

**BAT ACTIVITY SURVEY REPORT
FOR:**

**SAINT PETER'S CHURCH
THE WARREN
CAVERSHAM
READING RG4 7TH**

A report to:
Caversham Thameside & Mapledurham Parish

By: Eric Palmer MCIEEM

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1.0 Introduction and summary

- 1.1. This report has been prepared by Link Ecology Ltd. for Caversham Thameside & Mapledurham Parish¹, under the Diocese of Oxford. The surveys reported on here were carried out following a Preliminary Bat Roost Assessment (PRA) carried out by GS Ecology Ltd. in February 2026. The intention was to inform an application for Faculty Consent and Planning Permission for re-roofing part the church: the south slope of the south aisle and both roof faces of the vestry. The site address is as shown on the front cover of this report.
- 1.2. A daytime inspection by GS Ecology found a bat roost, evidenced by the presence of droppings (not identified to species) in the eastern end of the North Chapel, which is outside of the proposed working area. The areas to be re-roofed were assessed as having “moderate” potential to host a bat roost. Further survey was recommended to determine whether or not roost(s) were present within the working area and/or in such close proximity to it that they could be disturbed or destroyed as a result of the work taking place.
- 1.3. In accordance with published guidance, two bat emergence (exit) surveys of the affected areas, as well as a buffer around them, were carried out on 2nd and 24th June 2026. Monitoring of the know roost was also carried out to provide context to the survey. No bats were noted exiting the building during these surveys but bats were noted flying inside it.
- 1.4. In view of the findings of this report, an application to Natural England for a Bat Mitigation Licence is not considered necessary; however, it is possible, given that roost switching does occur throughout the year, and that bats do roost somewhere within the church that appears to be separate to the working area, that bat(s) might be uncovered in the course of works. A Method Statement for ensuring no harm to bats results from such a find and for ensuring that appropriate action is taken to ensure the works remain in compliance with the law, is suggested.

2.0 Methodology

Desk study

- 2.1. The desk study review was carried out by GS Ecology. This found that there have been 15 bat mitigation licence applications within 2km of the Church. These were for Common and Soprano Pipistrelles (*Pipistrellus pipistrellus* and *P. pygmaeus*), Daubenton's bat (*Myotis daubentonii*), Serotine (*Eptesicus serotinus*) and Brown Long-eared bat (*Plecotus auritus*). The nearest sites are 200m and 500m away from St. Peter's.

Daytime Building Inspection for Bats

- 2.2. A brief inspection of the building was carried out to confirm the continued presence of features of actual or potential suitability for roosting bats that were highlighted by GS Ecology, including searching for evidence of recent occupation of the roost identified by them.
- 2.3. The inspection was undertaken using a powerful torch and binoculars. This was done on on 2nd June 2026, with a follow-up inspection on 24th June. Both surveys were carried out by Eric Palmer CEnv MCIEEM, a Natural England licensed bat worker (Class Licence registration numbers 2015-

¹ <https://www.ctmparish.org.uk>

11659-CLS-CLS and 2015-11660-CLS-CLS).

Bat activity survey

- 2.4. In accordance with published advice (Collins, 2023) two activity (dusk emergence) surveys were carried out on 2nd and 24th June 2026. This was considered sufficient to inform the proposals and to determine whether or not recourse to Protected Species Licencing would be needed.
- 2.5. The survey dates, timings, weather conditions and personnel used are shown in the Results section of this report and in Appendix 1. Two surveyors, Eric Palmer and Ryan Davies (Class Licence registration numbers 2019-43276-CLS-CLS), were licensed bat workers. The other two surveyors were experienced professional ecologists.
- 2.6. Hand-held equipment used during activity surveys included a Pettersson D240x time expansion bat detector with an Edirol digital recorder and EMT2 Pro full-spectrum detectors. An EMT2 was also deployed inside the church in the doorway between the Vestry and the North Chapel.
- 2.7. Night Vision Aids (NVAs) used were:
 - 1 Canon XA nightshot video camera with an infra-red (IR) flood light;
 - Up to 5 Nightfox Whisker IR cameras with built-in IR lights;
 - 2 Guide TK612 Thermal Imaging (TI) cameras;
 - 2 Pixfra A613 TI cameras.
- 2.8. On the first survey, two Nightfox and one Canon IR cameras were used inside the church to record activity in the Vestry and the North Chapel; 3 Nightfox cameras monitored the outside of the Vestry, whilst two Guide TK612s were used to monitor the South Aisle.
- 2.9. On the second survey, three Nightfox cameras were used inside the church to record activity in the Vestry and the North Chapel; two Pixfra A613 TI cameras monitored the outside of the Vestry and part of the North Aisle, whilst two Guide TK612s were used to monitor the South Aisle.
- 2.10. During both surveys, an SM mini full-spectrum bat detector was deployed in the doorway between the Vestry and the North Chapel in order to record any bat passes within the church.
- 2.11. All bat calls recorded were analysed using BatSound and Kaleidoscope software. All footage from IR and TI cameras was reviewed manually and/or using the Wildlife Imaging Systems (WIS)² software for movement detection.
- 2.12. Results of all bat surveys are provided in Appendix 1.

Limitations

- 2.13. It is considered that the bat surveys were fully compliant with the recommendations of the *Bat Survey Guidelines*. The surveys were carried out at an optimal time of year, during the active season for bats. The weather at the time of the bat activity surveys was considered to be suitable for obtaining a representative sample of bat occupancy of the building and foraging activity around it.

² <https://www.wildlifeimagingsystems.com/>

- 2.14. The interior and exterior of the building was largely accessible for inspection, although a full and detailed daytime survey was not carried out.

3.0 Results

Daytime Building Inspection for Bats

- 3.1. A full description of the church is provided in the GS Ecology report. The only evidence of bats occupying the interior of the building in June 2026 was very old droppings on flat surfaces below the gable end of the North Chapel. All other surfaces and walls were devoid of any evidence of bats, although this could have been the result of regular cleaning as pointed out in the previous report.
- 3.2. The presence of hibernating bats was considered to be possible, because the church has very thick walls and complex layers of roofing materials that could contain thermally stable crevices and other spaces suitable for roosting over winter.

Bat activity survey

- 3.3. The results of the bat activity surveys can be found on Plans A1.1 and A1.2 in Appendix 1. Survey conditions were optimal for bat surveys. The positions of surveyors during the survey are shown on the plans therein. No bats were recorded emerging from any part of the building on either of the surveys. However, bats were recorded inside it. Summary results of the activity survey are as follows:

First survey – 2nd June 2026

- 3.4. On the first survey, no bats were recorded inside the Vestry. A bat was, however, recorded on the IR camera monitoring the known roost at 21:58, 46 minutes after sunset and 25 minutes after the first recording of this species flying around the church (see below). The bat recorded by the camera did not emerge from the area being monitored. Common Pipistrelle calls were recorded inside the building from 21:55 until 22:16 so it was thought highly likely that the bat recorded on the camera was an individual of this species. This evidence suggested that the bat was either roosting in another part of the interior of the building or that it had entered it unseen after emerging from a day roost elsewhere.
- 3.5. Bats recorded in flight only outside the church were a species of *Myotis* auto-identified as Daubenton's bat, Noctule (*Nyctalus noctula*), Serotine, Common and Soprano pipistrelles and Brown long-eared bat. The first Common Pipistrelle recorded was at 21:33, four minutes after dusk.

Second survey, 24th June 2026

- 3.6. During the second survey, no bats were recorded emerging from any part of the interior or exterior of the church.
- 3.7. Bats recorded in flight only outside the church were (again) a species of *Myotis* auto-identified as Daubenton's bat, Noctule, Serotine, Common and Soprano pipistrelles. The first bat recorded was Noctule at 21:22 whilst the first Common Pipistrelle recorded was not until 22:09, 45 minutes after sunset. Of the other early-emerging species, Soprano Pipistrelle was not recorded until 21:52, 28 minutes after sunset.

4.0 Conclusion and Recommendations

Survey interpretation

- 4.1. The daytime inspection by GS Ecology indicated the presence of a bat roost in a part of the church that would not be worked on under the current program of repair. Brief repeat survey indicated that bats had not occupied this roost with any regularity and might not have been present at all since the survey in February. The activity surveys in June 2026 confirmed the absence, at that time, of bats from the feature in the North Chapel. However, at least one Common Pipistrelle might have been roosting inside the church in another as-yet unidentified location. The timing of recording (both acoustic and visual, on the IR camera) suggested that, rather than day-roosting inside the church, this animal had entered it after first emerging from a roost elsewhere and foraging around the site. Video footage included numerous flights of insects (probably moths or lacewings) within the field of view, suggesting that a food resource was present within the building.
- 4.2. The potential for bats to hibernate within the fabric of the church was considered to be high but this could not be confirmed by the activity surveys in summer and all features of potential use would not have been fully accessible during a winter survey. Given the uncertainty regarding winter use, retention of obvious means of access to wall tops is considered to be of high importance. There is a potential for finding roosting bats during cold periods, when they could be in deep torpor and therefore more vulnerable to disturbance than at other times of the year.

Recommendations

- 4.3. Although bats are currently absent from it, they could roost within the areas of the church to be re-roofed at some point in the future if conditions remain as they were in summer 2026. Whilst the establishment of a maternity roost is possible, the re-roofing works will occur before the next active season for mothers with dependent young. Small numbers of individual bats might be encountered during works carried out in the remainder of 2026 and/or the beginning of 2027. It would therefore be prudent to ensure that works are carried out under a Precautionary Method Statement (PMS). This should include the following:
 - Timing of works to ensure minimal impacts on bats if animal(s) are present i.e. September to early April, avoiding the coldest months of the year, which are usually January and February. The most appropriate timing for works would be a complete tile strip of the Vestry and the South Aisle by the beginning of November 2026 or in early March 2027. Work can be carried out at other times, provided that mild winter conditions are experienced, i.e. a run of dusk temperatures predicted to be 9°C or above. Conditions such as these are suitable to allow for safe release of any animals uncovered (although situations within which capture and release is acceptable need to be outlined in the PMS);
 - Attendance on site of a suitably licensed and experienced bat ecologist during the roof strip;
 - A toolbox talk given by the ecologist to the roofers and other building trades that will be working on the roof, to ensure that they are aware of the protection afforded to bats and what to do if one is found i.e. stop work, inform the ecologist and wait for further instruction once a revised assessment has been made;
 - The ecologist to ensure that safe methods of tile removal are employed and appropriate inspections of cavities beneath are carried out as works progress;
 - Recourse to licensing (and its attendant delays) if necessary.

- 4.4. Given that there are some residual uncertainties as to the impact of the re-roofing on roosting bats, it is considered appropriate to plan-in a number of simple and unobtrusive provisions for them within the working area. Appropriate measures are suggested in Appendix 2. As set out in that section of this report, these should include:
- Use of an appropriate roof liner. This should be rough-sawn sarking boards treated with insecticides and fungicides known to be safe within bat roosts³ and/or Type 1F bitumen underfelt. If strictly necessary for the future preservation of the church, a bat safe breathable membrane such as Batsafe TLX (see <https://tlxinsulation.co.uk/tlx-batsafe/>) could be used;
 - Access to wall tops on gable ends by retaining existing gaps and/or omitting mortar from small sections. Of all the measures recommended, this is the most important because such gaps provide direct access to potential hibernation roosts that could not be confirmed by the surveys carried out to date;
 - Crevice features under re-seated ridge tiles. A means of achieving this is set out in Appendix 2;
 - Roof pitch access points using purpose-made tiles or by lifting tiles;

5.0 References

Collins, J. (ed) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edition), The Bat Conservation Trust, London. ISBN– 978-1-7395126-0-6

GS Ecology (2026) *Preliminary Bat Roost Assessment* (of) *St. Peter's Church, The Warren, Caversham, Reading RG4 7TH*. Unpublished report to Caversham Thameside & Mapledurham Parish.

JNCC. 2004. *Bat Workers' Manual*. ISBN 1 86107 558 8

³ See: [Timber-treatment products suitable for use in or near bat roosts - GOV.UK](https://www.gov.uk/guidance/timber-treatment-products-suitable-for-use-in-or-near-bat-roosts)

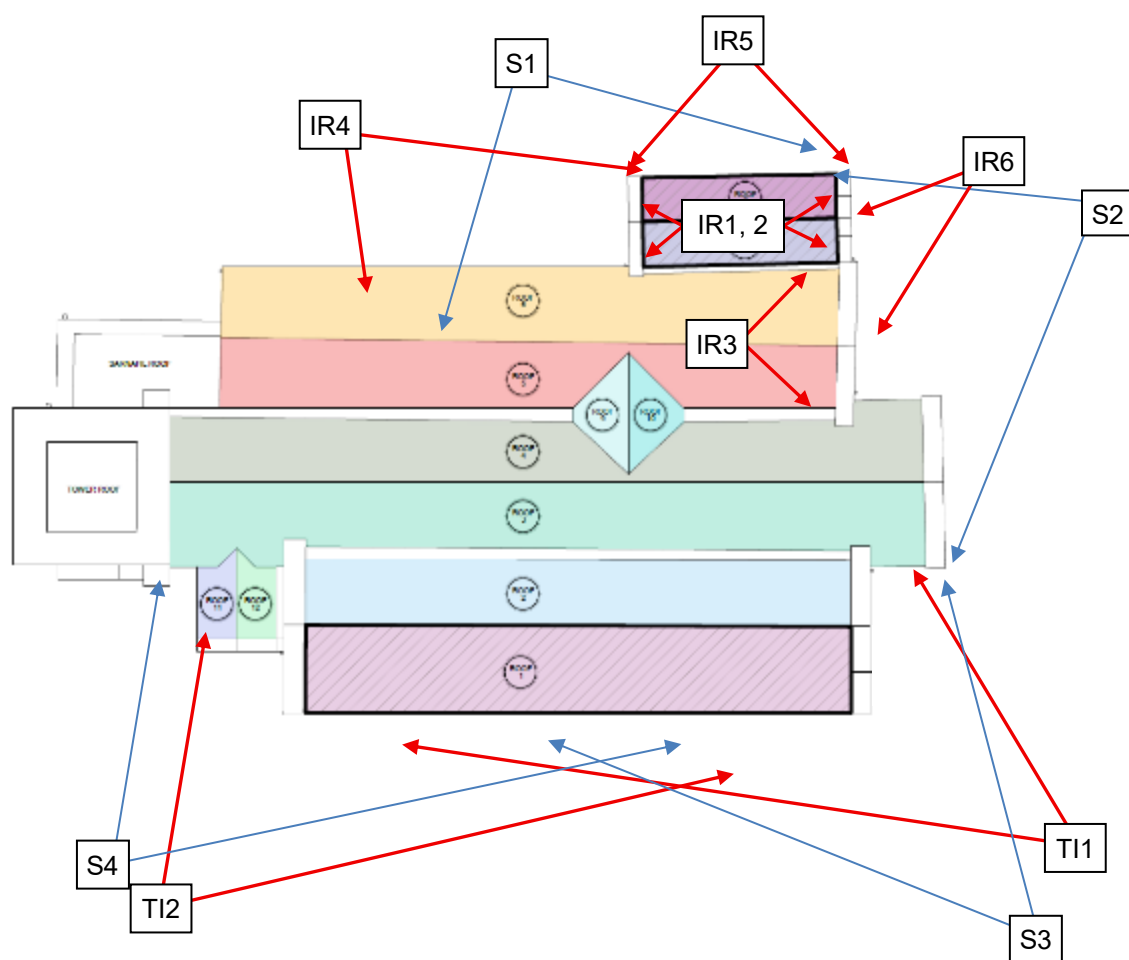
Appendix 1 Bat Survey

Survey 1– 02/06/2026 – Dusk emergence

Survey conditions and equipment used

Survey start	20:42	Survey end	22:40	Sunset	21:12
Weather	Start	Middle	End	Bat detectors used	
Temp	15	15	14	Surveyor 1 (Chris Hoadley)	EMT2 Pro
Rain	-	-	-	Surveyor 2 (Eliza Sutton)	EMT2 Pro
Wind (Bf)	0	0	0	Surveyor 3 (Eric Palmer)	EMT2 Pro
Cloud (%)	5	5	5	Surveyor 4 (Ryan Davies)	EMT2 Pro

Plan A1.1 – positions of surveyors and NVAs

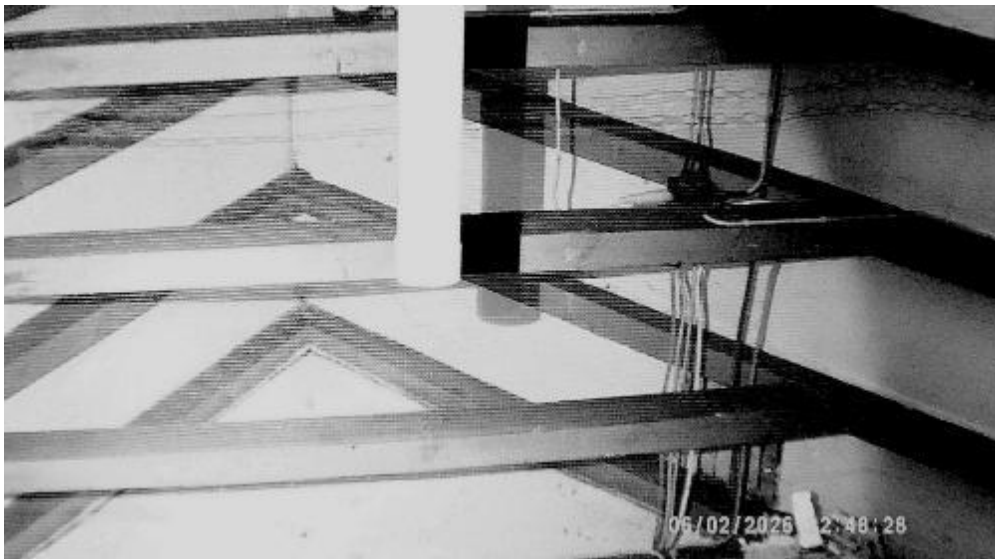
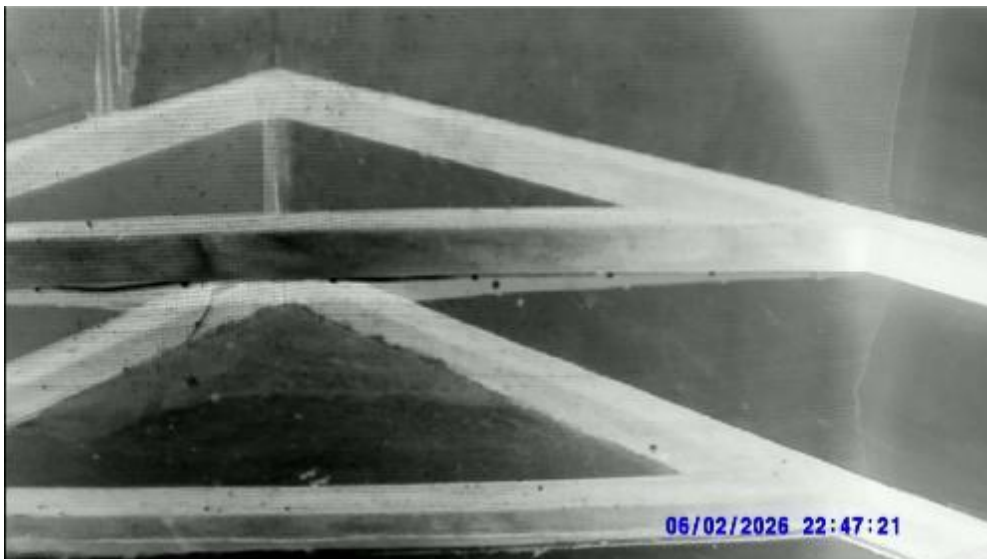


Key to symbols used

- S1 Position and number of surveyor, with area covered by them indicated by blue arrows
- TI1 Position and number of Thermal Imaging Camera, with area covered by them indicated by green arrows
- IR1 Position and number of IR Camera, with area covered by them indicated by red arrows

Bats recorded in flight only

Myotis (of which): Daubenton's	Heard not seen.
Common pipistrelle	Foraging around and inside the building.
Soprano pipistrelle	Foraging around the building.
Noctule	High overhead, seldom seen.
Serotine	Foraging around the building.
Brown Long-eared	Heard not seen.

NVAs – Fields of view**IR1 –Nightfox Whisker****IR2 – Nightfox Whisker**

IR3 – Canon XA20



IR4 – Nightfox Whisker



IR5 – Nightfox Whisker



IR6 – Nightfox Whisker



T11 – Guide 612

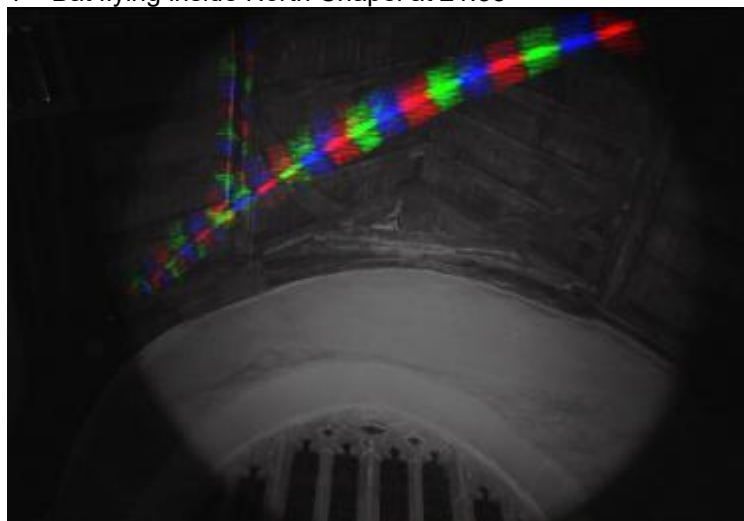


T12 – Guide 612

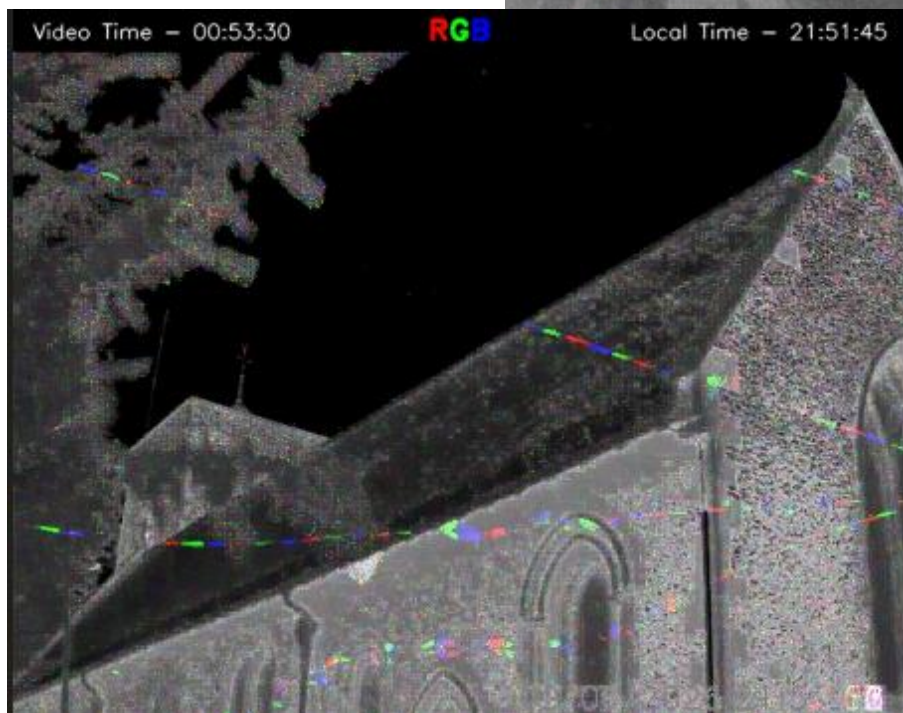
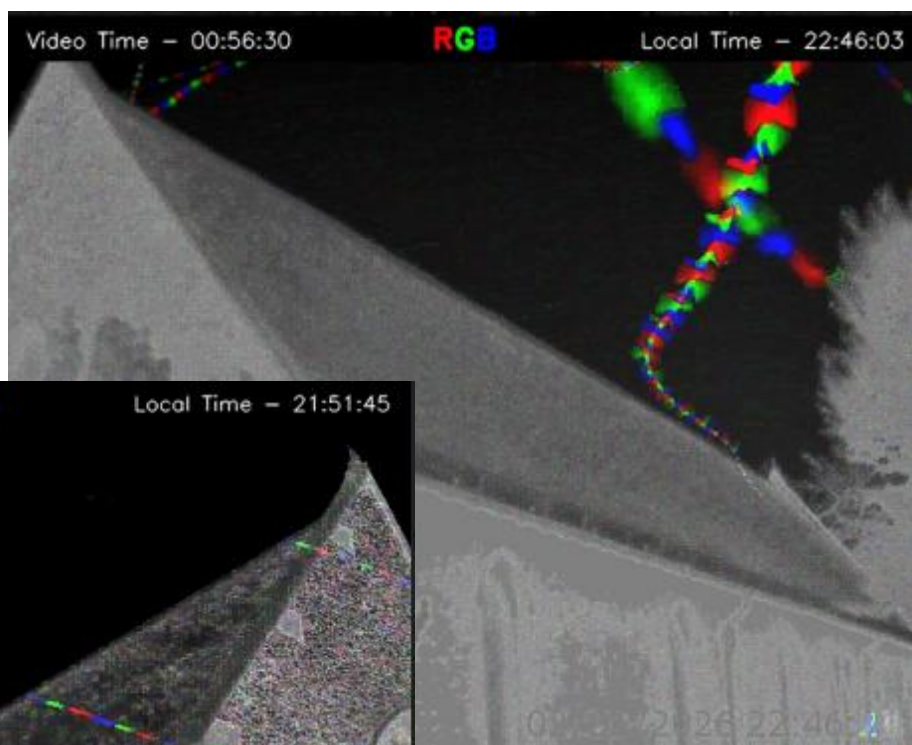


Additional images from WIS analysis

1 – Bat flying inside North Chapel at 21:58



2 and 3 - Examples of bats foraging above and around the South Aisle

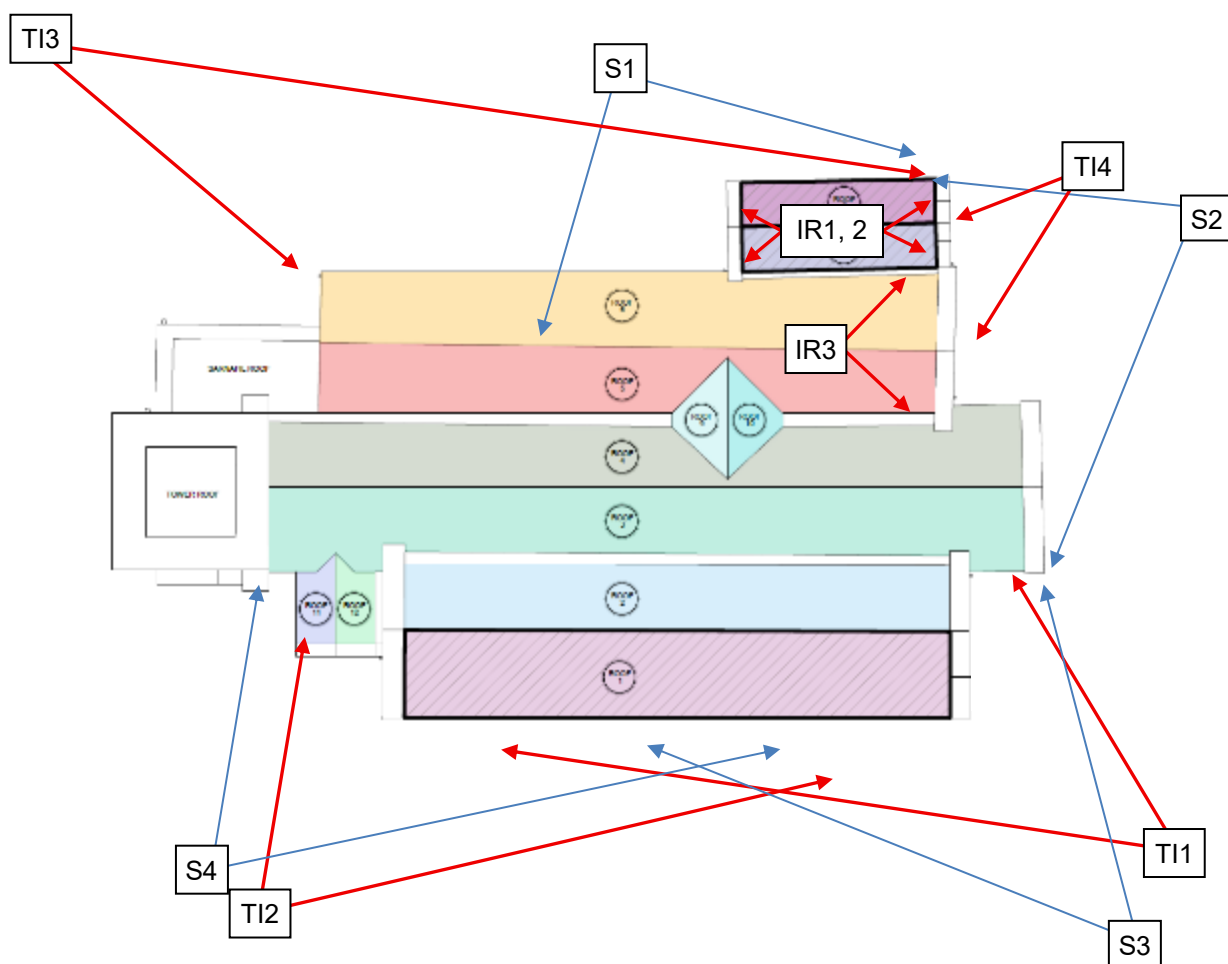


Survey 2 – 24/06/2026 – Dusk emergence

Survey conditions and equipment used

Survey start	21:10	Survey end	23:00	Sunset	21:24
Weather	Start	Middle	End	Bat detectors used	
Temp	28	27	24	Surveyor 1 (Ian Ranger)	EMT2 Pro
Rain	-	-	-	Surveyor 2 (Ryan Davies)	EMT2 Pro
Wind (Bf)	0	0	0	Surveyor 3 (Eliza Sutton)	EMT2 Pro
Cloud (%)	0	0	0	Surveyor 4 (Eric Palmer)	Pettersson D240x

Plan A1.2 – positions of surveyors and NVAs



Key to symbols used

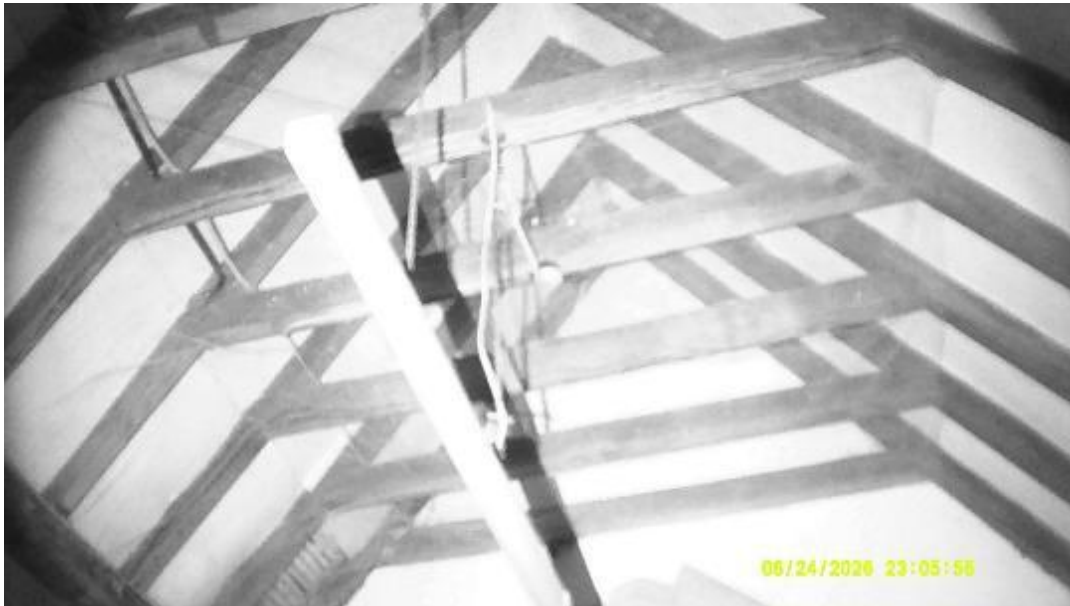
- S1** Position and number of surveyor, with area covered by them indicated by blue arrows
- TI1** Position and number of Thermal Imaging Camera, with area covered by them indicated by green arrows
- IR1** Position and number of IR Camera, with area covered by them indicated by red arrows

Bats recorded in flight only

Myotis (of which): Daubenton's	Heard not seen.
Common pipistrelle	Foraging around the building.
Soprano pipistrelle	Foraging around the building.
Noctule	High overhead, seldom seen.
Serotine	Foraging around the building.

NVAs – Fields of view

IR1 – Nightfox Whisker



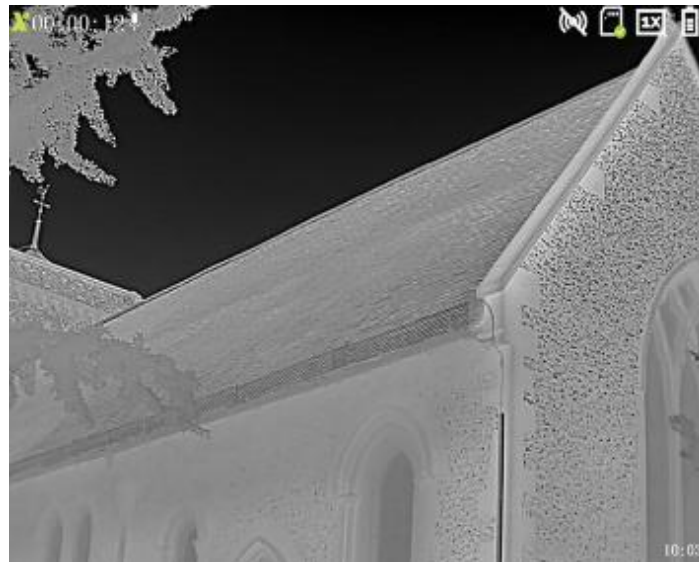
IR2 – Nightfox Whisker



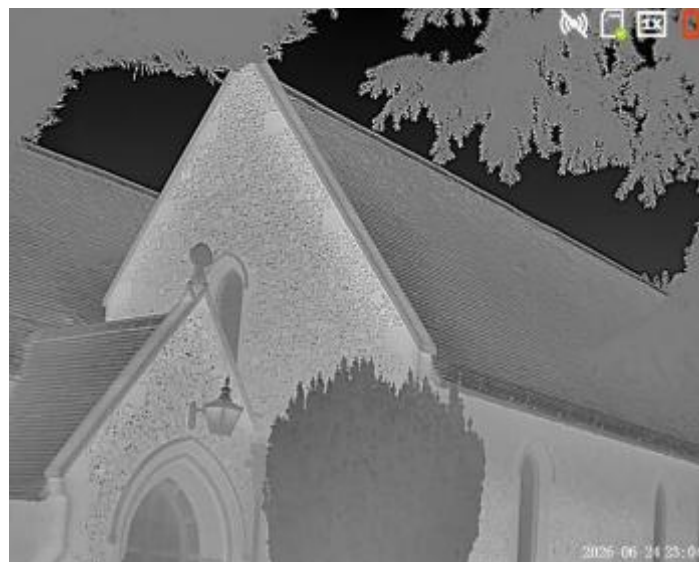
IR3– Nightfox Whisker



TI1 – Pixfra A613



TI2 – Pixfra A613



TI3 – Guide 612



TI4 – Guide 612



Additional images from WIS analysis

1 – Bats flying around North Aisle and Vestry



2 – Bats flying over South Aisle



Appendix 2 –Bat Precautionary and Enhancement Measures – outline recommendations

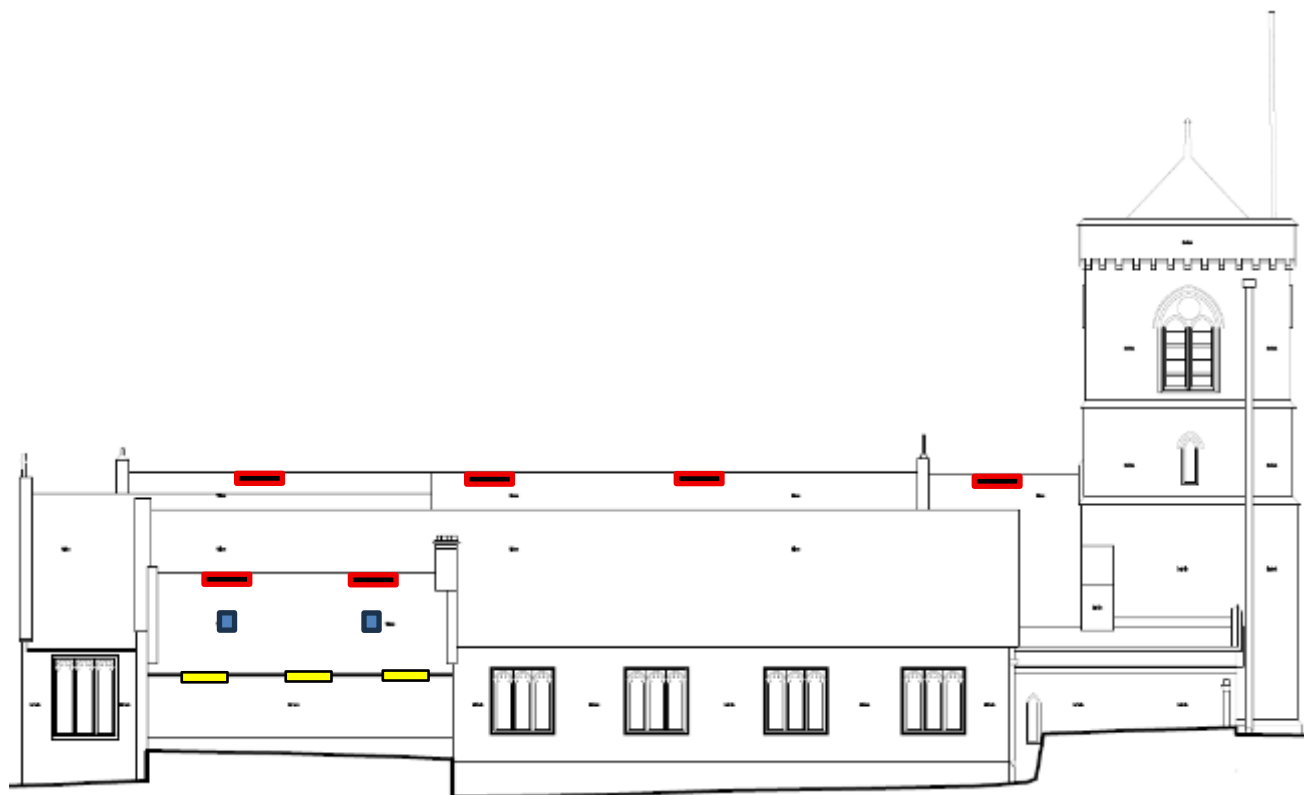
The measures set out below are designed to provide enhancements for roosting bats. The base plan is reproduced from a JBKS Architects drawing supplied. It is not intended that all features suggested are installed. Some, notably the wall top access crevices, may not be necessary if suitable crevices are retained.

All chosen features for bats should be situated away from sources of artificial light, i.e. not within the light splay of the street light at the southeast corner of the church and the light at the entrance. Locations to the north side would be preferable because of the effect of light splay.

Locations and symbols used are indicative only and do not indicate accurately the size of any such features. Suggested designs for each feature are shown on pages following this.

Key to symbols used

	Ridge line access to cavities under ridge tiles.
	Crevice access to wall top (shown for Vestry only but should be repeated for the South Aisle south roof).
	Roof pitch access tiles (shown for Vestry only but could be repeated for the South Aisle south roof).

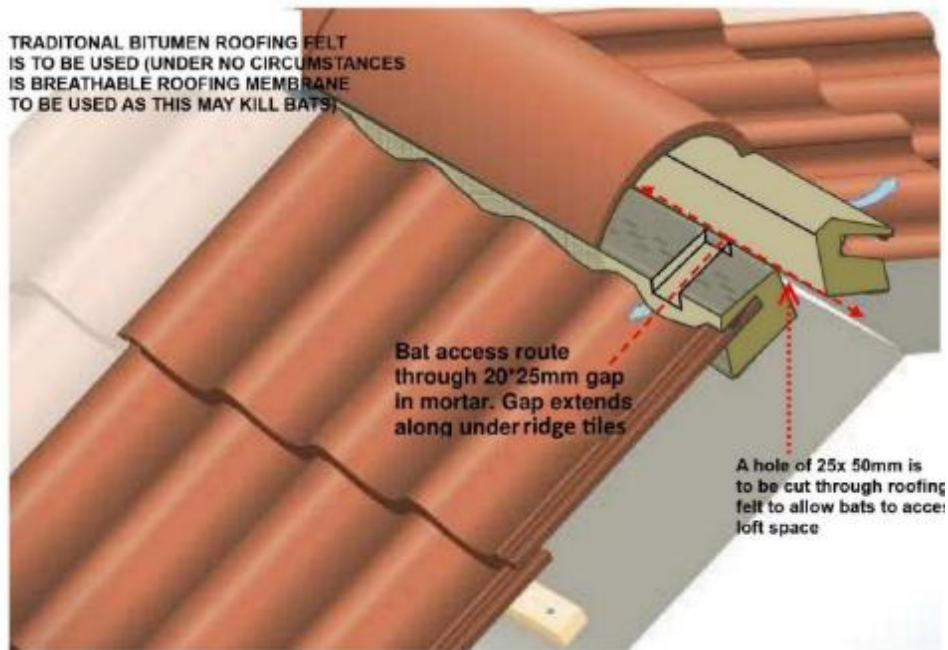


Examples of feature designs

Bespoke features

1. Ridge line access to cavities under ridge tiles (bats)

Ridge line access through the mortar into cavities under ridge tiles (2 no.). This requires that bedding mortar is 20mm deep, with a 25mm wide slot cut through the mortar to provide a short “tunnel” from the outside into cavities under the ridge tiles.



2. Wall-top crevice examples (exact design to be confirmed by inspection by site ecologist)



20mm high gap under bitumen felt leading to a boxed off section on top of the wall plate. Divided into smaller sections with rough sawn timber.

20mm high gap under wall plate.

3. Roof-pitch access for bats

3a - Bespoke feature

Lead strips rolled to create 20mm high



3b – off-the-shelf solution (available from a number of stockists)



Appendix 3 - Legislation and planning policy

Planning Authorities have a legal duty to consider biodiversity when assessing planning applications. Where there is a reasonable likelihood that a planning application might affect important protected sites, species or habitats, information on the species, habitat or site likely to be affected, together with an assessment of the impacts of the proposals, will almost certainly be required.

The NERC Act

The legal duty for Planning Authorities to have regard to the conservation of biodiversity was introduced in the 2006 Natural Environment and Rural Communities Act (The NERC Act). This act clarified existing commitments with regard to biodiversity, raised the profile of biodiversity and aimed to make the consideration of biodiversity a natural and integral part of policy and decision making.

In addition to the NERC Act there is also national and international biodiversity legislation. This includes legislation in relation to protected species and sites which operates outside of the planning system. Local Authorities and developers have a duty to comply with this legislation.

National planning policy

Paragraph 99 of the Government Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System (this document has not been revoked by the recently published National Planning Policy Framework) states that:

'It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.'

As such, in line with national planning policy, most planning authorities will ask for this information to be provided before a planning decision is made and in many cases before it is registered.

Local planning policy

In addition to national planning policy, most councils have planning policies to protect biodiversity, and to enhance it where practicable within and adjacent to development sites.

European protected species

The United Kingdom hosts a number of European Protected Species (EPS) of animals (Table 1) and plants (Table 2). These species receive special protection under UK law and it is an offence under the Wildlife and Countryside Act 1981 (as amended) and the European Habitats and Species Directive (92/43/EC), enacted in the UK through The Conservation of Habitats and Species Regulations 2010, to deliberately or recklessly destroy or damage their habitat, or to disturb, kill or injure the species without first having obtained the relevant licence from Natural England.

Planning Authorities have a statutory duty under these regulations to have regard to the requirements of the Habitats Directive and need to be satisfied that the development is likely to receive a licence from Natural England, and therefore comply with the Habitats Directive, before granting planning permission.

Table 1 – European Protected Species of Animal found in the UK

Common name	Scientific name	Common name	Scientific name
Bats, Horseshoe (all)	<i>Rhinolophidae</i>	Otter, Common	<i>Lutra lutra</i>
Bats, Typical (all)	<i>Vespertilionidae</i>	Snail, Lesser Whirlpool Ram's-horn	<i>Anisus vorticulus</i>
Butterfly, Large Blue	<i>Maculinea arion</i>	Snake, Smooth	<i>Coronella austriaca</i>
Cat, Wild	<i>Felis silvestris</i>	Sturgeon	<i>Acipenser sturio</i>
All cetaceans	<i>Cetacea</i>	Toad, Natterjack	<i>Bufo calamita</i>
Dormouse	<i>Muscardinus avellanarius</i>	Turtles, Marine (all)	<i>Caretta caretta</i>
Frog, Pool	<i>Rana lessonae</i>		<i>Chelonia mydas</i>
Lizard, Sand	<i>Lacerta agilis</i>		<i>Lepidochelys kempii</i>
Moth, Fisher's Estuarine	<i>Gortyna borelii lunata</i>		<i>Eretmochelys imbricata</i>

Table 1 – European Protected Species of Animal found in the UK

Newt, Great Crested (or Warty)	<i>Triturus cristatus</i>		<i>Dermochelys coriacea</i>
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Table 2 – European Protected Species of Plant found in the UK

Common name	Scientific name	Common name	Scientific name
Dock, Shore	<i>Rumex rupestris</i>	Naiad, Slender	<i>Najas flexilis</i>
Fern, Killarney	<i>Trichomanes speciosum</i>	Orchid, Fen	<i>Liparis loeselii</i>
Gentian, Early	<i>Gentianella anglica</i>	Plantain, Floating-leaved water	<i>Luronium natans</i>
Lady's-slipper	<i>Cypripedium calceolus</i>	Saxifrage, Yellow Marsh	<i>Saxifraga hirculus</i>
Marshwort, Creeping	<i>Apium repens</i>		

Nationally protected species

Many species of animal are protected under the 1981 Wildlife and Countryside Act (as amended). 'Full protection' applies to EPS and some non EPS species such as the water vole. This prohibits the intentional killing, injuring or taking (capture, etc); possession; intentional disturbance whilst occupying a 'place used for shelter or protection' and destruction of these places; sale, barter, exchange, transporting for sale and advertising to sell or to buy. Many species, such as common species of reptile and amphibian, are protected from intentional killing and injuring and trading.

Badgers

Badgers and their setts are protected under the 1992 Protection of Badgers Act and the Wildlife and Countryside Act 1981 (as amended). It is illegal to intentionally or recklessly kill, injure or take badgers or to interfere with a badger sett. Interference with a sett includes blocking tunnels, or damaging the sett in any way, and could include blocking a badger pathway if it were to stop badgers entering or leaving a sett.

Penalties for offences can be severe, with fines of up to £5,000 plus up to six months' imprisonment, for each illegal sett interference, badger death or injury.

Work that disturbs badgers occupying a sett is illegal without the appropriate licence from the relevant statutory authority being held. Natural England issue licences for reasons including science, education or conservation, for development such as the building of houses and for investigation of offences against badgers. They also issue licences for the prevention of serious damage to land, crops or other form of property, as well as for agriculture, forestry, drainage operations and prevention of the spread of disease.

Birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), whilst they are actively nesting or roosting. Section 1 of this Act makes it an offence to kill, injure or take any wild bird, and to intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built. It is also an offence to take or destroy any wild bird eggs.

In addition, bird species listed under Schedule 1 of the Act receive extra protection. The Act states that "it is an offence to intentionally or recklessly disturb any wild bird listed in Schedule 1 while it is nest building, or at (or near) a nest containing eggs or young, or disturb the dependent young of such a bird".

In practice this means that in areas where birds are likely to be nesting works should not be undertaken during the nesting season, which is generally considered to be March to September, although this very much depends on weather conditions, habitats and the species involved. If works cannot be avoided then areas should first be checked for nesting birds. Habitats likely to host nesting birds include trees, hedgerows and dense scrub, buildings, reedbeds and riverine habitats and open areas with tussocky vegetation.