Conditions 8 & 9 – PA/2015/0568

Biodiversity Management Plan

October 2017

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Conditions 8 & 9 – PA/2015/0568:
Biodiversity Management Plan

1 INTRODUCTION

Ecology and Forestry Ltd was commissioned by Edwardson Associates Ltd on behalf of L Kirkby Farms Ltd to prepare a site specific Biodiversity Management Plan relating to an agricultural building at Burnham Beeches Farm Access Road to Burnham Beeches Farm, Thornton Curtis, DN18 6EH. The plan is required to ensure compliance with planning conditions 8 & 9 of application number PA/2015/0568 granted by North Lincolnshire Council dated 18 June 2015:

> 8.
> No development shall take place until a Biodiversity Management Plan has been submitted to and approved in writing by the Local Planning Authority.
>
> The plan shall include:
> a) Details of measures to avoid harm to bats and nesting birds during demolition, vegetation clearance and construction works;
> b) Details of bat roosting features to be installed;
> c) Details of nesting sites to be installed to support house sparrows and barn swallows;
> d) Restrictions on lighting to avoid impacts on bat roosts, bat foraging areas bird nesting sites and sensitive habitats;
> e) Proposed timings for the above works in relation to the completion of the building; and
> f) Prescriptions for the planting of native trees of high biodiversity value in accordance with submitted drawing number 101.
>
> Reason
> To protect features of recognised nature conservation importance in accordance with policies CS5 and CS17 of the Core Strategy.
>
> 9.
> The Biodiversity Management Plan shall be carried out in accordance with the approved details and timings, and the approved features shall be retained thereafter, unless otherwise approved in writing by the local planning authority. The applicant or their successor in title shall submit photographs of the installed bat roosting and bird nesting features, within two weeks of installation, as evidence of compliance with this condition.
>
> Reason
> To protect features of recognised nature conservation importance in accordance with policies CS5 and CS17 of the Core Strategy.

This plan utilises the submitted Ecological Assessment dated September 2014 which was undertaken by Ecology & Forestry Ltd. It is hoped that implementing the plan will contribute to the achievement of local and national targets for UK BAP priority species and habitats and additional species and habitats which are not listed in the UK BAP but may be locally significant for a variety of reasons may coincidentally benefit.

2 SITE DESCRIPTION

2.1 Site communities and habitats

Burnham Beeches Farm, located at NGR: TA 04180 16820 is an isolated farmstead consisting of some five domestic dwellings and an arrangement of traditional and modern farm buildings. The farmstead is located on a footprint of hard standing and roads bordered by rough grassland, trees and scrub.

2.2 Surrounding habitats

The site is further surrounded by grazed pasture, neighbouring woodland plantations and arable land. A pond is present immediately due south of the survey site which is separated from site by a solid 8' high red brick, stone capped wall.. The wider area is dominated by arable agriculture. The site is comprised two traditional former agricultural buildings and associated crew yard walling.

2.3 Associated buildings

There is a large solid brick farmhouse and associated outbuildings set in mature and wooded grounds to the east of the site. Two pairs of brick cottages, one due south and one due west are also present. A large modern, open sided barn of steel construction and a further three substantial modern agricultural buildings are located immediately north of site. West of the main barn is an east facing open fronted former cart shed now used for general agricultural storage.

2.4 Proposed work

Planning permission has been granted for the:

'conversion, internal and external alteration and re-use of redundant agricultural building to form 1no. dwelling following demolition of existing modern agricultural building at Burnham Beeches Farm Access Road to Burnham Beeches Farm, Burnham, Thornton Curtis, DN18 6EH'

3 BATS

3.1.1 Legal protection and BAP status

In England, Scotland and Wales, all bats are strictly protected under the Wildlife and Countryside Act 1981 (and as amended); in England and Wales this legislation has been amended and strengthened by the Countryside and Rights of Way (CRoW) Act 2000.

Bats are also protected by European legislation; the EC Habitats Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2010 – often referred to as 'The Habitat Regs'. Taken together, all this legislation makes it an offence to:

- Deliberately capture (or take), injure or kill a bat
- Intentionally or recklessly disturb a group of bats where the disturbance is likely to significantly affect the ability of the animals to survive, breed, or nurture their young or likely to significantly affect the local distribution or abundance of the species whether in a roost or not
- Damage or destroy the breeding or resting place of a bat
- Possess a bat (alive or dead) or any part of a bat
- Intentionally or recklessly obstruct access to a bat roost
- Sell (or offer for sale) or exchange bats (alive or dead) or parts of bats

A roost is defined as being 'any structure or place that is used for shelter or protection', and since bats regularly move roost site throughout the year, a roost retains such designation whether or not bats are present at the time.

Biodiversity and Government Policy

In addition to the legislation described above, which is in place to safeguard species such as bats (and their roosts) and barn owls, there is also legislation and policy which imposes duties to take account of statutorily protected species such as bats and also to undertake action to prevent loss of biodiversity and species/habitats which have been identified as priorities for the UK. In England and Wales, the Natural Environment and Rural Communities (NERC) Act 2006, imposes a duty on all public bodies (including Local Authorities and statutory bodies) to conserving biodiversity – including the restoration and/or enhancement of a population or habitat. In addition, government planning policy guidance throughout the UK, provided in Planning Policy Statement (PPS) 9 and OPDM Circular 06/2005, states that Protected Species are a 'material consideration' when assessing development proposals and requires that local planning authorities must take account of protected species issues prior to determining planning applications.

Eleven species of bat have been recorded in Lincolnshire:

whiskered bat	*Myotis mystacinus*
Brandt's bat	*Myotis brandtii*
Natterer's bat	*Myotis nattereri*
Daubenton's bat	*Myotis daubentoni*
noctule	*Nyctalus noctula*
Leisler's bat	*Nyctalus leislen*
common pipistrelle (45kHz)	*Pipistrellus pipistrellus*
soprano pipistrelle (55kHz)	*Pipistrellus pygmaeus*
Nathusius pipistrelle	*Pipistrellus nathusii*
barbastelle	*Barbastella barbastellus*
brown long-eared bat	*Plecotus auritus*

The noctule, soprano pipistrelle, barbastelle and brown long-eared bat are priority species in the UK BAP and have national action plans.

Lincolnshire Biodiversity Action Plan (2006)

3.1.2 Requirement – Measures to avoid harm to bats during development

A method statement designed to avoid harm to bats during proposed construction works can be found in Appendix 1. All contractors working on the building are to be briefed on the legal protection afforded to bats and their places of shelter and on how to proceed if a bat is discovered during the course of the work. A procedure to follow in the event of discovering bats on site is provided within Appendix 1. A copy of this is to be available on site during the development.

3.1.3 Requirement – Bat roosting features

Following the recommendations of the Protected Species Survey of site relating to the potential presence of foraging and/or roosting bats within the survey site and immediate environs, the Local Planning Authority require details of bat roosting features to be installed on site. It is therefore required that:

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- 2 x Schwegler 1FR bat tubes or similar will be installed during the construction phase due to the 'integral' nature of the required bat roost units. The bat roosting boxes are to be positioned in accordance with best practice methods and will be positioned at least 12 feet above the ground.
- 1 x bat roost unit is to be installed as high as possible in the north east corner of the building on the eastern facing wall of the building.
- 1 x unit is to be installed as high as possible on the north eastern end wall of the building.

This will provide potential bat populations with long term roosting opportunities and access to potential roost sites experiencing differing climatic conditions to help meet species specific requirements an provide a potentially longer annual opportunity for occupation.

Approximate suitable locations are provided in Figure 1, Appendix 2. The exact installation locations are to be determined at the time of erection.

Examples of the recommended bat roost units or similarly appropriate alternatives can be found in appendix 3.

3.1.4 Requirement – Lighting

The ecological effect of artificial lighting in the countryside is a topic of increasing concern. Recent estimates have shown a 24% increase in light pollution in the UK between 1993 and 2000. Lighting schemes can damage bat foraging habitat directly through loss of land and fragmentation, or indirectly by severing commuting routes from roosts.

- It is required that any security or amenity lighting on site is physically directed to avoid light spillage onto adjacent semi-natural features/habitats and the use of shields to direct light to the immediate grounds only will be adopted.
- No 'up lighting' designed to illuminate the building itself will be installed.
- Sodium lamps instead of mercury or metal halide lamps will be utilised.
- The height of lighting columns in will be as short as is possible as light at a low level reduces the ecological impact.
- Light sensors will be utilised to provide some dark periods on site.

3.2 Birds

3.2.1 Legal protection and BAP status

All common wild birds are protected under The Wildlife and Countryside Act 1981 (and as amended). Under this legislation it is an offence to:

- Kill, injure or take any wild bird
- Take, damage or destroy the nest of any wild bird while it is in use or being built
- Take or destroy the egg of any wild bird

Certain rare breeding birds are listed on Schedule 1 of The Wildlife and Countryside Act 1981 (and as amended). Under this legislation they are afforded the same protection as common wild birds and are also protected against disturbance whilst building a nest or on or near a nest containing eggs/unfledged young.

The Grey partridge *Perdix perdix*, lapwing *Vanellus vanellus*, yellow wagtail *Motacilla flava*, skylark *Alauda arvensis*, corn bunting *Emberiza calandra*, linnet *Carduelis cannabina*, yellowhammer *Emberiza citrinella*, reed bunting *Emberiza schoeniclus*, turtle dove *Streptopelia turtur*, bullfinch *Pyrrhula pyrrhula*, starling *Sturnus vulgaris*, tree sparrow *Passer montanus* and curlew *Numenius arquata* are priority BAP species in the UK BAP and have national action plans. They are all recorded in Lincolnshire. A total of seventeen species of bird have been included in the Lincolnshire BAP Farmland Bird Species Action Plan.
Lincolnshire Biodiversity Action Plan (2006)

The Local Planning Authority requires house sparrow *Passer domesticus* (Bird of Red list concern) and swallow *Hirundo rustica* nesting features to be installed on site to support these species in particular.

3.2.2 Requirements – Measures to avoid harming birds during development

- Development will avoid the active nesting season, which is typically considered to run from 1 March to 31 July inclusive.
- Development may be permitted during the bird breeding season, providing a search for nests is carried out before commencement, and any active nests will be protected until the young fledge.

3.2.3 Requirements - house sparrows

- 2 x Schwegler 1SP Sparrow Terraces or similar are to be erected on site. **Boxes are to be erected immediately after completion of the permitted development**.
- The boxes should be erected at least 3 metres above ground level and should be south or south east facing. As such, erection on the south facing wall of the building at as great a height as possible is required.
- The exact installation locations are to be determined at the time of erection.

An approximate suitable location is provided in Figure 1, Appendix 2.

1SP Schwegler Sparrow Terrace and/or Wooden Triple Sparrow House

Nest box terraces can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of houses in built-up areas, and on industrial and agricultural buildings such as barns, sheds and factories.

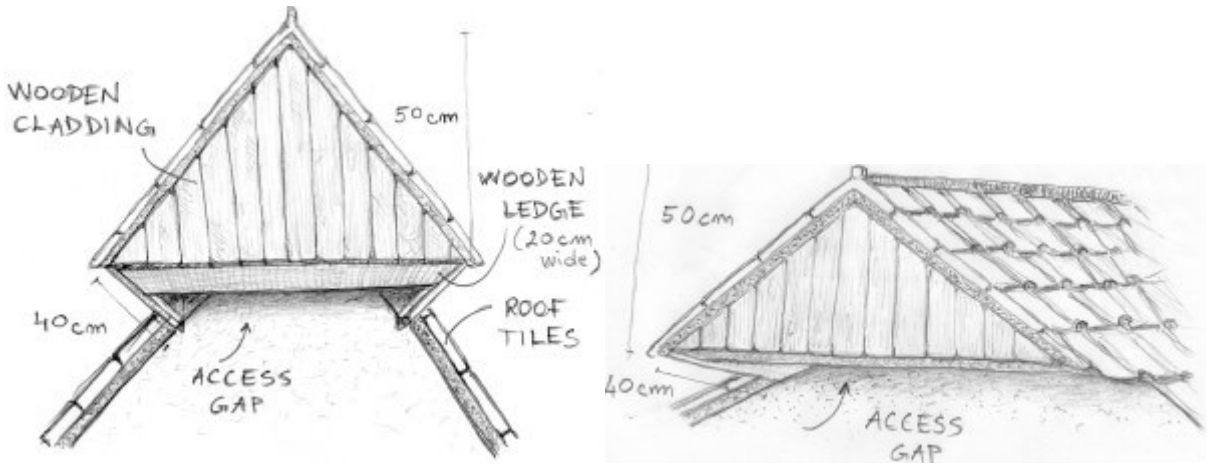
Ideally place the terrace two metres or more above the ground. Either install on the surface of the wall, or install directly into the wall. Cleaning is advisable but not necessary. Schwegler bird boxes are made from 'Woodcrete', a long lasting material which will not require maintenance.

All boxes are available from various natural history supply companies, including http://www.nhbs.com/

3.2.4 Requirements – swallows

As swallows prefer to nest inside built structures it can be difficult to incorporate such provision but possibilities could include having areas above garages, inside porches, or wheelie bin enclosures which can be designed to accommodate the birds without the resultant mess becoming a problem. Plans for the site do not include built structures suitable for mitigation. As such an alternative purpose built covered nest box structure is required:

- 1 x purpose built covered nest box structure (2 examples are shown below) is to be erected on the north end wall of the building. The structure is not currently commercially available but can be constructed by tradesmen on site. The external timber elements of the structure will be painted with non-toxic preservative to ensure longevity.



- 2 x swallow nest cups (Schwegler –No 10 Swallow Nest – shown below) are to be incorporated into the covered nest box structure
- The mitigation is to be erected during construction.

Photograph 1: Schwegler No 10 Swallow Nest – constructed from WoodcretePLUS™ is a natural material made from a mixture of 75% wood sawdust, concrete and clay.

Nest cups are available from various natural history supply companies, including http://www.nhbs.com/

3.2.5 Requirement – Lighting

The ecological effect of artificial lighting in the countryside is a topic of increasing concern. Recent estimates have shown a 24% increase in light pollution in the UK between 1993 and 2000. The local authority requires any proposed lighting scheme does not impact on bird nest sites.

- It is required that any security or amenity lighting on site is physically directed to avoid light spillage onto adjacent semi-natural features/habitats and the use of shields to direct light to the immediate grounds only will be adopted.
- No 'up lighting' designed to illuminate the building itself will be installed.
- Sodium lamps instead of mercury or metal halide lamps will be utilised.
- The height of lighting columns in will be as short as is possible as light at a low level reduces the ecological impact.
- Light sensors will be utilised to provide some dark periods on site.

3.2.6 Requirement - Native Trees

The local authority requires the planting of native trees of high biodiversity value in accordance with the submitted drawing number 101. 7 trees are proposed for planting.

Trees and woodlands support a range of national BAP priority species. In Lincolnshire Just over 4% is covered by woodland, making it one of the least wooded areas in the UK. The dominance of agriculture means that woodland is confined to those areas of least value for food production. In the process, woodlands have not just become reduced in extent but have also become more fragmented, even in those areas where substantial blocks remain. There has not only been a reduction in the quantity of woodland but also in the quality.

The Lincolnshire BAP states that: 'newly planted native woodland cannot be as species rich as ancient woodland, it plays a valuable role in reconnecting this fragmented habitat, and provides opportunities for people to experience and enjoy woodland. The area's woodlands support a range of national BAP priority species'

- A total of 7 native hard wood trees are to be planted.
- Species are to include a mix of: pedunculate oak *Quercus robur*, beech *Fagus sylvatica*, holly *Ilex aquifolium*, yew *Taxus baccata* and hazel *Corylus avellana*
- All trees should be 80 – 100 cm bare rooted transplants which should be pit planted utilising a 75 – 120 cm tubular tree guard supported by a stake.
- A tree maintenance schedule is given below in Table 1:

Table 1:

Tree maintenance schedule

YEAR 1	
March	Check shelters
April	Apply contact herbicide
July	Assess plant losses
September	Check shelters. Remove (cut or pull) tall weeds
November	Replace failed plants
YEAR 2	
March	Check shelters
April	Apply contact herbicide
July	Assess plant losses
September	Check shelters. Remove (cut or pull) tall weeds
November	Replace failed plants
YEAR 3	
January	Consider residual herbicide application
March	Check shelters
April	Apply contact herbicide
July	Assess plant losses
September	Check shelters. Remove (cut or pull) tall weeds
November	Replace failed plants
YEAR 4	
March	Check shelters
April	Apply contact herbicide
YEAR 5 ONWARDS	Gradual removal of guards and canes Continued spot treatment with contact herbicide as required

4 REFERENCES

Acer Ecology 2017. *Swallow mitigation.* Available at:

http://www.acerecology.co.uk/wp-content/uploads/2016/11/Mitigation-for-Swallows.jpg

Bat Conservation Trust 2012 'Good Practice Guidelines'

Bat Conservation Trust 2012 - The Bat Roost Replacement and Enhancement Resource - http://roost.bats.org.uk/

Ecology & Forestry Ltd (2014) *Protected Species Survey at Burnham Beeches Farm, Burnham, North Lincolnshire, DN18 6EH*

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Eaton M A et al 2009. *Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man*. British Birds 102, pp296–341.

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Lincolnshire Biodiversity Action Plan (2006) Action for Wildlife in Lincolnshire.

Mitchell-Jones, A.J. & McLeish, A.P. (2004). The Bat Workers' Manual. JNCC.

Natural England. 2004. Bat Mitigation Guidelines. English Nature, Peterborough

APPENDIX 1
Method Statement

METHOD STATEMENT FOR DEVELOPMENT IN AREAS WHERE BATS MAY BE PRESENT & A DEFRA LICENCE IS NOT CONSIDERED TO BE NECESSARY

SITE: Burnham Beeches Farm Access Road to Burnham Beeches Farm, Thornton Curtis, DN18 6EH
NGR: TA 04180 16820
DATE OF ISSUE: 15 October 2017

1 INTRODUCTION

This method statement is intended to provide advice for those involved in work that could affect bats. ***It should be clearly understood that a failure to comply with this method statement could result in a criminal prosecution***. It is therefore important that information contained in this document is delivered to the relevant site staff.

Site staff must be fully briefed using this method statement and sign off to say that they have read and understood it.

A copy of the original bat survey report (Ecology & Forestry Ltd 2014) should also be issued to the site supervisor.

2 LEGAL PROTECTION

In England, Scotland and Wales, all bats are strictly protected under the Wildlife and Countryside Act 1981 (and as amended); in England and Wales this legislation has been amended and strengthened by the Countryside and Rights of Way (CRoW) Act 2000.

Bats are also protected by European legislation; the EC Habitats Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2010 – often referred to as 'The Habitat Regs'. Taken together, all this legislation makes it an offence to:

- Deliberately capture (or take), injure or kill a bat
- Intentionally or recklessly disturb a group of bats where the disturbance is likely to significantly affect the ability of the animals to survive, breed, or nurture their young or likely to significantly affect the local distribution or abundance of the species whether in a roost or not

- Damage or destroy the breeding or resting place of a bat
- Possess a bat (alive or dead) or any part of a bat
- Intentionally or recklessly obstruct access to a bat roost
- Sell (or offer for sale) or exchange bats (alive or dead) or parts of bats

A roost is defined as being ‘any structure or place that is used for shelter or protection’, and since bats regularly move roost site throughout the year, a roost retains such designation whether or not bats are present at the time.

Penalties on conviction – people committing bat crimes can face six months imprisonment and/or unlimited fines. Additionally any profits made as a consequence of not following lawful process can be confiscated and items used to commit the offences such as vehicles, plant or machinery can be forfeited.

3 GENERAL PRECATIONARY MEASURES

The following features will be checked with a torch immediately prior to work commencing:

- Missing bricks/mortar in internal walls – anything larger than 25mm^2 that goes back more than 50mm into the wall.
- Under ridge tiles, between tiles and felt and/or sarking boards – tiles should be removed by hand.
- Behind lead flashing
- Gaps where roof trusses enter walls
- Gaps between brickwork and any door/window frames and lintels

4 WHAT TO DO IF BATS ARE FOUND

- Stop work in that area immediately – work in other areas can continue with caution

- Cover the bat over If the bat does not voluntarily fly out, then the aperture will be carefully covered over gently, taking care not to injure but protect the bat(s) from the elements, leaving a small gap for the bat to escape voluntarily. Any covering should be free from grease or other contaminants, and should not be a fibreglass-based material

- Prevent further disturbance.

- Make a record of when and where the bat was found and by whom.

- Contact either Rod Strawson the project bat ecologist (07881) 666 215 or Natural England East Midlands office (0300) 060 3900.

- Do not handle the bat unless it is absolutely necessary to do so for its welfare, in which case wear gloves.

- If the bat has to be moved or is injured, put it in a ventilated box with a securely fitting lid, and put the box in a safe, cool, quiet place for the bat's protection whilst awaiting the arrival of the licensed person.

- An appropriately licensed bat worker will liaise directly with Natural England. Actions will then be taken following advice given. This may include removal of bats, but only where direct written or verbal permission is gained from Natural England.

- Only when Natural England is satisfied that there is no further risk to bats will works recommence.

- Should it transpire that the operation being carried out is of more risk to bats than was originally thought, then works will be stopped until they can be supervised by an appropriately licensed bat worker.

5 ADDITIONAL INFORMATION

- All timber treatment products used will be from the approved list. See Natural England Technical Information Note TIN092 available from: **www.naturalengland.org.uk**.
- An ecologist with a Natural England bat licence will be consulted over the design and installation of any mitigation measures.

This statement should be copied to the site agent, architect, clerk of works, and to those contractors whose work may affect bat roosts at this site including those involved in demolition, timber treatment, roofing and building works.

Issued to:	**Prepared by:**
Agent/Architect: **Edwardson Associates Ltd** **Paddock House** **10 Middle Street South** **Driffield** **East Yorkshire** **YP25 6PT** **01377 249720**	 **Rod Strawson** **Ecology & Forestry Ltd** **Kelstern** **Louth** **Lincolnshire** **LN11 0RG** **07881 666215**

6 REFERENCES

Bat Conservation Trust. 2016. *Bat surveys – Good practice guidelines*. 3rd Edition. Bat Conservation Trust, London.

English Nature. 2004. *The Bat Mitigation Guidelines*. English Nature. Peterborough

Joint Nature Conservation Committee, 2004. Bat Workers Manual. 3rd Edition.

APPENDIX 2
Figure 1


Swallow nest unit
Bat roost units
Sparrow terraces
Google Earth
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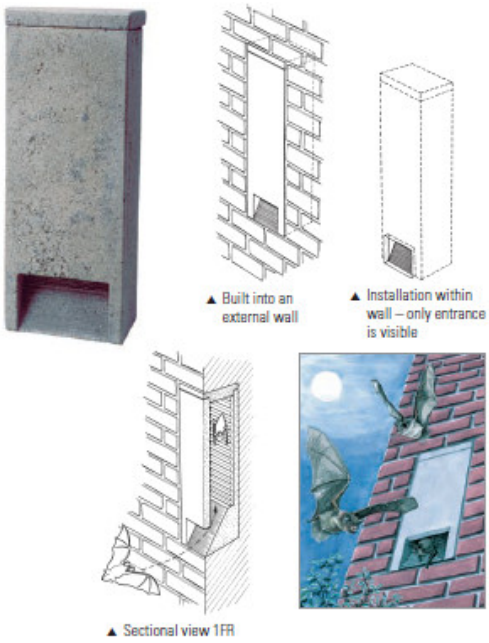
APPENDIX 3
Examples of bat roost units

Schwegler 1FR:



Schwegler 2FR:

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eco habitats for bats

Eco Habitats for Bats - Technical Data: A	
Sizes	215mm x 215mm or 215mm x 296mm
Durability	F2 S2 - Fully frost Resistant

Eco Habitats for Bats - Technical Data: B	
Sizes	215mm x 215mm or 215mm x 296mm
Durability	F2 S2 - Fully frost Resistant

Eco Habitats for Bats - Technical Data: C	
Size	215mm x 65mm
Durability	F2 S2 - Fully frost Resistant

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eco habitats for bats

Features & Benefits

Enclosed bat box (A & B)

- Designed with the Pipistrelle Bat in mind
- Available in all brick types
- Attractive 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 as the entrance is at the bottom
- Ideal for new build & conservation work

Free Access Option (C)

- Discrete Single Bat brick
- Easy to install
- Allows bats to create a natural home habitat within the cavity of the building

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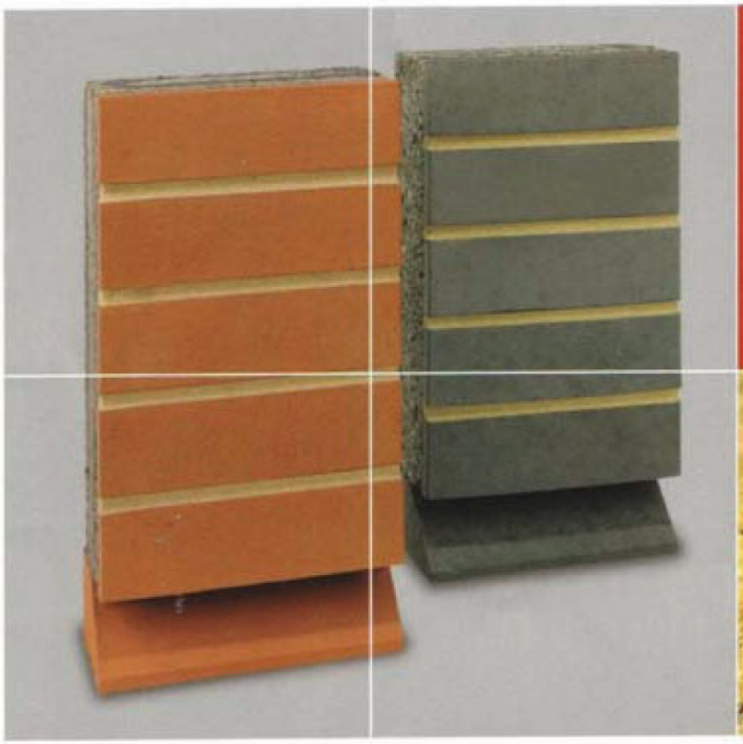
contact numbers

sales office 0870 903 4010
design advice 0870 903 4018
technical services 0870 903 4017
literature and samples 0870 903 4030

Wienerberger
Building Value



Bat Boxes. To protect and conserve.

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THE wildlife TRUSTS
Birmingham and the Black Country
Cheshire
Derbyshire
Devon
Durham
Lancashire, Greater Manchester & North Merseyside
Staffordshire
Surrey
Sussex

Wienerberger has worked closely with EcoSurv Ltd to create a brand new range of eco-friendly bat boxes. Compared to existing bat boxes on the market, the Wienerberger bat box is larger and features an innovative arrowhead structure which helps maintain the bats body temperature in order for them to flourish.

The bat box is designed to encourage the most popular bats found in the UK, such as Pipistrelles, Natterer's, Whiskered and Brandt's bats. Other bat box options are available for other breeds via special order.

Bats are an important part of our natural landscape. The latest legislation to protect bat species and their habitats has now brought the UK in line with the rest of Europe and made bat conservation mandatory on any new building project where bats may exist.

Our bat boxes also help towards gaining additional ecological points to meet the requirements of the Code for Sustainable Homes.

Our bat boxes are currently available in Staffordshire Smooth Red and Smooth Blue but can also be manufactured to any colour in our range.

Further detailed information on Wienerberger bat boxes and bat conservation is available at **www.brick.co.uk/batbox** or contact Design Services on **0161 491 8200**

All boxes are available from various natural history supply companies, including http://www.nhbs.com/