

Bat Scoping Survey

80 Pine Road, Changers Ford

Client Mr & Mrs Gardner

Reference G1142.001

Issue One

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Non-technical Summary

Background

In October 2022, Crossman Associates was commissioned by Mr and Mrs Gardner to undertake a bat and bird survey of 80 Pine Road, Chandlers Ford, Southampton, SO53 1JT.

Proposals are to enlarge the dwelling via ground floor side extensions added to the dwellings north-east and south-east elevations.

Methodology

The scoping survey was undertaken by Fairbrass Knowles, a fully licensed bat worker, experienced ecologist and full member of CIEEM. The dwelling was inspected both externally and internally for any evidence of bat / bird presence, such as droppings, food remains, staining or actual bats / birds.

Results

The dwelling is a C. 1950's brick-built dwelling with several extensions and an integral twin bay garage. No roof void is present. Overall, the dwelling remains in excellent condition and is occupied.

During the survey no evidence of bat occupation was identified. The dwelling provides bats with **Negligible Roosting Suitability**.

No evidence of nesting birds was found during the survey.

Recommendations

- A precautionary approach to development regarding bats
- Install integral bat and bird roosting / nesting boxes.
- Hard and soft landscaping schemes to be wildlife friendly

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1. Background

- 1.1. In October 2022, Crossman Associates was commissioned by Mr and Mrs Gardner to undertake a bat and bird survey of 80 Pine Road, Chandlers Ford; site Ordnance Survey grid reference is SU 4314 2203.
- 1.2. Figure 1 within Appendix I provides a site location map.
- 1.3. The objectives of the survey were to:
 - Assess the likely presence or absence of bats and birds
 - Identify any legislative or planning policy constraints relevant to the site
 - Determine the need for further surveys, compensation, or mitigation

Site Description

- 1.4. 80 Pine Road, Chandlers Ford is a C. 1950's detached brick built dwelling with pitched roofs clad with flat clay peg tiles and an integral twin bay garage. First floor accommodation is arranged to occupy the roof void and as a result no loft is present. The dwelling has been considerably enlarged. The dwelling has a good-sized rear garden, occupying the north-east side and mainly consisting of a well-maintained amenity lawn fringed with flower and shrub borders, the front garden consist mainly of the driveway also fringed with shrub / flower borders and a couple of trees.
- 1.5. The dwelling remains in excellent condition and was recently subject to roof renovation works. The dwelling is occupied.

- 1.6. The dwelling occupies the northern end of Chandlers Ford and immediate surroundings to the north include a sports ground that consists of an expanse of amenity sports turf. To the south, east and west the land is mainly occupied by further similar dwellings. To the east there is a narrow green buffer that extends both north and south, this includes a stream with mature vegetated banks, to the north the area links into a larger block of broadleaved woodland.
- 1.7. The wider landscape to the south, east and west is taken up mainly by the village of Chandlers Ford. There are frequent green breaks, particularly on the western side, which provide several small woodlands.

Proposals

- 1.8. Proposals are to enlarge the dwelling via extensions to the north-east and south-east elevations.

Legislation

- 1.9. 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) (EU Exit) Regulations 2019. 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 take into account bats within the planning process and the level of bat activity on-site must be fully assessed prior to the assessment the planning application.
- 1.10. 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. Survey work was undertaken by Fairbrass Knowles an experienced ecologist, full member of CIEEM and licensed bat worker; licence number 12392-CLS-CLS. The survey took place on 31 October 2022. The dwelling was fully accessible.
- 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* and barn swallow *Hirundo rustica*. The building was checked for field signs including nesting material, accumulations of droppings and/or pellets.

3. Results

Desktop Study

Data Search

- 3.1. The MAGIC website informs of no statutory sites designated for bats within a 4 km radius to the site.

Planning Policy

- 3.2. National policy guidance is provided by National Planning Policy Framework (NPPF), 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

- 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 reasons, 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 building is described in the table below and photographic reference can be found within 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.

Table 1: building description and bat suitability.

Description	Factors that increase likelihood of bats	Factors that decrease likelihood of bats	Evidence of bats	Potential for bats
80 Pine Road is a detached brick built dwelling with pitched roofs clad with flat clay peg tiles and an integral twin bay garage. The dwelling remains in excellent condition and was recently subject to roof renovation works. The dwelling is occupied.	80 Pine Road is located within a rural village that whilst not providing optimal habitat is likely to support more widespread bat species that are more tolerant of disturbed and artificially lit environments; typically common pipistrelle <i>Pipistrellus pipistrellus</i> and brown long-eared bat <i>Plecotus auritus</i>	80 Pine Road is a simply constructed dwelling employing modern and uniform materials. The roof is clad with flat peg tiles and well fitted ridge and hip tiles. Soffits are all modern replacements and all fit tightly. The 2 number dormers present on the front; south-west elevation both remain well-sealed to the roof and the sides also remain well sealed. Overall, the roof provides a comprehensively sealed area, that provides bats with no significant roosting opportunities. Exterior walls are all of well-pointed brick and all remain	No bats, bat droppings or any bat related evidence was discovered during the survey.	Negligible

Description	Factors that increase likelihood of bats	Factors that decrease likelihood of bats	Evidence of bats	Potential for bats
		free of any significant cracks or holes and all windows remain intact.		

Birds

- 3.5. No bird nests, birds, bird droppings or any other bird related evidence was found in association with any aspect of the dwelling.

Evaluation

Bats

Dwelling

- 3.6. During the scoping survey, no droppings, staining, feeding remains or actual bats were observed.
- 3.7. The dwelling is constructed from uniform materials which include well-sealed walls and a roof that is clad with tightly fitting flat peg tiles. All soffits are modern and fit well, providing no significant gaps or crevices. The dwelling has no loft.
- 3.8. 80 Pine Road is assessed to provide bats with **Negligible Roosting Suitability**.

Habitat

- 3.9. The local environs, while not providing bats with optimal habitat does offer a number of bat species, which are known to make use of gardens for foraging and commuting with useful potential habitat; typically common *pipistrelle* *Pipistrellus* and brown long-eared bat *Plecotus auritus*. Both these species are also well known to roost in association with buildings.

Birds

- 3.10. No birds or bird nesting activity was recorded in association with the dwelling.



4. Recommendations

- 4.1. The recommendations in the paragraphs below should be followed 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. Under the Government's National Planning Policy Framework (NPPF, 2021) opportunities to incorporate biodiversity in and around developments should be encouraged.

Species recommendations

Bats

- 4.4. Due to the lack of evidence of roosting bats within any aspect of the dwelling, it is not considered necessary or beneficial to undertake any further survey work.
- 4.5. Due to the transitory nature of bats, there is a small possibility that bats could be encountered during demolition / renovation works; therefore, all works must proceed under a cautionary 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 Crossman Associates or Natural England (telephone number 0300 0603900).

Exterior lighting

- 4.6. If exterior lighting is planned, it must consider the likely presence of bats and other nocturnal wildlife. Exterior lighting should consist of a modern LED-type and should be directional and or cowed. Lighting must not illuminate the garden or neighbouring gardens.
- 4.7. The choice of lighting is important to minimising light spill and it is recommended that the following factors are considered to reduce the impact as much as possible;
 - Narrow spectrum lights with no UV content
 - Low pressure sodium and/or warm white LED
 - Directional downlighting, illuminating downwards and below the horizontal plane to avoid light trespass
- 4.8. A recommended exterior light unit is the Knightsbridge WALL 1LBK which is a wall mounted down lighter installed with a 3000K LED bulb which provides a beam angle of 50 degrees.
- 4.9. If timers are fitted then these should be set to the minimum delay time required, ideally 1 minute.
- 4.10. An information sheet on lighting is provided under Appendix III; information sheets.

Other species

Hedgehog

- 4.11. In the UK hedgehogs are listed on schedule 6 of the Wildlife and Countryside Act (1981) as Amended which makes it illegal to kill or capture wild hedgehogs. Hedgehogs are also listed as a species of 'principal importance' under the Natural Environmental and Rural Communities Act 2006, which is meant to confer a 'duty of responsibility' to public bodies.
- 4.12. The site provides limited habitat for hedgehogs *Erinaceous europaeus* which may present within the general vicinity.
- 4.13. Excavated holes and trenches on building sites have the potential to trap wildlife including hedgehogs leading to the potential suffering and death of the animal (s) particularly if they become filled with water.
- 4.14. If during the development excavated holes / trenches are likely to be left open, then timber builders' planks should be fitted as ramps to enable any wildlife including hedgehogs a means of escape.
- 4.15. An information pack on Hedgehogs is provided under Appendix III; Information sheets.

Ecological enhancements

- 4.16. The following paragraphs provide recommendations that follow current NPPF guidance, see paragraph 3.2.

Bats

- 4.17. It is recommended that 1 number integrally fitted Habibat bat box (type 001) is fitted. This model is designed for a variety of bat species and has good thermal properties making it suitable as both a maternity roost and hibernation roost. This model of bat box is constructed into the wall of the extension as it is constructed making the operation very simple. The boxes can be specified with a variety of facings to suit any existing brick, wood, stonework or rendered finish, making the box unobtrusive and aesthetically pleasing. This box is approximately shoebox in

- size and provides a sealed box that does not allow bats to gain direct access to the dwelling. The boxes have the added benefit of being self-cleaning.
- 4.18. The bat box ideally should be placed beneath the eaves or on gable ends and away from windows and doors and ideally should be fitted in a location that gives bats immediate access to foraging habitat.
- 4.19. The actual placement of the bat boxes should be done in consultation with a suitably qualified ecologist.
- 4.20. An information sheet detailing this type of bat roosting box can be found in Appendix III; information sheets.
- 4.21. Bat boxes are available from www.habibat.co.uk

Birds

- 4.22. New nesting opportunities should be provided for house sparrows (which have suffered significant decline), and the new extension should be fitted with 1 number sparrow nest box.
- 4.23. Integrally fitted models should be used and can be constructed into the outer wall as it is built. Alternative models are available for surface mounting. Sparrow nest boxes are ideally fitted below eaves or on gable walls, ideally on north or easterly elevations. Suitable models include the Schwegler 1SP, which is suitable for both integral and surface fitment. This model is strong, durable, long lasting and available in brown or stone colour. Other models are available from www.habibat.co.uk and www.vivara.co.uk An information sheet on integral bird nesting boxes is included in Appendix III.
- 4.24. Bird boxes are available from www.wildlifeservices.co.uk telephone number 0333 9000 92. Further models are supplied by Habibat www.habibat.co.uk telephone number 01642 724626.

- 4.25. The siting of the bird boxes should be completed in consultation with a suitably qualified ecologist.

Landscape Recommendations

- 4.26. Any new landscape proposals should include new tree and shrub planting, including a range of native and non-native species. Where possible, boundary features should be created using native hedgerows rather than close board fencing allowing the free passage of wildlife, particularly hedgehogs.
- 4.27. If a solid fence is necessary, then this should be combined with a hedgerow. In the case of solid fences small holes measuring approximately 150 mm x 150 mm should be created at the bases to allow the passage of wildlife, including hedgehogs in and out of the garden.
- 4.28. An information sheet is included in Appendix III which includes a range of tree, shrub, and herb species that could be incorporated; these are recommended for encouraging bats but will also attract a wide range of other species.

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. This report represents a preliminary assessment only. Recommendations and conclusions are subject to change should further findings significantly differ from those collected from the survey efforts to date.
- 5.3. 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 (2012) *National Planning Policy Framework*. TSO

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

Appendix I – Site Figures

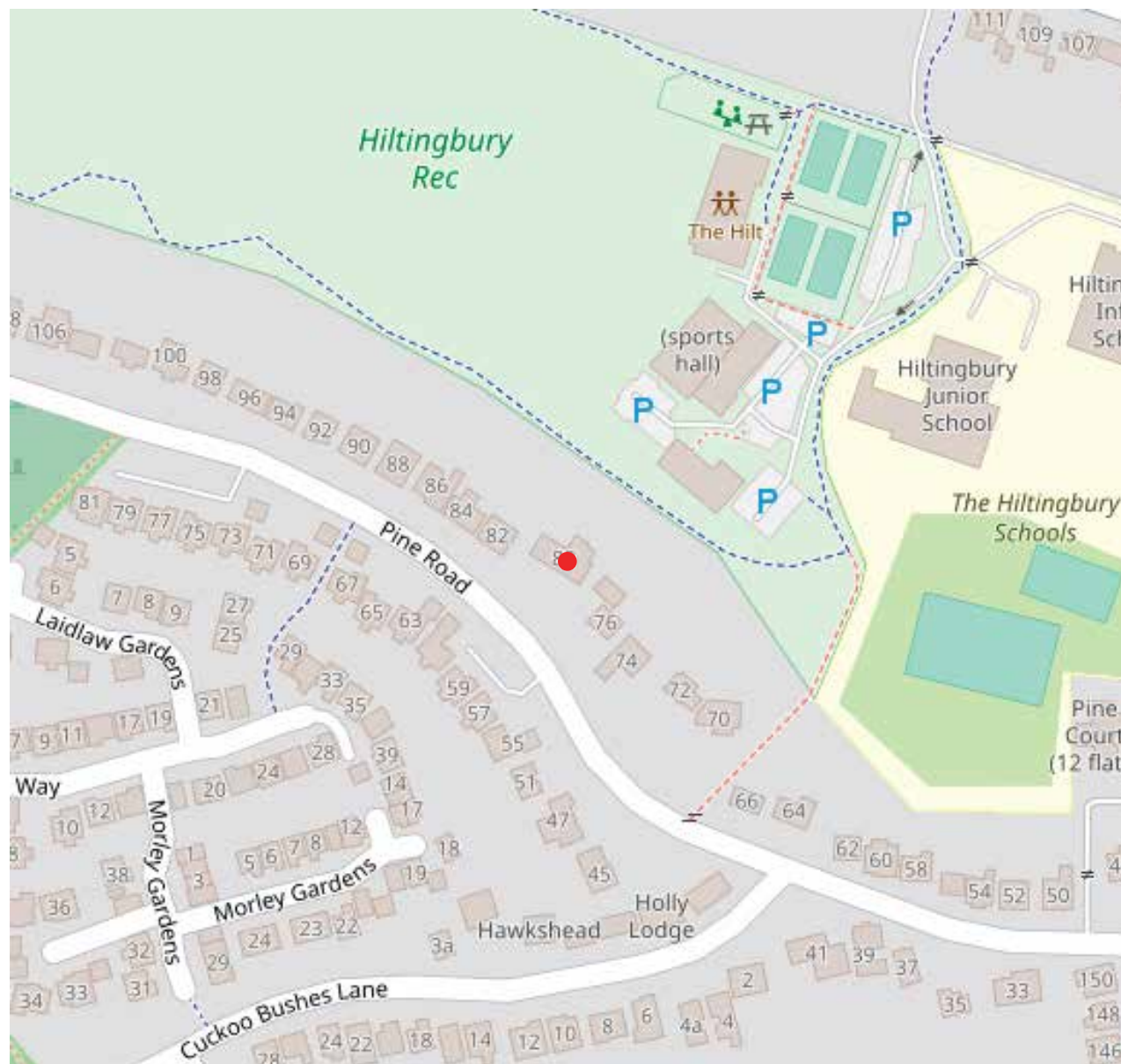


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● Site location



Client Mr & Mrs Gardner
Title Location plan
Site 80 Pine Road, Chandlers Ford
Figure 1
Date 18 November 2022
Scale Not to scale



Appendix II – Site Photographs

Photographs 1- 3



Photograph 1:

Front: south-west elevation.



Photograph 2:

Rear; north-east elevation and side; south-east elevation



Photograph 3:

Side; north-west elevation

Photographs 4 - 6



Photograph 4:

The roof tiles are tight fitting peg tiles. All hip and ridge tiles are present and well fitted.



Photograph 5:

The soffits all remain well-fitted and provide no significant crevices.



Photograph 6:

First floor accommodation occupies the roof void. No loft is present.

Photographs 7



Photograph 7:

Detail; showing the two-bay garage, which serves as storage and to house the owner's restored vintage tractor.



Appendix III– Information Sheets

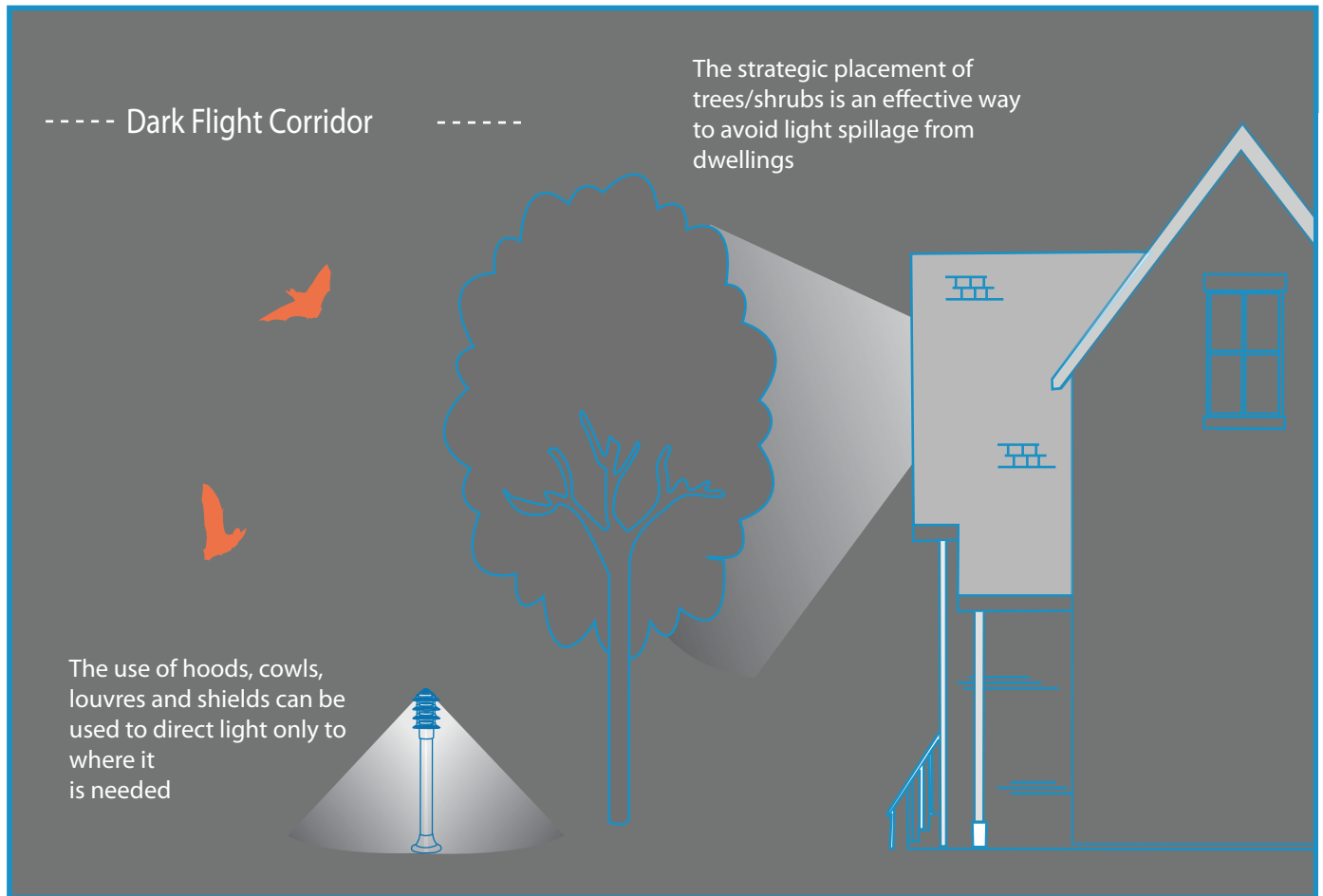
Bat Habitat Suitably Criteria

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, when designing lighting for pedestrian walkways, use short bollard lights that produce a low level light (as low as 3 lux) directed downwards.

Light Mapping

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

Light Levels

Proposed light levels within landscape plans should be as low as possible. If lighting is not needed, don't light.

Timing of Lighting

The times at when lighting is left on should be limited where possible. The use of movement sensors and timers for lights is useful for saving energy and reducing the amount of time a light is left on.

Impacts of Light on Bats

As nocturnal mammals, light causes disturbance to bats and many species will actively avoid lit areas. The illumination of bat roosts can delay bats emerging and thus shorten their foraging time and may eventually lead to bats abandoning their roost. The illumination of foraging or commuting areas may also lead to an increase in the rate of predation of bats by predators.


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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