JUNE 2017

UPPER BLAEN FARM LLANVEYNOE LONGTOWN HEREFORDSHIRE HR2 0NL

BAT SURVEY & METHOD STATEMENT

FOR

JOHN LISTER

Ecology Services, Castle Courtyard, 6b Broad Street, Builth Wells, Powys, LD2 3DT Tel: 01982 448103 Email: info@eco-serv.com Web: www.eco-serv.com VAT No: 790 7971 78

CONTENTS

- 1 INTRODUCTION
- 2 LEGISLATION
- 3 SURVEY METHODS
- 4 RESULTS
- 5 METHOD STATEMENT
- 6 CONCLUSION

PLANS

- PLAN 1 Site location
- PLAN 2 Development proposals

FIGURES

FIGURE 1	The farmhouse viewed from the south.
FIGURE 2	The farmhouse viewed from the north.
	The adjoining lean-too supports a corrugated iron roof and showed no evidence of usage by bats.
FIGURE 3	The ground floor room of the farmhouse is the occasional roosting site of a single lesser horseshoe bat.
	The bat roosts in the old bread oven and was present on the 1 st May and 4 th June but was absent on the 19 th June.
	No other bats were recorded roosting in the farmhouse during the survey period.
FIGURE 4	The upper floor of the farmhouse is in the late stages of dereliction. It is well illuminated by windows and missing sections of the roof.
FIGURE 5	The western section of the farmhouse has almost completely lost its roof.
	No evidence of bats was found in this area during the survey period.
FIGURE 6	The byre viewed from the east.
FIGURE 7	The byre viewed from the inside.
	With the exception of a very localised area of corrugated iron, the byre does not support a roof.
	No evidence of bats was found in this area during the survey period.
FIGURE 8	The barn viewed from the west.
	The barn does not support a roof and is completely derelict.
	No evidence of bats was found in this area during the survey period.
APPENDICES	
Appendix 1	Bat access point designs.

1. INTRODUCTION

- 1.1. Upper Blaen Farm comprises a derelict farm house, a derelict barn, and a derelict byre/cow shed. Grid reference SO 2724 3388 (Plan 1 & Figures 1-6).
- 1.2. A planning application is being prepared seeking permission to restore the farmhouse back into a habitable residential property and convert the byre into residential accommodation. In addition the proposals seek to restore the barn into a functional outbuilding (Plan 2).
- 1.3. This report sets out the results of bat surveys undertaken at the site on the 1st May, 4th June, and 19th June 2017.
- 1.4. The report also includes a Method Statement. Implementation of the Method Statement will ensure no significant impacts on bats and the retention and creation of bat roosting opportunities following completion of the development.

Summary of survey findings & mitigation measures

- 1.5. The farmhouse is in the late stages of dereliction. The western half of the property no longer supports a roof and much of the eastern side of the property is missing a roof. There is no dark enclosed loft void in the farmhouse due to missing sections of the roof. The only evidence of bats found in the farmhouse during the survey period was a single lesser horseshoe bat that was roosting in the old bread oven in the ground floor room of the property. This bat was present on the 1st May and 4th June but was absent on the 19th June. A single brown long-eared bat utilised the property as a night time roost on the 4th June but does not use the property as a daytime roosting site.
- 1.6. The Byre is completely derelict, and with the exception of a small localised section of tin roof, does not support a roof and comprises just stone walls. No evidence of bats was found in the Byre during the survey period and the building is considered to offer extremely limited bat roosting potential.
- 1.7. The barn comprises stone walls and no longer supports a roof. No evidence of bats was found in the barn during the survey period and the building is considered to offer extremely limited bat roosting potential.
- 1.8. Very little bat foraging/commuting activity was observed during the survey period with just small numbers of common pipistrelle bat (2 bats), soprano pipistrelle bat (1 bat), brown long-eared bat (1 bat), and noctule bat (2 bats) foraging/passing through the local area. This is perhaps a reflection of the site's elevated location at the far end of the Olchon Valley and its close proximity to large expanses of moorland that lacks any significant tree cover.
- 1.9. The development proposals will significantly enhance the site's bat roosting potential. The proposals will create gaps and cavities suitable for roosting bats in all three of the renovated buildings. These will be located under new soffit and barge boarding/weather boarding and under ridge tiles. In addition the new upper floor/loft void of the barn will be set aside entirely for bats and will include free flight access points for lesser horseshoe bats. Bat boxes will also be erected at the gable end walls of all three buildings. All bat roost enhancements will be created under the guidance of an appointed ecological clerk of works. The ecological clerk of works will confirm that bats are absent immediately prior to the commencement of development works.
- 1.10. It is anticipated that this report will form part of a planning condition attached to the planning permission.

2. LEGISLATION

- 2.1. All bats are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010. These include provisions making it an offence to:
 - Intentionally or deliberately kill, injure or capture bats.
 - Deliberately disturb bats (whether in a roost or not).
 - Damage, destroy or obstruct access to bat roosts even if bats are not in residence.

3. SURVEY METHODS

- 3.1. The buildings were searched for evidence of bats over the course of three visits undertaken on the 1st May, 4th June, and 19th June 2017.
- 3.2. Daytime internal and external searches were made for bat droppings, staining and other signs that can indicate present or past use and extent of use. Where accessible, gaps and cavities in the internal and external fabric of the buildings were subject to examination with an endoscope.
- 3.3. Evening fieldwork with bat detectors (Anabat recorders & Batbox Duet) and night vision equipment was carried out during favourable weather conditions on the 1st May and 4th June. These surveys aimed to record any roosting bats leaving the buildings in the evening.
- 3.4. Dawn fieldwork with bat detectors (Anabat recorders & Batbox Duet) and night vision equipment was carried out during favourable weather conditions on the 19th June 2017. This survey aimed to record bats returning to the buildings in the morning.
- 3.5. On all survey dates three Anabat recorders were utilized. One was located on the south eastern corner of the farmhouse (between the farmhouse and Byre). The second Anabat was located on the north western corner of the farmhouse (between the farmhouse and the barn). The third Anabat was located in the lower ground floor room of the farmhouse. The Anabat recorders were left in position for the duration of all three surveys.
- 3.6. All survey work was undertaken by two licenced bat surveyors. Where necessary bat identification was confirmed by computer analysis of calls recorded on the Anabat recorders.
- 3.7. Evening emergence surveys commenced 30 minutes before sunset and finished 2 hours after sunset. The dawn re-entry survey commenced two hours before sunrise and finished shortly after sunrise.
- 3.8. Surveyor 1 was located on the south eastern corner of the farmhouse with clear views of the southern side of the property and eastern gable end wall. Surveyor 2 was located on the north western corner of the farmhouse with clear views of the northern side of the property and western gable end wall. Surveyors were not static and moved about according to bat activity that was observed.
- 3.9. On all survey dates the weather was calm and still with a favourable mild temperature.

4. **RESULTS**

Daytime internal & external inspections

- 4.1. The farmhouse is in the late stages of dereliction (Figures 1 & 2). The western section of the property has almost completely lost it roof (Figure 5). There is no dark enclosed loft void and the upper floor in the eastern section of the property is fully illuminated by windows and missing sections of the roof (Figure 4). A lesser horseshoe bat roosts in the old bread oven in the ground floor room of the property (Figure 3). This bat was present on the 1st May and 4th June but was absent on the 19th June. No large accumulations of bat droppings were found in the bread oven indicating that this is an occasional roosting site that is probably only used by a single bat. No other evidence of bats was found anywhere within the farmhouse.
- 4.2. The byre/cattle shed is completely derelict and, with the exception of a localised area of corrugated iron, no longer supports a roof (Figures 6 & 7). No evidence of bats was found in this area.
- 4.3. The barn is completely derelict and no longer supports a roof (Figure 8). No evidence of bats was found in this area.

1st May 2017 – evening emergence survey

- 4.4. The only bat recorded departing from the farmhouse was the single lesser horseshoe bat that roosts in the bread oven. This bat departed via the doorway at the eastern gable end wall of the property. No bats recorded departing from the byre or barn.
- 4.5. Two soprano pipistrelle bats and one common pipistrelle bat were foraging briefly in the local area over one hour after sunset but did not appear to originate from roosting sites in the survey area.
- 4.6. One noctule bat was foraging high over the local area shortly after sunset.
- 4.7. No other bats recorded.
- 4.8. The Anabat located on the south eastern side of the farmhouse recorded 2 lesser horseshoe bat passes that are attributable to the bat that roosts in the bread oven. The Anabat also recorded 12 passes of soprano pipistrelle bat, 8 passes of common pipistrelle bat, and 4 passes of noctule bat; all of which are attributable to the small number of foraging bats that were observed by surveyors.
- 4.9. The Anabat located on the north western side of the farmhouse recorded 7 passes of soprano pipistrelle bat, 2 passes of common pipistrelle bat, and 8 passes of noctule bat; all of which are attributable to the small number of foraging bats that were observed by surveyors.
- 4.10. The Anabat located in the ground floor room of the farmhouse recorded 9 lesser horseshoe bat passes that are attributable to the bat that roosts in the bread oven.

4th June 2017 – evening emergence survey

- 4.11. The only bat recorded departing from the farmhouse was the single lesser horseshoe bat that roosts in the bread oven. This bat departed via the doorway at the eastern gable end wall of the property. No bats recorded departing from the byre or barn.
- 4.12. One common pipistrelle bat was foraging briefly in the local area over one hour after sunset but did not appear to originate from roosting sites in the survey area.
- 4.13. Two noctule bats were foraging high over the local area shortly after sunset.
- 4.14. A single brown long-eared bat entered the ground floor of the farmhouse one and a half hours after sunset. This individual entered via a window on the northern side of the property and what is presumably the same individual departed about half an hour later via the doorway at the eastern gable end wall of the property.
- 4.15. No other bats recorded.
- 4.16. The Anabat located on the south eastern side of the farmhouse recorded 1 lesser horseshoe bat pass that is attributable to the bat that roosts in the bread oven. The Anabat also recorded 12 passes of common pipistrelle bat, 1 pass of brown long-eared bat, and 3 passes of noctule bat; all of which are attributable to the small number of foraging bats that were observed by surveyors.
- 4.17. The Anabat located on the north western side of the farmhouse recorded 5 passes of common pipistrelle bat, and 11 passes of noctule bat; all of which are attributable to the small number of foraging bats that were observed by surveyors.
- 4.18. The Anabat located in the ground floor room of the farmhouse recorded 3 lesser horseshoe bat passes that are attributable to the bat that roosts in the bread oven.

19th June 2017 – dawn re-entry survey

- 4.19. No bats recorded returning to roost at the farmhouse, byre, or barn.
- 4.20. The only bat activity observed during the survey period was a single common pipistrelle bat that foraged briefly in the local area one hour before dawn. This bat did not go to roost in the survey area.
- 4.21. The Anabat located on the south eastern side of the farmhouse recorded 6 passes of common pipistrelle bat which are attributable to the single foraging individual that was observed by surveyors.
- 4.22. The Anabat located on the north western side of the farmhouse recorded 3 passes of common pipistrelle bat which are attributable to the single foraging individual that was observed by surveyors.
- 4.23. The Anabat located in the ground floor room of the farmhouse made no recordings.

5. METHOD STATEMENT

<u>Bats</u>

Introduction to the Bat Method Statement

- 5.1. The only evidence of roosting bats recorded during the survey period was a single lesser horseshoe bat that occasionally roosts in the old bread oven of the farmhouse. No evidence of bats was found in the byre or barn and both these building are in the late stages of dereliction and as such are extremely limited in bat roosting opportunities.
- 5.2. This method statement sets out a precautionary approach that will ensure no disturbance to the lesser horseshoe bat that occasionally utilises the farmhouse. The method statement also details how bat roosting opportunities will be created as part of the development proposals. These roosting opportunities include the creation of gaps and cavities around the roof and walls of the renovated buildings as well as the provision of a bat boxes on the gable end walls. In addition a dedicated bat loft will be created in the upper floor/loft void of the barn. These enhancement measures will significantly enhance the site's bat roosting potential.

Ecological clerk of works

5.3. A suitably qualified ecological clerk of works will be appointed prior to the commencement of works. The ecological clerk of works will consult with the site manager/contractors throughout the duration of development works to ensure that the method statement is suitably implemented.

Bat access points/roosting sites in the external fabric of the buildings

- 5.4. Bat access points into gaps located under ridge tiles; between the roof and gable end walls; and behind soffit and barge boarding will be created in all three renovated buildings. Access point designs are set out in Appendix 1.
 - 5.4.1. Farmhouse Ten access points will be created along the ridge tiles of the roof; ten access points will be created between the roof and the gable end walls (five per gable end wall); ten access points will be created under weather boarding/soffit/barge boarding on the side walls of the building (five on each side of the property).
 - 5.4.2. Byre Ten access points will be created along the ridge tiles of the roof; ten access points will be created between the roof and the gable end walls (five per gable end wall); ten access points will be created under weather boarding/soffit/barge boarding on the side walls of the building (five on each side of the property).
 - 5.4.3. Barn Five access points will be created along the ridge tiles of the roof; ten access points will be created between the roof and the gable end walls (five per gable end wall); ten access points will be created under weather boarding/soffit/barge boarding on the side walls of the building (five on each side of the property). In addition a bat loft will be created in the upper floor of the barn (see below).

Bat boxes

5.5. As part of the development proposals one Schwegler 1FF bat box (or similar approved design) will be located under the apex of a gable end wall on each of the renovated buildings (3 boxes in total).

Bat loft

5.6. A dedicated bat loft will be created as part of the development proposals. None of the buildings currently support a dark loft void and as such this will represent a net gain in bat roosting opportunities, particularly for lesser horseshoe bats. The bat loft will be located in the roof of the barn. Dimensions are set out on architectural plans accompanying the planning application. Free flight bat access into the loft will be via two suitably located 'windows' in the gable end walls or under the eaves, these will measure 15cm in height and 30cm in width. The access points will be located a maximum of 50cm above the loft void floor to prevent heat loss in the upper part of the loft void. The roof of the bat loft will comprise slate tiles and a bitumastic felt underlay (or similar approved underlay). The access points will be located on the north western and north eastern sides of the roof that faces into open countryside and existing vegetation.

Timing of works

5.7. There are no significant timing constrains to the commencement of development works. However, the farmhouse does occasionally support a single lesser horseshoe bat and as such the appointed ecological clerk of works will conduct an assessment of the property immediately prior to works commencing. If bats are found works to these areas will be postponed until the bats have vacated the area by their own accord (as confirmed by subsequent survey work). In the extremely unlikely event that a number of bats are found, or a breeding colony of bats is found, all works will stop and the appointed ecological clerk of works will consult Natural England for guidance.

Unexpected discoveries

5.8. In the unlikely event that bats are discovered during development works all works will stop and the ecological clerk of works will be consulted immediately.

Lighting

5.9. Where external security lighting is used it will not be located in areas where bat access points have been created/retained. The nearby stream corridor and associated vegetation will not be subject to illumination by security lights.

Timber treatments

5.10. Any timber treatments that are required will follow guidelines published by Natural England The appointed ecological clerk of works will advise accordingly. Permethrin and cypermethrin compounds are the most 'bat friendly' wood treatments currently available.

Nesting birds

- 5.11. Swallows and redstart were nesting in the farmhouse during the survey period. Works that could impact on nesting birds will be undertaken outside the bird nesting season (October-February) or alternatively at any time once the appointed ecological clerk of works has confirmed that nesting birds are absent.
- 5.12. No evidence of barn owls was found during the survey period.
- 5.13. If nesting birds are unexpectedly encountered during the renovation works all works will stop and the ecological clerk of works will be consulted immediately.
- 5.14. As part of the development proposals two Schwegler swallow nesting boxes and two Schwegler open fronted boxes (or similar approved design) will be erected in suitably sheltered areas (such as roof overhangs). Bird boxes will be erected under the supervision of the appointed ecological clerk of works.

Hedgehogs

5.15. As part of the development proposals two 'Eco Hedgehog Nesting Boxes' will be located within the garden of the renovated farmhouse (these durable plastic boxes are produced by the Nestbox Company). The boxes will be located within existing/new hedgerow vegetation along the garden boundaries. The boxes will be positioned in suitable locations under the supervision of the appointed ecological clerk of works.

Pollinating insects

5.16. As part of the development proposals three 'bee boxes' will be erected on the walls of the renovated buildings (1 box per building). These boxes will comprise a mix of designs suitable for attracting red mason bees and other solitary species. Schwegler designs will be utilised as these are constructed from durable materials such as 'woodcrete'. The boxes will be erected in suitable locations under the supervision of the appointed ecological clerk of works.

6. CONCLUSION

- 6.1. Bat survey work was undertaken Upper Blaen Farm on the 1st May, 4th June, and 19th June 2017. A single lesser horseshoe bat was roosting in the old bread oven in the farmhouse on two of the survey dates. No other evidence of roosting bats was found in the farmhouse during the survey period.
- 6.2. The byre and barn are both in the late stages of dereliction and do not support roofs. No evidence of bats was found in these two structures.
- 6.3. The method statement set out in this report details how bat roosting opportunities will be created as part of the development proposals. This includes the creation of bat roosting opportunities in the external fabric of all three properties. In addition a dedicated bat loft will be created in the roof of the barn. These measures will result in a significant net gain in bat roosting opportunities at the site.
- 6.4. The method statement adopts a precautionary approach to ensure that bats are absent immediately prior to works commencing.
- 6.5. The development proposals also include the provision of hedgehog homes, bird nesting boxes, and bee/pollinator boxes.
- 6.6. Prior to the commencement of works an ecological clerk of works will be appointed. The ecological clerk of works will oversee the implementation of the method statement and will consult with the site manager/contractors throughout the duration of development works.
- 6.7. On current evidence there are no reasons to suggest that the development proposals set out in this report would lead to any significant impact on any known protected species or ecological feature of value at the national, county or local level. The proposed bat roost enhancements will significantly increase bat roosting opportunities at the site. As such there are no reasons for refusing planning permission on the grounds of nature conservation.

Plan 1

Site location



Plan 2

Development proposals

Farmhouse







Barn









Lesser horseshoe bat roost in bread oven in ground floor room of farmhouse



Figure 1

The farmhouse viewed from the south.

Figure 2

The farmhouse viewed from the north.

The adjoining lean-too supports a corrugated iron roof and showed no evidence of usage by bats.

Figure 3

The ground floor room of the farmhouse is the occasional roosting site of a single lesser horseshoe bat.

The bat roosts in the old bread oven and was present on the 1st May and 4th June but was absent on the 19th June.

No other bats were recorded roosting in the farmhouse during the survey period.

Figure 4

The upper floor of the farmhouse is in the late stages of dereliction. It is well illuminated by windows and missing sections of the roof.









Figure 5

The western section of the farmhouse has almost completely lost its roof.

No evidence of bats was found in this area during the survey period.

Figure 6

The byre viewed from the east.

Figure 7

The byre viewed from the inside.

With the exception of a very localised area of corrugated iron, the byre does not support a roof.

No evidence of bats was found in this area during the survey period.

Figure 8

The barn viewed from the west.

The barn does not support a roof and is completely derelict.

No evidence of bats was found in this area during the survey period.

Appendix 1

Bat access point designs



