

Bat

Presence-Absence Survey

Dry Gap Farm

Ramsbottom

Greater Manchester

BL0 0RX

For

Marnie Holt



Gritstone Ecology

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Non-technical summary

A preliminary roost appraisal completed by Pennine Ecological in May 2022 assessed the building as having moderate suitability for use by roosting bats, and recommended that two dusk and dawn surveys were undertaken during the active season.

Building inspections, one dusk, and one dawn survey were completed in May & June 2022. No indications of use by bats were recorded during the building inspections, and no bats were recorded roosting in the building during the presence-absence surveys.

As no bats were recorded roosting in the building, and as no indications of use by bats have been found during the surveys, it is unlikely that bats will be affected by the proposed works.

No further survey, licensing, or mitigation work is required with regard to bats.



1. Introduction

1.1. Purpose of the report

The report is written by Stewart Bradshaw for Marnie Holt. Stewart carried out bat presence-absence surveys of Dry Gap Farm in May & June 2022. The survey report will be used to provide supporting information for a planning application on the site.

1.2. Survey aims

The aim of the surveys was to determine the presence or absence of bats, to characterise any roosts present, and assess the need for further survey or mitigation.

1.3. Surveyor details

Stewart is licensed to disturb, take and handle all species of bats in all counties of England under licence number 2015-15615-CLS-CLS. He has more than 10 years of experience in ecological consultancy, including the planning & preparation of bat surveys, and mitigation licences.

Experienced assistant surveyors were used during the presence-absence surveys to cover all angles of the building.

1.4. Proposed development

The development proposals are for a full height extension to the southern gable end of the farmhouse at Dry Gap Farm. The works will include the demolition of a single storey outbuilding and construction of the new extension. The main roof of the farmhouse will not be affected by the works.

1.5. Site context

Dry Gap Farm is located to the east of Bury Old Road, Ramsbottom, BL0 0RX GR SD 80622 17965, approximately 7km north of Bury Town Centre. The farm is on an exposed hillside at 225m above sea level.

The site includes a detached stone farmhouse with outbuildings, surrounded by paddocks and grazed pastures. Habitat within 50m of the building includes: stone farm buildings, open pasture, hedgerows, dry-stone walls, mature trees, and un-lit country lanes.

Habitat within 500m includes: grazed pasture, hedgerows, dry-stone walls, mature trees, small blocks of woodland, farm buildings, roads, ponds, and watercourses.

The site and surrounding area provide high quality foraging, commuting, and roosting opportunities for bats.



The map displays a rural landscape with several farms and a network of roads. A red arrow points to a location on Rossendale Way, labeled '18'. The map includes contour lines, a reservoir, and various landmarks such as a mill and a quarry. The roads shown are Rossendale Way, Bury Old Road, Riding Head Lane, and Bamford Road. The farms shown are Bleakholt Farm, Windy Bank Farm, Anthony Fold, Shuttleworth, Green Hill Farm, and Moor Side Farm. The map also features a mill, a quarry, and a reservoir.

An aerial photograph of a residential area. A red arrow points to a house with a dark roof and a light-colored wall. The house is situated on a grassy plot. To the left of the house is a small, light-colored building. To the right is a larger, light-colored building. A road runs along the top of the image, and a driveway leads to the house. Several cars are parked in the driveway and on the road. The surrounding area is mostly grassy with some trees and shrubs.

Bat Presence-Absence Survey | Dry Gap Farm - Ramsbottom | 5th July 2022

2. Methods

2.1. Survey timings

A building inspection and dusk survey was completed on 24th May 2022, a dawn survey was completed on 16th June.

2.2. Desk study

No formal desk study of the site was undertaken, prior to the preliminary roost assessment. The development has a small footprint, and impacts beyond the site boundary are unlikely. A site-specific investigation was considered more suitable.

2.3. Habitat assessment

The habitat on site and in the surrounding area was assessed using Ordnance Survey mapping, and aerial photography. Habitat features on site, and those in the surrounding area were assessed for their suitability for use by bats during the site visit.

2.4. Building inspection

A systematic search of the exterior of the building was made to identify potential or actual bat access points and roosting places, and to locate any evidence of bats such as live or dead specimens, bat droppings, urine splashes, fur-oil staining and or squeaking noises. Bat specimens and droppings are the most reliable type of evidence; the other types are not always the result of bat activity. Sometimes bats leave no visible sign of their presence on the outside of a building (even when they do wet weather can wash evidence away.)

The search included (where present) the ground beneath potential access points, windowsills, window panes, walls, behind peeling paintwork and lifted rendering, hanging tiles, weatherboarding, eaves, soffit boxes, fascia's, lead flashing, gaps under felt, under tiles / slates and in existing bats boxes. Gaps in brickwork and stonework were searched (where present). All evidence of use by bats, or features with the potential to be used by bats was recorded and photographed.

A systematic search of the inside of the building was undertaken to identify potential or actual bat access points and roosting places, and to locate evidence of bats. Bat specimens (live or dead) and droppings are the most reliable type of evidence. Other evidence can include urine splashes, fur-oil staining, feeding remains, squeaking noises, bat fly (Nycteribiid) pupal cases (Hutson 1984) or odour.

Areas inspected include;

Within rooms

- floors and surfaces
- behind wooden panelling
- in lintels above doors and windows
- behind window shutters and curtains
- behind pictures, posters, furniture, peeling paintwork, peeling wallpaper, lifted plaster and boarded up windows
- inside cupboards and in chimneys accessible from fireplaces.

Within roof spaces

- the tops of gable end and dividing walls
- the top of chimney breasts
- ridge and hip beams and other structural timbers
- mortise and tenon joints
- all beams
- the junction of roof timbers, especially where ridge and hip beams meet
- behind purlins
- between tiles and the roof lining (where accessible)
- under flat felt roofs.

The areas listed above were inspected (where present), any additional areas with potential for use were also inspected.

2.5. Presence-absence survey method

Ecologists visited the site at dusk and dawn, to listen to, and record bats, and look for bats emerging from, or returning to roosts, and compile information on species, numbers, access points, and locations. The surveys were informed by a building inspection, which identified potential roosting and access points. These points were covered by an observer during the surveys.

2.6. Equipment

The equipment listed below was available for use during the surveys and was used where required.

Clulite CB2 1,000,000 candlepower torch. Rigid Seesnake CA-300 digital endoscope with 0.9m cable reach with 17mm and 6mm imaging heads. Digital camera with 50x zoom. 8x25 close focussing binoculars, 4m ladders, bat handling gloves, DNA sampling tubes.

Elekon Batlogger M – full spectrum bat detector. The Elekon Batlogger M - records bat echolocation calls in high quality, along with temperature and GPS location data. The information is stored on an SD card, and later analysed in detail using Elekon Bat explorer software.

Elekon Batlogger A+ - passive full spectrum bat detector. The Elekon Batlogger A+ records bat echolocation calls in high quality, along with temperature data. The information is stored on an SD card, and later analysed in detail using Elekon Bat explorer software.

Wildlife Acoustics Echometer Touch II Pro - full spectrum bat detector fitted to smartphone or iPad. The device records bat echolocation calls in high quality, along with location data taken from the attached device (where available). The information is stored internally, and later analysed in detail using Wildlife Acoustics Kaleidoscope software.

Infra-red night vision video cameras and powerful infra-red lamps were used to observe the building. The cameras recorded for the full length of the survey, the videos were checked during and after the surveys were completed.

Motorola two- way radios, were used to relay information between surveyors.



3. Results - building inspection

3.1. External Inspection



3.1a – The west side of the farmhouse, south gable end, and attached outbuildings.

Dry Gap Farm is a detached pre-1900's stone farmhouse which is currently occupied. The roof is pitched and covered with rough-cut stone roof & ridge tiles; roof pitches face east & west, gable ends face north & south. Single storey outbuildings at the south gable end have pitched roofs covered with slate roof tiles and vented ceramic ridge tiles.

Wooden fascia boards are fitted at the eaves of the farmhouse, lead flashing is fitted where roof tiles abut stonework. Walls are solid local stone, and have been re-pointed within the last 10 years. Lintels and sills are stone, window and door frames are UPVC, all glass is intact.

Fascia boards at the eaves are in good condition, however, they are fixed to the end of rafters with a >50mm gap between stonework and timbers. Stone tiles are in good condition, and end tiles at the verges are sealed with cement.

There are features externally which could be used by roosting bats including:

- gaps beneath stone roof & ridge tiles
- gaps behind fascia boards
- gaps between roof and ridge tiles on outbuildings

The gaps present could be used by crevice dwelling species of bats, or could give access to the inside of the building.



3.2. Internal inspection

An internal inspection of the building was completed by Pennine Ecological in May 2022. The inspection found no droppings or other indications of use by bats in the farmhouse or outbuildings

3.3. Limitations

None, all accessible areas of the building were inspected. The surveys were completed in May and June, when bats are active and external signs of use such as droppings and feeding remains are more likely to be evident, if present.

3.4. Indications of use

No bat droppings or other indications of use by roosting bats were present during the building inspections.

3.5. Level of suitability

The building has a number of features which could be used by roosting bats and has moderate suitability.



4. Results - presence-absence surveys

4.1. Survey 1



4.1a – Surveyor locations and bat activity.

Date	Survey type	Sunrise / sunset	Start time	End time
24/05/2022	Dusk	21:20	21:00	23:20

Surveyor / position	Equipment
1 - southeast of building	Batlogger M & Infrared camera
2 - southwest of building	Remote Infrared camera
3 - northwest of building	EM Touch II Pro & Infrared camera

Temperature	Wind	Rain	Cloud	Other
17°C	Still	Dry	Clear	N/A

Description

A warm dry evening following a warm sunny day with lots of midges, moths, and insect prey in flight during the survey.

4.1b - Weather, surveyor locations, and equipment.



The first bat recorded during the survey was a single common pipistrelle at 21:58, 38 minutes after sunset. The bat came from the northeast, and was seen flying southwest.

The level of bat activity during the survey was low, with occasional foraging passes recorded along the tree-line to the south of the site. Between 21:58 and 22:23 five passes by single common pipistrelle bats were recorded. No bats were recorded after 22:23.

All activity recorded was from single common pipistrelle bats.

No bats were recorded emerging from the building during the survey.

The bat species below were recorded:

- Common pipistrelle - *Pipistrellus pipistrellus*

Survey 1 - summary of activity

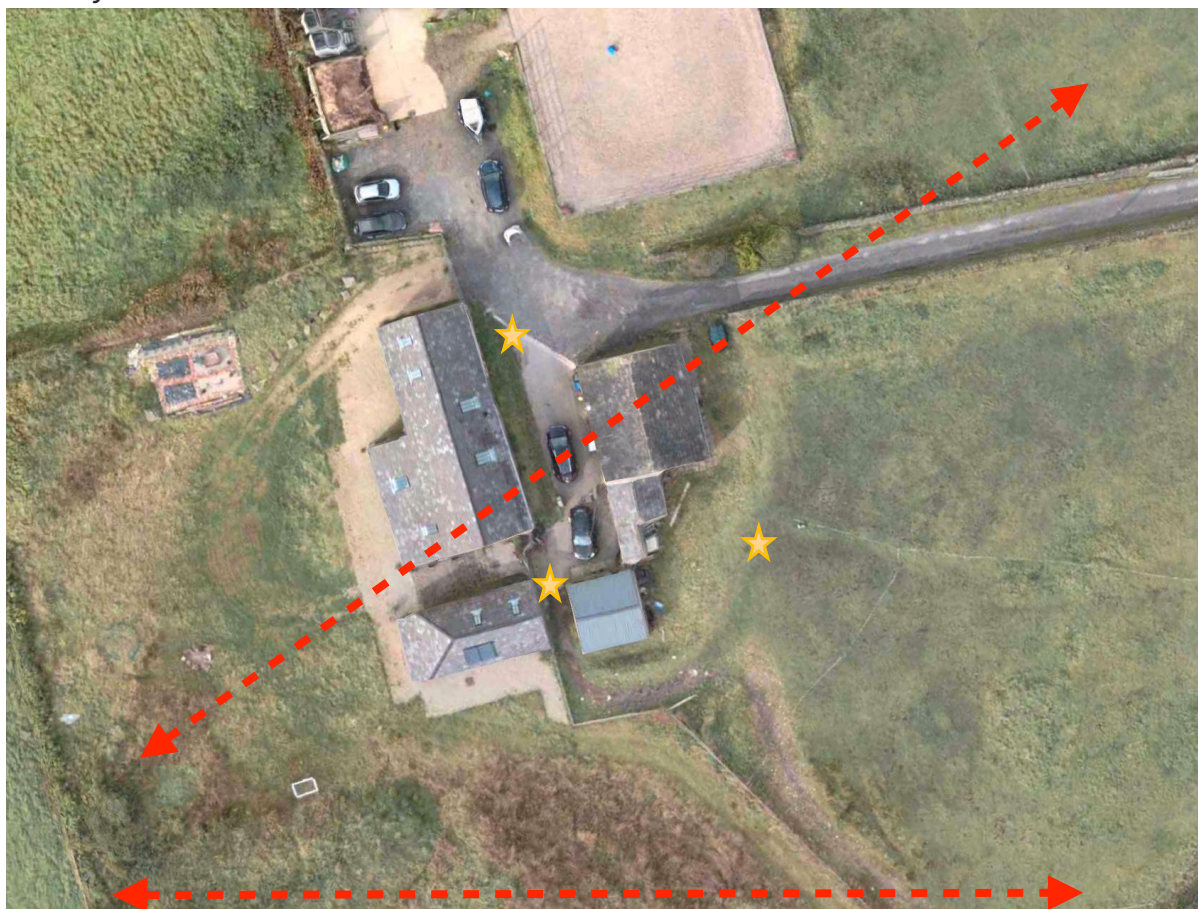
- No bats were recorded emerging from the building during the survey. Foraging and commuting activity was recorded, and bats were seen foraging along the tree-line to the south of the site.

Limitations

None. The survey was completed on a warm dry evening following a warm day. Temperatures throughout the survey were suitable for bat activity and bats were recorded in low numbers during the survey.



4.2. Survey 2



4.2a – Surveyor locations and bat activity.

Date	Survey type	Sunrise / sunset	Start time	End time
16/06/2022	Dawn	04:40	02:40	05:05

Surveyor / position	Equipment
1 - southeast of building	Batlogger M & Infrared camera
2 - southwest of building	Remote Infrared camera
3 - northwest of building	EM Touch II Pro & Infrared camera

Temperature	Wind	Rain	Cloud	Other
12°C	Light breeze	Dry	Clear	N/A

Description

A warm dry morning following a warm sunny day.

4.2b - Weather, surveyor locations, and equipment.

The first bat recorded during the survey was a single common pipistrelle at 03:40. The bat flew west over the farmhouses and downhill until out of sight.



Levels of bat activity were low during the survey with only four passes recorded. The last bat was recorded at 03:48.

Bats were recorded passing and foraging along the tree-line to the south of the site during the survey, with a maximum of one bat seen in flight at any one time.

All activity was from single common pipistrelle bats.

No bats were recorded returning to roost in the building during the survey.

The bat species below were recorded:

- Common pipistrelle - *Pipistrellus pipistrellus*

Survey 2 - summary of activity

- No bats were recorded returning to roost in the building during the survey. Foraging and commuting activity was recorded.

Limitations

None. The survey was completed on a dry morning following a warm day. Temperatures throughout the survey were suitable for bat activity and bats were recorded in low numbers during the survey.



5. Evaluation

The building is set in an area which provides high quality habitat, for foraging, commuting and roosting bats.

Areas of open pasture, hedgerows, and tree-lines locally provide good foraging opportunities for bats, in an area which is subject to little light and noise disturbance.

The building has external features which could be used by crevice dwelling bats, such as gaps & beneath roof and ridge tiles, and gaps at the eaves.

The thick stone walls of the building, rough-cut stone roof tiles, and gaps beneath roof slates on outbuildings, could provide suitable summer roosts for bats.

Gaps at the eaves of the farmhouse could allow access to the roof void, or to small gaps and crevices within the stone walls.

The building has some external and internal features which could be used by roosting bats, and which could allow access to the inside of the building. However, no evidence of use was found during the building inspections, and no bats were seen to exit or enter these features during the presence-absence surveys.

Features were fully checked using an endoscope and no indications of use by bats were found. No droppings or other indications of use were found on subsequent surveys.

The lack of any evidence of use inside the building, such as droppings or feeding remains, reduces the likelihood of a significant roost being present. If bats were present inside the building, even in lower numbers, some evidence of use would be likely to persist.

The building is set in a rural area close to good quality habitat. It is subject to little disturbance from light, noise, and other human activity, and although it has features which could be used by roosting bats, no indications of use were found, and no bats were recorded roosting in the building during the presence-absence surveys.

5.1. Legal and planning context

All species of bats in the UK and their roosts are legally protected by UK and European legislation. The UK the legal protection is summarised as follows:

You will be committing a criminal offence if you:

1. Deliberately* capture, injure or kill a bat
2. Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats
3. Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)
4. Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat
5. Intentionally or recklessly obstruct access to a bat roost even if bats are not present at the time

*In a court, 'deliberately' will probably be interpreted as someone who, although not intending to capture/injure or kill a bat, performed the relevant action, being sufficiently informed and aware of the consequence his/her action would most likely have.

If bats or bat roosts are present in the building, the proposed work would likely result in an offence being committed.



5. Impact assessment

The development proposals are for a full height extension to the southern gable end of the farmhouse at Dry Gap Farm. The works will include the demolition of a single storey outbuilding and construction of the new extension. The main roof of the farmhouse will not be affected by the works.

The building inspections carried out by Pennine Ecological and by Gritstone Ecology found no indications of use by roosting bats, and no bats were recorded roosting in the building during the presence-absence surveys.

The Level of bat activity recorded during the surveys was low, the proposed work is unlikely to impact on bats or bat roosts; and, once completed is unlikely to provide any increase in levels of disturbance for bats locally.

6. Required actions

No field signs of use by bats were found internally or externally during the building inspections, no bats were recorded roosting in the building during the dusk and dawn surveys, and no further survey or licensing work is required.



7. References

Department for Communities and Local Government (2012). National Planning Policy Framework.

Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines. (3rd ed.) The Bat Conservation Trust, London.

Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature.

Mitchell-Jones, A.J. & McLeish, A.P. (2004). The Bat Workers Manual. (3rd ed.) JNCC



8. Appendix 1 - Photos



1 – The south gable end and west side of the farmhouse and outbuildings.



2 – The south gable end, and east side of the farmhouse and outbuildings.





3 - The north gable end of the farmhouse.



4 - Pointing between stonework and at the verges is in good condition with no gaps.





5 - There are no gaps around windows or lintels.



6 - There are gaps beneath roof and ridge tiles on the outbuildings.





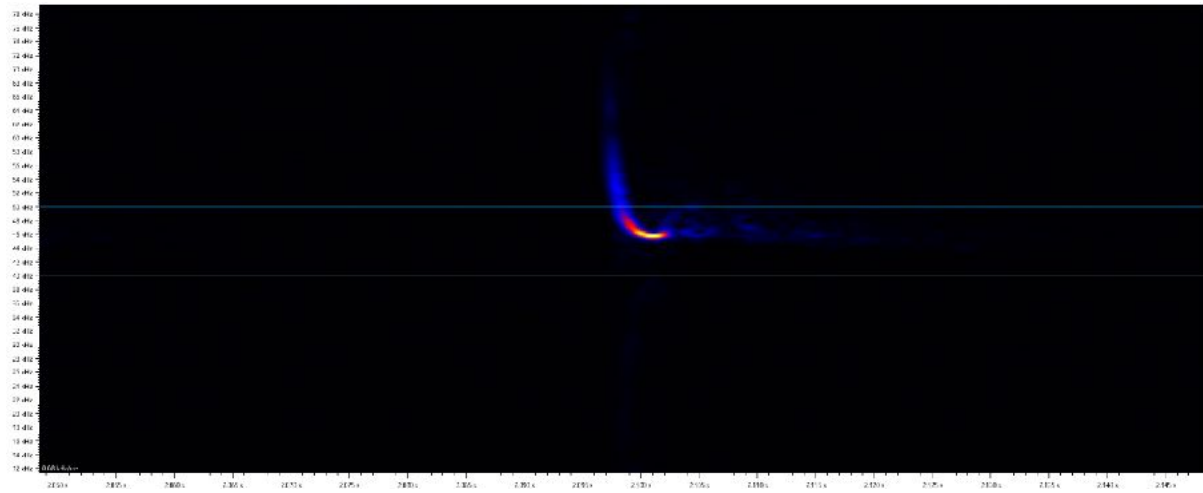
7 - There are gaps between stone roof tiles.



8 - There gaps between timbers and stonework at the eaves.



9. Appendix 2 - Sonograms



Common pipistrelle.

