Quantock Ecology
ENVIRONMENTAL CONSULTING

Dyers Orchard, Water Lane, Butleigh, BA6 8SP

Mr. Julian De Wilton

Bat Survey – Emergence and Activity Surveys

27/09/2023

Status	Issue	Name of Author/Reviewer	Date
Draft	0.1	India Long, BSc (Hons) QCIEEM- Assistant Ecologist	19/09/2023
Reviewed	0.2	Simon Pidgeon, BSc (Hons) MRSB – Director/Principal Ecologist	27/09/2023
Final	1.1	India Long, BSc (Hons) QCIEEM- Assistant Ecologist	28/09/2023

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Executive Summary

Quantock Ecology Ltd. undertook a suite of emergence and activity surveys at Dyers Orchard, Water Lane, Butleigh, Somerset BA6 8SP on the 6th June, the 5th July and the 31st July 2023. The survey followed on from a Preliminary Roost Assessment for bats and breeding birds undertaken by Quantock Ecology during March 2023. The aim of the assessment is to determine the presence or likely absence of bats and if present, characterise the roost including species, numbers and levels of activity, to identify entrance and egress points, and to gain an understanding of the activity of bats using the building in the local landscape.

The current proposals, to be submitted to Somerset Council is understood to involve the conversion of parts of the existing loft, the reroofing of the building and the re-designing of the chimneys.

Table 1: Summary of results

Building reference	**Presence/likely absence of roosting**	**Roost character**	**Recommendations for further survey and/or mitigation**
B1 – Existing Dwelling	Confirmed roost	Small day roost for a low number (two) of common pipistrelle *Pipistrellus pipistrellus* bats, (one) serotine *Eptesicus serotinus* bats and (two) brown long-eared bats *Plecotus auritus* (confirmed by eDNA).	An application for a European Protected Species Mitigation Licence (EPSML) will need to be submitted and approved by Natural England, in order for the works to proceed. Due to the small number of common species presence, the site is suitable to be registered by an approved consultant, under the low impact bat mitigation class license system. Mitigation and site enhancements have been recommended.

1.0 Introduction and Context

1.1 Background

Quantock Ecology were commissioned by Mr. Julian De Wilton to undertake a suite of emergence surveys at Dyers Orchard, Butleigh. The assessment is informed by the Bat Conservation Trust publication: *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, J, (ed.), 2016).

The Preliminary Roost Assessment, undertaken in March 2023 by Quantock Ecology, suggested B1 provided a high habitat value for roosting bats, with some suitable habitat noted on the building suitable for crevice dwelling species and a large quantity of bat droppings and potential entrance points identified in the loft void.

1.2 Aims and Objectives

This report provides a description of the bat activity observed and recorded during each survey, notably the egress and entrance points on the building; the numbers and species of bats using the roosts; and the type and levels of activity in and around the roost sites. The aim of the assessment was to determine the presence or likely absence of roosting bats and to gain an understanding of how bats (if present) use the building. The objectives of the surveys were to gain an understanding of the species, numbers and access points, roosting locations, timing of use and type of roost.

Robust data has been collected, following good practice guidelines, to inform an assessment of the potential impacts of the proposed development on bats, and inform any mitigation and enhancement measures. This report provides information on constraints to the proposals as a result of roosting bats, and summarises any mitigation required to achieve planning or other statutory consent, and to comply with wildlife legislation.

1.3 Scope of the Report

Survey plans are presented in Appendix 1, showing the location of each surveyor and the bat activity observed and recorded during each survey; site plans showing the current site layout and proposed development will be shown in Appendix 2; proposed mitigation is outlined in Appendix 3 and a summary of relevant legislation can be found in Appendix 4. eDNA results can be found in Appendix 5. This report should be read in conjunction with the Preliminary Roost Assessment (Quantock Ecology), March 2023.

1.4 Site Context

The site is situated within the village of Butleigh, ~6km north of the town of Somerton, Somerset. The surrounding village of Butleigh consists of low density detached and semi-detached housing, with large residential gardens containing scattered trees. The local landscape is predominantly a mixture of arable and pastural farmland, bordered by mature hedgerows with scattered trees. Substantial areas of woodland are present in the local landscaping. At their closest, these lie ~890m east with Combe Hill Wood identified ~1km southwest of the site. Several waterbodies can be found across the landscape; these include a network of Rhynes situated in the northern half of the 2km search area, Wash Brook identified ~420m east, Mill Stream ~1.5km northeast and the River Brue ~1.7km north of the site. Connectivity to and from the site into the wider landscape is present; mostly in the form of the residential gardens surrounding the site, leading to mature trees and heavy hedgerows and woodland features.

1.5 Project Description

This report is prepared to accompany a planning application to be submitted to Somerset Council. The development proposals briefly comprise the conversion of the existing loft, the reroofing of the building the re-designing of the chimneys and other modifications to the interior. The plan showing the proposed works, is included in Appendix 2. The programme for the scheme is yet to be confirmed.

The plan showing the proposed works will be included in Appendix 2 upon receipt. The programme for the scheme is yet to be confirmed.

2.0 Methodology

2.1 Site Survey

2.1.1 Surveyors and weather conditions

The surveys were undertaken and overseen by Assistant Ecologist India Long, BSc (Hons) QCIEEM on the 16th of March 2023. India holds a Natural England bat licence, number: 2022-10301-CL17-BAT. Also present was Principal Ecologist Simon Pidgeon, BSc MRSB (Hons) (licence number: 2016-24382-CLS-CLS) and experienced bat surveyor Indie England BSc (Hons) QCIEEM, Emma-louise Crawford BSc, PGDip and Philip Pidgeon.

Weather conditions for each survey are shown in Table 2 below.

Table 1: Weather conditions during surveys

Date of survey	Weather conditions at start of survey	Weather conditions at end of survey
06/06/2023 (Dusk)	Temperature: 15°C Humidity: 67% Cloud Cover: 0% Wind speed: 0/8 Precipitation: None	Temperature: 14°C Humidity: 71% Cloud Cover: 0% Wind speed: 0/8 Precipitation: None
05/07/2023 (Dusk)	Temperature: 15°C Humidity: 71% Cloud Cover: 40% Wind speed: 0 Precipitation: None	Temperature: 14°C Humidity: 76% Cloud Cover: 90% Wind speed: 0 Precipitation: None
31/07/2023	Temperature: 17°C Humidity: 81% Cloud Cover: 30% Wind speed: 1 Precipitation: None	Temperature: 16°C Humidity: 82% Cloud Cover: 100% Wind speed: 0 Precipitation: None

The survey methods were informed by the Preliminary Roost Assessment (PRA), which identified potential roosting and access points on the building. All building that were assessed as being suitable for roosting bats was subject to survey; two surveyors were used to provide sufficient coverage of all suitable structures on site. The location of each surveyor during each survey is shown in Appendix 1.

2.1.2 Timing

The dates and times of each survey are shown in the table below.

Table 2: Survey schedule, dates and times

Reference	Suitability	Survey date	Sunset/sunrise time	Survey start time	Survey end time
B1	High	06/06/2023	21:21	21:06	22:51
B1	High	05/07/2023	21:27	21:12	22:57
B1	High	31/07/2023	20:59	20:44	22:29

2.1.3 Equipment

All surveyors utilised high powered torches, an echo meter touch (EMT2 Pro) connected to an apple iPad. Two-way radios were also used to communicate between surveyors across the site. A Canon XA11 infrared camcorder supplemented with infrared flood lights was utilised on each survey.

2.2 Limitations

This survey follows best practice guidance to confirm presence/absence of roosting bats and where present, characterise the roost. However, this information is collected at finite dates and times, and provides an indication of the conditions on site only. The use of the structures and trees, and site as a whole, by bats, at all times cannot be established based on this information.

No site-specific limitations were noted during the surveys, which were undertaken during the optimal survey season.

3.0 Results

3.1 Survey Results

3.1.1 Presence/absence and roost characterisation surveys

Building 1

A total of two common pipistrelle bats were seen emerging from raised lead flashing around the chimney on the south elevation, one serotine bat was seen emerging from between the wall top and fascia on the south elevation and from raised lead flashing around the chimney on the south elevation and two brown long-eared bats were seen emerging from the apex of the eastern gable end and between the fascia and wall top on the south elevation. Therefore, the building provides a day roost for a small number (two) of common pipistrelles, one serotine and two brown long-eared bats.

This information is shown on the plans in Appendix 1 and in tables 4 and 5.

Table 3: Summary of survey results, Survey Date: 06/06/2023

Surveyors: A: Simon Pidgeon B: Indie England C: India Long			
Survey Date: 06/06/2023			
Building reference	**Surveyor and Position**	**Start Time – End Time**	**Brief summary of passes and behaviour observed**
B1 Existing Dwelling	Surveyor A, (located on the east elevation observing the east and north elevations).	21:06 – 22:51	The first bat recorded was a passing soprano *Pipistrellus pygmaeus* bat seen flying south towards the garden at 21:40. A common pipistrelle was recorded flying from the lane over the garden at 21:55 and a further pass from a common pipistrelle flying north was recorded at 21:59. Two common pipistrelles were observed and recorded circling over the building at 22:11 and a single common pipistrelle was seen flying west at 22:16. A common pipistrelle was heard but not seen at 22:22 and a faint pass from a noctule *Nyctalus noctula* recorded at 22:38. No bats were seen emerging from the building.
B1 Existing Dwelling	Surveyor B, (positioned on the southeast corner of the building observing the south and east elevations of the building).	As above	Continuous foraging activity was recorded from common pipistrelles, foraging in the garden from 21:38 until the end of the survey. An unidentified bat that did not echolocate was also observed flying southeast to northwest over the east elevation at 21:59 and a soprano pipistrelle was recorded flying along the driveway over the east elevation at 21:10. A pass from a noctule, heard but not seen was recorded at 22:38. No bats were observed emerging from the building.
Existing Dwelling	Surveyor C, (positioned on the west elevation of the building)	As above	The first bat recorded was a faint pass from a common pipistrelle, heard but not seen at 21:39. A further pass from a common pipistrelle bat was recorded commuting west from east at 21:48, 21:59 and 22:13. A bat that did not echo-located, suspected to be a long-eared *Plecotus* sp., was observed circling surveyor C and then flying low around the building towards the north gable end at 21:58 and a soprano pipistrelle bat was seen flying north from south

			over the house at 22:11. A faint pass from a noctule was recorded at 22:38. No bats were seen emerging from the building.

Table 4: Summary of survey results, Survey date: 05/07/2023

Surveyors: A: Emma Crawford B: Indie England C: India Long			
Survey Date: 05/07/2023			
Building reference	**Surveyor and Position**	**Start Time – End Time**	**Brief summary of passes and behaviour observed**
B1 Existing Dwelling	Surveyor A, (located on the east elevation observing the east and north elevations).	21:12-22:57	The first bat recorded was the unseen pass of a common pipistrelle, recorded at 21:50. Further common pipistrelle passes were recorded at 22:12, 22:25, 22:31. Unseen serotine passes were noted at 21:54, 21:57, 22:03 and 22:06. A faint pass from a soprano pipistrelle was recorded at 22:31 and 22:38 but was not seen. Foraging behavior was recorded from a common pipistrelle bat, observed foraging in the garden near the south elevation of B1 at 22:03 and 22:18. A noctule was recorded at 22:31 but was not seen and a long-eared bat was heard but not seen at 22:44. No bats were observed emerging from the building.
B1 Existing Dwelling	Surveyor B, (positioned on the southeast corner of the building observing the south and east elevations of the building).	As above	The first bat recorded was a common pipistrelle at 21:37, seen flying west from the east direction and recorded again flying the same direction at 21:39. A faint pass from a brown long-eared was recorded at 21:52. **A common pipistrelle bat was seen emerging from a lifted tile near the base of the chimney on the south elevation at 21:57. A serotine bat was recorded emerging from beneath the fascia on the southern elevation of the building at 21:58.** A common pipistrelle bat was seen foraging in the garden at 22:00 and was recorded frequently until the end of the survey. An unseen pass of a

			soprano pipistrelle bat was recorded at 22:31. **In summary, two bats were seen emerging from the building.**
B1 – Existing Dwelling	Surveyor C, (Positioned on the west elevation of the building)	As above	A common pipistrelle bat was the first bat recorded at 21:37, seen circling the courtyard adjacent to the east elevation of the building. **A further common pipistrelle was seen emerging from a loose tile beneath the chimney on the east elevation at 21:53.** An unseen pass from a serotine bat was recorded at 22:06 and frequent unseen passes from common pipistrelles were recorded from 22:12 until the end of the survey and foraging behavior from common pipistrelle bats, recorded foraging in the garden was recorded at 22:15. A soprano pipistrelle was recorded flying north from the south direction at 22:22 and recorded but not seen at 22:21. The unseen pass from a noctule was recorded at 22:31 and an unseen pass from an unidentified myotis *Myotis* sp. was recorded at 22:32. **One bat was seen emerging from the building.**

Table 6: Summary of survey results, Survey date: 31/07/2023

Surveyors: A: Emma Crawford B: Indie England C: India Long			
Survey Date: 31/07/2023			
Building reference	**Surveyor and Position**	**Start Time – End Time**	**Brief summary of passes and behaviour observed**
B1 Existing Dwelling	Surveyor A, (located on the east elevation observing the east and north elevations).	20:44-22:29	A faint pass from a noctule at 21:17 was the first bat recorded during the survey, and was heard again at 21:29, 21:31, 21:53 and 22:05. A pass from a common pipistrelle, heard but not seen was recorded at 21:47 and a soprano pipistrelle was recorded but not seen at 21:50. No bats were seen emerging from the building.

B1 Existing Dwelling	Surveyor B, (positioned on the southeast corner of the building observing the south and east elevations of the building).	As above	A faint, unseen pass from a noctule was recorded at 21:17 and again at 21:52. An unseen pass from a common pipistrelle was recorded at 21:21 and a common pipistrelle was seen commuting northeast to west across the garden at 21:23 and faint foraging activity was recorded at 21:24. **A long-eared bat was seen emerging from the apex at the gable end and then flew north at 21:27. A further emergence from a non-echolocating bat was recorded (suspected to be a long-eared from flight characteristics) at 21:44, where it was seen emerging from between the fascia and wall top of the southern elevation and seen flying south. A serotine bat was seen emerging from the chimney from beneath the lead flashing at 21:36 and flew north**. Foraging behavior from common pipistrelle bats was recorded from 21:44 to 22:00.
B1 – Existing Dwelling	Surveyor C, (positioned on the west elevation of the building)	As above	A common pipistrelle was heard but not seen at 21:32 and 21:54 and commuting activity from common pipistrelle bats, seen flying north from south across the building was recorded at 21:44 and 22:45. No bats were seen emerging from the building and activity levels were

4.0 Conclusions and Impact Assessment

4.1 Conclusions

The main conclusions of the PRA and emergence surveys undertaken at this site are described below. One building was surveyed, following recommendations made in the PRA.

Two common pipistrelles were seen emerging from the building from beneath lead flashing around the chimney. One serotine was seen emerging from between the fascia and wall top of the southern elevation, and one serotine was seen emerging from beneath lead flashing near the chimney on the south elevation. Two long-eared bats were seen emerging from the eastern gable end at the apex and from between fascia and wall top on the southern elevation. Therefore, the building is a confirmed day roost for a low number of common pipistrelle bats, serotine bats, and brown long-eared bats.

4.2 Impact Assessment

As the proposals involve the complete renovation and reroofing of B1, the bat roosts will be destroyed, and bats could be killed or injured during the works. This would result in a contravention of legislation protecting bats, and a European Protected Species Mitigation Licence issued by Natural England is required to ensure legal compliance.

Bats are protected under the Wildlife and Countryside Act and Conservation Regulations; see Appendix 3 for a summary of legislation protecting bats in the UK.

4.3 Recommendations

4.3.1 Mitigation

The surveys undertaken to date in and around B1 provide sufficient information to inform a European Protected Species Mitigation license (EPSML). An EPSML will be required to enable the proposed works to be undertaken on this building lawfully, whilst ensuring the maintenance of the populations of the species concerned at a favourable conservation status in their natural range; detailed mitigation will be described in the EPSML Method Statement.

Natural England's *European Protected Species Guidance: How to get a licence* states: "In order to obtain a licence to allow for the capture of EPS, damage or destruction of breeding sites, etc., in advance of any otherwise legitimate activity which may impact on the favourable conservation status of the EPS

concerned, you must demonstrate that the damage will be adequately compensated for to satisfy Regulation 53(9)(b)". Current Natural England advice is that there should be no net loss in the local population status of the species concerned, taking into account factors such as population size, viability and connectivity. Hence, when it is unavoidable that an activity will affect an EPS population, the mitigation should aim to maintain a population of equivalent status on or near the original site".

The survey efforts undertake to date, confirm that 'Dyers Orchard' can be a registered, under Natural England's Low Impact Bat Mitigation Class Licence system, by an approved consultant.

A BMCL can be obtained once the client is in receipt of planning permission. The BMCL must be obtained before any works that may affect the roost within the main loft are undertaken**.** The BMCL will be required to enable the proposed works to be undertaken on this building lawfully, whilst ensuring the maintenance of the population of the species concerned at a favorable conservation status in their natural range; mitigation is outlined in Appendix 3.

As such, mitigation will include soft stripping of the building under supervision by the registered consultant. A number of replacement roosting provisions have been considered, which could include the installation of one Schwegler 1FR Bat Tube on the south elevation and two bat adapted tiles near the ridgeline of the south elevation and near the eastern gable end. It is understood that there are no plans to convert part of the loft void at the eastern gable end or centrally, therefore, alternative mitigation could include the creation of a suitable roosting site within the roof void (ideally centrally) not being impacted. This would include recreating access points around chimney, providing potential access into the retained loft space for serotine and brown long-eared bats.

Where the bat adapted tile is installed, only type 1F bitumen felt should be used as weatherproof membrane. No breathable roof membranes should be used. Scientific research has shown that Breathable Roof Membranes (BRMs) are harmful to bats with bats becoming entangled in loose fibres resulting in the death of bats. BRMs used in bat roosts can quickly become shredded by the bats claws resulting in a reduced lifespan of the product. **There are currently no bat friendly BRM products on the market**.

A provisional mitigation plan showing the details above, is presented in Appendix 3.

Careful consideration should be given to any future lighting across the site. Bats were observed using the gardens south of the building for foraging and commuting. As such, the lighting of these areas should be maintained as close to current conditions as possible. Any future lighting should be kept to a minimum, and in line with guidance produced by the Bat Conservation Trust and Institute of Lighting Professionals: https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/.

4.3.2 Enhancements

The installation of a single Schwegler 1FF or 2FN bat box could be considered; erected on the existing dwelling or any suitable trees on site. This should be installed facing a southerly direction, approximately 3-5m above ground level. Such bat boxes would provide additional roosting habitat for bats present within the local area. The inclusion of one swift brick (or similar) could also be provided on the new extension or existing dwelling to provide alternative nesting opportunities for red listed (species of conservation concern) passerine birds. Any nesting provision should be installed at least 4m above the ground, spaced at least 1m part and be located on the north or east elevation of the buildings to avoid excessive heating and prevailing weather conditions.

The installation of three Schwegler 1FF or 2FN (or similar woodstone) bat boxes will also need to be considered; erected on the existing dwelling or any suitable trees on site. This should be installed facing a southerly direction, approximately 3-5m above ground level. Such bat boxes would provide additional roosting habitat for bats present within the local area. The boxes would also provide a location to place any bats found during the supervised removal of the roof structure once the mitigation licence has been approved.

5.0 Bibliography

- Barn Owl Trust (2012) Barn Owl Conservation Handbook, Pelagic Publishing, Exeter.
- British Trust for Ornithology (2016) www.bto.org/about-birds/nnbw/putting-up-a-nest-box
- Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3rd edition, Bat Conservation Trust, London.
- Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected?
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

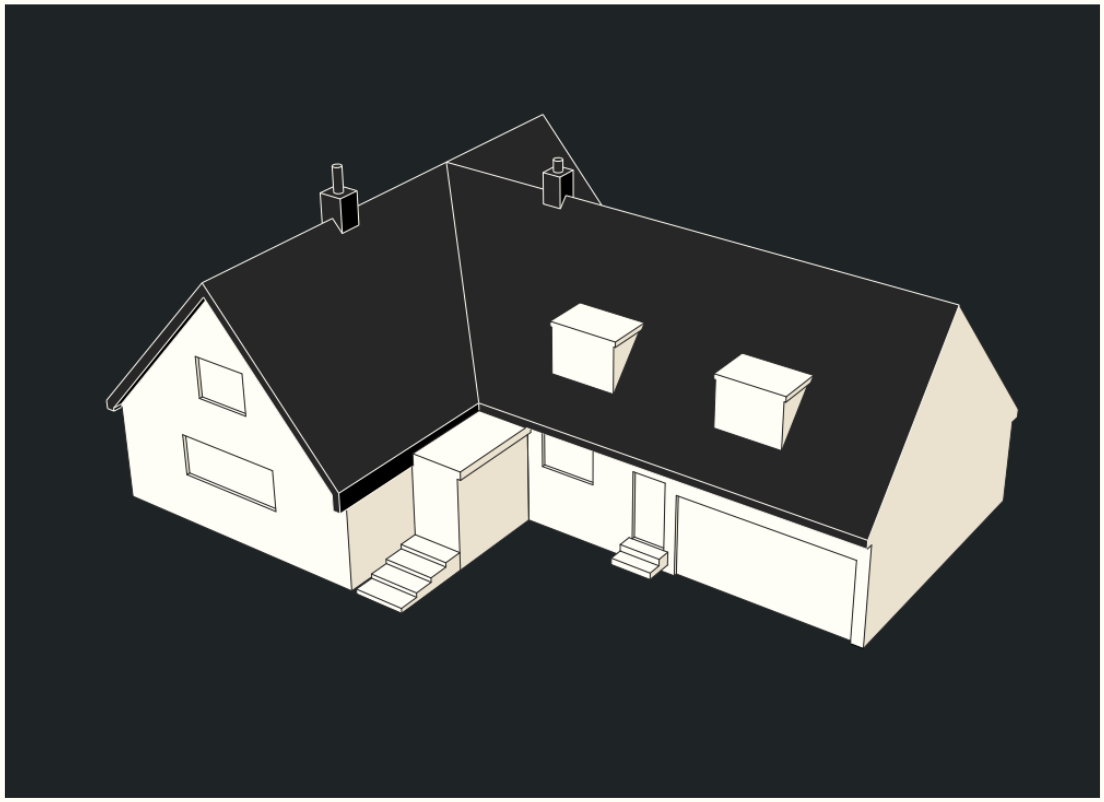
Appendices

Appendix 1: Survey Plan

Appendix 2: Proposed Site Plan

_Step 05: Roof

As with the walls, improvements should be sought to the aesthetic and thermal properties of the roof. Concrete roof tiles will be replaced with a contextually appropriate finish such as slate or clay tile. Internally the ceiling space should be vaulted to provide a more capacious internal environment with insulation added between and below the existing rafters. The two existing chimneys could be redesigned and re-purposed, with one acting as a flue to the log burner, and the other providing natural stack ventilation to keep the house cool in the summer.



Appendix 3: Proposed Mitigation

Proposed Mitigation (alternative)

Appendix 4: Legislation and Planning Policy related to bats

LEGAL PROTECTION

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2.

Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species as:

  a) to impair their ability:

  (i) to survive, breed, or reproduce, or to rear or nurture young

  (ii) to hibernate or migrate

  b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are also protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale

Effect on development works:

A European Protected Species Mitigation (EPSM) Licence issued by the relevant statutory authority (e.g. Natural England) will be required for works likely to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficiency/success to be monitored.

The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost (Garland & Markham, 2008)

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and The Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act, 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act (Section 42 in Wales) requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity.' This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

Appendix 5: eDNA results

SureScreen Scientifics

Folio No: E19175
Report No: 1
Purchase Order: Withy Lane/Dyers Orchard
Client: Quantock Ecology
Contact: India Long

TECHNICAL REPORT

ANALYSIS OF BAT DROPPINGS FOR SPECIES OF ORIGIN IDENTIFICATION

SUMMARY

The droppings of bats contain small amounts of DNA belonging to the organism from which they originated. By analysing droppings collected from a bat roost or colony for the presence of DNA, a robust identification of the species present can be made. Recent advancements in molecular methods including PCR (polymerase chain reaction) and DNA sequencing mean that 92% of bat species worldwide can be identified including all 17 UK resident bat species.

RESULTS

Date sample received at Laboratory: 08/09/2023
Date Reported: 15/09/2023
Matters Affecting Results: None

Lab Sample ID.	Site Name	O/S Reference	Genetic Sequence	Common Name	Result	Sequence Similarity
[redacted]						
B2486	Dyers Orchard	ST 520 336	CCTGATATAGCTTTTCCCCG AATGAATAACATAAGCTTCT GACTGCTTCCCCCCTCTTTT CTACTACTTTTAGCTTCATCT GCGGTAGAGGCTGGAGCTG GTACCGGTTGAACAGTCTAT CCCCCTTTAGCGGGAAACCT AGCTCATGCTGGAGA	Brown long-eared bat	*Plecotus auritus*	94.81%

If you have any questions regarding results, please contact us: ForensicEcology@surescreen.com

Reported by: Chelsea Warner **Approved by:** Chris Troth

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