

Extended Phase 1 Habitat Survey of land at Glen Parva, Leicester



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SUMMARY

On land at Glen Parva, Leicester, planning permission is being sought for the development of the site.

In October 2013, FEC Ltd was instructed to carry out an Extended Phase 1 Habitat Survey of the site. This was undertaken to determine the presence of any important habitats or species which might be impacted on by the proposed development. In addition, a Great Crested Newt *Triturus cristatus* Habitat Suitability Index (HSI) assessment was carried out on all ponds within 500 m of the site.

A search of the ecological data for the area was carried out, this revealing a number of records of European Protected Species, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species within a 2.0 km radius of the site.

This included records of Badger *Meles meles* and Pipistrelle bat *Pipistrellus sp.* from the site itself, along with a record of Smooth Newt *Lissotriton vulgaris* from a pond just outside the northern boundary of the site.

Within the same 1.0 km grid square as the site there were also records of Common Frog *Rana Temporaria* and Grass Snake *Natrix natrix*.

Elsewhere within the 2.0 km search area there were records of Water Vole *Arvicola amphibius* from the Grand Union Canal and the River Soar, records of Otter *Lutra lutra* from the River Sence, the River Soar and the Grand Union Canal, and records of Harvest Mouse *Micromys minutus* from Narborough Bog. Other records included a number of White-clawed Crayfish *Austropotamobius pallipes* records from the Grand Union Canal and a small number of Common Toad *Bufo bufo* records.

The desk study also identified records of a number of bat species, including Daubenton's Bat *Myotis daubentonii* Common Pipistrelle *Pipistrellus pipistrellus* and Brown Long-eared Bat *Plecotus auritus*. A large number of unidentified bat records *Chiroptera sp.*, were also noted.

In addition, the desk study identified records of 38 bird species. None came from the site itself, although there were records of Kingfisher *Alcedo atthis* from the Grand Union Canal and the River Sence, along with a number of records from around the ponds at Jubilee Park and Grove Park a short distance to the west.

Within the 2.0 km search area there was one statutory site; Narborough Bog Site of Special Scientific Interest (SSSI), this being 1.1 km to the southwest. No adverse impacts are anticipated on this site.

There were also sixteen non-statutory sites within the 2.0 km search area. Three of these were located in close proximity to the survey site and of these there was some connectivity to Glen Hills Nature Area and Aylestone South/Glen Parva Local Wildlife Site along the Grand Union Canal, which ran along the boundaries of these two sites as well as the survey land.

Further stretches of the Grand Union Canal to the north and east of the survey land were also designated as Local Wildlife Sites. However, if the canal is protected from pollution and run-off during any proposed works it is not anticipated that these sites would be adversely impacted.

None of the other non-statutory sites have any connectivity to the survey land and are separated from it by intervening barriers including distance, roads, railways and built-up areas. It is not anticipated that these sites would be adversely impacted by development of the survey land.

A large number of other district and parish-level sites were also identified through the desk study however no adverse impacts are anticipated on these as a result of the proposed works.

The Extended Phase 1 visit took place on 21st November 2013, in cool but sunny conditions, with a gentle breeze.

The site was located on a hill which sloped generally from north to south and was dominated by a field of poor, semi-improved grassland, which was being grazed by cattle at the time of the survey. Hedgerows were present around the boundaries of the field whilst an area of mature scrub was present in the south-west corner of the site. A further small area of scrub was present in the south-east corner of the site, with small amounts of scattered scrub present along the western boundary.

A fenced-off area containing a mosaic of un-grazed semi-improved grassland, tall ruderal vegetation and scrub was present as a strip along the southern boundary of the site, adjacent to the housing to the south, whilst a small ruined building was present in the north-east corner of the site.

No rare vascular plants were found, and all species recorded were common and widespread. There were no invasive or notifiable weeds.

A total of nine species of birds were observed. Of these, one was a species of Medium Conservation Concern (RSPB Amber list) whilst all of the others were Species of Low Conservation Concern (RSPB Green list). An old nest was found within a recess on the internal wall of the brick building in the northeast corner of the site, but this was the only sign of nesting birds, with no nests recorded within the hedgerows and scrub elsewhere on site.

Nevertheless, since all in-use bird's nests and their contents are protected from damage or destruction, any tree and shrub removal should be undertaken outside the period 1st March to 31st August inclusive. If this time frame cannot be avoided, a close inspection of the trees and shrubs to be removed should be undertaken prior to clearance.

Work should not be carried out within a minimum of 5.0 metres of any in-use nest, although this distance could be more depending on the sensitivity of the species.

The proposed development is unlikely to impact to a large degree on local nesting bird populations as there is an abundance of suitable habitat for birds in the

surrounding area and only small amounts of suitable nesting and foraging habitat are likely to be removed.

Any trees not to be removed as part of the proposed works should be given adequate protection during the works, in accordance with British Standard *BS5837:2012 Trees in relation to Design, Demolition and Construction – Recommendations*. Protection should be installed on site prior to the commencement of any works on site.

The development will impact and possibly lead to the loss of potential bat commuting routes along the northern and eastern boundary hedgerows, as well as potentially impacting on a number of ivy-covered trees within the hedgerows and a dead oak tree displaying potential bat roosting features in the eastern hedgerow. It is therefore recommended that bat activity surveys are undertaken in summer 2014 to determine levels of bat use of the site.

To comply with paragraph 125 of the National Planning Policy Framework, the development should also aim to limit the impact of light pollution on bats, through the sensitive placement and design of any new lighting, and through maintaining dark routes for commuting and foraging where possible.

Current plans for the site indicate that the proposed water detention basin may be located in close proximity to a potential Badger sett located on the northern edge of the mature scrub in the southwest corner of the survey site. As such a Badger survey should be undertaken in order to determine the current status of the sett and to assess the potential impacts of the proposed development.

All of the ponds present within 500 metres of the survey site were concluded to be sub-optimal for Great Crested Newts. Furthermore, they will not be directly impacted by the proposed development whilst it was concluded any animals if present, will undoubtedly stay within the habitat mosaics around the ponds and will be unlikely to commute over unsuitable ground to reach the survey site. In addition, the majority of the land to be impacted by the proposed works was considered to be sub-optimal for newts as it was dominated by short, heavily-grazed grassland. As such, no further surveys are required, and no mitigation measures for Great Crested Newts are considered necessary.

Although no evidence of reptiles or common amphibians was found during the survey, and their presence is considered to be highly unlikely, small mammals could be present in the grassland. As such, care will be taken at all times during vegetation removal and topsoil stripping. Any small mammals disturbed or uncovered, will either be caught by hand and relocated to a safe area, or left to vacate the work site in their own time.

Although there are desk study records of Otter, Water Vole and White-clawed Crayfish from within the Grand Union Canal, which runs along part of the southern boundary of the site, it is understood that the proposed works will not directly impact the Canal, its banks or the vegetation within 5 metres of the banks. As such, no further survey work is required for these species however the Canal should be protected from run-off and pollution during the proposed works by following

established guidance (for example the Environment Agency's Pollution Prevention Guidance).

Despite the general absence of wildlife, if excavations are to be undertaken, it should be noted that open trenches could potentially trap wildlife, especially if these fill up with water. Escape routes should therefore be provided if trenches cannot be infilled immediately. These can be in the form of branches or boards placed on the bottom of the trench, with their upper ends above ground level and touching the sides, or sloping ends left in trenches.

*

Taking all the evidence into account, and excluding the potential impacts highlighted above, the proposed development of land at Glen Parva, Leicester is unlikely to impact any further on wildlife and will not lead to a significant loss of habitat in the area.

1. INTRODUCTION

1.1 Background and survey objectives

On land at Glen Parva, planning permission is being sought for development of the site.

In October 2013, FEC Ltd was instructed to carry out an Extended Phase 1 Habitat Survey of the site. This was undertaken to determine the presence of any important habitats or species which might be impacted on by the proposed development. In addition, a Great Crested Newt Habitat Suitability Index (HSI) assessment was carried out on all ponds within 500 m of the site.

A search of the ecological data for the area was carried out, this revealing a number of records of European Protected Species, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species within a 2.0 km radius of the site.

1.2 Site description

The site was located on the southwestern corner of the Glen Parva area of Leicester and was surrounded to the north and east by residential and industrial buildings, with public footpaths running along both the northern and eastern boundaries. A small strip of relatively new housing development was also present immediately to the south of the site, beyond which was the Grand Union Canal, which flowed along the site boundary in its southwest corner, along with the River Sence a further short distance to the south.

A small area of open countryside comprising grassland and dividing hedgerows was present beyond this and separated Glen Parva from the settlements of Whetstone and Blaby to the south. A similar landscape of grassland and hedgerows, with a small number of larger ponds, was present beyond the site to the west, through which the Grand Union Canal and the River Soar flowed.

The site was located on a hill which sloped generally from north to south and was dominated by a field of poor, semi-improved grassland, which was being grazed by cattle at the time of the survey. Hedgerows were present around the boundaries of the field whilst an area of mature scrub was present in the south-west corner of the site. A further small area of scrub was present in the southeast corner of the site, with small amounts of scattered scrub present along the western boundary.

A fenced-off area containing a mosaic of un-grazed semi-improved grassland, tall ruderal vegetation and scrub was present as a strip along the southern boundary of the site, adjacent to the housing to the south whilst a small ruined building was present in the northeast corner of the site.

The Ordnance Survey Grid Reference is SP 5621 9879, centred on the middle of the site.

1.3 Proposed works

It is understood that the land is to be developed for housing.

2. METHODOLOGY

2.1 Desk study

A detailed desk study was undertaken to determine the nature conservation designations and protected species that had been recorded within a 2.0 km radius of the site. This involved contacting statutory and non-statutory organisations, and then assimilating and reviewing the data provided.

The consultees for the desk study were:

- Multi Agency Geographic Information (MAGIC) website www.magic.gov.uk;
- National Biodiversity Network Gateway website;
- Leicestershire and Rutland Environmental Records Centre.

2.2 Habitat survey

An Extended Phase 1 Habitat Survey was carried out across the whole of the survey site. It was conducted using standard JNCC (2003) techniques and methodologies.

The Extended Phase 1 visit took place on 21st November 2013, in cool but sunny conditions, with a gentle breeze.

2.3 Protected species survey

During the surveys the potential for other protected and important species was assessed. This included European Protected Species, legally protected species and Local Biodiversity Action Plan Species (and habitats).

2.4 Constraints

The study was carried out just outside the optimum survey period and this will impact on the number of species recorded. However, the weather conditions were good at the time of the visit and given the nature of the habitats present, the timing of the survey was not considered to be a significant constraint to a robust initial site assessment.

3. RESULTS

3.1 Desk study

3.1.1 Designated sites

Statutory Sites

Within the 2.0 km search area there was one statutory site; Narborough Bog Site of Special Scientific Interest (SSSI), this being 1.1 km to the southwest.

A brief description of the SSSI is given below.

Narborough Bog SSSI

This site contains one of the largest natural reed-beds in Leicestershire together with areas of wet woodland and meadow.

Due to the distance of the site from the survey land, and the presence of intervening barriers including roads and built-up areas, the proposed development is unlikely to impact on any of the citation features of the SSSI.

Non-Statutory Sites

There were sixteen non-statutory sites within the 2.0 km search area. These sites are summarised in Table 3.1 below

Site Name & Designation	Grid Reference	Proximity to Survey Site	Description
Glen Hills Nature Area LWS 54195	SP560991	90 metres north	Mesotrophic grassland
New Bridge Meadow LWS 64281	SP561984	110 metres south	Mesotrophic grassland
Aylestone South / Glen Parva LWS 26183	SP561994	290 metres north-west	Wet Grassland
The Wethers cLWS 90699	SP560996	510 metres north	Mesotrophic grassland
Aylestone Holt Spinney LWS 80003	SP564995	590 metres north	Woodland
River Soar – Jubilee Park, Enderby LWS 80078	SP553987	640 metres west	Large River
Grand Union Canal, Aylestone LWS 26181	SK580019	700 metres north	Canal
Aylestone Meadows Central LWS 26182	SK564012	780 metres north	Mesotrophic grassland
Grand Union Canal LWS 57911	SP576983	1.04 km south-east	Canal
Moat Land LWS 25220	SP574980	1.2 km south-east	Mesotrophic grassland
Mill Lane Farm Grassland cLWS 37792	SP575979	1.3 km south-east	Mesotrophic grassland
Blaby Cemeteries LWS 23258	SP574977	1.3 km south-east	Mesotrophic grassland
Blaby Cemeteries LWS 25377	SP574976	1.4 km south-east	Mesotrophic grassland
Mill Lane Grassland	SP577978	1.5 km	Mesotrophic grassland

Site Name & Designation	Grid Reference	Proximity to Survey Site	Description
LWS 25215		south-east	
Highfields Farm Hedge pLWS 90639	SP575973	1.65 km south-east	Hedgerow
Hedgerow, Aisne Road, South Wigston cLWS 90005	SP581992	1.78 km east-north- east	Hedgerow
Key: LWS: Local Wildlife Site cLWS: Candidate Local Wildlife Site pLWS: Potential Local Wildlife Site			

Table 3.1: Non-statutory sites present within the 2 km search area.

Three Local Wildlife Sites (LWS) were located in close proximity to the survey site: Glen Hills Nature Area, New Bridge Meadow and Aylestone South/Glen Parva LWS. Of these there was some connectivity to Glen Hills Nature Area and Aylestone South/Glen Parva along the Grand Union Canal, which ran along the boundaries of these two sites as well as the survey land. However if the canal is protected from pollution and run-off during any proposed works it is not anticipated that these sites would be adversely impacted. Despite its proximity, there was no direct connectivity to New Bridge Meadow.

Further stretches of the Grand Union Canal to the north and east of the survey land were also designated as Local Wildlife Sites and these have connectivity to the survey land as the canal runs along the southern boundary of the survey land. However, again, if the canal is protected from pollution and run-off during any proposed works it is not anticipated that these sites would be adversely impacted.

None of the other non-statutory sites have any connectivity to the survey land and are separated from it by intervening barriers including distance, roads, railways and built-up areas. It is not anticipated that these sites would be adversely impacted by development of the survey land.

A large number of other district and parish-level sites were also identified through the desk study and a small number of these (Haymeadow 00026614, Haymeadow 00026643, Disused Railway Line 00026624 and the Grand Union Canal between the bridge and railway bridge at Glen Parva 00069986) were situated adjacent to the survey land and thus had direct connectivity with it.

A larger number of other sites were situated alongside the Grand Union Canal and thus were indirectly connected to the survey land via the canal. The adjacent haymeadows and disused railway will not be directly impacted by the proposed works and so no adverse impacts are anticipated. In addition, if the canal is protected from pollution and run-off during any proposed works it is not anticipated that the other sites would be adversely impacted.

The remaining district and parish sites have no connectivity to the survey land and are separated from it by intervening barriers including distance, roads, railways and built-up areas. It is not anticipated that these sites would be adversely impacted by development of the survey land.

3.1.2 Protected species

A search of the ecological data for the area was carried out, this revealing a number of records of European Protected Species, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species within a 2.0 km radius of the site.

This included records of Badger and pipistrelle bat from the site itself, along with a record of Smooth Newt from a pond just outside the northern boundary of the site.

Within the same 1.0 km grid square as the site there were also records of Common Frog and Grass Snake, although the snake record was from the opposite side of a railway line to the survey site.

Elsewhere within the 2.0 km search area there were records of Water Vole from the Grand Union Canal and the River Soar, with the closest record coming from the Grand Union Canal approximately 450 metres east-south-east of the survey land.

There were also Otter records from the River Sence, the River Soar and the Grand Union Canal, with the closest record coming from approximately 430 metres to the south-east on the River Sence at Blaby Bridge. Records of Harvest Mouse were also identified at Narborough Bog, 1.1 km to the south-west of the survey land.

The desk study also identified records of a number of bat species, including a Daubenton's Bat record from 620 metres to the west, a record of Common Pipistrelle from 870 metres to the west-northwest and a Brown Long-eared Bat record from 1.1 km to the north-northwest. There were also a large number of unidentified bat records *Chiroptera sp.*, the closest of which came from 1.0 km to the north-northeast.

Other records included a number of White-clawed Crayfish records from the Grand Union Canal, with the closest record coming from 290 metres to the west-northwest of the survey land and a small number of Common Toad records, with the closest record coming from 820 metres to the northeast.

The desk study also identified records of 38 bird species. None came from the site itself however there were records of Kingfisher from the Grand Union Canal and the River Sence, along with a number of records from around the ponds at Jubilee Park and Grove Park a short distance to the west.

3.2 Habitat survey

3.2.1 Habitat descriptions

The following habitats were recorded across the site:

- ❑ Poor, semi-improved grassland;
- ❑ Hedgerows;
- ❑ Scrub;
- ❑ Buildings and structures; and
- ❑ Habitat mosaic.

These are shown on the Phase 1 Habitat Survey map in Appendix 1, with the target notes (where applicable) in Appendix 2.

Poor, semi-improved grassland

The site was dominated by a field of poor, semi-improved grassland which was being grazed by cattle at the time of the survey and had a very short sward (Fig. 1)

Grasses present within the sward included Perennial Rye-grass *Lolium perenne*, False Oat-grass *Arrhenatherum elatius*, Timothy *Phleum pratense*, Common Bent *Agrostis capillaris* and Crested Dog's-tail *Cynosaurus cristatus*. Where the ground was wetter, small stands of Hard Rush *Juncus inflexus* were also recorded.



Fig. 1 Poor, semi-improved grassland

Forbs present within the grassland included Dandelion *Taraxacum officinale* agg., White Clover *Trifolium repens*., Ribwort Plantain *Plantago lanceolata*, Creeping Buttercup *Ranunculus repens*, Greater Plantain *Plantago major*, Creeping Cinquefoil *Potentilla reptans*, Ragwort *Senecio jacobaea*, Creeping Thistle *Cirsium arvense* and Spear Thistle *C. vulgare*.

Hedgerows

A species-poor, unmanaged, defunct and gappy hedgerow up to 5 metres tall ran along the western boundary of the site (Fig. 2).

This was dominated by Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa* and Dog Rose *Rosa canina*, with some Bramble *Rubus fruticosus* also present.

A further defunct hedgerow ran along the eastern boundary of the site (Fig. 3) and comprised Blackthorn, Field Maple *Acer campestre*, Dog Rose and Bramble.

A number of trees were also present along the hedgerow and these included a semi-mature Ash *Fraxinus excelsior* tree to the south of a mast which appeared to be in good condition but was covered with thick Ivy *Hedera helix*. A further Ivy-covered Field Maple was also present, along with an oak *Quercus sp.* and single, dead Ash and oak trees which were again covered in Ivy. Some minor holes and splits were recorded on the dead Oak tree however these were situated too high up to determine if they penetrated into the tree.



Figs. 2 & 3 Western (l) and eastern (r) boundary hedgerows

An unmanaged hedgerow approximately five metres tall also lined the northern boundary of the site (Fig. 4). This was again dominated by Hawthorn, Blackthorn and Dog Rose, with Field Maple, Ash and Bramble also present, along with standard Ash trees that appeared to be in good condition, although some Ivy cover was present.



Fig. 4 Northern boundary hedgerow

Scrub

An area of mature scrub dominated the south-western corner of the site, between the grassland to the north and the Grand Union Canal to the south (Fig. 5).

This was mostly open in nature, with species present including Hawthorn, Dog Rose, Elder *Sambucus nigra*, Ash, Wych Elm *Ulmus glabra*, Crab Apple *Malus sylvestris*

and Bramble. The ground was generally bare however some Common Nettle *Urtica dioica* was noted, along with mosses, occasional ferns and species from the adjacent grassland. A large electricity pylon was also present within the centre of this area.



Fig. 5 Mature scrub



Fig. 6 Potential Badger Sett

The land sloped down from the grassland to the north and this created a bank along the northern edge of the scrub.

On this bank a small number of holes were recorded (Fig. 6). These were of a size and shape thought to be attributable to Badger, although no evidence of Badger or signs of recent activity were noted to confirm this, whilst the ground surrounding the holes was heavily disturbed from where cattle had accessed the scrub from the grassland to the north. A Fox *Vulpes vulpes* was also recorded within this area of scrub.

A further area of scattered scrub was present in the southeastern corner of the site, where the land sloped steeply down towards the housing to the south (Fig. 7).

This comprised Hawthorn, Blackthorn, Dog Rose, Field Maple and Bramble. Where the scrub met the eastern boundary hedgerow a mature Field Maple was present. This appeared to be in good condition, although it was covered with Ivy.



Figs. 7 & 8 Scattered scrub

Occasional scattered scrub comprising Hawthorn, Blackthorn, Dog Rose and Bramble was also recorded along the northern and western edges of the grassland, adjacent to the boundary hedgerows (e.g. Fig. 8).

Buildings and structures

In the northeast corner of the site there was a small, derelict, brick-built structure with a collapsed concrete roof (Fig. 9). This was open to the elements and was considered to have no bat potential, although an old bird's nest was present within a recess in the internal wall of the building (Fig. 10). A small pile of bricks and rubble was present close to the building.



Figs. 9 & 10 Derelict structure (l) with old bird's nest in internal cavity (r)

A large electricity pylon was also present within the mature scrub in the southwest corner of the site whilst a mobile phone mast was present within a wooden-fenced area adjacent to the eastern boundary hedgerow.

Habitat mosaic

Along the southern edge of the site, adjacent to the recent housing development, a strip of land was fenced off by post and rail fencing (Ref. Fig. 11 and Fig. 7). The vegetation within this strip was unmanaged and comprised a mosaic of grassland vegetation, occasional Teasel *Dipsacus fullonum* and scattered Hawthorn, Bramble and Dog Rose scrub.



Fig. 11 Habitat mosaic

3.2.2 Flora

The botanical composition of each habitat was typical, and all species recorded were common and widespread.

No rare vascular plants were found, and there were no invasive species or notifiable weeds.

A list of species observed is presented in Appendix 3.

3.3 Protected species survey

3.3.1 Bats

The derelict brick-built structure was considered highly unsuitable for roosting bats (Ref. Fig. 9), as the roof and some of the walls had collapsed and the building was open to the elements.

No evidence of bat activity or occupation was observed in or around the building.

Most of the trees within the curtilage of the site appeared to be in good condition and did not support features such as decay cavities, woodpecker holes, fissures and exfoliating bark, that would be considered suitable for bat roosting and/or hibernation.

However, a dead oak tree in the northeast corner of the site appeared to have minor splits and/or holes at height although, due to their height, it was not possible to inspect them closely. A number of the trees along the eastern and northern boundary hedgerow also had a covering of Ivy which may act as a summer roosting feature in itself or may be hiding features on the tree below.

The site itself was thought to be of only low value to foraging or commuting bats, as it was mostly open ground. However, the hedgerows around the boundaries of the site may act as commuting or foraging features, providing routes for bats roosting within the adjacent residential areas to access the open countryside and river and canal corridors to the west and south for foraging purposes.

3.3.2 Badgers

A small number of holes of a size and shape considered to be made by a Badger were recorded within the bank on the northern edge of the mature scrub in the southwest corner of the site (Ref. Fig. 6).

However, no evidence of Badger occupation or signs of recent activity were noted in association with this, whilst the ground surrounding the holes was heavily disturbed from where the cattle had accessed the scrub from the grassland to the north.

No evidence of Badger use was recorded elsewhere on site.

3.3.3 Otters

No evidence of Otter presence was found.

3.3.4 Water Voles

No evidence of Water Vole presence was found.

3.3.5 Birds

A total of nine species of birds were observed. Of these, one was a species of Medium Conservation Concern (RSPB Amber list); Black-headed Gull *Larus ridibundus*. All of the other birds were Species of Low Conservation Concern (RSPB Green list).

Flocks of Black-headed Gulls and Jackdaws *Corvus monedula* were observed on and over the grassland whilst the remaining species were observed within the hedgerows and scrub areas on site.

An old nest was found within a recess on the internal wall of the brick building in the northeast corner of the site, but this was the only sign of nesting birds, with no nests recorded within the hedgerows and scrub elsewhere on site, although it was not possible to fully investigate all of the scrub areas.

It is concluded, however, that the hedgerows and scrub areas have the potential to support nesting birds.

A full list of species noted is given in Appendix 4.

3.3.6 Reptiles

The site contained little suitable reptile habitat as the majority of the site was dominated by heavily grazed grassland, with little in terms of variety in vegetation height and structure, areas of dense cover and the 'habitat edges' favoured by reptiles, which were limited to the boundaries of the site, along the hedgerows and around the areas of scrub.

Potential hibernacula were also limited to the small rubble pile in the northeast corner of the site, although this was located in close proximity to a well-used public footpath with little suitable reptile habitat nearby.

The fenced off habitat mosaic along the southern boundary contained more suitable reptile habitat, although this was limited in extent and was isolated from any other suitable reptile habitat.

Despite the desk study identifying records of Grass Snake in the local area, the closest record came from the opposite side of a train track and the likelihood of finding them on the site is considered to be low.

3.3.7 Great Crested Newts

Ordnance Survey maps highlighted the possible presence of three ponds and a further complex of larger ponds/lakes within 500 m of the site. The locations of the ponds are shown in Appendix 5.

Pond 1 was located on the southern edge of a field to the north of the footpath that ran alongside the northern boundary of the site (Fig. 12). This pond was subject to a Great Crested Newt Habitat Suitability Index assessment and came out with a score of 0.54, giving it a below average predicted presence of finding Great Crested Newts in the pond. The desk study also identified one record of a Smooth Newt from within this pond but no Great Crested Newt records either within this pond or within the remainder of the search area.



Fig. 12 Pond 1

Suitable terrestrial vegetation close by on the survey site is limited to the hedgerows and scrub along the northern and western boundaries, with no waterbodies present, whilst there are larger amounts of suitable terrestrial vegetation to the north of the pond, comprising numerous hedgerows along with rough grassland in the field within which the pond is located.

Given the lack of Great Crested Newt records within the local area combined with the lack of suitable terrestrial habitat on site and the presence of abundant suitable habitat to the north of the pond, it is therefore considered unlikely that any newts will be present on site.

The full details of the Habitat Suitability Index score are given in Appendix 6.

The remaining ponds were located on private land and could not be accessed however assessment from distance, combined with consultation of aerial photographs of the ponds, produced the following conclusions:

- **Pond 2:** Aerial photographs suggest that this pond is actually a meander connected to the main River Sence, rather than it being a separate water body, and as such it will be unsuitable for Great Crested Newts. It is therefore considered unlikely that Great Crested Newts are present within the meander. In addition there is sub-optimal terrestrial vegetation in the form of short

grazed grassland situated between the meander and the survey site, with more suitable vegetation situated to the east, south and west of the river.

- **Pond 3:** Aerial photographs of this pond suggest that it may have been infilled as it does not appear to be there anymore, and it could not be seen from the canal towpath. Furthermore, if any remnant of the pond is remaining, what little suitable terrestrial vegetation is present is situated mostly to the south and to the immediate east and west of the pond, with short grazed grassland and human activity mostly dominant in between the pond location and the survey site. It is therefore more likely that any newts present would commute towards the south and immediate east and west of the pond, rather than making the longer journey across less suitable habitat towards the survey site.
- **Pond 4 complex:** This consisted of three large ponds/lakes which could partly be viewed from Jubilee Park to the west. These were noted to be populated by large numbers of Black-headed gulls and wildfowl and were mostly surrounded by very short, cattle-grazed grass, with only very limited amounts of suitable terrestrial habitat (Fig. 13). Aerial photos also suggested that they may be used as angling lakes, as some fishing pegs were visible around the banks. The combination of wildfowl and fish therefore make it unlikely that Great Crested Newt are present.



Fig. 13 Pond 4 complex

As such, no further surveys are required, and no mitigation measures for Great Crested Newts are considered necessary.

3.3.8 Invertebrates

It was also possible to assess the potential importance of the habitats within the application site to invertebrates.

Since much of the site was heavily grazed, poor semi-improved grassland, with only a few small patches of other vegetation, it was concluded that there was low potential for invertebrate assemblages, in particular those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan. Indeed, none were noted.

3.3.9 Other species

No other important or protected species were observed during the site visit.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Site evaluation

The site supported little habitat that was considered to be of value to wildlife.

The hedgerows and scrub areas around the boundaries of the site provided potential breeding and foraging cover for common birds, although only a single old nest was found within the derelict building in the northeastern corner of the site.

Most of the trees within the hedgerows and mature scrub on site were noted to be in good condition and displayed no features that may be suitable for use by bats as roosting and/or hibernation places, whilst the derelict building situated in the northeastern corner of the site was considered highly unsuitable for bat occupation.

However, some of the trees within the eastern and northern boundary hedgerows were covered with ivy and this may provide roosting potential in itself or may be hiding potential roosting features on the tree below. A single dead oak tree located within the eastern boundary hedgerow also displayed some minor holes and splits, although these were situated too high up to determine if they penetrated into the tree.

The site itself was thought to be of only low value to foraging or commuting bats, as it was mostly open ground. However, the hedgerows around the boundaries of the site may act as commuting or foraging features, providing routes for bats roosting within the adjacent residential areas to access the open countryside and river and canal corridors to the west and south for foraging purposes.

The grassland was not diverse in grasses and wildflowers, and thus had limited interest to invertebrates and small mammals.

A potential Badger sett was recorded within the bank on the northern edge of the mature scrub in the southwest corner of the site, although no evidence of Badger occupation or signs of recent activity were noted in association with this. No other evidence of Badgers was recorded across the site.

Ordnance Survey maps highlighted the possible presence of three ponds and a further complex of larger lakes within 500 m of the site. One pond was surveyed and appeared to be sub-optimal for Great Crested Newts, having a Habitat Suitability Index score of below average. Furthermore, the desk study also identified one record of a Smooth Newt from within this pond but no Great Crested Newt records either within this pond or within the remainder of the search area.

Of the remaining ponds, one appeared to be a meander of the River Sence rather than a pond, one appeared to potentially have been infilled, whilst the pond complex contained waterfowl and appeared to be used for angling. These ponds also had sub-optimal terrestrial vegetation situated between them and the survey site.

The presence of reptiles was thought to be unlikely, as there was little suitable reptile habitat and no obvious refugia or hibernacula, apart from a small rubble pile located in the northeastern corner of the site.

Since much of the site was heavily grazed, poor semi-improved grassland, with only very narrow strips of tall ruderal vegetation, it was concluded that there was low potential for invertebrate assemblages, in particular those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan.

Although no evidence of Water Vole and Otter was recorded on site, there are desk study records of both species, along with White-clawed Crayfish from within the Grand Union Canal, which runs along part of the southern boundary of the site.

4.2 Possible impacts of proposed work and recommendations

It is understood that a housing development and detention basin are planned for the site.

The main impact of this development will be on the semi-natural habitats noted above, in particular the hedgerows and areas of scrub around the boundaries of the site that hold the main ecological value.

Current plans suggest that the hedgerow along the northern boundary of the site and the northern section of the eastern boundary hedgerow will be impacted by the proposed works, although the remaining hedgerows will be left intact. In addition it appears that much of the mature scrub in the southwestern corner of the site, along with the scrub in the southeastern corner of the site will be retained.

Since all in-use bird's nests and their contents are protected from damage or destruction, any tree and shrub removal should therefore be undertaken outside the period 1st March to 31st August inclusive. If this time frame cannot be avoided, a close inspection of the trees and shrubs to be removed should be undertaken prior to clearance. Work should not be carried out within a minimum of 5.0 metres of any in-use nest, although this distance could be more depending on the sensitivity of the species.

The proposed development is unlikely to impact to a large degree on local nesting bird populations, as there is an abundance of suitable habitat for birds in the surrounding area, and only small amounts of suitable nesting and foraging habitat are likely to be removed.

Any trees not to be removed as part of the proposed works should be given adequate protection during the works, in accordance with British Standard *BS5837:2012 Trees in relation to Design, Demolition and Construction – Recommendations*. Protection should be installed on site prior to the commencement of any works on site.

The development will also impact and possibly lead to the loss of potential bat commuting routes along the northern and eastern boundary hedgerows, as well as

potentially impacting on a number of Ivy-covered trees within the hedgerows and a dead oak tree displaying potential bat roosting features in the eastern hedgerow. It is therefore recommended that bat activity surveys are undertaken in summer 2014 to determine levels of bat use of the site.

To comply with paragraph 125 of the National Planning Policy Framework, the development should also aim to limit the impact of light pollution on bats, through the sensitive placement and design of any new lighting, and through maintaining dark routes for commuting and foraging where possible.

Current plans for the site indicate that the proposed water detention basin may be located in close proximity to the potential Badger sett located on the northern edge of the mature scrub in the southwestern corner of the survey site. As such a Badger survey should be undertaken in order to determine the current status of the sett and to assess the potential impacts of the proposed development.

All of the ponds present within 500 metres of the survey site were concluded to be sub-optimal for Great Crested Newts. Furthermore, they will not be directly impacted by the proposed development, whilst it was concluded any animals if present, will undoubtedly stay within the habitat mosaics around the ponds and will be unlikely to commute over unsuitable ground to reach the survey site.

In addition, the majority of the land to be impacted on by the proposed works was considered to be sub-optimal for newts, as it was dominated by short, heavily-grazed grassland.

As such, no further surveys are required, and no mitigation measures for Great Crested Newts are considered necessary.

Although no evidence of reptiles or common amphibians was found during the survey, and their presence is considered to be highly unlikely, small mammals could be present in the grassland. As such, care will be taken at all times during vegetation removal and topsoil stripping. Any small mammals disturbed or uncovered, will either be caught by hand and relocated to a safe area, or left to vacate the work site in their own time.

Although there are desk study records of Otter, Water Vole and White-clawed Crayfish from within the Grand Union Canal, which runs along part of the southern boundary of the site, it is understood that the proposed works will not directly impact the canal, its banks or the vegetation within five metres of the banks.

As such, no further survey works is required for these species, although the canal should be protected from run-off and pollution during the proposed works by following established guidance (for example the Environment Agency's Pollution Prevention Guidance).

Despite the general absence of wildlife, if excavations are to be undertaken, it should be noted that open trenches could potentially trap wildlife, especially if these fill up with water. Escape routes should therefore be provided if trenches cannot be infilled immediately. These can be in the form of branches or boards placed on the bottom

of the trench, with their upper ends above ground level and touching the sides, or sloping ends left in trenches.

Taking all the evidence into account, and excluding the potential impacts highlighted above, the proposed development of land at Glen Parva, Leicester is unlikely to impact any further on wildlife and will not lead to a significant loss of habitat in the area.

4.3 Further surveys

If any tree or shrub/hedge removal cannot be timed appropriately to avoid the bird nesting period (considered to be March to August inclusive), then further surveys of the ground, trees and/or shrubs to be cleared or removed will be necessary.

The site itself was concluded to be of potential value to roosting, foraging and/or commuting bats, and as such, it is recommended that bat activity surveys are carried out in summer 2014 to establish the level of bat use of the site. At least three surveys should be undertaken between June and August, with a minimum of two surveyors present.

As the proposed water detention basin will be located in close proximity to a potential Badger sett, a Badger survey should be to enable the potential impacts of the proposed development to be fully assessed. Badger surveys can be undertaken at any time of the year, with April and May optimum periods.

No other surveys were considered necessary.

5. REFERENCES

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APPENDICES

Appendix 1: Extended Phase 1 Habitat Survey Map

Appendix 2: Target Notes

Appendix 3: Plant species list

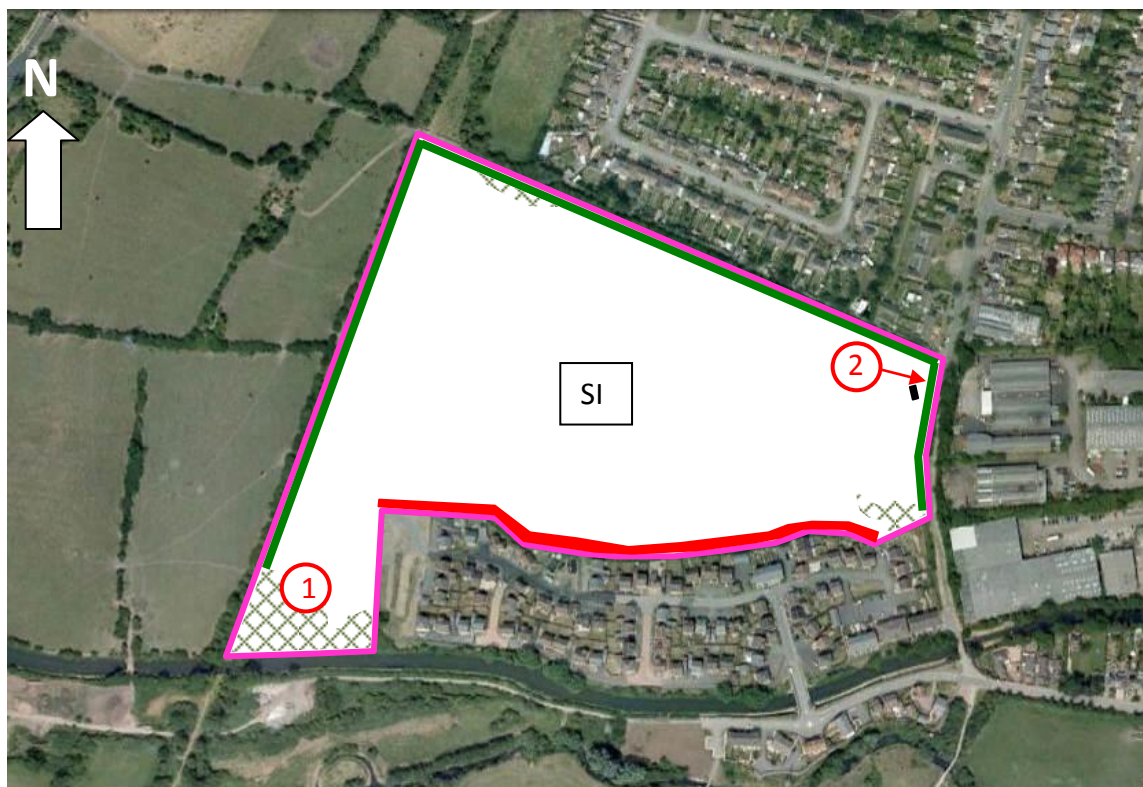
Appendix 4: Bird species list

Appendix 5: Pond Locations

Appendix 6: GCN HSI scores

Appendix 7: Relevant legislation

Appendix 1: Extended Phase 1 Habitat Survey Map (not to scale)



Legend		
	Survey boundary	 Poor, semi-improved
	Scrub	 Hedgerow
	Target note	 Building
		 Habitat mosaic

Appendix 2: Target Notes

Target Number	Notes
1	Potential Badger Sett
2	Dead oak tree displaying potential bat roosting features

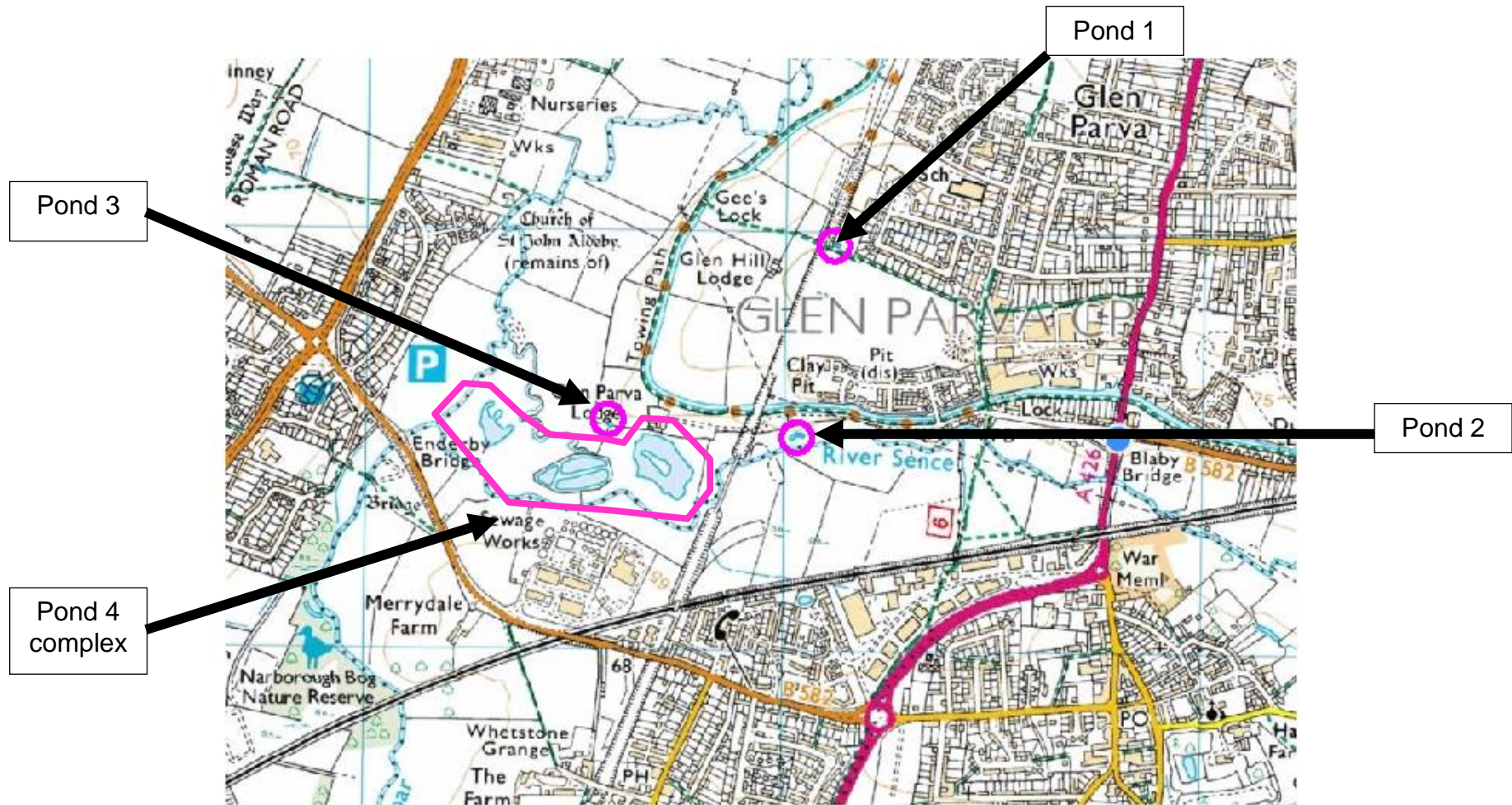
Appendix 3: Plant species list

Latin name	Common name
<i>Acer campestre</i>	Field Maple
<i>Crataegus monogyna</i>	Hawthorn
<i>Fraxinus excelsior</i>	Ash
<i>Hedera helix</i>	Ivy
<i>Malus sylvestris</i>	Crab Apple
<i>Prunus spinosa</i>	Blackthorn
<i>Quercus sp.</i>	Oak
<i>Rosa canina</i>	Dog Rose
<i>Rubus fruticosus</i>	Bramble
<i>Sambucus nigra</i>	Elder
<i>Ulmus glabra</i>	Wych Elm
<i>Cirsium arvense</i>	Creeping Thistle
<i>Cirsium vulgare</i>	Spear Thistle
<i>Dipsacus fullonum</i>	Teasel
<i>Ranunculus repens</i>	Creeping Buttercup
<i>Plantago lanceolata</i>	Ribwort Plantain
<i>Plantago major</i>	Greater Plantain
<i>Potentilla reptans</i>	Creeping Cinquefoil
<i>Senecio jacobaea</i>	Common Ragwort
<i>Taraxacum Officinale agg.</i>	Dandelion
<i>Trifolium repens</i>	White Clover
<i>Urtica dioica</i>	Common Nettle
<i>Agrostis capillaris</i>	Common Bent
<i>Arrhenatherum elatius</i>	False Oatgrass
<i>Cynosaurus cristatus</i>	Crested Dog's-tail
<i>Lolium perenne</i>	Perennial Rye-grass
<i>Phleum pratense</i>	Timothy
<i>Juncus inflexus</i>	Hard Rush

Appendix 4: Bird species list

Common name	Latin name
Black-headed Gull	<i>Chroicocephalus ridibundus</i>
Woodpigeon	<i>Columba palumbus</i>
Pied Wagtail	<i>Motacilla alba</i>
Blackbird	<i>Turdus merula</i>
Great Tit	<i>Parus major</i>
Long-tailed Tit	<i>Aegithalos caudatus</i>
Chaffinch	<i>Fringilla coelebs</i>
Magpie	<i>Pica pica</i>
Jackdaw	<i>Corvus monedula</i>

Appendix 5: Pond Locations



Appendix 6: Great Crested Newt Habitat Suitability Index scores

Pond 1

Suitability Indices	Value	Criteria	Indices Score
SI ₁ Location	Optimal	Location within GCN range	1.0
SI ₂ Pond area	<50 m ²	Pond surface area	0.05
SI ₃ Pond drying	Dries rarely	Dries no more than two years in ten or only in drought	1.0
SI ₄ Water quality	Poor	Low invertebrate diversity	0.33
SI ₅ Shade	85%	Estimate of percentage perimeter shaded	0.5
SI ₆ Fowl	Absent	No evidence of waterfowl	1.0
SI ₇ Fish	Absent	No evidence of fish	1.0
SI ₈ No. of ponds	5	Number of ponds within 1 km (excluding pond surveyed)	0.75
SI ₉ Terrestrial habitat	Moderate	Quality of terrestrial habitat	0.67
SI ₁₀ Macrophytes	20%	Estimate of percentage of pond surface covered	0.5
HSI score			0.54

$$HSI = (SI_1 \times SI_2 \times SI_3 \times SI_4 \times SI_5 \times SI_6 \times SI_7 \times SI_8 \times SI_9 \times SI_{10})^{1/10}$$

The suitability of the pond for Great Crested Newts was considered thus:

HSI	Pond suitability
<0.5	Poor
0.5 – 0.59	Below average
0.6 – 0.69	Average
0.7 – 0.79	Good
>0.8	Excellent

This equates to a below average predicted presence of finding Great Crested Newts in the pond.

Appendix 7: Relevant legislation

7.1 – Badgers

Badgers are protected in Britain by the Protection of Badgers Act 1992. The purpose of this Act is to protect the animals from deliberate cruelty and from the incidental effects of lawful activities which could cause them harm. Under this legislation it is an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or attempt to do so;
- Interfere with a sett by damaging or destroying it;
- Obstruct access to, or any entrance of, a Badger sett;
- Disturb a Badger when it is occupying a sett.

Note that if any of the above resulted from a person being *reckless*, even if they had no intention of committing the offence, their action would still be considered an offence. A person is not guilty of an offence if it can be shown that the act was '*the incidental result of a lawful operation and could not have been reasonably avoided*'; only a court can decide what is 'reasonable' in any set of circumstances.

Penalties for offences under this legislation can be up to six months in prison and a fine of up to £5,000 for each offence.

A Badger sett is defined in the Act as '*any structure or place which displays signs indicating current use by a Badger*'. This can include culverts, pipes and holes under sheds, piles of boulders, old mines and quarries, etc.

'Current use' does not simply mean 'current occupation' and for licensing purposes it is defined as '*any sett within an occupied Badger territory regardless of when it may have last been used*'. A sett therefore, in an occupied territory, is classified as in current use even if it is only used seasonally or occasionally by Badgers, and is afforded the same protection in law.

7.2 – Bats

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5.

In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations 1994, (or Northern Ireland 1995) (the Habitats Regulations), which defines 'European protected species of animals'.

The above legislation can be summarised thus (Mitchell-Jones and McLeish, 2004):

- *Intentionally or deliberately kill, injure or capture (or take) bats*

- ❑ *Deliberately disturb bats (whether in a roost or not)*
- ❑ *Recklessly disturb roosting bats or obstruct access to their roosts*
- ❑ *Damage or destroy roosts*
- ❑ *Possess or transport a bat or any part of a part of a bat, unless acquired legally*
- ❑ *Sell (or offer for sale) or exchange bats, or parts of bats*

The word 'roost' is not used in the legislation, but is used here for simplicity. The actual wording is 'any structure or place which any wild animal...uses for shelter or protection' (WCA), or 'breeding site or resting place' (Habitats Regulations).

As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

7.3 – Birds

In Britain, all wild birds, their nests and eggs are protected under the Wildlife & Countryside Act 1981(as amended), with the Countryside and Rights of Way Act 2000 extending this protection. There are penalties for:

- ❑ *Killing, injuring or capturing them, or attempting any of these*
- ❑ *Taking or damaging the nest whilst in use*
- ❑ *Taking or destroying the eggs*

Schedule 1 species carry special penalties and it is an offence to even disturb these near the nest.

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Land at Glen Parva, Leicester – Extended Phase 1 Habitat Survey

Report Number: 5059 FE EPH1S

Version: 01

Date: 28th January 2014

A handwritten signature in black ink, appearing to read 'ADW', is centered within a light gray rectangular box.

A D Warren