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Stretton Road
Much Wenlock
TF13 6DG

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The report should be read in its entirety.

Questions arising from the survey report should be directed to the author of the report who will be pleased to clarify any technical issues raised.

Whilst the surveyors make every reasonable effort, Greenscape Environmental Ltd cannot guarantee that all protected species have been identified and survey results are definitive. Many species are cryptic and transitional in habit.

Reports are considered valid for one year for planning purposes, after which time further survey information may be required.

Greenscape Environmental Ltd can provide advice and support for recommendations and planning conditions.

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1 Executive Summary

1.1 Purpose of the Report

Greenscape Environmental Ltd was commissioned by Lime Green Products Ltd to undertake an ecological appraisal of land surrounding the existing buildings to provide supporting information for a planning application for a new access off the road to the southwest. This is required to cope with increased vehicular movements as the company grows.

The survey report has these principal aims:

- To provide an initial assessment of the ecological value of the site in local context.
- To provide details supporting further surveys that may be required.
- To identify potential ecological constraints relating to the development, and recommend measures to avoid, reduce or manage negative effects, and to provide a net ecological gain.

1.2 Methodology

The appraisal included a desktop study, reviews of other surveys previously conducted on site by Greenscape Environmental, and site visits undertaken at the site, OS grid reference SO60139908 on 26th January, 28th January, 12th March and 18th May 2022, 19th June 2023 and 18th Nov 2023 by P Marshall.

1.3 Key Impacts and Mitigation Measures

The desktop study included a search for nearby designated sites and previously recorded protected species. The site is situated adjacent to the SSSI, but previous planning permissions had allowed the development of silos, hardstanding and increased carparking, as well as larger manufacturing areas.

A pond was previously present immediately adjacent to southwest of the proposed access, but this has been dry now for some time as drainage around side has improved. A small population of great crested newts were found in 2016, but not since. Frogs were found on site in 2020, but no suitable habitat for breeding newts was seen in 2022 or 2023.

The new access will pass through an earth bund screening site from the road. This is topped with young trees. These had no potential roost features for bats, but would support nesting birds. The road around the buildings will follow the line of made up tracks already in existence.

Work to clear and remove the bunds must be conducted under method statements for great crested newts and nesting birds. A Construction and Environmental Management Plan has been recommended and is outlined in section 6.

1.4 Conclusion

It is recommended that the biodiversity value of the site will be enhanced post-construction by restoring the pond to the southwest and providing enhanced management including planting of trees along the Wenlock Edge. This will include enhancement for dormice.



The method statements provided in Section 6 of this report will be followed, and work will be conducted at a suitable time of year to minimise potential impacts.

There are no other ecological constraints to the development as currently proposed.

Table 1.1. Timing of Works

Action	Timing	Justification
Update phase 1 survey	After 12 months from report issue date	Ecological features can change and develop over time



2 Introduction

This report has been compiled Peta Marshall BSc (hons) MSc who has over 15 years' experience conducting ecological appraisals. It has been reviewed in line with Greenscape's Quality Management System.

For full details of surveyors and licences please see Appendix A.

2.1 Project Background

Greenscape Environmental Ltd was commissioned by Lime Green Products Ltd to conduct a survey to determine the presence of protected species and potential for the damage or destruction of habitats of value. This forms part of the planning application for the new vehicular access of the road to the southwest.

The site has been surveyed most years since 2013. Previous surveys identified a small population of great crested newts in a now extinct pond immediately adjacent to site.

The company has recently purchased a section of land which will enable this development to proceed and it also provides further opportunity for biodiversity enhancement.

It was advised that Natural England should be contacted with respect to this application as it involves work on the SSSI. It is understood that this has been undertaken.

2.2 Purpose of the Report

This report aims to:

- Identify the key ecological constraints to the proposed development.
- Inform planning to allow significant ecological effects to be minimised or avoided where possible.
- Allow any necessary mitigation or compensation measures to be developed following the mitigation hierarchy.
- Identify any additional surveys that may be required to inform the assessment.
- Identify the opportunities offered by a project to deliver ecological enhancement under NPPF Section 15.



3 Methodology

Broad methodologies for data collection and interpretation were informed by guidance outlined in CIEEM (2017) – Guidelines for Preliminary Ecological Appraisals. Full details can be found in Appendix B.

3.1 Desk Study

The desk study provides contextual information such as the site’s proximity to designated areas and known records of protected or notable species.

3.2 Field Survey

3.2.1 Date and Survey Conditions

Table 3.1. Survey conditions

Date	Time	Equipment Used	Weather
26/01/2022	10:00	Camera	Clear sky, dry underfoot
Comments	Two surveyors used: Peta Marshall and Ben Jones		
28/01/2022	08:30	Camera, hand excavation tools	Good conditions, sunny, dry
Comments	One surveyor used: Peta Marshall		
12/03/2022			Good conditions, sunny, dry
Comments	One surveyor used: Peta Marshall		
18/05/2022	11:30	Camera	Good conditions, sunny, dry
Comments	One surveyor used: Peta Marshall		
26/01/2022	10:00	Camera	Clear sky, dry underfoot
Comments	Two surveyors used: Peta Marshall and Ben Jones		
19/06/2023	14:00	Camera	Good conditions, sunny, dry
Comments	One surveyor used: Peta Marshall		
17/11/2023		Camera	Good conditions, sunny, dry
Comments	One surveyor used: Peta Marshall		

3.2.2 Habitats

The level of survey is aimed to identify field signs of, or habitats with the potential to support protected species and therefore assist in the determination of site value.

3.2.3 Hedgerows

The aim of the assessment is to ascertain whether the hedgerow could be classified as important according to the definitions listed in the Hedgerow Regulations (1997).

3.3 Species Survey

Features on site were assessed for potential for bat roosts, foraging and commuting. These were conducted in accordance with Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition, BCT, Collins (ed.) (2016).

Badger surveys were conducted following guidance from Surveying Badgers by Harris et al., (1989)

Features on site were assessed for potential for nesting birds.

The terrestrial habitats at the application site were surveyed and assessed with respect to suitability and potential value for great crested newts.

The hedge to the south of the site and woodland to the north was assessed for its potential to support dormice.



3.4 Constraints of the Survey

All areas were accessible for these surveys. They were conducted throughout optimal times of year for the assessment of great crested newts and nesting birds. No specific constraints have been identified.



4 Baseline Ecological Conditions

4.1 Nearby Features of Importance

4.1.1 Designated Sites

The map from Natural England presented in Figure 4.1 indicated that the site is adjacent to the Wenlock Edge SSSI, and within 1km of the Shropshire Hills AONB.

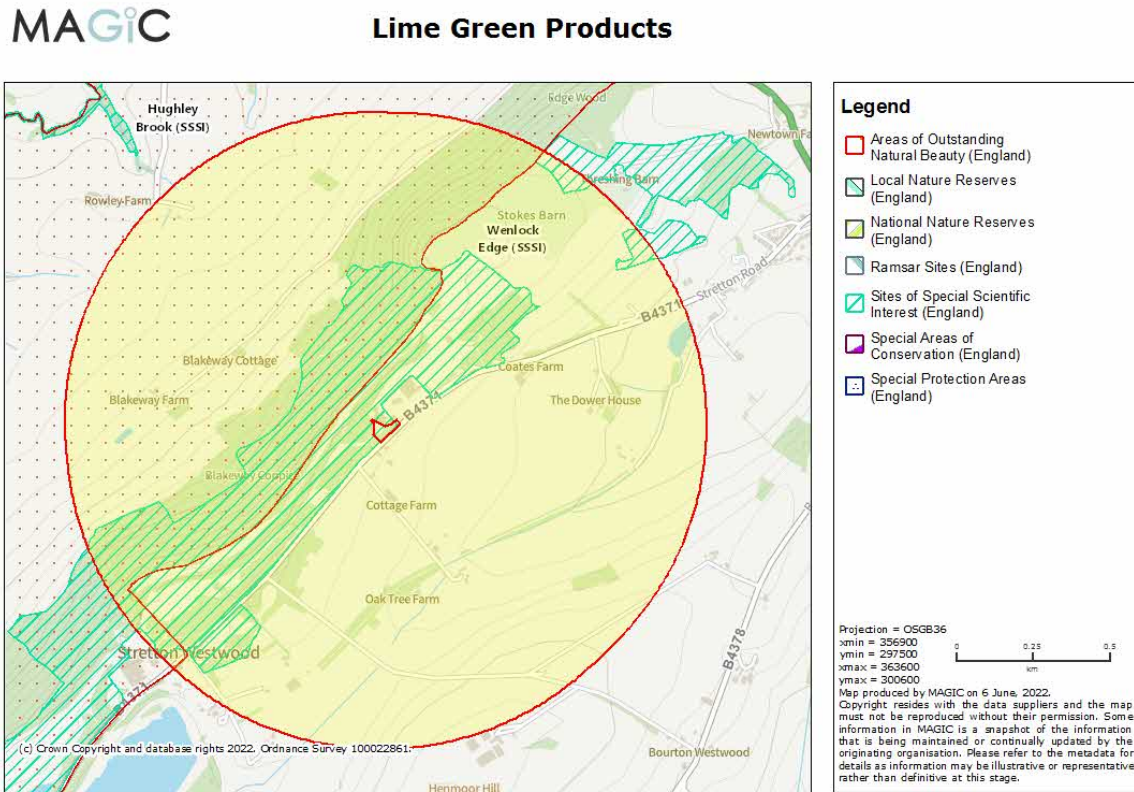


Figure 4.1. Identifying any designated areas near site, a 1km buffer is shown

Table 4.1. Details of statutory designated sites within 1km

Type of Designation	Site Name	Reason for Designation	Distance & Direction
Statutory - SSSI	Wenlock Edge	Biological – Two largest remaining areas of semi-natural woodland remaining in the northern part of the Edge	On site
Statutory - AONB	Shropshire Hills	Biological – range of habitats including grazing land, moorland, hills and forests	125m northwest



4.1.2 Nearby European Protected Species Licences

The site is within 2km of four previously granted licences, three for amphibians and one for bats. There are also Great Crested Newt Class Licence returns within 2km, including one immediately adjacent to site from 2016 when Greenscape Environmental conducted ECoW work on site.

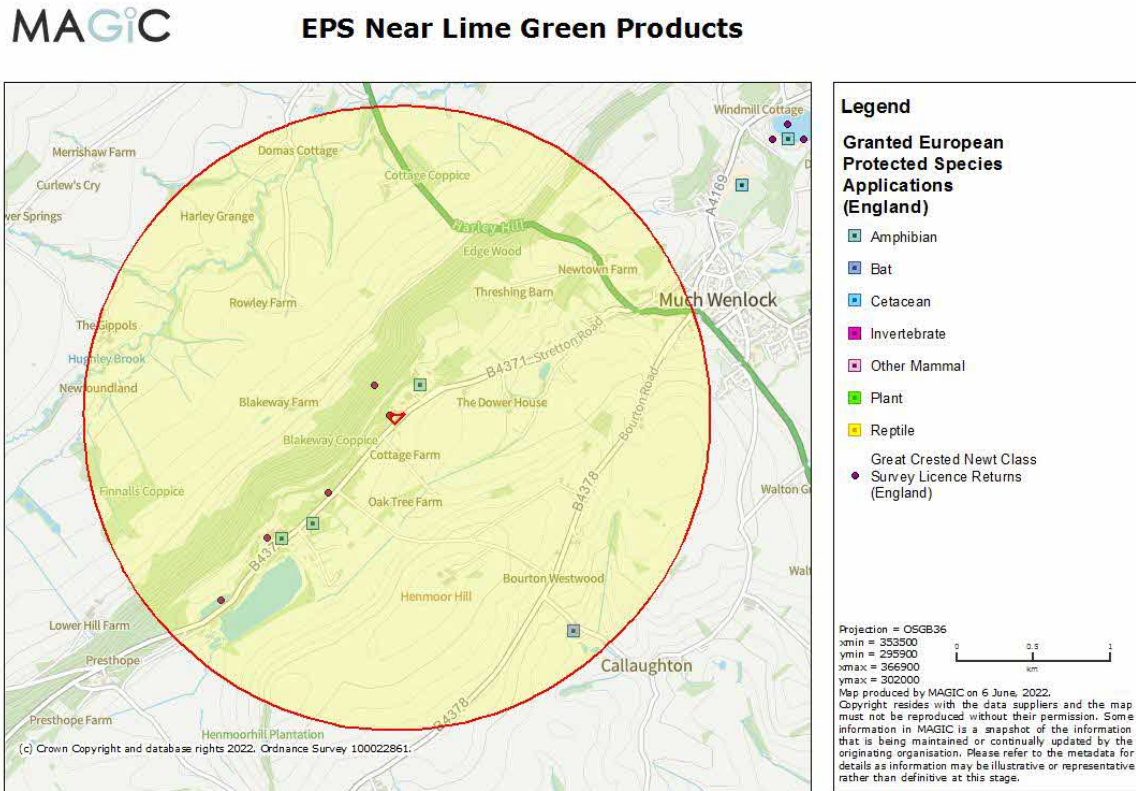


Figure 4.2. Identifying any previous EPS licences near site, a 2km buffer is shown

Table 4.2. Details of EPS licences within 2km

Licence Number	Licensable Action	Dates Covered	Species Involved	Distance from Site
2015-11934-EPS-MIT	Damage and destruction of a resting place	01/07/2015 – 31/03/2016	GCN	250m
2016-22855-EPS-MIT-1	Damage and destruction of a resting place	01/07/2016 – 30/09/2017	GCN	850m
2016-22855-EPS-MIT-1	Damage and destruction of a resting place	28/11/2016 – 28/11/2016	GCN	850m
2014-1106-EPS-MIT	--	18/09/2014 – 01/07/2017	GCN	1050m
2018-34266-EPS-MIT	Damage and destruction of a resting place	24/04/2018 – 30/06/2018	GCN	1050m
EPSM2009-1240	Destruction of a resting place	06/10/2009 – 01/09/2011	C-Pip, BLE	1750m



4.2 Habitats on Site

The site comprises an earth bund screening the road and site. This is topped with young and semi-mature trees including ash (*Fraxinus excelsior*), silver birch (*Betula pendula*), hazel (*Corylus avellana*) and sycamore (*Acer pseudoplatanus*).



Figure 4.3. Atop the bund in May 2022

This section will be removed for the road access.



Figure 4.4. Bund from roadside, January 2022



Figure 4.5. Bund from site-side, January 2022

This section will be altered for the site access with there being a small section remaining adjacent to the building.

4.3 Bats

4.3.1 Records

Records of bats within 2km include common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*P. pygmaeus*) and brown long-eared bat (*Plecotus auritus*).

The nearest records of all species are over 1km from site, along the A458, recorded most recently in 2011.

Bat species data was provided to the NBN Atlas by SEDN under a CC-BY licence.

4.3.2 Field Observations

The trees on the bund and to the north of the site were considered generally of insufficient age and size to have features of potential roost value. None were seen from ground level on any site visit.



4.4 Other Mammals

4.4.1 Records

Records of other mammals within 2km include brown hare (*Lepus europaeus*), otter (*Lutra lutra*), badger (*Meles meles*) and hazel dormouse (*Muscardinus avellanarius*).

Records of otter are from Hushley Brook to the northwest most recently from 2000. Common dormouse have been recorded throughout Wenlock Edge routinely, with the latest record on NBN from 2017. Badgers have been recorded throughout the surrounding 2km most recently in 2016.

Mammal data (not including bats) was provided to the NBN Atlas by SEDN and Atlas of Mammals, both under CC-BY licences.

4.4.2 Field Observations

No evidence of any protected mammals was seen on site, and the woodland is unlikely to be of value for hazel dormice as there is a paucity of bramble, honeysuckle and oak which are key species for the mammal.



4.5 Birds

4.5.1 Records

Records of birds within 2km include common tree nesting species such as corvids and blackbird (*Turdus merula*). All bird species records are provided with a low OS grid accuracy and so no specific locations can be determined.

Bird species data was provided to the NBN Atlas by SEDN under CC-BY licence.

4.5.2 Field Observations

The trees on site may provide suitable nesting habitat for birds when in full leaf. Minimal evidence of nesting was seen on site visits, however. Typical birds recorded include black cap (*Sylvia atricapilla*), Blue tit (*Cyanistes caeruleus*). A blackbird nest was observed in a shrub close to the site in Nov 2023.

4.6 Amphibians

4.6.1 Records

Records of amphibians within 2km include common toad (*Bufo bufo*), smooth newt (*Lissotriton vulgaris*), common frog (*Rana temporaria*) and great crested newt (*Triturus cristatus*).

Great crested newts were recorded on site in 2016. Frogs, toads and smooth newts have also been recorded on site, and in the wider environs.

Amphibian species data was provided to the NBN Atlas by SEDN under CC-BY licence and from Greenscape own records).

4.6.2 Field Observations

There has historically been a pond immediately adjacent to the newly proposed access, though this has remained dry throughout the newt breeding season in 2020, 2021, 2022, and 2023 and is understood to have dried out more and more each year in recent history, most likely as drainage on and around the site has improved. This pond no longer shows on OS maps. There is one other pond to the south, separated by a busy carriageway. This pond was not accessed for assessment as it is sufficient barriers for any population of newts using that pond not to be impacted.



Figure 4.6. Former pond area

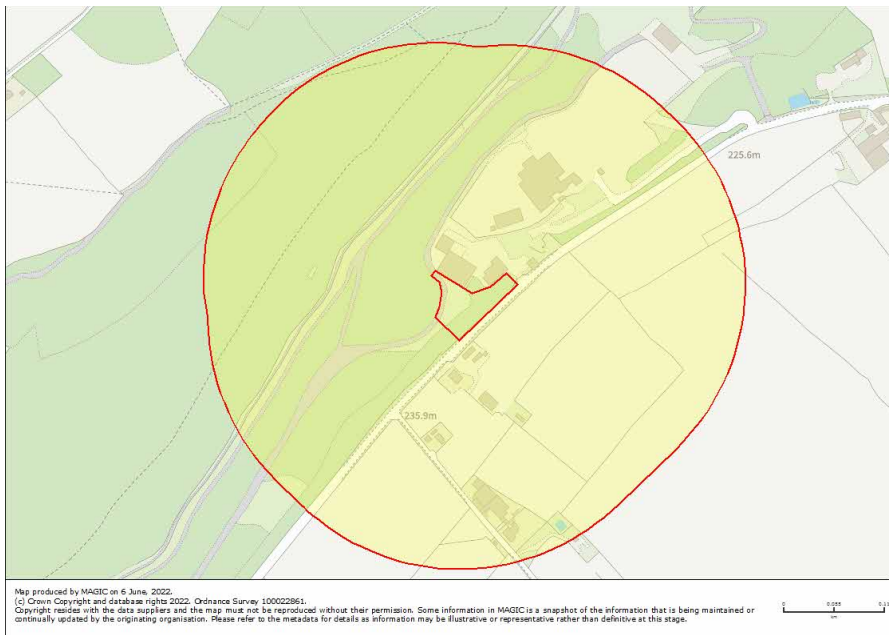


Figure 4.7. OS Map showing single pond within 250m

The development will include the removal of a bund adjacent to the hardstanding and buildings non site, adjacent to the hard standing at Grange Fencing. This bund was created in 2016, and supports rough weeds and no axiophytes.



Figure 4.8. Bund to be removed.



5 Description of Proposed Development

The current plans are for a new access off the main road to the southeast. This road will pass up the side of the buildings and join an existing track. The scheme as shown below include improvements to the pond.

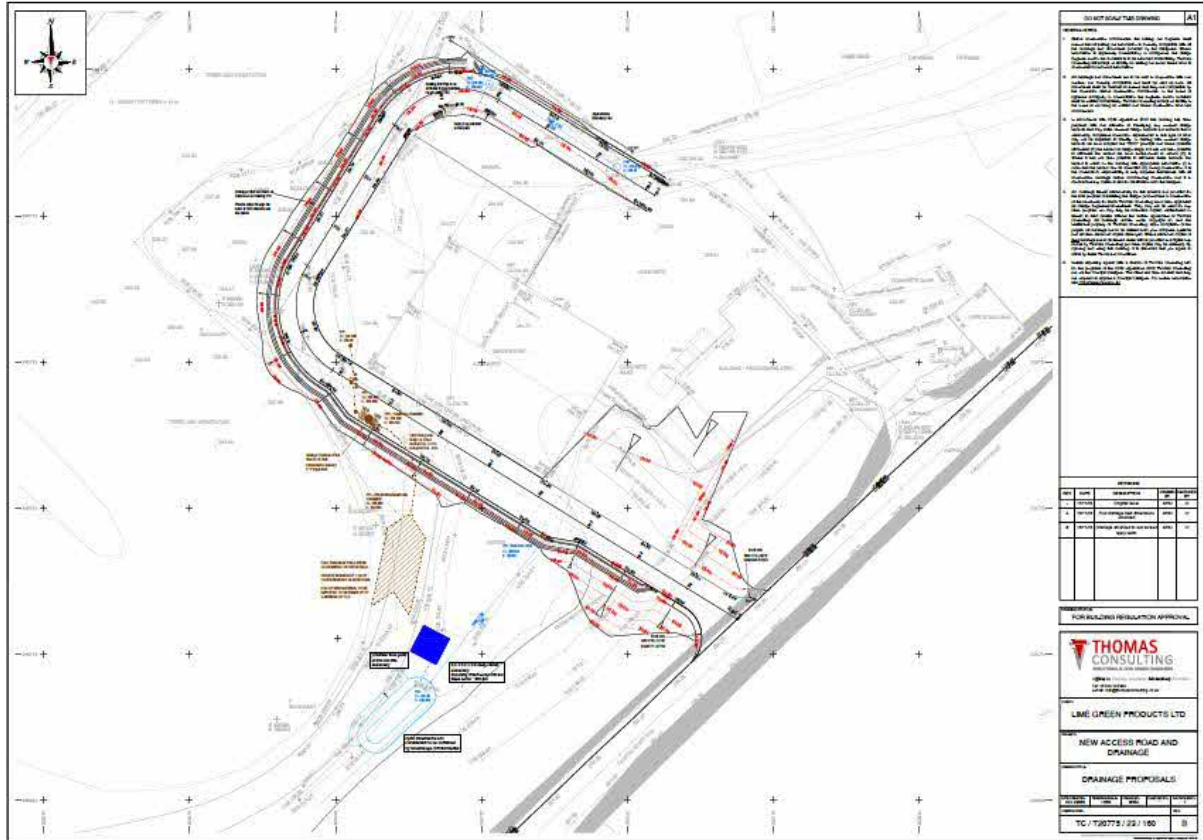


Figure 5.1. Proposed site plan



6 Impacts, Enhancements and Mitigation

6.1 Nearby Features of Importance

6.1.1 Impacts

Figure 4.1 shows that the site falls within Wenlock Edge SSSI, and within the vicinity of Shropshire Hills AONB. The development is small scale, and only the small break through the bund to create the roadside access will damage any habitats of value to the SSSI. As this is a very small area right on the edge of the SSSI, no negative impact and no loss of ecological functionality is expected.

The SSSI is noted for its geological values, but the land to be removed is made up material (bund) and the road way will be placed on existing made up hardcore which formed the tracks for the quarry when it was functioning. Very little bedrock will be impacted. This has been evidenced by looking at trial pits close to the proposed development area.



Figure 6.1. Showing existing hardcore base

There is some potential for there to be an increase in the amount of dust from site during the removal of the bund, and potential for there to be run off onto the road during works. This will be taken into consideration in a Construction Environmental Management Plan (CEMP).

6.1.2 Mitigation

- i. Materials stockpiled on site, such as solid hardcore and sand can pollute the local environs and air with silt and dust.
 - o Material stockpiles will be as far from the trees to be retained as possible
 - o Once opened, easily dispersible materials such as dry cement will be stored in a sealed bag or storage unit as is currently the practice with materials on site.
 - o All empty bags will be appropriately stored and appropriately disposed of



- ii. Sufficient spills kits will be available on site, and all workers will be aware of their location and how to use them.
 - o Any diesel/oil/chemical spills on site should be cleared as a matter of urgency. Where spills become absorbed into the ground it may be necessary to excavate the contaminated soil and remove from site.
 - o Chemicals will be stored in the site compound in a suitably protected environment.

6.2 Habitats on Site

6.2.1 Impacts

The development as proposed will result in the loss of young woodland atop an earth bund and an area of planted trees to the west. A comparatively small area of habitat at the very edge of the more expansive area is to be affected, and no loss of connectivity is anticipated.

6.2.2 Mitigation and Enhancements

Pond Enhancements

The plans include the improvement of the now dry pond adjacent to the new track. This will be dug deeper and beyond the road access. Drainage along the road will be fed toward the pond via the new soakaway and from the building overflow. It will be maintained with water from the artesian well on site.

The profile of the pond will be stepped down around the edges, allowing different habitats to develop within the same pond.

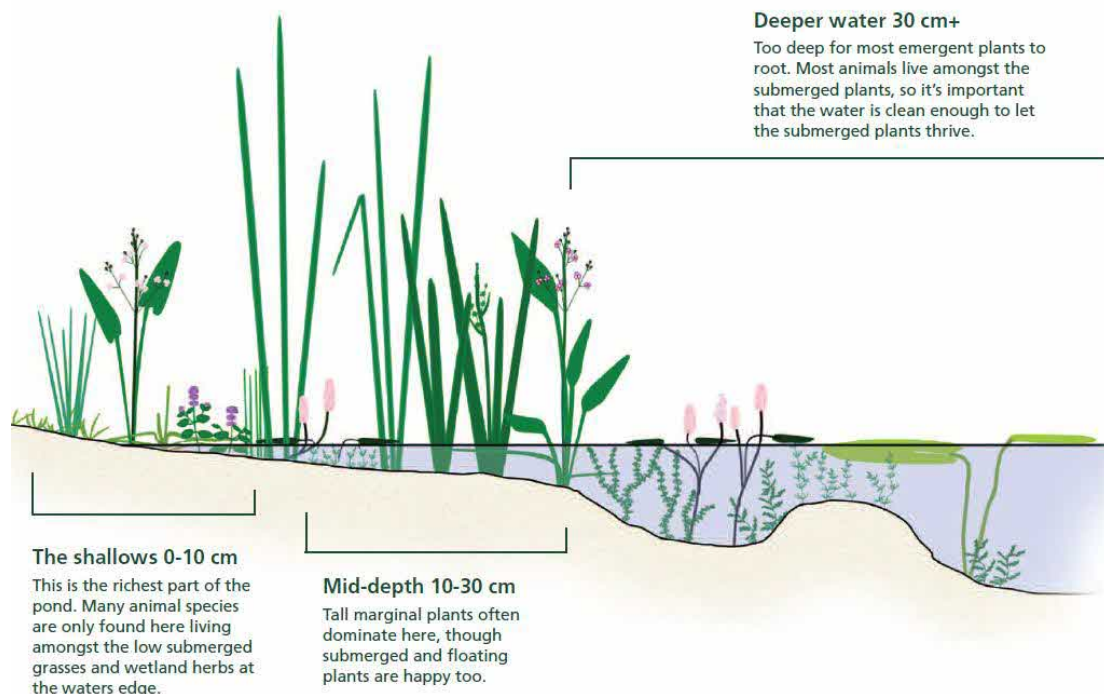


Figure 6.2. Pond Design (Taken from the Million Pond Project)

The pond will be planted with locally sourced native species to begin with. These will be planted at a minimum of five plants per m².



Flowering plants such as yellow flag iris (*Iris pseudacorus*), water mint (*Mentha aquatica*) and marsh marigold (*Caltha palustris*) can be planted. Water forget-me-not (*Myosotis scorpioides*) is a favoured plant species for amphibian species such as great crested newts to use as egg-laying substrate. Planting this will provide a relatively quick enhancement for the species in the area.

These plants will form a baseline biodiversity interest which will then be added to by natural colonisation of local native plants. Local plants often colonise new ponds within a short timescale.

Hedgerows

The plans show a landscaping area. This will be planted with hedge, scrub and tree species to provide biodiversity value to the area.

Plants to use for landscaping and gapping-up of existing boundaries will include locally sourced native species. These will be planted in accordance with BS3936 (part 1, 1992, Nursery Stock, Specifications for trees and shrubs). Planting will occur between November and April depending on the timing of the development.

Yew and holly have been included to provide year around screening.

Table 6.1. New hedge planting scheme

Common Name	Latin Name	Distribution (%)
Hawthorn	<i>Crataegus monogyna</i>	25%
Blackthorn	<i>Prunus spinosa</i>	25%
Hazel	<i>Corylus avellana</i>	10%
Holly	<i>Ilex aquifolium</i>	20%
Wild Service Tree	<i>Sorbus torminalis</i>	10%
Yew	<i>Taxus buccatus</i>	10%

Table 6.2. Fruiting plant enhancement

Common Name	Latin Name
Crab Apple	<i>Malus sylvestris</i>
Wild Cherry	<i>Prunus avium</i>
Wild Pear	<i>Pyrus communis</i>
Honeysuckle	<i>Lonicera periclymenum</i>

Trees

Management of trees leading up to the Wenlock Edge will be undertaken. Currently the bank is inundated with Ash saplings clearly showing signs of dieback. These will be removed and stacked on site to provide brush habitat piles.



Figure 6.3. Showing dead Ash trees

Replacement trees to be used should be from the list below. These should also be native species, locally sourced where possible. Oak should particularly be encouraged because it supports a large diversity of invertebrates and supports dormice.

Table 6.3. Trees proposed for enhancement

Common Name	Latin Name
English Oak	<i>Quercus robur</i>
Sessile Oak	<i>Quercus petraea</i>
Field maple	<i>Acer campestre</i>
Lime	<i>Tilia cordata</i>
Rowan	<i>Sorbus aucuparia</i>
Silver Birch	<i>Betula pendula</i>

6.2.3 Monitoring

All habitat enhancements will be monitored post-development and any failing plants or features will be addressed as appropriate to maintain the value of the enhancement.



6.3 Bats

6.3.1 Impacts

Even without consideration there is unlikely to be any loss or damage of potential bat roosts, nor the potential for death or damage of individual bats. An offence is considered highly unlikely. It is, however, recommended that the trees along the hedge line are removed between end of August and end of February.:

6.3.2 Enhancements

It is recommended that provision be made for roosting opportunities for bats with the erection of at least one woodcrete bat box suitable for day roosts in the nearby trees. These will be erected at a height of 3-4 m and in a southerly, westerly or easterly facing direction. A Beaumaris bat box will be erected on the exterior of the large silo.



Figure 6.4. Example woodcrete bat box: Schwegler 1FF & Beaumaris Bat Box Midi

6.3.3 Monitoring

Failing boxes or enhancements will be replaced at the cost of the developer if deterioration or damage is noted within five years post-development.



6.4 Other Mammals

Without consideration there is unlikely to be any negative impact on local non-bat mammals. No evidence of badger activity was recorded and the bund does not support all the plant species considered optimal for hazel dormice.

The proposed landscaping will ensure there is still good quality habitat on site and the functionality of the surrounding land is not impacted.

The planting lists will ensure that improved diversity of plants will provide for more abundance in the area.

6.5 Birds

6.5.1 Impacts

Work at this site will include the removal of semi-mature and young trees which could affect nesting birds if conducted during the nesting season.

To negate an offence, the following mitigation and enhancements have been recommended.

6.5.2 Mitigation and Enhancements

1. Tree removal will be conducted outside the bird nesting season, which is March to August inclusive. If this is not possible, a suitably experienced ecologist will conduct a check within the 24 hours prior to work commencement to ensure no nesting birds will be affected.
2. Should a nesting bird be found, a 4m buffer will be left around the nest, and no further disturbance conducted until the young have fledged.
3. It is recommended that a range of woodcrete boxes are erected around the site to provide an enhancement for passerine birds, and a selection of the following would be appropriate.
 - a. 26/32mm hole nest boxes (e.g. Schwegler 1b) should be installed at a minimum height of 3m in a westerly, northerly or easterly aspect.
 - b. Robin boxes should be installed inside vegetation such as a hedge or shrub, ideally at a height of over 2m.
 - c. Wren boxes should be installed inside vegetation such as a hedge or shrub, ideally 1-3m from the ground.
 - d. Swift and house martin boxes will be erected on the silo on the eastern and western elevations. These will be erected at a height of 5m



Figure 6.5. Bird boxes

6.5.3 Monitoring

Failing boxes or enhancements will be replaced at the cost of the developer if deterioration or damage is noted within five years post-development.



6.6 Amphibians

6.6.1 Impacts

Whilst great crested newts have been recorded on site in the past, the habitat has degraded significantly in the past few years, and there is no longer any suitable habitat for breeding newts on site.

Continued functionality will include the enhancement of habitat on site with the improvement of the former pond which was created for runoff.

To negate the potential damage of individual newts in the area, the bunds will be removed in the presence of a suitably qualified experienced surveyor for newts and the method statement below followed.

6.6.2 Mitigation and Enhancements

Work will follow a strict method statement outlining reasonable precautions for securing the safety of individual newts. This will create a scenario by which the risk to individual newts is negated.

Working Method Statement

Pre-Construction

1. The site will be kept under management prior to construction. This will reduce the potential for newts to cross the land and reduce the potential for the terrestrial features to improve. All plants will be kept short (<10cm) to ensure there is no shelter for great crested newts on the site where the road is to be created.
2. Plants will be cut to this level over winter when newts are likely to be hibernating and birds not nesting.

Site Setup

3. A consultant will be employed as the ECoW to oversee the work in areas sensitive to great crested newts. This person will need to be licensed and an experienced surveyor for great crested newts.
4. This will include all the bunds around the site and when the existing drainage is altered to a culvert.
5. The ECoW will provide contractors with a toolbox talk prior to work commencing. This will include information about the legal status of newts and responsibilities of the construction company to ensure no offence is committed. A document to assist with the identification of newts will be left on site.
6. The site will be checked thoroughly by the ECoW prior to clearance or construction commencing. This will confirm there are no newts present and that there are no potential places of shelter.
7. Soil and vegetation will be stripped in the presence of the ECoW to ensure there is no vegetation which could potentially attract great crested newts. This will occur when newts are most likely to be in ponds and not on site.
8. All cabins equipment and materials will be located on firm compacted ground, preferably the existing concrete base.



9. Contractors are advised not to handle newts at any time.

Construction Phase

10. The site foreman will be responsible for ensuring all contractors are aware of the potential to find newts, and that they are familiar with the appearance of newts. If in doubt the ECoW will be contacted.
11. Contractors are advised to avoid handling newts at any time.
12. Stored subsoil/hardcore must not be tipped onto any tall vegetation on the SSSI. The location of the storage area will be checked by the ECoW immediately before use.
13. Any plants around the site will be kept short during construction to stop the development of an area of terrestrial habitat more suitable for newts.
14. Removal of any unwanted plants will be conducted between mid-February and May when there is least opportunity for newts to be hibernating in the roots. The ECoW will be on site when this occurs.
15. The bund will be removed carefully, with the ECoW checking using hand tools, that there are no newts or other amphibians in crevices.
16. All groundwork will be conducted during daylight hours as newts are least likely to move during this time.
17. Major construction work– this includes trenches for services, soakaway, footings and other the improvement of the pond areas will be conducted between December to February when there is least movement of newts between ponds.
18. Trenches will be dug and filled in on the day created or will be covered over with close-fitting boards at the end of each working day.
19. If it is not possible to cover the trench, a ramp will be placed from the edge of the trench to the base to allow newts and small mammals to escape.
20. Open or covered trenches will be checked the following morning. This is particularly important when newts are most active, between March and November
21. The ECoW will conduct site visits until groundworks have been completed or areas deemed unsuitable for newts
22. If a newt is found, then work will stop immediately and the ECoW contacted for advice.
23. Any heavy machinery will be stored on an area of hardstanding to avoid refugia being created.
24. Stored material will be raised on pallets to reduce the potential they might act as a temporary resting place. This reduces the potential for damage or destruction of individual newts.
25. All waste will be placed straight into skips or in the area designated for keeping material on site to reduce the potential of creating refugia.



26. Great crested newts will not be handled or moved without express permission from Natural England as this would constitute an offence. If a newt is found, then the ECoW will follow best practice and contact the council and Natural England for further advice.
27. It is recommended that regular site visits are carried out by the ECoW to ensure compliance with the legislation and the Method Statement. A record of these visits will be made as part of the audit trail.

Enhancements for Newts

1. The landscaping features will be designed to enhance the terrestrial features for newts. This will include trees and wildflower planting and the new pond.
2. The surface drainage of the site will be amphibian friendly. This can be achieved with the use of wildlife kerbs, with an indent allowing small animals to bypass road gullies.
3. Amphibian ladders can also be installed in all gully poles, allowing amphibians that do fall in to escape.



Figure 6.6. Example of a wildlife kerb and gully ladder

4. A hibernaculum will be constructed at to the north of the site adjacent to the bank of the Wenlock Edge. This will be created of tree brush and stone from the removal of the bund.

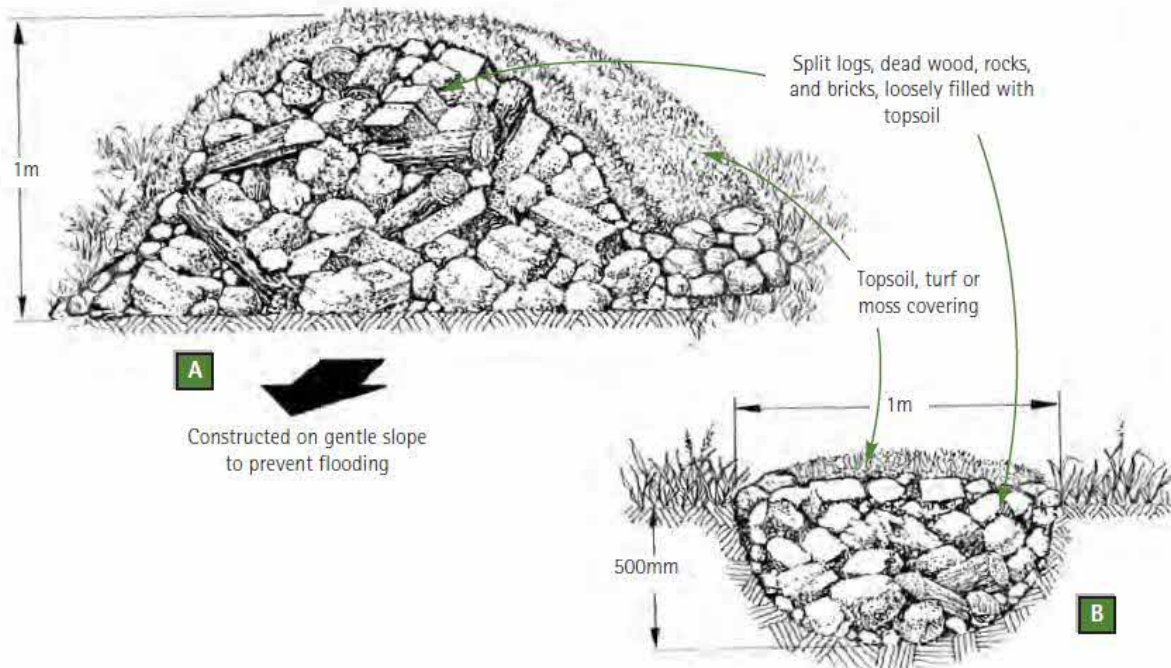


Figure 6.7. Hibernacula design from Froglife ©

6.6.3 Monitoring

The hibernaculum will be monitored, and more material added when notable decomposition is seen.



6.7 Invasive Species

6.7.1 Impacts

No evidence of non native invasive species was observed.

6.7.2 Monitoring

Any invasive plant species on site will be treated as per guidance, and any recurrence will be noted and treated in the same way as an ongoing process.



7 Concluding Remarks

The survey has focussed on the potential habitats or protected species to be damaged or destroyed as part of this development.

Of particular concern was the potential impact on the SSSI – noted for its geological features. This has been discounted as the road will be on existing hardcore and through a bund of made up material.

Protected species such as great crested newts and nesting birds have been taken into consideration and recommendations to follow method statements provided.

Enhancements with ongoing management of the site have been recommended. This includes the removal of Ash showing signs of Ash dieback, and the replacement with tree species which seem to be still thriving in the area.

The development can proceed without the loss of habitat of significant value, and without the loss of the favourable conservation status of any protected species.

The method statements provided in sections 6 of this report will be followed and works will be done at a suitable time of year. Other than those listed above, there are no ecological constraints to the development as currently proposed.



Appendix A – Surveyor Details

Table A.1. Details of surveyors' experience and licences held

Name	Membership of associations/ experience	Licenses
Peta Marshall BSc(hons)MA	<p>Principal Consultant MCIEEM PIEMA</p> <p>Peta has a degree in Applied Biology and has been working in commercial environmental assessment for over 10 years. She has 15+ years' experience surveying for protected species.</p> <p>As a member of the CIEEM she is bound by professional conduct.</p>	<p>Holder of survey licenses for bats and newts in England and Wales. Registered Consultant for Mitigation Class Licence for Bats</p> <p><u>England:</u> Bats - 2015-12200-CLS-CLS BMCL - RC084 GCN - 2015-18939-CLS-CLS Dormice - 2017-29225-CLS-CLS</p> <p><u>Wales:</u> Bats – S090542/1 GCN – S090807/1</p>
Ben Jones BSc(hons) MSc	<p>Senior Consultant</p> <p>Ben has a degree in Marine and Freshwater biology and a Master's degree in "Managing the Environment".</p> <p>He has 7 years' experience conducting environmental appraisals and phase 2 surveys for bats and newts in England and Wales.</p>	<p>Holder of survey licenses for bats and newts in England and Wales.</p> <p><u>England:</u> Bats - 2017-29112-CLS-CLS GCN - 2016-25209-CLS-CLS</p> <p><u>Wales:</u> Bats – S088669-2 GCN – S091242-1</p>



Appendix B – Methodology

Desk Study

Table B.1. Data sources

Organisation/Resource	Information Assessed
Freely available online species datasets (NBN Atlas)	Protected/UK BAP Species records (2km)
MAGIC website	International statutory designations (1km) Special Protection areas (SPA) Special Areas of Conservation (SAC) RAMSAR sites National statutory designations (1km) Sites of Special Scientific Interest (SSSI) National Nature Reserves (NNR) EPS Licenses for protected species (2km)

The National Biodiversity Network (NBN) Atlas was checked to identify the protected species that have formally been recorded in the area. This was considered proportionate to the size of the development, as the Shropshire Environmental Data Network (SEDN) provides most of its records to the NBN.

A search on Multi Agency Geographic Information for the Countryside (Magic Maps) determined nearby designated areas. The map is presented in Section 4.1.

Field Survey

An assessment of habitats was conducted broadly following the UKHabs habitat descriptions.

The level of survey is aimed to identify field signs of or habitats with the potential to support protected species and therefore assist in the determination for detailed phase 2 surveys.

Determination of Ecological Value is based on the general criteria provided by IEEM (IEEM 2006).

Table B.2. Criteria of ecological values

Ecological Value	Description and Examples
High	Habitats or features that have high importance for nature conservation, such as statutory designated nature conservation sites of international or national importance or sites maintaining viable populations of species of international or national importance (e.g. Red Data Book species; European protected species).
Medium	Sites designated at a county or district level, e.g. Local Wildlife Site (LWS), ancient woodland site, ecologically 'important' hedgerows or ecological features that are notable within the context of a region, county or district (e.g. a viable area of a Priority Habitat on the county BAP or a site that supports a viable population of a county BAP species).
Low	Sites of nature conservation value within the context of a parish or neighbourhood, low-grade common habitats, such as arable fields and improved grasslands and sites supporting common, widespread species.



Species Surveys

Bats

Methodology used is in accordance with recommendations by BCT, Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd edition, Collins (2016).

Features on site were assessed for potential for bat roosts, foraging and commuting.

All trees were assessed from ground level. All trees examined were categorised on their potential roost features (PRF). These features include cracks, splits in limbs, cavities, loose bark and thick stemmed ivy. Where appropriate and accessible these features were assessed using binoculars and/or endoscopes.

Table B.3. Categorisation of trees for bats

Value for Bats	Example Features
Negligible	A tree that lacks the requisite features to support roosting bats
Low	A tree that contains a feature or features that clearly offer little roosting habitat for bats
Moderate/High	A tree that provides one or more potentially suitable roosting features for bats
Confirmed roost	Bat presence has been confirmed

Daytime surveys were conducted, though bat species may leave little evidence of their presence.

Evidence for the presence of bats includes:

- Holes, cracks and rot holes used as roosts, marked by streaks of urine and faeces.
- Smoothed, darkened edges where bats have rubbed and left natural body oils when entering and exiting a space.
- Faeces under a well-used feeding point or a resting spot.
- Feeding signs such as discarded insect wings under a feeding point.
- Presence of roosting or dead bats in or behind any object.

Badgers

Surveys were conducted in line with Harris, S., Cresswell, P. and Jefferies, D. (1989) Surveying Badgers. Mammal Society - No9.

Daytime surveys for badgers involved looking for:

- Scrapings where badgers have dug for food or used as latrines.
- Signs of a sett, including signs of use such as presence of badger hair.
- Tracks and prints.

Hazel Dormice

Surveying for hazel dormouse includes the following, as outlined in the Dormouse Conservation Handbook (Second Edition) by English Nature:

- 'Nut hunting' – looking for characteristic foraging marks on fallen nuts, particularly around hazel coppices.
- Looking for nests in suitable vegetation



Assessing the suitability of the habitat for foraging and nesting opportunities– Ideal habitat is close canopied woodland, diverse with low lying shrub and some mature species.

Birds

Searching for evidence of nesting birds, including barn owls, involved looking for:

- Presence of nests
- Collections of droppings and/or feathers
- Highly distinctive droppings or splats under roosting points.
- Presence of owl pellets/feathers
- Listening for bird song
- Recording bird activity

Amphibians and Reptiles

The terrestrial habitats at the application site were surveyed and assessed for their suitability and potential value for the support of GCN. The general topography, ground conditions and presence or absence of vegetation were recorded. A refugia search was conducted for amphibians and reptiles by looking under any logs, large stones and other debris.



Appendix C – Policy

The following areas of policy and legislation are of relevance to ecology and provide context to the surveys conducted. Findings presented in this report are in line with the following:

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 – as listed in:

- Schedule 2. European protected species of animals
- Schedule 5. European protected species of plants

The Wildlife and Countryside Act (1981) – as listed in:

- Schedule 1. Birds protected by special penalties at all times
- Schedule 5. Protected animals
- Schedule 8. Protected plants

Countryside and Rights of Way Act (2000)

Environment Act (2021) – Part 6 – Nature and Biodiversity

The Protection of Badgers Act (1992)

Natural Environment and Rural Communities (NERC) Act (2006)

National Planning Policy Framework (2018)

- Policy 15 – Conserving and Enhancing the Natural Environment

Biodiversity 2020 – A strategy for England’s wildlife and ecosystem services (2011)

ODPM Circular 06/2005: Biodiversity and Geological Conservation

Shropshire Core Strategy (2014): Policy CS17 – Environmental Networks

Bats

All bat species are protected under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 which implements the EC Directive 92/43/EEC in the United Kingdom. It is an offence, with certain exceptions, to:

- Deliberately capture or kill any wild animal of a European Protected Species.
- Deliberately disturb any such animal.
- Damage or destroy a breeding site or resting place of such a wild animal.
- Keep (possess), transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal or plant of a European Protected Species, or any part of, or anything derived from such a wild animal or plant.

A person found guilty of an offence is liable on summary conviction to imprisonment for a term not exceeding six months or to an unlimited fine or to both.

Seven bat species are on the UK Biodiversity Action Plan and are listed as Species of Principal Importance under the provisions of the Natural Environment and Rural Communities (NERC) Act 2006. The National Planning Policy Framework (NPPF) states that to minimise impacts on biodiversity and geodiversity, “planning policies should... promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations”.



Badgers

Badgers and their setts are specifically protected under the Protection of Badgers Act 1992. The act was primarily brought into force to prevent the deliberate injury to or death of badgers. Some aspects of the act affect developers. It is important that developers are aware of any badger setts located on the land they intend to develop.

All personnel working on sites where there are badgers should be aware of the Protection of Badgers Act 1992. Under this legislation it is an offence to:

- Damage a badger sett or any part of it.
- Destroy a badger sett.
- Obstruct access to, or any entrance of a badger sett.
- Causing a dog to enter a badger sett.
- Disturbing a badger when it is occupying a badger sett.

Hazel Dormouse

The hazel dormouse is offered full protection under the Wildlife and Countryside Act 1981 Schedule 5 (as amended in 2010). The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 which implement the EC Directive 92/43/EEC in the United Kingdom makes the hazel dormouse a European Protected Species.

Schedule 5 of the Wildlife and Countryside Act 1981 states that it is illegal to:

- Intentionally kill, injure or take a dormouse.
- Possess or control any live or dead specimen of anything derived from a dormouse.
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a dormouse.
- Intentionally or recklessly disturb a dormouse while it is occupying a structure or place which it uses for that purpose.

Regulation 53 of Schedule 2 of the Habitats Regulations makes it an offence to:

- Deliberately capture or kill a dormouse.
- Deliberately disturb a dormouse.
- Damage or destroy a breeding site or resting place of a dormouse.
- Keep, transport, sell or exchange, or offer for sale or exchange alive or dead dormouse or any part of a dormouse.

Birds

Under Section 1 of the Wildlife and Countryside Act 1981 (as amended), birds, their nests and young are all protected from damage, particularly during the breeding season. The Act allows for fines or prison sentences for every bird, egg or nest destroyed. It makes it an offence to:

- Intentionally kill, injure or take any wild bird.
- Take, damage or destroy the nest of any wild bird whilst it is in use or being built.
- Take damage or destroy the egg of any wild bird.
- To have in one's possession or control any wild bird, dead or alive or egg or any part of a wild bird or egg.

Some bird species are included in the UK and local BAPS and are recognised as species of principal importance for nature conservation in accordance with section 41 of the NERC



Act 2006. Such species and their habitats receive protection through the provisions of the NPPF.

Amphibians and Reptiles

All species of amphibians receive a measure of protection under legislation.

The Wildlife and Countryside Act 1981 has been amended by the Countryside and Rights of Way Act (CRoW) 2000. This applies to England and Wales only. The key relevant fact is:

Section 9(4) is amended to create an additional offence of reckless damage to, destruction of, or obstruction of access to, any structure or place used for shelter or protection; and reckless disturbance while occupying such a structure or place.

Great Crested Newts

Great crested newts are protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 which implements the EC Directive 92/43/EEC in the United Kingdom. It is an offence, with certain exceptions, to:

Deliberately capture or kill any wild animal of a European Protected Species.

Deliberately disturb any such animal.

Deliberately take or destroy eggs of any such wild animal.

Damage or destroy a breeding site or resting place of such a wild animal.

Keep (possess), transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal or plant of a European Protected Species, or any part of, or anything derived from such a wild animal or plant.

Great crested newts are listed as a priority species on the UK BAP and Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. The National Planning Policy Framework (NPPF) states that to minimise impacts on biodiversity and geodiversity, "planning policies should... promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations".

A person found guilty of an offence is liable on summary conviction to imprisonment for a term not exceeding six months or to an unlimited fine, or to both.



Appendix D – Bibliography

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