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**PLOT 7
HOME FARM BUILDINGS
RUTHIN ROAD
COEDPOETH
WREXHAM
LL11 3BP**

BUILDING DEVELOPMENT

Bat Emergence Surveys



Plot 7 (aka Barn 1), Plas Power, Coedpoeth.

Client	Carl Sheffield
Planning Authority	Wrexham County Borough Council
Grid Reference	SJ304506
Dates of Surveys	16 May 2019 and 2 June 2019
Reference	062019/BES/CS



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TABLE OF CONTENTS

1.0 SUMMARY	3
2.0 INTRODUCTION	4
2.1 Brief	
2.2 Purpose of this report	
2.3 Scope of report	
2.4 Relevant background information	5
2.5 Qualifications	
2.6 Copyright	
3.0 DATA COLLECTION	6
3.1 Site Description	
3.2 Methodology	7
3.3 Results	
4.0 SITE EVALUATION	10
5.0 IMPACT ASSESSMENT	10
5.1 Short-term impact	
5.2 Long-term impact – roost losses	
5.3 Long-term impact – fragmentation and isolation	
5.4 Post-development interference impacts	
5.5 Predicted scale of impact	
6.0 CONCLUSIONS	11
6.1 Bats	
6.2 Nesting birds	
7.0 MITIGATION AND RECOMMENDATIONS	12
7.1 Compensation	
7.2 Reasonable Avoidance Measures	
7.3 Bat roosting opportunities	13
7.4 Roof insulation	
7.5 Timber treatment	14
7.6 Lighting	
7.7 Bird nesting opportunities	
8.0 WILDLIFE AND THE LAW	15
8.1 European Protected Species	
8.2 Other Protected Species – Nesting Birds	17
8.3 Environment (Wales) Act 2016	18
8.4 Planning Policy Wales (PPW 2016)	
8.5 Key Principles of PPW (2016)	
APPENDICES	
Appendix 1 – Site Plan	20
Appendix 2 – Photographs	21
Appendix 3 – Grading System for Bat Habitats	22
Appendix 4 – Bat Sonographs	23
Appendix 5 – Mitigation Details	26
Appendix 6 – Bibliography	29

Client: Carl Sheffield
Ref: 062019/BES/CS

Bat Emergence Surveys
Plas Power, Coedpoeth

11 June 2019
page 2 of 29



1.0 SUMMARY

It is proposed to convert the existing main barn on Plot 7, into a dwelling and demolish some of the other small buildings. The planning process requires that ecological surveys be carried out to highlight any potential conflict regarding the protected species (bats and birds), and the proposed development work. The results of the surveys will guide what mitigation/compensation measures are required.

A previous report by JW Ecological Ltd, dated March 2013, concluded from emergence surveys carried out in May 2012 that there was a small summer day roost for 5 x Common Pipistrelle bats and a small summer day roost for 5 x Brown Long-eared bats, primarily associated with the ridge of the Northern section of the barn on Plot 7 [identified in the report as Barn 1]. The same report concluded that small summer day roosts for Common Pipistrelle and Soprano Pipistrelle bats were confirmed in the other barns on the development site.

A report by Tyrer Ecological Consultants Ltd dated September 2018, regarding Barn 4 (located in Northeast of the site) confirmed no bats emerged from the building, but Common Pipistrelle, Noctule, Soprano Pipistrelle and Brown Long-eared bats were recorded foraging/commuting on the site.

A report by Atmos Consulting dated October 2018, observed bat droppings and feeding remains on the first floor of Barn 3, Plot 5 (directly to the North of Plot 7) and from the evidence concluded that the building was a confirmed roost.

Further emergence surveys were carried out on 16 May and 2 June 2019, by Stephen Cutmore and two assistant surveyors. Bats were observed emerging from the section near the West gable-end of the main barn building. The building is therefore a confirmed roost, being used by up to four Brown Long-eared, a single Natterer's and two Common Pipistrelle bats in small day-roosts. Soprano Pipistrelle and Noctule bats were observed foraging in the locality.

As the building is a confirmed roost, a Derogation licence will be required from Natural Resources Wales for this proposed development scheme, to avoid an offence being committed. The proposed development will cause disturbance to bats and likely result in the destruction of bat roosts and roost access points. Mitigation in the form of compensation is therefore required, to provide an alternative bat roost on the site, before any proposed works commence. A dedicated bat loft must be provided as mitigation in the proposed development. This could be achieved by providing an alternative bat loft in the building to the South of the main barn, which is proposed to be used as a garage.

Reasonable Avoidance Measures in the form of timing of operations and provision of bat-friendly features in the proposed development will minimise disturbance to bats and keep in line with Local Biodiversity Action Plans. If mitigation is provided and Reasonable Avoidance Measures are followed, the proposed scheme is likely to have a low impact on the favourable conservation status of the locally recorded bats.



2.0 INTRODUCTION

2.1 Brief

Stephen Cutmore, a licensed bat worker (NRW[78542: OTH: CSAB: 2018], NE[2015-16936-CLS-CLS]), was commissioned by Carl Sheffield, to carry out further bat emergence surveys of the building on Plot 7, Home Farm Buildings, Ruthin Road, Plas Power, Coedpoeth, Wrexham, LL11 3BP.

The definition of the assignment was to:

1. Carry out further bat emergence surveys of the building to determine if there are any roosting bats present.
2. Provide a report with mitigation measures.

2.2 Purpose of this report

The purpose of this report is to advise you of the results of the part 1 of the assignment. These results are set forth in the *Conclusions* section, following. This report describes the field conditions as found and interpreted.

2.3 Scope of report

Date of consultation.

The field surveys were made on 16 May and 2 June 2019, and observations and conclusions are as of those dates.

Limit of scope.

This is solely a protected species survey results report and cannot comment on topics outside this discipline. If additional advice is required, it is strongly recommended that other professionals are consulted.

Unless stated otherwise:

- 1) information contained in this report covers only those buildings that were examined:
- 2) the emergence survey is limited to visual examination of the buildings, whilst utilising digital bat recorders to record bat calls to help identify bat species.
- 3) there is no warranty or guarantee, expressed or implied, that bats may not utilise the buildings after the survey has been completed, that are not discovered utilising the buildings during the inspection. Bats are highly mobile and some species frequently move roosts. It may be possible that bats could move into a building after a survey has taken place. An assessment of the suitability of the building to support roosting bats has therefore been carried out, to establish the likelihood of this occurring.
- 4) this report has been prepared for the sole use and benefit of the client. Any liability of Stephen Cutmore Arboricultural & Ecological Services shall not be extended to any third party.



2.4 Relevant background information

It is proposed to convert the existing main barn on Plot 7, into a dwelling and demolish some of the other small buildings. The planning process requires that ecological surveys be carried out to highlight any potential conflict regarding the protected species (bats and birds), and the proposed development work. The results of the surveys will guide what mitigation/compensation measures are required.

2.5 Qualifications

Stephen Cutmore has over twenty years' experience as an arboricultural and ecological consultant. Stephen holds a BSc (Hons) in Arboriculture & Urban Forestry and is a Chartered Arboriculturist. Stephen is a member of the Bat Conservation Trust (102994) and a member of Clwyd Bat Group. Stephen has been a Licenced Bat Worker since May 2007 and a Licenced Amphibian Worker since March 2011 and currently holds bat licences with NRW and NE (NRW[785424: OTH: CSAB: 2018], NE[2015-16936-CLS-CLS]) and GCN licences with NRW and NE (NRW[78772a:OTH:SA:2018], NE[2016-19908-CLS-CLS]).

2.6 Copyright

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3.0 DATA COLLECTION

3.1 Site Description

Plot 7, Home Farm Buildings, Ruthin Road, Coedpoeth, LL11 3BP, is located at Grid Reference SJ304506. The site is located approximately 1km to the East of the village of Coedpoeth and some 3km to the Southwest of Wrexham town centre. The site is located on the Plas Power Estate, adjacent to the South of the A525. The A483(T) is some 0.75km to the East of the site.

Plot 7 is located towards the South section of the development site, directly to the South of Plot 5. The River Clywedog lies some 1.2km to the South of the site and the River Gwenfro is some 0.7km to the North. Other small watercourses are in the locality. The surrounding landscape has improved pasture fields with native hedgerows and trees. Big Wood is some 1.1km to the Southwest of the site, with other small areas of woodland in the locality. All these landscape features provide good habitat for foraging bats.

A previous report by JW Ecological Ltd, dated March 2013, concluded from emergence surveys carried out in May 2012 that there was a small summer day roost for 5 x Common Pipistrelle bats and a small summer day roost for 5 x Brown Long-eared bats, primarily associated with the ridge of the Northern section of the barn on Plot 7 [identified in the report as Barn 1]. The same report concluded that small summer day roosts for Common Pipistrelle and Soprano Pipistrelle bats were confirmed in the other barns on the development site.

A report by Tyrer Ecological Consultants Ltd dated September 2018, regarding Barn 4 (located in Northeast of the site) confirmed no bats emerged from the building, but Common Pipistrelle, Noctule, Soprano Pipistrelle and Brown Long-eared bats were recorded foraging/commuting on the site.

A report by Atmos Consulting dated October 2018, observed bat droppings and feeding remains on the first floor of Barn 3, Plot 5 (directly to the North of Plot 7) and from the evidence concluded that the building was a confirmed roost.



Figure 1: Aerial photograph of the Home Farm Buildings, Coedpoeth, showing good connectivity in the surrounding landscape.



3.0 DATA COLLECTION (continued)

3.2 Methodology

3.2.1 Scoping survey

A day-time survey was carried out on 13 March 2018, by licensed bat worker, Stephen Cutmore. The buildings were subject to a preliminary roost assessment, as detailed in the Bat Conservation Trust survey guidelines (Collins, 2016). The structure of the buildings was visually examined, utilising a high powered torch and an endoscope. The walls (both internal and external), floor, and (where practical and safe) all accessible roof spaces, crevices and other potential roosting areas were methodically closely visually examined for signs of bat occupation, in the form of droppings, feeding remains, staining around crevices, as well for the animals themselves.

3.2.2 Emergence surveys

Further emergence surveys were carried out on 16 May and 2 June 2019, by Stephen Cutmore and two assistant surveyors. The surveyors took up strategic positions around the building, which was visually monitored to check for any emerging bats. Electronic bat detectors (Anabat Walkabout), were used to record and analyse the frequencies of bat echolocation calls. The observed flight pattern of the observed bats and the frequency of the echolocation calls enabled the species of bat to be identified.

3.3 Results

3.3.1 Bat scoping survey

No bats were encountered. The only evidence of recent bat activity was observed in the form of old droppings on the white wall tiles in the central room of the barn complex.

The building has a high level of natural light penetrating via the areas of collapsed roof and numerous holes due to slipped/missing slates. The inside of the barn complex is damp, due to the ingress of rain through the damaged roof sections and is cold and drafty due to the wind. Some sections of the barn complex to the South have pitched roofs covered with corrugated asbestos roof sheets. No roofing felt or insulation was observed beneath the slates or roofing sheets.

There are gaps under ridge tiles and slates on the intact sections of roof on the North section, which provides potential for crevice-dwelling bat species. The very small loft area present towards the West gable end of the North section has some limited potential for bats. The building has deteriorated in condition significantly since the original surveys in May 2012, which has reduced the potential for bats.

The building was assessed as having a moderate suitability for roosting bats. The surrounding habitat was assessed as having moderate suitability for foraging/commuting bats.



3.3 Results

3.3.2 Emergence surveys

1st survey evening emergence 16 May 2019

The emergence survey started at 20.50hrs, with sunset time of 21.05hrs. The starting air temperature was recorded as 13°C. The weather was dry, with clear skies. There was a moderate breeze.

The survey was stopped at 22.35hrs, with a finishing temperature of 12°C.

The first bat was detected at 21.36hrs and observed emerging from beneath the bargeboards on the West gable-end of the main barn building. Echolocation calls recorded [33kHz] were assessed using Anabat Insight software. The bat was identified as a Brown Long-eared (*Plecotus auritus*).

At 21.42hrs a second Brown Long-eared bat was observed emerging from beneath the bargeboards on the West gable-end of the main barn building.

At 21.47hrs a myotis bat was observed emerging from a gap at the edge of the slate, just above the bargeboards on the West gable-end of the main barn building. Echolocation calls recorded [47kHz] were assessed using Anabat Insight software. The bat was identified as a Natterer's (*Myotis nattereri*).

At 21.48hrs a third Brown Long-eared bat was observed emerging from beneath the bargeboards on the West gable-end of the main barn building.

At 21.56hrs a fourth Brown Long-eared bat was observed emerging from beneath the bargeboards at the apex of the West gable-end of the main barn building.

At 21.58hrs a bat was observed foraging along the yard to the North of the main barn building and flying round the West gable-end and into the field to the South. Echolocation calls recorded [45kHz] identified it as a Common Pipistrelle bat.

At 22.03hrs a Brown Long-eared bat was observed foraging in the yard near the West gable-end of the main barn building.

At 22.09hrs a Common Pipistrelle bat was observed foraging in the field to the South, then flying around the West gable-end.

At 22.10hrs a bat was observed flying high over the site. Echolocation calls recorded [18kHz] identified this as a Noctule (*Nyctalus noctula*).

At 22.19hrs a Common Pipistrelle was observed foraging in the yard near the West gable-end of the main barn building. A second bat was observed in the same area and echolocation calls recorded [55kHz] identified this as a Soprano Pipistrelle (*Pipistrellus pygmaeus*).



3.3 Results

3.3.2 Emergence surveys (continued)

2nd survey evening emergence 2 June 2019

The emergence survey started at 21.15hrs, with sunset time of 21.31hrs. The starting air temperature was recorded as 15°C. The weather was dry and overcast with 70% cloud cover. There was a brisk breeze.

The survey was stopped at 23.05hrs, with a finishing temperature of 13°C.

The first bat detected at 21.57hrs was a Noctule [18kHz] flying high over the site.

At 22.00hrs a Common Pipistrelle bat [45kHz] was observed emerging from beneath a ridge tile, near the collapsed section of roof towards the West gable-end of the main barn building.

At 22.02hrs a Natterer's bat was observed emerging from a gap at the edge of the slate, just above the bargeboards on the West gable-end of the main barn building.

At 22.05hrs a Brown Long-eared bat [33kHz] was observed emerging from a hole in the roof, towards the West gable-end of the main barn building. At 22.08hrs this bat was observed foraging in the yard near the West gable-end.

At 22.09hrs a Common Pipistrelle bat [45kHz] was observed foraging in the yard to the North of the barn.

At 22.10hrs a second Brown Long-eared bat was observed emerging from beneath the bargeboards on the West gable-end of the main barn building. At 22.13hrs a third Brown Long-eared bat was observed emerging from beneath the bargeboards at the apex of the West gable-end of the barn.

At 22.16hrs a Common Pipistrelle was observed foraging in the yard to the North of the barn. At 22.22hrs a second Common Pipistrelle bat was observed emerging from a gap beneath a slate edge at the West gable-end of the barn. Between 22.24hrs and 22.50hrs, these two Common Pipistrelles were observed making constant passes foraging around the West gable-end and flying into the field to the South.

At 22.31hrs a Noctule bat was observed flying high over the site.



4.0 SITE EVALUATION

Bats were observed emerging from the section near the West gable-end of the main barn building. The building is therefore a confirmed roost, being used by up to four Brown Long-eared, a single Natterer's and two Common Pipistrelle bats in small day-roosts. Soprano Pipistrelle and Noctule bats were observed foraging in the locality.

The River Clywedog lies some 1.2km to the South of the site and the River Gwenfro is some 0.7km to the North. Other small watercourses are in the locality. The surrounding landscape has improved pasture fields with native hedgerows and trees. Big Wood is some 1.1km to the Southwest of the site, with other small areas of woodland in the locality. All these landscape features provide good habitat for foraging bats.

5.0 IMPACT ASSESSMENT

5.1 Short-term impact

Disturbance through increased human presence, noise and changes in site layout may have a detrimental effect on bats. Bats could be killed or abandon roost if works start when present between spring and summer. If works started in winter and not completed by spring, bats would have no roost to return to. Timing of operation will minimise disturbance.

5.2 Long-term impact – roost losses

A small day-roost for Brown long-eared, Natterer's and Common Pipistrelle species bats will be disturbed/destroyed during the development, which could have a low impact on the locally recorded population. Providing a replacement roost and incorporating additional new roost opportunities into the proposed development will likely have a positive impact on locally recorded bats.

5.3 Long-term impact – fragmentation and isolation

Any loss of linear features (hedges, treelines), which provide important flightlines would be negative. There is no vegetation in the immediate vicinity of the barn complex, which is surrounded by concrete yard areas. A post-construction landscape scheme will include new tree/shrub planting, which will improve biodiversity on the site.

5.4 Post-development interference impacts

Any bright, artificial lighting on roost entrances and flightlines would be negative. Any lighting should be low level, with illumination directed downwards to minimise impact.

5.5 Predicted scale of impact

The impact on individual bats of all species concerned would be high and the impact on the favourable conservation status of locally recorded bats would be low. It is essential that appropriate compensation and mitigation measures are implemented and that Reasonable Avoidance Measures are followed, in order to minimise the impact on locally recorded bats.



6.0 CONCLUSIONS

6.1 Bats

Evidence of bat activity was observed during the scoping survey, in the form of old droppings on the white wall tiles in the central room of the barn complex. On the emergence surveys, Brown Long-eared, Common Pipistrelle and Natterer's bats were observed and detected emerging from the building. Noctule and Soprano Pipistrelle bats were observed and detected foraging in the vicinity.

The conclusion is that the main barn building on Plot 7, Home Farm Buildings, Ruthin Road, Coedpoeth, Wrexham, LL11 3BP is a confirmed roost, being used by up to 4 x Brown Long-eared, 2 x Common Pipistrelle and 1 x Natterer's bats as a day roost.

As the building is a confirmed roost, a Derogation licence will be required from Natural Resources Wales for this proposed development scheme, to avoid an offence being committed. The proposed development will cause disturbance to bats and likely result in the destruction of bat roosts and roost access points. Mitigation in the form of compensation is therefore required, to provide an alternative bat roost on the site, before any proposed works commence. Reasonable Avoidance Measures in the form of timing of operations and provision of bat-friendly features in the proposed development will minimise disturbance to bats and keep in line with Local Biodiversity Action Plans. If mitigation is provided and Reasonable Avoidance Measures are followed, the proposed scheme is likely to have a low impact on the favourable conservation status of the locally recorded bats.

6.2 Nesting birds

Evidence of previous nesting birds was observed in the form of Swallow nests (*Hirundo rustica*) and Wood Pigeon (*Columba palumbus*) in the central room and a small room in the Southeast section, where the electric main fuse box was located. A small nest, likely to be Robin (*Erithacus rubecula*), was observed in the room in the Southeast section. None of the nests were actively occupied at the time of the survey.

Swallows have previously nested in the barn. Provision must be provided, on a like-for-like basis, in another outbuilding, by installing starter platforms in the form of 90mm x 90mm wooden battens fixed 450mm down from the roof apex.

Birds are protected by European and UK legislation. Any proposed development works which may affect nesting birds should be carried out between October – March to avoid the nesting season.



7.0 MITIGATION AND RECOMMENDATIONS

7.1 COMPENSATION

The proposed development work will result in the disturbance/destruction of a confirmed roost being used by up to 4 x Brown Long-eared, 2 x Common Pipistrelle and 1 x Natterer's bats as a day roost. Mitigation in the form of compensation is required, to provide an alternative 'like-for-like' bat roost on the site. The replacement roost should 1) match the existing roost in terms of size, height and aspect; 2) have a thermal regime suitable for the target species; 3) be situated as close as possible to the roost being lost and; 4) have an entrance close to the existing flight lines and appropriate habitat, to maximise chances of the bats finding and adopting it.

Brown Long-eared bats, being roof void dwelling species, require timber joists or beams on which to roost, but the loft void should not be trussed, in order to allow unobstructed flight. A dedicated bat loft must be provided as mitigation in the proposed development. This could be achieved by providing an alternative bat loft in the building to the South of the main barn, which is proposed to be used as a garage. Whilst no Lesser Horseshoe bats were detected in the vicinity, if a 'fly-in' access (with an opening 300mm wide x 225mm high) is provided in the South or West elevation, or as a covered fly-in access in the South or West-facing pitch, low down on the roof, approximately 1m above the height of the eaves, this would make the bat loft accessible for this species of bat. This replacement roost should be completed between October-May, so that a replacement roost for the void dwelling bats is available for when the bats emerge from hibernation.

Compensation in the form of an alternative bat roost must be provided for crevice-dwelling bats before any proposed work commences. This could be in the form of bat boxes [suggest either a Schwegler (1FQ) wall-mounted bat box (75) or a Schwegler 1WQ summer & winter bat roost] [available from www.wildcareshop.com], fixed to the South or West elevation of the garage building, high enough (>2m) to avoid predation by cats, or in the form of bat-friendly features (bat bricks, bat slates, gaps under slates/ridge tiles/eaves etc.) incorporated into the roof above the replacement void-dwelling bat roost.

7.2 REASONABLE AVOIDANCE MEASURES

General recommendations

Timing of the development works is crucial. The optimum time for work involving a summer roost (where bats are present but without dependable young) is 1st September – 1st May. If there is a possibility it is a maternity roost (where baby bats are born and reared), the optimum time for works is 1st October - 1st May.

The amendments to the European Habitat Regulations came into force in August 2007, which means that the 'incidental result defence', which previously covered acts that were the incidental result of an otherwise lawful operation, such as a planning permission, has now been removed. Therefore, if any bats are encountered, work should stop immediately and not resume until advised by an ecologist. If any bats are discovered, Natural Resources Wales must be notified as to what bat species and numbers were encountered and what action has been taken.

Any proposed development works which may affect nesting birds should be carried out between October – March to avoid the nesting season.



7.0 MITIGATION AND RECOMMENDATIONS (continued)

7.3 BAT ROOSTING OPPORTUNITIES

It is recommended that bat friendly features be incorporated into the proposed development, in order to keep in line with the Local Biodiversity Action Plans. To provide suitable conditions for bats, the use of warm roofs should be avoided. Traditional cold roofs with air circulation should be used. Whichever roof construction is to be used (closed eaves with a fascia; eaves with a soffit; barge board with or without soffit; closed verge pointed with undercloak), gaps (10-20mm) should be left by the fascia/soffit/undercloak for bats to gain access to the inner gable walls.

To provide suitable roosting opportunities for bats, it is recommended that any building to incorporate bat-friendly features **must** use traditional hessian backed 1F bitumastic underfelt. Results of recent research commissioned by The Bat Conservation Trust (http://www.bats.org.uk/pages/breathable_roof_membranes.html) has concluded that Breathable Roofing Membrane (BRM) poses a serious threat to bats, due to loose spun-bond filaments becoming entangled around bats feet and wings, resulting in bats becoming immobilised and eventually dying. The functionality and longevity of BRM can also be affected in those parts altered by the presence of bats.

Another method that could be designed into the roof construction is the use of 'Slate-line' bat tiles installed on the south or west-facing roof sections, to allow bats access to the space between the slates and roofing felt (available from Summit Slate Supplies, Welshpool <http://www.summitslate.co.uk/>). For bat species that use the inside of the loft void (e.g. Brown Long-eared bats), a small hole [75mm x 30mm] should be cut into the underfelt near the top of the bat slate, immediately adjacent to a rafter or wall, so that the bats can climb back out. Alternatively approximately three ridge tiles should have 20mm x 100mm gaps cut in one of the lower edges, to allow access for bats (see *Appendix 5 – Mitigation Details*).

Another alternative is to install a Schwegler 1FQ wall-mounted bat box (75) [available from www.wildcareshop.com], which should be fixed to the west or south elevation wall, high enough (2m) to avoid predation by cats.

Any bat-friendly features to be incorporated in the new development should be detailed on the development plans/drawings.

7.4 ROOF INSULATION

Any new insulation to be installed in the roof of buildings to incorporate bat-friendly features, (e.g. Kingspan sheets), should be fixed to a counter batten, attached to the underside of the rafters. Care must be taken to ensure that a 50mm airspace between the insulation and the slates/tiles is maintained for bat access.



7.0 MITIGATION AND RECOMMENDATIONS (continued)

7.5 TIMBER TREATMENT

Any timber treatment to protect against insects, fungal growth or weathering in areas with potential to be accessed by bats, should only be carried out utilising chemicals from the Natural Resources Wales approved list. A list of Approved Products is available at <https://www.gov.uk/guidance/bat-roosts-use-of-chemical-pest-control-products-and-timber-treatments-in-or-near-them>, which provides links to Timber Treatment Table 1. If the product is not listed, check the active ingredients listed in Timber Treatment Tables 2-7.

You can't use chemical products in or near a known bat roost if there are bats present. The best time to apply treatments is usually between autumn and spring.

Pre-treated timber products

Pre-treated timber products are not included in the tables mentioned above. You can use timber that's been pre-treated off-site, because the chemicals are injected deep into the timber leaving lower concentrations on the surface which isn't harmful to bats. However you shouldn't apply products used to pre-treat timber on-site, because the active ingredients will be more concentrated on the timber surface and may be harmful to bats.

Stains and preservatives

Decorative wood finishes, like stains or wood preservative, can be used around bat roosts as long as you only use them on external timber.

7.6 LIGHTING

Bats can be disturbed by bright, artificial lighting. Where lighting is essential in the vicinity of any proposed new development, subdued lighting should be used and the illumination should be directed downwards (upward light ratio 0%). LED luminaires should be used where possible, with a warm white spectrum (<2700Kelvin) to minimise blue light component. Luminaires should have peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats. The use of motion sensor-triggered security lighting with short (1 min) timers, is preferable to permanent lighting. If roosting opportunities are to be incorporated into the new development, it is essential that roost access points and flightlines used for foraging/commuting (e.g. hedgerows, lines of trees) are not illuminated. The use of soft landscaping and fencing [supported by concrete posts to ensure long-term contribution] can be used to screen light spill. The latest Guide Note 08/18 can be downloaded at www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/

7.7 BIRD NESTING OPPORTUNITIES

Consideration should providing some simple measures that would have a positive conservation benefit on local bird populations. These may be in the form of eaves built to be suitable for house martins. Suitable crevices left unsealed in exterior stonework or brickwork provides potential for nesting house sparrows. Bird boxes (including owl boxes) could be installed in trees to benefit local bird populations. Planting native species hedgerows and areas of shrubs and trees would provide suitable habitat and food sources for birds.



8.0 WILDLIFE AND THE LAW

8.1 EUROPEAN PROTECTED SPECIES

The Bern Convention (The convention on the conservation of European Wildlife and Natural Habitats) was adopted in 1979 and came into force in 1982. To implement this agreement, the European Community adopted the EC Habitats Directive.

The EC Habitats Directive has been transposed into UK legislation by the Wildlife and Countryside Act, 1981 (as amended) and the Conservation of Habitats and Species Regulations, 2010. The Countryside and Rights of Way Act (CroW), 2000 strengthened the existing wildlife legislation in the UK.

The UK has also signed the Bonn Convention (The Convention on the Conservation of Migratory Species of Wild Animals) and is therefore party to various agreements.

8.1.1 Bats

All 17 bat species found in the UK and their roosts are protected in the UK under Schedules 5 and 6 of the Wildlife & Countryside Act 1981 (as amended) and are therefore afforded protection under Section 9 of this Act. The Countryside Rights of Way Act (CroW) 2000 strengthened the existing wildlife legislation in the UK.

In addition, five British bat species are also listed on Annex II [and all bats are listed on Annex IV] of the EC Habitats Directive, which is transposed into national law by means of The Conservation of Habitats and Species Regulations (2017).

These are:

- Greater horseshoe bat (*Rhinolophus ferrumequinum*);
- Lesser horseshoe bat (*Rhinolophus hipposideros*);
- Bechstein's bat (*Myotis bechsteinii*);
- Barbastelle (*Barbastella barbastellus*) and
- Greater mouse-eared bat (*Myotis myotis*).

Bats are listed under Appendix III of the Bern Convention. Bats and their habitats are also listed under Appendix II of the Bonn Convention and therefore the UK has an obligation to protect their habitat, including links to important feeding areas. The UK had designated maternity and hibernacula areas as Special Areas of Conservation (SACs) under the Habitats Directive. Implementation of the UK Biodiversity Action Plan also includes action for a number bat species and the habitats which support them.



8.0 WILDLIFE AND THE LAW (continued)

8.1.2 Legislation relating to European Protected Species

In relation to a development a person commits an offence if they –

- Deliberately captures, injures or kills a European Protected Species
- Deliberately or recklessly disturbs wild animals of any such species in such a way as to be likely significant to affect:
 - (i) the ability of any significant group of animals to survive, breed, or rear or nurture their young; or
 - (ii) the local distribution or abundance of that species;
- Damages or destroys a breeding site or resting place (even if unintentional or when the animal is not present)
- Intentionally or recklessly obstructs access to a structure or place used for protection or shelter
- This legislation applies, regardless of the life stage (including eggs).

A European Protected Species Licence is required to carry out any activity that would otherwise involve committing an offence.

To avoid disturbance during habitat management, a written strategy is required following guidance provided by Natural Resources Wales. If the guidance is followed and major disturbance can be avoided, then a licence is not required.

8.1.3 European Protected Species Licences

At the present time, Natural Resources Wales requires the following three ‘tests’ to be met, in order that a licence may be granted.

Test 1. Regulation 53 (2) (e) states that licences granted to ‘preserve public health, or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment’.

Test 2. Regulation 53 (9) (a) states that a licence may not be granted unless the licensing authority is satisfied ‘that there is no reasonable alternative’.

Test 3. Regulation 53 (9) (b) states that a licence cannot be issued unless the licensing authority is satisfied that the action proposed ‘will not be detrimental to the maintenance of the species concerned at a favourable conservation status in its natural range’.

8.1.4 Recent changes in Licences

Following a recent intervention from the European Court, there have been significant changes in the interpretation of the way licences are issued. In considering a licence request, Natural Resources Wales will seek information relating to the size and importance of the population/colony and will require evidence to demonstrate that the species will be maintained ‘at a favourable conservation status in their natural range’. In effect, this means that to obtain a licence, Natural Resources Wales must be satisfied that the applicant will implement mitigation to safeguard (and ideally enhance) the population concerned. Natural Resources Wales will need to see evidence that the development work which will disturb/destroy a roost site will be undertaken using current best practice, also that the bats can be provided with an alternative roost site on or in the immediate area.



8.0 WILDLIFE AND THE LAW (continued)

8.1.5 Important EPSL Information

Please note that a European Protected Species Licence can only be obtained once planning permission has been granted. When assessing planning applications where a European Protected Species could be affected by proposed works, the local Planning Authority must take into account the potential impacts on the species concerned. In practice this could make further survey work (such as emergence surveys in the case of bats) essential prior to planning permission being granted. Alternatively the LPA may grant planning permission whilst imposing planning conditions to undertake further survey work. The local Planning Authority must also have regard for the three ‘tests’ as outlined above – Regulations 53 (2) (e), 53 (9) (a) and 53 (9) (b). Once planning permission has been granted a European Protected Species Licence application can be submitted to Natural Resources Wales. The application requires detailed Method Statements to be produced by a qualified bat ecologist to demonstrate how Regulation 53 (9) (b) can be satisfied. The applicant will also need to complete a Reasoned Statement form demonstrating (with evidence) that Regulations 53 (2) (e) and 53 (9) (a) are satisfied. This involves producing evidence to show that no reasonable alternative to the proposed action is available and that the action must take place to either ‘preserve public health, or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.

8.2 OTHER PROTECTED SPECIES - NESTING BIRDS

All wild birds are protected under Part 1 of the Wildlife and Countryside Act, 1981 (as amended). Therefore in the UK it is an offence to:

- Take, damage or destroy the nest of any wild bird whilst it is being built or in use.
- Kill, injure or take any wild bird.
- Take or destroy the eggs of any wild bird.

To avoid committing an offence no works should be carried out on a structure/feature that is being used by nesting birds. Nesting is deemed to be over when the young have fully fledged. Certain species which are listed in Schedule 1 of the Wildlife and Countryside Act receive special protection. In these cases any form of intentional or reckless disturbance when they are nesting or rearing dependent young, constitutes an offence. Any disturbance of nesting birds between 1st March-30th September could constitute a criminal offence.



8.0 WILDLIFE AND THE LAW (continued)

8.3 ENVIRONMENT (WALES) ACT 2016

This Act sets out Wales' approach to planning and managing natural resources at a national and local level with a general purpose linked to statutory 'principles of sustainable management of natural resources' defined within the Act.

The Environment (Wales) Act introduces a new, enhanced Biodiversity and Resilience of Ecosystem Duty on public bodies to ensure that biodiversity is an integral part of decision making. The Duty will replace the existing Natural Environment and Rural Communities (NERC) Act 2006 Duty. Public authorities will be required to report on the actions they are taking to improve biodiversity and promote ecosystem resilience. Section 6 of the Act places a duty on public authorities to seek to maintain and enhance biological diversity (referred to as biodiversity). All public bodies, statutory undertakers, Ministers of the Crown and other public office holders are required to apply the duty when they are carrying on any functions in Wales, or in relation to Wales. Section 7 of the Act is similar to the duty in *section 42 of the NERC Act 2006* which it replaces. It places a duty on the Welsh Ministers to publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales.

8.4 PLANNING POLICY WALES FRAMEWORK

Planning Policy Wales (Edition 9, Nov 2016) sets out the Welsh Government's planning policies and how these are expected to be applied. The planning system manages the development and use of land in the public interest, contributing to improving the economic, social, environmental and cultural well-being of Wales, as required by the Well-being of Future Generations (Wales) Act 2015. It should reconcile the needs of development and conservation, securing economy, efficiency and amenity in the use of land, and protecting natural resources and the historic environment. A well-functioning planning system is fundamental for sustainable development.

8.5 KEY PRINCIPLES OF PPW (2016)

Chapter 5 'Conserving and Improving Natural Heritage and the Coast' provides policies for protection of biodiversity and geological conservation.

Para.5.2.3 The Welsh Government will ensure that its policies contribute to the conservation of the abundance and diversity of native wildlife and its habitats and will minimise the adverse effects on wildlife where conflict of interest is unavoidable.

Para 5.5.11 The presence of a species protected under European or UK legislation is a material consideration when a local planning authority is considering a development proposal which, if carried out, would be likely to result in disturbance or harm to the species or its habitat. Local planning authorities should advise anyone submitting a planning application that they must conform with any statutory species protection provisions affecting the site concerned, and should consult Natural Resources Wales before granting permission. An ecological survey to confirm whether a protected species is present and an assessment of the likely impact of the development on a protected species may be required in order to inform the planning decision.



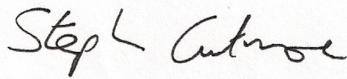
8.0 WILDLIFE AND THE LAW (continued)

8.5 KEY PRINCIPLES OF PPW (2016)

Para 5.5.12 Developments are always subject to the legislation covering European protected species regardless of whether or not they are within a designated site. New developments for which development works would contravene the protection afforded to European protected species require derogations from the provisions of the Habitats Directive. A derogation may only be authorised if there is no satisfactory alternative and if the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in its natural range. The development works to be authorised must be for the purposes of preserving 'public health or safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment'.

Derogations are granted by a licence issued by Natural Resources Wales. Local planning authorities are under a duty to have regard to the requirements of the Habitats Directive in exercising their functions. To avoid developments with planning permission subsequently not being granted derogations in relation to European protected species, planning authorities should take the above three requirements for derogation into account when considering development proposals where a European protected species is present.

Report written and compiled by

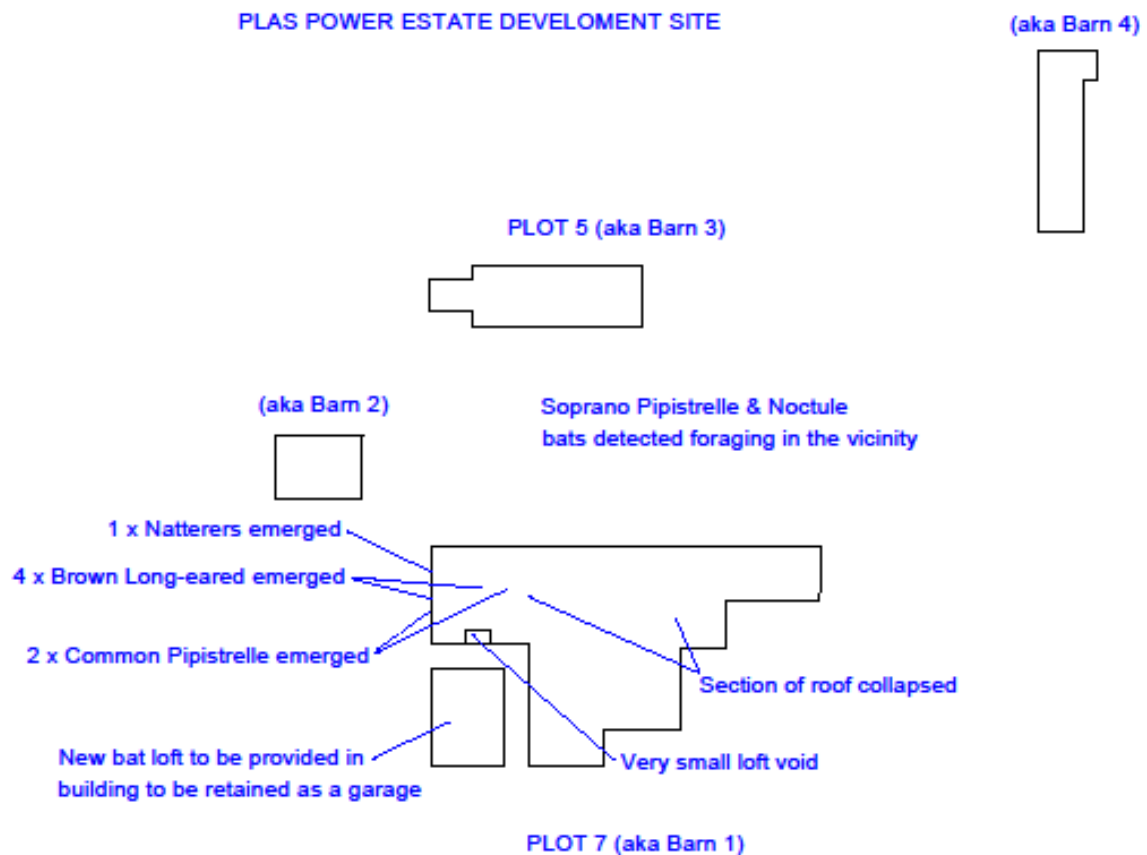


Stephen Cutmore BSc (Hons), MICFor

Licensed Bat Worker (NRW[78542: OTH: CSAB: 2018], NE[2015-16936-CLS-CLS])



APPENDIX 1 – Site plan



APPENDIX 2 – Photographs



Photo 1: Bat emergence points: Brown arrows = Brown Long-eared bats; Red arrows = Common Pipistrelle bats; Blue arrow = Natterer's bat.

Client: Carl Sheffield
Ref: 062019/BES/CS

Bat Emergence Surveys
Plas Power, Coedpoeth

11 June 2019
page 21 of 29



APPENDIX 3 – Grading system for bat habitats

It should be noted that low suitability roosting habitats may be present in commuting/foraging habitats that are of high suitability and vice versa. Roosting habitats and commuting/foraging habitats should be assessed separately and independently.

Table 1: Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

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



APPENDIX 4 – Bat sonographs

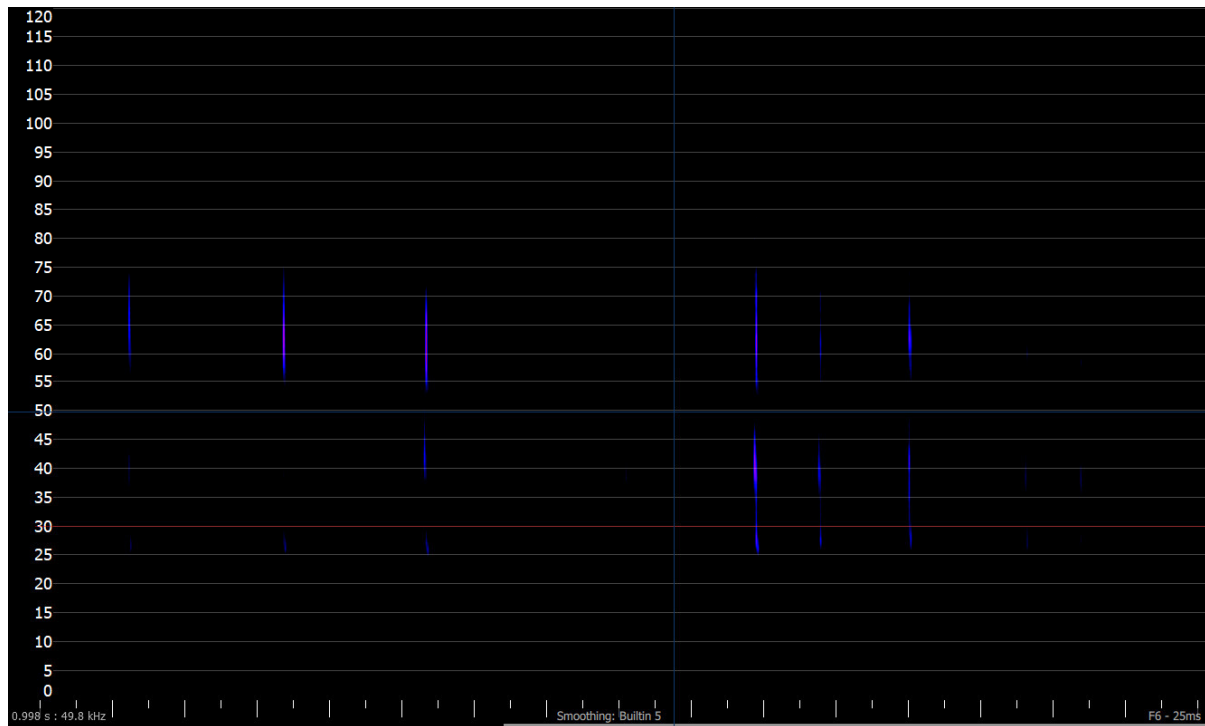


Figure 2: Brown Long-eared [33kHz] emerging at 21.36hrs on 1st survey.

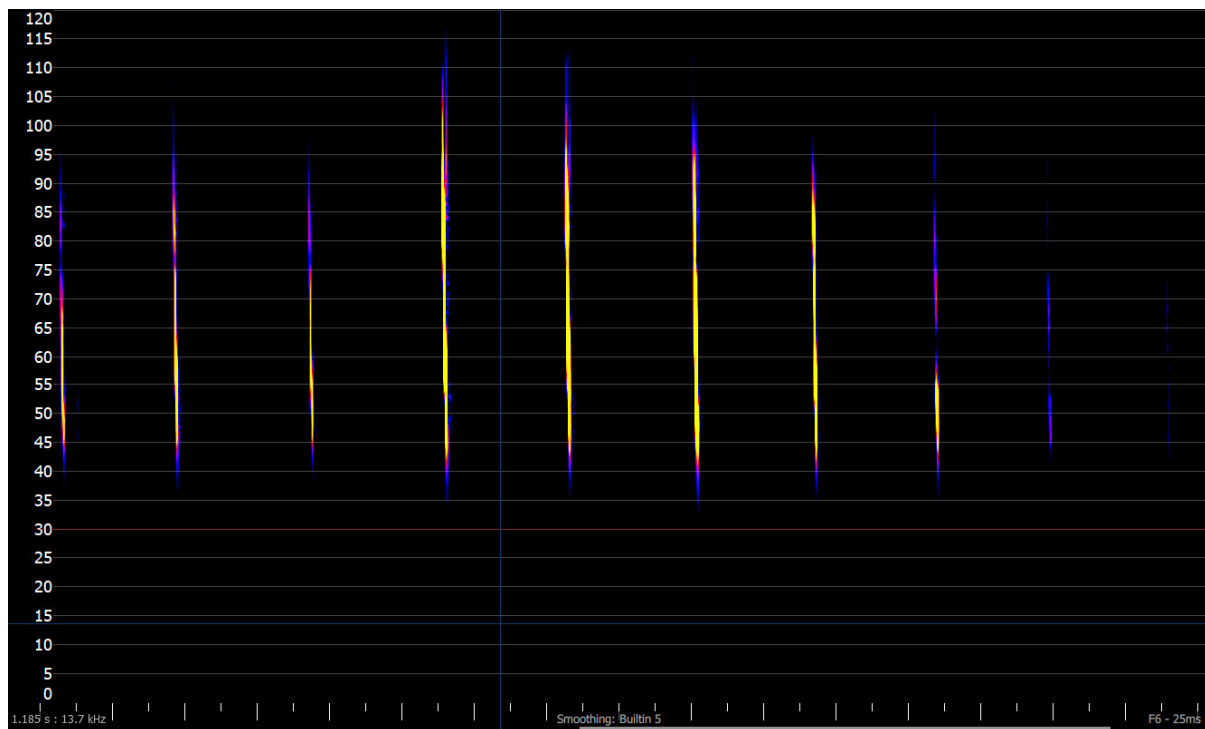


Figure 3: Natterer's [47kHz] emerging at 21.47hrs on 1st survey.



APPENDIX 4 – Bat sonographs

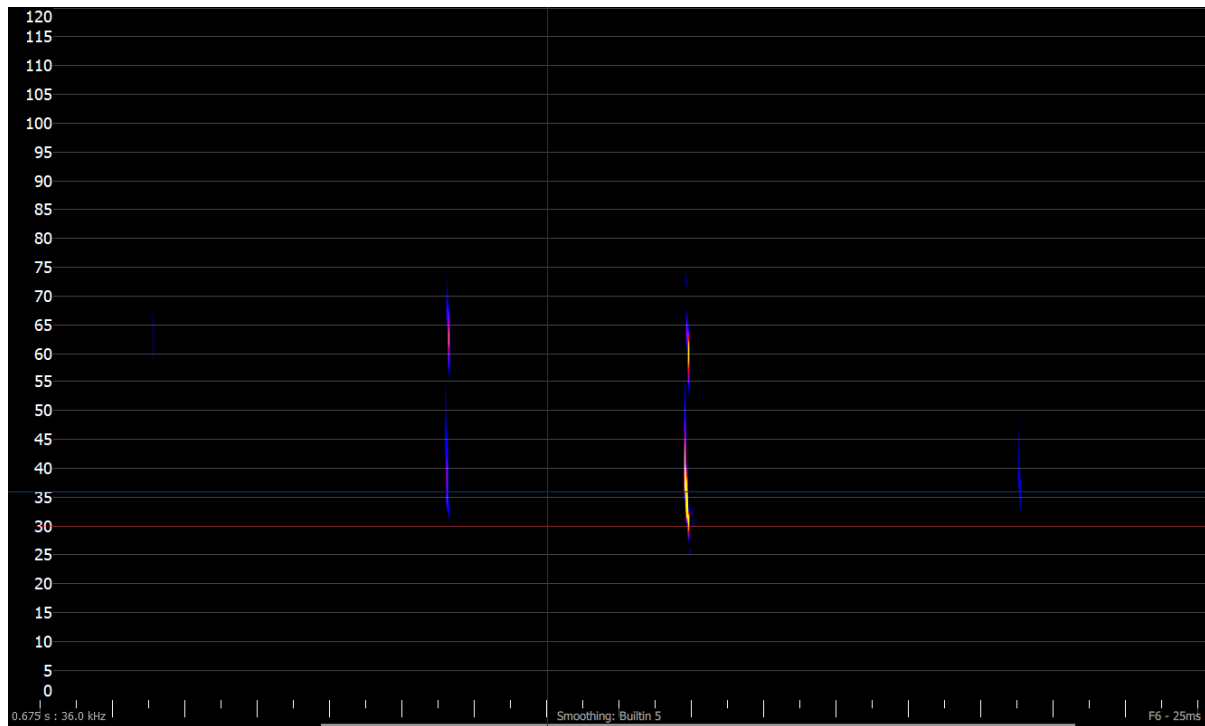


Figure 4: Brown Long-eared [33kHz] emerging at 21.48hrs on 1st survey.

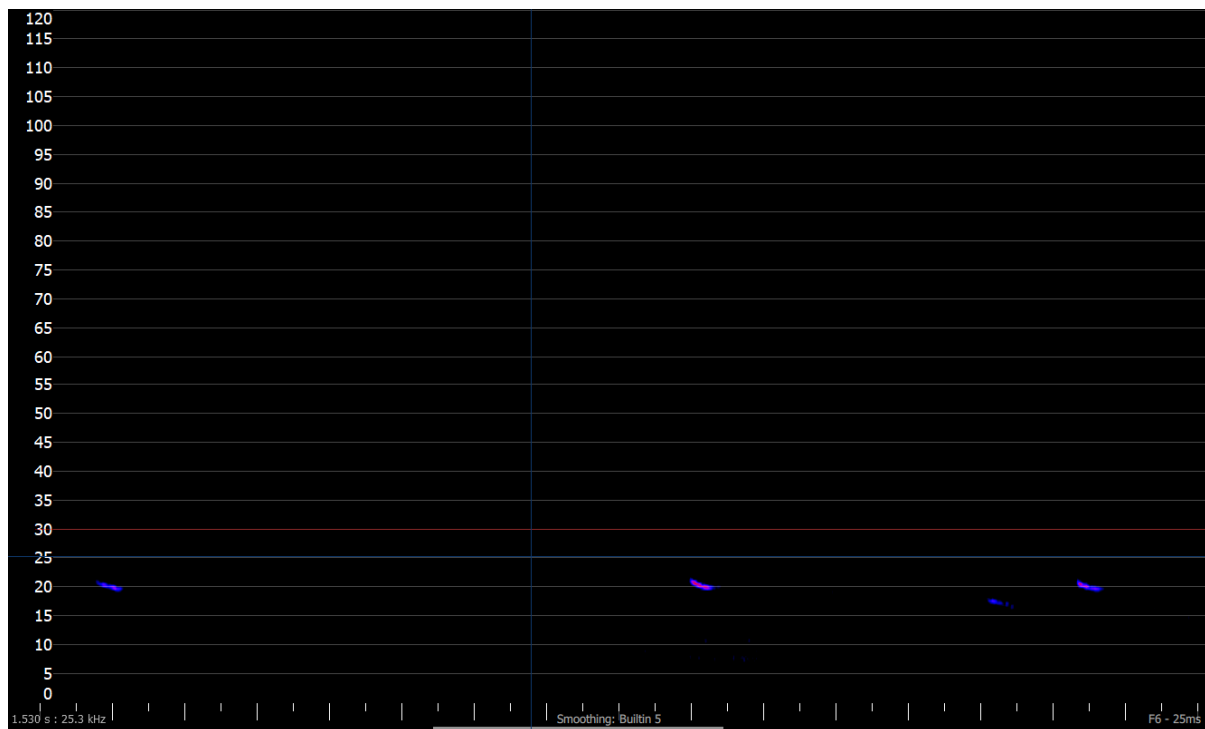


Figure 5: Noctule [18kHz] flying high over site at 21.57hrs on 2nd survey.



APPENDIX 4 – Bat sonographs

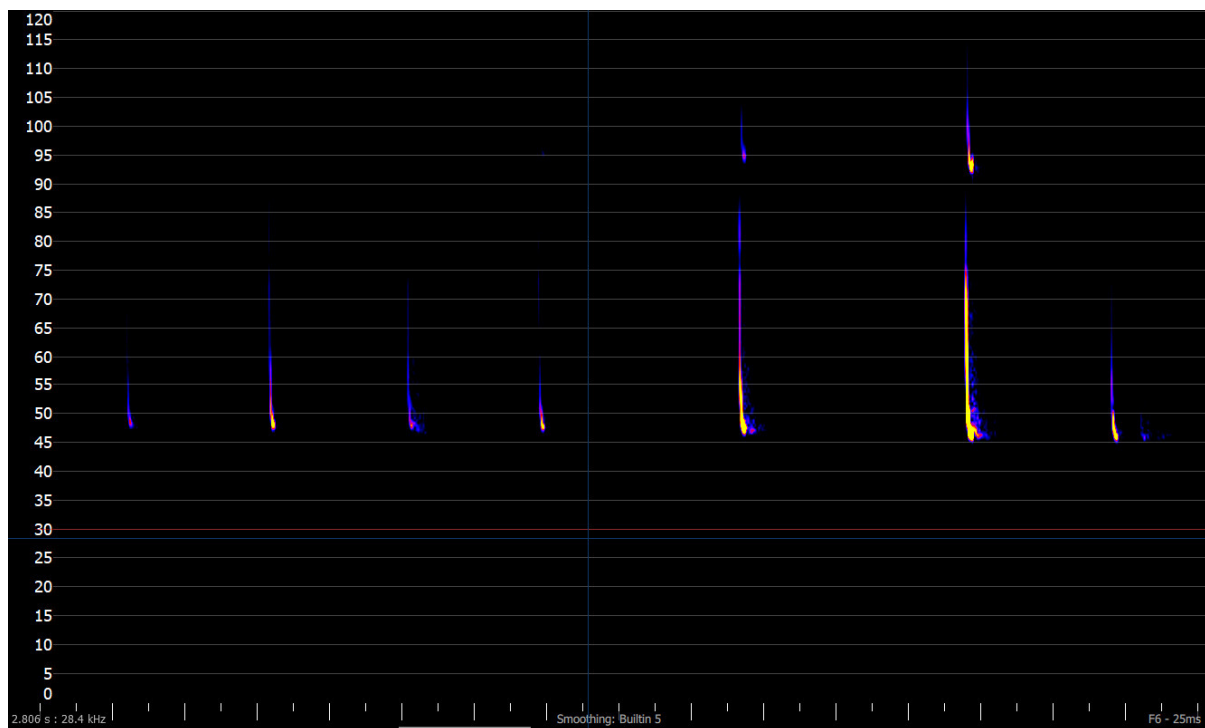


Figure 6: Common Pipistrelle [45kHz] emerging at 22.00hrs on 2nd survey.

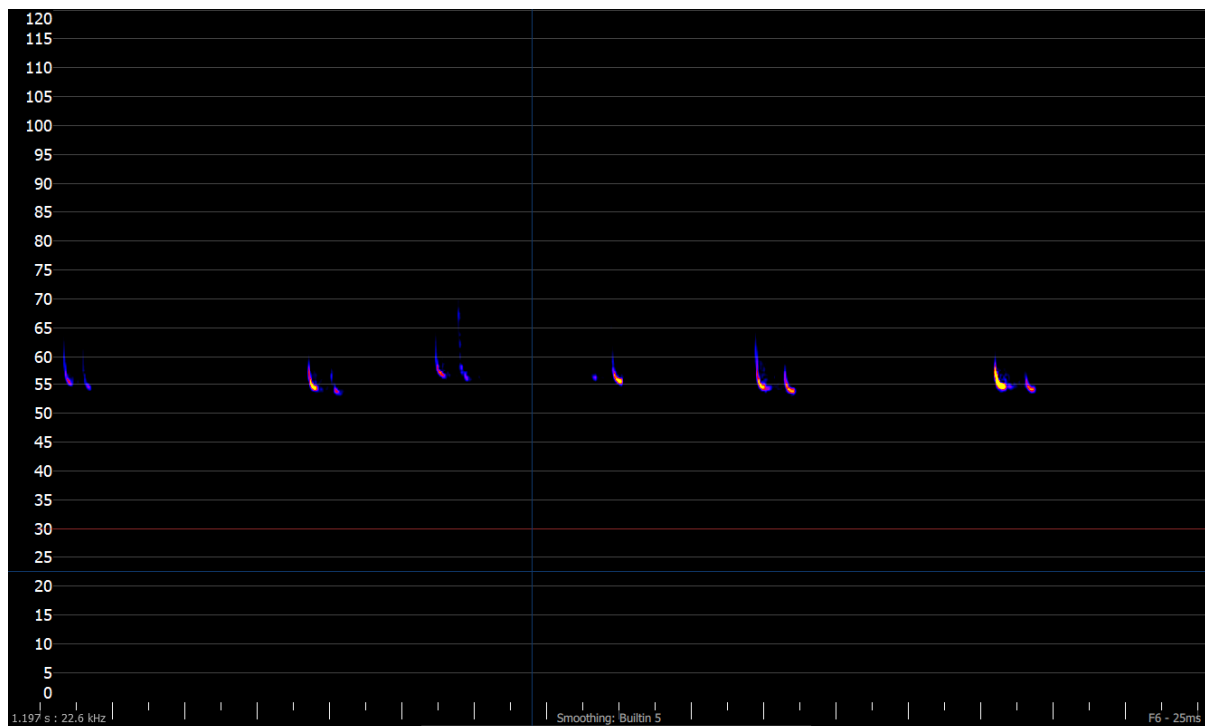


Figure 7: Soprano Pipistrelle [55kHz] foraging in the vicinity at 22.19hrs on 1st survey.



APPENDIX 5 – Mitigation details

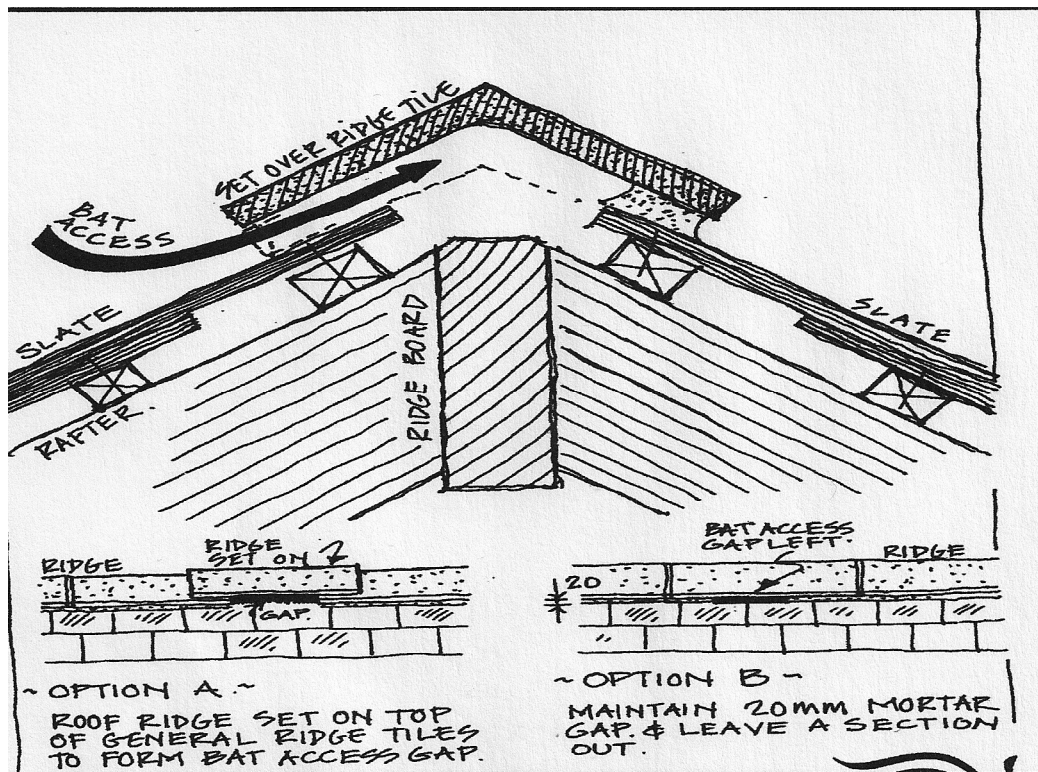


Figure 6: Ridge tile details

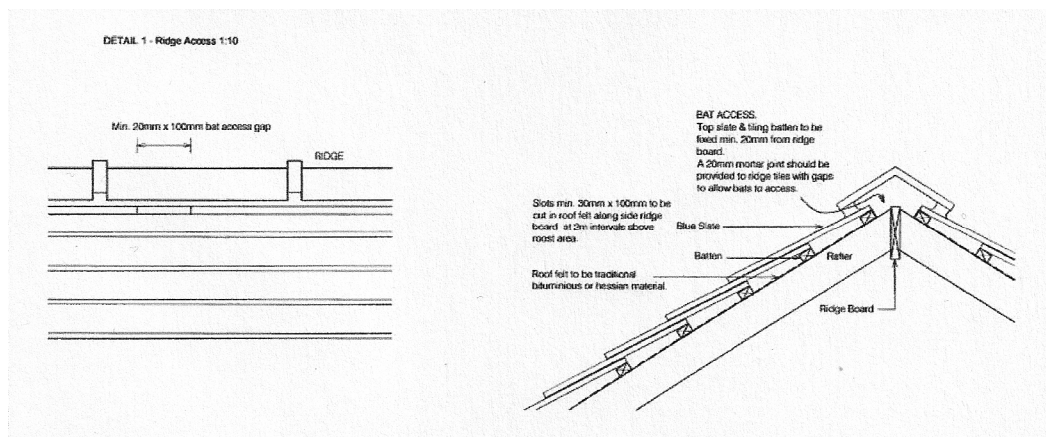


Figure 7: Ridge tile details



APPENDIX 5 – Mitigation details

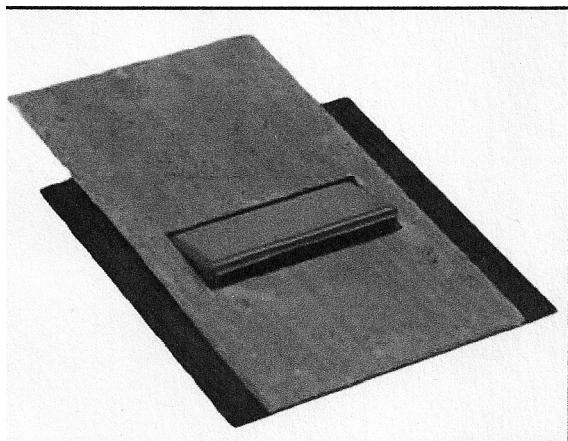


Figure 8: 'Slate-line' bat tile

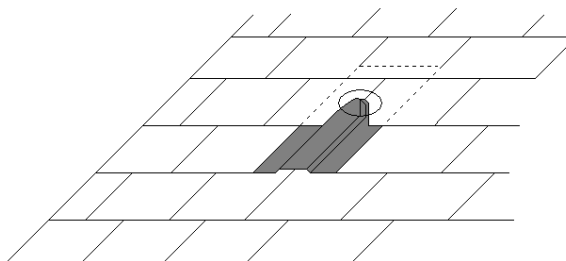


Figure 9: To allow access into the loft void, a hole (75mm x 30mm) needs to be cut in the underfelt, adjacent to a rafter or wall

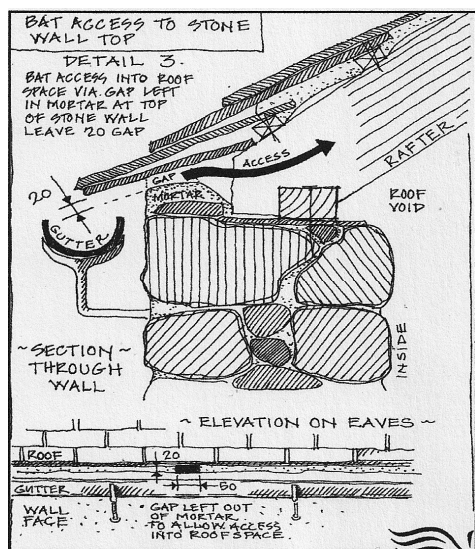


Figure 10: Bat access via eaves



Figure 11: Schwegler IFS bat box (95).

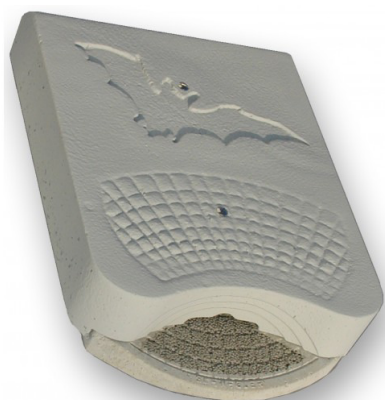


Figure 12: Schwegler (1WQ) Summer & winter roost box



Figure 13: Schwegler (1FQ) bat box fitted to wall.



APPENDIX 5 – Mitigation details



Figure 14: Example of LHS covered fly in access in roof.



Figure 15: Example of LHS fly in access in gable-end wall.



APPENDIX 6: Bibliography

The following publications were referred to in preparing this report.

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