

**BAT SURVEYS AND
RISK ASSESSMENT
FOR THE CHURCH HALL BUILDING AT
ROMALDKIRK**

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July 2023

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SUMMARY

- 1 The aim of the study was to confirm the possible presence of a bat roost in an the church hall building in Romalldkirk , County Durham. The building is currently unused and unheated over the colder months of the year.
- 2 Bat surveys were carried out by experienced surveyors in July 2023 and June & July 2019, during the bat breeding season to establish the presence or absence of bats in the building.
- 3 The surveys recorded no evidence of any species of bat roosting in the building. Common pipistrelle bats were recorded foraging in the general area.
- 4 There is good feeding habitat surrounding the building.
- 5 The evaluation remains very similar to that for 2019, with the exception of the building's value as a swift nest site. In relation to bats, the church hall building is suitable for use as a roost and/or hibernation site as there are some cracks or crevices in the exterior walls that could be used by crevices dwelling bats but the surveys have shown no evidence of use. The interior is too well-lit during daylight hours to be a suitable roost site for those species that prefer a more open roost site and the roof space is judged to have too low a ceiling to apex height to provide a roost site for these species. The building is cool so it is very unlikely it would be used as a nursery roost site by common pipistrelle bats, the only species recorded in the area.

There is known to be a relatively high level of bat activity in the area during the months when bats are active and there is good bat feeding habitat around the village and there are many properties that could provide suitable roost sites.
- 6 It is considered that there is a negligible risk of any impact on bats due to the re-roofing and conversion of the building. However, given there is evidence that there are bats in the area mitigation measures have been put in place to protect against accidental harm. As no bat roost had been found a protected species license from Natural England will not be needed in this instance.
- 7 In line with good conservation practice mitigation will be put in place to protect the conservation status of bats in the area. This will include careful working practices, careful removal of roofing materials and checking of any deep cracks and crevices in the stonework before re-pointing. A method statement will be given to the contractors carrying out the building work to ensure no accidental harm to bats.
8. Crevices will be conserved at the gable wall tops to provide potential bat roost sites and an exterior 'woodcrete' bat box will be erected on the west elevation.
9. The roof slates will be stripped outside the bird nesting season, for swifts this is May to late August. New swift nest sites will be created either built into the

building or using boxes mounted on the exterior. One of these will be created or erected close to the existing nest site.

1. INTRODUCTION

- 1.1 These surveys, risk assessment and report were commissioned by the new owner of the property, in June 2023 to provide an update of the 2019 report completed for the previous owner.

The aim of the study was to confirm the possible presence of a bat roost in a building previously used as the school and church hall in Romaldkirk, County Durham and identify any bird species nesting in or on the building.

- 1.2 The building currently remains unused and has stood empty for some time. It has not been heated over the colder months of the year, so is cold and damp. The proposal is to re-roof and refurbish the building and convert it into a single dwelling.

Site Description (See photos)

- 1.3 The building to be developed is a single storey stone building with an unlined slate roof. There is a small extension at the northern end of similar build abutting onto the east elevation and a similar one at the southern end abutting onto the gable wall plus a flat roof extension that housed the toilet block. The building is detached from all other building in the area.



East elevation



Southern end of building showing flat roofed extension

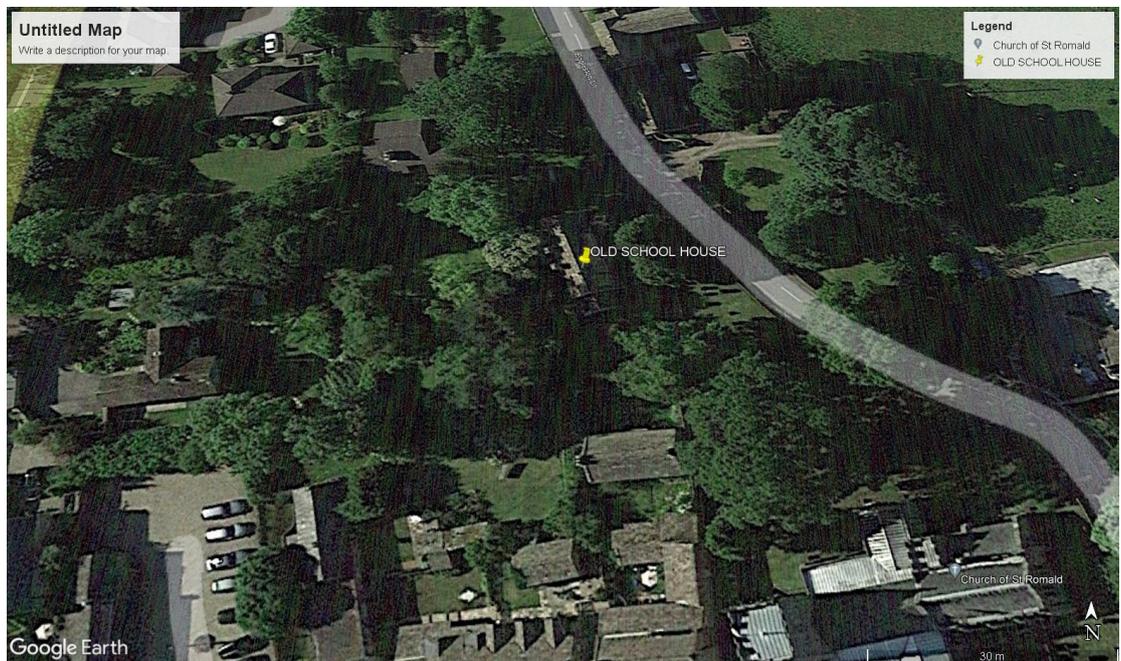


Northern end of building

- 1.4 Internally the main building is split into two sections and each of the extensions forms a small separate room. There is a drop ceiling in the main building with a wide gap between it and the original ceiling meaning there is a low ceiling to apex height inside the roof space. There are windows in all sections so the interior of the building is well lit during daylight hours.
- 1.5 The stonework is in a reasonable state of repair though there are some crevices in the gable ends and at the wall tops. The roofs, with the exception of the flat roof, are in a reasonable state of repair. Part of the flat roof has collapsed.

Surrounding Habitat

- 1.6 The building is surrounded on three sides by mown grass with shrubs along the west side. There are a large number of mature trees in the area along roadsides, in the church yard and in the grounds of other properties.



2. **METHODOLOGY**

Methods

- 2.1.1 The study included two types of survey. The first was a daylight survey of the building to check for signs of bats. The second was a dusk survey to check for bats emerging from roosts.
- 2.1.2 The daylight surveys involved checking for signs of bats, i.e., bat droppings and urine stains on the exterior walls of the building, on window sills, or on the ground around the building. The interior of the building was also checked on both storeys.
- 2.1.3 Droppings etc. provide a good indication that there is an access point to a roost somewhere above where the droppings are found, or that bats are roosting above the area of droppings. Persistent urine stains provide a good indication that there is an access point to a roost somewhere above where the stains are found and can be a useful indication that a site is used. The floors were clean and dry so droppings would be easily visible.
- 2.1.4 There were no cracks and crevices in the building that needed to be checked using an endoscope all could be illuminated using a torch.
- 2.1.5 On some occasions large numbers of moth wings are found together with a small number of bat droppings. This usually indicates that bats, in particular brown long-eared or Natterer's bat, are feeding and/or roosting within a building. The survey also included checking for these signs of bat activity.
- 2.1.6 The emergence survey ran from before sunset until the light had completely failed and checked for bats emerging from roosts and recorded bats feeding in the area near the building. The survey was concluded when it was only possible to identify the presence of a bat or bats in the area from recordings on the bat detectors and none of the animals were visible. This was well after the period of time after sunset that the species recorded usually emerge from roosts.
This methodology is in line with that given in the Bat Conservation Trust's 'Bat Surveys – Good Practice Guidelines', 3rd Edition, which states 'Dusk emergence surveys should begin at least 15 minutes before sunset and should continue for up to two hours after sunset to take account of all species'.
- 2.1.7 The survey also recorded birds nesting in the roof edge on the east side.
- 2.1.8 **Timing**
The surveys were carried out on 4th July 2023 and 7th June and 10th July 2019, all at the peak of the bat breeding season.

Personnel

- 2.1.9 The new emergence survey was carried out by 3 experienced surveyors all with >10 years of experience, and overseen by the consultant who has worked

in bat conservation in NE England for the past 32 years and holds a scientific license (2015-15609-CLS-CLS).

For the dusk surveys bat detectors were used to identify any species of bats recorded emerging/flying in the area, (Models – Echo Meter Touch 3 and Bat Box Duet)

Weather Conditions

2.1.10 Weather conditions at the time of the survey were as follows-

July 2023 - Dry and overcast with 80% cloud cover and still. (15-16°C)

June 2019 – Dry with 60% cloud cover and still. (12-13°C)

July 2019 – Overcast with 100% cloud cover and still. (14-15°C)

2.1.11 **Risk Assessment - Building**

The building could be surveyed externally and internally with no constraints except there was no access into the roof space for health and safety reasons.

2.2 THE LAW RELATING TO PROTECTED SPECIES

BATS

2.2.1 It is well known that all bats in Britain are protected by law. Under the 1981 Wildlife and Countryside Act it is illegal to-

- * catch, injure, kill or sell any bat
- * damage, destroy or obstruct bat roosts (even when bats are not present)
- * disturb bats while they are roosting, for example by entering known roosts or hibernation sites.

A breeding site or resting site of any bat is known as a bat roost. A bat roost is any structure as bat use for shelter or protection. It is an offence to damage or destroy a bat roost at any time of year.

2.2.2 The following activities are those most likely to cause disturbance to bat roosts-

- * Demolition of buildings
- * Restoration, building conversion or remedial work including re-roofing, repointing of stonework.
- * Timber treatment.
- * Tree felling or extensive tree surgery.

Bats are most at risk from disturbance during the breeding season late May through to late September, after this the nursery roosts disperse. They are also vulnerable during the hibernation period; roughly late November to late March, as they are torpid and unable to move quickly from their hibernation roosts.

2.2.3 **Natural England** must always be consulted if any building work is to be undertaken which may cause disturbance to bats or their roost.

2.2.4 Any development which is likely to result in disturbance of a European protected species, or damage to its habitat usually requires a licence Natural England
'Development' is interpreted broadly to include projects involving demolition of buildings, rebuilding, structural alterations and additions to buildings.

2.2.5 BIRDS

Under the Wildlife and Countryside Act (1981) it is illegal to-

- * Kill, injure or take any wild bird (unless under licence)
- * Take damage or destroy a bird's nest whilst in use or being built.
- * Take or destroy the egg of any wild bird.
- * Disturb any wild bird listed on Schedule 1 of the Act while it is nest building or at a nest containing eggs or young, or disturb the dependant young of such a bird.

2.3 RESULTS OF FIELD SURVEYS

Daylight Survey

2.3.1 No signs of bats were found in or around the building in 2023 or 2019.

2.3.2 Emergence Surveys

July 2023

Sunset – 21.45

21.30 – Start

Finish – 23.00

Time	Location	Activity
21.30 -23.00	Church Hall Building	No bats emerged from the building.
21.45 onwards	East side of building	Common pipistrelle detected foraging, entering the area from the west. 1-3 bats of this species recorded intermittently foraging in the grounds of the property.
22.15	North end of building	Single whiskered bat commuting over the site towards the trees on the west side.

June 2019 surveys

Sunset – 21.42

Start of Survey – 21.20

Finish -23.00

Time	Location	Activity
21.20 to 23.00	Church Hall Building	No bats emerged from the building
21.51	Churchyard to east	Common pipistrelle bat detected foraging high in the tree canopy.
21.59	Church Hall grounds	A single common pipistrelle bat flew from the direction of the churchyard over the top of the school building and then detected feeding among the trees to the west.
22.20 to 23.00	Church Hall grounds	2-3 Common pipistrelle feeding in the grounds and amongst the boundary trees. Intermittent feeding activity.

July 2019 surveys

Sunset – 21.38

Start of Survey – 21.25

Finish -23.00

Time	Location	Activity
21.25 to 23.00	Church Hall Building	No bats emerged from the building
21.40	Churchyard to west	Common pipistrelle bat detected foraging high in the tree canopy. The first bat was followed by a further 6 common

		pipistrelles entering the area from the east.
21.40 to 22.00	Church Hall grounds	The 7 bats each fed briefly in the canopy of trees in the churchyard before flying across the church hall site to forage in the trees to the west of the building in the grounds of the neighbouring property.
22.10 to 23.00	Church Hall grounds	2-3 Common pipistrelle feeding in the grounds and amongst the boundary trees. Intermittent feeding activity.

2.3.3 Birds

2023 – A single pair of swifts was recorded nesting under loose slates on the western elevation.

2019 - No bird species was recorded nesting in or on the building.

2.3.4 Existing Records

A record search by Durham Bat Group found the following records for the area. There are none for the old school/ church hall.

Grid Ref.	Date	Location	Species	Activity
NY9723	1990	High Green Mickleton	1+ Brandt's	Roost
	1993	Sycamore Cottage Mickleton	340 Pipistrelle	Roost
	1995	Low Green Mickleton	Species unknown	Roost
	2006	Around Mickelton	Common pipistrelle	Field record
	2010	Mickelton NY973236	1 Common pipistrelle	Roost
NY9821	1992	Wilden Beck Bridge Hunderthwaite	Species unknown	Roost
NY9824	1998	Eggleston Burn Foggerthwaite	Daubenton's	Feeding
	2005	Glebe Farm Eggleston	Common pipistrelle	Field record
	2011	Eggleston	3 Pipistrelle	Flight
NY9922	2011	Rose & Crown Hotel Romaldkirk	Common pipistrelle 10-20	Roost
	2008	Carrowcroft Romaldkirk	Common pipistrelle Brown long-eared	Roost Feeding
	2011	Romaldkirk House	135 Common pipistrelle	Roost
	2014	Churchyard, Romaldkirk	Common pipistrelle	Feeding
	2021	Old Rectory, Romaldkirk (dawn survey)	Soprano pipistrelle Common pipistrelle Daubenton's bat Noctule Brown long-eared	Foraging Foraging Commuting Commuting
NY9923	1986	Eggleston Hall	Species unknown	Roost
	2009	Eggleston Bridge	24 Daubenton's	Probable Roost

	2011	Eggleston	1 Pipistrelle	Flight
NY9925	2008	Laverock Hall Eggleston	1 Common pipistrelle	Feeding
NZ0023	2006	Stobgreen House Eggleston	1+ Common pipistrelle	Feeding
NZ0122	2006	Folly Top Eggleston	1 Common pipistrelle	Occasional Roost
	2006	Folly Top	1 Brown long-eared	Occasional Roost
	2006	Folly Top	Pipistrelle Brown long-eared <i>Myotis</i> sp.	Flight Flight Flight

2.4 SITE EVALUATION

- 2.4.1 The evaluation remains very similar to that for 2019, with the exception of the building's value as a swift nest site. In relation to bats, the church hall building is suitable for use as a roost and/or hibernation site as there are some cracks or crevices in the exterior walls that could be used by crevices dwelling bats but the surveys in 2023 and 2019 have shown no evidence of use. The interior is too well-lit during daylight hours to be a suitable roost site for those species that prefer a more open roost site and the roof space is judged to have too low a ceiling to apex height to provide a roost site for these species. The building is cool so it is very unlikely it would be used as a nursery roost site by common pipistrelle bats, the main species recorded in the area.
- 2.4.2 Common pipistrelle roosts are found predominantly in buildings, both old and new with the maternity roosts mainly found in warmer buildings. Summer roosts are found in external cracks, behind board cladding and panelling, and behind weather boards, only rarely in the roof space itself. Winter hibernaculum sites may be in buildings which are at a constant cool temperature. Their foraging areas can be up to 4km from the roost.
- 2.4.3 There is known to be a relatively high level of bat activity in the Romaldekirk area during the months when bats are active and there is good bat feeding habitat around the village and there are many other properties that could provide suitable roost sites.
- 2.4.4 A single pair of swifts was recorded nesting beneath loose roof slates in 2023. Common Swift is a bird of Conservation Concern in the UK and is included on the Red List, i.e., species at risk of extinction in Great Britain.

3 IMPACT ASSESSMENT

- 3.1 There is no evidence of bats using the building in 2023 or 2019, therefore there is a negligible risk that the conversion, re-roofing and refurbishment will have any impact on bats providing mitigation is put in place to avoid any accidental harm. As the building is unheated there is a very low risk of the building being used as a maternity roost site. There is a small chance it could be used as a hibernaculum.
- 3.2 There is always a very small possibility of a bat/bats being found during any building work or demolition work on any building of any construction. In line with good conservation practice, precautions need to be put in place working on the assumption that a bat(s) could be present.
- 3.3 Given no bat roost has been found in the building a protected species license from Natural England will not be required in this instance.
- 3.4 The conversion of the building will have no impact on bat feeding habitat.

- 3.5 The re-roofing of the building will lead to the loss of a swift nest sites. New potential nest sites are to be created as part of the mitigation.

4. **MITIGATION**

Maintenance of Conservation Status - Bats

- 4.1 Given there is evidence of bats in the area, the following mitigating steps will be taken to minimise any possible impacts-

a) All the building work will proceed with care, with the contractors being requested to check for the presence of bats. They will be requested to follow a method statement, and should there be any difficulty complying with this method statement they will contact the consultant for further advice.

b) The re-roofing work and re-pointing work will be completed outside the bat hibernation period (November through to late March)

c) Any cracks in the stonework will be checked for bat use before repointing, replacement of stones or rebuilding of walls. The deep crevices will be checked by illuminating with a torch before being filled with mortar. If it is impossible to see into the crevice then it will be left open to ensure no bat is entombed. If there are any cracks where the full depth of the crack cannot be seen, then these will be left free of mortar.

d) Some of the deeper crevices in the gable walls of the main building at the wall tops will be left free of mortar as potential roost sites. The crevices will be of at least one stone's depth with widths of 14-25mm at the narrowest point to the rubble fill. In addition, a 'woodcrete' bat box will be erected on the western elevation, near the wall top. (See architect's drawing)

e) When the re-roofing work is carried out, all the slates will be removed by hand, to protect any bats that might be roosting beneath them. All the old window and door frames will be removed with care.

f) Any timber treatment required will only use 'bat friendly' insecticides and any new timber in the roof area will only have been treated with similar products.

g) In the unlikely event of a bat/bats been found during the demolition work and accidentally disturbed, work will cease immediately and the consultant should be contacted for advice (Tel 0191 3773697). If it is necessary to remove a bat to prevent it being harmed, then it will be handled with care and gloves will be worn. The bat will be transferred to a box with ventilation and placed in a quiet place until it can be released at dusk or removed to another undisturbed part of the surrounding buildings where it can be placed out of the view of predators.

h) In the event of the consultant not being available Natural England should be contacted for advice. The contact numbers for the consultant and Natural England should be kept on site.

Maintenance of Conservation Status – Birds

a) The roof slates will be stripped outside the bird nesting season, for swifts this is May to late August.

b) New swift nest sites will be created either built into the building or using boxes mounted on the exterior. One of these will be created or erected close to the existing nest site.

METHOD STATEMENT – CHURCH HALL, ROMALDKIRK

1. Objective - To maintain and protect the populations of bats in the Romalldkirk area.
2. Though there is no evidence of the building being used as a roost site, common pipistrelle bats have been recorded feeding in the general area around the property. Even when no bats have been found during surveys it is still possible to discover a bat during building or demolition work. A bat can be hidden away in cracks, in rubble fill within a wall, in gaps in the mortar around windows or under slates or pantiles and can be difficult to see. Therefore, great care is needed when working on a building where there are known to be bats in the area.
It is the responsibility of the contractor to follow the guidelines set out below in Section 4 to ensure that no bats are harmed.
3. All bats in Britain are protected by law. Under the 1981 Wildlife and Countryside Act it is illegal to -
 - * catch, injure, kill or sell any bat
 - * damage, destroy or obstruct bat roosts (even when bats are not present)
 - * disturb bats while they are roosting, for example by entering known roosts or hibernation sites.A breeding site or resting site of any bat is known as a bat roost. A bat roost is any structure as bat use for shelter or protection. It is an offence to damage or destroy a bat roost at any time of year.

The following activities are those most likely to cause disturbance to bat roosts-
 - * Demolition of buildings
 - * Restoration, building conversion or remedial work including re-roofing, repointing of stonework.
 - * Timber treatment.
4. The following guidelines must be followed when working on the building-
 - a) Repointing work must be completed outside the bat hibernation period (November through to late March). The roof must be stripped outside the swift nesting season May to August.
 - b) Any cracks in the stonework should be checked for bat use before repointing, replacement of stones or rebuilding of walls. The deep crevices should be checked by illuminating with a torch before being filled with mortar. If it is impossible to see into the crevice then it must be left open to ensure no bat is entombed. If there are any cracks where the full depth of the crack cannot be seen, then these should be left free of mortar.
 - c) Some of the deeper crevices in the gable walls of the main building at the wall tops should be left free of mortar as potential roost sites. The crevices should be of at least one stone's depth with widths of 14-25mm at the narrowest point to the rubble fill.

- d) When any roofing work is carried out all the slates should be removed by hand, to protect any bats that might be roosting beneath them.
- e) Any timber treatment required should only use 'bat friendly' insecticides and any new timber in the roof area should only have been treated with similar products.
- f) In the event of a bat/bats been found during building work and accidentally disturbed, work must cease and the consultant be contacted for advice. (Telephone 0191 3773697) If it is necessary to remove a bat to prevent it been harmed, then it should be handled with care and gloves should be worn. It should be transferred to a box with ventilation and placed in a quiet place until it can be released at dusk or removed to another undisturbed part of the building where it can be placed out of the view of predators e.g. cats.
- g) In the event of the consultant not being available and urgent advice is needed then Natural England should be contacted for advice.

(These numbers to be held by contractors on site so that immediate action can be taken in the event of bats being found.)