

Bat Surveys: 111 Wargrave Rd, Twyford

Client Mr D Hood
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Non-technical Summary

Background

In May 2025, Crossman Associates was commissioned to undertake a bat survey of 111 Wargrave Rd, Twyford RG10 9PE. Development proposals include a loft conversion.

Methods

The scoping survey was undertaken by Miguel Canovas, an experienced ecologist and licenced bat worker. The buildings were inspected both externally and internally for any evidence of bat / bird presence, such as droppings, food remains, staining or actual bats / birds. One additional bat emergence survey was also undertaken.

Results

The building is located within a residential area. Overall, the dwelling remains in good condition. However, there are gaps on the weatherboards which can provide roost opportunities for bats. The garden is maintained.

The dwelling has **low** suitability for roosting bats.

The bat emergence surveys confirmed likely absence of roosting bats.

Recommendations

It is recommended that the following be undertaken as part of the development:

- A Precautionary approach to be taken in relation to bats.
- Install bird boxes in the building.
- Exterior lighting planned sensitive to nocturnal wildlife.

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1. Background

- 1.1. In May 2025, Crossman Associates was commissioned to undertake a bat survey of 111 Wargrave Road, Twyford. Development proposals include a loft conversion.
- 1.2. Figure 1 under Appendix II provides a site location map.
- 1.3. The objectives of the survey were to:
 - Assess the likely presence or absence of bats.
 - Identify any legislative or planning policy constraints relevant to the site.
 - Determine the need for further surveys, compensation, or mitigation.

Site Description

- 1.4. The site comprises a detached house in a residential area in Twyford, Berkshire. The property has a maintained garden.
- 1.5. The property is adjoined on all sides by similar detached properties with maintained gardens.
- 1.6. The environs are predominately residential with a mix of medium/large properties. The wider landscape includes parkland and farmland.

Legislation

- 1.7. In the UK all species of bats are protected under the Wildlife and Countryside Act (1981) as amended and the Conservation of Habitats and Species (Amendment) Regulations. Under this legislation it is a strict liability offence to injure or destroy a bat or to disturb damage or destroy the resting place of a bat. Under this

legislation the UK is obliged to fully consider bats within the planning process and the level of bat activity on-site must be fully assessed prior to the assessment the planning application.

- 1.8. In Britain all wild birds are granted legal protection under the Wildlife & Countryside Act (1981) (as amended). This legislation protects the birds, their eggs and nests whilst being built or in use.

2. Methodology

Desktop Study

Data search

- 2.1. The MAGIC website was accessed to gain information on any statutory site designations within 4 km of the site that are designated for bats.

National Planning Policy

- 2.2. National Planning Policy has been reviewed for policies that relate to nature conservation relevant to the site.

Field Survey

Bat scoping survey

- 2.3. A bat scoping survey was carried out on the 15th May 2025 by Miguel Canovas, an experienced ecologist and licenced bat worker.
- 2.4. The building was methodically inspected internally and externally for any evidence of roosting bats, including actual bats, droppings, urine staining and evidence of feeding activity such as discarded insect wings and cases.
- 2.5. The building was also assessed for its suitability to support roosting bats by considering several factors including whether bats can access internal and external voids within the building and whether these voids provide adequate protection and shelter for roosting bats. If the building is not confirmed as a roost, it is assessed from High to Negligible Suitability as follows;

- **High Suitability** – many roosting opportunities. Buildings tend to be old, large and rural

- **Moderate Suitability** – some roosting opportunities. Buildings tend to be old, rural with some recent maintenance
- **Low Suitability** – few roosting opportunities. Buildings tend to be modern, urban and well maintained
- **Negligible Suitability** – insignificant roosting opportunities. Buildings tend to be small, modern, urban and very well maintained.

Birds

- 2.6. The building was also inspected for the presence of birds including house sparrow *Passer domesticus*. The building was checked for field signs including nesting material, accumulations of droppings and/or pellets.

Evening emergence/ activity surveys

- 2.7. One evening emergence/ activity survey was carried out by two bat surveyors led by experience and bat worker Naomi Turner. The surveyors were positioned so that all aspects of the building suitable for roosting bats could be observed. The Survey was undertaken during suitable weather conditions. The emergence survey commenced at 15 minutes before sunset and continued for two hours. All general bat activity on site was also noted.
- 2.8. Echo meter touch, Peersonic bat detectors and IR cameras were used together with visual observations on flight patterns and feeding behaviour to aid identification to species level. Recordings of bat calls were made and later analysed using dedicated computer software Audacity and wildlife acoustics.

3. Results

Desktop Study

Data Search

- 3.1. The MAGIC website informed that there are no statutory sites within 4 km of the site designated for bats.

Planning Policy

- 3.2. National policy guidance is provided by National Planning Policy Framework (NPPF, December 2024), which sets out the Government's planning policies for England and how they should be applied to planning applications;

Conserving and enhancing the natural environment

- Planning decisions should contribute to and enhance the natural and local environment by:
 - a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;

- 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;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

Habitats and Biodiversity

- To protect and enhance biodiversity and geodiversity, plans should:
 - a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity⁶⁸; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
 - b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.
- When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁷⁰ and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Field Survey

Bat scoping survey

- 3.3. The external and internal conditions of the buildings are described in the table below and photographs can be found in Appendix II.

- 3.4. A table within Appendix III; information sheets set out the criteria for the way a building is assessed for its potential to support roosting bats.

Building	Feature	Feature Description	Bat suitability
111 Wargrave Rd, Twyford	Overview	Detached house. The dwelling is in good condition and is occupied. No bats or evidence of bats were found inside or outside of the buildings.	Low Suitability ☒
	Exterior	The brick walls are in good condition; no gaps or cracks were observed. The windows and doors are all well-sealed. There are gaps on the weatherboards front and rear of the building. The property has a maintained garden.	
	Interior	Internal areas are composed of rooms with plaster and painted walls and ceilings. The roof void is insulated composed with exposed timber and type 1 bituminous sarking felt. No gaps were observed.	
	Roof	The flat roof tiles are in good condition. The chimney brick work is in good condition and flash/concrete work which seals the chimneys to the roof remains well fit in place.	

- 3.5. The building was identified as low suitability for roosting bats. Therefore, one bat survey was undertaken. The surveys were led by Naomi Turner, an experienced ecologist and bat worker.
- 3.6. The table below details the results of the surveys.

Table 2; Bat emergence table

Survey Date	24/08/2025
Survey Conditions	Cloud: 10% Weather: Dry Wind level 0 / 1 Start temp 18°C End temp 17°C Sunset time 21.03
Emergence survey	No emergence
General bat activity. Non emergence	21.08 -22.03 Multiple passes by common pipistrelle <i>Pipistrellus pipistrellus</i> and soprano pipistrelle <i>Pipistrellus pygmaeus</i> bats seen and heard flying and foraging around the front and rear garden. 21.33 – 21.43 three passes by a noctule <i>Nyctalus noctula</i> bats seen flying high above the building.

Birds

- 3.7. No birds or bird nesting activity was recorded in any aspect of the dwelling.

Evaluation

- 3.8. The property is located within a residential area, however, lies near to parkland and farmland with habitats likely to function as commuting and foraging resource for bats.
- 3.9. During the scoping survey, no droppings, staining, feeding remains or actual bats were observed. However, there are gaps on the wooden weatherboards which can provide roost opportunities for bats.
- 3.10. The dwelling has **low suitability** for roosting bats.

Emergence survey

- 3.11. During the bat emergence survey, no bats were recorded either exiting or entering the dwelling, which confirms likely absence of roosting bats.
- 3.12. During the survey common, soprano pipistrelle and noctule bats were observed/heard foraging around the garden trees. The garden combined with neighbouring and similar gardens are considered to provide a useful foraging resource for local bats.

4. Recommendations

- 4.1. The recommendations in the paragraphs below are provided to help ensure that wildlife and important ecological features are protected during the course of works. Recommendations also set out mitigation measures to minimise harm where this cannot be avoided and provide compensation measures to allow the proposals to meet current legislative and planning policy objectives.
- 4.2. The Natural Environment and Rural Communities (NERC) Act (2006) states that a public authority must 'in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity; Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat'.
- 4.3. The NPPF (2021) states that planning decisions should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

Species recommendations

Bats

- 4.4. All bats within the UK are fully protected under the Wildlife and Countryside Act as Amended and the Conservation of Habitats and Species Regulations. Under this registration there are strict liability offence to injure or destroy a bat or to disturb, damage or destroy the resting place (roost) of a bat. Under the Bonn Convention, the UK is obliged through the planning system to protect important bat habitats.

- 4.5. The level of survey work is adequate to confirm the status of roosting bats on site, and it is not considered necessary or beneficial to undertake any additional survey visits.
- 4.6. Due to the transitory nature of bats, there remains a very small possibility that bats could be encountered during the works; therefore, all works must proceed under a precautionary approach. Tiles and roof panels will be removed in a vertical rather than horizontal sliding motion. Soffits and masonry will be dismantled using a 'soft' approach taking care with cavity walls where present. All site workers will be vigilant at all times and in the very unlikely event that a bat is found, then works must stop immediately and advice should be sought from a suitably qualified ecologist.

Lighting

- 4.7. The site lies near to parkland and farmland, these habitats are likely to support a number of species of bat; typical species that would be likely to be present include common pipistrelle and soprano pipistrelle, therefore any exterior lighting that is to be employed should be of the modern LED-type and should take into account the presence of bats and avoid over illumination of the garden, trees and adjacent properties. This can be achieved by using directional lights and or cowl.

Biodiversity enhancements

Birds

- 4.8. During the construction phase of the works, there is an opportunity to incorporate inexpensive ecological enhancements that aim to increase the biodiversity of the site.
- 4.9. Swifts (*Apus apus*) are a declining species in the UK, largely due to the loss of suitable nesting sites in modern and renovated buildings. To support local

biodiversity, fulfil policy objectives and contribute to swift conservation efforts, it is recommended that

- 4.10. At least one swift nest box be installed on the building.
- 4.11. The nest box should be positioned at least 4 m above ground level, under the eaves or on an appropriate sheltered wall, with a clear flight path and minimal disturbance. Ideally, the box should face north or east to avoid excessive heat exposure.
- 4.12. For a long-term, low-maintenance solution, we recommend incorporating the Action for Swifts S Brick into the development. The S Brick is a discreet, integrated nest box designed to be built directly into the structure of the building, providing a secure and permanent nesting site without affecting aesthetics or maintenance requirements. Models can be found on www.actionforswifts.com.

5. Limitations

- 5.1. This report records wildlife found during the survey and anecdotal evidence of sightings. It does not record any plants or animals that may appear at other times of the year and were therefore not evident at the time of visit.
- 5.2. The advice contained in this report relate primarily to factual survey results and general guidance only. On all legal matters you are advised to take legal advice.

6. References

Bat Conservation Trust (BCT) *Bats and Lighting in the UK* BCT

HMSO (1981) *Wildlife and Countryside Act 1981 (and subsequent amendments)*. HMSO

HMSO (1995) *Biodiversity*. The UK Steering Group Report

Joint Nature Conservation Committee (JNCC) *Common Standards Monitoring Guidance for Reptiles and Amphibians* (2004) JNCC

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

Mitchell-Jones, A.J, & McLeish A.P. (2012) *The Bat Worker's Manual* (4th Edition)

Multi-Agency Geographical Information for the Countryside (MAGIC)
Website at www.magic.gov.uk

Stace, C. (1997) *New Flora of the British Isles 2nd Edition*. Cambridge University Press

TSO (2021) *National Planning Policy Framework*. TSO

TSO (2006) *Natural Environment and Rural Communities Act* TSO

Appendix I – Site Figures



Site location



Client Mr D Hood
Title Location plan
Site 111 Wargrave Rd, Twyford
Figure 1
Date 19 May 2025
Scale xxx



Site Boundary

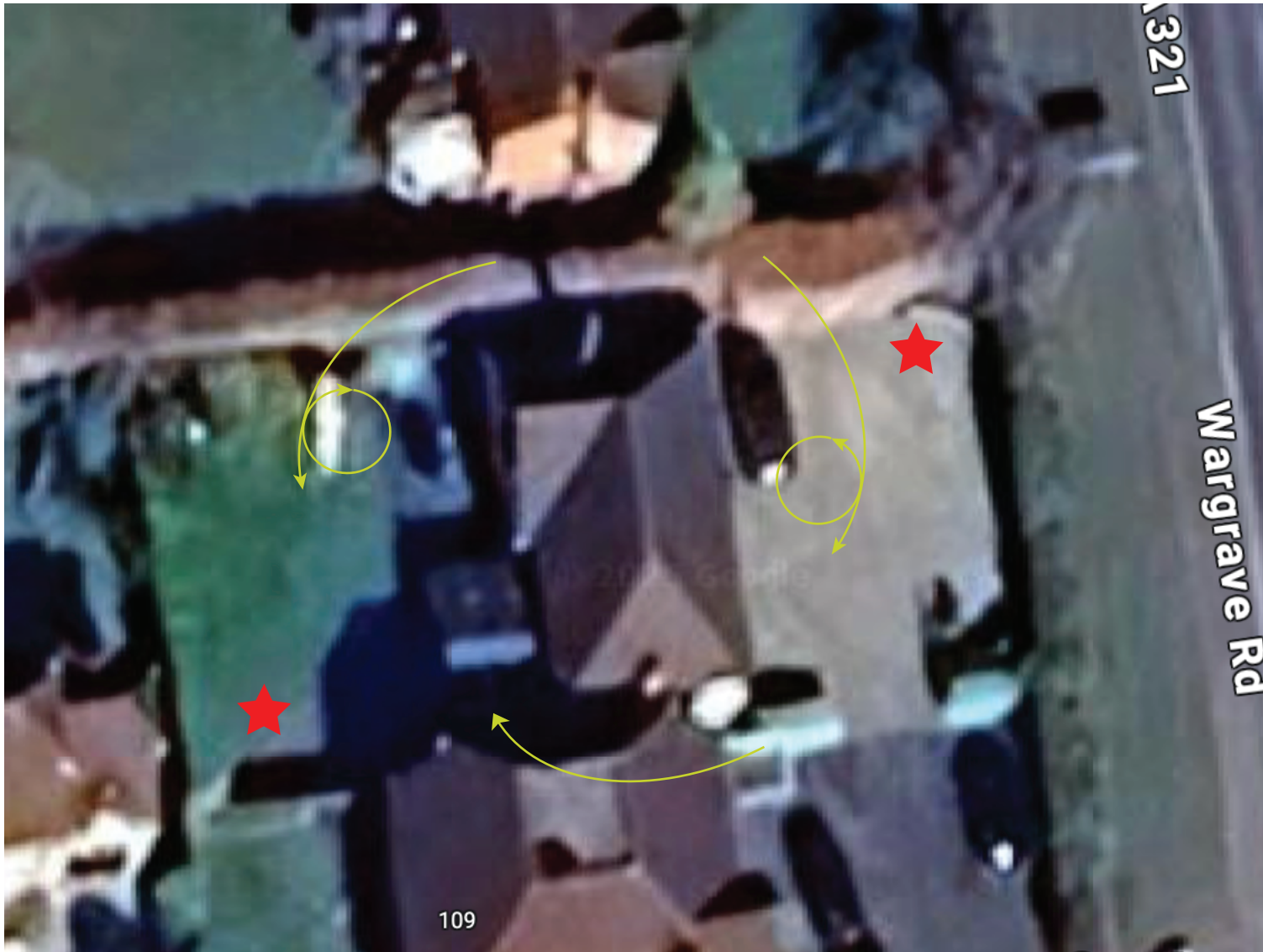


Surveyor locations



Bat activity

Bat emergence



Client Mr D Hood

Title Bat survey plan

Site 111 Wargrave Rd, Twyford

Figure 2

Date 07 August 2025

Scale xxx



Appendix II – Site Photographs

Photographs 1- 3



Photograph 1:

Eastern elevation

Gaps detail



Photograph 2:

Southeastern elevation



Photograph 3:

Northwestern elevation

Photographs 4 - 6



Photograph 4:

Roof void



Photograph 5:

Rear - western elevation



Photograph 6:

Gaps detail



Appendix III– Information Sheets

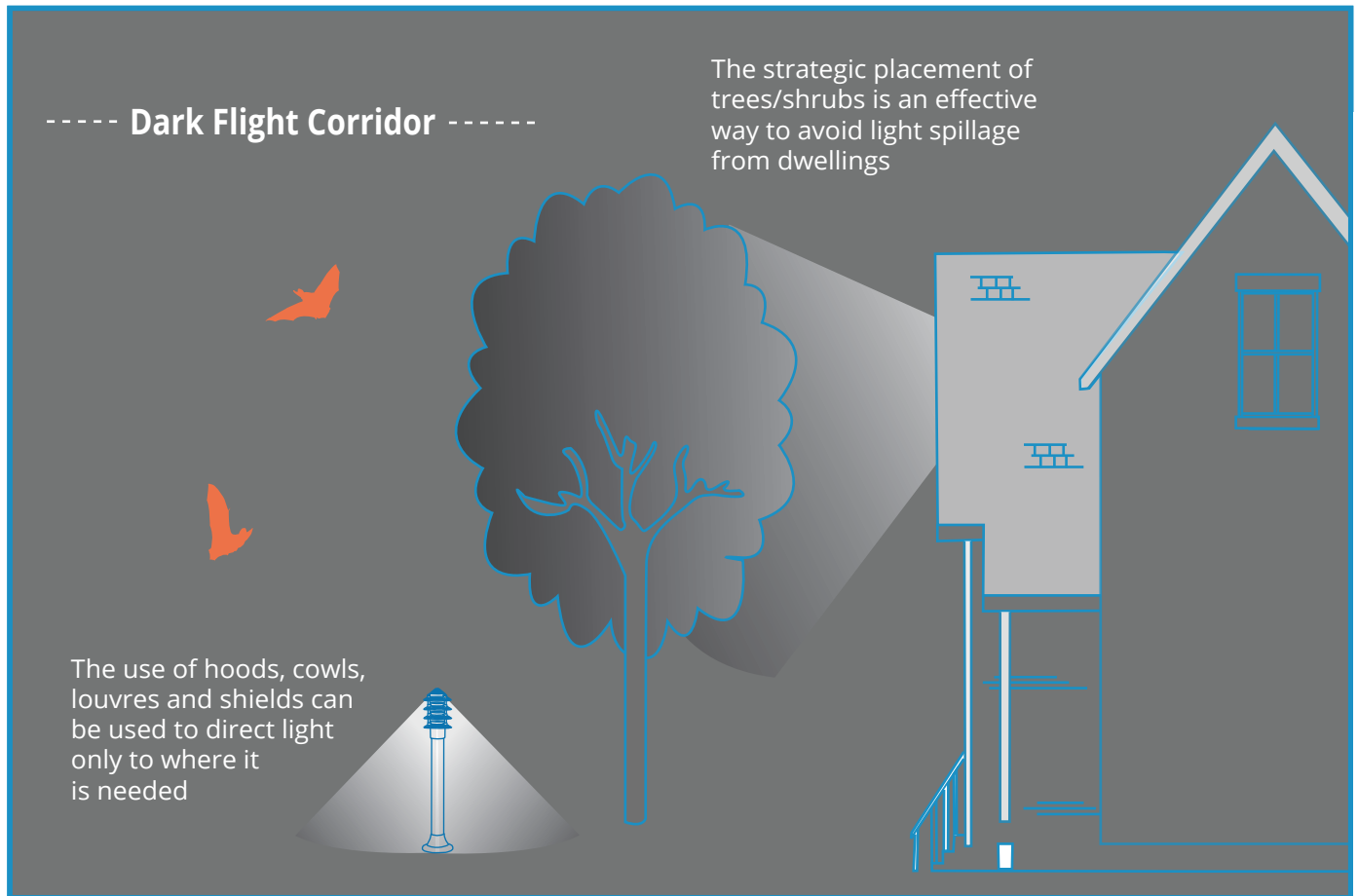
Bat Habitat Suitably Criteria

Bat Roosting Suitability	Criteria	Survey requirement to prove likely absence
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further survey work required
Low	A building, structure or tree with one or more potential roosting sites that could be used by individual bats opportunistically; however, these possible roost sites do not provide enough space, shelter, protection and/or suitable surrounding habitat to be used by large numbers of bats and are unlikely to be suitable for maternity or hibernation roosts.	One activity survey
Medium	A building, structure or tree with one or more potential roost sites that could be used by bats due to the size, shelter, protection, conditions and surrounding habit, but is unlikely to support a roost of high conservation status.	Two activity surveys
High	A building, structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Three activity surveys

Survey requirements are taken from Bat Surveys for Professional Ecologists: Good Practice Guidelines (2016), which is the recognised industry standard guidance used by local planning authorities and other statutory consultees.

Sensitive Lighting for Bats

MITIGATION GUIDELINE N° 001



Lamp Type

The impact of light on bats can be minimised by the use of low/high pressure sodium lamps

Lighting Column

The height of lighting columns should be kept as low as possible to reduce the impact of light spill. For example for pedestrian walkways short bollard lights with a light level as low as 3lux directed downwards.

Timing of Lighting

The times at which lighting is left on should be limited where possible. The use of movement sensors for security lights can be used to reduce the amount of time a light is on each night.

Light Levels

Light levels within a landscape plan should be as low as possible. If lighting is not needed, don't light.

Light Mapping

Mapping the light spill of a lighting scheme using computer software can prove essential in designing schemes that are fit for purpose, minimise energy costs and create dark flight corridors and foraging areas for bats

Impacts of Light on Bats

As nocturnal mammals, light causes disturbance to bats, many species of which will actively avoid lit areas. The illumination of bat roosts can delay bats emerging and thus shorten their foraging time and eventually lead to bats abandoning their roost. Lit conditions also lead to an increase of predation as they are more easily seen.


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Information sheet Artificial bird nesting boxes for Buildings: Swifts, house martins and house sparrows



Habibat house
sparrow nest box



Vivara woodstone sparrow
nest box; suitable for both
integral fitment or surface
mounting

Ibstock Swift boxes are also suitable for house sparrows. Can be customised to suit any exterior finish. Site boxes under eaves, away from windows and direct sunlight.

Sparrow boxes should be grouped together and be at least 2 m of the ground. The boxes can be also be sited on gable walls. At least 3 per averaged size house.

Swifts boxes should be at least 5 m above the ground with an clear un-obstructed flight path.

Schwegler house martin box model 9 b double is a suitable box for house martins and can be used to encourage the uptake of a building by this species. The boxes can be attached to the exterior walls in a sheltered position; ideally beneath the eaves. At least two sets should be placed on an averaged size house.

Ibstock Box



Schwegler model 9b