GreenLink Ecology Ltd

Land at Vicar's Grove Closed Landfill

Ecological Scoping Survey Report

1st June 2010

GreenLink Ecology Ltd

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1 Introduction

1.1 Site Description

Land at Vicar's Grove closed landfill (the "site") is located off Little Almshoe Road to the south of Gosmore, in the county of Hertfordshire, centred on Ordnance Survey (OS) grid reference TL 192 258. The site is approximately 8 hectares in size and comprises a mosaic of hard standing, bare ground, spoil heaps, rough grassland, ruderal/scrub vegetation, hedgerows and immature woodland, with a bund along the site boundary adjacent to which there is an area of established woodland. The area surrounding the site is rural in character, being dominated by agricultural fields, along with hedgerows and sections of woodland. The site and surrounding area are illustrated in aerial photographs provided in Appendix 1, with selected photographs of the site being provided in Appendix 2.

1.2 Proposed Works

It is understood that the site is the subject of a planning application to the Local Planning Authority (LPA). It is proposed to 'skim' and remove some inert material from the central domed area of the site, and generally landscape the site so as to create a more flowing and environmentally empathetic feel to the site. Improved topsoil and subsoil will be developed on site or imported to create a suitable medium for vegetation growth. Some hedgerows and trees will be planted within this 'skimmed area'; other areas will be encouraged to re-colonise from the present woodland areas. A small portion at the front of the site, near the entrance, will be utilised as a 'working area'.

1.3 Aims of Study

GreenLink Ecology Ltd. has been commissioned by QSP Consultancy, on behalf of the landowner, to conduct an ecological scoping survey of the site to identify what habitats are present and look for any evidence of, or potential for, protected/notable species and their habitats.

The aim of this report is to present the results of the survey, describe the habitat characteristics of the site, and highlight any areas of conservation concern. This report also discusses the need for whether further survey and/or mitigation and enhancement measures are required for habitats and protected/notable species.

2 Methodology

An ecological scoping survey was undertaken by experienced consultant ecologist Leon Brown MIEEM[1] on 3rd May 2010. The plant species and habitat types present within the site were identified and any evidence of, or potential for, protected/notable species and their habitats was recorded. On the day of the survey the weather conditions were sunshine with scattered cloud and the temperature at midday was around 15°C.

[1] *Member of the Institute of Ecology and Environmental Management (Full)*

3 Results

3.1 Habitat Description

The site contains a variety of semi-natural and artificial habitats, including rough grassland, ruderal/scrub vegetation, immature woodland and hedgerows, along with hard standing, bare ground and spoil heaps.

The rough grassland is not well established as there is regular disturbance of the site as a result of the landfill management. This habitat is predominantly composed of cock's-foot (*Dactylis glomerata*), false oat-grass (*Arrhenatherum elatius*), annual meadow grass (*Poa annua*), common nettle (*Urtica dioica*), cleavers (*Galium aparine*), perennial rye-grass (*Lolium perenne*), creeping cinquefoil (*Potentilla reptans*), clover (*Trifolium* sp.), plantains (*Plantago* spp.), common groundsel (*Senecio Vulgaris*), dandelion (*Taraxacum officinale*), buttercup (*Ranunculus* sp.), field forget-me-not (*Myosotis arvensis*), ground ivy (*Glechoma hederacea*) and common ragwort (*Senecio vulgaris*). None of the plants listed above are protected/notable species and this does not constitute a habitat of conservation concern.

In association with the grassland and the artificial habitats, the ruderal/scrub vegetation includes cow parsley (*Anthriscus sylvestris*), bristly ox-tongue (*Picris echioides*), perennial sow-thistle (*Sonchus arvensis*), prickly lettuce (*Lactuca serriola*), garlic mustard (*Alliaria petiolata*), docks (*Rumex* spp.), thistles (*Cirsium* sp.), teasel (*Dipsacus* sp.), dead nettles (*Lamium* spp.), greater burdock (*Arctium lappa*), common mallow (*Malvus sylvestris*), mustard (*Sisymbrium* sp.), bramble (*Rubus fruticosus*), field bindweed (*Convolvulus arvensis*), lords and ladies (*Arum maculatum*), common comfrey (*Symphytum officinale*) and green alkanet (*Pentaglottis sempervirens*). None of the plants listed above are protected/notable species and they do not constitute a habitat of conservation concern, other than where the growth of vegetation is sufficient to support protected/notable species, as described in a subsequent section.

Relatively immature woodland growing on the bund around the north-eastern, northern and north-western site boundaries contains willow (*Salix* sp.), hawthorn (*Crataegus monogyna*), field maple (*Acer campestre*), cherry (*Prunus* sp.) oak (*Quercus robur*), elder (*Sambucus nigra*), and white poplar (*Populus alba*). Unmanaged and overgrown hedgerows are located along the southern and south-western boundaries containing immature elm (*Ulmus* sp.), hawthorn, ash (*Fraxinus excelsior*), oak, elder, willow, field maple and hornbeam (*Carpinus betulus*). Within these areas are also more mature trees, including two oaks on the south-western boundary, an oak on the north-eastern boundary and a group of oak and ash trees on the south-eastern boundary. None of the trees listed above are protected/notable species and the majority do not themselves constitute habitats of conservation concern, although some of the more mature specimens are of higher ecological value, as are the hedgerows and these do have the potential to support protected/notable species, as described in a subsequent section.

Adjacent to the site, beyond the bund, is an area of woodland thought to be Ancient Semi-Natural Woodland (ASNW), which is predominantly composed of mature oak standards and hornbeam coppice, with bluebell (*Hyacynthoides non-scripta*) in the under-storey. None of these are protected or notable species, although ASNW does constitute a notable habitat of conservation concern and this habitat also has the potential to support protected/notable species, as described in a subsequent section.

The artificial habitat types present within the site (hard standing, bare ground and spoil heaps) are of inherently low ecological value and not of conservation concern, other than where they have the potential to support protected/notable species as described in a subsequent section.

3.2 Protected Species

3.2.1 Breeding Birds

Although no evidence for actively breeding birds was recorded during the survey, there are abundantly suitable habitats within the site which have the potential to be used by nesting birds during the breeding season, which is March-July/August as a guide. The majority of these habitats are located around the site boundaries, where there is immature woodland, scrub, trees and hedgerows.

3.2.2 Reptiles

Although no evidence for reptiles was recorded during the survey, there is a mosaic of potentially suitable semi-natural and artificial habitats that could be used by the more common and widespread species of reptile throughout the year, for foraging, sheltering and hibernating purposes.

3.2.3 Bats

Although no evidence for bats was recorded during the survey, there are mature trees located on and beyond the site boundaries, which have potentially suitable features that could support roosting bats. In addition, the site also contains habitats that are suitable for use by foraging and commuting bats.

4 Assessment

4.1 Constraints

Access to all areas of the site was possible and the survey was undertaken by an experienced consultant ecologist using standard survey techniques, at an appropriate time of the year. It is therefore considered that there were no significant constraints to the ecological scoping survey.

4.2 Potential Impacts

4.2.1 Habitats

Since it is understood that the proposed works will focus on skimming and removing some inert material from the central area of the site where there are currently artificial and semi-natural habitats of limited ecological value, impacts to these habitat types themselves are considered insignificant. However, these habitat types do have the potential to support protected/notable species, which are considered below. Provided that impacts to the woodland/hedgerow habitats located around the site boundaries are avoided, the proposed works should have the potential to significantly improve the site for local biodiversity, including protected/notable species, as described in a subsequent section.

4.2.2 Protected Species

4.2.2.1 Breeding Birds

Although no evidence for actively breeding birds was recorded during the survey, habitats with nesting potential were identified during the survey and it is therefore considered that there is a risk of direct and indirect impacts to breeding birds as a result of the proposed works, if the works are to affect these habitats and if the works are conducted during the breeding season (March-July/August). To avoid the risk of impacts to breeding birds, mitigation measures are recommended in a subsequent section.

4.2.2.2 Reptiles

Although no evidence for reptiles was recorded during the survey, there are potentially suitable reptile habitats within and close to the areas to be directly affected by the proposed works and it is therefore considered that there is a risk of impacts to reptiles as a result of the proposed works. To avoid the risk of impacts to reptiles, further survey work is recommended in a subsequent section, which will guide the need for mitigation measures.

4.2.2.3 Bats

Although no evidence for bats was recorded during the survey and it is understood that there should be no direct impacts to the mature trees and ASNW to the north of the site, there is a risk of indirect impacts to bats through the disturbance of potential roosting locations as a result of the proposed works. To avoid the risk of indirect impacts to bats, mitigation measures are recommended in a subsequent section.

4.3 Legislation and Policy

4.3.1 Breeding Birds

Breeding birds are protected under the Wildlife and Countryside Act 1981 (as amended by the CRoW Act 2000[2]) which makes it an offence to intentionally or recklessly kill, injure or take any wild bird or take, damage or destroy its nest whilst it is in use or being built, or to take or destroy its eggs. In addition, some species of bird are listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), for which there are additional offences of disturbing these birds at their nests, or their dependent young.

4.3.2 Reptiles

All species of reptile native to the UK are afforded legal protection under the Wildlife and Countryside Act 1981 (as amended) in respect of deliberate, intentional or reckless killing and injuring. Protection to the habitats of reptiles is only extended to smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*), which would not find the habitats within the site suitable for use.

4.3.3 Bats

All species of British bat, and their habitats, are protected under the Wildlife and Countryside Act 1981 (as amended), and by the Conservation (Natural Habitats &c.) Regulations 1994, as amended by the Conservation (Natural Habitats, &c.) (Amendments) Regulations 2007 and 2009.

The legislation makes it illegal under the Wildlife and Countryside Act 1981 (as amended) to:

- Intentionally or recklessly kill, injure or take a wild bat;
- Be in possession or control of any live or dead wild bat or any part of, or anything derived from, a wild bat;
- Intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection; and
- Intentionally or recklessly disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection.

All species of British bat are European Protected Species (EPS). As such under the Habitat Regulations 1994 (as amended) it is an offence to:

- Deliberately capture, injure or kill any wild animal of a European Protected Species;
- Deliberately disturb wild animals of any such species. Disturbance of animals includes in particular any disturbance which is likely to:
    - impair their ability -
        - to survive, to breed or reproduce, or to rear or nurture their young; or
        - in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
    - affect significantly the local distribution or abundance of the species to which they belong; and
- Deliberately damage or destroy a breeding site or resting place of such an animal.

[2] *Key sections of the Wildlife and Countryside Act 1981, principally those relating to powers and penalties have been amended by the Countryside and Rights of Way Act 2000 (CRoW Act). One of the most important of these is the addition of the word 'reckless' within offences under Section 9(4) of the Wildlife and Countryside Act 1981, which makes prosecution easier.*

4.3.4 *Planning Policy Statement 9 (PPS9)*

PPS9: Biodiversity and Geological Conservation, sets out government planning policies on the protection of biodiversity and geological conservation through the planning system. LPAs are required under PPS9 to make planning decisions which are based upon up-to-date information about the environmental characteristics of areas, including the presence of legally protected species and designated sites for nature conservation. In the context of development proposals, LPAs are directed to ensure that species of principal conservation importance are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations. The conservation of such species should be promoted through the incorporation of beneficial biodiversity designs within developments.

5 Recommendations

5.1 Further Survey

Whilst this survey report has identified some potential impacts that could occur as a result of the proposed works, further survey work for reptiles is recommended in order to establish the presence/absence of such species, and to enable a fuller understanding of the likely impact of development on the site. This information is required by the LPA since under PPS9, they are required to take biodiversity conservation issues into account as part of their decision making. This information will also be required to inform a mitigation and compensation strategy if reptiles are found to be present and there is a perceived risk of impacts to reptiles as a result of the proposed works.

Survey work for reptiles can take place between March-September and will require an initial visit to lay out Artificial Cover Objects (ACOs) comprising squares of corrugated metal, bituminised material, rubber sheeting and roofing felt. These ACOs attract reptiles, if present in an area, since they provide ideal micro-climates for basking and sheltering. These ACOs will then need to remain undisturbed and surveyed for the presence of any reptiles by an experienced ecologist over seven separate visits.

5.2 Mitigation and Enhancement Measures

5.2.1 Habitats

Mitigation measures for habitats are not recommended at this time, since it is understood that the proposed works will focus only on the central area of the site where there are no habitats that are themselves of conservation concern. If the scope of the proposed works changes to affect the habitats around the site boundaries however, it is likely that mitigation measures will be required to take into account the avoidance of impacts to trees, hedgerows and woodland (including the ASNW).

Upon the advice from an ecologist about what is most appropriate the proposed works should seek to enhance the habitats within the site, to include features such as hedgerows, trees and shrubs, which will benefit a variety of wildlife. These should include a proportion of native species and non-native species that are known to benefit wildlife. Additionally, the provision of a variety of habitat features that could be used by local wildlife as places of shelter and breeding (bird boxes, bat boxes, insect boxes etc) would further enhance the site and demonstrate that in accordance with PPS9, the proposed works are seeking to have a positive impact on local biodiversity.

5.2.2 Breeding Birds

Mitigation for breeding birds should fundamentally identify whether the scope of the proposed works is likely to directly or indirectly affect any areas of potential breeding bird habitat (i.e. established scrub, woodland, hedgerows or trees). If this is the case, the disturbance of such habitat should ideally be undertaken outside of the bird breeding season, (avoiding mid-March-July/August as a guide). Should it prove necessary to disturb such habitat during the breeding season, the presence/absence of any birds' nests should be checked for in advance of works going ahead by an Ecological Clerk of Works (ECoW). If any active nests are found then works with the potential to impact on the nest must cease and an appropriate buffer zone should be established until the young have fledged and the nest is no longer in use.

Enhancement measures for the local bird population should include the planting of new native tree and shrub species to increase the habitat diversity of the site, as well as increasing the abundance of foraging and nesting opportunities. The installation of a variety of bird boxes on suitably sized trees would also be an effective way to enhance the site for breeding birds.

5.2.3 Reptiles

The full detail of mitigation and enhancement required for reptiles (if present) will become apparent once further survey work has been undertaken. A strategy would need to be discussed and agreed in principle with Natural England and/or the LPA once the survey work is completed, if it has been confirmed that reptiles are present. If this is confirmed it is likely that an exclusion fence will need to be installed around the working area footprint of the site and reptiles will need to be trapped and translocated to the other side of the fence.

5.2.4 Bats

Mitigation for bats should fundamentally identify whether the scope of the proposed works is likely to directly or indirectly affect any mature trees which may have bat roosting potential. If this is the case, the level of impact would need to be assessed to establish whether further survey work would be required to inform the need for an EPS licence (i.e. if the tree has bat roost potential and is to be removed), or whether the level of impact could be offset by simple avoidance measures or tree protection.

Enhancement for the local bat population should include the planting of new native tree and shrub species to increase the habitat diversity of the site, as well as increasing the abundance of foraging opportunities. The installation of a variety of bat boxes on suitably sized trees would also be an effective way to enhance the site for bats.

6 Conclusions

GreenLink Ecology Ltd. was commissioned by QSP Consultancy to conduct an ecological scoping survey of land at Vicar's Grove closed landfill site. The survey that was undertaken on 3rd May 2010 by an experienced consultant ecologist, determined that none of the plants recorded within the site is a protected or notable species and that the majority of habitat types are of relatively low ecological value, although the more mature trees and sections of hedgerow on the site boundaries are of conservation concern, as is the area of ASNW to the north of the site.

The survey also identified the potential for breeding birds, reptiles and bats to be present within, or close to the site, which are legally protected species. Recommendations therefore include further survey work for reptiles, with mitigation and enhancement measures being proposed for breeding birds and bats. The requirement for mitigation and enhancement measures in relation to reptiles will be determined further to the completion of the recommended survey work.

Overall, there are no known overriding ecological constraints which would prevent the proposed works going ahead, subject to the results of the recommended survey work and further to appropriate mitigation and enhancement measures being implemented correctly.

7 Additional Information

It should be noted that observations relating to protected/notable species are valid at the time of survey. It is possible that protected/notable species not present during the survey may utilise or otherwise colonise the site since it was surveyed.

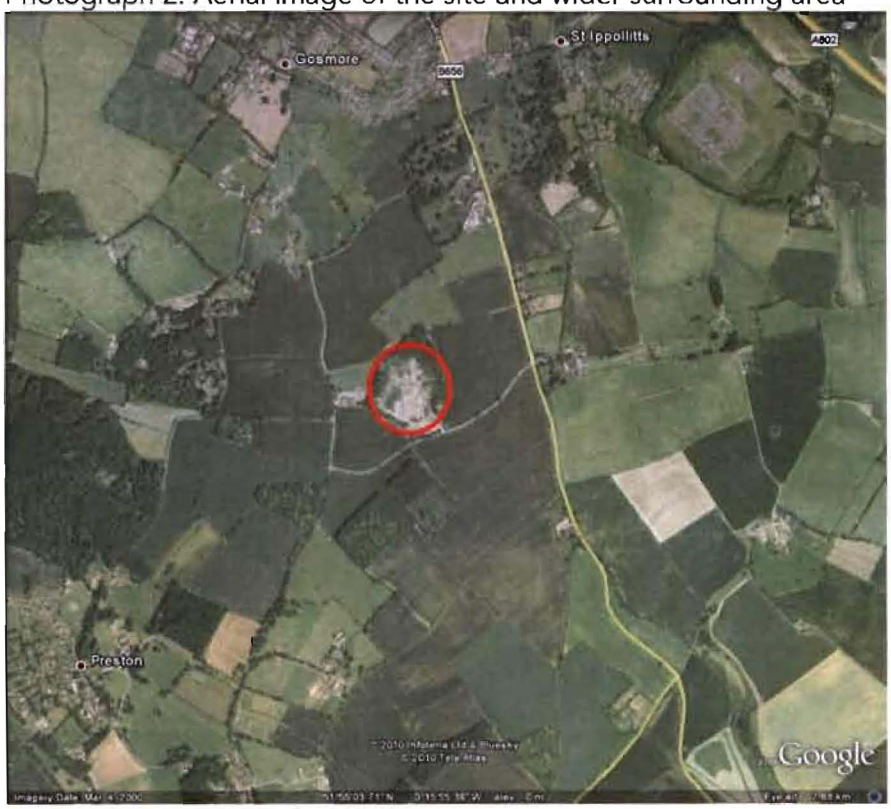
8 Appendices

Appendix 1: Approximate location of the site (red circle is for illustrative purposes only)

Photograph 1: Aerial image of the site and immediate surrounding area



Photograph 2: Aerial image of the site and wider surrounding area



Appendix 2: Selected photographs of the site

Photograph 1: View of the site looking approximately south



Photograph 2: View of the site looking approximately north



Photograph 3: View of the recently disturbed central area of the site



Photograph 4: View of the less recently disturbed central area of the site



Photograph 5: View down the bund towards the ASNW to the north of the site boundary



Photograph 6: View of the ASNW to the north of the site boundary





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GreenLink Ecology Ltd

LAND AT VICAR'S GROVE
CLOSED LANDFILL

Phase 1 Habitat Plan

Date: June 2010
Job Ref: 10_451
Drawn: SW
Client: QSP Consultancy
FIGURE 1

Scale: NTS

Legend

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