



College Road, Campdown

Ecological Mitigation and Management Plan (EMMP)

Persimmon Homes

September 2018

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Appendix A – Report Conditions

Appendix B – Key Legislation



Glossary

CEnv	Chartered Environmentalist
CIEEM	Chartered Institute of Ecology & Environmental Management
EcIA	Ecological Impact Assessment
ECoW	Ecological Clerk of Works
EMMP	Ecological Mitigation and Management Plan
GCN	Great Crested Newt
GradCIEEM	Graduate Member Chartered Institute of Ecology & Environmental Management
HRA	Habitats Regulations Assessment
JNCC	Joint Nature Conservation Committee
LPA	Local Planning Authority
MCIEEM	Member of Chartered Institute of Ecology & Environmental Management
NPPF	National Planning Policy Framework
SAC	Special Area of Conservation
SPA	Special Protection Area



1.0 Introduction

1.1 Background

WYG was commissioned by Persimmon Homes to prepare an Ecological Mitigation and Management Plan (EMMP) for land at College Road, Campdown, Havant (the Site). It addresses the following items with a view to maintaining and enhancing the biodiversity value of the site in the long-term:

- Mitigation for the protected and notable habitats and species that may be impacted by the development proposals;
- Management of retained, enhanced and created habitats; and
- Long-term monitoring to determine the effectiveness of mitigation and management undertaken.

Please note that the EMMP is intended to be a working document that will be updated as further information is collected regarding ecology either pre-commencement or during the construction phase. This document will be agreed with the Local Planning Authority (LPA) prior to the commencement of works on site with any amendments discussed with them as appropriate.

The basis for the EMMP is derived from information gathered on the site through ecological surveys conducted between October 2015 and October 2017 in support of this application (WYG 2017a-d).

Whilst enhancement is not a legal requirement, it has been incorporated into the design as it helps to meet the government objectives for planning to protect and enhance biodiversity, in accordance with the National Planning Policy Framework (NPPF). This commitment to delivery of enhancement to the value of the biodiversity of the site is a central facet of the design.

This report has been prepared by Project Ecologist Ben Cooke GradCIEEM and the conditions pertinent to it are provided in Appendix A.

1.2 Site Location

The proposed development site mainly consists of large semi improved grassland fields c. 31 ha in area, located to the west of Havant in Hampshire, centred on Ordnance Survey grid reference SU690069.

The site is bounded by Scratchface Lane and the A3 (M) along the eastern boundary and College Road forming the western boundary. Further east of the site lies the residential area of Bedhampton. South of the site are agricultural fields with the B2177 Portsdown Hill Road and the residential dwellings of Farlington beyond. Directly north of the site is Littlepark Wood. Portsmouth Golf Course lies directly south west of the site. On the north western corner of the site lies South Downs College. Further south lies Chichester and Langstone Harbour, a designated Ramsar Site, Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI), along with Farlington Marshes a designated Local Nature Reserve (LNR).



1.3 Development Proposals

Development of land at Campdown for the provision of circa 735 dwellings (Use Class C3), sports facilities, formal and informal open space, landscaping, the provision of new access onto College Road and necessary associated works and infrastructure.

1.4 Context of the Management Plan

This EMMP is based on the results of the following previous surveys and reports carried out by WYG at the site:

- WYG, (2017a) College Road, Campdown, Extended Phase 1 Habitat Survey.
- WYG, (2017b) College Road, Campdown, Wintering Bird Survey Report.
- WYG, (2017c) College Road, Campdown, Bat Survey Report.
- WYG, (2017d) College Road, Campdown, Hazel Dormouse Presence/Likely Absence Report.

Note that scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

A summary of the key legislation is also provided in Appendix B.

2.0 Baseline Ecological Features

2.1 Baseline Ecological Features

Table 1 provides a summary of the baseline ecological work that was completed to support the planning application.

Table 1: Survey completed and month conducted

Survey Type	Month Survey Conducted	Summary of Results
Ecological Appraisal (WYG, 2017a)	November 2016	The proposed development site mainly consists of large semi-improved grazed grassland fields c. 31 ha in area. The habitats within the site were assessed as being of low ecological value and are common and widespread within the surrounding area.
Wintering Birds (WYG, 2017b)	October 2016 – March 2017	During the wintering bird surveys undertaken in 2016-2017, SPA qualifying species brent goose were noted utilising the site. Red listed species noted utilising the site comprise curlew, starling, herring gull, linnet, song thrush, and house sparrow. Amber listed species comprise SPA qualifying species brent goose, as well as oystercatcher, black headed gull and lesser black-backed gull. Green listed species comprised, woodpigeon, carrion crow, pied wagtail, blackbird, goldfinch, greenfinch, robin, blue tit, great tit and collared dove. Birds were noted utilising the entirety of the site however brent goose and curlew were predominantly noted in the south eastern extent of the site. The wintering bird assemblage was assessed as being of County value and off-site mitigation will be provided.
Bat Activity Survey (WYG, 2017c)	October 2016 – June 2017	Up to three bat species were recorded within the site during the manual transects and automated surveys – common pipistrelle, soprano pipistrelle and serotine. No roosts were recorded on site. The site is considered to be of importance up to Local level for foraging and commuting bats according to Wray <i>et al.</i> (2010) classifications.
Hazel Dormouse Survey (WYG, 2017d)	March – October 2017	Hazel dormice were confirmed as present on site. Hedgerows will be retained and protected where possible with infill planting of existing boundary features. Nest boxes will be installed within hedgerows.



3.0 Wildlife Legalisation and Planning Policy Relevant to the Site

3.1 Wildlife Legalisation Relevant to the Site

3.1.1 Hazel Dormouse

The hazel dormouse is afforded protection under the *Conservation of Habitats & Species Regulations 2017* and the *Wildlife and Countryside Act 1981* (as amended) which makes it an offence to:

- Intentionally or deliberately kill, injure or capture a dormouse;
- Damage, destroy or obstruct access to any structure or place used for shelter or protection by a dormouse;
- Deliberately disturb a dormouse while it is occupying a structure or place which it uses for that purpose.

3.1.2 Breeding Birds

All birds, their nests and eggs are protected by the *Wildlife and Countryside Act 1981* (as amended), Part 1. It is therefore an offence to intentionally:

- Kill, injure or take any wild bird;
- Take, damage or destroy the nests of any wild bird while it is in use or being built;
- Take or destroy the egg of any wild bird;
- Intentionally or recklessly) disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

The presence of breeding birds should be considered a constraint to development if vegetation clearance is carried out during the bird breeding season (usually considered to be March – September inclusive).

3.1.3 Bats

All British bat species are listed in Schedule 5 of the *Wildlife and Countryside act 1981* (as amended) and Schedule 2 of the *Conservation of Habitats and Species Regulations 2017* as European protected species.

This makes it an offence to:

- Deliberately capture, injure or kill any bat;
- Deliberately disturb bats, in particular where it is likely to:
 - Impair their ability to breed or reproduce, or to rear or nurture their young;
 - Impair their ability to hibernate or migrate; or
 - Affect significantly the local distribution or abundance of bats.
- Intentionally or recklessly damage, destroy or obstruct the access to the place of shelter or protection; and
- Damage or destroy a bat's breeding site or resting place.

Unmitigated removal of linear corridors such as sections of hedgerows and increases in habitats disturbance (through lighting, noise and vibration impacts) during construction and operational



phases of a proposed development could indirectly impact bats that use the site to forage and commute.

Furthermore, direct impacts to bats may occur through road traffic mortalities in the operational phase of a proposed development. Such indirect and direct impacts could result in an offence being committed.

3.2 Planning Policy Relevant to the Site

3.2.1 National Policy

A revised NPPF was issued on February 2019 (Ministry of Housing Communities and Local Government, 2019) and currently supplements government Circular 06/2005, Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System (Office of the Deputy Prime Minister, 2005).

Circular 06/2005 states that the presence of protected species is a material consideration in the planning process. Paragraph 170 of the NPPF also states that:

'Planning policies and decisions should contribute to and enhance the natural environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)*
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland*
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate*
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*

The conservation and enhancement of wildlife is also specifically reference re: development within the National Parks or the Broads. Paragraph 174 then goes on to confirm that:

When determining planning applications, local planning authorities should apply the following principles:



- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.*

Regarding EcIAs and HRAs – any sites identified, or required, as compensatory measures for adverse effects on any Natura 2000/habitats site should also be given the same level as protection as the pSPAs and cSACs themselves. In addition, when an application is being determined, Paragraph 177 clarifies that:

"The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site. The presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site"

Paragraph 180 is also relevant as;

Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should...

- c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.*

3.2.2 Local Policy

The site is located within The Campdown Strategic Area (2016), identified within the Havant Strategic Development Areas Financial Feasibility Study on behalf of Havant Borough Council. The study forms



supporting evidence to the Havant Local Plan 2036. The site is included as a draft allocation under the Pre-Submission Havant Borough Local Plan 2036 under Policy H40.

The Havant Borough Local Plan (Core Strategy) includes Policy CS11 Protecting and Enhancing the Special Environment and Heritage of Havant Borough. Planning permission will be granted for development that:

- Has particular regard to the following hierarchy of nature conservation designations within the borough (i) Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar (ii) Sites of Special Scientific Interest (SSSI) and National Nature Reserves. (iii) Sites of Importance for Nature Conservation (SINC), Local Nature Reserves (LNR) and other Ancient Woodland.
- Protects and where appropriate enhances the borough's statutory and non-statutory heritage designations by appropriately managing development in or adjacent to conservation areas, listed buildings, scheduled ancient monuments, historic parks and gardens, archaeological sites, buildings of local historic or architectural interest.
- Protects wildlife habitats and wildlife corridors to prevent the fragmentation of existing habitats and to allow species, for example Brent Geese, to respond to the impacts of climate change by making provision for habitat adaptation e.g. coastal managed realignment and species migration.



4.0 Roles and Responsibilities

4.1 Construction Roles and Responsibilities

The EMMP will be distributed to all relevant personnel involved with the construction phase of the development including Persimmon Homes and any contractors who may be working on the site. It will be the responsibility of the main contractor (Persimmon Homes) to distribute this document (where relevant) to all other contractors, sub-contractors and visitors to the site as appropriate, who will in turn be bound by the terms therein.

It will be the responsibility of the Ecological Clerk of Works (ECoW) (to be appointed by Persimmon Homes) to provide advice to the construction teams during all phases of the scheme on all pertinent ecological issues and to check that the ecological protection and mitigation measures, as specified in this document, are implemented. Recommendations will be passed to Persimmon Homes who will be responsible for ensuring implementation.

The ECoW will have specific responsibilities which will include:

- Deliver an initial toolbox talk to introduce site staff to this document and detail protected species that may be encountered on site, and the protection measures required;
- Provision of advice on the location of protected species e.g. reptiles and the type and location of protection or mitigation required;
- To supervise and monitor the implementation and maintenance of protective or mitigation measures in accordance with legal requirements or the terms set out in this document;
- Liaison with the main contractor's site manager and others relevant stakeholders as appropriate; and
- Monitoring of the created and retained habitats on site.

Specific responsibilities of the client, Persimmon Homes, in relation to this EMMP will include:

- Adhering to the relevant provisions made within this document;
- Complying with the advice of the ECoW;
- Ensuring that this EMMP is distributed to all relevant parties; and,
- Ensuring that all persons working within the area covered by this EMMP are briefed on relevant aspects. Once the initial toolbox talk has taken place (prior to works commencing on the site), briefing notes will be left on site for future visitors / contractors.

4.2 Post-Construction Roles and Responsibilities

Post construction management will be the responsibility of Taylor Wimpey or an appointed management agent.





5.0 Toolbox Talk

Contractors working on the site will be given a site briefing (toolbox talk) with regards to working methods, and protection of habitats and species during works, before they begin working on the site. This will include general avoidance measures including; noise management, lighting, access and parking, storage of materials and cleaning as detailed below.



6.0 Habitat Mitigation and Management

The development of the site will retain some of the current habitats present in addition to the creation of new habitats. The management / creation of habitats at the site will include:

- Hedgerows;
- Grassland; and
- Standing Water in the form of Sustainable Urban Drainage System ponds (SuDS).

6.1 Hedgerows

6.1.1 Protection

Protective tree fencing will be erected adjacent to retained hedgerows throughout the construction phase in accordance with BS5831-2012 Trees in Relation to Construction.

6.1.2 Mitigation

The development will result in the loss of 155m of defunct hedgerow in the south east of the site. The removal of the hedgerow will be undertaken from November to February (inclusive). All hedgerow removal will be compensated for with like for like replacement planting using native species

6.1.3 Enhancement

Enhancement will comprise of infill planting and reinforcement of approximately 2,400m of retained hedgerow around the site boundaries.

6.1.4 Monitoring

Any planting that fails within the new hedgerow planting and infill planting and for the new shrub planting; this will be replaced during the next suitable planting period for that species. This will be undertaken in September annually for five years post construction.

6.2 Grassland

6.2.1 Protection

Existing grassland will be protected through the erection of fencing throughout the construction phase of the development.

6.2.2 Mitigation

Footpaths through the area of grassland open space are to be clearly demarcated to discourage the disturbance of the created habitat.

6.2.3 Enhancement

Initially works should be completed on the construction of the SuDS within the grassland habitat to the south of the proposed construction zone. Once these works have been concluded the SuDS should be seeded with a grassland mixture of native species and be left undisturbed and allowed to grow. The remaining areas of retained grassland habitat throughout the site will also be left undisturbed and allowed to grow, i.e. if there are areas of bare ground.



6.2.4 Monitoring

The establishment of the grassland within the SuDS will be monitored for competitive weeds, will be spot sprayed where necessary or hand pulled. This will be undertaken every two months during the main growing period, April to September (inclusive) for two years post-sowing.

6.3 Standing Water (SuDS)

6.3.1 Protection

There is currently no standing water on site to protect.

6.3.2 Mitigation

There will be no loss of standing water requiring mitigation.

6.3.3 Enhancement

The SuDS will be built within an area of which currently comprises grass pasture. Seeding around the SuDS surrounding grass areas will use a species-rich seed mix, suitable for the wet condition it is expected to experience, such as river plain / water meadow grass seed containing native species of local provenance.

The seed mix will be used on the grassland surrounding the pond to provide an ecologically valuable habitat. Seed will be sown at the appropriate time of year when the ground temperature will be high enough for germination i.e. between April and October.

Biocide or fertilisers within the drawdown zone of the SuDS will be avoided. Non-native species will not be planted and care will be taken to avoid the accidental introduction of non-native aquatic plants.

6.3.4 Monitoring

See Section 6.2.4 above.



7.0 Protected Species Mitigation

7.1 Badgers

7.1.1 Pre-construction Surveys

A pre-commencement badger survey will be undertaken one month prior to development commencing on site to check that no new badger setts have been created which may be affected by the development proposals. This will comprise a walkover survey of the site and suitable habitat within 50 m of the site boundary where accessible.

In the event badger setts could be affected, a Natural England development licence will be required, however this is not detailed in this report as this is not envisaged at this stage.

7.1.2 Protection Measures During Construction

As part of the toolbox talk prior to works commencing, best practice methods will be implemented on the site to avoid any impacts to commuting and foraging badgers, these will include:

- Consideration should be given to the placement of any **topsoil storage**, or piles of materials that may create mounds suitable for sett creation. Any such piles are placed well away from identified badger activity, and are checked on a daily basis by construction staff to ensure that no badger activity has taken place. If the mounds are to be in place for a significant period of time, the earth will be temporarily fenced to ensure that badgers cannot access the fresh soil.
- There will be no **night working** to avoid disturbance to badgers, any works within 30m of a sett will cease at least two hours before sunset. There will be no lighting along the eastern boundary of the site to avoid any light spill where badger activity has previously been recorded.
- If any excavations are left open overnight, an **earth ramp** will be created or a wooden ramp installed to allow any animals that fall in to escape.
- Any **pipes** that need to be left over night on site will be capped to avoid animals becoming trapped.

7.1.3 Enhancement

The retention and enhancement of the hedgerows and grassland will allow potential badger commuting routes and foraging areas to be maintained across the site. The proposed landscaping and habitat creation works within the site, including new hedgerow and shrub planting will partly replace the loss of foraging habitats as a result of the development and bolster commuting routes surrounding the site.

7.1.4 Monitoring

No monitoring is required.

7.2 Bats

7.2.1 Protection

No potential bat roosts have been identified, therefore no protection is required.



A sensitive operational lighting strategy is to be incorporated to avoid disturbance to nocturnal species. This will stipulate the avoidance light spill of above 1 lux upon the following habitats: running water, standing water and hedgerows.

7.2.2 Mitigation

No works will take place at night, in order to avoid disturbance of foraging or commuting bats during the construction period.

7.2.3 Enhancement

Habitat suitable for bats in the form of new hedgerow and shrub planting will be included within the informal open space on site. Tall trees will be retained and / or planted to create hop-overs where roads cross, maintaining existing commuting routes along hedgerows.

Five tree-mounted bat boxes will be installed on site at a minimum height of 3 m, comprising Schwegler 2FN or similar. Twenty building-mounted boxes will also be installed on south-facing walls at a minimum height of 4 m, comprising Schwegler 2FE or similar.

7.2.4 Monitoring

Bat boxes are to be installed as an enhancement. Therefore, monitoring of bat boxes is not currently proposed at the site.

7.3 Breeding Birds

7.3.1 Protection

Areas of retained hedgerow will be fenced off from the on-site construction zone. This will protect any potential bird nesting habitat during the duration of the construction period within these areas.

7.3.2 Mitigation

Wherever possible, any necessary removal of hedgerow within the site will be carried out outside the bird nesting season, which runs from March to September inclusive. If this is not possible and vegetation removal is required within the nesting season, it will be inspected for the presence of nests by an ECoW within 24hrs of work commencing. Should active nests be found, they will be left in-situ with at least a 5 m buffer of intact vegetation until all the young have fledged and cease to return to the nest. The width of the buffer will be species dependant.

7.3.3 Enhancement

Additional enhancements for nesting birds will be included comprising:

- 15 closed bird boxes with entrance holes will be erected;
- 15 open-fronted bird boxes;
- 13 house sparrow terraces;
- 10 swift boxes.

7.3.4 Monitoring

Bird boxes will be installed as an enhancement for nesting birds. Therefore, monitoring of bird boxes is not currently proposed at the site.



7.4 Hazel Dormice

7.4.1 Protection

Loss of hedgerows will be avoided as far as possible. Protective fencing will be used to avoid impacts during construction with a buffer of 5m maintained between hedgerows and construction activity.

7.4.2 Mitigation

To maintain favourable conservation status of dormice within the site, compensatory habitat will be provided. If the hedgerows will be removed the amount of removed hedgerows will be planted elsewhere within the site as new hedgerows. It is likely that the defunct hedgerow which extends west from the eastern boundary will be lost due to development.

The new hedgerows should be planted with a diverse mix of native species including hawthorn, hazel, holly, blackthorn, elder, guelder rose and honeysuckle all of which will provide a food source and nesting habitat for dormice.

If any hedgerows on the site are to be removed as part of the development, vegetation clearance will be carried out to discourage dormice from using them prior to work commencing, with the aim of displacing dormice into the surrounding hedgerows which will be retained. This will minimise the risk of dormice being killed or injured as a result of the work and will maintain access for them to foraging and commuting areas. It is proposed that all vegetation clearance works will be undertaken in a two-stage process in order to avoid the main dormouse hibernation and breeding seasons, in addition to the peak nesting bird season.

Winter vegetation clearance

Once the licence is approved and granted by Natural England, the above-ground vegetation will be cut to a minimum of 300mm, this will be undertaken between November and February. A dormouse licenced ecologist will undertake hand searches of all the vegetation to be removed prior to cutting. Dormice hibernate at ground level; therefore, the ground level vegetation (i.e. all vegetation below 300mm) will remain in situ and undisturbed.

Any torpid dormice found during the vegetation clearance will be left in situ and fenced off from the development. These areas will only be cleared once the dormouse has broken hibernation and moved of its own accord.

Summer vegetation removal

Stump and root removal will be undertaken between May and October, after the hibernation season is over, when dormice will be using arboreal habitats. This will be supervised by a dormouse licenced ecologist.

7.4.3 Enhancement

Forty standard design dormouse boxes will be erected within retained habitat focused on the northern and western boundary of the northern field. These boxes will provide long term shelter and breeding sites for dormice and will therefore enhance the habitat for dormice.



7.4.4 Monitoring

As a requirement of the Natural England EPSM licence, dormouse boxes must be monitored by a licensed dormouse surveyor twice a year (May and October) for up to five years after completion of the scheme (or creation of new habitats), to be agreed with Natural England. Results of the monitoring surveys will inform the long term management of the site by allowing management prescriptions to be revised.



8.0 Management

8.1 Hedgerows

New hedgerow planting will not be cut for at least five years to allow new planting to become established.

Sympathetic management of the hedgerows will be adapted which will involve cutting every three years instead of annually will result in increased berry production in the second year for most shrub species. This increase will enhance these habitats for breeding birds and invertebrates. Hedgerows will be cut between November and February to prevent impacts to nesting birds.

8.2 Retained Grassland

The retained grassland will be cut at the end of the first year of the sowing (assuming the grassland is sown in April / May). Prior to completing the cut, the grassland establishment will be assessed to determine whether it would be suitable to cut the grass.

The grassland cut will be completed annually in August / September (see Section 9) and the cut will be to a height of 150 mm only. The grass should be cut by a large wheeled vehicle that drives slowly over the site, and the flail cutter is set to cut the grass no shorter than 150 mm from the ground to prevent the killing or injuring of reptiles. Grass should not be cut during wet weather as the machinery may damage the soil structure. The arising will be left on the grassland floor for a few days and before being removed, to allow the seed to drop back into the grassland.

Formal pathways will be included in the landscaping design. This would allow managed access, where the public are encouraged to follow certain routes through the site. These would link to paved walkways throughout the site to further encourage the public to follow specific routes rather than widespread access.

8.3 SuDS

The grassland in the vicinity of the SuDS will be managed in a traditional manner, without artificial fertiliser, to maintain and enhance its nature conservation interest. This will include an autumn cut after the herbs and grasses have seeded. A carefully controlled cut, i.e. using light machinery and cutting the sward to no less than 150 mm, is unlikely to harm reptiles, and should benefit them by maintaining the grassland in an open condition and preventing scrub encroachment. Additionally cutting a rotational basis i.e. leaving selected areas unmown for an entire season, should assist in providing structural diversity to the sward, and provide suitable basking, foraging and refuge areas for reptiles, as well as enhancing its invertebrates diversity.



9.0 Management Activity

Activity	Year									
	1	2	3	4	5	6	7	8	9	10+
Cutting of existing hedgerows (November – February)										
Cutting of new hedgerows (November – February)										
Grassland habitat within the area of open space to be cut once a year in August to September to a height of 15 cm										



10.0 Monitoring

Activity	Year									
	1	2	3	4	5	6	7	8	9	10+
Monitoring of hazel dormouse population within receptor site (May and October)										



11.0 References

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- WYG, (2017c) *College Road, Campdown, Bat Survey Report*. Written on behalf of Hampshire Homes Ltd.
- WYG, (2017d) *College Road, Campdown, Hazel Dormouse Presence/Likely Absence Report*. Written on behalf of Hampshire Homes Ltd.

Please note that the legislation which is relevant to this report is not included in the list above, but details are included in Appendix B below.



Appendix A – Report Conditions

This Report has been prepared using reasonable skill and care for the sole benefit of [Persimmon Homes] ("the Client") for the proposed uses stated in the report by [WYG Environment Planning Transport Limited] ("WYG"). WYG exclude all liability for any other uses and to any other party. The report must not be relied on or reproduced in whole or in part by any other party without the copyright holder's permission.

No liability is accepted or warranty given for; unconfirmed data, third party documents and information supplied to WYG or for the performance, reliability, standing etc of any products, services, organisations or companies referred to in this report. WYG does not purport to provide specialist legal, tax or accounting advice.

The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections'. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The "shelf life" of the Report will be determined by a number of factors including; its original purpose, the Client's instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. WYG accept no liability for issues with performance arising from such factors.



Appendix B – Key Legislation

Bern Convention

The *Convention on the Conservation of European Wildlife and Natural Habitats* (the *Bern Convention*) was adopted in Bern, Switzerland in 1979, and was ratified in 1982. Its aims are to protect wild plants and animals and their habitats listed in Appendices 1 and 2 of the Convention, and regulate the exploitation of species listed in Appendix 3. The regulation imposes legal obligations on participating countries to protect over 500 plant species and more than 1000 animals.

To meet its obligations imposed by the Convention, the European Community adopted the *EC Birds Directive* (1979) and the *EC Habitats Directive* (1992 – see below). Since the Lisbon Treaty, in force since 1st December 2009, European legislation has been adopted by the European Union.

Bonn Convention

The Convention on the Conservation of Migratory Species of Wild Animals or 'Bonn Convention' was adopted in Bonn, Germany in 1979 and came into force in 1985. Participating states agree to work together to preserve migratory species and their habitats by providing strict protection to species listed in Appendix I of the Convention. It also establishes agreements for the conservation and management of migratory species listed in Appendix II.

In the UK, the requirements of the convention are implemented via the Wildlife & Countryside Act 1981 (as amended), Wildlife (Northern Ireland) Order 1985 (as amended), Nature Conservation and Amenity Lands (Northern Ireland) Order 1985 and the Countryside and Rights of Way Act 2000 (CRoW).

Habitats Directive

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, or the 'Habitats Directive', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.

In the UK, the Habitats Directive is transposed into national law via the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales, and via the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland.

Birds Directive

The EC Directive on the Conservation of Wild Birds (79/409/EEC) or 'Birds Directive' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

Conservation of Habitats and Species Regulations 2017 (as amended)

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by the European Commission, are then designated as Special Protection Areas (SPAs) within six years. Public bodies must also help preserve, maintain and re-establish habitats for wild birds.

The 2018 amendments mainly related to the impact of the *People Over Wind* decision and some implications arising for neighbourhood plan development and a range of other planning tools including Local Development Orders and Permission in Principle – see here for full details:

<https://www.legislation.gov.uk/ukxi/2018/1307/note/made>

The Regulations make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5 - see below:

Schedule 2 – European Protected Species of Animals	Schedule 5 – European Protected Species of Plants
Horseshoe bats <i>Rhinolophidae</i> – all species	Shore dock <i>Rumex rupestris</i>
Common bats <i>Vespertilionidae</i> – all species	Killarney fern <i>Trichomanes speciosum</i>
Large Blue Butterfly <i>Maculinea arion</i>	Early gentian <i>Gentianella anglica</i>
Wild cat <i>Felis sylvestris</i>	Lady's-slipper <i>Cypripedium calceolus</i>
Dolphins, porpoises and whales <i>Cetacea</i> – all sp.	Creeping marsh-wort <i>Apium repens</i>
Dormouse <i>Muscardinus avellanarius</i>	Slender naiad <i>Najas flexilis</i>
Pool frog <i>Rana lessonae</i>	Fen orchid <i>Liparis loeselii</i>
Sand lizard <i>Lacerta agilis</i>	Floating-leaved water plantain <i>Luronium natans</i>
Fisher's estuarine moth <i>Gortyna borelii lunata</i>	Yellow marsh saxifrage <i>Saxifraga hirculus</i>
Great crested newt <i>Triturus cristatus</i>	
Otter <i>Lutra lutra</i>	
Lesser whirlpool ram's-horn snail <i>Anisus vorticulus</i>	
Smooth snake <i>Coronella austriaca</i>	
Sturgeon <i>Acipenser sturio</i>	
Natterjack toad <i>Epidalea calamita</i>	
Marine turtles <i>Caretta caretta</i> , <i>Chelonia mydas</i> , <i>Lepidochelys kempii</i> , <i>Eretmochelys imbricata</i> , <i>Dermochelys coriacea</i>	

Wildlife & Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use; or
- take or destroy an egg of any wild bird.

Or to intentionally do the following to a wild bird listed in Schedule 1:

- disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5;
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and
- The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to:

- intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant;
- unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or
- sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9.

It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

Schedule 1 - Birds which are protected by special penalties

Avocet	<i>Recurvirostra avosetta</i>	Osprey	<i>Pandion haliaetus</i>
Bee-eater	<i>Merops apiaster</i>	Owl, Barn	<i>Tyto alba</i>
Bittern	<i>Botaurus stellaris</i>	Owl, Snowy	<i>Nyctea scandiaca</i>
Bittern, Little	<i>Ixobrychus minutus</i>	Peregrine	<i>Falco peregrinus</i>
Bluethroat	<i>Luscinia svecica</i>	Petrel, Leach's	<i>Oceanodroma leucorhoa</i>
Brambling	<i>Fringilla montifringilla</i>	Phalarope, Red-necked	<i>Phalaropus lobatus</i>
Bunting, Cirl	<i>Emberiza cirlus</i>	Plover, Kentish	<i>Charadrius alexandrinus</i>
Bunting, Lapland	<i>Calcarius lapponicus</i>	Plover, Little Ringed	<i>Charadrius dubius</i>
Bunting, Snow	<i>Plectrophenax nivalis</i>	Quail, Common	<i>Coturnix coturnix</i>
Buzzard, Honey	<i>Pernis apivorus</i>	Redstart, Black	<i>Phoenicurus ochruros</i>
Capercaillie	<i>Tetrao urogallus</i>	Redwing	<i>Turdus iliacus</i>
Chough	<i>Pyrrhocorax pyrrhocorax</i>	Rosefinch, Scarlet	<i>Carpodacus erythrinus</i>
Corncrake	<i>Crex crex</i>	Ruff	<i>Philomachus pugnax</i>
Crake, Spotted	<i>Porzana porzana</i>	Sandpiper, Green	<i>Tringa ochropus</i>
Crossbills (all species)	<i>Loxia</i>	Sandpiper, Purple	<i>Calidris maritima</i>
Curlew, Stone	<i>Burhinus oedicnemus</i>	Sandpiper, Wood	<i>Tringa glareola</i>
Divers (all species)	<i>Gavia</i>	Scaup	<i>Aythya marila</i>
Dotterel	<i>Charadrius morinellus</i>	Scoter, Common	<i>Melanitta nigra</i>
Duck, Long-tailed	<i>Clangula hyemalis</i>	Scoter, Velvet	<i>Melanitta fusca</i>
Eagle, Golden	<i>Aquila chrysaetos</i>	Serin	<i>Serinus serinus</i>
Eagle, White-tailed	<i>Haliaetus albicilla</i>	Shorelark	<i>Eremophila alpestris</i>
Falcon, Gyr	<i>Falco rusticolus</i>	Shrike, Red-backed	<i>Lanius collurio</i>
Fieldfare	<i>Turdus pilaris</i>	Spoonbill	<i>Platalea leucorodia</i>
Firecrest	<i>Regulus ignicapillus</i>	Stilt, Black-winged	<i>Himantopus himantopus</i>
Garganey	<i>Anas querquedula</i>	Stint, Temminck's	<i>Calidris temminckii</i>

Godwit, Black-tailed	<i>Limosa limosa</i>	Swan, Bewick's	<i>Cygnus bewickii</i>
Goshawk	<i>Accipiter gentilis</i>	Swan, Whooper	<i>Cygnus cygnus</i>
Grebe, Black-necked	<i>Podiceps nigricollis</i>	Tern, Black	<i>Chlidonias niger</i>
Grebe, Slavonian	<i>Podiceps auritus</i>	Tern, Little	<i>Sterna albifrons</i>
Greenshank	<i>Tringa nebularia</i>	Tern, Roseate	<i>Sterna dougallii</i>
Gull, Little	<i>Larus minutus</i>	Tit, Bearded	<i>Panurus biarmicus</i>
Gull, Mediterranean	<i>Larus melanocephalus</i>	Tit, Crested	<i>Parus cristatus</i>
Harriers (all species)	<i>Circus</i>	Tree-creeper, Short-toed	<i>Certhia brachydactyla</i>
Heron, Purple	<i>Ardea purpurea</i>	Warbler, Cetti's	<i>Cettia cetti</i>
Hobby	<i>Falco subbuteo</i>	Warbler, Dartford	<i>Sylvia undata</i>
Hoopoe	<i>Upupa epops</i>	Warbler, Marsh	<i>Acrocephalus palustris</i>
Kingfisher	<i>Alcedo atthis</i>	Warbler, Savi's	<i>Locustella luscinioides</i>
Kite, Red	<i>Milvus milvus</i>	Whimbrel	<i>Numenius phaeopus</i>
Merlin	<i>Falco columbarius</i>	Woodlark	<i>Lullula arborea</i>
Oriole, Golden	<i>Oriolus oriolus</i>	Wryneck	<i>Jynx torquilla</i>
Animal (Vertebrate) Species Listed in Schedule 5 (full legal protection at all times)			
Horseshoe Bats (all species)	<i>Rhinolophidae</i>	Newt – Great Crested	<i>Triturus cristatus</i>
Typical Bats (all species)	<i>Vespertilionidae</i>	Snake – Smooth	<i>Coronella austriaca</i>
Dolphin – Bottle-nosed	<i>Tursiops truncatus (tursio)</i>	Toad, Natterjack	<i>Epidalea calamita</i>
Dolphin – Common	<i>Delphinus delphis</i>	Turtles – All Species	<i>Cheloniidae & Dermochelyidae</i>
Dormouse – Hazel	<i>Muscardinus avellanarius</i>	Basking Shark	<i>Cetorhinus maximus</i>
Pine Marten	<i>Martes martes</i>	Burbot	<i>Lota lota</i>
Porpoise – Harbour	<i>Phocaena phocaena</i>	Goby – Giant	<i>Gobius cobitis</i>
Otter – Eurasian	<i>Lutra lutra</i>	Goby – Couch's	<i>Gobius couchii</i>
Squirrel – Red	<i>Sciurus vulgaris</i>	Seahorse – Short-snouted ¹	<i>Hippocampus hippocampus</i>
Walrus	<i>Odobenus rosmarus</i>	Seahorse – Spiny	<i>Hippocampus guttulatus</i>
Water Vole	<i>Arvicola amphibius</i>	Sturgeon	<i>Acipenser sturio</i>
Whales – All Species	<i>Cetacea</i>	Vendace	<i>Coregonus albula</i>
Wildcat	<i>Felis sylvestris</i>	Whitefish	<i>Coregonus lavaretus</i>
Lizard – Sand	<i>Lacerta agilis</i>		
Animal (Vertebrate) Species Protected under Section 9 (1) part: Killing and Injuring & Section 9 (5) Sale			
Adder	<i>Vipera berus</i>	Slow-worm	<i>Anguis fragilis</i>
Lizard – Viviparous	<i>Zootoca vivipara</i>	Snake – Grass	<i>Natrix helvetica (natrix)</i>
Animals (Vertebrate) Species Protected under Section 9 (5) Sale only			
Frog – common	<i>Rana temporaria</i>	Newt – Smooth	<i>Lissotriton vulgaris</i>
Newt – Palmate	<i>Lissotriton helvetica</i>	Toad – Common	<i>Bufo bufo</i>
Animals (Vertebrate) Species Protected under Section 9 (1) (4)(a): Killing, Injuring & Taking and Damage / Destruction of place of shelter / protection only			
Allis Shad	<i>Alosa alosa</i>	Shark – Angel	<i>Squatina squatina</i>
Twaite Shad	<i>Alosa fallax</i>		
Butterflies & Moths – Full Protection under Schedule 52 at all times			
High brown fritillary	<i>Argynnis adippe</i>	Fisher's Estuarine Moth	<i>Gortyna borellii</i>
Large Blue	<i>Maculinea arion</i>	Barberry Carpet	<i>Pareulype berberata</i>

¹ Both sea horse species are protected in England only.

² Viper's Bugloss Moth *Hadena irregularis* was removed from Schedule 5 in 1996 as it is believed to be extinct.

Heath Fritillary	<i>Mellicta athalea</i>	Black-veined Moth	<i>Siona lineata</i>
Marsh Fritillary	<i>Eurodryas aurinia</i>	Sussex Emerald	<i>Thalera fimbrialis</i>
Swallowtail	<i>Papilio machaon britannicus</i>	Essex Emerald	<i>Thetidia smaragdaria</i>
Large Copper	<i>Lycaena dispar</i>	Fiery Clearwing	<i>Bembecia chrysidiformis</i>
Reddish-buff Moth	<i>Acosmetia caliginosa</i>	New-Forest Burnet	<i>Zygaena viciae</i>
Butterflies – Protected under Section 9 (5) Sale Only			
Purple Emperor	<i>Apatura iris</i>	Adonis Blue	<i>Lysandra bellargus</i>
Northern Brown Argus	<i>Aricia artaxerxes</i>	Chalkhill Blue	<i>Lysandra condon</i>
Pearl-bordered Fritillary	<i>Boloria euphrosyne</i>	Glanville Fritillary	<i>Melitaea cinxia</i>
Chequered Skipper	<i>Carterocephalus palaemon</i>	Large Tortoiseshell	<i>Nymphalis polychloros</i>
Large Heath	<i>Coenonympha tullia</i>	Silver-studded Blue	<i>Plebejus argus</i>
Small Blue	<i>Cupido minimus</i>	Black Hairstreak	<i>Strymonidia pruni</i>
Mountain Ringlet	<i>Erebia epiphron</i>	White-letter Hairstreak	<i>Strymonidia w-album</i>
Duke of Burgundy	<i>Hamearis lucina</i>	Brown Hairstreak	<i>Thecla betulae</i>
Silver-spotted Skipper	<i>Hesperia comma</i>	Lulworth Skipper	<i>Thymelicus acteon</i>
Wood White	<i>Leptidea sinapis</i>		
Other Invertebrates – Full Protection under Schedule 5 at all times			
Rainbow Leaf-beetle	<i>Chrysolina cerealis</i>	Tadpole Shrimp	<i>Triops cancriformis</i>
Spangled Diving-beetle	<i>Graphopterus zonatus</i>	Trembling Sea-mat	<i>Victorella pavidia</i>
Lesser Silver Water-beetle	<i>Hydrochara caraboides</i>	De Folin's Lagoon Snail	<i>Caecum armoricum</i>
Moccas Beetle	<i>Hypebaeus flavipes</i>	Sandbowl Snail	<i>Catinella arenaria</i>
Violet Click-beetle	<i>Limoniscus violaceus</i>	Freshwater Pearl Mussel	<i>Margaritifera margaritifera</i>
Bembridge Beetle	<i>Parcymus aeneus</i>	Glutinous Snail	<i>Myxas glutinosa</i>
New Forest Cicada	<i>Cicadetta montana</i>	Lagoon Snail	<i>Paludinella littorina</i>
Wart-Biter	<i>Decticus verrucivorus</i>	Lagoon Sea Slug	<i>Tenellia adspersa</i>
Mole-Cricket	<i>Gryllotalpa gryllotalpa</i>	Northern Hatchet-shell	<i>Thyasira gouldi</i>
Field-Cricket	<i>Gryllus campestris</i>	Tentacled Lagoon-worm	<i>Alkmaria romijni</i>
Norfolk Hawker Dragonfly	<i>Aeshna isosceles</i>	Lagoon Sand-worm	<i>Armandia cirrhosa</i>
Southern Damselfly	<i>Coenagrion mercuriale</i>	Medicinal Leech	<i>Hirudo medicinalis</i>
Fen Raft Spider	<i>Dolomedes fimbriatus</i>	Marine Hydroid	<i>Clavopsella navis</i>
Ladybird Spider	<i>Eresus niger (cinaberinus)</i>	Ivell's Sea Anemone	<i>Edwardsia ivelli</i>
Fairy Shrimp	<i>Chirocephalus diaphanus</i>	Starlet Sea Anemone	<i>Nematosella vectensis</i>
Lagoon Sand Shrimp	<i>Gammarus insensibilis</i>	Atlantic Stream (White-clawed) Crayfish	<i>Austropotamobius pallipes</i>
Other Invertebrates Protected under Section 9 (1) Possession & 9 (2) (5) Sale only			
Stag Beetle	<i>Lucanus cervus</i>	Roman Snail ³	<i>Helix pomatia</i>
Fan Mussel	<i>Atrina fragilis</i>	Pink Sea-fan	<i>Eunicella verrucosa</i>
Other Invertebrates Protected under Section 9 (4) (a) Damage / Destruction of Place of Shelter / Protection only			
Mire Pill Beetle	<i>Curimopsis nigrita</i>		
Vascular Plant Species - Full Protection under Schedule 8 at all times (previous Scientific name in brackets)			
Adder's-tongue Least	<i>Ophioglossum lusitanicum</i>	Lily – Snowdon	<i>Gagea serotina (Lloydia serotina)</i>
Alison- Small	<i>Alyssum alyssoides</i>	Marsh-mallow – Rough	<i>Malva setigera (Althaea hirsuta)</i>

³ England only

Broomrape – Bedstraw	<i>Orobanche caryophyllacea</i>	Milk-parsley – Cambridge	<i>Selinum carvifolia</i>
Broomrape – Oxtongue	<i>Orobanche picridis</i>	Mudwort – Welsh	<i>Limosella aquatica</i>
Broomrape – Thistle	<i>Orobanche reticulata</i> ⁴	Naiad – Holly-leaved	<i>Najas marina</i>
Cabbage – Lundy	<i>Coincya wrightii</i> (<i>Rhynchosinapis wrightii</i>)	Orache – Stalked	<i>Atriplex pedunculata</i> (<i>Halimione pedunculata</i>)
Calamint – Wood	<i>Clinopodium menthifolium</i> (<i>Calamintha sylvatica</i>)	Orchid – Early Spider	<i>Ophrys sphegodes</i>
Catchfly – Alpine	<i>Silene suecica</i> (<i>Lychnis alpina</i>)	Orchid – Ghost	<i>Epipogium aphyllum</i>
Centaury – Slender	<i>Centaurium tenuiflorum</i>	Orchid – Lapland Marsh	<i>Dactylorhiza lapponica</i>
Cinquefoil – Rock	<i>Potentilla rupestris</i>	Orchid – Late Spider	<i>Ophrys fuciflora</i>
Clary – Meadow	<i>Salvia pratensis</i>	Orchid – Lizard	<i>Himantoglossum hircinum</i>
Club-rush – Triangular	<i>Schoenoplectus triqueter</i> (<i>Scirpus triqueter</i>)	Orchid – Military	<i>Orchis militaris</i>
Colt's-foot – Purple	<i>Homogyne alpina</i>	Orchid – Monkey	<i>Orchis simia</i>
Cotoneaster – Wild	<i>Cotoneaster cambricus</i> (<i>C. integerrimus</i>)	Pear – Plymouth	<i>Pyrus cordata</i>
Cotton-grass – Slender	<i>Eriophorum gracile</i>	Pennycress – Perfoliate	<i>Microthlaspi perfoliatum</i> (<i>Thlaspi perfoliatum</i>)
Cow-wheat – Field	<i>Melampyrum arvense</i>	Pennyroyal	<i>Mentha pulegium</i>
Crocus – Sand	<i>Romulus columnae</i>	Pigmyweed	<i>Crassula aquatica</i>
Cudweed – Broad-leaved	<i>Filago pyramidata</i>	Pine - Ground	<i>Ajuga chamaepitys</i>
Cudweed – Jersey	<i>Gnaphalium luteoalbum</i>	Pink – Cheddar	<i>Dianthus gratianopolitanus</i>
Cudweed – Red-tipped	<i>Filago lutescens</i>	Pink – Childing	<i>Petrorhagia nanteuillii</i>
Cut-grass	<i>Leersia oryzoides</i>	Ragwort – Fen	<i>Jacobaea paludosa</i> (<i>Senecio paludosa</i>)
Deptford Pink	<i>Dianthus armeria</i>	Ramping-fumitory – Martin's	<i>Fumaria reuteri</i> (<i>F. martinii</i>)
Diapensia	<i>Diapensia lapponica</i>	Rampion – Spiked	<i>Phyteuma spicata</i>
Eryngo – Field	<i>Eryngium campestre</i>	Restharrow – Small	<i>Ononis reclinata</i>
Fern – Dickie's-bladder	<i>Cystopteris dickieana</i>	Rock-cress – Alpine	<i>Arabis alpina</i>
Fleabane – Alpine	<i>Erigeron borealis</i>	Rock-cress – Bristol	<i>Arabis scabra</i>
Fleabane – Small	<i>Pulicaria vulgaris</i>	Sandwort – Norwegian	<i>Arenaria norvegica</i> ⁵
Galingale – Brown	<i>Cyperus fuscus</i>	Sandwort – Teesdale	<i>Minuartia stricta</i>
Gentian – Alpine	<i>Gentiana nivalis</i>	Saxifrage – Drooping	<i>Saxifraga cernua</i>
Gentian - Dune	<i>Gentianella amarella</i> subsp. <i>occidentalis</i> (<i>Gentianella uliginosa</i>)	Saxifrage – Tufted	<i>Saxifraga cespitosa</i>
Gentian – Fringed	<i>Gentianopsis ciliata</i> (<i>Gentianella ciliata</i>)	Solomon's-seal – Whorled	<i>Polygonatum verticillatum</i>
Gentian - Spring	<i>Gentiana verna</i>	Sow-thistle – Alpine	<i>Cicerbita alpina</i>
Germander – Cut-leaved	<i>Teucrium botrys</i>	Spearwort – Adder's-tongue	<i>Ranunculus ophioglossifolius</i>
Germander – Water	<i>Teucrium scordium</i>	Speedwell – Fingered	<i>Veronica triphyllos</i>
Gladiolus – Wild	<i>Gladiolus illyricus</i>	Speedwell – Spiked	<i>Veronica spicata</i> ⁶
Goosefoot – Stinking	<i>Chenopodium vulvaria</i>	Spike-rush – Dwarf	<i>Eleocharis parvula</i>

⁴ The Weeds Act 1959 does not apply to thistles *Cirsium* & *Carduus* species supporting this broomrape.

⁵ All subspecies occurring in the UK

⁶ Both subspecies: *spicata* & *hybrida*

Grass-poly	<i>Lythrum hyssopifolia</i>	South-stack Fleawort	<i>Tephrosia integrifolia</i> <i>ssp. maritima</i>
Hare's-ear – Sick-leaved	<i>Bupleurum falcatum</i>	Star-of-Bethlehem – Early	<i>Gagea bohemica</i>
Hare's-ear – Small	<i>Bupleurum baldense</i>	Starfruit	<i>Damasonium alisma</i>
Hawk's-beard – Stinking	<i>Crepis foetida</i>	Strapwort	<i>Corrigiola littoralis</i>
Hawkweed – Northroe	<i>Hieracium northroense</i>	Violet – Fen	<i>Viola persicifolia</i>
Hawkweed – Shetland	<i>Hieracium zetlandicum</i>	Viper's-grass	<i>Scorzonera humilis</i>
Hawkweed – Weak-leaved	<i>Hieracium attenuatifolium</i>	Water-plantain – Ribbon-leaved	<i>Alisma gramineum</i>
Heath – Blue	<i>Phyllodoce caerulea</i>	Wood-sedge – Starved	<i>Carex depauperata</i>
Helleborine – Red	<i>Cephalanthera rubra</i>	Woodsia – Alpine	<i>Woodsia alpina</i>
Horsetail – Branched	<i>Equisetum ramosissimum</i>	Woodsia – Oblong	<i>Woodsia ilvensis</i>
Hound's-tongue – Green	<i>Cynoglossum germanicum</i>	Wormwood – Field	<i>Artemisia campestris</i>
Knawel – Perennial	<i>Scleranthus perennis</i> ⁷	Woundwort - Downy	<i>Stachys germanica</i>
Knot-grass – Sea	<i>Polygonum maritimum</i>	Woundwort – Limestone	<i>Stachys alpina</i>
Leek – Round-headed	<i>Allium sphaerocephalon</i>	Yellow-rattle – Greater	<i>Rhinanthus angustifolius</i>
Lettuce – Least	<i>Lactuca saligna</i>		
Vascular Plant Species – Partial Protection under Section 13 (2) Protection from commercial exploitation and sale			
Bluebell	<i>Hyacinthoides non-scripta</i>		
Bryophytes – Full Protection under Schedule 8 at all times			
Anamodon – Long-leaved	<i>Anomodon langifolius</i>	Flamingo Moss	<i>Desmatodon cernuus</i>
Blackwort	<i>Southbya nigrella</i>	Frostwort	<i>Gymnomitrium apiculatum</i>
Crystalwort – Lizard	<i>Riccia bifurca</i>	Glaucous Beard Moss	<i>Barbula glauca</i>
Earwort – Marsh	<i>Jamesoniella undulifolia</i>	Green Shield Moss	<i>Buxbaumia viridis</i>
Feathermoss – Polar	<i>Hygrohypnum polare</i>	Hair Silk Moss	<i>Plagiothecium piliferum</i>
Flapwort – Norfolk	<i>Leiocolea rutheana</i>	Knothole Moss	<i>Zygodon forsteri</i>
Grimmia – Blunt-leaved	<i>Grimmia unicolor</i>	Large Yellow Feather Moss	<i>Scorpidium turgescens</i>
Petalwort	<i>Petalophyllum ralfsii</i>	Millimetre Moss	<i>Micromitrium tenerum</i>
Lindenberg's Leafy-Liverwort	<i>Adelanthus lindenbergianus</i>	Multi-fruited River Moss	<i>Cryphaea lamyana</i>
Feather-moss Slender Green	<i>Drepanocladus vernicosus</i>	Nowell's Limestone Moss	<i>Zygodon gracilis</i>
Alpine Copper-Moss	<i>Mielichhoferia melichhoferia</i>	Rigid Apple Moss	<i>Bartramia stricta</i>
Baltic Bog-Moss	<i>Sphagnum balticum</i>	Round-leaved feather Moss	<i>Rhynchostegium rotundifolium</i>
Blue Dew-Moss	<i>Saelania glaucescens</i>	Schleicher's Thread Moss	<i>Bryum schleicheri</i>
Blunt-leaved bristle-Moss	<i>Orthotrichum obtusifolium</i>	Triangular Pygmy Moss	<i>Acaulon triquetrum</i>
Bright-Green Cave-Moss	<i>Cyclodictyon laetevirens</i>	Turpswort	<i>Geocalyx graveolens</i>
Cordate Beard Moss	<i>Barbula cordata</i>	Vaucher's Feather Moss	<i>Hypnum vaucheri</i>
Cornish Path Moss	<i>Ditrichum cornubicum</i>	Western Rustwort	<i>Marsupella profunda</i>
Derbyshire Feather Moss	<i>Thamnobryum angustifolium</i>		

⁷ Includes both subspecies: *perennis* & *prostratus*

Stoneworts – Full Protection under Schedule 8 at all times			
Bearded Stonewort	<i>Chara canescens</i>	Foxtail Stonewort	<i>Lamprothamnium papulosum</i>
Lichens – Full Protection under Schedule 8 at all times			
New Forest Beech Lichen	<i>Enterographa elaborata</i>	Forked Hair Lichen	<i>Bryoria furcellata</i>
Snow Caloplaca	<i>Caloplaca nivalis</i>	Golden Hair Lichen	<i>Teloschistes flavicans</i>
Tree Catapyrenium	<i>Catapyrenium psoromoides</i>	Orange-fruited Elm Lichen	<i>Caloplaca luteoalba</i>
Laurer's Catillaria	<i>Catillaria lauri</i>	River Jelly Lichen	<i>Collema dichotomum</i>
Convolut Cladonia	<i>Cladonia convoluta</i>	Starry Breck Lichen	<i>Buellia asterella</i>
Upright Mountain Cladonia	<i>Cladonia stricta</i>	Caledonia Pannaria	<i>Pannaria ignobilis</i>
Goblin Lights	<i>Catolechia wahlenbergii</i>	New Forest Parmelia	<i>Parmelia minarum</i>
Elm Gyalecta	<i>Gyalecta ulmi</i>	Oil Stain Parmentaria	<i>Parmentaria chilensis</i>
Tarn Lecanora	<i>Lecanora archariana</i>	Southern Grey Physcia	<i>Physcia tribacioides</i>
Copper Lecidea	<i>Lecidea inops</i>	Ragged Pseudo-cyphellaria	<i>Pseudocyphellaria lacerata</i>
Arctic Kidney Lichen	<i>Nephroma arcticum</i>	Rusty Alpine Psora	<i>Psora rubiformis</i>
Ciliate Strap Lichen	<i>Heterodermia leucomelos</i>	Rock Nail	<i>Calicium corynellum</i>
Coralloid Rosette Lichen	<i>Heterodermia propagulifera</i>	Serpentine Selanopsora	<i>Selanopsora liparina</i>
Ear-lobed Dog Lichen	<i>Peltigera lepidophora</i>	Sulphur Tresses	<i>Alectoria ochroleuca</i>
Lichens – Partial Protection under Section 13 (2) Commercial Exploitation and Sale Only			
Tree Lungwort	<i>Lobaria pulmonaria</i>		
Fungi – Full Protection under Schedule 8 at all times			
Royal Bolete	<i>Boletus regius</i>	Oak Polypore	<i>Buglossosporus pulvinus</i>
Hedgehog Fungus	<i>Hericium erinaceum</i>	Sandy Stilt Ball	<i>Battaria phalloides</i>
Invasive plant species listed in Schedule 9			
Australian swamp stonecrop or New Zealand pygmyweed	<i>Crassula helmsii</i>	Japanese rose	<i>Rosa rugosa</i>
Californian red seaweed	<i>Pilea californica</i>	Japanese seaweed	<i>Sargassum muticum</i>
Curly waterweed	<i>Lagarosiphon major</i>	Laver seaweeds (except native species)	<i>Porphyra</i> spp
Duck potato	<i>Sagittaria latifolia</i>	Parrot's-feather	<i>Myriophyllum aquaticum</i>
Entire-leaved cotoneaster	<i>Cotoneaster integrifolius</i>	Perfoliate alexanders	<i>Smyrnium perfoliatum</i>
False Virginia creeper	<i>Parthenocissus inserta</i>	Pontic rhododendron	<i>Rhododendron ponticum</i>
Fanwort or Carolina water-shield	<i>Cabomba caroliniana</i>	Purple dewplant	<i>Disphyma crassifolium</i>
Few-flowered garlic	<i>Allium paradoxum</i>	Red algae	<i>Grateloupia luxurians</i>
Floating pennywort	<i>Hydrocotyle ranunculoides</i>	Rhododendron	<i>Rhododendron ponticum</i> × <i>Rhododendron maximum</i>
Floating water primrose	<i>Ludwigia peploides</i>	Small-leaved cotoneaster	<i>Cotoneaster microphyllus</i>
Giant hogweed	<i>Heracleum mantegazzianum</i>	Three-cornered garlic	<i>Allium triquetrum</i>
Giant kelp	<i>Macrocystis</i> spp.	Variegated yellow archangel	<i>Lamiastrum galeobdolon</i> subsp. <i>argentatum</i>
Giant knotweed	<i>Fallopia sachalinensis</i>	Virginia creeper	<i>Parthenocissus quinquefolia</i>
Giant rhubarb	<i>Gunnera tinctoria</i>	Wakame	<i>Undaria pinnatifida</i>
Giant salvinia	<i>Salvinia molesta</i>	Wall cotoneaster	<i>Cotoneaster horizontalis</i>
Green seafingers	<i>Codium fragile</i>	Water fern	<i>Azolla filiculoides</i>



Himalayan cotoneaster	<i>Cotoneaster simonsii</i>	Water hyacinth	<i>Eichhornia crassipes</i>
Hollyberry cotoneaster	<i>Cotoneaster bullatus</i>	Water lettuce	<i>Pistia stratiotes</i>
Hooked asparagus seaweed	<i>Asparagopsis armata</i>	Water primrose	<i>Ludwigia grandiflora</i>
Hottentot fig	<i>Carpobrotus edulis</i>	Water primrose	<i>Ludwigia uruguayensis</i>
Hybrid knotweed	<i>Fallopia japonica</i> × <i>Fallopia sachalinensis</i>	Waterweeds	<i>Elodea</i> spp.
Indian (Himalayan) balsam	<i>Impatiens glandulifera</i>	Yellow azalea	<i>Rhododendron luteum</i>
Japanese knotweed	<i>Reynoutria japonica</i>		

Protection of Badgers Act 1992

The main legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992 (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: "any structure or place which displays signs indicating current use by a badger"

Natural Environment and Rural Communities Act 2006

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of Habitats and Species which are of Principal Importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 Habitats of Principal Importance and 1,150 Species of Principal Importance.

Hedgerow Regulations 1997

The Hedgerow Regulations were made under Section 97 of the Environment Act 1995 and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.



Birds of Conservation Concern

This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2015 (Eaton *et al*, 2015) and identified 67 red list species, 96 amber species, and 81 green species. The criteria are complex, but generally:

- **Red list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.
- **Amber list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK.
- **Green list** species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed

Global IUCN Red List

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

Local Biodiversity Action Plan (LBAP)

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities.

Some LBAP's may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision making process.

Wild Mammals (Protection) Act 1996

This Act offers protects a form of protection to all wild species of mammals, irrespective of other legislation, and focussed on animal welfare, rather than conservation.

Unless covered by one of the exceptions, a person is guilty of an offence if he mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering.

It's application is typically restricted to preventing deliberate harm to wildlife (in general) during construction works etc.



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