

EXTENDED PHASE 1 ECOLOGICAL HABITAT SURVEY REPORT 87-89 Camden Mews, London, NW1 9BU.

| Document Version/Ref | Date | Author |
|----------------------|--------------------------------|--------------------------------------|
| Draft Report V1 | 2 nd September 2018 | Julie Merrett (Ecologist) Grad CIEEM |
| | | BSc (Hons) |
| Final report V1 | 04th September 2018 | Daniel Hone BSc (Hons) (Principal |
| | • | Ecologist) CIEEM |

Contents

| EXE | CUTIVE SUMMARY | . 3 |
|--------|--|-----|
| 1. | INTRODUCTION | . 5 |
| Surv | vey Location5 | |
| Surv | vey Objectives5 | |
| Surv | vey Limitations5 | |
| 2. | METHODOLOGY | . 6 |
| Des | k Study6 | |
| Pha | se 1 Habitat Mapping6 | |
| Sco | ping Survey6 | |
| 3. | RESULTS | . 7 |
| Site | Description7 | |
| 4. | DESIGNATED NATURE CONSERVATION SITES | Ω |
| | | |
| 5. | HABITATS ASSESSMENT | . 8 |
| Hab | itat overview 8 | |
| 6. | PROTECTED SPECIES POTENTIAL ASSESSMENT | . 9 |
| Prot | tected Flora9 | |
| Grea | at Crested Newt9 | |
| Rep | tiles9 | |
| Bird | ls10 | |
| Bad | ger10 | |
| Bats | s10 | |
| Haz | el Dormouse10 | |
| Barı | n Owls10 | |
| 7. | CONCLUSIONS | .11 |
| 8. | RECOMMENDATIONS | .11 |
| Bird | ls11 | |
| Rep | tiles11 | |
| Enh | ancements and Opportunities12 | |
| REF | ERENCES AND BIBLIOGRAPHY | .13 |
| Figu | ıres14 | |
| Арр | endix A Legislation16 | |

| | Executive summary | | | | |
|------------------|---|--|--|--|--|
| Introduction | This report provides detail information on the potential ecological constraints for the development of garages and garden area at 87 and 89 Camden Mews, London NW1 9BU. The recommendations of this report will highlight key ecological areas, potential constraints to development and recommended further action in the form of more detailed species specific surveys or ecological enhancements where necessary. It is understood that the proposed plans for the site comprise developing residential | | | | |
| | buildings. | | | | |
| Results | The site comprises three connected garages, and an area of garden. The garages are of brick construction with wood and felt flat roofing. The garden area is bordered by brick walls or buildings over 6 feet high, with the exception of the brick wall to an adjoining garden to the east, which is approximately 3 feet high. The site is within a highly developed urban area of Greater London, with a few immature trees outside the site. The garden area is primarily overgrown scrub with paths cut through it for access, and a small area of tall ruderals. The adjacent garden to the east has been mostly cleared of vegetation, with some ruderal regrowth. | | | | |
| Conclusion | Evidence of Fox using the garden was found, with a den observed in the adjacent garden. In order to prevent breach in legislation protecting foxes under The Mammal Act foxes must be removed from the den humanely. Fox are classed as vermin and reputable pest exterminators can be used to remove them from a site if necessary. | | | | |
| | There is potential for birds nests in the scrub area of the garden. Therefore clearance works for this area should take place outside the breeding season for birds if possible. Where this is not possible the scrub should be checked for nesting birds before clearance commences. | | | | |
| | The scrub area provides potential cover and foraging habitat for reptiles. In the unlikely event any are encountered during the clearance of the scrub, they should be allowed to run clear of the work area. | | | | |
| | There are no designated statutory or non-statutory wildlife sites on or adjacent to site and the scheme lacks habitat connectivity to the non-statutory wildlife sites within 1km. Therefore the proposed works are unlikely to affect the integrity of the sites within 1km. | | | | |
| Recommendations | Birds | | | | |
| | If possible works should be undertaken outside of the bird breeding season. The breeding bird season extends from March – August inclusive. It should be noted however that certain species are known to breed throughout the year (e.g. pigeons) and remain protected. | | | | |
| | If works cannot be undertaken outside of the bird breeding season, care shoul taken. If a nest is identified either being built, has eggs or chicks the area around nest should be avoided until the young have fledged. | | | | |
| | Reptiles | | | | |
| | If possible scrub clearance should be undertaken outside of the reptile hibernation season which extends from October to March. The scrub should be cut in two phases, firstly cutting to a height of 50 mm above the ground. Cutting should start at one end of an area and move slowly back and forth to allow any animals to feel the vibrations and move out of harms way. The scrub can then be cut back to ground level. | | | | |
| | In the unlikely event a reptile is found during or after clearance works, then works should cease in that area and an ecologist should be contacted for advice. | | | | |
| | Fox | | | | |
| | The potential fox tunnel should checked to confirm if it is being used. If confirmed empty, it can be filled and works continued. A pest exterminator can be contacted to humanely remove any fox which may be using the tunnel. Once any fox has been removed from the site, it would be advisable to put a 6 foot fence in place to avoid them re-entering the site from the adjacent garden. | | | | |
| Enhancements and | Enhancements should include: | | | | |

| Opportunities | • | Placement of an enclosed void within part of one of the buildings for bats or the placement of bat boxes to provide potential roosts. |
|---------------|---|---|
| | | |

1. Introduction

- 1.1 This report provides detail information on the potential ecological constraints for the development of garages and garden area at 87 and 89 Camden Mews, London NW1 9BU. The recommendations of this report will highlight key ecological areas, potential constraints to development and recommended further action in the form of more detailed species specific surveys or ecological enhancements where necessary.
- 1.2 It is understood that the proposed plans for the site comprise developing residential buildings.

Survey Location

- 1.3 The site is located at OS Grid reference TQ 29674 84746.
- 1.4 The site and habitats present are shown on Figures 1 in the figures section.

Survey Objectives

- 1.5 The purpose of this survey is to produce a phase 1 habitat survey report to comply with wildlife legislation and planning policy objectives such as National Planning Policy Framework and Local Planning Policy.
- 1.6 The key objectives are as follows:
 - Identify all relevant statutory and non-statutory designated sites and features of ecological significance within the site and its surroundings.
 - Using JNCC 2007 Phase 1 methodology identify key habitats on and adjacent to site. The recognised standard for mapping ecological habitats.
 - Assess the potential for the presence of protected species and species of principal conservation importance within the site and its surroundings. Using the Chartered Institute for Ecology and Environmental Guidelines undertaken by an experienced and qualified ecologist.
 - Provide recommendations for further surveys where assessed as necessary and suggest potential enhancements.
 - Provide an early indication of potential ecological mitigation and compensation requirements.

Further information on wildlife legislation and planning policy has been included in Appendix A.

Survey Limitations

1.7 This survey records the flora and fauna evident on the day of the site visit. It does not record any flora or fauna that may appear at other times of the year, and as such, were not evident at the time of visit.

2. Methodology

Desk Study

- 2.1 Biological records from Greenspace Information for greater London (GIGL) were obtained for a 1km radius. The records obtained contain all relevant records and information held by the local wildlife trust on the area. An extensive search of web based information for the area was also undertaken identifying records of protected and other notable species of flora, fauna together with statutory/non-statutory wildlife sites.
- 2.2 Web-based DEFRA resource Multi-Agency Geographic Information for the Countryside was also consulted to identify designated nature conservation sites within or immediately adjacent to the site surveyed.

Phase 1 Habitat Mapping

- 2.3 The Joint Nature Conservation Committee (JNCC) is the statutory adviser to Government on UK and international nature conservation. Its work contributes to maintaining and enriching biological diversity, conserving geological features and sustaining natural systems. The JNCC Phase 1 Habitat Classification and associated field survey technique provide a standardised system to record semi-natural vegetation and other wildlife habitats. The approach is designed to cover large areas of countryside relatively rapidly. It presents the user with a basic assessment of habitat type and potential importance for nature conservation. Each habitat type/feature is identified by way of a brief description of its defining features. It is then allocated a specific name, an alpha-numeric code.
- 2.4 The use of this method relies on the ecologist being experienced in native botanical identification of common native plants, trees and grasses.
- 2.5 Julie Merrett has completed botanical training with The Field Studies Council, JNCC Phase 1 Habitat Classification training with CIEEM, and undertaken botanical surveys and as such is qualified to use this methodology accurately.

Scoping Survey

- 2.6 The site and its immediate surroundings were considered in terms of habitats, protected species present and the potential for presence species of principal conservation importance during a walkover survey undertaken on 22nd August 2018.
- 2.7 Habitats were searched for:
 - field signs of protected species in the form of latrines, feeding remains, active shelter/breeding sites.
 - animal activity/behaviour if observed.
 - botanically diverse habitats.
 - invasive introduced plants and animals.
 - habitats with the potential to support protected species.
 - habitat connectivity to surrounding habitats.

3. Results

Site Description

3.1 The site comprises three connected garages, and an area of garden. The garages are of brick construction with wood and felt flat roofing. The garden area is bordered by brick walls or buildings over 6 feet high, with the exception of the brick wall to an adjoining garden to the east, which is approximately 3 feet high. The site is within a highly developed urban area of Greater London, with a few immature trees outside the site. The garden area is primarily overgrown scrub with paths cut through it for access, and a small area of tall ruderals. The adjacent garden to the east has been mostly cleared of vegetation, with some ruderal regrowth.





Potential fox hole in site garden, and fox earth in next door garden to east





Back or garages showing large crack in wall, and inside garage 1









4. Designated Nature Conservation Sites

See the figure section for a plan showing the designations in relation to site.

- 4.1 There are no statutory designated wildlife sites within 1km such as SSSI, SAC or SPA's.
- 4.2 There are ten non-statutory Sites of Importance for Nature Conservation (SINCs) within 1 km of the site, which are shown below:
 - London's Canals (M006) are of Metropolitan importance and pass approximately 800m to the south west of the site.
 - Kentish Town City Farm, Gospel Oak Railsides and Mortimer Terrace Nature Reserve (CaBl04) is of Borough Importance lies to the north west, reaching to approximately 900m of the site.
 - Caledonian Park (IsBI06) is of Borough Importance and lies approximately 450m to the east of the site.
 - Holloway Road to Caledonian Road Railsides (IsBI11) is of Borough importance and lies approximately 850m to the east of the site.
 - Copenhagen Junction (IsBI12) is of Borough importance and lies approximately 850m to the south east of the site.
 - North London Line (CaBII06) is of Borough importance and lies approximately 700m to the south
 of the site.
 - Market Road Garden (IsBII02) is of Borough importance and lies approximately 850m to the east of the site.
 - Rochester Terrace Gardens (CaL15) is of local importance and lies approximately 550m to the west of the site.
 - Tuffnell Park Primary School Gardens (IsL03) is of local importance and lies approximately 850m north of the site.
 - Bingfield Park (IsL06) is of local importance and lies approximately 1km to the south east of the site.
- 4.3 The proposed scheme is unlikely to significantly affect the conservation status of the wildlife sites listed above owing to their proximity from the site.

5. Habitats Assessment

See figure 1 for the location of habitats on site.

Habitat overview

- 5.1 The site supports primarily hardstanding with tall ruderals and a single mature oak tree along the western boundary. The site is limited for flora biodiversity as the arable fields which surround the site are sprayed with herbicide occasionally and the hardstanding which dominates prevents flora from establishing.
- 5.2 Phase 1 habitats identified on site are listed below using the JNCC terminology JNCC (2007). See Figure 1 for the location of habitats on site:
- 5.3 Scrub (A2.1)

Scrub dominates the site outside the garage building. The scrub is dominated by Bramble (*Rubus fruticosus*). This area has had paths cut into it for access to the site.

5.4 Tall ruderals (C3.1)

There is a small area of tall ruderals to the south west corner of the scrub dominated by rosebay willow herb (*Chamerion angustifolium*) and common nettle (*Urtica dioica*).

5.5 Ephemeral/short perennial

The area where a shed has been demolished is now bare ground with some short perennials growing on it. This area is currently dominated by bindweed species (*Convolvulus sp.*).

5.6 Broadleaved scattered trees (A3.1)

A small number of immature deciduous trees, including willow (*Salix sp.*) and silver birch (*Betula pendula*) are growing just outside the boundary of the site.

5.7 Buildings (J3.6)

A building comprising three garages is situated at the southern side of the site.

5.8 Paths (J4)

Concrete paths are found in front of and around the sides of the garages.

5.9 Wall/Fence (J2.5)

The majority of the site is surrounded by brick walls, with an area of wooden fencing to the south boundary.

6. Protected Species Potential Assessment

Protected Flora

6.1 It is considered that the site has a **low potential** to support protected or notable flora due to the land being primarily scrub. Records of protected flora have been identified within 1km of the site although habitats which could support the protected species recorded do not exist on site.

Great Crested Newt

- 6.2 It is considered that the site has a **negligible potential** to support Great Crested Newts (GCN). No records of (GCN) have been identified within 1km, the site does not support any water bodies and none lie within a 1 km radius of the site.
- 6.3 Common amphibian species are afforded limited legal protection under the Wildlife & Countryside Act 1981 (as amended). GCN's are afforded legal protection under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) and Schedule 2 of the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) (See Appendix A). GCN's are a European Protected Species (EPS).

Reptiles

- 6.4 There are no records of native reptiles have been identified within 1km of the site.
- The scrub which dominates the site does provide cover from predation and foraging opportunities but is too isolated from other suitable habitats to support reptile populations.
- Therefore it should be considered that the site has a **low potential** to support common reptile species, namely viviparous lizard (Zootaca (Lacerta) vivipara), slow-worm (Anguis fragilis) and grass snake (Natrix natrix).
- 6.7 Common reptiles are afforded legal protection under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) (See Appendix A).

Birds

- Numerous bird records have been identified although none originating from the site. The scrub on site provided potential for nesting birds, but no nests were observed. The trees just outside the site boundaries were immature and unlikely to offer nesting potential. Therefore the site should be regarded as having a **low potential** to support breeding birds.
- 6.9 All species of bird whilst actively nesting are afforded legal protection under the Wildlife & Countryside Act 1981 (as amended) and special penalties are available for offences related to birds listed on Schedule 1 (See Appendix A).

Badger

- 6.10 No badger records have been identified within 1km of the site. No signs of badger were found in the form of spraints, evidence of feeding or setts. As such the site should be considered to have a **negligible potential** to support badgers (Meles meles).
- 6.11 Badgers are afforded legal protection under the Badgers Act 1992 and Schedule 6 of the Wildlife & Countryside Act 1981 (as amended) (See Appendix A).

Bats

- 6.12 Records for bats were identified within 1km of the site although none of the records originate from site or adjacent area. The back of the three garages on site supported a large crack which which could provide ingress for bats. These were searched with a high powered torch but no evidence of roosting bats was found.
- 6.13 Therefore the site should be considered to have a **low potential** to support roosting bats.
- 6.14 All species of bat are afforded legal protection under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) and Schedule 2 of The Conservation of Habitats Species Regulations (2010) (as amended) (See Appendix A). All species of bat are European Protected Species (EPS).

Hazel Dormouse

- 6.15 No records of dormice have been identified within 1km. As the site lacks aerial habitat connectivity to the woodland which support dormice and the woodland or hedgerows suitable for supporting dormice, the site should be considered to have a **negligible potential** to support hazel dormouse (Muscardinus avellanarius).
- 6.16 Dormice are afforded legal protection under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) and Schedule 2 of The Conservation of Habitats Species Regulations (2010) (as amended) (See Appendix A). Dormice are European Protected Species (EPS).

Barn Owls

- 6.17 No record of barn owls was identified within 250meters from site. No evidence of barn owls were identified. The site does not support habitat suitable for barn owls.
- 6.18 Therefore it should be considered that the site has a **negligable potential** to support barn owls.
- 6.19 All species of bird whilst actively nesting are afforded legal protection under the Wildlife & Countryside Act 1981 (as amended) and special penalties are available for offences related to birds listed on Schedule 1 such as Barn owls (See Appendix A).

Fox

6.20 Evidence of a Fox den was observed in the garden adjoining the west of the site, which is only separated by a low wall. A potential Fox burrow was also observed on the edge of the scrub on the site at Grid Reference TQ 29674 84746.

- 6.21 Therefore it should be considered that the site has a **high potential** to support Fox.
- 6.22 Foxes are not subject to any specific protection although inhumane treatment of foxes is an offence under The Protection of Animals Act 1911 and the Wild Mammals Protection Act 1996.

7. Conclusions

- 7.1 Evidence of Fox using the garden was found, with a den observed in the adjacent garden. In order to prevent breach in legislation protecting foxes under The Mammal Act foxes must be removed from the den humanely. Fox are classed as vermin and reputable pest exterminators can be used to remove them from a site if necessary.
- 7.2 There is potential for birds nests in the scrub area of the garden. Therefore clearance works for this area should take place outside the breeding season for birds if possible. Where this is not possible the scrub should be checked for nesting birds before clearance commences.
- 7.3 The scrub area provides potential cover and foraging habitat for reptiles. In the unlikely event any are encountered during the clearance of the scrub, they should be allowed to run clear of the work area.
- 7.4 There are no designated statutory or non-statutory wildlife sites on or adjacent to site and the scheme lacks habitat connectivity to the non-statutory wildlife sites within 1km. Therefore the proposed works are unlikely to affect the integrity of the sites within 1km.

8. Recommendations

8.1 The following recommendations are based on the principles of established survey techniques and comply with relevant best practice guidelines set out by the Chartered Institute for Ecology and Environmental Management (CIEEM).

Birds

- 8.2 If possible works should be undertaken outside of the bird breeding season. The breeding bird season extends from **March August** inclusive. It should be noted however that certain species are known to breed throughout the year (e.g. pigeons) and remain protected.
- 8.3 If works cannot be undertaken outside of the bird breeding season, care should be taken. If a nest is identified either being built, has eggs or chicks the area around the nest should be avoided until the young have fledged.

Reptiles

8.4 In the unlikely event a reptile is found during or after clearance works, then works should cease in that area and an ecologist should be contacted for advice.

Fox

8.5 The potential fox tunnel should checked to confirm if it is being used. If confirmed empty, it can be filled and works continued. A pest exterminator can be contacted to humanely remove any fox which may be using the tunnel. Once any fox has been removed from the site, it would be advisable to put a 6 foot fence in place to avoid them re-entering the site from the adjacent garden.

Enhancements and Opportunities

- 8.6 Ecological enhancements should where possible be incorporated into the proposed development to contribute towards the objectives of planning legislation identified within the National Planning Policy Framework (NPPF).
- 8.7 In accordance with the above plan: "Plan policies and planning decisions should aim to maintain, and enhance, restore or add to biodiversity and geological conservation interests" and together with the Natural England & Rural Communities Act 2005, places a statutory duty to promote biodiversity and minimise impacts of a development upon ecology.
- 8.8 Furthermore, in accordance with the principles of NPPF, developments should contribute towards the degree of connectivity between natural habitats and avoid the effects of habitat fragmentation and isolation. These networks of habitats provide valuable routes or stepping-stones for the migration, dispersal and genetic exchange of species within the wider environment. Existing networks, where possible, should be strengthened by, or integrated within, new developments.
- 8.9 Enhancements should include:
- Placement of an enclosed void within part of one of the buildings for bats or the placement of bat boxes to provide potential roosts.

References and Bibliography

Biodiversity: The UK Action Plan. H.M.S.O., (1994), London.

Bat Conservation Trust (2016). Bat Surveys - Good Practice Guidelines. Bat Conservation Trust, London.

IEEM (2006). Guidelines for Ecological Impact Assessment in the United Kingdom

English Nature (2001). Great Crested Newt Mitigation Guidelines. English Nature, Peterborough

English Nature (2002). Badgers and Development. English Nature, Peterborough

English Nature (2004). Bat Mitigation Guidelines. English Nature, Peterborough

English Nature (2006). The Dormouse conservation handbook. 2nd Edition. English Nature, Peterborough

H.M.S.O. (1960) Abandonment of Animals Act 1960. H.M.S.O., London

H.M.S.O. (2010) Conservation Habitats Species Regulations as amended. H.M.S.O., London.

H.M.S.O. (2000) Countryside & Rights of Way Act 2000. H.M.S.O., London.

H.M.S.O. (2006) Natural England & Rural Communities Act 2006. H.M.S.O., London

H.M.S.O. (1992) The Badger Act 1992. H.M.S.O., London.

H.M.S.O. (1992) The Hedgerow Regulations 1992. H.M.S.O., London.

H.M.S.O. (1981) Wildlife and Countryside Act 1981. H.M.S.O., London.

H.M.S.O. (1996) Wild Mammals Act 1996. H.M.S.O., London

Joint Nature Conservation Committee (1998) Herpetofauna Worker Manual, JNCC, Peterborough.

Joint Nature Conservation Committee (1999) Bat Workers Manual, JNCC, Peterborough.

Joint Nature Conservation Committee (2003). Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit. JNCC, Peterborough.

Langton, T.E.S., Beckett, C.L., & Foster, J.P. (2001). Great Crested Newt Conservation Handbook, Froglife, Halesworth.

Office of the Deputy Prime Minister (March 2012). National Planning Policy Framework. H.M.S.O., London.

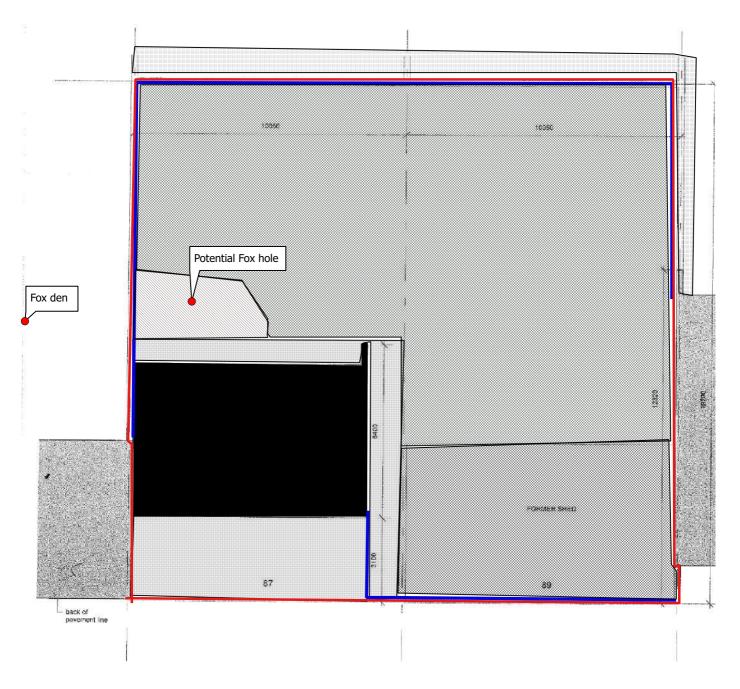
Rose, F (1989) Colour Identification Guide to the Grasses, Sedges, Rushes and

Rose, F (2006) The Wild Flower Key, Frederick Warne.

Stace, C (2001) New Flora of the British Isles, Second Edition, Cambridge University Press, Cambridge. British Standards Institution (BSI) (1991) Guide for Trees in Relation to Construction. BS5837.

The UK Biodiversity Steering Group Report. Volume 2. Action Plans. H.M.S.O., (1995), London. Wildlife and Countryside Act 1981. H.M.S.O., London.

Figures



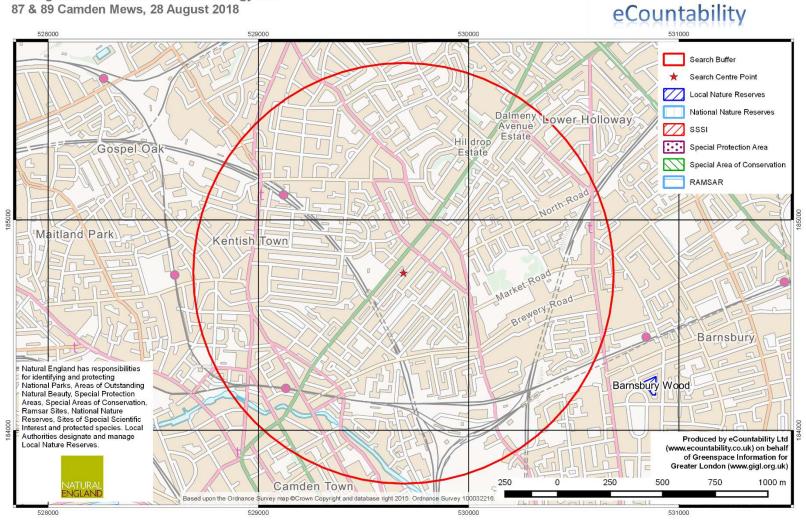
Legend

- Site boundary
- Scrub
- Tall ruderal
- Ephemeral/Short Perenial
 - Scattered Trees
- Garages
- Paths
- --- Walls

Statutory Site Designations

Ecological Data Search for Hone Ecology Ltd 87 & 89 Camden Mews, 28 August 2018





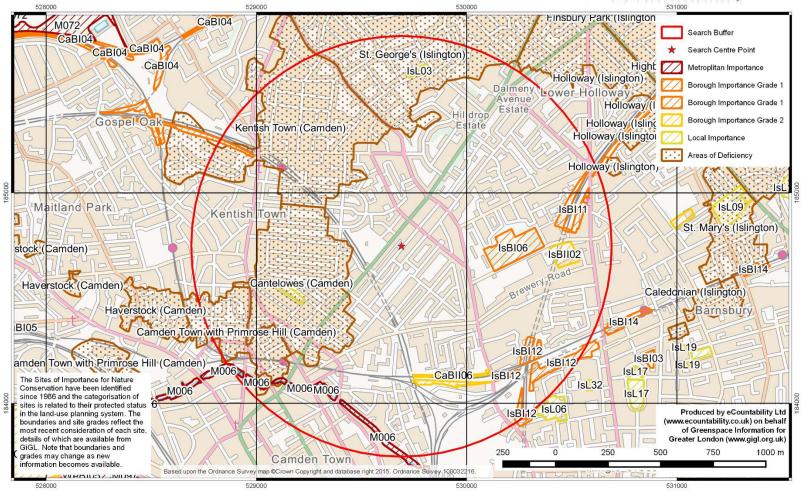


Sites of Importance for Nature Conservation

Ecological Data Search for Hone Ecology Ltd 87 & 89 Camden Mews, 28 August 2018



eCountability





Appendix A Legislation

The following is a summary of wildlife legislation and planning policy relevant to protected plant and animal species in the UK.

The sections on legislation have been extracted from the Joint Nature Conservation Committee's website and the Department of the Environment. Food and Rural Affairs website.

The Conservation of Habitats Species Regulations (2010) (as amended)

The Conservation of Habitats Species Regulations (2010) (as amended) consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law. The Regulations provide for the designation and protection of a network of 'European Sites' termed Natura 2000, the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites.

Amendments to the Habitats Regulations for England and Wales and the new Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 came into force on the 21st August 2007.

The amendments relate to the protection status of European protected species covered by the Habitats regulations. Taken together it is an offence to undertake the following acts with regard to European Protected Species:

- (a) deliberately capture, injure or kill any wild animal of a European Protected Species;
- (b) deliberately disturb animals of any such species in such a way as to be likely to significantly affect:
 - (i) the ability of any significant group of animals of that species to survive, breed, or rear or nurture their young, or
 - (ii) the local distribution or abundance of that species;
- (c) deliberately take or destroy the eggs of such an animal; or
- (d) damage or destroy a breeding site or resting place of such an animal.

An offence will only be committed if the deliberate disturbance is likely to **significantly affect** a **significant group** of animals of that species' ability to survive, breed, or rear or nurture its young or **significantly affect** the local distribution or abundance of that species.

Any biological definition of what constitutes a significant group of animals should take into account the local abundance of the species, its behaviour and the circumstances in which the disturbance takes place. Species that tend to be solitary, **such as dormice**, probably never form significant groups of adults, but a family group with dependent young could constitute such a group, particularly if the species is rare in the area.

The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb or trade in the animals listed in **Schedule 2** or damage or destroy a breeding site or resting place of such an animal; or pick, collect, cut, uproot, destroy, or trade in the plants listed in **Schedule 4**. However, these actions can be made lawful through the granting of licences (European Protected Species Licence) by the appropriate authorities (Natural England in England and Countryside Council for Wales). Licences may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that:

- Regulation 44 (2)(e) the development is 'in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment'.
- Regulation 44 (3)(a) there is 'no satisfactory alternative'.

• Regulation 44 (3)(b) the action 'will not be detrimental to the maintenance of the population of the species at favourable conservation status in their natural range'.

To apply for a licence, the following information is required:

- The species concerned.
- The size of the population at the site (note this may require a survey to be carried out at a particular time of the year).
- The impact(s) (if any) that the development is likely to have upon the populations.
- What measures can be conducted to mitigate for the impact(s).

Amendments to the Habitats Regulations for England and Wales and the new Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 came into force on the 21st August 2007. Both Regulations revised the definition of deliberate disturbance of European Protected Species.

The Wildlife & Countryside Act (as amended) 1981

The Wildlife & Countryside Act 1981 (as amended) is the principal piece of UK legislation relating to the protection of wildlife. It consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive) in Great Britain.

The Act makes it an offence (with exception to species listed in Schedule 2) to intentionally kill, injure, or take any wild bird or their eggs or nests. Special penalties are available for offences related to birds listed on **Schedule 1**, for which there are additional offences of disturbing these birds at their nests, or their dependent young. The Secretary of State may also designate Areas of Special Protection (subject to exceptions) to provide further protection to birds. The Act also prohibits certain methods of killing, injuring, or taking birds, restricts the sale and possession of captive bred birds, and sets standards for keeping birds in captivity.

The Act makes it an offence (subject to exceptions) to intentionally kill, injure, or take, possess, or trade in any wild animal listed in **Schedule 5**, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. The Act also prohibits certain methods of killing, injuring, or taking wild animals listed in **Schedule 6**.

The Act makes it an offence (subject to exceptions) to pick, uproot, trade in, or possess (for the purposes of trade) any wild plant listed in **Schedule 8**, and prohibits the unauthorised intentional uprooting of such plants.

The Act contains measures for preventing the establishment of non-native species which may be detrimental to native wildlife, prohibiting the release of animals and planting of plants listed in **Schedule 9**. It also provides a mechanism making any of the above offences legal through the granting of licences by the appropriate authorities.

The Countryside & Rights of Way Act 2000

The Countryside and Rights of Way Act 2000 (CRoW) was passed to provide additional levels of protection for wildlife whilst also strengthening the protection afforded to Sites of Special Scientific Interest. The CRoW act now makes it an offence to 'recklessly' harm the majority of species listed on the Schedules of the Wildlife and Countryside Act.

The Act places a duty on Government Departments and the National Assembly for Wales to have regard for the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity (Section 74).

Schedule 12 of the Act amends the Wildlife and Countryside Act 1981, strengthening the legal protection for threatened species. The provisions make certain offences 'arrestable', create a new offence of reckless disturbance, confer greater powers to police and wildlife inspectors for entering premises and

obtaining wildlife tissue samples for DNA analysis, and enable heavier penalties on conviction of wildlife offences.

Natural Environment & Rural Communities Act 2006

The Natural Environment & Rural Communities Act 2006 (NERC) is designed to help achieve a rich and diverse natural environment and thriving rural communities through modernised and simplified arrangements for delivering Government policy.

It was created to make provision in connection with wildlife, sites of special scientific interest, National Parks and the Broads; to amend the law relating to rights of way; to make provision as to the Inland Waterways Amenity Advisory Council; to provide for flexible administrative arrangements in connection with functions relating to the environment and rural affairs and certain other functions; and for connected purposes.

NERC carries an extension of the CRoW Act biodiversity duty to public bodies and statutory undertakers to ensure due regard to the conservation of biodiversity.

The Badger Act 1992

In the UK, badgers are primarily afforded protection under the Protection of Badgers Act 1992. This makes it illegal to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so and to intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it.

Badgers also receive limited protection under Schedule 6 of the Wildlife & Countryside Act 1981 (as amended). This outlaws certain methods of taking or killing animals.

Under Section 10 (1)(d) of the Protection of Badgers Act 1992, a licence may be granted by Natural England to interfere with a badger sett for the purpose of development, as defined by Section 55(1) of the Town & Country Planning Act 1990.

Section 3 of the Protection of Badgers Act 1992 defines interference as:

- a) Damaging a badger sett;
- b) Destroying a badger sett;
- c) Obstructing access to, or any entrance of, a badger sett;
- d) Causing a dog to enter a sett; or
- e) Disturbing a badger when it is occupying a badger sett.

The Wild Mammals Act 1996

The Wild Mammals (Protection) Act (1996) makes it an offence for any person to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

The Abandonment of Animals Act 1960

The Abandonment of Animals Act comes into force when an animal is abandoned, whether permanently or not, in circumstances likely to cause unnecessary suffering. With regards to development, this has implications when translocations of animals are proposed. As such, care must be taken to ensure that any receptor sites are suitable for the species in terms of habitat and carrying capacity in order that minimal stress and suffering is imposed upon the animal(s) concerned.

The Hedgerows Regulations

The Hedgerows Regulations 1997 were introduced to protect hedgerows of importance from destruction. The Regulations define a hedgerow as, 'a row of bushes forming a hedge with the trees growing in it'. The law however does not clarify the difference between a line of trees and a hedgerow.

However the legislation does not apply to any hedgerow (even if it is within the list above) which is 'within or marking the boundary of the curtilage of a dwelling house'.

For the Regulations to be applicable, the hedgerow must be at least 20 metres in length and less than 5 metres wide. A hedgerow is deemed to be important if it is more than thirty years old and meets at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

If a hedgerow that qualifies under the Regulations is to be removed, the landowner must contact the Local Planning Authority (LPA) in writing by submitting a hedgerow removal notice. The LPA then has a period of 42 days to decide whether or not the hedgerow meets the importance criteria of the regulations.

National Planning Policy Framework

The National Planning Policy Framework (NPPF) sets out the view of central Government on how planners should balance nature conservation with development and helps ensure that Government meets its biodiversity commitments with regard to the operation of the planning system. It is a key objective of NPPF to:

"promote the preservation, restoration and re-creation of priority habitats, ecological networks and the recovery of priority species, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure.

NPPF states that development plan policies and planning decisions should be based upon up-to-date information about the environmental characteristics of their areas, including biodiversity. It also states that the aim of planning decisions should be to prevent harm to biodiversity conservation interests and to "promote opportunities for the incorporation of beneficial biodiversity and geological features within the design of development.

Where granting planning permission would result in significant harm to those interests, local planning authorities will need to be satisfied that the development cannot be reasonably be located on any alternative sites that would result in less or no harm. In the absence of any such alternatives, local planning authorities should ensure that, before planning permission is granted, adequate mitigation measures are put in place. Where a planning decision would result in significant harm to biodiversity interests, which cannot be prevented or adequately mitigated against, appropriate compensation measures should be sought. If that significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission should be refused.

This means that full ecological surveys should be carried out and suitable mitigation measures proposed prior to any planning application being submitted. It is common practice for planning officers to consult Natural England or other conservation bodies for advice regarding the suitability of proposals in relation to biodiversity conservation.

Biodiversity Action Plans

Biodiversity Action Plans (BAPS) set out actions for the conservation and enhancement of biological diversity at various spatial scales. They consist of both Habitat Action Plans (HAPs) and Species Action Plans (SAPs).

The UK BAP was the UK's response to the 1992 Convention on Biological Diversity in Rio de Janeiro. Following a review in 2007 a list of 1149 priority species and 65 priority habitats has been adopted, which are given a statutory basis for planning consideration under Section 74 of the CRoW Act 2000.

Red Data Books

Red Data Books (RDB) is an additional method for determining rarity of species and is often seen as a natural progression from Biodiversity Action Plans.

RDB species have no automatic legal protection (unless they are protected under any of the legislation previously mentioned). Instead they provide a means of assessing rarity and highlight areas where resources may be targeted. Various categories of RDB species are recorded ranging from RDB 1 (endangered) through to RDBX (extinct). As with Biodiversity Action Plans, where possible, steps should be taken to conserve RDB species, which are to be affected by development.