# Bat Activity Surveys at

# Ty Newydd,

# School Lane, Overton,

# Wrexham LL13 0ES

# on

# 13th, 16th and 19th May and

# 12th, 26th and 27th June 2022

Report completed 11th July 2022
Ref: TYN130522

Survey by:
Susan Worsfold BSc (Hons) ACIEEM
Lyngarth,
Ellesmere Road,
St. Martins,
Oswestry,
Shropshire
SY11 3HT

01691 772310
or 07752 105600
s.worsfold@hotmail.co.uk

Requested by:
Craig Williams
Ty Newydd,
School Lane,
Overton,
Wrexham
LL13 0ES

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# 1. Summary

The purpose of the report is to provide results from a bat activity survey to add to a scoping survey, initially carried out by Tyrer Ecological Consultants Limited in March 2022.

Two dusk emergence surveys were carried out on each building; a house and two outbuildings.

Impacts during the development are considered to be low. There is not considered to be any significant threat to the conservation status of bats or danger of harm to individuals as the buildings was not being used by roosting bats. However precautions must be taken to avoid harm to any transient bats which may roost there in future. If bats are found at any stage of the development then work in that area must stop and a licensed bat worker contacted for advice. Enhancements for bats and birds are recommended.

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## 2. Introduction

Susan Worsfold BSc (Hons) ACIEEM is an experienced wildlife surveyor, licensed bat and great crested newt worker and voluntary bat roost visitor. Registration number CLS0895 2015-12555-CLS-CLS (CL15 Bat Roost Visitor Level 1) and registration number CLS 0895 2015-12556-CLS-CLS (CL18 Bat Survey Level 2 ) (Natural England) and S089569-1 (Natural Resources Wales); Great crested newt licence registration number 2016-19947-CLS-CLS (NE) and S089570-1 (NRW)

This report was commissioned by Craig Williams and Blueprint Architectural Services.

The site, at Ty Newydd, Overton comprises a two storey dwelling and two outbuildings.

The purpose of the report is to provide results from a bat activity survey to add to a scoping survey, initially carried out by Tyrer Ecological Consultants Limited in March 2022. This is necessary to comply with local planning policy and government legislation and avoid any offence being committed. Also, to describe any compensation, mitigation and enhancement measures which should be taken.

## 3. Methodology

### 3.1. Scope of the Assessment

The report comprises two bat activity surveys to update the previous report.

## 3.2. Field Survey

Two dusk emergence surveys on each building were carried out during May and June 2022 by Susan Worsfold and Craig Thomas, an experienced assistant. These were done in accordance with *Bat surveys for professional ecologists: Good Practice Guidelines (3rd Edn)* (Collins 2016) and the Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys (*Bat Conservation Trust, May 2022*).
Survey times and conditions are given in Appendix 12.
Frequency division detectors were used to record any bat sounds in and around the buildings for later analysis on the computer. These were Peersonic RPA3 and Song Meter SM4BAT ZC.

## 4. Assessment of Effects and Mitigation Measures

Bats
There is not considered to be any threat to the conservation status of bats or danger of harm to individuals as none of the buildings were being used by roosting bats at the time of the surveys. The site is being used by foraging and commuting bats. Four species were identified during the two surveys. The frequency of visits and number of bats seen does not indicate that the site is an important habitat for bats.
It is possible that transient bats may temporarily roost or perch in the building in the future.
If bats are found at any stage of the development then work in that area must stop and a licensed bat worker contacted for advice.
It is recommended that the new buildings use bitumastic hessian roofing felt type 1F, as modern roofing membranes are extremely hazardous to bats as they become entangled in the fibres and cannot escape. If this is not possible then it is important that access is prevented to the roof lining.

## 5. Compensation

None considered necessary.

## 6. Enhancement Recommendations

An integrated bat box to be incorporated into the new extension on the house e.g. Vivara Pro Build-in WoodStone Bat Box. Further information is given in the bat box information pack available at http://www.bats.org.uk/index.php. Bat boxes should be placed in a south east to south west facing position if possible.
One woodcrete nests suitable for small birds such as robin, blackbird, tit species and sparrow to be incorporated into the new extension or converted outbuildings, and one swallow nest.
House Sparrow Terrace - Wooden (or woodcrete) nest box with 3 sub-divisions to support 3 nesting pairs. To be placed under the eaves of buildings or incorporated into walls. Entrance holes: 32mm diameter. Dimensions: H310 x W370 x D185mm. Also suitable for tits, redstarts and spotted flycatchers. Place at least 2 m from the ground.
Swallow nests - H110mm x W250mm x D140mm. The nests should be placed inside an enclosed outbuilding or shed, porch or garage leaving a distance of at least 6cm between the top of the nest and the ceiling. There must be access for the birds through an open window or sky-light. A car port or refuse bin shelter, or an outbuilding with a permanently open window or half door, or simply a space over the door, would suffice. Under the eaves of the buildings would be acceptable but less suitable.
Other designs of nest boxes may also be suitable.

## 7. Ecological Constraints

None identified

## 8. Monitoring

None recommended

## 9. Conclusions

If the recommended mitigation, compensation and enhancement measures are taken the overall ecological impacts of the proposed development will be low due to its small scale and lack of evidence of any rare or threatened species or priority habitat.

## 10. Bibliography

Bat Conservation Trust available at: http://www.bats.org.uk

Collins J. (Ed) (2016) *Bat surveys for professional ecologists: Good Practice Guidelines (3rd Edn)*. The Bat Conservation Trust, London

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora available at: jncc.defra.gov.uk

Mitchell-Jones, A. J. and McLeish, A. P. (2004) *Bat Worker's Manual,* Peterborough: Joint Nature Conservation Committee

# 11. Activity Surveys

*Building 1 (house) 13/5/22*

| *Observer or area* | *Equipment* |
|---|---|
| Sue Worsfold (SW) NW corner | Peersonic RPA3 + Nightfox Red NVA |
| Craig Thomas (CT) SE corner | Peersonic RPA3 + Nightfox Red NVA |

*Bats recorded:*

Common pipistrelle (*Pipistrellus pipistrellus*)
Myotis sp. Probably whiskered bat (*Myotis mystacinus*)
Soprano pipistrelle (*Pipistrellus pipistrellus*)
Noctule (*Nyctalus noctula*)

| *Observer or Area* | *Time* | *Number of Bats and Observation* | *Identification from visual or correlation with sonograms* |
|---|---|---|---|
| SW & CT | 21:21 | 1 bat flew SW to NW across front of house then round to the rear | Common pipistrelle |
| CT | 21:34-22.26 | 1-2 bats foraging in courtyard and nearby intermittently | Soprano pipistrelle |
| SW | 21:36 | 1 bat flew N to S foraging back and forth | Common pipistrelle |
| SW | 21:44 | 1 bat flew S to N | Common pipistrelle |
| SW | 21:50 | 1 bat flew N to S foraging back and forth | Common pipistrelle |
| | | | |

*Building 1 (house) 12/6/22*

| *Observer or area* | *Equipment* |
|---|---|
| Sue Worsfold (SW) NW corner | Peersonic RPA3 + Nightfox Red NVA |
| Craig Thomas (CT) SE corner | Peersonic RPA3 + Nightfox Red NVA |

*Bats recorded:*

Common pipistrelle (*Pipistrellus pipistrellus*)

| *Observer or Area* | *Time* | *Number of Bats and Observation* | *Identification from visual or correlation with sonograms* |
|---|---|---|---|
| SW | 21:58 | 1 bat flew N to S and foraging nearby | Common pipistrelle |
| CT | 21:59 | 1 bat flew N to S and foraging nearby | Common pipistrelle |
| CT | 22:12-22.30 | 1 bat foraging nearby | Common pipistrelle |
| CT | 22:30 | 1 bat flew E to W | Common pipistrelle |
| CT | 22:39 | 1 bat foraging nearby | Common pipistrelle |
| | | | |

*Building 2 16/5/22*

| *Observer or area* | *Equipment* |
|---|---|
| Sue Worsfold (SW) SE corner | Peersonic RPA3 + Nightfox Red NVA |
| Craig Thomas (CT) NW corner | Peersonic RPA3 + Nightfox Red NVA |
| Loft | Song Meter SM4BAT ZC |

*Bats recorded:*

Common pipistrelle (*Pipistrellus pipistrellus*)
Myotis sp. Probably whiskered bat (*Myotis mystacinus*)
Soprano pipistrelle (*Pipistrellus pipistrellus*)
Noctule (*Nyctalus noctula*)

No calls recorded in loft

| *Observer or Area* | *Time* | *Number of Bats and Observation* | *Identification from visual or correlation with sonograms* |
|---|---|---|---|
| SW+CT | 21:15 | 1 bat flew along road S to N and back into drive-way, foraged for 2 minutes then back N | Unidentified |
| SW+CT | 21:47-22.04 | 1 bat flying back and forth N to S and circling in driveway | Common pipistrelle |
| | | | |
| | | | |
| | | | |
| | | | |

*Building 2 26/6/22*

| *Observer or area* | *Equipment* |
|---|---|
| Sue Worsfold (SW) SE corner | Peersonic RPA3 + Nightfox Red NVA |
| Craig Thomas (CT) NW corner | Peersonic RPA3 + Nightfox Red NVA |

*Bats recorded:*

Common pipistrelle (*Pipistrellus pipistrellus*)
Soprano pipistrelle (*Pipistrellus pipistrellus*)

| *Observer or Area* | *Time* | *Number of Bats and Observation* | *Identification from visual or correlation with sonograms* |
|---|---|---|---|
| CT | 21:48 | 1 *bird* flew into roof near apex at W gable end | |
| CT | 22:10 | 1 bat arrived from S then circling in drive for 10 minutes | Common pipistrelle |
| CT | 22:30 | 1 bat foraging in drive | Common pipistrelle |
| | | | |
| | | | |
| | | | |

*Building 3 19/5/22*

| *Observer or area* | *Equipment* |
|---|---|
| Sue Worsfold (SW) NE corner | Peersonic RPA3 + Nightfox Red NVA |
| Craig Thomas (CT) SW corner | Peersonic RPA3 + Nightfox Red NVA |
| Loft | Song Meter SM4BAT ZC |

*Bats recorded:*

Common pipistrelle (*Pipistrellus pipistrellus*)
Myotis sp. Probably whiskered bat (*Myotis mystacinus*)
Noctule (*Nyctalus noctula*)

No calls recorded in loft

| *Observer or Area* | *Time* | *Number of Bats and Observation* | *Identification from visual or correlation with sonograms* |
|---|---|---|---|
| CT | 21:20 | 1 bat flew over roof NE to SW | Common pipistrelle |
| SW | 21:30 | 1 bat flew E to W | Common pipistrelle |
| CT | 21:37 | 1 bat arrived from SE,circled on drive then went E | Common pipistrelle |
| SW | 21:40 | 1 bat flew W to E | Common pipistrelle |
| SW | 21:45-55 | 1 bat foraging nearby | Common pipistrelle |
| CT | 22:03 | 1 bat in drive for 3-4 minutes | Common pipistrelle |

*Building 3 27/6/22*

| *Observer or area* | *Equipment* |
|---|---|
| Sue Worsfold (SW) NE corner | Peersonic RPA3 + Nightfox Red NVA |
| Craig Thomas (CT) SW corner | Peersonic RPA3 + Nightfox Red NVA |

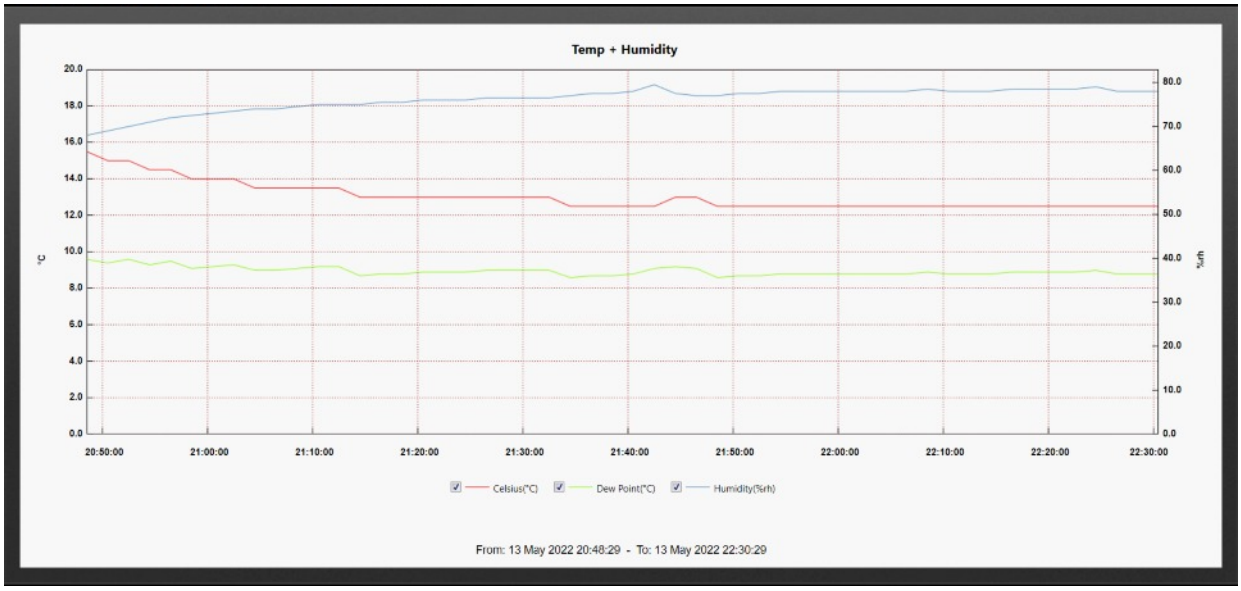
*Bats recorded:*

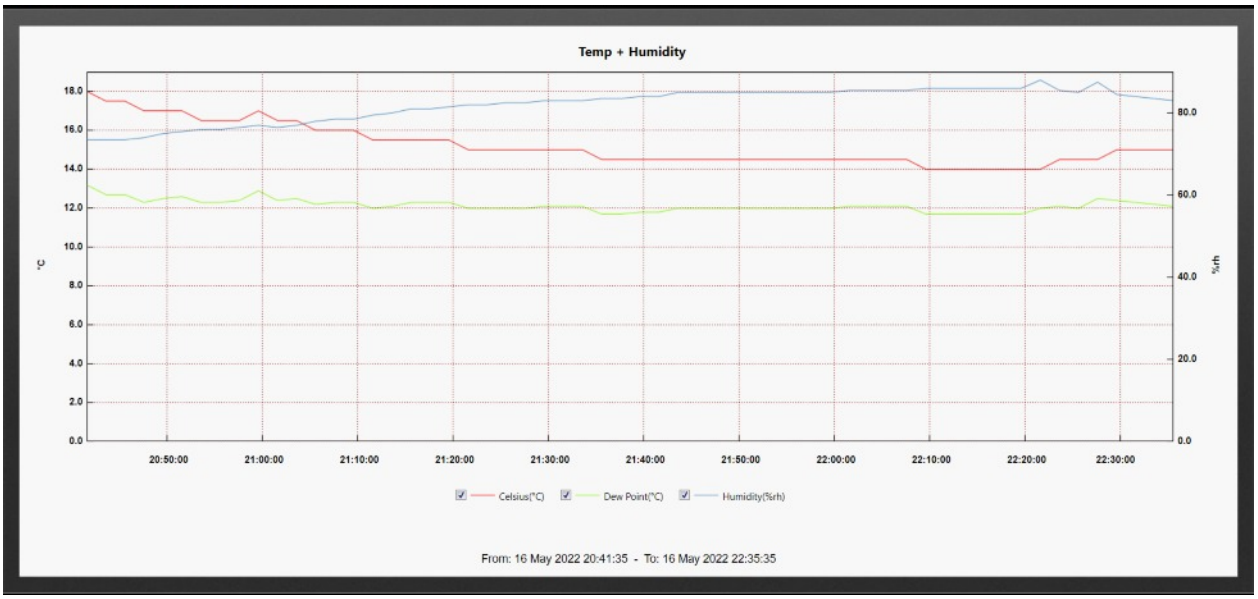
Common pipistrelle (*Pipistrellus pipistrellus*)
Soprano pipistrelle (*Pipistrellus pipistrellus*)
Noctule (*Nyctalus noctula*)

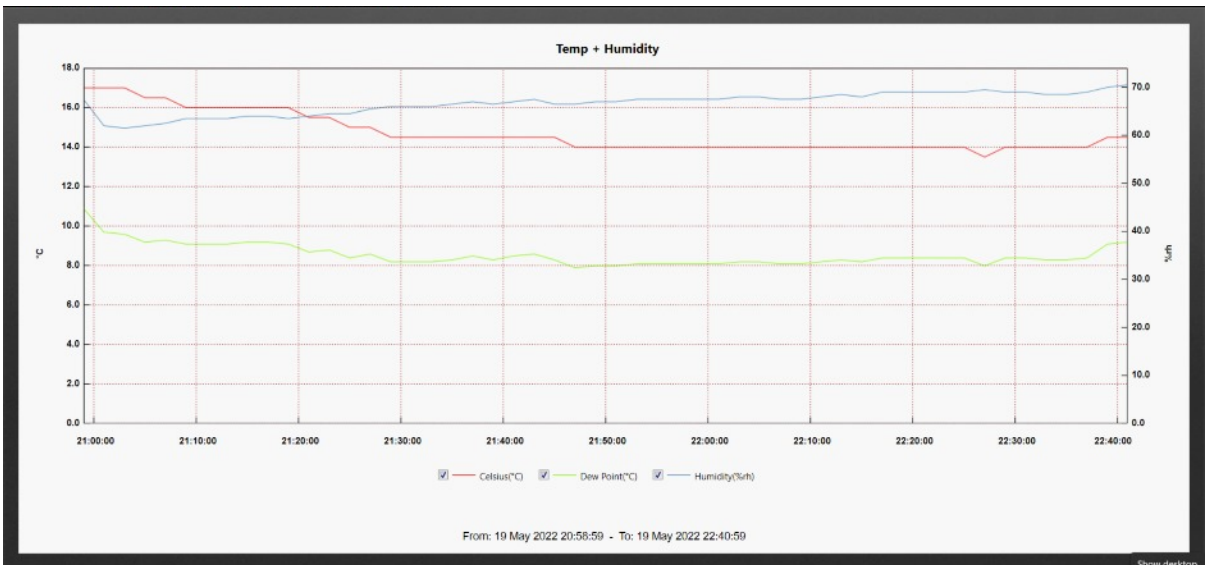
| *Observer or Area* | *Time* | *Number of Bats and Observation* | *Identification from visual or correlation with sonograms* |
|---|---|---|---|
| SW+CT | 22:05-22.15 | 1 bat arrived from S then foraging in and near driveway | Common pipistrelle |
| CT | 22:24 | 1 bat in driveway briefly | Common pipistrelle |
| SW | 22:26 | 1 bat flew N to S | Common pipistrelle |
| CT | 22:30 | 1 bat in driveway briefly | Common pipistrelle |
| SW | 22:34 | 2 bats flew N to S | Common pipistrelle |
| | | | |

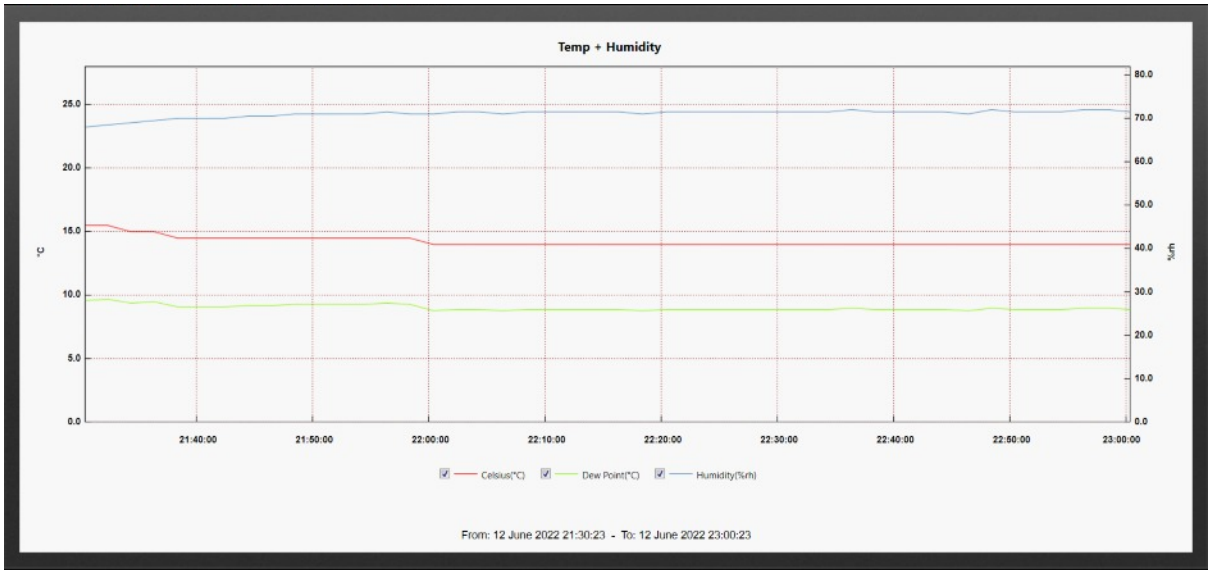
# 12. Survey Conditions

| Date | Sunset/ Sunrise | Start Time | End Time | Temp. Start °C | Relative Humidity Start % | Temp. End °C | Relative Humidity End % | Cloud % | Wind 0-6 |
|---|---|---|---|---|---|---|---|---|---|
| 13.5.22 | 21:00 | 20:45 | 22:30 | 14 | 78 | 13 | 78 | 90 | 0 |
| 16.5.22 | 21:05 | 20:50 | 22:35 | 16 | 76 | 14 | 86 | 10 | 0 |
| 19.5.22 | 21:10 | 20:55 | 22:40 | 17 | 62 | 14 | 68 | 80 | 0 |
| 12.6.22 | 21:38 | 21:20 | 23:10 | 15 | 67 | 14 | 71 | 90 | 0 |
| 26.6.22 | 21:40 | 21:25 | 23:10 | 16 | 67 | 14 | 75 | 30 | 2 |
| 27.6.22 | 21:40 | 21:25 | 23:10 | 13 | 70 | 14 | 73 | 80 | 1 |




Temp + Humidity
°C
%rh
Celsius(°C)
Dew Point(°C)
Humidity(%rh)
From: 19 May 2022 20:58:59 - To: 19 May 2022 22:40:59


Temp + Humidity
°C
%rh
Celsius(°C)
Dew Point(°C)
Humidity(%rh)
From: 12 June 2022 21:30:23 - To: 12 June 2022 23:00:23


Temp + Humidity
°C
%rh
Celsius(°C)
Dew Point(°C)
Humidity(%rh)
From: 26 June 2022 21:32:14 - To: 26 June 2022 23:16:14

# 14. Building Numbers and Observer Locations




Bat detector, NVA and observer

Bat detector

# 15. Legislation

All species of bats in the UK are European Protected Species (EPS). It is against the law to damage or destroy a bat's breeding site or resting place (known as a roost), or deliberately to capture, kill, injure or disturb a bat

Bats are the only mammals which can fly. They are warm blooded, they suckle their babies and are intelligent, social animals. British bats feed only on insects, of which they consume vast numbers to sustain their energetic lifestyles. A pipistrelle bat can eat up to 3000 midges in a single night!

We have 12 species of bat breeding in Wales. Many of these have suffered severe declines, not just in Britain but throughout Europe.

All British bat species are protected under the Conservation of Habitats and Species Regulations 2017, known as the 'Habitats Regulations'. Bats have a unique relationship with humans, sometimes sharing our homes for part of the year. For this reason, Natural Resources Wales (NRW) deals with many hundreds of bat enquiries each year from householders.

Under the Habitats Regulations, it is an offence if you:

deliberately capture, injure or kill any wild animal of an EPS
deliberately disturb wild animals of any such species
damage or destroy a breeding site or resting place of such an animal
Disturbance includes, but is not limited to, any disturbance which is likely:

1. to impair their ability –
to survive, to breed or reproduce, or to rear or nurture their young, or
in the case of animals of a hibernating or migratory species, to hibernate or migrate; or

2. to affect significantly the local distribution or abundance of the species to which they belong.

Defra and the Welsh Government will publish a joint guidance document on the interpretation of the offences relating to disturbance, and to damage and destruction of breeding sites and resting places.

There are other offences relating to possession, transport and sale.

NRW issues licences under Regulation 55 of the Habitats Regulations to allow you to work within the law.

If you are a householder and have concerns about bats at your property (other than queries related to planning applications or a development), contact the NRW Enquiry Line for advice, telephone 0300 065 3000