

Bat Survey Report

Rawling House Farm

22nd June 2015



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Contents

1	Summary.....	3
2	Introduction.....	3
3.	Site description.....	3
3.3	Aims of survey.....	5
4	Methodology.....	5
4.1	Field survey.....	5
5	Results.....	6
5.1	Desk survey.....	6
5.2	Field surveys.....	9
6	Assessments.....	13
6.1	Summary and evaluation of findings.....	13
6.2	Survey limitations.....	13
6.3	Impacts of development.....	14
6.4	Legislation and policy guidance.....	14
7.	Conclusion.....	16
8.	Method statement.....	18

1. Report summary

- 1.1 The bat survey was commissioned Mark Booth of Booth Designs on behalf of the owner of the property Mr Shirt.
- 1.2 The preliminary roost assessment survey was conducted on the 10th June 2015 followed by a dusk emergence survey on the same day and a second dusk survey on the 22nd June.
- 1.3 A light scattering of droppings were found on the floors of the barn (12) and there are many potential bat roosting features within king post timbers, ridge and the walls of the barn both inside and out.
- 1.4 Only a single bat emerged from the inside of the barn on both activity surveys and an automated survey deployed for a duration of nine days also confirmed this.
- 1.5. It was concluded that a Protected Species licence would be required prior to the commencement of works on the barns (including any preparatory work) to exclude the bat/s prior to development works and to ensure adequate roost provision in the converted barn.

2. Introduction

- 2.1 Rawling House Farm barn is the subject of a planning application for subsequent conversion to a dwelling. Middleton Ecological Consultancy were contracted initially to conduct a baseline assessment followed by a dusk survey for bats to confirm presence. This was then followed by dawn surveys to identify roost locations, access points, species present, level of use and the importance of nearby landscape features. This report confirms the findings of those surveys carried out by two surveyors.

3 Site description

- 3.1 Rawling House Farm barn is an old stone built traditional two storey barn located 1.5km WSW of Cawthorne. The building has a single ridged roof with gables with a roof covering of York stone slates. There is three compartments to the barn and several doorways. On the west elevation is a single storey annex animal shed built of dry stone with a corrugated asbestos cement roof. Adjacent to the site on the eastern boundary is an industrial complex (pipe works). To the north is arable land; with the remainder comprising improved grassland used for pasture.

3.2 Habitat assessment

3.2.1 The surrounding area contains a wide variety of habitats including grassland and woodlands and therefore all of the locally occurring species are likely to be in the locality. Table 1 outlines the habitats present adjacent to and further afield to Rawling House Farm barn.

Table 1

Name and address: Rawling House farm, North Lane.			
OS Grid Ref. SE2668 0704		Altitude. 440ft	
Local Planning Authority: Barnsley			
Features on site and adjacent to site			
Feature	On site	Adjacent	Comments
Buildings	✓	✓	Farm complex
River bordered by trees		✓	Tanyard beck 350m to south
Standing water			Nearest 1.5km
Bridges tunnels and culverts			Nearest 1.5km
Trees		✓	Copse and hedgerows nearby
Woodland			Dixon wood 300m to west
Grassland	✓	✓	

Plate 1 The site



3.3 Aims of survey

3.3.1 The surveys were conducted to find out the following:

- The presence of bats.
- Where in the building are bats likely to roost.
- Where bats are likely to enter and exit.
- Whether additional survey work is required

4. Methodology

4.1 Field survey

4.1.1 The following personnel conducted the survey:

Surveyor: Peter Middleton (Licence no (WML-A34-level 2; 2015-11028-CLS-CLS)
Carl Dixon

4.1.2 The following activities were carried out during the surveys.

- A brief inspection and assessment of the site and habitats present to within 300m.
- An extensive examination of all parts of the building both inside and out to record structural features and condition and to record features that may be suitable for roosting bats.
- A thorough search of all sections of the inside of the building for the presence or evidence of roosting bats including droppings, scratch marks and staining.
- Activity surveys in the form of a two emergence surveys using two surveyors beginning 15 minutes before sunset and finishing approximately 90 minutes after sunset.

4.1.3 The following equipment was used during the survey:

- Cluelite
- Binoculars
- Torch
- Ladders

- Bat detectors (Ipad & EM Touch, Batbox duet, Anabat)
- Digital recorder
- Thermometer

5. Results

5.1 Desk study

Data supplied by South Yorkshire Bat Group for a 2km radius of the site.

Latin Name	Common Name	Obs Comment	Location Name	Location	Date	Grid Ref
Plecotus auritus	Brown LE	house roost 85 emerged	Cawthorne	BMBC	25/07/1981	SE2807
Plecotus auritus	Brown LE	house roost 95 emerged	Cawthorne	BMBC	24/08/1981	SE2807
Plecotus auritus	Brown LE		Cawthorne		23/08/2006	SE2807
Plecotus auritus	Brown LE	roost	Tivy Dale		17/07/2008	SE2807
Pipistrellus pipistrellus	Pipistrelle	foraging	pond	Cannon Hall	27/05/2011	SE27600794
Myotis daubentoni	Daubenton's	foraging (6 minimum)	pond	Cannon Hall	27/05/2011	SE27600794
Plecotus auritus	Brown LE	present	Dakin Brook Farm	Cannon Hall	14/02/2007	SE259074
Plecotus auritus	Brown LE	exit count	Flash House Farm	Cannon Hall	11/05/1993	SE268073
Plecotus auritus	Brown LE	seen inside roof	Deer Shelter	Cannon Hall	20/05/2005	SE271080
Plecotus auritus	Brown LE		Deer Shelter	Cannon Hall	29/05/1988	SE272082
Plecotus auritus	Brown LE	visual in roof	Deer Shelter	Cannon Hall	29/06/1988	SE272082
Plecotus auritus	Brown LE	visual in roof	Deer Shelter	Cannon Hall	25/05/1991	SE272082
Plecotus auritus	Brown LE	visual in roof	Deer Shelter	Cannon Hall	02/07/1993	SE272082
Plecotus auritus	Brown LE	visual in roof	Deer Shelter	Cannon Hall	16/06/1995	SE272082
Plecotus auritus	Brown LE		Cannon Hall	Cannon Hall	19/07/2004	SE272082
Plecotus auritus	Brown LE	exit count	Tivvy Dale, 18	Cannon Hall	25/07/1981	SE279076
Plecotus auritus	Brown LE	exit count	Tivvy Dale, 18	Cannon Hall	24/08/1981	SE279076
Plecotus auritus	Brown LE	exit count	Tivvy Dale, 18	Cannon Hall	24/08/1987	SE279076
Plecotus auritus	Brown LE	exit count	Tivvy Dale, 18	Cannon Hall	23/05/1989	SE279076
Plecotus auritus	Brown LE	exit count	Tivvy Dale, 18	Cannon Hall	20/07/1990	SE279076
Plecotus auritus	Brown LE	exit count	Tivvy Dale, 18	Cannon Hall	01/06/1991	SE279076
Plecotus auritus	Brown LE	exit count	Tivvy Dale, 18	Cannon Hall	29/07/1991	SE279076
Plecotus auritus	Brown LE		Cat Hill Foot Farm	Cannon Hall	29/08/1997	SE248059
Myotis daubentoni	Daubenton's			Cannon Hall	04/09/1987	SE273080
Myotis daubentoni	Daubenton's			Cannon Hall	29/05/1988	SE275083

Myotis daubentoni	Daubenton's			Cannon Hall	12/06/1988	SE275083
Myotis daubentoni	Daubenton's			Cannon Hall	29/06/1988	SE275083
Myotis daubentoni	Daubenton's			Cannon Hall	12/05/1989	SE275083
Myotis daubentoni	Daubenton's			Cannon Hall	12/05/1989	SE275083
Myotis daubentoni	Daubenton's			Cannon Hall	13/05/1989	SE275083
Myotis daubentoni	Daubenton's			Cannon Hall	23/05/1992	SE275083
Myotis daubentoni	Daubenton's			Cannon Hall	25/05/1992	SE275083
Myotis daubentoni	Daubenton's			Cannon Hall	02/07/1993	SE275083
Myotis daubentoni	Daubenton's			Cannon Hall	17/06/1994	SE275083
Myotis daubentoni	Daubenton's			Cannon Hall	05/12/1994	SE275083
Myotis daubentoni	Daubenton's			Cannon Hall	23/04/1995	SE275083
Myotis daubentoni	Daubenton's	feeding		Cannon Hall	16/06/1995	SE275083
Myotis daubentoni	Daubenton's	feeding		Cannon Hall	27/04/2001	SE275083
Chiroptera	Bats		Deer Shelter	Cannon Hall	12/05/1989	SE272082
Chiroptera	Bats		Deer Shelter	Cannon Hall	23/04/1994	SE272082
Chiroptera	Bats		The Park, 20	Cannon Hall	23/09/1999	SE281078
Chiroptera	Bats		9 Tivvy Dale	Cannon Hall	30/07/1990	SE282078
Chiroptera	Bats		9 Tivvy Dale	Cannon Hall	01/07/1991	SE282078
Chiroptera	Bats		Church	Hoylandswaine	21/04/1990	SE259052
Myotis	Unidentified			Cannon Hall	10/08/1984	SE275083
Nyctalus	Nyctalus	exit count	Tivvy Dale, 18	Cannon Hall	03/05/1989	SE279076
Chiroptera	Bats		Oakleigh	Cannon Hall	23/03/2002	SE284077
Myotis nattereri	Natterer's Bat	visual in roof	Deer Shelter	Cannon Hall	25/05/1988	SE272082
Myotis nattereri	Natterer's Bat	visual in roof	Deer Shelter	Cannon Hall	05/09/1994	SE272082
Myotis nattereri	Natterer's Bat			Cannon Hall	29/05/1988	SE275083
Myotis nattereri	Natterer's Bat			Cannon Hall	12/05/1989	SE275083
Myotis nattereri	Natterer's Bat			Cannon Hall	13/05/1989	SE275083
Myotis nattereri	Natterer's Bat			Cannon Hall	23/05/1992	SE275083
Myotis nattereri	Natterer's Bat			Cannon Hall	02/07/1993	SE275083
Nyctalus noctula	Noctule		Flash House Farm	Cannon Hall	11/05/1993	SE268073
Nyctalus noctula	Noctule			Cannon Hall	25/05/1988	SE275083
Nyctalus noctula	Noctule			Cannon Hall	29/05/1988	SE275083

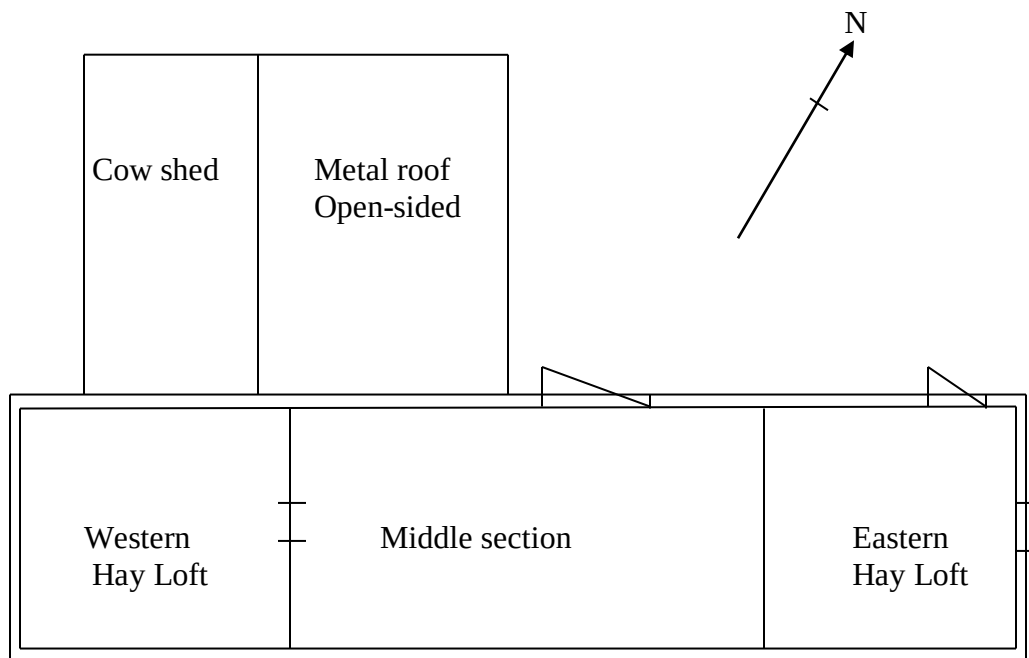
Nyctalus noctula	Noctule			Cannon Hall	12/06/1988	SE275083
Nyctalus noctula	Noctule			Cannon Hall	12/05/1989	SE275083
Nyctalus noctula	Noctule			Cannon Hall	13/05/1989	SE275083
Nyctalus noctula	Noctule			Cannon Hall	25/05/1991	SE275083
Nyctalus noctula	Noctule			Cannon Hall	23/05/1992	SE275083
Nyctalus noctula	Noctule			Cannon Hall	18/03/1993	SE275083
Nyctalus noctula	Noctule			Cannon Hall	02/07/1993	SE275083
Nyctalus noctula	Noctule			Cannon Hall	17/06/1994	SE275083
Nyctalus noctula	Noctule			Cannon Hall	23/04/1995	SE275083
Pipistrellus pipistrellus	Pipistrelle	1	South Lane	Cawthorne	25/06/1993	SE2706
Pipistrellus pipistrellus	Pipistrelle	1	wood	Cawthorne	12/10/1989	SE259086
Pipistrellus pipistrellus	Pipistrelle	1		Cannon Hall	13/05/1989	SE275083
Pipistrellus pipistrellus	Pipistrelle	1 feeding		Cannon Hall	23/08/2000	SE275083
Pipistrellus pipistrellus	Pipistrelle	1	farm	Cannon Hall	25/07/1994	SE2708
Pipistrellus pipistrellus	Pipistrelle	4		Cannon Hall	02/07/1993	SE275083
Pipistrellus pipistrellus	Pipistrelle			Cannon Hall	17/06/1994	SE275083
Pipistrellus pipistrellus	Pipistrelle			Cannon Hall	05/09/1994	SE275083
Pipistrellus pipistrellus	Pipistrelle	2 feeding		Cannon Hall	16/06/1995	SE275083
Pipistrellus pipistrellus	Pipistrelle	1		Cannon Hall	04/09/1987	SE273080
Pipistrellus pipistrellus	Pipistrelle	1	deer shelter	Cannon Hall	29/06/1988	SE272082
Pipistrellus pipistrellus	Pipistrelle	1	deer shelter	Cannon Hall	29/06/1988	SE272082
Pipistrellus pipistrellus	Pipistrelle	1		Cannon Hall	25/05/1988	SE275083
Pipistrellus pipistrellus	Pipistrelle	1		Cannon Hall	23/05/1992	SE275083
Pipistrellus pipistrellus	Pipistrelle	1		Cannon Hall	12/06/1988	SE275083
Pipistrellus pipistrellus	Pipistrelle	1	deer shelter	Cannon Hall	23/05/1992	SE272082
Pipistrellus pipistrellus	Pipistrelle			Cannon Hall	23/04/1995	SE275083
Pipistrellus pipistrellus	Pipistrelle	1 feeding		Cannon Hall	27/04/2001	SE275083
Pipistrellus pipistrellus	Pipistrelle	1		Cannon Hall	25/05/1991	SE275083
Pipistrellus pipistrellus	Pipistrelle	1	17 Tivvy Dale	Cawthorne	17/08/2000	SE282077
Pipistrellus pipistrellus	Pipistrelle	1 exit count	2 Kirkfield Close	Cawthorne	01/06/1995	SE286079
Pipistrellus pipistrellus	Pipistrelle	3 exit count	2 Kirkfield Close	Cawthorne	30/05/1995	SE286079

Pipistrellus pipistrellus	Pipistrelle	101 exit count	2 Kirkfield Close	Cawthorne	23/06/1992	SE286079
Pipistrellus pipistrellus	Pipistrelle	2	Dale	Cawthorne	25/07/1991	SE282078

5.2 Preliminary daytime assessment

5.2.1 The stone barn was internally and externally inspected for bats using a high powered lamp. The potential of the barn to accommodate bats was assessed along with a search for signs (e.g. droppings, moth wings, scratch marks, staining etc) or bats that were present. Particular attention was paid to any crevices or gaps in walls, lintels, gaps between beams and joists and to the possibility of finding droppings stuck to walls, floors or other surfaces, or insect remains below beams, among a number of other factors and signs indicative of a bat roost.

Figure 1: First floor plan of Rawling House Farm Barn



5.3 Inside inspection of building

5.3.1 Rawling House Farm Barn is a large stone built barn in three sections, with a Yorkshire stone slate roof, it is rectangular in shape with a single ridge and gable ends. It is of traditional design with hay lofts at either end of the barn with a single storey section at the centre. The barn has several doors and openings at both levels. There is also a single storey farm building made of stone and brick with an asbestos and steel corrugated roof (see figure 1).

- 5.3.2 There are numerous places for bats to roost both in the single storey middle section and both hay lofts, e.g. up against wooden beams, crevices, under slates and against the ridge board. In spite of this only a scattering of droppings (12) were found on the floors of the middle section and the eastern hayloft. The ridge board, roof timbers, ceilings and all the mortice joints and cracks were somewhat cobwebby and dusty. There are many openings in the barn walls including entrances, open doors and hay loft access openings. In addition there are numerous 25cm (approximately) holes in the walls all around the building (see plate 2). Consequently, the barn may be drafty with fluctuating temperatures and therefore less favoured as a roost. Also several species of birds were nesting in the barn including Barn Swallow *Hirundo rustica* and Little owl *Athene noctua*.

Plate 2



25/30cm holes

5.4 Outside inspection of building

- 4.4.1 The external walls of the barn have a plethora of holes that could accommodate a bat roost. The holes, gaps and crevices can be found on all sides of the main barn building and many of these allow access to the wall interior. An example is shown in (Plate 2).
- 4.4.2 The single storey cow shed is built of stone on the western side and this is in many parts without mortar. Nevertheless, the building is low in height and considering the high potential of adjacent buildings it is considered to have less than low bat roost potential (see Plate 3). The eastern side of this building is brick built and generally in good condition therefore this side of the building has no potential.

Plate 3 showing the abundance of holes and crevices etc



Plate 4 Single storey livestock shed with sheet metal roof



5.5 Emergence/re-entry surveys

- 5.5.1 **Dusk survey (10th June)** – Two surveyors undertook the survey and both were in position 15 minutes before sunset (Sunset 21.32). The surveyors were positioned so that all the elevations with bat roost potential could be monitored for bat activity.
- 5.5.2 The temperature at the beginning of the monitoring was 13.3 with a force 2 south-easterly wind and a clear sky. The temperature dropped to 10c and the wind decreased and became calm by the end of monitoring.
- 5.5.3 At 22.01 a Common pipistrelle *Pipistrellus pipistrellus* approached from the north and entered the barn through the large opening on the north elevation. Three more Common pipistrelles were seen foraging and approaching from elsewhere before a *Myotis* bat was heard flying around in the barn at 22.19. It foraged high inside the middle and east sections of the barn for several minutes before exiting where it foraged around the barn for a further three minutes before departing. Between one and three Common pipistrelles foraged around the barns more or less constantly thereafter.
- 5.5.4 **Anabat automated survey**
- 5.5.5 An Anabat bat detector was placed on a roof beam high up in the eastern hay loft on the 10th June and was left recording data for nine consecutive nights.
- 5.5.6 In Summary two species of bat were recorded in the inside of the barn over the nine day period: Common pipistrelle and a *Myotis* species.
- 5.5.7 The *Myotis* bat was recorded on all the nights the Anabat was deployed with the first recordings being between 35 and 60 minutes after sunset and intermittent foraging took place inside the barn throughout most nights.
- 5.5.8 Pipistrelles were recorded by the Anabat on all of the nights with many of the recordings being brief snatches of pulses suggesting that the bats were actually flying outside of the building past the openings in the walls. Nevertheless, much foraging took place throughout the night inside of the barn.
- 5.5.10 **Dusk survey (22nd June)** – Two surveyors undertook the survey and were in position 15 minutes before sunset (sunset 21.38). The surveyors were positioned so that all the elevations with bat roost potential could be monitored for bat activity.
- 5.5.11 The temperature was 12.4c at the beginning of monitoring with a force 3 north wind and 100% cloud. The temperature dropped to 11.9c by the end of monitoring and the other conditions remained the same.

- 5.5.12 The first bats recorded were Common pipistrelles foraging in the vicinity of the barn from 21.56. At 22.55 (77 minutes after sunset) a *Myotis* species began flying around inside the barn briefly before departing.

6. Assessments

6.1 Summary and evaluation of findings

- 6.1.1 No bats were found roosting in the building during the preliminary daytime assessment, nevertheless, considering the buildings age, features, construction and condition, the likelihood of bats being present in Rowling House Farm Barn was considered relatively high.
- 6.1.2 A survey of the barn was undertaken in 2012 over a two month period and included four activity surveys plus an automated survey. The results of this survey were found to be the same except for a different identification of the *Myotis* bat emerging from inside of the barn. Analysis of the anabat recordings this time confirmed that the *Myotis* bat is a Natterer's *Myotis natterii*.
- 6.1.3 The automated survey of the inside of the barn revealed much activity of two species but many of the recordings were short suggesting that the bats were flying past openings outside of the building. It was concluded that just a single Natterer's bat is roosting in the building probably in a gap in roof timbers or under the ridge. There is no evidence to show that Brown long-eared bats *Plecotus auritus* are using the barn.
- 6.1.4 Several species of birds are nesting in the barn including Swallows *Hirundo rustica*, Tree sparrows *Passer montanus* and Little owl *Athene noctua*.

6.2 Survey limitations

- 6.2.1 A daytime bat survey is used only to determine whether bats are present and if a more detailed survey is required in preparation for a protected species license application. A dusk/dawn bat activity survey in the summer months when bats are most active can give a much greater indication of the level of use of the building, in addition to the species present, roosting locations and access and exit points.
- 6.2.2 Large or complex buildings require a number of surveyors equipped with appropriate bat detectors and monitoring devices to ensure that the range of frequencies used by British Bats are covered, thus ensuring that no bat species are overlooked during the dusk survey. The 'Frequency Division' detector is a broadband detector i.e. all frequencies used by British bats can be heard at the same time. The heterodyne detector can only monitor one frequency at a time but by continually rotating the frequency dial between 35 and 50 kHz, this covers

many of the species likely to be found roosting inside a building. Rotating the dial through all frequencies at regular intervals allows the surveyor to identify the specific frequency of the call.

6.3 Potential impacts of development

6.3.1 Table 3

Development effect	Scale of impact without mitigation			
	Negligible	Low	Medium	High
Destruction of roost site				✓
Risk of entombing bats during building work		✓		
Risk of killing/injuring bats during roof strip			✓	
Temporary disturbance from building works during breeding season	✓			
Temporary disturbance from building works outside the breeding season	✓			
Post development interference			✓	

6.4 Legislation and policy guidance

6.4.1 Bats receive protection under the Conservation of habitats and Species Regulations 2010 (and 2011 Amendment Regulations) and the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats &c.) Regulations 1994.

6.4.2 It is an offence to:

- Deliberately capture (or take), injure or kill a bat.
- Intentionally or recklessly disturb a group of bats where the disturbance is likely to significantly effect the ability of any significant group of animals to survive, breed, rear or nurture their young or likely to significantly effect the local distribution or abundance of the species, whether in a roost or not.
- Damage or destroy the breeding or resting place (roost) of a bat.
- Possess a bat (live or dead), or any part of a bat.
- Intentionally or recklessly obstruct access to a bat roost.
- Sell (or offer for sale) or exchange bats (dead or alive), or parts of parts.

6.4.3 The Convention on Biological Diversity, signed in Rio de Janeiro, Brazil in 1992, requires member states to develop national strategies and to undertake a range of actions aimed at maintaining or restoring biodiversity. The UK Biodiversity Strategy was produced in response to the Convention.

- 6.4.4 Individual Species Action Plans (SAPs) have been developed to address the causes of decline for those species that have been identified as priorities for UK conservation action. Country-level lists contain species considered of national importance in biodiversity strategies. The current list includes Bechstein's Bat, Greater Horseshoe Bat, Lesser Horseshoe Bat, Barbastelle, Noctule, Soprano Pipistrelle and Brown long-eared bat. At a more local level there are Local Biodiversity Action Plans for smaller geographical areas which may cover a greater or lesser range of bat species.
- 6.4.5 In England & Wales, the Natural Environment and Rural Communities (NERC) Act, 2006 imposes a duty on all public bodies, including local authorities and statutory bodies, in exercising their functions, "to have due regard, as far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". It notes that "conserving biodiversity includes restoring or enhancing a population or habitat".
- 6.4.6 Where it is proposed to carry out works which will have an adverse impact on bats or on a bat roost, a European Protected Species (EPS) license must first be obtained from Natural England, even if no bats are expected to be present when the work is carried out.
- 6.4.7 An EPS license application requires details of the proposed works, the bats which may be affected and the mitigation proposed to maintain the favourable status of bats in the region. The application is usually drawn up on behalf of the client by a specialist ecological consultant. The consultant is likely to be required to check that work is proceeding in accordance with the method statement and to also carry out monitoring of the impact on bats for sometime after completion of the works.
- 6.4.8 When considering an application, the Natural England licensing section may consult with the local planning authority and specialist conservation staff. This process may take a considerable length of time. Natural England presently states that it aims to make a decision on an application within 30 working days of receipt. There is no guarantee that a license will be granted and no fast track process to obtaining a license. Applications can only be made once planning permission has been granted (where appropriate).
- 6.4.9 EPS licenses can only be issued if Natural England is satisfied that there is no satisfactory alternative to the development and that 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.
- 6.4.10 NPPF: 11 Conserving and enhancing the natural environment. The planning system should contribute to and enhance the natural and local environment by:

- Protecting and enhancing valued landscapes, geological conservation interests and soils.
- Recognising the wider benefits of ecosystem services.
- Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

7. Mitigation (birds)

7.1 Little owl, Tree sparrows and Barn swallows are nesting in the barn. The following boxes should therefore be provided as mitigation in suitable locations:

- One Schwegler 20A Little owl box to be erected in nearby tree.
- One 1SP Sparrow terrace to be erected on the east or south elevation under eaves or gutter.
- Mitigation for Barn swallows can only be achieved by the construction of a lean-to or other open out building. If the LA insist on such mitigation then it can be provided for.



7. Conclusion

- 7.1 It was concluded that the Barn at Rawling House Farm is an active bat roost for one Natterers bat, and as such, the proposed works will require licensing under the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats &c.) Regulations 1994.
- 7.2 A licence application cannot be made until full planning consent has been granted and any outstanding planning conditions that may have a bearing on the mitigation scheme have been discharged. The licence application process can be

- lengthy so it is therefore recommended that a licence be applied for when permissions are in place.
- 7.3 The mitigation and methods of safeguarding the current bat roosts is outlined in the attached draft method statement. Please note that there is now a different procedure for the application of a mitigation licence which involves using a Natural England Method Statement template.
- 7.4 The three tests of the Conservation of habitats and species regulation has been met. 53 (2) (e) Preserving public health or safety or other imperative reason of overriding public interest. There is no other satisfactory alternative and that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range 53 (2) (a & b).
- 7.5 Considering that the barns are well used by birds, commencement of works should avoid the bird nesting season from April to August.

References

Mitchel- Jones AJ, 2004, Bat Mitigation Guidelines, English Nature.

Bat Conservation Trust, 2007. Bat Surveys, Good Practice Guidelines.

8. Method Statement Document – Delivery Information

A Mitigation and compensation.

A1 Summary of mitigation strategy

A1.1 A European Protected Species development licence will be obtained prior to the following works commencing at Rawling House Farm.

- Roof stripping
- Maintenance and removal of roofing timbers
- Masonry repairs

A1.2 Populations of bat species known to occur at this site will be maintained and encouraged as a result of the mitigation strategy. To summarise, the mitigation strategy includes:

- Pre – works inspection of the building to confirm the status of roosting bats.
- Temporary replacement roost sites will be installed. A Schwegler 1FS bat box will be erected.
- Contractors on site to receive an induction on bat species present at Rawling House Farm and provided with the Delivery Document.
- Strategies for safely managing bat species present, during the work, under different weather conditions.
- Exclude bats using one-way valves.
- The maintenance of existing roosting opportunities in the building.
- Access points will be re-created in the same or similar locations.
- Management of external lighting to reduce disturbance to bat roost access points and flight paths.

The mitigation strategy will ensure that the bat populations at the site are maintained at a favourable conservation status.

B Works to be undertaken by ecologist.

Works involving the handling of bats will not be necessary, however in the unlikely event; it will only be undertaken by a licensed ecologist. Gloves will be worn and the ecologist will have an up-to-date rabies vaccination.

B1.1 Timing

There is not a maternity roost at the site therefore the timing is not critical. However, the winter months should be avoided as hibernating bats can be deep in the core of the walls.

B1.2 Site Induction

A tool box talk will be given to all contractors and others involved in the works prior to the start. This will provide background information on bats at the site, where bats are likely to be found and what to do if bats are unexpectedly discovered during works. In the event that bats are found during works then all work will stop immediately. The ecologist will be contacted immediately for advice, at Middleton Ecological Consultancy on Tel number 07774 845266.

B1.3 Pre-Works Surveys

No pre-works surveys are necessary at the onset of works. However, an activity survey will be required prior to commencements of masonry works.

B1.4 Destructive Search

In order to reduce any unnecessary disturbance, injury, or death of bats roosting in buildings, the roof coverings, where bats have been identified, will be carefully removed, by hand under the watching brief of a bat ecologist. The slates will be removed by hand and checked underneath before stacking. The roof will be stripped and covered during the same day to protect the structure from rainfall. This will also ensure that if any bats discovered during the roof stripping, that are re-released at dusk, will not be able to return to the buildings. Timbers will be inspected for bats once the roof covering has been removed.

B1.5 Discovering Bats

Bats that are removed during the destructive search and / or subsequent works will be placed into a holding box, with water provided and re-released close to the mitigation area at dusk. Injured bats will be taken into care (as directed by the Bat Workers Manual, section 7.3, pages 64 – 66: 3rd edition 2004) and fed until such time when conditions are suitable (night time temperature are $>6^{\circ}\text{C}$) for them to be released at dusk in the mitigation area.

If bats are found and night-time temperatures are $<6^{\circ}\text{C}$, they will be removed by hand and placed in the Schwegler 1FS bat box on site. This woodcrete box, designed to accommodate hibernating bats, is available within 250 metres of the site.

The 1FS bat box will be removed if no bats are found and once the roof work is completed. The box will be checked for bat presence and then removed if no evidence is found, should bats or droppings be present in the box it will remain in situ.

C. Works to be undertaken by the Developer/Landowner

C.1 Bat roosts

C.1.1 In-situ retention of roost(s)

- Great care should be taken with masonry work and re-pointing walls. Bats will use crevices at any time of year but are more vulnerable during

winter hibernation when they are unable to escape when disturbed. At this time they are likely to use sites deep in the rubble filled core of walls, gaining access through open joints etc. The roost site can be a considerable distance from the access point. For this reason where bats may be present this type of work should not be done in the winter months. Crevices that have been identified as bat roosts during the activity surveys will remain un-modified.

- Prior agreement with masons will be reached as to which cavities are to be retained unmodified, which are to be modified and which are to be infilled/re-pointed. Crevices will be marked with coloured masonry crayon and plans will be drawn to explain this clearly and unambiguously.
- Shallow crevices where the full extent can be easily seen and that can clearly be seen to be empty may be filled after supervised endoscope check.
- Any crevices that appear to extend into the rubble filled core of the wall or disappear behind other building stones and cannot be fully seen may be reduced by careful pointing leaving small permanent holes approx. 15x30mm in size accessing the core of the wall. Before this can take place bats will need to be excluded. Bats should not come into contact with wet mortar therefore by using one-way excluders this will be prevented.
- Where the absence of bats cannot be assumed, and where suitable weather conditions allow, wall cavities will be chalk-marked and fitted with one-way excluders with rock wool surrounding it to only permit bats to exit the pipe and not re-enter the cavity. The excluder comprises of a plastic pipe with a 26mm bore, facing slightly downwards (to avoid water ingress), projecting at least 100mm from the wall. It will be inserted tightly into the gap and will remain in place over four consecutive days and nights where (night-time) temperatures have not dropped below 8°C. (Exclusion is guided by Bat Workers Manual, section.9.1.2, pp. 88-90; 3rd ed, 2004). The cavity will then be checked again immediately prior to being in filled or modified.

C.1.2 Modification of existing roost(s)

Not applicable

C.1.3 Temporary roost creation

A Schwegler 1FS bat box will be erected on a tree within 100m of the site and will provide temporary roosting opportunities in the unlikely event that any bats are encountered during demolition. The 1FS will be erected immediately prior to roof stripping in order for the box to acclimatise to local conditions. The box will be

removed if no bats are found roosting inside and / or on completion of the development.

C.1.4 New roost creation

The new development will have a hole left in the mortar underneath a ridge tile (see figure 2 below).

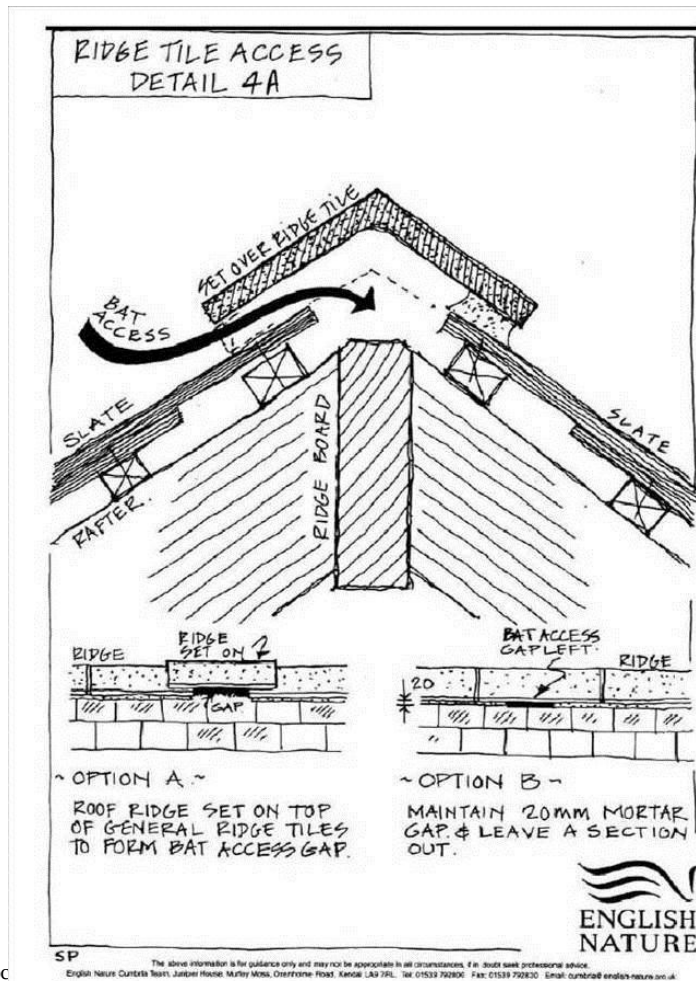
A maximum of 1m² section of bitumastic/hessian will be laid over the breathable roof membrane where the access hole is under the ridge tile.

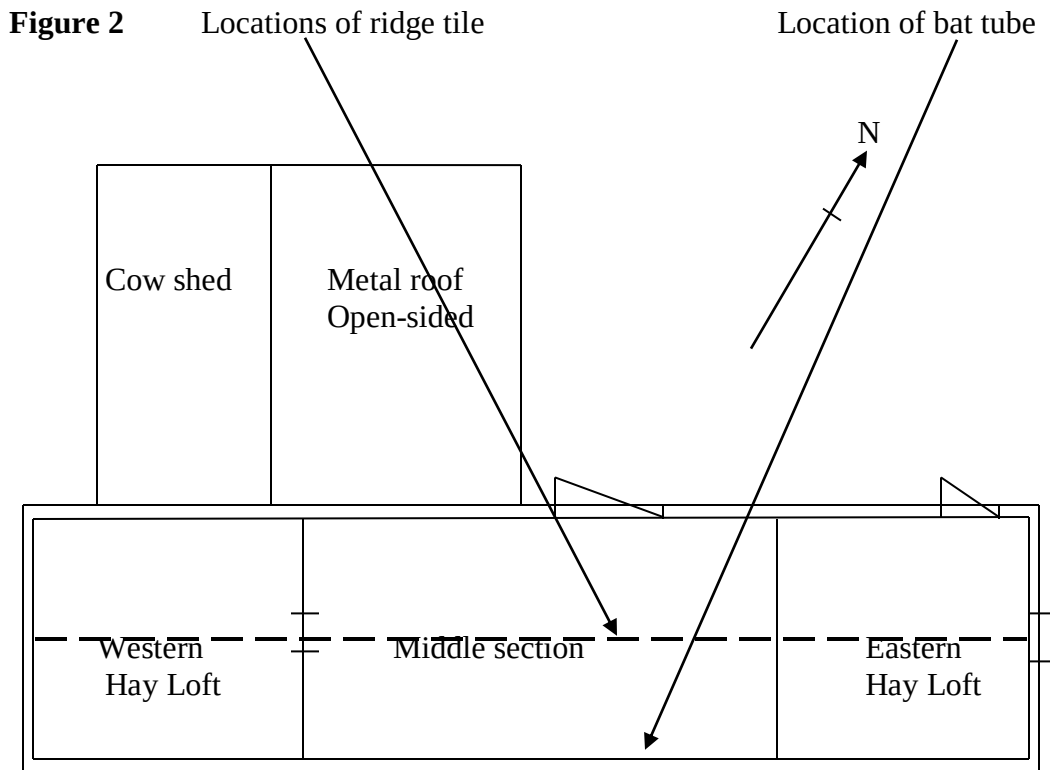
Access will be created by leaving a 20mm high x 50mm wide gap in the mortar. The bitumen/hessian membrane will prevent bats contacting the breathable membrane below.

Timber treatments will be with Permethryn type chemicals on the Natural England list of approved safe chemicals. New pre-treated timbers i.e. tanalised timber will be allowed to dry thoroughly before use, if applicable. A list of Natural England approved paints and timber treatments is available at http://www.naturalengland.org.uk/Images/Bat%20roost%20timber%20treatment_tcm6-10167.pdf

An in-situ bat tube will be installed in the wall of the south elevation as high as possible.

Ridge tile detail





D. Post-development safeguard

- D.1 The site at Rawling House farm will be managed in the same way as before and no habitat will be lost as a consequence of the development. The management and funding of the property will be the responsibility of the owner.
- D.2 Monitoring is not required.

D.3 Mechanism for ensuring delivery of post-development works

- D.3.1 The owner of the site will be responsible for post-development works. No post-development is required.

E. Land ownership – Mitigation site(s) (area(s) where any works will be done to offset development impacts etc.

- E.1 Not Applicable
- E.1.1 Not Applicable
- E.1.2 Not Applicable
- E.1.3 Not Applicable

F Timetable of works:

A: Development activities and timing					
Activity	Timing	Notes			
Pre-works inspection of building.		To be undertaken by ecologist.			
Erection of Schwegler 1FS		Provide temporary roosting habitat.			
Roof stripping		Under supervision of ecologist			
Dusk survey prior to masonry works. Exclusion of bats from masonry		The use of one-way excluders may be necessary.			
Construction of new roosts		Ridge tile detail, bat tube.			
B: Post development monitoring					
Year					
Details	Not required				