Chalcot Crescent, London NW1 BS 5837 Tree Survey

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1.0 Introduction

1.1 This report provides details of trees located at 35 Chalcot Crescent, London NW1. The recommendations of this report will identify tree species, dimensions and indicate the health and likelihood of trees on site to fail and make recommendations in accordance with the guiding principles of British Standard 5837 (2005) 'Trees in Relation to Construction: Recommendations.' This survey report also identifies potential constraints in relation to trees and recommends further action in the form of more detailed specific tree inspections where necessary. The survey was undertaken by Senior Ecologist and tree surveyor Daniel Hone BSc MIEEM of Rummey Environmental.

Survey Location

1.2 The site is located at OS Grid reference TQ279839 within the rear garden of 35 Chalcot Crescent.

The site and its application area is shown on Figure 1.

Survey Objectives

- 1.3 The purpose of this survey is to provide baseline information on trees present on site and provide recommendations to comply with wildlife legislation and planning policy objectives.
- 1.4 The key objectives are as follows:
 - Identify the species and location of all trees on site.
 - Assess the health of the trees on site.
 - Provide an early indication of the potential for the trees on site to fail.
 - Identify trees, which may be of a risk to public spaces and highways.
 - Provide recommendations for tree retention, enhancement, mitigation and management.

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

Survey Limitations

- 1.5 The findings and recommendations contained within this report are, assuming its recommendations are undertaken and should be considered to be valid for a period of twelve months from the date of survey. As trees are living organisms, subject to change, best practice dictates they are inspected on an annual basis for reasons of safety.
- 1.6 Tree rooting characteristics and soils are both variable, as are their interactions. Therefore no attempts have been made to assess and quantify subsidence risk.
- 1.7 Every effort has been made to detect defects where possible within the trees inspected, no guarantee can be given as to the absolute safety or otherwise of any individual tree. The recommendations given in this report are intended to reduce the likelihood of tree collapse. Absolute safety is not a realistic goal; even apparently sound trees can fail. All recommendations are given in the context of the site's current usage; any change will

dictate a re-inspection.

- 1.8 Trees that are Ivy (*Hedera helix*) clad or where their dense twig growth obscures the tree trunk, have been recorded in the Tree Survey Schedule. The inspection of such trees should be considered to be provisional following removal of ivy and twig growth and a further inspection carried out.
- 1.9 This report has been prepared for the sole use of the client. Any third party referring to this report or relying on the information contained herein does so entirely at his or her own risk.
- 1.10 This report represents a survey and should not be construed to be a detailed tree inspection report; such is available upon request.

2.0 Methodology

- 2.1 The survey was undertaken in accordance with the guiding principles of British Standard 5837 (2005) *'Trees in Relation to Construction: Recommendations'* and the trees were assessed objectively and without reference or influence being given to any proposed site layout. Using 'Visual Tree Assessment' techniques the trees were surveyed from the ground; this method is recognised as being robust and is appropriate for this survey.
- 2.2 All trees surveyed are listed within the Tree Survey Schedule and numbered locations are shown within Figure 1 in the figures section of this report.
- 2.3 In some instances where tree densities are high, groups of trees have been identified as defined in BS 5837 (2005) *'Trees in Relation to Construction: Recommendations'* ie where, they are identified in the Tree Survey Schedule and within Fig 1 using the prefix 'G'. Where groups have been identified the dominant species only have been recorded.
- 2.4 *Species* the species identification is based on visual observations and the common English name of what the tree appeared to be is listed first, with the taxonomic *(latin)* name after in brackets.
- 2.5 *Tree Heights* are estimated in metres. Estimated mature heights are given in brackets. In the case of groups the mean current height is recorded.
- 2.6 Trunk Diameters measured at 1.5 metres above ground and recorded in centimeters to the nearest 10mm. However, where the trunk of any tree breaks below 1.5 metres it is considered a multi-stemmed tree and, in accordance with British Standard 5837 (2005), 'Trees in Relation to Construction: Recommendations' it is measured immediately above the root flare. In the case of groups of trees the maximum diameter was recorded.
- 2.7 *Crown Radius* has been estimated in metres along at least two cardinal points with the average crown radius recorded within the schedule. In the case of groups of trees the maximum peripheral spread was recorded.

- 2.8 Age Class recorded as follows:
 - Yng Young tree; <1/3 of normal life expectancy
 - Mid Middle aged tree; between 1/3 & 2/3 normal life expectancy
 - Mat Mature tree; has attained optimum stature
 - OM Over Mature tree; declining
 - Vet Veteran tree; tree of great age, which is of exceptional value in terms of culturally, landscape or for nature conservation.
- 2.9 *Condition* Based upon a preliminary assessment

Trees condition have been categorised using the following categories:

- A Good
- B Fair
- C Poor
- D Very Poor/Dead

In the case of groups the dominant category for the group is awarded.

- 2.10 *Life Expectancy* estimated; ie less than 10 years, 10-20 years, 20-40 years, more than 40 years.
- 2.11 *Recommendations* works required where the tree is to be retained regardless of development proposals.
- 2.12 *A Retention Category* is given as follows which corresponds with Table 1 (See Appendix 2) of British Standard 5837, (2005), '*Trees in Relation to Construction, Recommendations*:
 - A Trees of a high quality and value, including visual amenity value (Sub categories 1, 2, 3). It is usual for such trees to be retained unless the planning merits of a particular scheme or layout over-ride.
 - **B** Trees of moderate quality and value, including visual amenity value (Sub categories 1, 2, 3). Such trees should be considered for retention.
 - **C** Trees with a stem diameter of less than 15 cm or which are of low quality and value, including visual amenity value (Sub categories 1, 2, 3). *Retention of Category C trees will not impose a constraint on development.* Trees with a stem diameter of less than 15cm should be considered for transplanting.
 - **R** Trees in such a condition that they should be removed.

Sub-categories are also awarded and reflect where the value of a particular tree lies:

- Sub-category 1 awarded in recognition of arboricultural wildlife value,
- Sub-category 2 awarded in recognition of landscape value,
- Sub-category 3 awarded in recognition of cultural value, including historic value.
- 2.13 All sub-categories carry equal weighting and some trees may qualify in more than one category, although they will not accrue additional value if they do. It must be noted that Retention Categories are awarded purely on arboricultural/amenity grounds and that in some instances the planning merits of a particular scheme may well over-ride the retention

of even those trees qualifying for Retention Category 'A'.

3.0 Results

Tree Schedule

3.1 Table 1 below lists the trees recorded on site

Tree	Species	Height	Trunk	Crown	Vigour	Age	Surrounding features	BS5837	Condition	Recommendations/Priority	
No		(m)	Diam (cm) measured at 1.5m	radius (m)	Low/Normal			Retention Category		Action?	Notes
T1	Cherry tree (Prunus Sp)	(7)	35	3.5	Normal	MA	Surrounded by garden paving. Canopy close to wall of residential housing	O	Fair	If retained canopy reduction 30%	Within the footprint of the proposed. To be felled as part of works.
T2	Strawberry tree (Arbutus unedo)	(6)	40 Three trunks largest recorded	2.0	Normal	МА	Surrounded by garden paving. Canopy close to wall of residential housing	С	Fair Contains mildew on leaves	Prune back if retained.	Within the footprint of the proposed. To be felled as part of works.

Т3	Ash (Fraxinus excelsior)	(11)	140	4.40	Low	М	Surrounded by garden paving. Canopy over neighbouring boundary brick wall	R	Poor	Fell Replace with same species of good size where space and light allows away from building.	Limb adjacent to property is rotting showing signs of weakness. It lies within the footprint of the proposed To be felled as part of works
T4	Maple (Acer Sp) Non-native	(3.0)	10 Three trunks largest recorded	1.5	Normal	Υ	Surrounded by garden paving.	С	Good	No further action recommended	Within the footprint of the proposed. To be felled as part of works.

- 3.2 Trees Subject to Statutory Controls: Camden Borough Council, Tree Conservation Department was consulted on 17th May 2010 and confirmed that the trees on site are not subject to any Tree Preservation Orders (TPO) although the site does exist within a Conservation Area. When proposing to do works to trees within a Conservation Area, with some exceptions, six weeks written notice must be given to the LPA. This notice is often referred to as a Section 211 Notice.
- 3.3 Having received such a notice the LPA has essentially only one of two options at its disposal ie:
 - · **Impose a TPO** in respect of those trees/some of those trees subject to the notice. This prevents any works being carried out without the express, written consent of the LPA,
 - Do nothing It is considered best practice for an LPA to acknowledge receipt of the notice but there is no obligation for it to do so. After six weeks of serving the notice the tree owner may proceed with the works detailed in the Section 211 Notice. The LPA cannot, in response to a Section 211 Notice, issue a conditional consent. TPO's are made in the interests of preserving amenity, usually taken to mean public visual amenity. Trees largely removed from public view and which have little visual impact are not usually made the subject of a TPO. Subject to certain exemptions eg trees, which are dead, dying or dangerous, the written consent of the LPA must be obtained prior to undertaking works to trees subject to TPO.

Trees and Wildlife:

- 3.4 **Birds** Trees on site in particular T3 was seen to be used by starlings (*Sturnus vulgaris*) for feeding and territorial singing although not for nesting purpose. Should there be a requirement to remove any trees, shrubs or structures that have the potential to be used by breeding birds, such 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.
- 3.5 If trees / shrubs / structures cannot be removed outside of the bird breeding season, an inspection by a qualified ecologist must first be completed a maximum of 48 hours before works commence. If during the inspection a nest considered to be in use is discovered, works must be delayed until the young have fledged.
- 3.6 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.
- 3.7 **Bats** T3 was identified by the surveyor as having a hole which could be entered by birds or bats however after inspection it is vertical in aspect and as such is subject to rain collection and flooding in times of heavy rain, therefore it is unlikely that bats would use such a hole for roosting. Particularly with so many old properties in the local area with high roosting potential.
- 3.8 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 (Natural Habitats, &c.) Regulations 1994 (as amended). All species of bat are European Protected Species.

4.0 RECOMMENDATIONS AND CONCLUSIONS

Tree Loss

- 4.1 The proposal of reducing the level of the entire garden to the basement level of the adjacent residential house, directly necessitates the loss of all trees on site. As the site lies within a Conservation area, a Section 211 Notice must be submitted 6 weeks prior to any ground or tree works being undertaken. A section 211notice form can be obtained from Camden Borough Council tree conservation team.
- 4.2 The only mature native tree on site was T3, which suffers from its close proximity to residential properties and should be regarded as a poor specimen with a limb, which is likely to fail surrounded by multiple residential properties. Therefore it is recommended that T3 be soft section felled as part of works due to limited space in which it is located.

Mitigation

- 4.3 New planting is proposed will mitigate for any loss in biodiversity arising from the proposed development. It is proposed that a small pond and two birch *betula utilis var. Jacquemontii* and a *parrotia persica* trees 5-7 meters tall be planted. The trees will be fed by permeable paving and will not be subject to over watering as surface water from the surrounding area is intercepted by roof and road drains. It is acknowledged that the garden is within a conservation area and trees to be planted are not native. However the site is isolated from view as it is a private garden and T3 represents the only native tree, which is likely to be covered under the conservation area regulations. Therefore it is considered that the loss of this tree and the proposed planting scheme will not have a detrimental effect on the integrity of the conservation area.
- 4.4 Furthermore a bat box and several bird boxes will be erected within the garden together with squirrel proof bird feeders to provide a resource for birds and bats in the area.

References and Bibliography

British Standard 5837:2005 'Trees in Relation to Construction: Recommendations.'

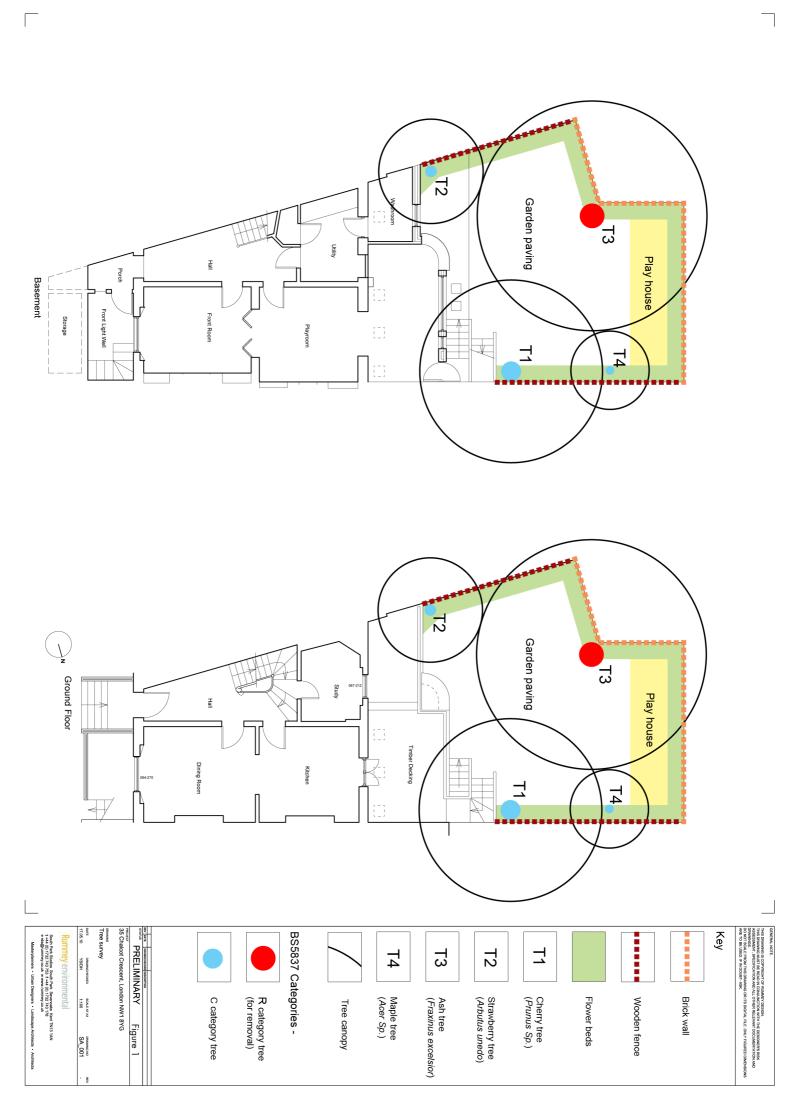
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Figures



Appendix A Legislation

The following is a summary of wildlife legislation and planning policy relevant to protected plant and animals 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 (Natural Habitats & C) Regulations (1994) (as amended)

The Conservation (Natural Habitats, &c.) Regulations 1994 transpose Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC Habitats Directive) into UK 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 England & Rural Communities Act 2006

The Natural England & 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.

Planning Policy Statement 9

Planning Policy Statement 9 (PPS9) 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 PPS9 to:

"to conserve, enhance and restore the diversity of England's wildlife and geology by sustaining, and where possible improving, the quality and extent of natural habitat and geological and geomorphological sites; the natural physical processes on which they depend; and the populations of naturally occurring species which they support."

PPS9 states that development plan policies and planning decisions should be based upon upto-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.