

**LAND AT
POTASH ROAD
MATCHING GREEN, ESSEX**

**HABITAT & PROTECTED SPECIES
ECOLOGY REPORT**



2016

CLIVE HERBERT

Amphibian, Reptile & Mammal Conservation Limited
Species protection and habitat conservation specialists

**67A Ridgeway Avenue, East Barnet, Herts. EN4 8TL
Tel: 020 8440 6314**

1. Introduction

- 1.1 Amphibian, Reptile and Mammal Conservation Limited were contracted by RCT Construction limited, via GF Planning Limited, on 23rd August 2016 to undertake a habitat and protected species ecological survey of a compartment of land located between Stock Farm and Stock Hall, off Potash Road, Matching Green, Essex CM17 0RN, situated at approximately National Grid Reference TL 540 113 (see cover photograph).
- 1.2 This assessment was commissioned in order to support a planning application for the re-development of the site for two new residential houses.
- 1.3 The objectives of the survey were to:
 - determine if any ecologically significant habitats would be adversely affected by the proposed development;
 - identify any summary mitigation measures required (if any), including further targeted survey work;
 - assess the potential for any protected species to occur within the proposed working footprint;
 - ensure compliance with the legislation and the maintenance of the local biodiversity resource.

2. Methodology

- 2.1 Prior to the field site visit, a desk study including a search of the National Biodiversity Network (NBN) was undertaken in order to assess the species assemblage present in the surrounding area and to identify any relevant known records of protected species since 1981.

A search of the County Herpetofauna Database, maintained by the London, Essex & Hertfordshire Amphibian and Reptile Trust (LEHART), was also completed to access records not submitted to the NBN.

- 2.2 A site visit was then undertaken on 24th August 2016, by the report's author, a protected species consultant with 30 years' experience. There was full access available to all relevant parts of the proposed development footprint.
- 2.3 The standard survey technique of a 'walk-over' survey of the proposed development footprint was utilised in order to record the various habitat features present, compile a summary species list (see Appendix) and identify any habitats or features of ecological importance that may require protection or mitigation during the forthcoming works.
- 2.4 An assessment was also made of the potential for any protected species to occur on the site and that may require further targeted survey work.

3. Constraints

- 3.1 It is considered that there are no constraints operating on the assessment results presented in section 4 below.
- 3.2 The results presented in section 4 below remain valid for a period of twelve months from the date of the survey, after which time they should not be relied upon and further advice should be sought regarding updating the survey.

4. Results

4.1 Desk Study

The desk study found records of the following legally protected species within a 2-km radius of the study area:

Species	Grid Ref.	Location
Great Crested Newt <i>Triturus cristatus</i>	TL 51 F	No named site specified. Tetrad to the west and south-west of study area.
Grass Snake <i>Natrix natrix</i>	TL 51 F	No site specified. Tetrad to the west and south-west of study area.
Common Pipistrelle <i>Pipistrellus pipistrellus</i>	TL 51 K	No named site specified. Tetrad to the east and south-east of study area.
Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>	TL 51 K	No named site specified. Tetrad to the east and south-east of study area.
Badger <i>Meles meles</i>	TL 51 K	No named site specified. Tetrad to the east and south-east of study area.

4.2 Habitat Assessment

4.2.1 Location

The proposed development footprint (see photographs 1 – 4 below) is composed of a roughly square compartment of land that is located to the south of Potash Road between Stock Farm and Stock Hall. It was formerly part of the Matching Airfield and housed six underground fuel storage tanks and an associated building.

4.2.2 Boundaries

The boundaries (see photographs 5 – 8 below) of the proposed development footprint are as follows:

Eastern: this boundary is comprised of a wooden fence with no vegetation present.

Northern: this boundary is formed by a hedgerow of Dogwood and Field Maple, with one mature Ash tree.

Western: this boundary is mainly comprised of a chain-link fence but with a small, gappy hedge in the northern section formed mainly by Common Hawthorn with one small Ash present.

Southern: this boundary is formed by a low (approximately 1.5 metre high) Beech hedge.

4.2.3 Habitats

The site is comprised of two distinct compartments, as follows:

Outer Compartment: this compartment (see photographs 1 – 2 below) is located between the boundaries detailed above and an inner chain-link fence that is overgrown with Bramble, Rose, Common Hawthorn and Old Man's Beard.

The substrate of the entirety of this compartment is formed of large concrete slabs with only minimal ruderal vegetation present in the cracks between the slabs.

Inner Compartment: this compartment (see photograph 3 – 4 below) is located within the inner chain-link fencing and contains the underground former fuel storage tanks and the only building on the site.

The substrate is comprised of gravel and the vegetation cover is dominated by Bramble and other ruderal plant species.

The building (see photographs 9 – 14 below) is a single-storey structure with thick, rendered brick-built walls and an asbestos roof that is supported by metal rafters. There is one tight-fitting door together with one window that has been fully sealed. The building has been used for occasional storage but the interior was undisturbed and provided optimal survey conditions.

The underground storage tanks have no access points above ground.

As a result of the artificial substrate of the entire site, the recent origin of the habitat since cessation of airfield usage and the low species assemblage present, the site was considered to have only a low ecological significance as a habitat.



Photographs 1 – 2: Proposed development footprint (outer compartment)



Photographs 3 – 4: Proposed development footprint (inner compartment)



Photographs 5 – 8: Site boundaries (E – N – W – S)



Photographs 9 – 14: Derelict building

4.3 Protected Species

The following taxa were considered to be the only protected faunal groups requiring specific attention and comment:

- 4.3.1 Bats: There are no mature trees within the proposed development footprint, apart from a mature Ash on the northern boundary, that could afford potential roosting sites for the various bat species highlighted by the desk study (see section 4.1 above) to be present in the surrounding area. The single mature Ash showed no potential bat roost sites to be present.

The building (see section 4.2.3 above) was found to be of an unsuitable structure to afford roosting opportunities for bats with none of the typical features present that are associated with roosts, such as a wooden central ridge, mortise joints in rafters, hanging tiles or weather boarding, cavity walls, soffits etc.

There was also no external access available to the underground former fuel storage tanks that could afford potential hibernation sites for bats.

It is therefore considered that the proposed development will have ‘**no impact**’ on this taxon.

- 4.3.2 Badgers: This species is known from the surrounding area (see section 4.1 above) but the proposed development footprint comprises only flat artificial substrate with no embankments, mounds, slopes etc that are typical locations for setts.

The site was intensively searched and no potential holes indicative of a sett were located. In addition, there were no other signs of Badgers utilising the site for foraging or commuting, such as snuffle holes, latrines etc.

It is therefore considered that the proposed development will have ‘**no impact**’ on this taxon.

- 4.3.3 Reptiles: The artificial habitats that dominate the site, together with small area of central scrub, were considered to represent unsuitable habitat for the Grass Snakes that are known from the desk study to occur in the surrounding area.

It is therefore considered that the proposed development will have ‘**no impact**’ on this taxon.

- 4.3.4 Great Crested Newts: The site provides no suitable aquatic breeding habitat for this species. The principal pond cluster in the surrounding area is in Matching Green village that is >500m and too distant to have any impact (even if present) on the proposed development footprint. The only water body within a 500 metre radius of the site is the moat at Stock Hall to the south of the proposed footprint. This is on private land and was not surveyed as part of the current assessment, although there are no known historic records of the species from the moat.

It is therefore recommended that the proposed development will have ‘**no impact**’ on this species unless the species breeds in the Stock Hall moat, in which case the potential impact on Great Crested Newts would be a ‘**high impact**’ due to its adjacent location.

- 4.3.5 Breeding Birds: There is suitable tree and hedgerow habitat along the northern and southern boundaries of the site for birds of several typical widespread garden species, such as Robins or Wrens, to breed.

There is no potential within the site for any specially protected Schedule 1, Wildlife & Countryside Act (1981, as amended) species to occur.

The proposed works will, however, have ‘**no impact**’ on this taxon as long as all hedgerow clearance work (if any required) is undertaken outside of the nesting season.

If vegetation clearance is required during the breeding season (March – August inclusive), then a nest search in this area should be undertaken by an experienced ecologist prior to the works and any nests located will need to be clearly marked for protection until breeding has been completed.

5. Summary & Recommendations

- 5.1 The habitat survey found that there are no **habitats** of ecological importance that will be adversely affected by the proposed development and which would require mitigation or compensation in order to maintain the local biodiversity resource.
- 5.2 The desk study highlighted several **protected species** (two species of bats, Badgers, Great Crested Newts and one species of reptile) as occurring in the surrounding area.
- 5.3 The site assessment, however, found that there is no suitable habitat present for bats to roost within any part of the proposed footprint and no evidence of Badger activity was detected on the site.
- 5.4 There is only one potential Great Crested Newt breeding site within 500 metres of the proposed footprint; this is located on private land at Stock Hall immediately to the south of the site. No attempt was made to access this private site as the assessment was commissioned outside of the main spring amphibian breeding season (March – May inclusive).

Although there are no proven Great Crested Newt records from the moat, it is highly likely that it has never been surveyed for this species due to its location on private land.

It is therefore **recommended** that a survey for this species is undertaken at the appropriate time of the year during the breeding season, subject to access consent from the landowner.

Appendix: Species List

The following species list was compiled during the single site assessment visit in late summer and therefore does not claim to be a definitive list for any of the taxa listed.

Plants

Ash	<i>Fraxinus excelsior</i>
Beech	<i>Fagus sylvatica</i>
Bittersweet	<i>Solanum dulcamara</i>
Black Bryony	<i>Tamus communis</i>
Bramble	<i>Rubus fruticosus</i> agg.
Broad-leaved Willow-herb	<i>Epilobium montanum</i>
Common Hawthorn	<i>Crataegus monogyna</i>
Common Nettle	<i>Urtica dioica</i>
Common Tormentil	<i>Potentilla erecta</i>
Dandelion	<i>Taraxacum officinale</i> agg.
Dock	<i>Rumex</i> sp.
Dogwood	<i>Thelycrania sanguinea</i>
Elder	<i>Sambucus nigra</i>
Field Bindweed	<i>Convolvulus arvensis</i>
Field Maple	<i>Acer campestre</i>
Herb Robert	<i>Geranium robertianum</i>
Oxford Ragwort	<i>Senecio squalidus</i>
Perennial Rye-grass	<i>Lolium perenne</i>
Poplar sp.	<i>Populus</i> sp.
Rose sp.	<i>Rosa</i> sp.
Scarlet Pimpernel	<i>Anagallis arvensis</i>
Thistle	<i>Cirsium</i> sp.
Traveller's Joy	<i>Clematis vitalba</i>

Birds

Wood Pigeon	<i>Columba palumbus</i>
Swallow	<i>Hirundo rustica</i>
Wren	<i>Troglodytes troglodytes</i>
Dunnock	<i>Prunella modularis</i>
Robin	<i>Erithacus rubecula</i>
Blackbird	<i>Turdus merula</i>
Blue Tit	<i>Cyanistes caeruleus</i>
Magpie	<i>Pica pica</i>
Jackdaw	<i>Corvus monedula</i>
Carrion Crow	<i>Corvus corone</i>
House Sparrow	<i>Passer domesticus</i>
Goldfinch	<i>Carduelis carduelis</i>

Mammals

Rabbit	<i>Oryctolagus cuniculus</i>
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