



**Verdant Ecology**  
LAND MANAGEMENT SERVICES

Home Farm, Broadmoor, Abinger Common, Dorking, Surrey. RH5 6JY

01306 731150

[www.verdantecology.co.uk](http://www.verdantecology.co.uk)

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## **A Preliminary Ecological Appraisal**

**for**

**Mrs Cara Bradley**

**from**

**Wildfowlers**

Survey conducted by:

Ruth Frith, BSc (Hons) CEnv MIEMA.

Report produced by;

Jonathan Bradley

BSc (Hons), MSc, TechCertArb, MArborA

Consultant Ecologist, Arborist and Land Manager

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<b>1 Executive Summary.....</b>	<b>3</b>
<b>2 Introduction.....</b>	<b>3</b>
<b>3 Survey.....</b>	<b>3</b>
3.1 Field Survey.....	3
3.2 Survey Limitations.....	4
3.3 Desk Study.....	4
<b>4 Results.....</b>	<b>4</b>
4.1 Our Background Research.....	4
4.2 Description of Site and Adjacent Habitats.....	4
4.3 Habitats and Flora.....	4
4.4 Fauna.....	5
<b>5 Evaluation of Importance.....</b>	<b>7</b>
5.1 Designated Sites.....	7
5.2 Legally Protected Plants and Habitats.....	8
5.3 Legally Protected Fauna.....	8
5.4 Policy-protected Features.....	8
<b>6 Impacts.....</b>	<b>8</b>
6.1 Impacts Considered.....	8
6.2 Impact Assessment.....	9
<b>7 Recommendations.....</b>	<b>9</b>
7.1 Further Surveys.....	9
7.2 Mitigation.....	10
7.3 Advisory Notes.....	10
<b>8 Appendices.....</b>	<b>11</b>
8.1 Appendix 1. Existing Site Plan.....	11
8.2 Appendix 2. Legislation, Policy and Licensing Relating to Protected Ecological Features.....	11
8.3 Appendix 3. What Policy/Legislation Means for You.....	13
8.4 Appendix 4. Assessment and Evaluation Tables Used by Verdant Ecology.....	14
8.5 Appendix 5. References.....	14

## 1 **Executive Summary**

- Mrs Bradley intends to demolish a residence, a garage and a greenhouse and build a new dwelling with attached garage on the same site.
- In May 2022, a site survey was conducted.
- The house was considered to be of High suitability for bat roosts, the garage Low and the greenhouse Negligible. Bat surveys were conducted and are reported separately.
- There will be some minor tree works but the arboriculturalist is confident that there is no potential for bat roosts in the affected parts of these trees.
- The trees, house and greenhouse had potential for nesting birds. They must therefore be pruned/demolished/cleared outside the bird-nesting season or only after work has been approved by a competent ecologist.
- The greenhouse also had some potential for reptiles, toads and hedgehogs but the loss of this area is unlikely to have a negative effect on their conservation status and harm to individuals can be avoided by careful demolition.
- A pollution (including light) prevention/control plan must be complied with.
- Update surveys for badgers and Sch. 9-listed plants are recommended.
- If these recommendations are complied with, protected ecological features should not be a reason to refuse planning consent.

## 2 **Introduction**

Many ecological features are protected by legislation, policy and best practice. Where protected ecological features are likely to be present and likely to be affected, planning authorities are required (in advance of their decision) to request surveys (where protected ecological features are likely to be present and likely to be affected), to consider the potential impacts of development and to make sure significant impacts are offset. They should also seek opportunities to improve the area for wildlife. See Appendices 2 and 3 for further information.

The word site henceforth refers to the area defined in Appendix 1. Adjacent areas were viewed from within the site.

This report:

- Describes an initial ecological baseline survey to provide information on the natural features of the area.
- Describes and/or maps the habitats on and adjacent to the site.
- Considers the potential for habitats on/near to the site to support protected species and habitats.
- Considers this in relation to the proposals.
- Provides some suggestions for reducing the impacts of the project on wildlife.

## 3 **Survey**

### 3.1 **Field Survey**

A baseline habitat survey of the site and its immediate surroundings was conducted (based on CIEEM's Guidelines for Preliminary Ecological Appraisal) in May 2022. Habitat types and ecological features on the site and its surroundings were identified and plotted and then compared to lists of protected habitats. Habitats and

ecological features were then considered in terms of their suitability for protected species and those of conservation concern. Where the surveyor thought it appropriate, further inspections were made. In this case, for badger field signs and bat roost potential. Weather and season were considered ideal for such work.

### 3.2 **Survey Limitations**

A baseline survey is not a complete set of surveys for/of protected ecological features. It is conducted so as to determine habitat types and ecological features. It may prompt further ecology survey work.

### 3.3 **Desk Study**

Sites designated for nature and species/habitats of conservation concern near the site were considered using Natural England's online MAGIC resource.

## 4 **Results**

### 4.1 **Our Background Research**

The site is Wildfowlers, Shore Road, Bosham, Sussex. The site is at <https://goo.gl/maps/gpqS9jAH5BLUFRUaA>  
A site location plan can be found in Appendix 1.

The applicant intends to demolish the existing buildings and build a new dwelling on the (approximate) footprint of the existing buildings.

Protected sites within 2km were considered. Chichester and Langstone Harbour (an SPA, SAC, SSSI and Ramsar site), designated for its estuarine/coastal habitats and associated wildlife is about 60m away to the N.

Priority Habitats within 500m were considered. There is a traditional orchard on site about 30m SW of the house. An area of coastal grazing marsh lies just off site to the NW about 50m from the house.

Bat impact/mitigation licences have been awarded locally – see the Bat Survey Report.

There are at least two ponds within 500m of the site but no local records of great crested newts on magic.gov.

### 4.2 **Description of Site and Adjacent Habitats**

The site is a garden. It is almost entirely of short-mown semi-improved grass with occasional ornamental beds. There are several trees. Hedges form several of the site boundaries. To the E is a neighbouring property, to the S and W is arable land, to the N is a strip of rough grass, then a road, then the sea.

### 4.3 **Habitats and Flora**

Some habitats, trees and plants are protected (see Appendices 2 and 3). Approximately 40 varieties of plant are listed on Schedule 9 of the Wildlife and Countryside Act, making it an offence to cause them to be transplanted into the wild and requiring special licensing to take (parts of) it off-site.

The following ecological features/habitats have been discerned on the site.

#### 4.3.1 **Buildings**

There are three buildings on site - the house, the garage and the greenhouse. Photos can be found in the Bat Survey Report.

#### 4.3.2 **Grassland**

The site is almost entirely semi-improved lawn.

#### 4.3.3 **Hardstanding**

The buildings have a driveway to the N.

#### 4.3.4 **Hedges**

'Natural' but regularly cut hedges form the W and S boundaries. The E boundary is a hedge containing exotic species. They are unlikely to qualify as 'Important' under the Hedgerow Regulations and are, anyway, unlikely to be affected.

#### 4.3.5 **Invasive Plants**

None noted. However, the survey was conducted at a time of year when not all species listed on Sch. 9 of the Wildlife and Countryside Act were likely to be visible. A survey should thus be conducted before work starts on site, ideally in mid-summer.

#### 4.3.6 **Lower Plants**

Some ferns/fungi/lichens/mosses occur on site. These have not been surveyed and it is not intended to do so because protected species are usually associated with unusual habitats, whereas habitats on site are relatively commonplace.

#### 4.3.7 **Trees**

There are several mature trees on site. Further information on the tree resource can be found in the BS5837 report.

#### 4.3.8 **Waterbodies**

No water bodies are present on site. Within 500m there are two ponds. There are field ditches locally.

#### 4.4 **Fauna**

Impacts on creatures with 'full' legal protection and on those protected by policy are a material consideration in planning decisions. The following list shows such creatures in alphabetical order and explains either why they are thought to be absent/unaffected or what potential there is for their presence. Where a species is not listed, (e.g. natterjack toad) this is because the habitats are considered wholly unsuitable and/or outside their range/distribution.

Other than bat surveys of the buildings (reported separately) and a check for badger field signs, no faunal surveys have been conducted.

#### 4.4.1 **Badgers**

Habitat is sub-optimal but suitable. No signs of badgers were found. Badger setts can be constructed suddenly/quickly so it is recommended that occasional surveys are conducted before work starts. Badgers are protected for humane purposes, rather than conservation rarity. If badgers were to become established on site, it is likely that impacts can be avoided and if not, a licence would likely be achievable.

#### 4.4.2 **Bats**

Bat surveys were recommended and are reported separately.

#### 4.4.3 **Birds**

##### **Barn Owls**

No buildings or trees were considered suitable for nesting barn owls. Habitat on site and in the wider area is considered suitable for foraging barn owls but the development will have a Negligible impact on this so is unlikely to significantly affect their conservation status.

##### **National BAP-listed birds**

Habitats on or around the site appear suitable for a range of birds of conservation concern (e.g. house sparrow, song thrush). However, the affected habitats are relatively commonplace and post-development enhancements can reasonably offset impacts.

##### **Breeding birds**

The site (trees, hedges and buildings) will provide nesting sites for other 'common' species of birds, protected whilst nesting. However, impacts on nesting birds can be avoided by scheduling operations so as to avoid impacts.

Pollution prevention measures will be needed.

#### 4.4.4 **Toads**

Terrestrial habitats on site (the hedges at the margins and the overgrown greenhouse) are considered suitable. There are ponds in the area. However, harm to individuals can be avoided by careful site clearance and enhancements should have a positive effect on their conservation status. Pollution prevention measures will be needed.

#### 4.4.5 **Dormice**

Habitats on site are considered unlikely to support dormice (hedges are low/narrow and regularly-cut and isolated from woodland and there are no local records on magic.gov).

#### 4.4.6 **Great Crested Newts**

Terrestrial habitat on the margins of site and within the greenhouse is suitable for GCN. There are several ponds locally (based on OS maps). Surveys are not proposed because; GCN are unlikely to occur locally - based on

information available on [magic.gov.uk](http://magic.gov.uk) (licence applications, licence returns and eDNA pond surveys); the greenhouse vegetation is isolated by unsuitable habitat; other affected parts of the site are unsuitable.

#### 4.4.7 **Harvest Mice**

Habitat just off site is considered suitable. Pollution prevention measures will be needed.

#### 4.4.8 **Hedgehogs**

Habitats on and around the site are considered suitable. However, harm to individuals can be avoided by careful site clearance and enhancements should have a positive effect on their conservation status. Pollution prevention measures will be needed.

#### 4.4.9 **Insects**

The site and surrounding area supports a range of habitats that are suitable for insects. These have not been surveyed for and it is not intended to do so because protected species are usually associated with unusual habitats, whereas habitats on site are relatively commonplace. Pollution prevention measures will be needed.

#### 4.4.10 **Otters**

Habitats on and adjacent to site are considered unsuitable. They may exist 'downstream' of the site so pollution prevention measures will be needed.

#### 4.4.11 **Reptiles**

Habitat on the periphery of the site and in the overgrown greenhouse is suitable for reptiles. Surveys are not proposed because harm to individual reptiles can be avoided by careful site clearance and loss of the greenhouse is unlikely to have a significant effect on their conservation status. Pollution prevention measures will be needed.

## 5 **Evaluation of Importance**

See Appendix 3 for an explanation of the legislation and policy related to ecological features. See Appendix 4 for an explanation of terms used by Verdant Ecology in evaluating ecological features.

### 5.1 **Designated Sites**

SPA/SAC should be considered of International importance. SSSI should be considered of National importance. Non-statutory sites (LWS/SNCI/SINC) should be considered of County importance. If pollution prevention measures are successful, specific ecological impacts on these protected sites from a residential development are unlikely.

There may be a requirement to provide Suitable Alternative Natural Greenspace. The local planning authority will advise accordingly.

### 5.2 **Legally Protected Plants and Habitats**

No legally protected habitats or plants were found on site. Such-protected plants and habitats are therefore considered to be of Negligible importance.

### 5.3 **Legally Protected Fauna**

The assembly of fauna is considered to be of Local value.

### 5.4 **Policy-protected Features**

Trees are material considerations in planning decisions.

Habitats, plants and fauna listed in National or Local BAP (Biodiversity Action Plans) or Priority Habitats/Species are protected by policy and if present would be of at least County importance. The site contains designated Priority Habitat (traditional orchard) but it is remote from impacts, as is the grazing marsh just off site.

Fauna protected by policy (and not also protected legally) likely occur on or near site (e.g. hedgehogs, toads) and would be of Local importance.

## 6 **Impacts**

### 6.1 **Impacts Considered**

There is always potential for development work to contravene legislation and policy protecting native wildlife.

Impacts considered possible from a residential development are;

#### 6.1.1 ***Harm to Individuals or Roost/Nest/Resting Places***

Individuals or their place of rest may be protected.

#### 6.1.2 ***Habitat Loss***

Habitats may be protected in their own right or they may harbour protected species.

#### 6.1.3 ***Exclusion, Isolation, Fragmentation***

Animals may be excluded from foraging or shelter by new roads, fencing, lighting, etc. Existing habitat may be broken up into smaller, less viable areas.

#### 6.1.4 ***Pollution/Disturbance***

Such as air-borne dust, noise, vibration, heat or toxic substances and suspended solids in run-off or channel flow. These can be prevented by devising and complying with a pollution prevention plan. Special consideration should be given to controlling light pollution. Disturbance can arise from development action or come from people or pets post-development.

#### 6.1.5 ***Compaction***

Activities such as storing materials, site staff parking or tracking machinery can damage soil structure and/or tree roots beyond the footprint of the actual construction. This can be prevented by adhering to a Tree Protection Plan in line with BS 5837 that defines all peripheral activities (see below).



#### 6.1.6 **Peripheral Activities**

Consider; soil testing, fencing, drainage, service runs, temporary parking/offices/toilets, access routes, plant tracking, burning sites, storage/sorting areas etc. Any may damage ecological features.

#### 6.2 **Impact Assessment**

See Appendix 4 for an explanation of terms used by Verdant Ecology in evaluating ecological features.

The site is 'upstream' of important protected habitats. Therefore any pollution event could have Major Negative impacts on sites on International importance.

The proposed demolition of the house will destroy bat roosts and may cause physical harm to any bats present at the time. This is addressed in more detail in our bat survey report.

Tree work, demolition of the house and greenhouse would likely affect nesting birds if done during the nesting season.

Clearance/demolition of the greenhouse may harm reptiles, hedgehogs or toads.

If the recommendations herein are complied with and pollution prevention measures are successful and the tree protection plan is adopted, it is reasonable to believe that ecological impacts are likely to be Minor Negative at the Site/Local scale in the Short Term but with potential for Minor to Major Positive gain at the Site/Local scale.

### 7 **Recommendations**

#### 7.1 **Further Surveys**

##### 7.1.1 **Sch. 9-listed Plants**

These do not need to be conducted before a planning decision but should be conducted before work on site commences.

##### 7.1.2 **Badgers**

These do not need to be conducted before a planning decision but should be conducted approximately quarterly and certainly in early summer in case setts need to be closed under licence (which are only awarded between 1<sup>st</sup> July and 30<sup>th</sup> November).

##### 7.1.3 **Bats**

Conducted in 2022 and reported separately.

#### 7.2 **Mitigation**

1) Acquire a bat impact/mitigation licence before disruptive impacts on the house. This may need fresh survey data to support it. You cannot apply until consent is granted and any conditions that might relate to bats have been discharged.

2) Sch.9-listed plant matter cannot leave site except with a special licence (even if this is accidental, via the treads of vehicle tyres for example). If they are found you should seek specialist advice (Verdant Ecology can

provide such) on how to control the spread of these. Note that this may need to commence many months prior to other development impacts.

3) The greenhouse must be cleared of vegetation using hand-held (machine) tools only to about knee height outside the bird-nesting season (i.e. not during March to September inclusive) or only after work has been approved by a competent ecologist. Subsequent to this, the remaining vegetation needs to be cleared between April and September inclusive, gradually and sequentially, as instructed by a competent ecologist so as to avoid harming reptiles. Toads and/or hedgehogs will also be appropriately dealt with in this manner. The tree work and house demolition must occur outside the bird-nesting season or only after work has been approved by a competent ecologist (note you will need to co-ordinate this with what the bat licence dictates).

5) Tree/hedge planting. This is for the benefit of wildlife generally but is required for birds. Species selection should favour/include native species of local provenance.

6) Any panel-fencing to site perimeter should be modified so as to allow reptiles, amphibians and hedgehogs to move on/off site readily.

7) Pollution prevention - A comprehensive, fool-proof pollution prevention plan demonstrating you will avoid significant indirect impacts on protected ecological features. Suggested minimum standards can be found in the COSHH regulations and the Environment Agency's Pollution Prevention Guidelines series. It must include constrained external lighting (no uplighting, minimum number of fittings set as low as possible and not above 2m, downcast, hooded, with automated cut-offs - see BCT/ILE 2018, Bats and Artificial Lighting in the UK).

8) New and renovated buildings must use 1F bitumen, not breathable or woven membranes (to avoid harm to bats).

If any development was thus constrained, impacts are likely to be considered insignificant and with potential for significant biodiversity gain.

Protected ecological features should thus not be a reason for refusing planning consent.

A sensible condition to the consent would be for compliance with the recommendations in the ecology reports (whilst allowing for amendments due to any new information).

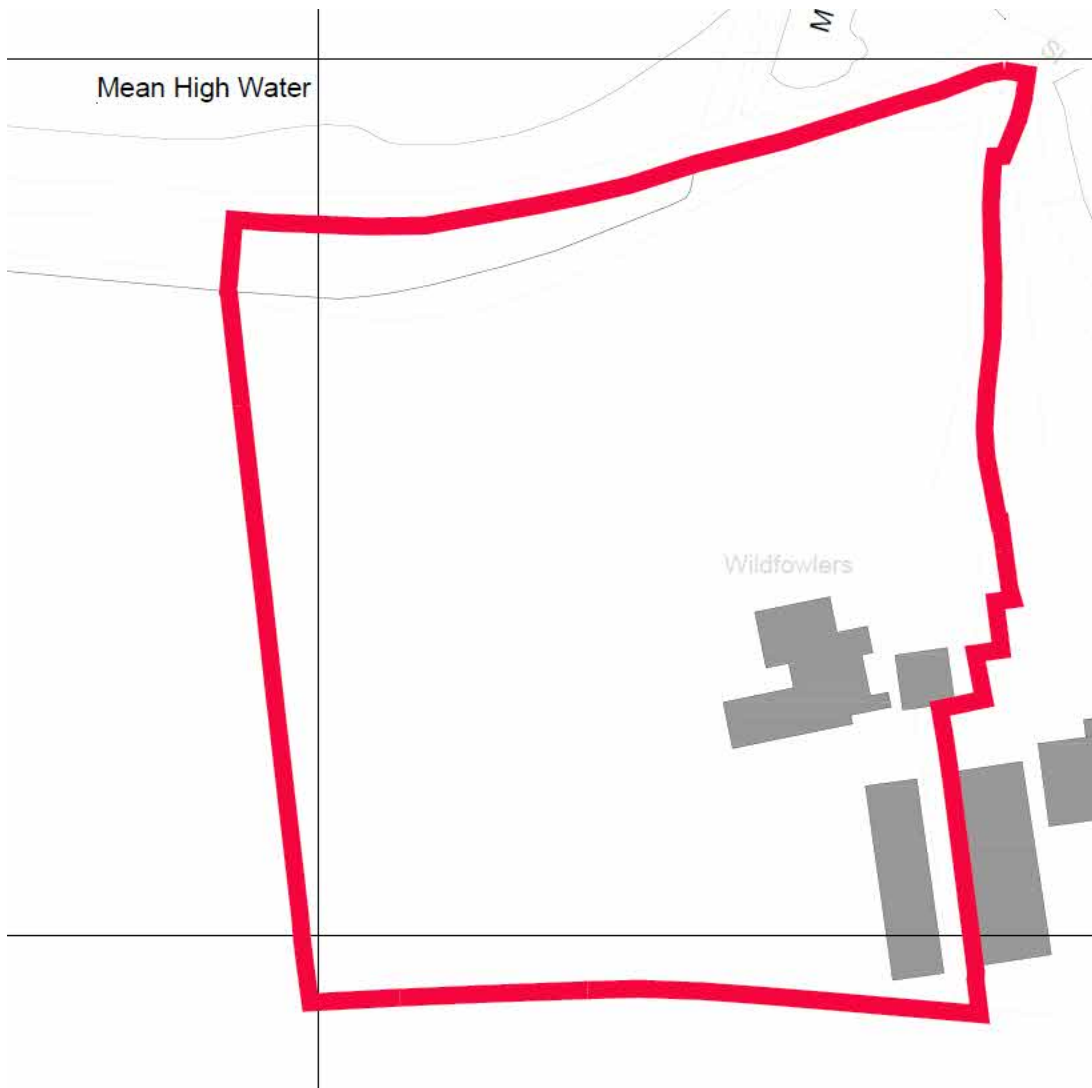
### 7.3 **Advisory Notes**

Consult a competent ecologist;

- Every few months
- If there are changes in plans
- If new ecological information arises.

8 **Appendices**

8.1 **Appendix 1. Existing Site Plan**



8.2 **Appendix 2. Legislation, Policy and Licensing Relating to Protected Ecological Features**

All legally protected ecological features (the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010) are material considerations in planning decisions under the National Planning Policy Framework and as in ODPM and DEFRA 2005 and ODPM 2006. This means that before granting permission, planning authorities should consider the potential impacts of development on legally protected features and should be confident that any negative impacts can be mitigated for. Legally protected features are protected, whether planning permission is applied for, held, or not. Licensing from Natural England may be required to conduct work and mitigation. European Protected Species Mitigation Licences can usually only be applied for after planning permission has been received and all conditions relating to the protected feature have been released. They are only granted where there is 'overriding public need', 'no suitable alternative' and the conservation status of the species concerned remains favourable.

Additionally, some ecological features are 'Priority Species/Habitats' in the UK Biodiversity Action Plan. These equate to 'Habitats and Species of Principle Importance' and may be referred to as such. We use BAP because it has been around longer. Local Biodiversity Action Plans may also be in place for certain species/habitats not covered by the national BAP. The Countryside and Rights of Way Act 2000 and The Natural Environment and Rural Communities Act 2006 expect those in a position of influence to consider the impacts of their actions on biodiversity, especially Biodiversity Action Plan features and to seek opportunities to benefit them. Many BAP features (e.g. otters) carry alternate and higher-level legal protection.

**Trees**

Trees may be protected by being part of a habitat that is protected, by being in a Conservation Area or by having a Tree Preservation Order placed on them. Trees may be indirectly protected by harbouring protected species (e.g. bats) or by being part of a hedgerow protected by the Hedgerow Regulations. Impacts on veteran trees, ancient semi-natural woodland and habitats (trees?) that serve to connect are specifically mentioned in planning policy as to be avoided. Trees may also be protected by Forestry Commission restrictions on the quantity of timber arisings. Licensing may be needed to fell trees. If planning permission is granted it overrides other protection mechanisms. The standard for assessing and protecting trees on and near development sites is BS 5837.

### **Hedgerows**

Some hedges may be classed as 'Important' under the Hedgerow Regulations 1997 and afforded legal protection accordingly. Receipt of planning permission overrides the restriction of these regulations. Hedges may be protected by harbouring other protected features (e.g. badgers or hazel dormice).

### **Habitats**

Many areas are already designated for wildlife conservation. Some areas not designated may be protected by various legislation and policy if they are of a particular habitat type. These are many and varied.

### **Schedule 9 Plants**

Under the Wildlife and Countryside Act it is an offence to cause any plant on Sch.9 to be transplanted in the wild. This includes accidental propagation. Arisings containing any such plant matter are a controlled waste and if leaving the site must do so via an authorised waste carrier with a waste transfer note under The Environmental Protection (Duty of Care) Regulations 1991.

### **Amphibians**

Great crested newts and their habitats are legally protected by The Conservation of Habitats and Species Regulations 2010 and The Wildlife and Countryside Act 1981. Combining the legislation means it is an offence to; intentionally or recklessly kill, injure, take or disturb a GCN (including eggs) or damage, destroy or obstruct access to any structure or place used for shelter, breeding or protection. If GCN or their habitat is affected, licensing will be needed, significant delays are possible and habitat enhancements will be needed. Natterjack toads are similarly protected but are rare and localised in distribution. Common toads are listed as a national BAP species meaning those in a position of influence are expected to seek opportunities to improve their conservation status. For toads, careful site clearance and habitat enhancements may be appropriate.

### **Badgers**

Under the Protection of Badgers Act 1992, badger setts showing signs of current or recent use (generally considered to mean within the last year) are protected. Harming badgers is illegal. Their feeding areas and access to them may also be protected. A licence from Natural England is needed if work might disturb an active sett or badgers using it. Licences are not usually available for such work during winter, spring and early summer if there is reason to believe the sett is occupied by a breeding female and/or juveniles.

### **Bats**

The main items of legislation protecting bats in England are The Conservation of Habitats and Species Regulations 2010 and The Wildlife and Countryside Act 1981. Combining the legislation means it is an offence to; intentionally or recklessly kill, injure, take or disturb bats, or to damage, destroy or obstruct access to any structure or place used for shelter, breeding or protection. Bat roosts are protected even if unoccupied. Bats may also be indirectly protected by virtue of their association with protected trees or veteran trees and habitats that serve to connect (both specifically mentioned in the NPPF) and hedgerows (Hedgerow Regulations 1997). If impacts on bat roosts are likely, further survey and licensing will be needed, significant delays are possible and habitat enhancements will be needed.

### **Birds**

Under the Wildlife and Countryside Act 1981, all birds are protected from disturbance at the nest, as are the nests. Some (Schedule 1) birds (e.g. barn owls) are protected whilst near the nest. The conservation of species that are rare and/or in decline (e.g. BAP-listed/RSPB's red-listed) should be considered by in the planning process. Work must not disturb nesting birds. Habitat enhancements are likely to be appropriate.

### **Dormice**

The main items of legislation protecting bats in England are The Conservation of Habitats and Species Regulations 2010 and The Wildlife and Countryside Act 1981. Combining the legislation means it is an offence to intentionally or recklessly disturb or harm dormice, damage,

destroy or obstruct access to places used for shelter or protection. If they are present and impacts are likely, further survey and licensing will be needed, significant delays are possible and habitat enhancements will be needed.

### **Hare, Harvest Mice and Hedgehogs**

These are listed on the national BAP and/or as Species of Principle Importance meaning those in a position of influence are expected to seek opportunities to improve their conservation status. This usually means careful site preparation and post-development habitat enhancements.

### **Insects**

Some species have full legal protection but these tend to be rare/specialised. Some species are BAP-listed meaning those in a position of influence are expected to seek opportunities to improve their conservation status. This usually means post-development habitat enhancements.

### **Other Invertebrates**

White-Clawed Crayfish are fully protected. Some molluscs are fully protected.

### **Reptiles**

Common reptiles are protected against killing and injury. They are also BAP-listed meaning those in a position of influence are expected to seek opportunities to improve their conservation status. Smooth snakes and sand lizards have further legal protection but have very specialised habitat requirements and a limited, well-documented range. If common reptiles are found, a population estimate is then obtained and this determines the level of effort exerted on a translocation operation. This usually involves ring-fencing the site, capturing individuals, gradual site clearance and may take several months. Note that the translocation operation (if required) would also need to be conducted in fine weather between May and September. It is usually necessary to enhance the receptor site and secure its long-term future before starting the translocation operation.

## **8.3 Appendix 3. What Policy/Legislation Means for You**

The onus is on the developer to provide enough information about protected ecological features that are likely to be present and likely to be affected so as to enable the planning authority to make an informed decision as to whether the development will have negative impacts on the protected features. If protected features are found to be present and affected, the developer must demonstrate to the planning authority how, in principle, the work can be carried out without negative impacts overall. Those involved should seek opportunities to enhance the ecological feature.

Planning permission should only be given if the status of the affected protected feature can be maintained or enhanced and if measures are taken to avoid harming individuals. Recent changes in legislation and policy are increasing the emphasis on expecting improvements or enhancements.

Changes to the law in 2007 also removed certain defences – the most significant of which was that of an offence being excusable when ‘*an incidental result of an otherwise lawful operation*’ (such as planning permission). Further changes in early 2009 mean remaining defences (such as health and safety issues) no longer apply if there was a suitable alternative and the action negatively affects the favourable conservation status of the species concerned (individuals are still protected from harm by the Wildlife and Countryside Act).

If planning permission is granted, a European Protected Species mitigation licence from Natural England may be available - to protect you from what may otherwise be an offence (disturbance, destruction of roosts, etc.). Such a licence is only granted if;

- there is no reasonable alternative (e.g. site),
- it is in the overriding interest of the public,
- the population of concern will remain in favourable conservation status.

Local authorities must also consider these three conditions when making their decision.

The licence application (if needed) will have to justify the need for your proposed actions. It will also have to include a comprehensive plan that seeks to preserve habitats and any roosts, minimise disturbance, prevent killing or injury, ensure a continuation of suitable habitat and provide enhancements. It is usual for several years post-construction monitoring of mitigation to be a condition of licensing.

## 8.4 Appendix 4. Assessment and Evaluation Tables Used by Verdant Ecology

Relative Terms in Assessment and Evaluation of Ecological Features and Potential Impacts

Importance of Ecological Feature		Area of Impact	
Negligible		Negligible	
Local/Site		Local/Site	
District/Borough		District/Borough	
County		County	
Regional		Regional	
National		National	
International		International	
<b>Duration</b>		<b>Extent of Change</b>	
		Major negative	
Short term (1-5 years)		Minor negative	
Medium term (5-20 years)		Negligible/Neutral	
Long term (>20 years)		Minor positive	
		Major positive	

Matrix for Estimating the Significance of Impacts

		Degree of Impact				
		Major negative	Minor negative	Negligible	Minor positive	Major positive
Geographic Scale	International	Major	Major	Negligible	Major	Major
	National	Major	Major	Negligible	Major	Major
	Regional	Major	Moderate	Negligible	Moderate	Major
	County	Moderate	Minor	Negligible	Minor	Moderate
	District/Borough	Moderate	Minor	Negligible	Minor	Moderate
	Local/Site	Minor	Negligible	Negligible	Negligible	Minor

## 8.5 Appendix 5. References

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