



Kingfisher Ecology Ltd

Ecological, Arboricultural and Sustainable Solutions

Preliminary Ground Level Roost Assessment,

Of

**Land to the South of Woodcroft Primary
School, Woodcroft Lane, Waterloooville,**

PO8 9PY

On behalf of:

Exbury Homes Ltd

February 2019

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Prepared by	Jordan Holmes MSc
Reviewed by	Adam Lewins BSc (Hons) Ecology MRSB AIFM GradCIEEM
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Kingfisher Ecology Ltd (company number: 10646936),
Office: Unit 2, The Business Centre, Morgans Vale, Redlynch, Wiltshire. SP5 2HA.
Email: info@kingfisherecology.co.uk Website: www.kingfisherecology.co.uk
Phone: 01725 513 999

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Summary

- Kingfisher Ecology Ltd has been commissioned by Exbury Homes Ltd. to conduct a Preliminary Ground Level Roost Assessment for the field south of Woodcroft Primary School, Woodcroft Lane, Waterloo, PO8 9PY, in accordance with *BS 42020:2013 Biodiversity code of practice for planning and development* and *BS 8596:2015 Surveying for bats in trees and woodland – guide*.
- Exbury Homes Ltd proposes a new residential development of up to 45 properties on the area of land south of Woodcroft Primary School, which would require the removal trees and canopy thinning.
- The site is the amenity grassland field south of Woodcroft School, bordered by an area of scattered mixed woodland to the north and west, and a residential suburban area to the east and south.
- All surveys were led by Adam Lewins. Adam holds a Natural England European Protected Species Licence for Bats - (Bat Class Level 2 Licence ref: 2016-25057-CLS-CLS).
- The purpose of the Preliminary Ground Level Roost Assessment is to assess the Potential Roost Features of the trees on the site as suitable habitat for bats.
- A walk-over survey was carried out on 20th January 2019 to assess the trees for PRF and evidence of bats roosting.
- The five trees with moderate PRF are G13 (2x *Quercus robur*), 1080, 1081, and 1085. All of the trees with moderate PRF will not be affected within the current proposed development and no further survey effort is recommended.
- If the proposed development plan changes from the time of writing this report and these trees are to be affected by any development works being carried out, they will be subject to two surveys: one dusk emergence survey and one dawn return to roost survey. In addition, a single arboreal PRF inspection will be carried out immediately prior to any tree works. All surveys will be undertaken in suitable weather conditions with no rain, low wind, and with temperatures above 10°C, between May and August
- Wildlife enhancements have been recommended as part of this assessment in line with the National Planning Policy Framework (NPPF) 2019.

1. Introduction and Site Description

Kingfisher Ecology Ltd has been commissioned by Exbury Homes Ltd to conduct a Preliminary Ground Level Roost Assessment and initial Potential Roost Feature (PRF) inspection of the trees in the field south of Woodcroft School, off Woodcroft Lane, Waterloooville, PO8 9PY, in accordance with *BS 42020:2013 Biodiversity code of practice for planning and development*. Planning Application Ref: APP/15/01235.

The survey was undertaken on the 20th January 2019. All surveys were undertaken by Adam Lewins BSc (Hons) Ecology MRSB AIFM GradCIEEM.

Weather conditions:

- Dry
- 0% cloud
- 3°C
- Beaufort scale: 2-3

Adam Lewins holds Natural England European Protected Species Licences for Bats and Great Crested Newts (GCN) - (Bat Class Level 2 Licence ref: 2016-25057-CLS-CLS and GCN Class Level 2 Licence ref: 2016-22742-CLS-CLS).

The purpose of the survey was to identify habitats present, to assess the ecological value of the survey area, and to identify the potential suitable habitats for protected species and to provide recommendations for further survey effort and mitigation if necessary.

Wildlife enhancements have been recommended as part of this assessment in line with the National Planning Policy Framework (NPPF) 2019.

1.1 Site location

The site is located at the field south of Woodcroft School, off Woodcroft Lane, Waterloo, PO8 9PY. Grid reference: SU 68625 12049. This land herein referred to in this report as 'the site' or 'application site' (see Fig. 1. for aerial maps).

Figure 1. Aerial views of site location





1.2 Site Description

The site is the amenity grassland field south of Woodcroft School, bordered by an area of scrub and mixed woodland to the north and west, and a band of trees and residential suburban area to the east and south.

Exbury Homes Ltd proposes a new residential development of up to 45 properties on the area of land south of Woodcroft Primary School, using an existing access route. This would require the removal of trees and canopy thinning to enhance visibility around access routes and create an emergency access to the southeast of the site (see Fig. 2).

2. Methodology

2.1 Desk study

The purpose of the desk study was to collect baseline ecological data. This includes any records of species from the site and surrounding area, which may not be present or detectable at the time of survey.

Previous ecological reports for the wider site development and comments from Hampshire County Council Ecologists was referenced from planning application ref APP/13/00804 and APP/15/01235, in order to gain baseline information on the surveys already undertaken for the site. The Planning Application Biodiversity Checklist for the site and the Grant of Outline Planning Permission from the application submitted on 29th October 2015 have been used in reference.

2.2. Preliminary Ground Level Roost Assessment field study

A preliminary ground level roost assessment of all trees on the site was undertaken on 30th January 2019 by licenced bat ecologist Adam Lewins (bat class level 2 licence ref: 2016 25057 CLS CLS) to find potential roosting features for bats with reference to: Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust. London. ISBN-13 978-1-872745-96-1; and Mitchell-Jones, A. J. McLeish, A. P. (2004) Bat Worker Manual (3rd edn). Joint Nature Conservation Committee.

Careful observation of the trees was done with the use of close focusing binoculars and a Clulite™ CB2 torch. A ladder enabling closer inspection of the lower Potential Roost Features was also used together with a Rigid micro CA-300 endoscope allowing full and thorough assessment of each feature accessible without climbing the tree or using a MEWP.

Each tree was assessed on whether it provides negligible, low, moderate or high potential roost features (PRF). Only trees that provide moderate or high PRF will require a further arboreal PRF inspection to check for the presence of roosting bats prior to felling (see Table 1 for survey guidelines).

Table 1. Table showing guidelines for assessing roosting habitats as well as commuting and foraging habitats

(Excerpt from Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).)

Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ¹ and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation ²). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential. ³	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ¹ and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ¹ and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

3. Survey Results

3.1 Desk Study

3.1.2 Features suitable for bats

The surrounding area is rural with good connectivity to fields and woodland. The trees on the site are likely to provide suitable habitat for birds and bats.

The trees onsite are protected under the planning application decision notice 15-01236 in that 'No development shall take place until all trees and hedgerows that are to be retained within or adjacent to the site have been enclosed with temporary protective fencing in accordance with BS:5837:2012 'Trees in relation to design, demolition and construction. Recommendations'. The fencing shall be retained throughout the period of construction and no activity prohibited by BS:5837:2012 shall take place within such protective fencing during the construction period.'

The presence of broadleaved woodland and/or veteran trees indicated in the Biodiversity Checklist may indicate a Priority Habitat, which is likely to offer habitat for bats and a corridor to the wider landscape.

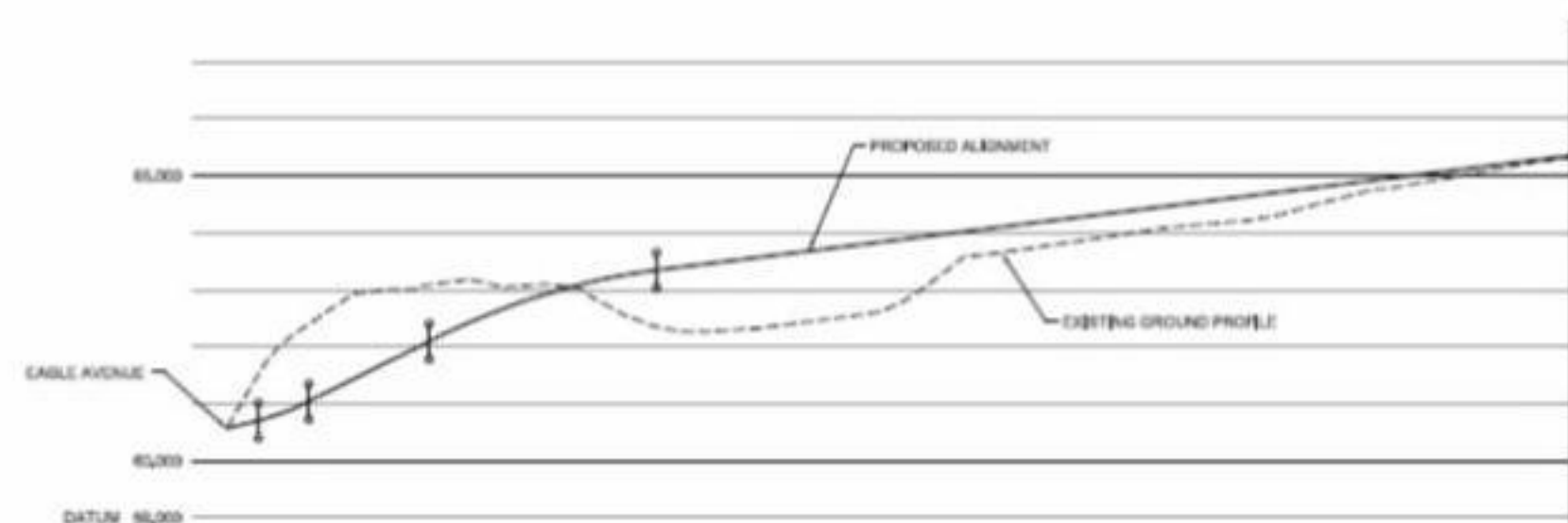
The current buildings were also identified in the Biodiversity Checklist as offering one or more features which may provide roosting opportunities for bats.

3.2. Field study for Preliminary Ground Level Roost Assessment

Figure 3. Arboricultural report detailing the trees present onsite which have been assessed for the current works. (Maps taken from AIA report ref D1859AIA Alderwood Consulting Ltd)







CHAINAGE	0+00	0+10	0+20	0+30	0+40	0+50	0+60	0+70	0+80	0+90	1+00	1+10	1+20	1+30	1+40	1+50	1+60	1+70	1+80	1+90	2+00
EXISTING GROUND LEVEL	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87
ALIGNMENT LEVEL	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87	82.87
VERTICAL ALIGNMENT																					
HORIZONTAL ALIGNMENT																					

LONGITUDINAL PROFILE - EMERGENCY ACCESS
SCALE 1:500

 	
Plan AC3	
Draft Tree Protection Plan for Arboreal/Cultural Impact Assessment - Arboreal/Cultural Method Statement	
Proposed developments at land adj. Woodcroft Primary School, Watersideville	Report Ref: D1659A1A
Emergency access	
Location of trees with tree schedule numbering indicating location of 30 TAP/2012 section 42 tree protection fencing	
Key	
	Location of trees / tree groups
	
	Location of emergency landing and proposed access
The original of this drawing was produced in colour. A main colour copy should also be relied upon.	
arboricultural consulting ltd, Eagle Works, Chesham Road, Northampton, NN4 6JH Tel: 01603 625410 Fax: 01603 625411 Email: info@arboricultural.co.uk Web: www.arboricultural.co.uk	

Table 2. Table providing the assessment results of each tree surveyed onsite at the field south of Woodcroft Primary School.

Tree number	Species	Potential Roost Features (PRF's)	PRF inspection undertaken?	Evidence of roosting bats?
1080	<i>Quercus robur</i>	Moderate	No	No
1081	<i>Quercus robur</i>	Moderate	No	No
1085	<i>Quercus robur</i>	Moderate	No	No
G13	<i>Quercus robur</i>	Moderate	No	No
G13	<i>Quercus robur</i>	Moderate	No	No

Figure 4. Map showing tree location including Target Notes (TN)



Table 3. Table to provide a description and supporting image for the Target Notes on the Phase 1 habitat map.

Target Note	Description	Supporting image
TN1	Two trees within G13 (here labelled as G13 and G13) exhibit moderate PRF in rot holes.	
TN2	The third tree from the west point of G13 (labelled here as G13). A lateral hazard beam at 9m elevation on the north west side has moderate bat roost potential.	
TN3	The fourth tree from the east in G13 (labelled here as G13). At 12m elevation there is a lateral tear-out with moderate bat roost potential.	
TN4	Canker in 1085 creating a small PRF with moderate bat roost potential.	

TN5	Image taken from the south towards 1082, 1083, 1084 and 1085. The trees are in good condition with negligible PRF with the exception of 1085 (right) which has a canker with moderate PRF.		
TN6	1081. Thick ivy provides PRF with moderate bat roost potential.		
TN7	1080 <i>Quercus robur</i> . Thick ivy providing a PRF with moderate bat roost potential.		
TN7	1080 <i>Quercus robur</i> . Thick ivy providing a PRF with moderate bat roost potential.		

4. Evaluation and Recommendations

The following conclusions are based upon the current survey findings and represent a snapshot of the site at the time of survey. Bats are highly mobile and may potentially move into a location and form a roost overnight. An updated survey of the site may be necessary if the site is not developed within the next 12 months.

Five of the trees surveyed on the site were found to have moderate potential roost features (PRF) and therefore may provide habitat for bats. Two trees were deemed to have low PRF. All other trees onsite have negligible PRF.

The five trees with moderate PRF are G13 2x *Quercus robur*, 1080, 1081, and 1085. All of the trees with moderate PRF will not be affecting within the current proposed development and no further survey effort is recommended.

If the proposed development plan changes from the time of writing this report and these trees are to be affected by any development works being carried out, they will be subject to two surveys: one dusk emergence survey and one dawn return to roost survey. In addition, a single arboreal PRF inspection will be carried out immediately prior to any tree works. All surveys will be undertaken in suitable weather conditions with no rain, low wind, and with temperatures above 10°C, between May and August (see Table 4).

Two trees were found to have low PRF: 1094 and 1082. These, along with the trees with negligible PRF, require no further survey effort.

It is highly recommended that four bat boxes (two Schwegler 2FN and two Schwegler 1FF) are erected on trees within the curtilage of the site at 4-9m high, preferably facing in a southerly direction, and positioned away from artificial light.

Table 4. Survey effort required for each category of PRF for the trees present onsite.

Category	Survey effort required
Negligible	No further survey effort required
Low	No further survey effort required
Moderate	In line with current guidelines, two Phase 2 bat surveys are required. The Phase 2 bat surveys will consist of a single dusk emergence survey and a single dawn return to roost survey. Prior to any tree works commencing that could potentially affect the PRF identified, an Arboreal PRF inspection will be required to closely inspect the feature for the presence of bats. If bats are discovered at any stage of the Phase 2 surveys, then a European Protected Species Mitigation Licence (EPSML) will need to be applied for and granted prior to any works commencing that could potentially disturb the roost.
High	In line with current guidelines, three Phase 2 bat surveys are required. The Phase 2 bat surveys will consist of dusk emergence surveys and dawn return to roost surveys. Prior to any tree works commencing that could potentially affect the PRF identified, an Arboreal PRF inspection will be required to closely inspect the

feature for the presence of bats.

If bats are discovered at any stage of the Phase 2 surveys, then a European Protected Species Mitigation Licence (EPSML) will need to be applied for and granted prior to any works commencing that could potentially disturb the roost.

Open habitat enhancements

It is recommended that enhancements to the vegetation of the site after development could be made that will benefit local wildlife. Night scented plants may be incorporated into the landscaping to attract moths and other insects that will benefit species such as bats. Examples of night scented plants that could be incorporated into a planting scheme are as follows:

Climbers:

- Dog rose *Rosa canina*
- Common ivy *Hedera helix*
- Jasmine *Jasminum officinale*
- Blackberries and raspberries *Rubus spp.*
- Dwarf honeysuckle *Lonicera xylosteum*
- Common honeysuckle *Lonicera periclymenum*

Bedding plants:

- Nottingham catchfly *Silene nutans*
- Bladder campion *Silene vulgaris*
- Flowering tobacco *Nicotiana glauca*
- Common soapwort *Saponaria officinalis*
- Night scented stock *Matthiola longipetala*

Lighting

Artificial light influences bat behaviour. Light falling on bat roosts can delay bat emergence, which can considerably reduce foraging time, particularly just after dusk which is the peak foraging period. Illuminating bat roosts can also increase avian predation. Disturbance to roosts can have a detrimental effect to the future of a colony.

Continuous lighting repels certain bat species. Studies have shown that slower broad-winged species such as long-eared bats, barbastelle, greater and lesser horseshoe bats, and *Myotis spp.* tend to avoid artificial light.

However, bat species including noctule, serotines, pipistrelles and Leisler's can exploit artificial light sources such as street light due to the increased localised insect concentrations providing increased foraging potential.

It is understood that no lighting is to be installed as part of the proposed works. However, should lighting be required, it is strongly recommended to be directional with a narrow white beam which illuminates only the required areas on the ground. Light sources such as Light Emitting Diodes (LEDs) could be used as the light emitted is more directional with a white, narrow, instant

beam. Security lighting should be timed and activated by motion sensors in order to reduce light pollution.

Enhancements for Bats

The following material requirements illustrate enhancement features for bats which can be incorporated into a building:

- Integrated bat boxes provide an enclosed space for bats to roost and rest and can be more aesthetically subtle than hanging bat boxes.
- Free access bat brick allow bat to access a roof void that has been allocated as a bat roost.
- Use only traditional type 1F bitumen roof liner. Woven or long strand roof liners such as Tyvek™ must be avoided as bats can get tangled up in the fibres causing potential bat mortalities.
- Timber treated with products deemed safe to use on bat roosts must be used. Details of products can be found using Natural England Guidance Technical Information note TIN092 – Bat Roosts and Timber Treatment Products. The following figures illustrate some of the enhancements that can be incorporated into built structures and trees.

Table 5. Suggested types of bat roost enhancements and locations

Location	Supporting image 1	Supporting image 2
Building (Schwegler 1FQ Bat Roost)		
Building (Habibat bat box)		

Building (Schwegler 2FR Bat Tube)		
Building (Tudor hand-made bat tile)		
Building		
Tree (Schwegler 1FF Bat Box)		

Tree (Schwegler 2FN Special Woodland Bat Box)			
Tree (Schwegler 1FS Large Colony Bat Box)			

Outline mitigation strategy

If roosting bats are found to be present, the EPSML application will include a detailed Method Statement that sets out a mitigation strategy to ensure the proposed works on the properties will not be detrimental to the **Favourable Conservation Status (FCS)** of bats in their natural range.

The Method Statement should cover all development activities with the potential to affect the bat roosts and bat activity on site. It is recommended that the following elements are included or given consideration in the Method Statement:

- Alternative roosting opportunities during the works could be provided through the installation of bat boxes in suitable mature trees adjacent the properties.
- The works should be undertaken when bats are least likely to be present and at times of year when they are least vulnerable to harm and disturbance.
- All site workers should be given a Toolbox Talk prior to the works, to inform them of the presence of bat roosts, the protection afforded to bats and a suitable working approach.
- Prior to any works commencing, a roost check should be conducted by a licensed bat worker to catch any bats present and move them into one of the newly installed bat boxes.
- A licensed bat worker should supervise the soft-strip of the property until all suitable roosting features, including clay roof tiles lead flashing and bitumen roofing felt, have been removed

by hand. Any bats seen during the soft strip should be captured and placed into one of the bat boxes.

- No breathable roofing membranes should be used on the properties as bats can get tangled in this and die. Bitumen felt (also known as type 1F) should be used instead.
- All mature trees and hedges within the vicinity of the property should be retained to preserve existing foraging and commuting habitat.
- Any external lighting that is required should be located away from the garage and will point away from the newly created access points.
- To monitor bats' use of the replacement roosts and inform appropriate remedial action (if necessary), a physical check of the created roost features and bat boxes should be undertaken by a licensed bat worker in years one and three following the completion of the development.

5. Survey Limitations

The results and recommendations of this report are based on findings on the day of the survey and which do not take account of seasonal differences, or of any species which might choose to take up residence subsequently. The lack of signs of any particular species does not confirm its absence, merely that there was no indication of its presence during this survey.

Emergence and return to roost surveys have not been undertaken. As is recommended above, further survey effort will enable the robust assessment for the presence or likely absence of roosting bats within the trees with moderate or high PRF.

6. Legislation and Species Information

The Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 form the cornerstone for species and habitat protection in England and Wales.

All native bat species are fully protected under the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017.

Taken together, these instruments make it illegal to:

- Deliberately (or recklessly in Scotland) capture, injure or kill a bat.
- Deliberately (or recklessly in Scotland) disturb a bat in a way that would (significantly in Scotland) affect its ability to survive, breed or rear young (or hibernate or migrate in England, Wales and Northern Ireland) or (significantly in England, Wales and Scotland) affect the local distribution or abundance of the species.
- Damage or destroy a roost [this is an 'absolute' offence and need not be deliberate or intentional].

- Possess, control, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat.

All bat species and their roosts (whether occupied or not) are afforded strict legal protection. Any activities likely to result in damage or disturbance to bat roosts can only be undertaken under derogation from the Conservation Regulations. In England, this mechanism is administered by Natural England, who is able to issue European Protected Species Mitigation (EPSM) licences to allow activities impacting bats and their roosts. EPSM licences will only be granted under the proviso that mitigation is implemented that will minimise any impacts on the conservation status of the species.

The protection of animals listed on WACA Schedule 5 from intentional killing, injury and taking, possession and sale. Places used for shelter and protection are also protected against intentional disturbance, obstruction, damage and destruction. Species on Schedule 5 include:

- Bats (all species)
- Dormice
- Water Vole
- Great Crested Newt
- Otter
- All UK reptile species
- Common amphibians
- Certain invertebrates including Stag Beetle
- The protection of plants listed on Schedule 8

The Environmental Damage (Prevention and Remediation) Regulations 2009

These Regulations implement Directive 2004/35/EC of the European Parliament and of the Council on environmental liability regarding the prevention and remedying of environmental damage.

If you or your business carry out an activity that causes environmental damage you will have to remedy the damage. You will no longer have to be prosecuted first. If there is a risk of damage from your business activities, you must prevent such damage occurring.

Under the regulations, environmental damage is:

- damage to surface or underground water
- contamination of land where there is a significant risk to human health
- damage to natural habitats and species and protected sites.

The regulations apply to:

- private businesses
- farming

- manufacturing
- construction and demolition
- waste management
- forestry
- public sector – schools, hospitals and government departments or agencies
- individuals and voluntary organisations.

If you or your activities threaten to cause, or have caused, environmental damage you must:

- take steps to prevent the damage (or further damage) occurring
- inform the Environment Agency or other authorities who will tell you what you must do to repair the damage.

The Environment Agency, Natural England and local councils are responsible for administering and enforcing the regulations, depending on the type of damage involved. If the Environment Agency must repair the damage for you, you will have to pay the costs.

If you don't comply with the regulations, you can be prosecuted, fined and/or imprisoned.

The regulations provide that, for certain economic activities, where there is a imminent risk of environmental damage, the operator must take steps to prevent it, and if it has occurred must prevent further damage. Where damage has occurred the enforcing authority must assess the damage and identify remedial measures. It must then serve a remediation notice on the responsible operator specifying what remediation is required.

Breach of specified provisions of the Regulations is an offence punishable:

1. on summary conviction, with a fine not exceeding the statutory maximum or to imprisonment for a term not exceeding three months or both; or
2. on conviction on indictment, with a fine or to imprisonment for a term not exceeding two years or both.

Countryside & Rights of Way Act 2000

The CRoW Act strengthened parts of the Wildlife and Countryside Act to include the term 'reckless' when considering whether an offence is intentional. Thus, if it can be demonstrated that sufficient knowledge of the likelihood of an offence is known, then prosecution will follow.

Natural Environment & Rural Communities (NERC) Act 2006

The NERC Act firmly places a duty on Local Authorities to conserve biodiversity. The Act required the publication of a list of the living organisms and types of habitat which are of principal importance for the purpose of conserving biodiversity: the Section 41 List. The conservation of species on this list forms part of the duty of Local Authorities to conserve biodiversity. Species on the list include:

- All species of UK bat
- All species of UK reptile
- All species of UK amphibian
- Otter, dormice, water vole and hedgehog
- Birds including Skylark, Cirl Bunting and Yellowhammer
- Invertebrates including the butterflies Wall, Dingy Skipper and Brown Hairstreak.

National Planning Policy Framework (NPPF) February 2019

Chapter 15 - Conserving and enhancing the natural environment

Planning policies and decisions should contribute to and enhance the natural and local 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.

Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks

Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.

The scale and extent of development within these designated areas should be limited. Planning permission should be refused for major developments other than in exceptional circumstances,

and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of: a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy; b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph), planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.

Habitats and biodiversity

To protect and enhance biodiversity and geodiversity, plans should: a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

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.

The following should be given the same protection as habitats sites: a) potential Special Protection Areas and possible Special Areas of Conservation; b) listed or proposed Ramsar sites; and c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

The presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined.

Hedgerow Regulations 1997

Important hedgerows are protected from removal by the Hedgerow Regulations 1997. Criteria are used to identify whether a hedgerow is one of importance for ecological, historical or landscape reasons.

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