports a remarkable biodiversity for its size. The purpose of this survey was to establish the range of habitats and over a period of 10 months,(from January 2011 to November 2012) what species of plants and animals live within or visit the site.

The survey site is approximately 5.0 ha in area and is shown at Figure 1 below:



Figure 1- The ecological survey site adjacent to the Nursling Sub Station. The yellow line indicates the position of the public right of way across the site. (Aerial photograph © Promap).

Site History

It is believed that the site has been left undisturbed, with no significant human intervention for over 50 years. Sand and gravel was extracted from the site in the 1950's and the current range of habitats and diversity of species is believed to have developed spontaneously since the end of the 1950's or the beginning of the 1960's. It is believed that following mineral extraction, the site was not (as in the case of the adjacent fields) infilled with imported waste material back to original ground levels. This would account for the site being below the level of surrounding land and would

also help to explain why parts of the site (the lowest parts of the site to the south adjacent to Mill Lane) are waterlogged for much of the year, giving rise to marsh and wet woodland habitats.

The current site vegetation is therefore believed to be semi-natural having developed spontaneously from the former mineral workings. A likely exception to this is the boundary vegetation – hedgerows and tree belts on the western, eastern and southern boundaries – which are believed to be remnants of the vegetation which existed prior to mineral extraction. These site boundaries have *not* been included within this survey and assessment since it has been assumed that should any development proposals come forward on the site, these boundary habitats could be conserved.

It is understood that the land was grazed – on licence from the landowners – for a number of years from the mid 1970,s up to about 1990. However there is no evidence of any grazing since.

Habitats

There are a wide range of habitats within the site demonstrating the range of ecological succession from bare open land to scrub woodland. The main habitats include:

| Broad Habitat Type | Related NERC Act S41 Habitats of Principal Importance for Biodiversity in England |
|--------------------|-----------------------------------------------------------------------------------|
| 1. Lichen heath | Lowland heathland |
| 2. Dry grassland | Lowland dry acid grassland Lowland calcareous grassland |
| 3. Wet grassland | Lowland meadows |
| 4. Marsh | Lowland fens |
| 5. Scrub | Lowland mixed deciduous woodland Wet woodland |
| 6. Woodland | Lowland mixed deciduous woodland Wet woodland |

1. Lichen Heath

This habitat consists of bare and sparsely vegetated ground alongside the main access track across the site, immediately adjacent to and contiguous with the security fence to the operational compound. To the inside of the access track (nearest the operational compound) on a gentle slope, vegetation cover is sparse and consists of a mixture of ruderal plants (e.g. Scarlet Pimpernel, Sticky Groundsel, etc, etc) but dominated in large areas by a species of Reindeer lichen (*Cladonia sp.*). This type of habitat and this species are not often found outside of heathland such as in the nearby New Forest or sand dunes. On the outside of the track the land is in places vegetated with fine grasses and supports club mosses and a range of other lichens including more *Cladonia spp.* and *Peltigera sp.* This habitat merges into adjacent areas of grassland, marsh and woodland. Similar habitat occurs in localised patches throughout the grassland within the site.



Figure 2 – Species of Reindeer lichen *Cladonia* sp. which dominates in some areas adjacent to the operational site alongside the main access track.



Figure 3 – Club mosses and lichen *Peltigera* sp. which form localised patches throughout the grasslands on the site, especially adjacent to the main access track.

2. Dry grassland

The dry grassland habitat occupies much of the upper and central part of this sloping site. It is dominated by False Oat Grass *Arrhenatherum elatius* with Cocksfoot *Dactylis glomerata* and most closely resembles MG1 grassland in the National Vegetation Classification (NVC). There are wide variations within the grassland including communities that approximate to for example the MG1b *Urtica dioica* sub-community and the MG1e *Centaurea nigra* sub community. The grassland is herb rich including Wild Carrot *Daucus carota*, Common Centaury *Centaureum erythraea*, Black Knapweed *Centaurea nigra*, Ox-eye Daisy *Leucanthemum vulgare*, Yarrow *Achillea millefolium*, Agrimony *Agrimonia eupatoria*, Creeping Cinquefoil (*Potentilla reptans*), Ribwort Plantain (*Plantago lanceolata*), Common Sorrel (*Rumex acetosa*) and Perforate St. Johns Wort (*Hypericum perforatum*).

This dry grassland is on a slight slope and south facing and is the core habitat for many invertebrates, reptiles and small mammals on the site. It contains the majority of the meadow ant hills fed on by the Green Woodpeckers *Picus viridis* and is the main area for butterflies – especially the significant Marbled White *Melanargia galathea* community. Reptile survey mats in this grassland consistently produced findings of Slow worm *Anguis fragilis* and Common Lizard *Lacerta vivipara*.

The public footpath which runs laterally east to west across the site shows slight variations in vegetation including an MG6 type community with *Lolium perenne* and *Cynosaurus cristatus*.

Notably, a number of the species of the grassland – and indeed of all the habitats on site - are indicators of calcareous soils. These include for example Wild Parsnip *Pastinaca sativa* and Burnet Saxifrage, Crosswort *Cruciata laevipes* and Musk Mallow *Malva moschata* and Dogwood *Cornus sanguinea*. This reflects the flora of the nearby undisturbed grasslands of the roadside verges of Station Road which include species such as Betony, Greater Knapweed, Burnet Saxifrage, Pyramidal Orchid and Bee Orchid.

Large areas of the dry grassland are grazed by the once large population of rabbits creating significant areas of low turf lawn enabling a variety of lower growing grasses and herbs to establish including abundant areas of Heath Speedwell *Veronica officinalis* and Ground Ivy *Glechoma hederacea*. In turn the rabbit population is preyed upon especially by the Common Buzzard *Buteo buteo*.



Figure 4 – View up the site from the marsh in the south towards the dry grassland.



Figure 5 – Wild Parsnip, one of several plant indicators of calcareous soils on the site.

3. Wet grassland

Wet grassland covers a lesser area of the site than the dry grassland areas and merges into the dry grassland and into the marsh areas and occupies the low lying area between them. There is a significant stand to the west of the site between the public footpath across the site and the adjacent Test Way footpath. The wet grassland is dominated by Yorkshire Fog *Holcus lanatus* and as with the dry grassland there are many variations in the wet grassland community. On the NVC it best fits the MG10 *Holcus lanatus/Juncus effusus* community, wetter areas merging into the MG10b *Juncus inflexus* sub community. There are also localised patches of what approximate to MG9 *Holcus lanatus/Deschampsia cespitosa* and the MG9b *Arrhenatherum elatius* sub community where the wet grassland marsh and drier grassland areas merge.

The wet grassland includes a significant population of Cuckooflower *Cardamine pratensis* which is probably the reason for the significant Orange Tip *Anthocaris cardamines* butterfly population on the site.

4. Marsh

The main marsh area occupies the lowest lying area of the site on the southern boundary. In addition to being the lowest lying area of the site to which most runoff and seepage collects, drainage along this boundary is impeded. As this is a former mineral extraction site, the height difference between the marsh area and the adjacent land on Mill Lane is up to 2 metres. In winter therefore, the water table in the marsh area is at or above the surface of the ground.

The marsh vegetation is dominated by a dense mat of *Juncus spp.* with *Carex spp.* especially *C. otrubae*. There are a variety of herbs including Hemp Agrimony *Eupatorium cannabinum*, Purple Loosestrife *Lythrum salicaria* and Water Mint *Mentha aquatica* and Greater Birds-foot Trefoil *Lotus pendunculatus*, Common Fleabane *Pulicaria dysenterica*, Common Comfrey *Symphytum officinale*, Common Marsh Bedstraw *Galium palustre*, Gipsywort *Lycopus europaeus* and Agrimony *Agrimonia eupatoria*. It most closely approximates to the S28 *C. otrubae* swamp community on the NVC intermingled with the MG10 wet grassland. In areas where the grassland has been heavily grazed by rabbits, Silverweed *Potentilla anserina* dominates.

Other marsh areas include a small patch of *Phragmites* reedbed and a small patch of *Phalaris arundinacea* tall herb fen, both to the west of the site. These areas connect the drainage channels from the north of the site to the main marsh area described above.

The marsh areas are in many places succeeding to willow scrub/wet woodland dominated by *Salix spp.* (please see scrub and woodland below).



Figure 6 – The main marsh area to the south of the site dominated by *Juncus spp.* The yellow flowers of the abundant Agrimony are clearly visible.

5. Scrub

Large parts of the site are succeeding from grassland and marsh to scrub. In the drier grassland areas, there are many large patches of Bramble scrub *Rubus fruticosus* supporting a variety of nesting birds, mammals and providing protection for reptiles. The Bramble is usually succeeded itself by Hawthorn *Crataegus monogyna* and Blackthorn *Prunus spinosa* which in places have matured to form dense impenetrable thorny scrub of great value to nesting birds. To the west of the site there is a large patch of Dogwood *Cornus sanguinea*.

In the wetter areas of the site, the succession to scrub is through *Salix spp.* especially *S.cinerea* which dominates large parts of the site.

This scrub is particularly valuable to a range of breeding birds on the site including several species of warblers which breed here in great numbers. These include Chiffchaff, Blackcap, Willow Warbler

Garden Warbler and Whitethroat. The site is a significant stop over for migrating birds in the autumn and especially in the spring when the scrub areas are full of migrating warblers.

Oak saplings are now common across the site and will if allowed to grow and develop, eventually mature into woodland.

6. Woodland

The woodland on the site is effectively mature scrub which has developed to the extent that there is now sufficient light suppression beneath the canopy to allow a genuine woodland flora to establish. This flora includes Dogs Mercury *Mercurialis perennis* and Sweet Violet *Viola odorata*, Wood Avens *Geum urbanum*, Herb Robert *Geranium robertianum* Enchanters Nightshade *Circaea lutetiana*, Male Fern *Dryopteris felix-mas* and a significant community of Broad-leaved Helleborine *Epipactis helleborine*

The trees are festooned with corticolous lichens, comparable to those found in the New Forest and other humid, pollution free areas of Britain such as Cornwall and Pembrokeshire. *Usnea*, *Evernia*, *Parmelia* and *Ramalina spp.* are abundant.

The woodland is also home to a small population of Roe Deer as well as Woodmouse and birds such as Greater Spotted Woodpecker, Jay and Nuthatch.

Species

The range and mosaic of habitats and ecotones between habitats on this relatively small site, supports a wide diversity of species with some :

- 150 species of flowering plants
- 60 species of birds
- 13 species of mammals
- 5 species of reptiles and amphibians
- 21 species of butterfly

This represents a remarkable biodiversity within such a relatively small site. Furthermore, several of these species are scarce or endangered locally, regionally and nationally and some are specially protected or subject to priority conservation action for this reason. Table 1 below summarises these species.

There are significantly more species of invertebrates on this site which are deserving of a more detailed study. Because the site has been left largely undisturbed for over 50 years with no fertiliser application or pesticide use, there is likely to be a significant invertebrate biodiversity in keeping with the vegetation diversity. Some indication of this potential diversity is confirmed by insect records kindly supplied by the Southampton Natural History Society.

Likewise the lichen flora of the site is exceptional for a site of this size and location and it too is deserving of a more detailed survey and assessment.

Finally, there is strong anecdotal evidence of Dormice *Muscardinus avellanarius* on the site. This is a European protected species. The cats of a neighbouring property have brought at least two specimens into the garden – one of which was independently witnessed. The ecological consultants employed by National Grid have erected many nesting tubes around the site which will hopefully confirm the presence on site. While the site was excavated for sand and gravel, the tall dense

hedges around the site were conserved and these connect to adjacent woodland and other hedgerows in the area. It is quite feasible therefore that this species has survived in the area within this extensive hedgerow network.



Figure 7- Common Lizard – one of several protected species or species of conservation concern on the site.



Figure 8 – Slow worms another protected species are common particularly in the central part of the site in the dry grassland



Figure 9 – Peregrine Falcon on an overhead electricity pylon on the site



Figure 10 – The site is rich in insect fauna including a large population of the Marbled White butterfly



Figure 11 – Eyed Hawk Moth at the site. The larvae feed on the abundant willow and poplar trees



Figure 12 – Trees on the site are festooned with a diversity of lichen species including *Usnea spp* and *Evernia spp*.



Figure 13 – There is a large colony of the beautiful orchid Broad-leaved Helleborine on the site – one of three species of orchids found at the site.

Table 1 – Species of conservation concern and with specific protection found on the site

| Species | NERC Act 2006, Section 41 Species | Wildlife and Countryside Act, 1981 | UK BAP Priority | Red Data List Species | EC Birds Directive | Habitats Directive |
|--------------------------------------------|--------------------------------------------------|---------------------------------------------------|----------------------------|----------------------------------|-------------------------------|-------------------------------|
| Reptiles and Amphibians | | | | | | |
| Common Toad <i>Bufo bufo</i> | ✓ | ✓Sch 5 Section 9.5 | ✓ | | | |
| Slow-worm <i>Anguis fragilis</i> | ✓ | ✓Sch 5 Section 9.1 ✓Sch 5 Section 9.5 | ✓ | | | |
| Grass Snake <i>Natrix natrix</i> | ✓ | ✓Sch 5 Section 9.1 ✓Sch 5 Section 9.5 | ✓ | | | |
| Common Lizard <i>Zootoca vivipara</i> | ✓ | ✓Sch 5 Section 9.1 ✓Sch 5 Section 9.5 | | | | |
| Common Frog | | ✓Sch 5 Section 9.5 | | | | |
| | | | | | | |
| Birds | | | | | | |
| Peregrine Falcon <i>Falco peregrinus</i> | | ✓Sch1 Part1 | | | ✓ Annex 1 | |
| Red-legged Partridge <i>Alectoris rufa</i> | | | | | ✓ Annex 2.1 | |
| Pheasant <i>Phasianus colchicus</i> | | | | | ✓ Annex 2.1 | |
| Woodcock <i>Scolopax rusticola</i> | | | | ✓ Amber | ✓ Annex 2.1 | |
| Carrion Crow <i>Corvus corone</i> | | | | | ✓ Annex 2.2 | |
| Rook <i>Corvus frugilegus</i> | | | | | ✓ Annex 2.2 | |
| Jackdaw <i>Corvus</i> | | | | | ✓ | |

| | | | | | | |
|--------------------------------------------------------------|---|-------------|---|---------|----------------|--|
| <i>monedula</i> | | | | | Annex 2.2 | |
| Jay <i>Garrulus glandarius</i> | | | | | ✓ Annex 2.2 | |
| Magpie <i>Pica pica</i> | | | | | ✓ Annex 2.2 | |
| Redwing <i>Turdus iliacus</i> | | ✓Sch1 Part1 | | ✓ Red | ✓ Annex 2.2 | |
| Blackbird <i>Turdus merula</i> | | | | | ✓ Annex 2.2 | |
| Nightingale <i>Luscinia megarhynchos</i> | | | | ✓ Amber | | |
| Fieldfare <i>Turdus pilaris</i> | | ✓Sch1 Part1 | | ✓ Red | ✓ Annex 2.2 | |
| Mistle Thrush <i>Turdus viscivorus</i> | | | | ✓ Amber | ✓ Annex 2.2 | |
| Northern Goshawk <i>Accipiter gentilis</i> | | ✓Sch1 Part1 | | | | |
| Black Redstart <i>Phoenicurus ochruros</i> | | ✓Sch1 Part1 | | ✓ Amber | | |
| Common Redstart <i>Phoenicurus phoenicurus</i> | | | | ✓ Amber | | |
| Meadow Pipit <i>Anthus pratensis</i> | | | | ✓ Amber | | |
| Common Kestrel <i>Falco tinnunculus</i> | | | | ✓ Amber | | |
| Common Cuckoo <i>Cuculus canorus</i> | ✓ | | ✓ | ✓ Red | | |
| Reed Bunting <i>Emberiza schoeniclus</i> | ✓ | | ✓ | ✓ Amber | | |
| House Sparrow <i>Passer domesticus</i> | ✓ | | | | | |
| Marsh Tit <i>Poecile palustris subsp. palustris/dresseri</i> | ✓ | | ✓ | ✓ Red | | |
| Bullfinch <i>Pyrrhula pyrrhula</i> | ✓ | | | ✓ Amber | | |

| | | | | | | |
|---------------------------------------------------------------------------|---|----------------------------------------|---|---------|-------------|---|
| Dunnock <i>Prunella modularis</i> | | | | ✓ Amber | | |
| House Sparrow <i>Passer domesticus</i> | | | ✓ | | | |
| Starling <i>Sturnus vulgaris</i> subsp. <i>vulgaris</i> | ✓ | | ✓ | ✓ Red | | |
| Song Thrush <i>Turdus philomelos</i> subsp. <i>clarkei</i> | ✓ | | ✓ | ✓ Red | ✓ Annex 2.2 | |
| Grey Wagtail Grey Wagtail <i>Motacilla cinerea</i> | | | | ✓ Amber | | |
| Willow Warbler <i>Phylloscopus trochilus</i> | | | | ✓ Amber | | |
| Common Whitethroat <i>Sylvia communis</i> | | | | ✓ Amber | | |
| Green Woodpecker <i>Picus viridis</i> | | | | ✓ Amber | | |
| | | | | | | |
| Mammals | | | | | | |
| Hedgehog <i>Erinaceus europaeus</i> | ✓ | | | | | |
| Pipisrelle/Soprano Pipistrelle <i>Pipistrellus pipistrelleus/pygmaeus</i> | ✓ | Sch 5 Section 9.4 Sch 5 Section 9.5 | ✓ | | | ✓ |
| | | | | | | |
| Insects | | | | | | |
| Wall butterfly <i>Lasiommata megera</i> | ✓ | | ✓ | | | |

| Table 2 – Full list of species recorded on the site | | | |
|-----------------------------------------------------|------------------------|----------------------------------------------------------|--|
| Species | Distribution/Abundance | Notes | |
| FLOWERING PLANTS | | | |
| GRASSES, SEDGES AND RUSHES | | | |
| Yorkshire Fog – <i>Holcus lanatus</i> | A | Dominant grass species in damper grassland | |
| Hard Rush <i>Juncus inflexus</i> | O - LC | | |
| Soft Rush <i>Juncus effusus</i> | O-LC | Co-dominant in low lying marsh areas | |
| Compact Rush <i>Juncus conglomeratus</i> | O - LC | Co- dominant in low lying marsh areas | |
| Jointed Rush <i>Juncus articulatus</i> | O | | |
| Field Woodrush <i>Luzula campestris</i> | O-LC | | |
| False Fox Sedge <i>Carex otrubae</i> | LF | | |
| Crested Dogs – tail <i>Cynosaurus cristatus</i> | LC | Mainly alongside paths | |
| Perennial Rye Grass <i>Lolium perenne</i> | LC | Mainly alongside paths | |
| False Oat Grass <i>Arrhenatherum elatius</i> | A | Dominant grass species in drier grassland | |
| Meadow Foxtail <i>Alopecurus pratensis</i> | O-LF | | |
| Cocksfoot <i>Dactylis glomerata</i> | C | In drier grassland | |
| Tufted Hair Grass <i>Deschampsia cespitosa</i> | O-LF | In low lying marsh areas | |
| Sweet Vernal Grass <i>Anthoxanthum odoratum</i> | O-LF | | |
| Grey Sedge – <i>Carex divulsa</i> | O | | |
| Oval Sedge – <i>Carex ovalis</i> | O | | |
| Spiked Sedge – <i>Carex spicata</i> | O | | |
| Glaucous Sedge <i>Carex flacca</i> | C | | |
| Reed Canary Grass <i>Phalaris arundinacea</i> | LC | Main community to south east corner of operational site. | |
| Common Reed <i>Phragmites australis</i> | R | One main stand to the west of the site. | |
| | | | |
| HERBS | | | |
| Broad –leaved Helleborine | LC | One stand of about | |

| | | | |
|------------------------------------------------------|-------|-----------------------------------------------------------------|--|
| <i>Epipactis helleborine</i> | | 30-40 plants within shady glades in woodland | |
| Common Spotted Orchid <i>Dactylorhiza fuchsii</i> | R | One spike in damp grassland | |
| Bee Orchid <i>Ophrys apifera</i> | R | Three plants alongside gravel track to west of operational site | |
| Water Figwort <i>Scrophularia auriculata</i> | R | | |
| Heath Speedwell <i>Veronica officinalis</i> | LC | | |
| Germander Speedwell <i>Veronica chamaedrys</i> | | | |
| Hemp Agrimony <i>Eupatorium cannabinum</i> | LF | | |
| Common Fleabane <i>Pulicaria dysenterica</i> | O-LC | | |
| Hedge Woundwort <i>Stachys sylvatica</i> | LF | | |
| Mugwort <i>Artemisia vulgaris</i> | LF | | |
| Teasel <i>Dipsacus fullonum</i> | O -LF | | |
| Dark Mullein <i>Verbascum nigrum</i> | R | | |
| Weld <i>Reseda lutea</i> | R | Gravel track | |
| Wild Mignognette <i>Reseda luteola</i> | R | | |
| Common Mallow <i>Malva sylvestris</i> | R | | |
| Musk Mallow <i>Malva moschata</i> | R | | |
| Scarlet Pimpernel <i>Anagallis arvensis</i> | LC | Gravel track | |
| Field Madder <i>Sherardia arvensis</i> | LC | Gravel track | |
| Crosswort <i>Cruciata laevipes</i> | LC | | |
| Field Bindweed <i>Convolvulus arvensis</i> | O | | |
| Hedge Bindweed <i>Calystegia sepium</i> | O-LC | | |
| Common Comfrey <i>Symphytum officinale</i> | C | | |
| Russian Comfrey <i>Symphytum x uplandicum</i> | C | | |
| Agrimony <i>Agrimonia eupatoria</i> | C | | |
| Hedge Garlic <i>Alliaria petiolata</i> | LC | | |
| Cuckooflower <i>Cardamine pratensis</i> | O-LF | | |
| Common Fumitory <i>Fumaria officinalis</i> | O-LC | | |
| Common Poppy <i>Papaver rhoeas</i> | O | | |
| Lesser Celandine <i>Ranunculus ficaria</i> | C | | |
| Meadow Buttercup <i>Ranunculus acris</i> | O | | |
| Creeping Buttercup <i>Ranunculus repens</i> | C | | |
| Bulbous Buttercup <i>Ranunculus bulbosus</i> | O | | |

| | | | |
|--------------------------------------------------|--------|----------------------------------------------------------------------|--|
| Common Mouse –ear <i>Ceastium fontanum</i> | O | | |
| Greater Chickweed <i>Stellaria neglecta</i> | C | | |
| Greater Stitchwort <i>Stellaria hollostea</i> | C | | |
| Lesser Stitchwort <i>Stellaria graminea</i> | C | | |
| Wood Dock <i>Rumex sanguineus</i> | C | | |
| Broad-leaved Dock <i>Rumex obtusifolius</i> | O-LC | | |
| Clustered Dock <i>Rumex conglomeratus</i> | O-LF | | |
| Curled Dock <i>Rumex crispus</i> | O | | |
| Water Pepper <i>Persicaria hydropiper</i> | LC | Paths/ruts through wet area to south east corner of operational site | |
| Common Sorrel <i>Rumex acetosa</i> | O-LC | | |
| Common Storksbill <i>Erodium cicutarium</i> | O-LF | Gravel track | |
| Doves – foot Cranes-bill <i>Geranium molle</i> | O-LF | | |
| Cut-leaved Cranes–bill <i>Geranium dissectum</i> | O | | |
| Hedgerow Cranes–bill <i>Geranium pyrenaicum</i> | O | | |
| Water Mint <i>Mentha aquatica</i> | O-LF | | |
| Gipsywort <i>Lycopus europaeus</i> | O-LF | | |
| Purple Loosestrife <i>Lythrum salicaria</i> | O-LF | | |
| Wild Parsnip <i>Pastinaca sativa</i> | O-LF | Gravel track and damp grassland to west of sub station | |
| Wild Carrot <i>Daucus carota</i> | C | | |
| Hogweed <i>Heracleum sphondylium</i> | O | | |
| Cow Parsley <i>Anthriscus sylvestris</i> | O-LF | | |
| Hedge Bedstraw <i>Gallium mollugo</i> | O-LF | | |
| Burnet Saxifrage <i>Pimpinella saxifraga</i> | O-LF | Dry grassland areas | |
| Spear Thistle <i>Cirsium vulgare</i> | O | | |
| Creeping Thistle <i>Cirsium arvense</i> | O-LC | | |
| Marsh Thistle <i>Cirsium palustre</i> | O | | |
| Cotton Thistle <i>Onopordum acanthium</i> | R | | |
| Common Centaury <i>Centaureum erythraea</i> | C | | |
| Herb Robert <i>Geranium robertianum</i> | O - LF | | |
| Wood Avens <i>Geum urbanum</i> | O-LF | | |
| Lords and Ladies <i>Arum maculatum</i> | LC | | |
| Dandelion <i>Taraxacum officinale</i> | O-LC | | |

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| Coltsfoot <i>Tussilago farfara</i> | O | | |
| Selfheal <i>Prunella vulgaris</i> | C | | |
| Common Nettle <i>Urtica dioica</i> | C | | |
| White Dead Nettle <i>Lamium album</i> | O | | |
| Common Ragwort <i>Senecio jacobea</i> | A | Has invaded large parts of the site – especially to the east. | |
| Hoary Ragwort <i>Senecio erucifolius</i> | O-LF | | |
| Goats-beard <i>Tragopogon pratensis</i> | O | | |
| Sticky Groundsel <i>Senecio viscosus</i> | LF | Gravel track | |
| Black Knapweed <i>Centaurea nigra</i> | O-LC | | |
| Ox-eye Daisy <i>Leucanthemum vulgare</i> | O-LF | | |
| Common Vetch <i>Vicia staiva</i> | O | | |
| Tufted Vetch <i>Vicia cracca</i> | R | | |
| Hairy Tare <i>Vicia hirsuta</i> | O | | |
| Black Medick <i>Medicago lupulina</i> | O | | |
| Hares –foot Clover <i>Trifolium arvense</i> | R | | |
| White Clover <i>Trifolium repens</i> | C | | |
| Red Clover <i>Trifolium pratense</i> | O | | |
| Yarrow <i>Achillea millefolium</i> | O-LC | | |
| Greater Birds-foot Trefoil <i>Lotus pendunculatus</i> | C | | |
| Prickly Sow-thistle <i>Sonchus asper</i> | O | Gravel track | |
| Smooth Sow –thistle <i>Sonchus oleraceus</i> | O | Gravel track | |
| Nipplewort <i>Lapsana communis</i> | O | | |
| Hawkweeds <i>Hieracium agg.</i> | O | | |
| Autumn Hawkbit <i>Leontodon autumnalis</i> | O | | |
| Common Winter- cress <i>Barbarea vulgaris</i> | R | In main marsh area on southern site boundary | |
| Hairy Bittercress <i>Cardamine hirsuta</i> | O | | |
| Shepherds Purse <i>Capsella bursa-pastoris</i> | O-LC | | |
| Red Campion <i>Silene dioica</i> | O-LF | | |
| Cleavers <i>Galium aparine</i> | C | | |
| Common Marsh Bedstraw <i>Galium palustre</i> | O-LF | | |
| Hedge Bedstraw <i>Gallium mollugo</i> | O-LF | | |
| Greater Plantain <i>Plantago major</i> | O | | |
| Ribwort Plantain <i>Plantago lanceolata</i> | O-LF | | |
| Silverweed <i>Potentilla anserina</i> | LC | | |

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| Creeping Cinquefoil <i>Potentilla reptans</i> | O | | |
| Enchanters Nightshade <i>Circaea lutetiana</i> | O | | |
| Ground Ivy <i>Glechoma hederacea</i> | A | | |
| Perforate St. Johns Wort <i>Hypericum perforatum</i> | O | | |
| Broad-leaved Willowherb <i>Epilobium montanum</i> | O-LF | | |
| Great Willowherb <i>Epilobium hisutum</i> | LF | | |
| Common evening-primrose <i>Oenothera biennis</i> | O | | |
| Dogs Mercury <i>Mercurialis perennis</i> | LF | Single large colony on eastern entrance to site through shady footpath. | |
| Sweet Violet <i>Viola odorata</i> | LF | Small colony in same location as above. | |
| Procumbent Pearlwort <i>Sagina procumbens</i> | LC | Local common in rabbit-grazed 'lawn' areas. | |
| Red Bartsia <i>Odontites vernus</i> | O-LF | Mainly on edges of grass paths. | |
| Michaelmas Daisy <i>Aster novi-belgii</i> | O-LF | Major colony to the south west corner of the operational compound. | |
| Yellow Flag <i>Iris pseudacorus</i> | R | | |
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| TREES AND SHRUBS AND CLIMBERS | | | |
| Mistletoe <i>Viscum album</i> | O-LF | Mature plants within several mature willow and poplar trees. | |
| Ivy <i>Hedera helix</i> | LC | | |
| Dog Rose <i>Rosa canina</i> | O | | |
| Bramble <i>Rubus fruticosus</i> agg. | LC | Many large dense clumps on drier parts of the site | |
| Elder <i>Sambucus nigra</i> | O | | |
| Hazel <i>Corylus avellana</i> | O-LC | Large plantation on screening mound in north east corner of | |

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| | | the site. | |
| Field Maple <i>Acer campestre</i> | O | | |
| Ash <i>Fraxinus excelsior</i> | O | Variety of ages from mature trees to saplings. | |
| Oak <i>Quercus robur</i> | O-LC | Mostly young immature trees and saplings. | |
| Hawthorn <i>Crataegus monogyna</i> | O-LC | Along with willows (<i>Salix spp.</i>) the most common and dominant trees/shrubs on the site. Forms dense scrub woodland especially to the east side of the site. | |
| Blackthorn <i>Prunus spinosa</i> | O-LF | Especially common in the shaded east and west footpath entrances to the site. | |
| Dogwood <i>Cornus sanguinea</i> | LC | Dense stand to the east of the site. | |
| Goat Willow <i>Salix caprea</i> | O-LC | | |
| Grey Willow <i>Salix cinerea</i> | C | Along with Hawthorn, the most common and dominant tree/shrub species on the site. | |
| White Willow <i>Salix alba</i> | O-LC | Mature group on north eastern corner of the site appear to have been planted as a screen for the adjacent builders compound. | |
| <i>Salix alba</i> varieties | O | Several large, mature trees planted across the site – probably coral bark willows given bright orange | |

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| | | stems. | |
| Crack Willow <i>Salix fragilis</i> | O | Especially large and mature specimen in south west corner of the site. | |
| Silver Birch <i>Betula pendula</i> | O –LF | | |
| White Poplar <i>Populus alba</i> | LF | On eastern boundary of site. Probably planted originally but has now naturalised on the site. | |
| <i>Populus sp.</i> | O | Probably Hybrid Back Poplar <i>P.x Canadensis</i> . A few mature specimens from planting on the site. | |
| <i>Prunus sp.</i> | LC | Possibly <i>Prunus domestica</i> or <i>P.cerasifera</i> . Distribution as for Blackthorn above. | |
| Gorse <i>Ulex europaeus</i> | O –LF | Several small scattered clumps on the site. | |
| Sycamore <i>Acer pseudoplatanus</i> | R | | |
| False Acacia <i>Acacia pseudacacia</i> | R | Couple of specimens to the west of the site. | |
| <i>Malus sp.</i> | R | | |
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| NON - FLOWERING PLANTS | | | |
| Lichens | | The site has a rich diversity of lichens, both terricolous and corticolous. The site is certainly worthy of a more detailed | |

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| | | examination by an expert lichenologist. | |
| Reindeer lichen <i>Cladonia</i> sp. | A – LC | Possibly <i>C.portentosa</i> forming large dense mats on the slopes around the operational site adjacent to the track. This is effectively a lichen heath type habitat. | |
| Other <i>Cladonia</i> spp. | | In addition to the Reindeer lichen there are other <i>Cladonia</i> species growing in the short turf grassland especially adjacent to (south of) the main access track in association with club mosses and <i>Peltigera</i> sp.(please see below). | |
| <i>Peltigera</i> sp. | O-LF | Possibly <i>P.canina</i> or <i>P.rufescens</i> . Found sporadically throughout the low turf grassland e.g. along the south side of the access track where it often occurs in association with e.g. <i>Cladonia</i> spp. and club mosses. | |
| <i>Usnea</i> spp. | | Many of the young trees/mature scrub (especially <i>Salix</i> spp.) especially to the east of the site, have a dense covering of | |

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| | | corticolous lichens, including <i>Usnea spp.</i> | |
| <i>Evernia spp.</i> | | Please see above. | |
| <i>Ramalina spp.</i> | | Please see above. | |
| <i>Parmelia spp.</i> | | Please see above. | |
| <i>Punctelia spp.</i> | | Please see above. | |
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| Ferns | | | |
| Male Fern <i>Dryopteris felix-mas</i> | O | Especially in scrub woodland to east of site. | |
| Bracken <i>Pteridium aquilinum</i> | R | | |
| Mosses and Club Mosses | | Especially common on old damp tree stumps and in low turf grassland. | |
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| BIRDS | Status | Breeding | Notes |
| Mallard <i>Anas platyrhynchos</i> | Occasional visitor | No evidence and unlikely. | Several mallard use the site when it is flooded and large temporary ponds form in low lying areas. |
| Northern Goshawk <i>Accipiter gentilis</i> | Rare visitor | No evidence. | One seen September 2012 flying out of willow trees and low over the operational site. |
| Sparrowhawk <i>Accipiter nisus</i> | Regular | No evidence. | Sparrowhawks are regularly seen hunting over the site – often successfully e.g. one seen taking a Green Woodpecker in May 2012. |
| Common Buzzard <i>Buteo buteo</i> | Regular. | No evidence but adults | Regularly seen |

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| | | seen feeding young and so nest site likely to be nearby. | hunting on the site undoubtedly attracted by the large rabbit population. |
| Common Kestrel <i>Falco tinnunculus</i> | Regular | No evidence. | |
| Peregrine Falcon <i>Falco peregrinus</i> | Regular | Successfully raised a brood of 2 chicks on nearby electricity pylons in 2012. Fledged chick seen being fed within the operational site. Mating/bonding display witnessed on the site following dispersal of fledged chicks. | Peregrines are regularly seen hunting over the site and perching on electricity pylons. |
| Red-legged Partridge <i>Alectoris rufa</i> | Rare visitor | No evidence. | One bird stayed on the site for a week during the summer of 2012. |
| Pheasant <i>Phasianus colchicus</i> | Regular | No evidence. | |
| Snipe <i>Gallinago gallinago</i> | Common winter visitor | No evidence | Occasionally heard calling over site at night. Flocks of up to 20 birds regularly flushed in winter (Greg Alexander pers.comm.) |
| Woodcock <i>Scolopax rusticola</i> | Rare visitor | No evidence | One flushed in winter 2012 and probably an overwintering migrant. However, Woodcock have been heard calling in the general area frequently. |
| Black-headed Gull <i>Larus ridibundus</i> | Regular | No evidence | |

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| Woodpigeon <i>Columba palumbus</i> | Regular | Probable. | Large flock of woodpigeons on site all year round. |
| Collared Dove <i>Streptopelia decaocto</i> | Regular | Probable | |
| Cuckoo <i>Cuculus canorus</i> | Rare visitor | No evidence | Singing male heard on site in summer. |
| Tawny Owl <i>Strix aluco</i> | Regular | No evidence | A pair of Tawny owls has nested and successfully raised young within 100 metres of the site for the last 3 years. The pair regularly hunt over the site and owl pellets have frequently been found. |
| Green Woodpecker <i>Picus viridis</i> | Regular | Nest holes on site and adults seen feeding on ground with young. | The site has numerous meadow ant mounds which are preyed upon by the Green Woodpeckers and probably form the bulk of their diet. |
| Greater Spotted Woodpecker <i>Dendrocopos major</i> | Regular | Suitable nest holes in old mature trees on site and evidence of pecking to widen some holes. Male drums on site during spring. | |
| Meadow Pipit <i>Anthus pratensis</i> | Occasional visitor | No evidence | Small flocks occasionally visit the site in autumn/winter. |
| Grey Wagtail <i>Motacilla cinerea</i> | Occasional visitor | No evidence and unlikely. Species does breed on nearby River Test. | |

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| Pied Wagtail <i>Motacilla alba</i> | Occasional visitor | No evidence. | |
| Wren <i>Troglodytes troglodytes</i> | Regular | Males holding territory. | |
| Duncock <i>Prunella modularis</i> | Regular | Males holding territory. Pairs seen together. | |
| Robin <i>Erithacus rubecula</i> | Regular | Males holding territory. Pairs seen together. | |
| Nightingale <i>Luscinia megarhynchos</i> | Rare passage migrant | No evidence. | Singing males heard on spring passage. |
| Common Redstart <i>Phoenicurus phoenicurus</i> | Rare passage migrant | No evidence | Males and females seen on spring and autumn passage. |
| Black Redstart <i>Phoenicurus ochruros</i> | Rare passage migrant | No evidence | Pair seen on autumn passage. |
| Blackbird <i>Turdus merula</i> | Regular | Males holding territory. Nests seen. | |
| Fieldfare <i>Turdus pilaris</i> | Winter visitor | No | Large flocks of up to 50 birds seen in winter. |
| Redwing <i>Turdus iliacus</i> | Winter visitor | No | As above |
| Song Thrush <i>Turdus philomelos</i> | Regular | Males holding territory | |
| Mistle Thrush <i>Turdus viscivorus</i> | Regular | Adults seen with young | |
| Lesser Whitethroat <i>Sylvia curruca</i> | Summer visitor | Pair stayed through summer | |
| Common Whitethroat <i>Sylvia communis</i> | Summer visitor | Two males held territory through the summer. | |
| Blackcap <i>Sylvia atricapilla</i> | Summer visitor | Several males held territories through the summer. Pairs of birds seen feeding/collecting food together. | There are large falls of warblers to the site on spring passage especially, Blackcap, Chiffchaff and Willow Warbler. |
| Garden Warbler <i>Sylvia borin</i> | Summer visitor | Around 4 pairs bred in 2012 (Greg Alexander pers.comm.) | |
| Chiffchaff <i>Phylloscopus collybita</i> | Summer visitor (some | Several males holding | Please see above. |

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| | individuals stay all year round) | territory during the summer. | |
| Willow Warbler <i>Phylloscopus trochilus</i> | Summer visitor | Several males holding territory over the summer | Please see above. |
| Goldcrest <i>Regulus regulus</i> | Regular | Potentially. Nest found in conifers within 100 metres of the site. | |
| Firecrest <i>Regulus ignicapillus</i> | Winter migrant | Regular records for January to March 2012 (Greg Alexander pers.comm.) | |
| Willow Tit <i>Parus montanus</i> | Regular | Bred 2012 (Greg Alexander pers.comm.) | |
| Marsh Tit <i>Parus palustris</i> | Occasional visitor | No evidence. | |
| Coal Tit <i>Parus ater</i> | Regular | No evidence | |
| Blue Tit <i>Parus caeruleus</i> | Regular | Several pairs | |
| Great Tit <i>Parus major</i> | Regular | Several pairs | |
| Nuthatch <i>Sitta europea</i> | Regular | Potentially. Pair seen with young. | |
| Treecreeper <i>Certhia familiaris</i> | Regular | No evidence | |
| Long-tailed Tit <i>Aegithalos caudatus</i> | Regular | Nests found. Family groups of adults and young seen. | |
| Jay <i>Garrulus glandarius</i> | Regular | Potentially | Flocks of up to 4 jays regularly seen on the site. |
| Magpie <i>Pica pica</i> | Regular | Potentially | |
| Carrion Crow <i>Corvus corone</i> | Regular | Potentially | |
| Rook <i>Corvus frugilegus</i> | Regular | Rookery nearby about 300 metres from the site. | |
| Jackdaw <i>Corvus monedula</i> | Regular | Nests within operational site. | The site holds a large (up to 50 birds) winter roost of Jackdaws as well as those pairs |

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| | | | which live here throughout the year. |
| Raven <i>Corvus corax</i> | Regular | Pair nested and successfully fledged young on an electricity pylon within the site in summer 2012. | |
| Starling <i>Sturnus vulgaris</i> | Occasional visitor | No evidence | Small numbers seen throughout the year with occasional larger flocks in winter. |
| House Sparrow <i>Passer domesticus</i> | Regular | No evidence | Sparrows known to breed in nearby domestic properties. |
| Chaffinch <i>Fringilla coelebs</i> | Regular | Potentially | |
| Greenfinch <i>Carduelis chloris</i> | Regular | Pair seen throughout the summer. | |
| Goldfinch <i>Carduelis carduelis</i> | Regular | Potentially | Small flock of up to 10 birds regularly seen feeding in the site. |
| Siskin <i>Carduelis spinus</i> | Winter visitor | No evidence | Small flocks of up to 20 birds regularly seen in winter. |
| Bullfinch <i>Pyrrhula pyrrhula</i> | Regular | Two pairs seen regularly throughout the year. | |
| Reed Bunting <i>Emberiza schoeniculus</i> | Occasional visitor | No evidence. This species does breed in the nearby water meadows adjacent to the River Test. | |
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| MAMMALS | | | |
| Rabbit <i>Oryctolagus cuniculus</i> | Regular | Numerous burrows on site. Juveniles seen in spring and summer. | Once large population appears to be in decline and has |

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| | | | been adversely affected by Myxamotosis in recent years. |
| Fox <i>Vulpes vulpes</i> | Regular | No evidence. Known earth within 200 metres of the site. | Regular sightings plus regular scats. |
| Badger <i>Meles meles</i> | Occasional visitor | No evidence. No setts on site. | Badgers seen crossing Station Road into and from the site in February and March. |
| Roe Deer <i>Capreolus capreolus</i> | Regular | Female with fawn seen on site. | Almost daily sightings and fresh prints. |
| Brown Rat <i>Rattus norvegicus</i> | Regular | No evidence but probable | |
| Wood Mouse <i>Apodemus sylvaticus</i> | Regular | No evidence but probable | |
| Mole <i>Talpa europea</i> | Regular | No evidence | Regular mole hills seen and occasional dead specimens found. |
| Field Vole <i>Microtus agrestis</i> | Regular | Nests seen within site. | |
| Common Shrew <i>Sorex araneus</i> | Regular | No evidence | Occasionally found dead specimens on site |
| Bank Vole <i>Clethrionomys glareolus</i> | Regular | Nests seen within site | |
| Hedgehog <i>Erinaceus europaeus</i> | Regular | No evidence but adult female with young seen within 50 metres of the site. | |
| Grey Squirrel <i>Sciurus carolinensis</i> | Regular | No evidence but probable | |
| Pipistrelle Bat /Soprano Pipistrelle <i>Pipistrellus pipistrellus/pygmaeus</i> | Regular | No evidence but possible as there are a number of mature trees with holes and | |

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| | | cracks on the site and the operational buildings of the National Grid are adjacent. | |
| REPTILES AND AMPHIBIANS | | | |
| Grass Snake <i>Natrix natrix</i> | Regular | No evidence, but have bred in compost heap of adjacent garden. | One juvenile specimen found under survey mat. However, in every year juveniles are found crossing the road (Mill Lane) from the site, along with toads and frogs on wet autumn evenings. One dead juvenile was found in September this year on the road. |
| Slow worm <i>Anguis fragilis</i> | Regular | Specimens under survey mats vary greatly in size/age class with many small juveniles observed in September and October. | Population distribution similar to that of Common Lizard (please see below). |
| Common Lizard <i>Lacerta vivipara</i> | Regular | Several juveniles seen basking on survey mats | Population appears to be distributed through the dry grassland areas in the centre and to the north and east of the site but absent from the wet grassland, marsh and scrub woodland areas. Population may be |

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| | | | linked to that on the nearby railway cutting. |
| Common Frog <i>Rana temporaria</i> | Regular | No evidence but possible as there are several temporary flooded pools on the site each winter and into spring. | Occasionally seen on site and one found under survey mat in September 2012. |
| Toad <i>Bufo bufo</i> | Regular | As above. | More often seen crossing Mill Lane to get to/from the site in spring and autumn along with frogs and grass snakes (please see above). |
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| INSECTS | | NOTE: No systematic survey of insects has been undertaken and the following lists are based on casual observations. Given the significant diversity of habitats and plant species on the site and its long period with no human interference (about 60 years) the site has the potential to support a diverse and important insect fauna. | |
| Butterflies and Moths | | | |
| Marbled White <i>Melanargia galathea</i> | Regular. Good numbers in most years. | Significant and locally important breeding population within the | |

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| | | site. In good summers, hundreds of this butterfly can be seen on the wing simultaneously. | |
| Small Skipper <i>Thymelicus sylvestris</i> | Regular . Abundant during summer months. | Probable. Larval food plants on site. | |
| Large Skipper <i>Ochlodes venata</i> | Regular. Common during summer months. | Probable. Larval food plants on site. | |
| Clouded Yellow <i>Colias crocea</i> | Occasional summer visitor last seen in summer 2011. | Possible – but larval/pupal stages do not survive cold winters. | |
| Brimstone <i>Gonepteryx rhamni</i> | Regular | Unlikely as larval food plant not found on site. | |
| Large White <i>Pieris brassicae</i> | Regular | Probable as some preferred cruciferae food plants found on site. | |
| Small White <i>Pieris rapae</i> | Regular | Probable as some preferred cruciferae food plants found on site. | |
| Green-veined White <i>Pieris napi</i> | Regular | Probable as larval food plants common on site. | |
| Orange Tip <i>Anthocaris cardamines</i> | Regular .Significant numbers in good years. | Adult females seen laying eggs on Cuckooflower. | |
| Small Copper <i>Lycaena phlaeas</i> | Regular but few in number. | Probable as Sorrel larval food plant common on site. | |
| Common Blue <i>Polyommatus icarus</i> | Regular and significant numbers in good years. | Probable as leguminous larval food plants common on site. | |
| Holly Blue <i>Celastrina argiolus</i> | Regular in small numbers. | Probable as preferred larval food plants on | |

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| | | site and <i>Ilex aquifolium</i> present in adjacent lane. | |
| Red Admiral <i>Vanessa atalanta</i> | Regular and significant numbers in most years. | Probable as site contains abundant areas of larval food plant. | |
| Painted Lady <i>Vanessa cardui</i> | Regular and significant numbers in good years. | Probable as site contains preferred larval food plants. | |
| Small Tortoiseshell <i>Agalais urticae</i> | Regular. Once seen in good numbers but in line with national decline, numbers significantly reduced over the last few years. | Probable as site contains abundant areas of larval food plant. | |
| Peacock <i>Inachis io</i> | Regular. Good numbers in most years. | Probable as site contains abundant areas of larval food plant. | |
| Comma <i>Polygonia c-album</i> | Regular. Good numbers in most years. | Probable as site contains abundant areas of larval food plant. | |
| Speckled Wood <i>Pararge aegeria</i> | Regular. Good numbers in most years. | Probable as site contains abundant areas of larval food plant. | |
| Wall Brown <i>Lasiommata megera</i> | Occasional visitor. | Possible as site contains abundant areas of larval food plant. | |
| Gatekeeper <i>Pyronia tithonus</i> | Regular. | Possible as site contains abundant areas of larval food plant. | |
| Meadow Brown <i>Maniola jurtina</i> | Regular. Good numbers in most years. | Probable as site contains abundant | |

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| | | areas of larval food plant. | |
| Mullein Moth <i>Cucullia verbasci</i> | | | |
| Cinnabar Moth <i>Tyria jacobaea</i> | | | |
| Six spot Burnet Moth <i>Zygaena filipendulae stephensi</i> | | | |
| Eyed Hawk Moth <i>Smerinthus ocellata</i> | | | |
| | | | |
| Dragonflies and Damselflies | | | |
| Banded Agrion <i>Calopteryx splendens</i> | | | |
| Emerald Damselfly <i>Lestes sponsa</i> | | | |
| Large Red Damselfly <i>Pyrrhosoma nymphula</i> | | | |
| Blue-tailed Damselfly <i>Ischnura elegans</i> | | | |
| Common Hawker <i>Aeshna juncea</i> | | | |
| Broad-bodied Chaser <i>Libellula depressa</i> | | | |
| Common Darter <i>Sympetrum striolatum</i> | | | |
| | | | |
| Bugs | Records courtesy of Southampton Natural History Society | | |
| Gorse Shield Bug <i>Piezodorus lituratus</i> | | | |
| Bishops Mitre <i>Aelia acuminata</i> | | | |
| Capsid Bug <i>Deraeocoris ruber</i> | | | |
| Sloe Bug <i>Dolycoris baccarum</i> | | | |
| Brassica Bug <i>Eurydema oleracea</i> | | | |
| <i>Liorhyssus hyalinus</i> | | | |
| | | | |
| Beetles | Records courtesy of Southampton Natural History Society | | |
| <i>Malachius bipustulatus</i> | | | |
| <i>Onthophagus vacca</i> | | | |
| <i>Rhagium bifasciatum</i> | | | |
| 24 spot Ladybird <i>Subcoccinella vigintiquatuorpunctata</i> | | | |
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