

2023 BAT SURVEYS OF OF THE OLD SCHOOL HOUSE MAIN STREET KINOULTON NOTTINGHAMSHIRE

A report to:

Mrs J Jackson & Polly Griffin The Old School House Main Street Kinoulton Nottinghamshire NG12 3EL

By:

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Report to:	Mrs J Jackson & Polly Griffin					
Report Title:	2023 Bat Surveys of The Old School House, Main Street, Kinoulton, Nottinghamshire					

Survey Site/Job:	The Old School House, Main Street, Kinoulton, Nottinghamshire NG12 3EL			
OS Grid Reference:	SK 6753 3059			

Survey Date(s):	25 th July 2023		
Surveyed by:	Mrs Helen Scarborough and Mr Alan Roe		

Architect/Agent:	Mark Willmott Reform Property		
Planning Reference:	N/A		

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SUMMARY

This report has been prepared by BJ Collins – Protected Species Surveyors Limited for J Jackson and P Griffin. The report provides the results of a preliminary bat roost assessment (PBRA) and the subsequent bat emergence and activity survey of The Old School House, Main Street, Kinoulton, Nottinghamshire. The survey building is located at Ordnance Survey grid reference, SK6748 3064.

The proposal is to extend and reconfigure the property.

The PBRA recorded two aged pipistrelle droppings were recorded within the roof void at the eastern end of the property. The fabric of the building also contained suitable access points/features for crevice dwelling bat species including hanging slates on dormer windows and rot holes in facias.

Therefore, as a result of the small areas with suitable bat roosting features within the fabric of the building, the PBRA survey determined that the property should be categorised as "low bat roost potential" in accordance with National Best Practice Guidelines (Collins, 2016) here in referred to as the "guidelines".

Habitats surrounding the property includes, scattered trees, a small pond, mature gardens and grazing land. The immediate landscape is considered to be of high value, with good levels of connectivity to further green infrastructure within the wider environment.

As the building has been shown to have bat roost potential, it was necessary to undertake a minimum of one nocturnal survey, as specified by the guidelines, to provide confidence in the absence of roosting bats.

The follow-up emergence and activity survey was completed in August 2023 during the peak survey season and during suitable weather conditions.

Activity was recorded from 4 species of bat with *Nyctalus* bats flying over the building but with Common ad Soprano pipistrelles foraging around the structure, at times flying close to but without emerging from or re-entering any potential bat roost feature.

The determination of the surveys over 2023 are that the building does not support roosting bats. There is no requirement for further emergence and activity surveys in support of this determination. There is no requirement for a European protected species derogation licence in order to render the proposed works as lawful. Due to the extent of bat activity in the locality a precautionary approach is recommended and included within this document. Biodiversity enhancement proposals are also included within the document to remain in compliance with current planning requirements.

The wisteria and other garden shrubs covering part of the school house and the conservatory of the property has high potential for nesting birds. Therefore, as a result, works will need to avoid impacts upon these species during the breeding season (March to September annually), or a precautionary check carried out in advance of commencement to check that nesting birds are not currently utilising the vegetation.

1. INTRODUCTION

This report has been prepared by BJ Collins – Protected Species Surveyors Limited for Ltd on behalf of Ms Jackson and Polly Griffin. The report provides the results of a preliminary bat roost assessment and subsequent phase II bat emergence and activity survey of The Old School House, Main Street, Kinoulton, Nottinghamshire NG12 3EL. The survey building is located at Ordnance Survey grid reference, SK 6753 3059.

The report provides the results of bat surveys over 2023 to cover the current proposal which includes extending and reconfiguring the property.

The legislation with regard to bats (*Chiroptera*) is listed below.

1.1 Legislation applicable to bats

All species of British bat and their roosts are protected under British law by the Wildlife and Countryside Act 1981 (as amended), and bats are classified as European Protected Species under the Conservation of Habitats and Species Regulations 2017 ('the 2017 Regulations'). This has recently been amended by the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations (2019) which continue the same provision for European protected species, licensing requirements, and protected areas after Brexit.

The legislation makes it an offence to kill, injure or disturb a bat and/or to damage or destroy a breeding site or resting place for a bat. It is also an offence to disturb the animals such that it impairs their ability to survive, to reproduce, to nurture their young, or such that it impairs their ability to hibernate or migrate. Under this legislation development work that could affect a bat or bat roost can only be permitted under a licence from Natural England.

Licences in respect of European Protected Species affected by development can be granted under Section 55(2) (e) of The Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations (2019), for the purpose of preserving public health or public safety or other imperative reasons of overriding public interest including those of social or economic nature and beneficial consequences of primary importance for the environment.

Under section 55(9) of the Regulations licences can only be issued if Natural England is satisfied that:

- there is no satisfactory alternative to the work specification
- and 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.

Natural England aim to process EPS licence applications within 35 working days of receipt and Low Impact Class licenses are typically registered within 14 working days of receipt.

1.2 Legislation applicable to breeding birds

Under the Wildlife and Countryside Act 1981 (as amended), all native birds and their nests, whilst in use, are protected from harm, disturbance or destruction during the breeding season. To avoid conflict, development work that could affect breeding birds should be timed to take place outside of the breeding season, variable between March and September. Note that a nest is protected from the beginning of its construction until the young have fledged and have left the nest.

2. SITE DESCRIPTION

2.1 Location of the building



Figure 1: The situation of the survey building, encircled in red, in relation to the surrounding landscape, courtesy of google Maps

The survey building is located south of Main Street, in the village of Kinoulton, Nottinghamshire. The immediate surrounding landscape includes residential dwellings with mature gardens north, east and west and south of the property is grazing land with hedgerows and trees. Two ponds are also located in close proximity to the survey building, including an ornamental pond within the garden of the property and a further field pond 160m north west. Grantham Canal also runs approximately 60m east of the survey property.

Description of the building

The property is a brick-built building with a variety of pitched felted roofs of slate onto timbers. The property has dormer windows both front and rear. Hanging slates cover the sides of the dormer on the front and plastic cladding covers the sides of the dormer at its rear. Windows and doors within the building are a mixture of timber and plastic. The property has a large conservatory on its southern elevation (rear). There are three accessible loft voids within the building.



Photograph 1: The northern elevation of the building



Photograph 2: The southern elevation of the building



Photograph 3: Eastern elevation of the property



Photograph 4: Western elevation of the property



Photograph 5: Within the void at the eastern end of the property



Photograph 6: Within the void in the middle of the property



Photograph 7: Within the void at the west of the property

3. SURVEY METHODOLOGY

3.1 Desktop study

The desktop study involved interrogating web-based resources. The following resources were examined:

• MAGIC - Multi-Agency Geographic Information website for maps of statutory designated nature conservation sites within 2.5km of the survey area (<u>www.magic.gov.uk</u>) and previously Granted European Protected Species Applications for Bats.

3.2 Preliminary Bat Roost Assessment

A preliminary bat roost assessment was undertaken on the old school house. This survey was completed in accordance with the Good Practice Guidelines (Collins 2016), comprising a visual inspection of the building (formerly referred to as a bat scoping survey) as part of the ecological assessment of the area requiring renovation.

The methodology included examining the building for potential roost features and assessing the likelihood of these features being used by bats. This included searching for evidence of bat roosting in the form of feeding remains, droppings, staining, worn surfaces and the bats themselves (alive or dead). There are three loft voids within the property – all of which were accessed.

Equipment used included a powerful torch, collapsible ladders, camera, and binoculars.

3.3 Emergence and Activity Survey

In accordance with the Good Practice Guidelines (Collins 2016), and the updated guidance Bat Conservation Trust (2022). The dwelling was assessed as being of "low bat roost potential" in accordance with best practice guidance and was therefore subject to a single emergence and activity survey. The survey was carried out on the 22nd of August 2023.

The surveys were completed by deploying four ecologists at prominent positions to cover the building in its entirety. All bat workers were experienced bat surveyors alongside a lead licensed bat ecologist. The surveyors used a range of equipment including a Pettersson D240x time expansion detector, Anabat Scout, Echometer Touch 2 and Pro full spectrum detector and recording units.

Night vision aids (NVA) were utilised covering key aspects of the building. This included a Canon XA20 paired with an infrared floodlight.

Ambient temperature was measured with an ETI Hygro-Therm hygrometer.

The emergence surveys began just prior to sunset and lasted for 105 minutes each.

All bat activity was documented by the surveyors.

3.4 Survey constraints

The surveyors did not encounter any significant constraints upon the survey effort. They were able to access all areas of the survey site.

3.5 Weather Data

Date	Sunset	Temperature (°C)		Cloud Cover (%)		Wind (Beaufort)	
		Start	End	Start	End	Start	End
22/08/2023	20:16	18.6	15.3	10	0	2	1

 Table 1: Weather data for the emergence and activity surveys.

3.6 Personnel

The ecology walkover and the preliminary bat roost assessment were undertaken by Helen Scarborough (registered to use Natural England Class Licences WML-CL19 and WML-CL20 to survey bats; registration numbers 2015-12691-CLS-CLS and 2015-12692-CLS-CLS respectively)

The emergence survey on the 22nd of August 2023 was led by Mr A Roe BSc (Hons) (Natural England Class Licence: 2015-12980-CLS-CLS) assisted by Mr J Wilson, Ms K Higham and Mr J Edinborough BSc (hons).

3.7 Breeding birds scoping survey

Features that had potential to support nesting birds were recorded along with any breeding bird activity observed during the visual inspection.

3.8 Other protected species

An ecological walkover of the area immediately surrounding the building was carried out to assess the habitat for other protected species.

4. SURVEY RESULTS

4.1 Preliminary Bat Roost Assessment Results

4.1.1 Fabric of the building

Two aged pipistrelle type droppings were identified within the roof void at the western end of the property during the survey.

No further evidence of use by bats was found during both the internal and external visual inspection of the building.

Doors and windows were generally tight sealed; however, several large access points were identified allowing bats entry into the lofts of the building from the outside; there were gaps in the ridges and areas where small pieces of mortar were missing from the eaves.

Other smaller potential access and roosting features included: gaps in the bedding mortar on a dormer window on the southern elevation, rot holes within the facia of the building, gaps within the hanging slates of the northern elevation dormer. These features were deemed suitable for crevice dwelling bats such as *Pipistrelle* species.

It should be noted that no field signs of bats were recorded in association with any of the external roost/access features identified during the survey.



Photograph 8: Pipistrelle dropping in western void

4.1.2 Data Search

A search of the Magic Map application for previously granted European Protected Species Derogation Licences within a 2 km radius of the site identified no previous granted EPS licences dated between 2012 and 2020.

4.1.3 Connectivity and water bodies

The immediate area around the survey building consists of a mature garden with amenity grass, ornamental pond and scattered trees. Grazing land with trees occurs to the south, residential properties occur to the north, east and west and Grantham Canal occurs to the east.

The large body of water north west of the survey building lies within a 500-metres. These local terrestrial and aquatic habitats could all provide some level of cover and connectivity for commuting and foraging bats within the local area.

A 2-kilometre search from the site identified one statutory sites, Kinoulton Marsh & Canal occurs approximately 600m west of the site.



Photograph 9: Ornamental garden bond rear of the property



Photograph 10: Location of pond approximately 100m north west

4.1.4 Findings and summary

In summary, the immediate landscape is estimated to be of high value for bats as it provides connectivity to the wider landscape, in addition to providing significant commuting and foraging opportunities for both generalist and specialist bat species within the local area.



Photograph 11: Missing mortar on roof gable on the southern elevation



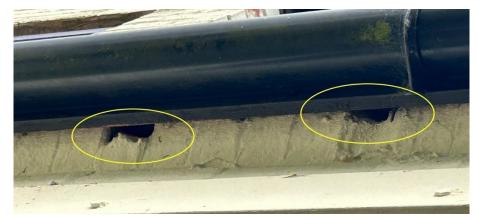
Photograph 12: Gaps around hanging tiles and lead on dormer on the property's northern elevation



Photograph 14: Gap behind facia on southern elevation dormer



Photograph 15: Slipped tiles and lifted lead on northern elevation dormer



Photograph 16: Gaps in brickwork above window

4.2 Scoping survey results: breeding birds

There are a range of habitat features which have value for breeding birds, including the building, trees and the wisteria and shrubs which covers part of the southern elevation and conservatory. As a result, precautionary actions are required and specified within this report.



Photograph 17: Wisteria cover on the southern elevation



Photograph 18: Trees and shrubs at the front and rear of the property

4.3 Scoping survey results: other protected species

No evidence of other protected species was found during the visual inspection of the surrounding landscape. The habitat surrounding the school house (amenity grassland and hard standing) would not be suitable terrestrial habitat for amphibians.

4.4 Emergence and activity survey – 22nd of August 2023

The preliminary bat roost assessment determined that the structure was of at least "low bat roost potential" in accordance with national best practice guidelines. This status for a building demands a single emergence and activity survey in order to provide confidence in the absence of roosting bats.

The emergence and activity survey was carried out on 22 August 2023 in good weather conditions and during the recommended survey season.

Due to the size of the building four bat ecologists were deployed monitoring from positions around such as to provide continuous observation of the structure simultaneously.

The surveyor positioned on the south-east corner recorded the first bat as a Common pipistrelle (*Pipistrellus pipistrellus*) flying low over the garden east to west at 20:40 hours, with sunset at 20:16 hours. From that point on there were 20 passes by this species. A Noctule bat (*Nyctalus noctula*) was recorded at 20:54 hours high over the landholding with 2 further passes by this species and a single pass by a bat with a sonogram indicating the presence of Leisler's bat (*Nyctalus leisleri*). A fourth species was then recorded at 21:30 and 21:27 with a single Soprano pipistrelle (*P. Pygmaeus*) recorded flying past the property.

The surveyor monitoring the north-west corner recorded the first bat at 20:31 hours as a faint echolocation calls from a distance soprano pipistrelle. This was repeated at 20:35. There was then a single recording of the species at 20:47 with about foraging continuously in the garden of the dwelling. The next species recorded was common pipistrelle and there were 7 separate activity recordings with periods of continuous foraging within the garden.

The surveyor monitoring the south-west corner of the structure recorded the first bat at 20:43 hours as a common pipistrelle circling overhead and foraging. Activity by this species was repeated on a further 11 occasions. The next species recorded from this location was Noctule bat on 4 separate occasions, 1 of these recordings is likely to be the Leisler's bat described in paragraph 4 above.

The surveyor monitoring from the north-east corner recorded the first bat at 20:35 hours as a common pipistrelle flying west to east across the garden. This was repeated at 20:37 hours. This species was then recorded a total of 35 occasions with social calls and periods of continuous foraging in the garden area. Only one other species was recorded from this position which was Noctule bat on 2 occasions.

At the end of the emergence and activity survey there were no bats recorded emerging from out of the building. No bats were flying up to the building such as to suggest potential for re-entry.

5. EVALUATION AND RECOMMENDATIONS

5.1 Evaluation

Two old pipistrelle type droppings were identified within the roof void at the western end of the property during the survey. No further evidence of use by bats was found during both the internal and external visual inspection of the building.

Doors and windows were generally tight sealed; however, several large access points were identified allowing bats entry into the lofts of the building from the outside. Other smaller potential access and roosting features included: gaps in the bedding mortar on a dormer window on the southern elevation, rot holes within the facia of the building, gaps within the brickwork and gaps within the hanging slates of the northern elevation dormer. These features were deemed suitable for crevice dwelling bats such as *Pipistrelle* species.

Therefore, the survey determined that the building should be categorised as of "**low bat roost potential**" in accordance with National Best Practice Guidelines, requiring a single emergence and activity survey to provide confidence in the absence of roosting bats.

The emergence and activity survey was completed in August 2023 in suitable weather conditions and with sufficient manpower to ensure all elevations were under observation simultaneously.

There were four species of bat active around the building, with most activity being by Pipistrelle bat species, but none of these were recorded emerging from the structure, or with activity suggesting potential use in the future.

There was however a significant amount of activity around the building and given the presence of potential bat roost features the development should move forward under a precautionary approach.

5.2 Recommendations

The conclusion of the surveys over 2023 found that The Old School House did not support currently roosting bats and no activity suggest roosting will occur in the near future. There is no requirement for further emergence and activity surveys in support of this determination and the redevelopment will not need to be carried out under a European protected species derogation licence to render works lawful.

Chapter 6 includes standard enhancement actions as required under National planning legislation and biodiversity net gain. It also includes details of a precautionary approach required at the time when the dismantling of the existing structure commences, to protect against the discovery of bats during work. This precautionary approach is recommended given the extent of bat activity in the garden area.

5.3 Breeding birds

All breeding birds are protected under the Wildlife and Countryside Act (1981) (as amended) that protects nests, whilst in use, from harm, disturbance or destruction during the breeding season.

To avoid any potential risk of conflict the proposed works should be timed for outside of the breeding season, which is variable and runs for the entire period between March and September. Note that a nest is protected from the beginning of its construction until the young have fledged and have left the nest.

If demolition work is required within the bird nesting season, in this instance before the beginning of September 2023 or after March 2024, then in advance a pre-commencement breeding bird check should be carried out by a suitably qualified ecologist. Note that if an active nest is found then the nest itself an area of 5 m around will have to remain unaffected and undisturbed until the young have hatched and fledged.

6 **BIODIVERSITY ENHANCEMENT STRATEGY**

6.1.1 Precautionary Approach

The survey recorded a significant amount of activity by Pipistrelle bats in the garden of the Old Schoolhouse. This increases the potential for a bat to be discovered within the structure at the time that works commence.

To this end, a precautionary approach is required. This approach requires that the ridge tiles from off of the building and the hanging slates should be removed by hand and with care, following the process referred to as soft demolition.

This requires that the tiles are lifted and checked underneath one by one. If a bat is discovered then there is a procedure included within Appendix A of this document that should be extracted and issued to the contractors as part of their induction toolbox talk, to include section 6.1.1 of this document.

Upon the discovery of a bat, work should be suspended in that location immediately and the procedure followed without delay, commencing with contacting the ecologist for further advice.

6.1.2 Biodiversity enhancement.

The general impetus of the NPPF in relation to ecology and biodiversity is for development proposals to not only minimise the impacts on biodiversity but also to provide enhancement.

Paragraph 174 states that the planning system should contribute to and enhance the natural environment by (section 174(d)) "...minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures..." When determining planning applications Paragraph 180 recommends that local planning authorities should aim to conserve and enhance biodiversity by applying the specified principles.

Therefore the biodiversity enhancement option below is recommended to address these planning considerations.

The biodiversity enhancement suitable and relevant to this proposal is the installation of permanent roost provision within this modified building.

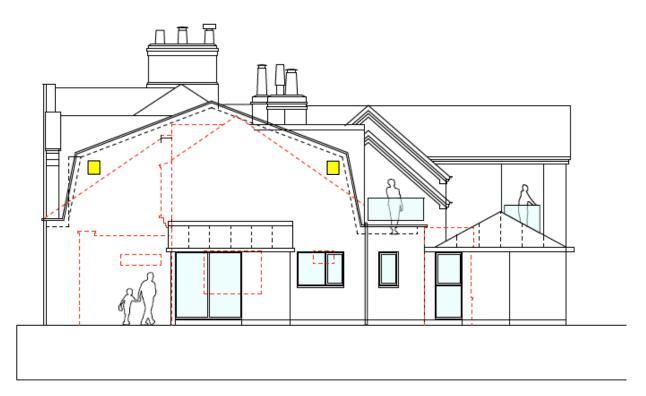
This should be two bat tubes located within the modified south-west facing gable, see figure 4 and 5 overleaf. The objective of the new permanent roost provision is to provide crevice features suitable for use by species of bat recorded during the survey. Being on the south-western gable this feature would also be suitable for a maternity colony.

The proposal is to install the Ibstock or Schwegler bat tubes, or similar proprietary brand, as shown overleaf.



Figure 4 - examples of the integrated bat boxes

The locations for the integrated bat box shown in figure 5 below.



side elevation (to south west) as proposed

Figure 5 - proposed locations for bat tube

REFERENCES

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

APPENDIX 1 – PROCEDURE FOR IF A BAT IS DISCOVERED DURING WORKS

- If at any point in the building works bats are discovered then contractors must stop work immediately and telephone BJ Collins Protected Species Surveyors on 01636 830058 or 07957 122217.
- B J Collins PSS will either provide an appropriately licensed bat worker to the site or provide a member of staff who will liaise directly with the contractor. Actions will then be taken following advice given. This may include removal of bats, but only where the bat ecologist considers this to be a viable and safe option.
- Bats are a protected species and there should be no attempt to handle a bat if discovered. The bat should be covered with a light material (cloth) and the bat worker called out to carry out the rescue.
- Only when the bat ecologist is satisfied that the risk to bats is ceased will works recommence.
- Should it transpire that the operation being carried out is of more risk to bats than was originally thought, then works will be stopped until they can be supervised by an appropriately licensed bat worker.
- If a bat is found under a tile or within any other niche to the building fabric, works will stop immediately (as above). If the bat does not voluntarily fly out, then the aperture will be carefully covered over to protect the bat(s) from the elements, leaving a small gap for the bat to escape voluntarily. Any covering should be free from grease or other contaminants and should not be a fibreglass-based material.