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Barns at Penoffa Farm, Beggar's Bush, Powys

Protected Species Survey
Assessment focusing on Bats



***Mid Wales Ecology
Ecological
Consultants***

August 2021

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PENOFFA FARM,
BEGGAR’S BUSH,
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Protected Species Survey Assessment Focusing on Bats

**Report to
Ms Miranda Roberts**

Project Ref: 21.029

5th August 2021

Report Information

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Summary of bat assessment:	<p>The main focus of the bat assessment was on a large metal-framed agricultural barn, with an asbestos roof, that is proposed for new wedding venue. During the appraisal, no evidence of bats were found inside the barn and overall, the barn was not considered to be suitable for roosting bats as it was too open to the elements and lacked suitable cover for crevice dwelling bats. Therefore, based on the available evidence, there appear to be no obvious and immediate implications for the proposed development with regard to bats.</p> <p>In addition to the large agricultural barn, there was an adjacent stone barn, with no clear proposals as of yet, but considered to be suitable for roosting bats and direct evidence was found inside the barn. Bats and their resting sites are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. It is therefore strongly recommended that dedicated bat emergence surveys are undertaken at the appropriate time of year (late April - September inclusive of any given year) prior to any works taking place.</p>
Crynodeb o'r asesiad ystlumod:	<p>Roedd prif ffocws yr asesiad ystlumod ar ysgubor amaethyddol fawr â ffrâm fetel, gyda tho asbestos, a gynigir ar gyfer lleoliad priodas newydd. Yn ystod yr arfarniad, ni ddarganfuwyd unrhyw dystiolaeth o ystlumod y tu mewn i'r ysgubor ac ar y cyfan, nid oedd yr ysgubor yn cael ei hystyried yn addas ar gyfer clwydo ystlumod gan ei bod yn rhy agored i'r elfennau ac nid oedd gorchudd addas ar gyfer ystlumod annedd agennau. Felly yn seiliedig ar y dystiolaeth sydd ar gael, ymddengys nad oes unrhyw oblygiadau amlwg ac uniongyrchol i'r datblygiad arfaethedig o ran ystlumod.</p> <p>Yn ogystal â'r ysgubor amaethyddol fawr, roedd ysgubor gerrig gyfagos, heb unrhyw gynigion clir hyd yn hyn, ond ystyriwyd ei bod yn addas ar gyfer clwydo ystlumod a darganfuwyd dystiolaeth uniongyrchol y tu mewn i'r ysgubor. Ar gyfer yr ysgubor garreg, Mae ystlumod a'u safleoedd gorffwys yn cael eu gwarchod o dan Gorchymyn Deddf Bywyd Gwyllt a Chefn Gwlad 1981 (Amrywio Atodlen 4) (Cymru) 2009 a Rheoliadau Cadwraeth Cynefinoedd a Rhywogaethau 2017. Felly, argymhellir yn gryf y dylid cynnal arolygon pwrpasol o ymddangosiad ystlumod ar yr adeg briodol o'r flwyddyn (diwedd Ebrill - Medi gan gynnwys unrhyw flwyddyn benodol) cyn i unrhyw waith ddigwydd.</p>

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SUMMARY

In July 2021 Mid Wales Ecology was commissioned by Nidus Architects on behalf of their client Ms Miranda Roberts to undertake a bat survey assessment on two barns at Penoffa Farm, Beggar’s Bush, near Presteigne, Powys. The survey assessment was requested to ensure compliance with National and European legislation.

The main focus of the bat assessment was on a large metal-framed agricultural barn, with an asbestos roof, that is proposed for new wedding venue. During the appraisal, no evidence of bats were found inside the barn and overall, the barn was not considered to be suitable for roosting bats as it was too open to the elements and lacked suitable cover for crevice dwelling bats. Therefore, based on the available evidence, there appear to be **no obvious and immediate implications** for the proposed development with regard to bats.

In addition to the large agricultural barn, there was an adjacent stone barn, with no clear proposals as of yet, but considered to be suitable for roosting bats and direct evidence was found inside the barn. Bats and their resting sites are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. It is therefore strongly recommended that **dedicated bat emergence surveys are undertaken** at the appropriate time of year (late April - September inclusive of any given year) prior to any works taking place.

The buildings were also assessed for the potential for nesting birds. The barns are considered to be suitable for nesting birds and consideration must be given to their presence; the main nesting bird period (nesting season generally considered to be between March to late August). The building redevelopment must be undertaken outside the main nesting season and where this is not possible a suitably qualified ecologist acting as the on-site Ecological Clerk or Works **must** be engaged to check for nesting birds and to provide advice on the most appropriate way to proceed.

It should be noted that if more than twelve months elapse between this survey assessment and the commencement of any development then a further survey assessment may be required at an appropriate time to determine the status of any protected species that may have taken up residence during the intervening period.

1. INTRODUCTION

1.1 Commissioning Brief

In July 2021 Mid Wales Ecology was commissioned by Nidus Architects on behalf of their client Ms Miranda Roberts to undertake a bat survey assessment on two barns at Penoffa Farm, Beggar’s Bush, near Presteigne, Powys. The survey assessment was requested to ensure compliance with National and European legislation.

1.2 Summary of the Proposed Development

It is our understanding that planning permission is being sought to redevelop a modern agricultural barn into a new wedding venue; in addition, the stone barn has no clear proposal as of yet.

1.3 Site Location

The barns are located at Penoffa Farm, Beggar’s Bush, near Presteigne, Powys, LD8 2SE at NGR SO 2663 8763.

1.4 Scope of the Survey Assessment

Planning applications are required to inform the consent process in view of the potential to impact protected species and habitats and in view of policy commitments to biodiversity.

This report provides a preliminary appraisal of the works proposed by the planning application in view of the legislation set out below.

The **Environment (Wales) Act 2016** includes a duty on local authorities to regard biodiversity conservation as a material consideration within the planning process. Section 7 of the Environment (Wales) Act protects those species and habitats of principal importance for the purpose of conserving biodiversity in Wales. Powys County Council has developed local biodiversity action plans to reflect the local Section 7 priority habitats and species (PCC 2002).

In Powys this legislation has informed in part the following planning policies, which include a requirement to inform the application process in view of ecological features and provide biodiversity enhancement:

- Powys County Council’s UDP Policies SP3, ENV2 and ENV7 in relation to The Natural Environment (PCC, 2010);
- Planning Policy Wales (Edition 9, November 2016) requirements;
- Technical Advice Note 5, Nature Conservation and Planning (Welsh Assembly Government, 2009); and
- The Environment (Wales) Act 2016

The Conservation of Habitats and Species Regulations 2017 transcribes the European Commission Habitats Directive into UK law. Species listed under Schedule 2 of these regulations

are ‘European Protected Species’ (EPS). It is an offence to damage or destroy the breeding or resting place of an EPS. It is an offence to deliberately capture, kill, injure or disturb an EPS animal. Inclusion of EPS on Schedule 5 of the **Wildlife and Countryside Act (WCA) 1981** (as amended) strengthens the protection given to these species, making it an offence to intentionally or recklessly disturb an EPS when in a place of shelter.

The **Countryside and Rights of Way Act 2000** strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to ‘recklessly’ harm or disturb a place of rest or shelter of a protected species.

Under the WCA 1981 (as amended) all birds, their nests and eggs are protected during the breeding season (typically March to August inclusive) from killing/destruction, damage and disturbance.

1.5 Desk Study

A search for statutory sites of ecological significance within a 2km radius of the site was conducted using the Multi-Agency Geographical Information for the Countryside website (MAGIC).

1.6 Survey Constraints

The comprehensiveness of any ecological assessment may be limited by the season in which the site visit was undertaken. To confirm the presence or absence of all bat species usually requires multiple visits at suitable times of the year.

It should be stressed that this is an assessment only of the structure’s suitability for use by bats and to identify any signs of bats utilising the site. The relevant building/s was subjected to a full external and internal inspection on the day of the visit.

This report cannot therefore be considered to provide a full comprehensive analysis of the ecological interest of the site. However, it does provide an assessment of the site for supporting bat populations on the day of the visit and highlights areas where further survey work may be required.

2. METHODOLOGY

Joshua Evans (Cyfoeth Naturiol Cymru / Natural Resources Wales registered bat worker Licence number: 70380:OTH:SA:2016), on behalf of Mid Wales Ecology, undertook the survey assessment on 21st July 2021. The weather at 19:00 hrs was dry with approximately 20% cloud cover and an air temperature of 22.8°C.

2.1 Bat Assessment

The assessment focuses on the suitability of the building for use by bats and to identify any signs of bats using the site. Evidence regarding the presence of bats including droppings, urine stains, grease marks and feeding remains is searched for during the assessment with all accessible roof voids thoroughly surveyed. Internal surveys are conducted using Clulite lamps (with red filter), video endoscope, angled mirrors and small flexible LED lamps where appropriate. Opportunities for access or roosting by bats are noted during an external and internal assessment of the building. This involves recording all observable ingress points (e.g., missing tiles and gaps around the eaves) together with any potential roosting opportunities for bats.

3 RESULTS AND DISCUSSION

3.1 Desk Study

There is one ecological statutory designated site within 2 km of the property – the River Lugg Site of Special Scientific Interest but this is considered to be sufficiently distant from the proposed works to not be affected by the development proposal.

In addition, the author of this report has undertaken surveys in the local area (including Presteigne, Evenjobb, Discoed, Kinnerton and Nash) and is aware that noctule (*Nyctalus noctula*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*P. pygmaeus*), brown long-eared bat (*Plecotus auritus*), myotis bats (*Myotis* sp.) and lesser horseshoe bat (*Rhinolophus hipposideros*) use the wider area around the site.

3.2 Site Description

The main storage barn is a relatively modern agricultural barn, constructed with metal-framed and slat-vented timber walls and interior metal support beams with a single pitch roof covered with asbestos; there are concrete floors.

The second barn, which was a subsidiary part of the assessment, is a stone-built agricultural barn building, with a slate-covered pitched roof. The large interior has timber king-post truss frames and the slate roof is unlined.

The barns are positioned on relatively high ground (i.e. Ordnance Datum 345m) up a farm track from Beggar’s Bush.

The surrounding habitats includes farmsteads, upland hill pastures, ffridd woodland edges, mixed woodlands (e.g. Castlerring Wood, Hilltop Plantation, Upper Chandler’s Plantation) and numerous small streams that are tributaries to the River Lugg/Afon Llugwy and its riparian habitats.

3.3.1 External Assessment

Main Agricultural Barn

The barn is open fronted on the northern and southern aspects and there is potential for bat access; however, it is equally well-illuminated and considerable draughty, which will considerably reduce its suitability for roosting bats. The corrugated sheets and asbestos roof offer little suitable shelter. Overall, there is a distinct lack of exterior features for bats to roost in.

Stone Barn

There are openings into the barn via numerous vent gaps and an open doorway. The slate roof is in moderate condition but there are some raised ridge tiles.

3.3.2 Internal Assessment

Main Agricultural Barn

Since the barn is constructed from corrugated metal sheets with very little timber inside, other than the timber slats, there are generally no suitable locations for bats to roost. The issue with corrugated metal sheets and asbestos roof for their potential for bat roosting is that the material is thermally unstable, either being too hot in the summer months or too cold and does not provide sustained mild temperature that roosting bats seek. Also, it is fairly well-illuminated and draughty as such, which will generally act as a deterrent for roosting bats.

There was no evidence of bat droppings, urine stains or feeding remains within the barn – especially beneath the ridge beam or purlins, although there were scattered bird droppings throughout. Overall, there was lack of features for bats to roost internally in the barn and it is considered to be unsuitable for either hibernating or summer roosting bats.

Stone Barn

The large, relatively sheltered barn interior offers suitable habitat for both foraging and roosting bats. The ridge beams are not covered with cobwebs, suggesting internal flight from bats or birds. Some urine stains were noted on some of the crossbeams and scattered bat droppings (i.e. long-eared bat type), approximately 30, were noted beneath the ridge beam and crossbeams with some feed evidence in the form of moth wings.

3.3.3 General Site Assessment

The site is located in an upland landscape but the site is located between two woodlands, with a large pond on site and some interconnecting hedgerows that are exposed the elements, which are considered to offer moderate to good foraging habitat.

3.3.4 Birds

In addition to the bat assessment, the barns were also noted to have moderate suitability for nesting birds, due to relative cover but these were very draughty. Opportunistic birds may choose to nest on the wall-plate. Bird droppings were found throughout the barns but no obvious remnant nests.

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 Bats

The main focus of the bat assessment was on a large metal-framed agricultural barn, with an asbestos roof, that is proposed for new wedding venue. During the appraisal, no evidence of bats were found inside the barn and overall, the barn was not considered to be suitable for roosting bats as it was too open to the elements and lacked suitable cover for crevice dwelling bats. Therefore, based on the available evidence, there appear to be **no obvious and immediate implications** for the proposed development with regard to bats.

In addition to the large agricultural barn, there was an adjacent stone barn, with no clear proposals as of yet, but considered to be suitable for roosting bats and direct evidence was found inside the barn. Bats and their resting sites are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. It is therefore strongly recommended that **dedicated bat emergence surveys are undertaken** at the appropriate time of year (late April - September inclusive of any given year) prior to any works taking place.

It is considered likely that bats will forage in the vicinity and it is therefore recommended that bat boxes and raised ridge tiles are incorporated into the redeveloped building in order to provide additional roosting opportunities for the local bat population. For instance, the Schwegler 1FF Bat Box design or similar, which is widely available, would be appropriate for the site (see Appendix 3). Bat boxes should ideally be installed on south-west or south-east facing walls (but never north) under the eaves at minimum heights of 2.5m.

Bat roosting features must not be illuminated by artificial light as this has been found to deter roosting bats. It is also recommended that any lighting that is going to be incorporated into the site should be low-powered, downward-pointing and preferably at ground level to reduce any disturbance to bats foraging in the area.

4.2 Birds

The buildings were also assessed for the potential for nesting birds. The barns are considered to be suitable for nesting birds and consideration must be given to their presence; the main nesting bird period (nesting season generally considered to be between March to late August). The building redevelopment must be undertaken outside the main nesting season and where this is not possible a suitably qualified ecologist acting as the on-site Ecological Clerk or Works **must** be engaged to check for nesting birds and to provide advice on the most appropriate way to proceed.

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Appendix 1: Site Photographs



Plate 1: The north elevation of the main agricultural barn.



Plate 2: The south-western elevation of the main agricultural barn.



Plate 3: The interior of the main agricultural barn facing southwards.



Plate 4: The western elevation of the stone barn.



Plate 5: The northern elevation of the stone barn.



Plate 6: The interior of the stone barn facing southwards.



Plate 7: Long-eared bat type dropping found in the in the stone barn.



Plate 8: Surrounding landscape – onsite pond.



Plate 9: Surrounding landscape in context – upland sheep pasture, gorse and bracken pastures and scattered woodland ffridd.

Appendix 2: Wildlife Legislation

Bats

Bats often occupy different roost sites at varying times of the year; what is suitable as a summer roost may not be as suitable for hibernation due to the variation in temperatures, for instance. Females often occupy maternity roosts when giving birth and return to the communal roost when the young are partly grown. Individual bats may move their roost site dependent on weather conditions. Since bats tend to re-use the same roosts, legal opinion is that the roost is protected whether or not the bats are present at the time.

There has been a severe decline in bat numbers over recent years, the main factors currently causing loss or decline are probably related to the following:

- Intensification of agriculture and inappropriate riparian management.
- Widespread misunderstanding of, or possibly ignored, legislation protecting bats, leading to loss or damage of many roosts when consultation procedures have not been carried out.
- Loss, destruction and disturbance of other roosts, particularly maternity roosts, through the use of toxic timber treatment chemicals, intolerance by roost owners, inappropriate building practices and tree felling.
- Loss of winter roosting sites, which need to be cold, humid and undisturbed. Such sites may include buildings, hollow trees and underground sites (mines, old tunnels, icehouses and cellars).
- Losses, or changes to, large country properties which can supply both summer and winter roosts that are generally surrounded by potentially good foraging habitat.

All bat species are protected by law, both national (Schedule 2 of the Conservation of Habitats and Species Regulations 2017 and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended)) and international (The Bern Convention 1979, The EC Habitats Directive 1992 and The Bonn Convention 1980 including the Agreement on the Conservation of Bats in Europe, 1994). The Countryside and Rights of Way Act 2000 reinforces the Habitat Regulations by creating a criminal offence rather than a prohibited action (Schedule 12).

There are three main areas of protection:

- It is illegal to intentionally kill or injure a bat.
- It is illegal to disturb a bat roost. This covers all roost sites such as caves, trees and buildings.
- It is illegal to damage a roost site or obstruct the entrance.

Where developments requiring planning permission may affect protected species, such as bats, it is essential that appropriate surveys are conducted and submitted to meet the requirements of the National Planning Policy Framework. With regard to paragraph 117, in order to minimise impacts on biodiversity and geodiversity, planning policies should:

- plan for biodiversity at a landscape-scale across local authority boundaries;
- promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan;

If, following surveys, it has been established that bats are present and roosting within the structure to be affected by the proposed development then if there is a reasonable likelihood that a breach in the legislation will occur through undertaking the works a European Protected Species Licence for a development affecting bats will need to be obtained from Natural Resources Wales.

Under the Conservation of Habitats and Species Regulations 2017 licences can only be issued if Natural Resources Wales are satisfied that:

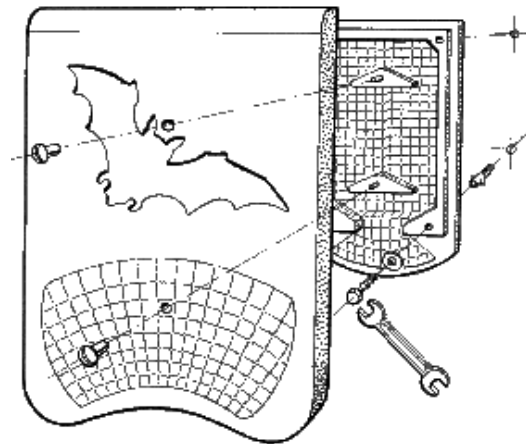
- there is no satisfactory alternative;
- the main purpose of the development is for either (1) ‘Imperative Reasons *Overriding Public Interest*’, (2) “Public Health or Safety”, or for (3) “Wildlife Conservation”;
- the action authorised will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range.

Undertaking work to a bat roost without following appropriate recommendations from Natural Resources Wales could lead to prosecution resulting in imprisonment, fines of up to £5000 per bat and confiscation of vehicles/equipment.

Appendix 3: Examples of Bat and Bird Mitigation Features



Schwegler 1FF bat box



Schwegler 1WQ Summer & Winter bat box

 A long, narrow, rectangular bat box made of a textured, greyish material. It has a small, dark, rectangular entrance at the bottom.	<p>Schwegler 1FR</p> <p>Maintenance-free long bat box for installation into a wall.</p>
 A square bat box made of a textured, greyish material. It features a large, stylized bat silhouette cutout in the center. There are two small circular holes on the left and right sides. A dark, rectangular entrance is located at the bottom.	<p>Schwegler 1FE</p> <p>Build into a wall to provide access to existing cavities.</p>

BIRD BOXES



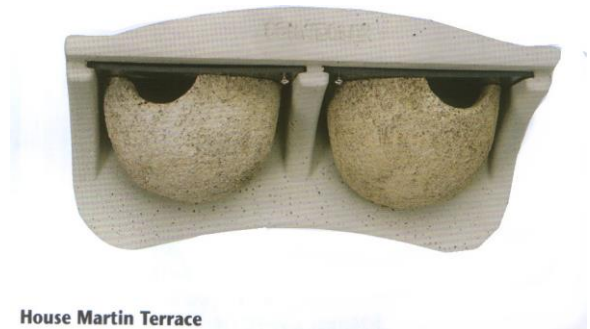
Swift nest box



Swift brick



Sparrow terrace box box



House Martin Terrace

House Martin terrace



Hole-fronted bird box (for trees)

Appendix 4: Ecological Experience

Joshua Evans BSc (Hons) MCIEEM - Ecologist

Joshua has worked as an independent consultant and as part of a larger ecological consultancy as its senior consultant. Prior to this he worked for the National Trust and Forestry Commission as an ecological surveyor. For the last 24 years he has worked in both the conservation and consultancy sector. Many of these years were in woodland conservation and management. He is an experienced ecologist with particular expertise in some terrestrial and aquatic invertebrates, amphibians, reptiles and bats and holds Natural England (NE) and Natural Resources Wales licences for bats, dormice, great crested newts, white-clawed crayfish and barn owls.