

**Angela Graham Bat Consultancy Service Limited**

**Office 47, Bury Business Centre, Kay Street, Bury, Lancs, BL9 6BU**

**tel - 0161 763 6171, fax - 0161 761 7854, mob - 07710 184142**

**e-mail : [bat.consultancy@talktalk.net](mailto:bat.consultancy@talktalk.net) Company no. 7492656**

---



**Bat Survey Report (preliminary day-time survey):**

**Highcroft  
Painterwood  
Billington  
Whalley  
BB7 9JD**

OS grid reference:  
SD 7282 3562

*Commissioned-by:*  
Sue Barlow

**Survey Date: 1/2/19**

**Report Date: 5/2/19**

## **Table of Contents**

|                                                                                                                       |                    |
|-----------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>1. Summary</b>                                                                                                     | <b>page 3</b>      |
| <b>2. Introduction</b>                                                                                                | <b>page 3</b>      |
| <b>3. Bats and the law</b>                                                                                            | <b>page 5</b>      |
| <b>4. Survey</b>                                                                                                      | <b>page 6</b>      |
| <b>5. Limitations of the Survey</b>                                                                                   | <b>page 7</b>      |
| <b>6. Findings</b>                                                                                                    | <b>page 7</b>      |
| <b>7. Conclusions/Discussion</b>                                                                                      | <b>page 8</b>      |
| <b>8. Recommendations</b>                                                                                             | <b>page 9</b>      |
| <b>9. References</b>                                                                                                  | <b>page 9</b>      |
| <br><b>Appendix 1 - Angela Graham's Experience</b>                                                                    | <br><b>page 10</b> |
| <b>Appendix 2 - Criteria used in assessing risk of roosting (in the absence of obvious evidence of roosting)</b>      | <b>page 12</b>     |
| <b>Appendix 3 - Recommendations for further survey work when the findings of the preliminary survey were negative</b> | <b>page 14</b>     |
| <b>Appendix 4 - Examples of available integrated bat boxes</b>                                                        | <b>page 15</b>     |

## **1. Summary.**

*(This summary should be read in conjunction with the conclusions and recommendations.)*

This property was surveyed prior to internal refurbishment and raising-in-height of the roof.

It occupies quite an elevated position but is in an area where bats, especially the pipistrelle, are common. There is good feeding habitat immediately available and linking well with feeding habitat further afield.

There was no obvious access available for bats to roost either within the loft or under external features such as roof-tiles, fascias or cladding. The one exception was a small soffit gap, blocked by well-established cobwebs.

Internal works have already commenced. As the roosting potential is currently minimal, the project should progress to completion without delay. No further survey work is necessary unless work stops and isn't planned to commence again until after April 2020. In that case the survey should be up-dated prior to recommencement.

Currently, all that is required is a precautionary approach by contractors, who should stop work and seek advice in the unlikely event they encounter a bat or droppings that may have come from a bat.

The raising of the roof may provide an opportunity to enhance the biodiversity value of the property in accordance with the biodiversity objectives of the National Planning Policy Framework, via the use of one or more integrated bat boxes.

## **2. Introduction**

I was asked to assess the importance of this property to bats as part of the planning process, prior to restructuring of the interior and raising-in-height of the roof.

This is a large, modern-style, detached house. It is two-stories high at the front and single-storey at the rear:



Front (north-western) and rear elevations

It occupies an elevated position in a rural location, with good bat feeding habitat immediately available and linking well with habitats further afield:



Location of property indicated by red circle

It is less than 400m from the River Ribble, to the north.

The pipistrelle bat (2 species: *Pipistrellus pipistrellus* - the common pipistrelle, and *Pipistrellus pygmaeus* - the soprano pipistrelle) is common and widespread in the area.

Roosts of these species can occur in any building that provides suitable roosting crevices, with the risk of bat presence increased by close proximity to good bat feeding habitat and commuting routes; for example tree-lines, hedges, woodland, scrub and water courses and bodies. The bats use different roosts at different times of year, sometimes singly and sometimes in large groups of females with dependent young. They can move frequently and unpredictably between the roost sites known to them. The majority of house-holders with a roost of this species are unaware of it.

In summer females gather together each with their single off-spring in, sometimes large, maternity colony groups. Disturbance can cause the abandonment of babies (pups). In autumn when the young are independent, females visit males to mate. In winter the bats hibernate and rousing from hibernation - a slow process - can result in a depletion of fat reserves that may compromise the bats' ability to survive the winter. Females become pregnant in spring when their food (insects) becomes available again.

Other species likely to occur within 2 kilometres are the brown long-eared (*Plecotus auritus*) - the species most likely to leave evidence of roosting within lofts, Daubenton's (*Myotis daubentonii*), the whiskered (*Myotis mystacinus*)/Brandt's (*Myotis brandtii*), which

are hard to separate without dna analysis, noctule (*Nyctalus noctula*) and Natterer's (*Myotis nattereri*).

Bats also roost in tree cavities, and individual bats may roost in minor defects including underneath raised bark and in dense ivy.

### **3. Bats and the Law**

All British bats and their roosts are legally protected under the Wildlife and Countryside Act of 1981 (as amended) and the EC Habitats Directive of 1994 as implemented by the Conservation of Habitats and Species Regulations 2017.

Where a development will destroy a bat roost, a Low Impact Class Licence or a European Protected Species Licence (Mitigation Licence) is required before the roost can be interfered with in any way. The former applies in cases where only small numbers of common species of bat are using the building within certain parameters. It usually takes approximately 2 weeks for these licences to be issued, whereas the turn-around time for a full European Protected Species Licence is approximately 7 weeks once the application has been submitted. Any licence issued is a legally binding document.

Licences can only be issued providing planning permission has been granted, where applicable.

**When a roost is found, both the bat consultant and the planners have to apply the "three tests" required by Natural England before issuing planning consent. Essentially these are:**

- That the development is necessary for the purpose of "preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequence of primary importance for the environment";
- That there is "no satisfactory alternative";
- That the action authorised "will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range".

N.b. The way in which the necessity is assessed includes whether the client has an alternative that it would be reasonable to expect them to adopt.

Necessary mitigation and compensation measures to ensure the favourable conservation status of bats will be maintained, would include appropriate timing and methodology for the work, including details of how the bats will be provided-for in the long term.

**Planners are required by the Government to satisfy themselves before granting planning consent that it would be possible for a licence to be obtained if necessary. Accordingly they are obliged to apply the three tests before issuing consent. For this reason enough survey work has to have been undertaken that the planning authority can evaluate whether or not the three tests can be satisfied and what degree of compensation/enhancement is necessary.** To avoid delays in obtaining consent it is in the client's best interest to find out sooner rather than later whether any bat roosting issues need to be addressed.

Natural England, the Government body responsible for administering the law relating to bats, have issued guidelines to planners on how to proceed with respect to bats

Outside the planning system, the onus is on developers/members of the public, to have sufficient investigations undertaken to satisfy themselves (and the authorities in the event of a subsequent investigation), that their actions are unlikely to be in contravention of bat legislation.

**N.b. It should always be remembered that bats often roost in places not anticipated by a lay person, such as modern buildings, trees with cavities, and bridges. Some leave no signs in lofts, as they roost underneath external features such as roof slates, ridges, weather-boarding and cladding.**

In the case of a building, tree or other feature not already known to be a bat roost, if bats are found during the course of work, contractors are legally obliged to stop work and seek advice. This should be from an appropriately experienced and licenced bat ecologist.

#### *Additional Relevant Legislation and Policy.*

Between 1995 and 2010 certain more vulnerable habitats and species were the subject of National or Local Biodiversity Action Plans. This strategy for the protection of biodiversity has been superseded by UK post-2010 Biodiversity Framework, which is largely now implemented at county level. Internationally The Convention on Biodiversity produced a Strategic Plan for Biodiversity 2011-2020. Further to this the EU Biodiversity Strategy was launched in 2011.

Section 41 of the Natural Environment and Rural Communities Act 2006 lists species "of principal importance for the purpose of conserving biodiversity". The list was up-dated in 2014 and includes the brown long-eared bat (*Plecotus auritus*), noctule (*Nyctalus noctula*) soprano pipistrelle (*Pipistrellus pygmaeus*) and 4 other bat species.

The National Planning Policy Framework of 2012 states that "the planning system should contribute to and enhance the natural and local environment" by a number of means, including "minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks... ."

#### **4. Survey**

I made a daytime visit on **1/2/18** to undertake a preliminary survey of the building, assess its likely importance to bats and advise whether or not a precautionary approach or further survey work is needed.

Having been involved with bat survey work for 30 years and consultancy work for 20years, it is always my objective to carry-out my work in a manner consistent with accepted Good Practice Guidelines (2) and consistent with the code of practice of the CIEEM. I hold Natural England Class Licences CL21 (Annex B), 18 and 16. Amongst other things these cover me to apply for Low Impact Licences for clients and undertake bat survey work. I have a supplementary licence to photograph bats in roosts and a CL29 Barn Owl Class Licence. My credentials are expanded-upon in Appendix 1.

As far as possible, I surveyed the building inside and out with the aid of surveyor's ladders, 2 million candle-power torch, camera with 6x optical zoom and binoculars (8x42). Head-torch, 10x 50 binoculars, fibrescope (6 and 13mm heads, extendable to 2m), camera with 18x zoom and mirrors were also available if needed.



I was looking for access to potential roosting places and evidence of their use, such as droppings and staining.

I also take into consideration the surrounding habitat and the range of bat species it appears likely to support, along with the quality of the habitat linkages with the wider area.

## **5. Limitations of the survey**

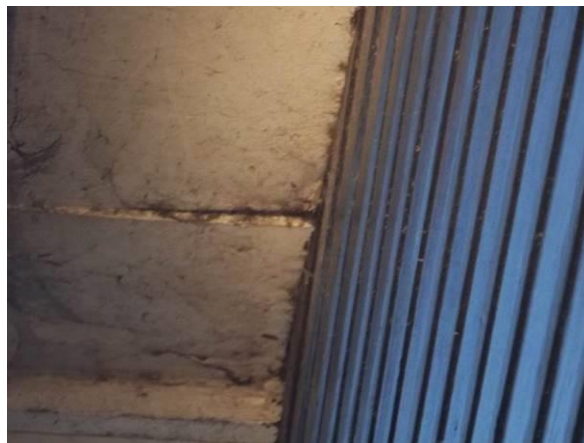
This was a preliminary survey to discover whether there are obvious signs of use by bats and to assess potential for use. If potential exists, usually follow-up work is required at dusk or dawn, possibly at a more appropriate time of year. See Appendix 3.

It should be noted that droppings are the sign most frequently found, but they are often deposited in areas that cannot be easily visualised, if at all, and they can turn to powder quite quickly. They are usually soon washed and blown away from exposed external surfaces so evidence of use often doesn't last long and pipistrelle bats in particular can change roosts frequently. However an assessment has been made of potential bat roosting places associated with the exterior of the building.

There are additional limitations to undertaking a bat survey in winter, when bats are hibernating and largely inactive. Droppings from the summer may no longer be evident.

## **6. Findings**

The property was assessed from the outside first. The roof, of very close-fitting tiles, is in good condition with no obvious potential bat access between tiles, under the ridge or at the verges. There were no gaps between soffits and walls and no gaps behind cladding or render. The one exception was between sections of soffit-board at the south-west-facing gable apex:



This was a small gap, and the dirty nature of the cobwebs obstructing it suggested they had been there for a prolonged period.

Given the findings of the survey of the exterior of the property it was not expected that signs of the presence of bats would be found in the loft. This is low in height and congested with trusses, limiting ease of access for inspection. It was however inspected from the loft-hatch, which is towards the south-western end of the building. There did not appear to be any bat access available at the internal gable wall:



South-western gable end

The roof is lined with board and there is insulating material at floor level.



## **7. Conclusions/Discussion**

*Appendix 2 gives an outline of the criteria used in assessing the level of risk of use by bats.*

Apart from a small soffit gap, blocked with well-established cobwebs, the exterior of the property appears to be completely sealed against potential bat access.



There was no evidence to suggest bats had been present.

Some internal works have already begun so there appears to be limited time for the only available, small gap at the soffit to clear of cobwebs and be used by bats.

Accordingly I've assessed the risk of this development impacting on bats to be negligible. Further survey work is not necessary unless work halts and does not recommence until after April 2020. In that case the survey should be up-dated before work recommences.

Minimal roosting potential will be lost to the development, but the biodiversity value of the building could be increased via the installation of one or more integrated bat boxes in external walls when the roof is raised in height. This would accord with the biodiversity objectives of the National Planning Policy Framework.

## **8. Recommendations**

*These recommendations should be read in conjunction with the conclusions above.*

Work, already commenced to the interior, should progress to completion without breaks of more than a few days.

Ensure contractors understand that if at any time a bat or droppings that may have come from a bat are found work **must** stop immediately. They have a legal obligation to do this. As far as practicable the feature that was sheltering the bat/s should be replaced. Further advice **must** then be sought from the bat consultant before work continues, even if the bat has flown off.

Have the survey up-dated if for any reason the project gets halted and does not start again until after April 2020.

## **9. References**

1. Eaton, M. A. et al (2015). Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man. British Birds 108: 708-746.
2. Ed. by Collins, J. (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines - Third Edition. Bat Conservation Trust.

## Appendix 1 - Angela Graham's Experience.

- I hold Natural England Class Licences CL21 (Annex B) - Registered Consultant 163 - CL18 and CL16. CL21 covers me to apply for Low Impact Class Licences for clients - a more stream-lined system for quickly obtaining a licence from Natural England when a roost of a small number of common bat species will be impacted-upon by the development. CL18 covers me for survey/consultancy/scientific work. CL16 allows me to do voluntary work with house-holders at domestic properties in certain circumstances, on behalf of Natural England, and to train new volunteers. I have a supplementary licence to use flash photography in bat roosts (2014/SC1/0160), possess up to 10 live/dead bat specimens (20123429). I have a CL29 licence to disturb barn owls.
- I'm a member of The Chartered Institute of Ecology and Environmental Management.
- I undertake my work in accordance with the principles outlined in the Bat Conservation Trust's "Good Practice Guidelines".
- I have been involved in bat conservation for 30 years, initially as a member of the South Lancashire Bat Group from its inception in 1987 and as a volunteer with the Nature Conservancy Council (NCC) - first licenced in 1989. Later, and for many years, I was Co-ordinator/Chair and Trainer for the South Lancashire Bat Group. I trained the people who currently run the group, one of whom is a Trustee for the Bat Conservation Trust. I was a founder member of the Greater Manchester Bat Group in 2002 and ran the group for 4 years.
- Over the last 23 years I have done increasing numbers of bat surveys on a consultancy basis, firstly part-time, then full time from December 2003.
- My experience at applying-for European Protected Species Licences with respect to bats spans approximately 20 years.
- From 2003 to 2008 I represented the bat groups of the north-west region at national bat worker meetings, hosted by the Bat Conservation Trust.
- I regularly communicate with the Ecologists who advise local authority planners, especially the Greater Manchester Ecology Unit and West Yorkshire Ecology raising concerns about practice and protocols.

Other experience includes:

- Attending bat-worker conferences every year since 1988 (mainly England, some in Wales) plus additional symposia on specific topics such as mitigation and woodland bats.
- Helping with winter surveys of underground hibernation sites in Clwyd and north Lancashire..
- Participating in "Bat Detector Workshops" during the 1990s in different areas of the country, concerned with locating bat roosts and feeding sites/commuting routes.
- Sitting on local council "Wildlife Advisory Groups" (WAGs) in the Greater Manchester area from the early 1990s until around 2005.
- Helping local authorities and the Greater Manchester Ecology Unit formulate their Biodiversity Action Plans for bats.
- Administering the bat casework for English Nature (now Natural England) in the South Lancashire and Greater Manchester areas over 1998-2000.
- Assisting with research involving mist netting, harp trapping and radio-tracking.

- Continuing to attend courses run by recognised experts to ensure I stay up-to date both with respect to bat survey-work and conservation, and issues such as health and safety.
- Re-passing the Construction Site (CITB) Operatives test in June 2017 and last updating my confined spaces training in 2006.
- Contributing to the Bat Conservation Trust's survey standards guidelines.

Other ecological experience includes:

- Bird watching for fun since 1982 with a general interest in wildlife, ecology and conservation for a similar period.
- Attending short courses and field training with respect to grasses, flowering plants, British mammals including water voles, reptiles and amphibians, non-native invasive plant species, Extended Phase 1 Habitat Surveying, National Vegetation Classification, Environmental Impact Assessment and use of GIS.
- Taking part in British Trust for Ornithology breeding bird and associated butterfly surveys annually.
- A year-long sandwich placement assisting with badger research, including radio-tracking.
- Short periods of voluntary work with the Lancashire Wildlife Trust and Royal Society for Protection of Birds.

**Appendix 2** - Personally-devised criteria used in assessing risk of roosting (in the absence of obvious evidence at the preliminary survey).

| Risk of roosting   | Definition                                                                                                                                                                                                                                                                                                                                                                                                            | Suggested Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nil                | Whole of structure/tree can be seen well enough to be sure there are no roosting opportunities.                                                                                                                                                                                                                                                                                                                       | No need to consider bats further unless development is delayed and potential roosting places might develop in time.                                                                                                                                                                                                                                                                                                                                                                                        |
| Minimal/negligible | All or most of structure/tree can be seen well enough to suggest there are few, if any, places suitable for roosting and the location does not provide easy access to potential feeding grounds.                                                                                                                                                                                                                      | Although roosting is thought to be unlikely and therefore the development is unlikely to impact on the favourable conservation status of bats, a precautionary approach should be taken in relevant areas at the time of the work. Further survey work needed only if development delayed.                                                                                                                                                                                                                 |
| Low                | Whole of structure/tree can be seen well enough to know there are no more than a few openings that could be used by an individual bat or two and/or these provide access to the sorts of features that are likely to be suboptimal due to materials and/or conditions within (eg unstable temperature); and/or the location provides limited access to potential feeding grounds.                                     | Although regular roosting is thought to be relatively unlikely and the development is unlikely to impact on the favourable conservation status of bats, a single survey at dusk or dawn in favourable weather conditions would be appropriate to accord with good practice. This would reduce the extent to which the judgement is based on speculation. If the findings were ambiguous e.g. possible bat emergence and/or considerable bat activity around the building, the survey would need repeating. |
| Moderate/medium    | A small number of openings are present in an area of reasonable habitat, and at least some seem likely to provide access to good conditions for roosting bats, and/or a loft/hay-loft is present that appears to have good qualities for roosting but there were limitations to access or no evidence of bats was found at the time. Cellars may be assessed as potentially being suitable for hibernation in winter, | Further work is needed to better assess the abundance of bat activity in the vicinity and whether or not bats seem to make use of the roosting potential available.<br>To accord with good practice a dusk emergence survey and a dawn return-to-roost survey will be necessary. A second inspection of the interior may also be necessary - if the survey was undertaken in winter for example.<br>As the absence of bats on two occasions wouldn't guarantee absence at other                            |

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                         | but the conditions and/or location aren't optimal.                                                                                                                                                                                                                                                                                                                                                                                                                                       | times, possibly including winter, some precautions would be needed at the time of the work and some roosting potential should be retained/re-created.<br>In the case of cellars and equivalent, inspection in winter is necessary.<br>Some work, for example pointing old stone walls, should be avoided in winter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| High                    | There is at least one feature that is typical of those favoured by bats for regular roosting and it/they provide access to abundant insect food on-site and/or via good links with the wider natural environment. The feature/s could be suitable for use by a maternity colony, either as a main or satellite roost, or by a territorial male in autumn in the case of pipistrelles, or by individuals or small numbers of bats at any time of year, including winter when hibernating. | The extent to which bats of different species make use of the potential available needs to be investigated by carrying-out at least 3 surveys at dusk and/or dawn spaced over the months of May to September inclusive, possibly extending into April or October if weather conditions are favourable. (Air temperature above 8°C and not more than light rain and/or gentle breeze. I generally plan to do surveys only when the forecast is for 10°C or above.)<br>Maternity colonies have largely disbanded by September, but territorial male pipistrelles may be missed without a survey in September and a lot of smaller roosts are discovered at this time of year.<br>As bats could hibernate unseen in winter and/or roost at other times not covered by the survey work, appropriate precautions would be needed at the time of the work along with maintenance of appropriate potential roosting places. |
| High - hibernation only | Cave-like places with stable conditions and high humidity, such as cellars can be used for hibernation in winter.                                                                                                                                                                                                                                                                                                                                                                        | High-risk potential hibernation sites need at least 3 inspections spaced over the winter months as bats will move between sites depending on the weather conditions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |



### Appendix 3 - Recommendations for further survey work when the findings of the preliminary survey were negative.

Bat Conservation Trust

**Table 7.3 Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).**

| Low roost suitability                                                                                                           | Moderate roost suitability                                                                       | High roost suitability                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| One survey visit. One dusk emergence or dawn re-entry survey <sup>a</sup> (structures).<br>No further surveys required (trees). | Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. <sup>b</sup> | Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn. <sup>b</sup> |

<sup>a</sup> Structures that have been categorised as low potential can be problematic and the number of surveys required should be judged on a case-by-case basis (see Section 5.2.9). If there is a possibility that quiet calling, late-emerging species are present then a dawn survey may be more appropriate providing weather conditions are suitable. In some cases, more than one survey may be needed, particularly where there are several buildings in the category.

<sup>b</sup> Multiple survey visits should be spread out to sample as much of the recommended survey period (see Table 7.1) as possible; it is recommended surveys are spaced at least two weeks apart, preferably more. A dawn survey immediately after a dusk one is considered only one visit.

Taken from "Bat Surveys for Professional Ecologists: Good Practice Guidelines", 3<sup>rd</sup> Edition (2)

**Table 7.1 Recommended timings for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).**

| Low roost suitability                                             | Moderate roost suitability                                                                     | High roost suitability                                                                         |
|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| May to August (structures)<br>No further surveys required (trees) | May to September <sup>a</sup> with at least one of surveys between May and August <sup>b</sup> | May to September <sup>a</sup> with at least two of surveys between May and August <sup>b</sup> |

September surveys are both weather- and location-dependent. Conditions may become more unsuitable in these months, particularly in more northerly latitudes, which may reduce the length of the survey season.

Multiple survey visits should be spread out to sample as much of the recommended survey period as possible; it is recommended that surveys are spaced at least two weeks apart, preferably more, unless there are specific ecological reasons for the surveys to be closer together (for example, a more accurate count of a maternity colony is required but it is likely that the colony will soon disperse). If there is potential for a maternity colony then consideration should be given to detectability. A survey on 31 August followed by a mid-September survey is unlikely to pick up a maternity colony. An ecologist should use their professional judgement to design the most appropriate survey regime.

Taken from "Bat Surveys for Professional Ecologists: Good Practice Guidelines", 3<sup>rd</sup> Edition (2)

#### **Appendix 4 – examples of available integrated bat boxes**

*N.b. Other boxes are available but the advice of the bat consultant should be sought before selecting one of these.*

##### EcoSurv Habibat

<http://www.ecosurv.co.uk/product/habibat-bat-boxes>

“Designed to be built into an exterior wall and is available in a variety of faces to match the building. Standard facings of red or blue brick - ideal for new builds - are normally available from stock, or boxes can be made to your specific requirements with a face of brick, stone, timber, or plain (for rendering). Supplied unpointed.”



Brick example of Ecosurv Habibat. Can also be faced with stone.

##### **Ibstock Ecozone**

<http://www.ibstock.com/sustainability-ecozone.asp>



##### **Enclosed Bat Box B**

- Designed specifically for the pipistrelle bat
- Available in all brick types
- Discrete home for bats
- Various sizes
- Several roosting zones are created inside the box
- Bats are contained within the bat box itself
- Maintenance free with entrance at the base
- Ideal for new build & conservation work



#### Enclosed Bat Box C with engraved motif

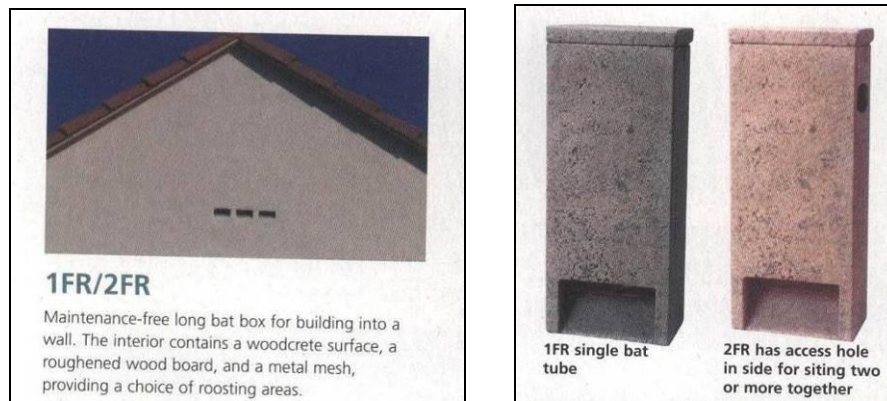
- Designed specifically for the pipistrelle bat
- Available in smooth blue, smooth gold & smooth red
- Attractive "bat" motif
- Discrete home for bats
- Various sizes
- Several roosting zones are created inside the box
- Bats are contained within the bat box itself
- Maintenance free with entrance at the base
- Ideal for new build & conservation work

|                                           | Sizes                          | Durability                    |
|-------------------------------------------|--------------------------------|-------------------------------|
| Eco Habitats for Bats - Technical Data: A | 215mm x 65mm                   | F2 S2 - Fully Frost Resistant |
| Eco Habitats for Bats - Technical Data: B | 215mm x 215mm or 215mm x 290mm | F2 S2 - Fully Frost Resistant |
| Eco Habitats for Bats - Technical Data: C | 215mm x 215mm or 215mm x 290mm | F2 S2 - Fully Frost Resistant |



Above: typical unit in situ. Photo © Angela Graham

## Schwegler 1FR/2FR



## Forticrete

<http://www.forticrete.co.uk/products/184/bat-boxes.html>.



Above and below - standard colours available. Others available to order







Example of Forticrete boxes in situ

Photos above © Angela Graham

“Forticrete’s boxes have been designed to be fitted to your property easily. Suitable for new build construction or renovation work where there is a requirement to provide a habitat for Pipistrelle bats.”

### **Bat and Bird Box Suppliers**

*Schwegler woodcrete:*

NHBS: 01803 865913

[http://www.nhbs.com/bat\\_boxes\\_eqcat\\_421.html](http://www.nhbs.com/bat_boxes_eqcat_421.html)

Envisage Wildcare. 01793 724848:

[http://www.wildcareshop.com/Products\\_Results.php?pageNum\\_WADAProducts=0&totalRows\\_WADAProducts=25&Search=1&ProductCategoryID\[\]=5](http://www.wildcareshop.com/Products_Results.php?pageNum_WADAProducts=0&totalRows_WADAProducts=25&Search=1&ProductCategoryID[]=5)

Nature Counters. 07917 340114

<http://www.naturecounters.com/catalog/index.php?cPath=36>

Jacobi Jayne: <http://www.livingwithbirds.com/nest-boxes-by-species/bats/>