[redacted] | W www.woodsidetrees.co.uk

Ecological Report

Preliminary Ecological Appraisal

Land at:

Belle Vue, Level Mare Lane, Eastergate, W Sussex

Prepared by: Andrew Southcott
Date: 18th September 2024
Ref: AS/TH/0924PEA

Contents

1. INTRODUCTION

I am instructed to carry out a Preliminary Ecological Appraisal (PEA) of land at Belle Vue, Level Mare Lane, Eastergate; where residential development is proposed within the site. The survey was carried out by Andrew Southcott *BSc (Hons) ACIEEM* on 5th September 2024. The weather at the time of survey was changeable with an approximate temperature of 16°C. Andrew is a qualified and experienced ecologist with over 15 years experience of surveying and working with a wide range of protected species and habitats, and is an associate member of the Chartered Institute of Ecology and Environmental Management.

1.1 **Site Description:** The site is located at OS grid reference SU 94176 06408, measuring approximately 0.2ha as shown in Figure 1. The site is part of an existing residential curtilage, covering the rear garden with an access drive along the E side of the main house. The garden is predominantly of amenity lawn, partly uncut and partly mown to a short sward. There are several small outbuildings and trees in the garden, with larger ash trees along the W boundary. There are neighbouring gardens to the E & W, and to the S the garden adjoins a narrow strip of ruderal/scrub growth with paddock fields beyond. The boundary treatments are a mix of timber panels, picket and mesh/chain-link fencing.

Figure 1. Aerial view of site outlined in yellow (Google Earth 2024)

2. METHOD

2.1 **Data Search:** A desktop investigation of environmental information relating to this site was obtained via Google Earth, Magic and Sussex Biodiversity Records Centre (SBRC).

2.2 **Habitat Survey:** The site was surveyed based on extended Phase 1 survey methodology (Joint Nature Conservation Committee, 2010), as recommended by Natural England, whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which may, depending on impacts to them, require further survey.

2.3 **Species Survey:** General faunal activity, such as mammals or birds observed visually or by call during the course of the survey was recorded, as well as any signs from searches of features with the potential to act as refugia. Specific attention was also paid to the potential presence of any protected, rare or notable species, and included European Protected Species and local Biodiversity Action Plan species and habitats.

2.4 **Limitations:**

2.4.1 This survey provides a snapshot of the site at the time the survey was carried out, however features of ecological value can change. In line with CIEEM guidance, this report is valid for a period of 18 months from this date, and further survey evaluation is sometimes required to provide scientifically robust evidence of species presence/absence. Every effort has been made to provide a detailed survey, however the survey coverage can sometimes be limited by boundaries, dense vegetation and other features on site.

2.4.2 All species that occur in each habitat would not necessarily be detectable at any given time of year, since different species are apparent at different seasons. This survey took place on the cusp of the optimum period for Preliminary Ecological Appraisals (considered to be April to August inclusive), and given the limited range of habitats on site the timing was considered appropriate in this instance.

3. RESULTS

3.1 **Data Search:** A 2km SBRC search found that there are very few designated sites in proximity to this location; consisting of just a single statutory site designation (South Downs National Park) located c.900m N of this site. There were no international designations. There were four non-statutory sites (2no. Local Wildlife Sites (LWS) and 2no. Designated Road Verges (DRV)); the nearest of which was Fontwell Racecourse LWS c.350m NE).
The nearest priority habitats to this site are the mix of *traditional orchard* habitat (nearest c.200m south), *deciduous woodland* (nearest non-cleared c.500m N) and *lowland meadow* (nearest c.380m E). Other habitats within 2km include *wood-pasture & parkland* (nearest c.800m SW), *open water* (nearest pond c.470m NW), *chalk stream* (nearest c.550m SW) and *ancient woodland* (nearest c.1.2km NE). The following summary list of features was found in a search using data from SBRC and MAGIC, and Figure 2 provides a visual pattern of the closest of these habitats within a 1km radius as recorded on MAGIC.

- **National Park** – South Downs.
- **Priority Habitats** - Deciduous woodland; Ancient woodland; Lowland meadow & calcareous grassland; Traditional orchard; Wood-pasture & parkland; chalk stream.
- **DRV** - Brittens Lane; Cherry Tree Drive.
- **LWS's** – Fontwell Park Racecourse (Ar01); Slindon Bottom (Ar09).

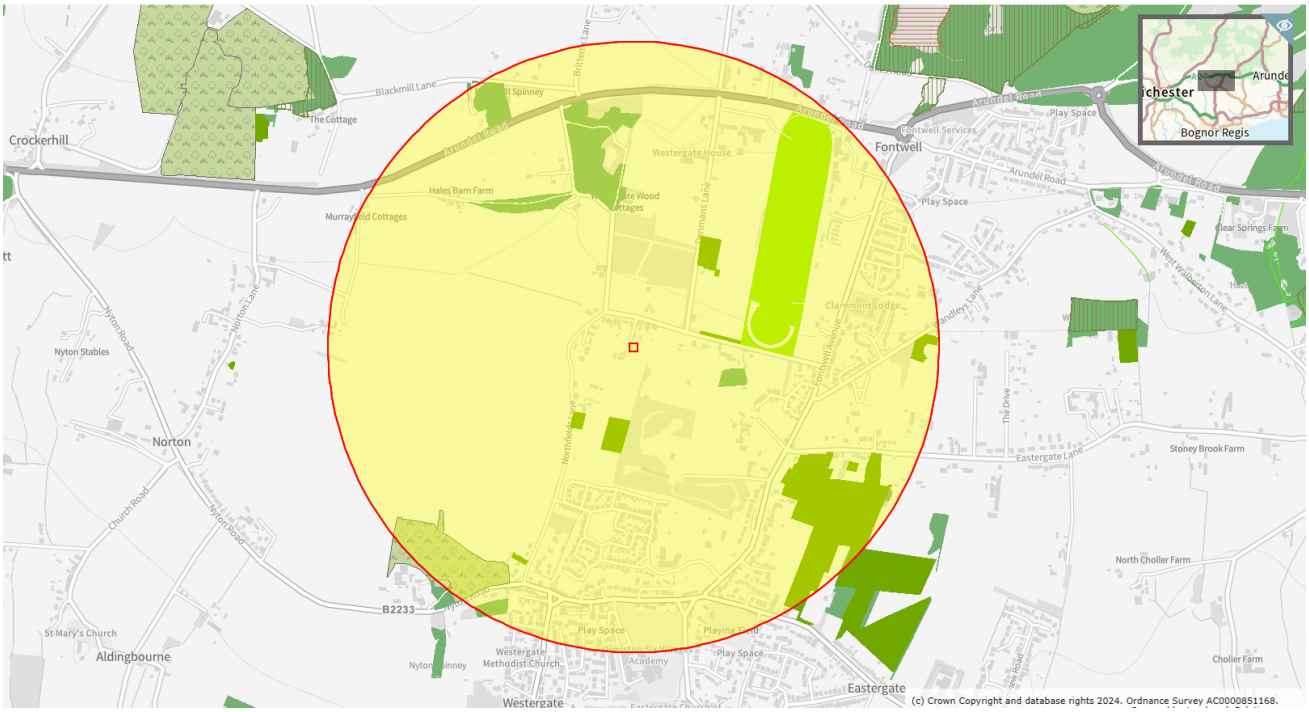

Figure 2. Priority habitats as recorded on MAGIC within 1km of site centre (the habitats are lowland meadow, deciduous woodland, traditional orchard and wood-pasture) Magic 2024

3.1.1 A data search for priority and protected species revealed records as summarised below (although supplied records excluded those for badger and otter).

- There are 53 records for four reptile species (slow worm, common lizard, adder and grass snake), with all being located >1km away and unconnected to this site. The nearest records were for slow worm and grass snake, approx. 1.3km away to the E.
- There are 7 records for great-crested newt (GCN), although the nearest was located c.1.1km away with no habitat connectivity.
- There are a number of records for other amphibians including toad, frog, palmate and smooth newts; however these are similarly distant as for reptiles and GCN.
- There are 39 hedgehog records, again with none in close proximity to this site and the nearest records being of deceased animals along the A29 at Fontwell.
- There are 3 records for water vole, with the nearest being c.1.4km S and having no watercourse connectivity near this site.
- There are 16 dormouse records, with the nearest being c.1.2km NE in ancient woodland at Slindon; again having no habitat connectivity with this site.
- There are a large number of bat records; for Barbastelle (39 records), Serotine (25), Bechstein's (2), Brandt's (2), Daubenton's (2), Whiskered (4), Natterer's (6), Noctule (17), Pipistrelle sp. (106), Brown long-eared (14). Of these, there are 16 records along Level Mare Lane for Barbastelle, Serotine, Noctule, Long-eared and Pipistrelle sp.

3.2 **Habitat Description:**

3.2.1 **Habitat types:**

The following habitat classifications were recorded across the site (with Phase 1 habitat codes in brackets), in order of approximate coverage:

- Amenity lawn (J1.2) – 0.14ha
- Buildings & surfacing (J3.6/J4) – 0.03ha
- Disturbed ground/ruderal (C3.1) – 0.02ha
- Scattered broadleaved trees (A3.1) - 0.01ha

3.2.1.1 Amenity grass:

This site is dominated by existing lawn garden which would be most affected by the proposed development. The N end of the lawn around the outbuildings and small trees is regularly maintained by mowing to a short sward c.5cm height; and includes dandelion, broadleaved & ribwort plantain, white clover, cat's-ear, cranesbill, burdock, daisy and creeping buttercup. A larger area of lawn to the S of the greenhouses appears to have been left uncut this year, resulting in a longer varied sward dominated by perennial ryegrass, cock's-foot and meadow grasses; with species including dock, thistle, ragwort, ribwort plantain, hogweed, nettle, bindweed and creeping buttercup. The edges of the lawn include encroachment of some nettle and low spreading *Vitis* plants. Figure 3 provides current views of this main habitat.

Figure 3. Views of site interior showing uncut lawn looking S along majority of garden (left), and close up of mown lawn with small garden trees and greenhouse at N end of rear garden (right)

3.2.1.2 Ruderal vegetation and scattered trees:

Along the S end of the garden was a strip of apparently historically disturbed ground, having a slightly raised profile with debris in the soil indicative of made-up ground, and which dropped lower to the rear wire mesh fence with adjacent off-site scrub growth to the S. This ground was heavily dominated by nettle growth to average 1.5m height, and also including bindweed, hogweed, dock, thistle, green alkanet, bristly oxtongue, bramble, *Vitis*, stone parsley, ground elder and ivy. Other materials have been dumped including some rubble and remains of bonfire debris. The nettle growth also extended narrowly alongside the W boundary due to an absence of recent lawn cutting. The W boundary was formed by a chain-link fence with ivy growth and conifer foliage from an

off-site hedge growing through it, whilst the E boundary was a low picket fence with occasional clump of *Vitis* growth in the uncut lawn.

Within the rear ruderal strip were several fruit trees (apple and pear), and along the W boundary were a number of larger ash trees just within the site. The N end of the rear lawn included a number of very small garden trees, predominantly fig as well as olive and mulberry. The proposed scheme would require removal of 6 small trees at the N end of the lawn, but all other trees would be retained. Figure 4 provides views of the main ruderal growth and scattered tree cover.

Figure 4. Views of ruderal vegetation at S end of garden with small scattered trees (left), and alongside W boundary with larger trees and encroaching ruderal growth into uncut lawn (right)

3.2.1.3 Buildings and surfacing:

The only built/sealed surfaces were the current access drive and parking/turning area nearest the main house, consisting of compacted gravel along its length; and several small outbuildings in the rear garden. The largest of these was a timber summer house which would be retained but relocated to replace several corrugated metal storage sheds in the retained garden area. The summer house had a flat corrugated metal sheet roof, with ply soffits and overlapping timber clad elevations. The only other outbuildings were two small greenhouses, both of which had missing glass panels and would be removed for the scheme. Figure 5 provides views of these built features.

Figure 5. Views of greenhouses and metal store to be removed (left), and gravel drive with summer house beyond which will be retained and relocated (right)

3.3 **Species Assessment:**

During the course of the survey general faunal activity was noted. A single bird species was seen – woodpigeon. There was also limited evidence of mammal activity as discussed below.

3.3.1 **Bats:**

The only buildings to be affected by the proposed scheme are removal of two small garden greenhouses and a corrugated metal store; with an existing timber summer house being retained and relocated. The buildings to be removed were inspected and signs of bats were searched for, both internally and externally. This included searching for feeding remains, droppings, smell, corpses, staining and scratch marks; however no positive indicators of bat use were encountered. The greenhouses and store lacked any internal roof voids, linings or other features of value to roosting bats. The summer house was inspected externally although this was of good condition with flat sheet material roofing and no internal roof void. Its appearance and construction did not offer any roosting potential and in any case it would be retained by relocating a few metres to the W. Overall, the built environment offered no bat roosting potential.

Of the trees on site, all were inspected for signs of bat roost potential, such as cavities, loose bark, large deadwood and dense ivy growth. All larger trees along the W boundary would however be retained, and no such features of roosting potential were found. The small garden trees that would be removed lacked size, maturity and any such features that could be of value to roosting bats. Therefore overall the tree cover on site offered no bat roosting potential.

In terms of foraging and commuting potential, the site was of limited value due to the dominance of species-poor amenity grassland within the site, and absence of connected or native hedgerows. Notwithstanding this, the W boundary includes a linear tree line and the rear boundary extends E-W with adjacent scrub and trees, offering some linear landscape features that could be used by commuting bat species; particularly as a number of species are recorded in the immediate area. As such, it is possible that locally occurring species may be present foraging/commuting along the W & S boundaries of this site as part of their wider habitat. None of this boundary habitat would be directly affected by the proposal, which is limited to the grassland interior nearer the main house; however recommendations are made below to mitigate any indirect impacts.

[redacted]

link with badgers. Overall the scheme will not impact on the legal protection of badgers as there will be no impact to any sett, and the scheme will also retain an open rear boundary as well as internal grassland/garden space. Therefore it is concluded that the development will have no adverse impacts on any wider badger population, although recommendations are made to prevent new barriers to mammal movements as a result of the development.

3.3.3 **Nesting birds:**

The site lacks good structural cover of high value to nesting birds, with only very small internal trees and overhanging branches from larger boundary trees. It is therefore unlikely that the site is of high value to nesting birds, however it is possible that such nesting could occur within the unmanaged ruderal/tree cover at the S end of the site, and possibly within/around the corrugated metal store to be removed. As such, where removal of this structure occurs, or where any clearance of structural vegetation is required as part of the scheme; it should either be avoided or supervised by a qualified ecologist during the bird nesting season (1st March - 31st August inclusive). Other recommendations for enhancements are made below.

3.3.4 **Reptiles:**

There were a large number of reptile records returned as part of the data search, however all were located well away from this site with no intervening habitat connectivity. The garden is predominantly of amenity lawn and although much of this is currently uncut, the site does not appear to have a longer term suitability for supporting a reptile population. There is also a lack of structural cover, with no hedgerows or significant scrub around the boundaries. There were several areas of materials including bricks, plastic sheeting and fabric sheets; located in the NW corner and along the S ruderal strip. These were all searched for evidence of reptiles, including lifting and inspecting beneath scattered materials that could act as potential refugia; however no reptiles or evidence of such was found at this time.

The proposed development would be limited to the main internal lawn areas and only very small areas of boundary ruderal/materials clearance, with the rear boundary area being retained for ecological enhancement. Therefore overall, given the lack of nearby records, absence of reptile evidence or suitable connected habitat, it is concluded that this site is of low potential for supporting reptiles. Recommendations are made below for precautionary site clearance and habitat enhancement to mitigate the loss of internal garden space.

3.3.5 **Great crested newts (*Triturus cristatus*):**

There are 7 records for GCN, however all of these are located over 1km away with no habitat connectivity to this site. Furthermore, the site lacks any aquatic habitat to support this species, and the nearest recorded ponds are over 450m away. For these reasons it is considered that GCN will not be impacted by proposals for this site.

3.3.6 **Dormice (*Muscardinus avellanarius*):**

There are 16 records for this species, although again these are all located over 1km away, within woodland that has no connectivity to this site. This site also lacked any

suitable dormouse habitat such as native hedgerows or dense scrub with wider connectivity. As only garden lawn and small scattered garden trees would be affected by the scheme, it is concluded that dormice will not be a relevant constraint.

3.3.7 **Invertebrates:**

Local invertebrate records are limited, and this site is dominated by species-poor amenity grass. The rear area being left uncut has provided more structural variation and flowering opportunities in the short term, however overall the value of this site to pollinators is limited. Overall, it is concluded that the site is of low value to invertebrates; in particular UK and/or local BAP priority species. This proposal would not result in loss of any high value habitat, although recommendations are made to enhance its diversity for invertebrates within a future scheme.

3.3.8 **Other species:**

Hedgehogs and water vole are recorded locally, although not in close proximity to the site. The site lacks any suitability for water vole, but as part of a wider area of residential gardens it does afford potential for supporting hedgehogs as they commute and forage between gardens. As the scheme would impact upon grassland that could be used by hedgehogs, recommendations are made to mitigate these impacts and to enhance the site overall for hedgehogs.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 **Site Evaluation:** This site consists of an established residential garden, dominated by low value amenity lawn with small areas of ruderal growth and scattered tree cover. There was limited evidence of larger mammal movements (commuting), but no setts were present. The proposed scheme will have a low ecological impact overall as it only affects garden lawn and several small trees. It retains open grassland, all larger trees and rough vegetation to the rear, which could be enhanced with new landscaping as part of the scheme. No further surveys are required, but recommendations are made below to avoid potential impacts and enhance the site overall as part of the proposed development.

4.2 **Recommendations:**

Where the potential presence of any protected species within a site may be impacted by a development there are legal obligations to consider, as summarised in Appendix 3. In supporting this primary consideration, the National Planning Policy Framework (NPPF) requires developments to maximise opportunities for biodiversity by mitigating impacts and building in enhancement; thereby making a positive contribution towards broad objectives of national and local Biodiversity Action Plans (BAPs). In line with the legal and policy guidelines, the following site-specific recommendations are made:

- A development must take care to minimise potential impacts to the value of the retained tree cover for foraging/commuting bats. New exterior lighting should be minimised; avoiding any wider illumination of larger trees and the retained/enhanced habitat at the S end of the site. The proposal does provide the opportunity to incorporate ecological enhancements including bat boxes on larger trees, and landscaping to benefit bats such as flowering shrubs and native hedging.

- Given the presence of paths indicating the movement of mammals through the site, the proposed development should avoid the introduction of any new barriers to movement. New or replacement garden/site boundaries should be designed to be permeable for continued movement of species such as hedgehogs and/or badgers.

- As noted in section 3.3.3, all in-use bird nests and their contents are protected; therefore where active nesting maybe present such as in trees and outbuildings to be removed, such clearance should either be avoided or supervised by a qualified ecologist during the period 1st March to 31st August inclusive. The scheme could also include bird boxes for locally occurring species that utilise residential sites such as house sparrow and swift.

- The rear of the site is shown to include an ecology area outside of the plot gardens. This can be used for habitat enhancement/creation such as wildflower grassland, native shrub and hedge planting, and fruit trees. A combination of such features would improve structural cover, nesting and foraging opportunities for a wide range of species including birds, hedgehogs and invertebrates. Species-specific features such as a hedgehog house and reptile hibernacula could also be included in this area.

- Although no evidence of reptiles was found, as well as the lack of nearby records; the potential for occasional common species such as slow worm to be present cannot be ruled out, due to the presence of currently unmanaged lawn and scattered features that could act as refugia. Therefore a precautionary approach to debris removal should be adopted. The removal of all potential refugia such as bricks/sheeting and other materials within the area to be cleared should be carried out by hand. Any species disturbed should be caught by hand and relocated to a safe area within retained vegetation outside the construction zone. The lawn area to be affected by the scheme should be maintained by regular mowing until such time as the development proceeds, thereby limiting its value and potential to attract such species.

- If excavations are to be undertaken during construction, it should be noted that open trenches could potentially trap wildlife, especially if these fill up with water. If trenches cannot be in-filled immediately then they should either be covered overnight or escape routes should be provided. These should be in the form of rough boards placed at 45° from the bottom of the trench, with their upper ends above ground level.

5. REFERENCES

- Bat Conservation Trust (2023) *Bat Surveys – Good Practice Guidelines. 4th Edition*. Bat Conservation Trust, London.
- English Nature (2004) *Reptiles: guidelines for developers*. EN, Peterborough.
- Gent, A.H., and Gibson, S.D., *eds* (1998) *Herpetofauna workers' manual.* Joint Nature Conservation Committee, Peterborough.
- Harris, S., Cresswell, P. and Jeffries, D., (1989) *Surveying Badgers*. The Mammal Society, London.
- Joint Nature Conservation Committee (2010) *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit*. Reprinted by JNCC, Peterborough.

Andrew Southcott *BSc (Hons) ACIEEM*
18th September 2024

Appendix 1 - Phase 1 Habitat Survey Site Plan

Legend

A Amenity grass (J1.2)	Buildings & surfacing (J3.6/J4)
Scattered broadleaved trees (A3.1)	Target note (with number)
Ruderal/disturbed ground (C3.1)	Site boundary

Appendix 2 - Target Notes

Target Number	Notes
1	Main domestic lawn area to be affected by scheme, consisting of short mown sward to c.5cm, with several scattered small garden trees and outbuildings (greenhouses and summer house)
2	Wider area of rear garden with continuation of amenity lawn, currently uncut with rank sward to c.30cm height. Several mammal paths noted along E & W sides and into ruderal growth at SE corner.
3	W boundary of recently uncut lawn with encroaching nettle, dock, hogweed and Vitis growth. In NW corner there is a small area of stored materials (bricks, plastic sheeting) around an ash tree. Other larger ash trees along fence line to SW corner.
4	S end of garden with a strip of unmanaged ground, appears to be formerly disturbed/made-up ground dominated by tall ruderal (particularly nettle, hogweed, bindweed, dock, thistle, green alkanet, ground elder, ivy, bramble). Two small fruit trees located within this overgrown area – all to be retained outside of new garden boundaries.

Appendix 3 - Legislation

Birds:

In Britain, all wild birds, their nests and eggs are protected under the Wildlife & Countryside Act 1981. There are penalties for:

- *Killing, injuring or capturing them, or attempting any of these;*
- *Taking or damaging the nest whilst in use;*
- *Taking or destroying the eggs.*

Bats:

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All bats also receive protection under the Conservation of Habitats and Species Regulations 2010 (as amended), which defines 'European protected species of animals'. It is an offence to:

- *Intentionally or deliberately kill, injure or capture (or take) bats;*
- *Deliberately disturb bats (whether in a roost or not;*
- *Recklessly disturb roosting bats or obstruct access to their roosts;*
- *Damage or destroy roosts;*
- *Possess or transport a bat or any part of a part of a bat, unless acquired legally;*
- *Sell (or offer for sale) or exchange bats, or parts of bats.*

The word 'roost' is not used in the legislation, but is used here for simplicity. The actual wording is 'any structure or place which any wild animal…uses for shelter or protection' (WCA), or 'breeding site or resting place' (Habitats Regulations). As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

[redacted]

Penalties for offences under this legislation can be up to six months in prison and a fine of up to £5,000 for each offence.

A Badger sett is defined in the Act as *'any structure or place which displays signs indicating current use by a Badger*'. This can include culverts, pipes and holes under sheds, piles of boulders, old mines and quarries, etc.

'Current use' does not simply mean 'current occupation' and for licensing purposes it is defined as *'any sett within an occupied Badger territory regardless of when it may have last been used*'. A sett therefore, in an occupied territory, is classified as in current use even if it is only used seasonally or occasionally by Badgers, and is afforded the same protection in law.

Reptiles:

All six species of British reptile are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). The adder, common lizard, grass snake and slow worm are fully protected under this legislation from deliberate killing and injury. Sale and related commercial activities are also proscribed. In addition, the sand lizard and smooth snake also receive a higher level of protection under Schedule 2 of The Conservation of Habitats and Species Regulations 2010 (as amended) making them European Protected Species.

Amphibians:

All British amphibian species receive a degree of protection under the 1981 Wildlife and Countryside Act (as amended). The level of protection varies from protection from sale or trade only, as is the case with species such as smooth newt and common toad, to the more rigorous protection afforded to the great crested newt.

The UK holds a large percentage of the world population of great crested newt, and as such has an international obligation to conserve the species. It therefore receives full protection under national and European legislation. As a European Protected Species it receives protection under the Conservation of Habitats and Species Regulations 2010 (as amended), making it an offence to:

- *Deliberately kill, injure or capture a great crested newt;*
- *Deliberately disturb, including in particular any disturbance which is likely to impair their ability to survive, to reproduce or to hibernate, or migrate, or which is likely to affect significantly their local distribution or abundance;*
- *Deliberately take or destroy their eggs;*
- *Damage or destroy a breeding site or resting place.*

Dormice:

Dormice are afforded protection under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010 (as amended). Under this legislation, it is an offence to:

- *deliberately capture, injure or kill hazel dormice;*
- *damage or destroy a dormouse resting place or breeding site;*
- *deliberately or recklessly disturb a hazel dormouse while it's in a structure or place of shelter or protection;*
- *block access to structures or places of shelter or protection;*

- *possess, sell, control or transport live or dead hazel dormice, or parts of hazel dormice.*

Water voles:

The water vole, although common in many parts of mainland Europe, is at the western edge of their natural range in the UK, and have declined dramatically over the last century, in particular over the last 30 years. As such it is a UK BAP Priority Species and is protected under Schedules 5 of the Wildlife and Countryside Act 1981 (as amended), receiving full protection since 2008. It is an offence to:

- *intentionally kill, injure or take (capture);*
- *Possess a live or dead water vole, or any part thereof;*
- *intentionally or recklessly damage or destroy any place used for shelter or protection;*
- *intentionally or recklessly disturb a water vole whilst occupying a structure used for shelter or protection, or obstruct access to its place of shelter or protection;*
- *Sell, or offer for sale, possess or transport for the purposes of sale, any live or dead water vole, or part of, or advertising any of these for buying or selling.*