
**54 LUCY ROAD
SKEWEN**

BAT SURVEY & REPTILE METHODOLOGY

June 2013

1 survey at the request of-

Mr Ron Bagshaw, owner.

2 proposed works

New build at cleared plot.

3 site: name

54 Lucy Rd, Lonlas, Skewen

4 nature & date of survey

21st June 2013- assessment of bat-roost potential *via* external/internal search

21st June 2013- assessment of reptile *via* site examination

n/a- roost-emergence watch

n/a - overnight activity *via* remote detectors/recorders

5 objectives

- to assess the extent of any bat, or other protected species, use of the site

- to identify any constraints consequent upon the discovery of bats, or other protected species, at the site

- at the request of the LPA: to design a "dealing with reptiles" methodology, against the possibility of animals being found during site works.

6 surveyors

Rob Colley Associates;

Rob Colley: scientific/conservation bat licence

7 ecology & legal status

7.1 (bats) Different bat species have different life-cycle strategies but, in general, each requires the following features:

- hibernation roost sites, where stable winter temperatures allow a period of winter torpor (e.g. underground sites such as caves and mines, or crevices and hollows in mature standing trees)

- nursery roost sites, where females gather in the spring/early summer to give birth and rear their single offspring (e.g. roof spaces, crevices and hollows in mature standing trees)
- roost sites for individual, or small congregations of, males during spring-autumn (e.g. roof spaces, or crevices and hollows in mature standing trees)
- an insect-productive (usually ecologically diverse) feeding environment additionally, there is a poorly understood need for social-gathering sites at certain times of the year (e.g. the autumn mating season) for some, or all, species.

Most, if not all, British bat species are believed to be in decline; main threats to bat populations can be summarised as:

- the loss of invertebrate-rich foraging areas (eg. woodland, hedgerows, ponds)
- the loss of nursery and hibernation roosts (eg. caves and mines, roof spaces, large standing trees)
- the effects of toxic chemicals (eg. timber preservatives in roof-space roosts, agricultural insecticides which reduce prey species).

All British bats, and their roosts (occupied or not) are protected by i)) **The Conservation of Habitats and Species Regulations 2010** (the "Habitats Regs"): this legislation implements the EC Habitats and Species Directive in the UK., and ii) the **Wildlife and Countryside Act** (as amended by the **Countryside and Rights of Way Act 2000**) Schedule 5.

Developments which compromise the protection afforded to a European Protected Species require **Welsh Government** (from 1st April '13: **Natural Resources Wales**) **licence** (Habitats Regs). The granting of licence will be conditional on i) an agreed "works methodology", designed to minimise impact on the bat(s), ii) agreed "mitigation", to ensure the provision of alternative roost potential at/near the development. Where planning permission is sought, the LPA will need to know, at application stage, what methodology/mitigation is being proposed: this is to i) avoid changes in planning designs, post pp, ii) ensure that LPAs comply with reg 3(4) of the Habs Regs, and iii) allow the Statutory Nature Conservation Organisation (from 1st April '13: **Natural Resources Wales**) (NRW)) to properly advise the LPA.

The **Natural Environment & Rural Communities Act 2006** requires all public authorities/bodies to have regard for the conservation of biodiversity- eg. when considering planning applications. There is a particular requirement to address those species and habitats targetted by the UK Biodiversity Action Plan, in pursuance of which the Welsh Gov't have listed Common and Soprano pipistrelles, Noctule, Brown long eared, Greater and Lesser Horseshoe, Barbastelle and Bechstein bats at **Section 42: Species of Principal Importance for Conservation of Biological Diversity**.

Implementation of this responsibility varies across authorities but, typically, some LPAs ask for "bat accommodation" as a routine req't, and some require survey data to be passed to a Local Records Office.

- 7.2 (reptiles)** The ubiquitous Slow worm *Anguis fragilis* and Common lizard *Zootoca* (Lacertis) *vivipara* are protected against "deliberate killing" (WCA).

8 methods

8.1 bats:

Survey methodologies are implemented as appropriate, based on experienced surveyors' assessment of the features at each site and with reference to the advice in ***Bat Surveys: Good practice guidelines*** (Bat Conservation Trust, 2007/12) & ***Bat Workers' Manual 3rd ed.*** (JNCC 2004).

building assessment:

Daytime survey of the site was made, searching for i) possible bat entry/exit/roosting points, evidence (principally faeces) of bat use of the site and direct evidence of roosting bats, and ii) evidence (eg. faeces/ pellets, feeding remains, nest sites) of owl use.

emergence watch: n/a

DNA genotyping: when surveyors are unsure of the origin of any bat faeces found, these are submitted to Dr Robin G Allaby, University of Warwick, for species ID via genotyping

overnight (dusk-dawn) remote data recording: where initial examination indicates that it is appropriate, Anabat or Songmeter frequency-division detector(s) + recorder(s) are left in the building, to detect/record species-identity and overnight patterns of bat activity at/around the building.

methodology/mitigation measures, where appropriate, are based on the surveyors' experience of similar situations, with reference to ***Bat Mitigation Guidelines*** (English Nature, 2004) & ***Bat Workers' Manual 3rd ed.*** (JNCC 2004).

8.2 reptiles:

Debris-turning search was undertaken at the site visit, and an assessment made of the site's suitability for reptiles.

9 results

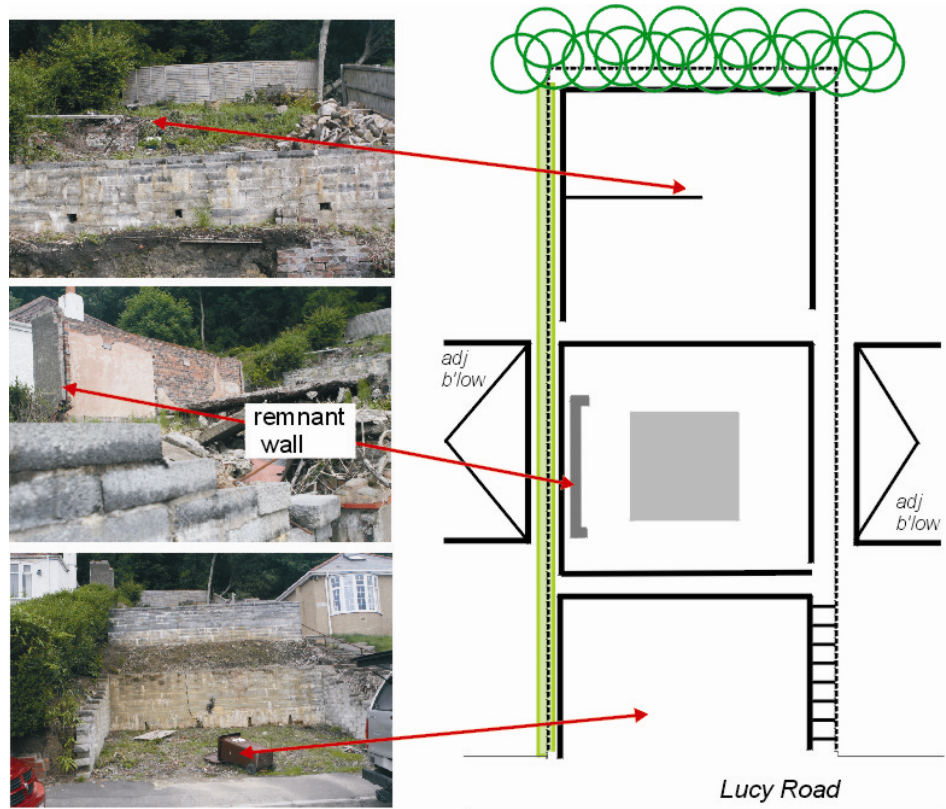
9.1 site location; adjacent habitat; general description; potential bat access points; evidence of bat presence:

The site is a long, narrow, strip, between bungalows at a residential street in Skewen; a former-dwelling has been demolished and cleared from the site.

The site rises from road level, via three terraces with across-slope retaining walls, to the edge of deciduous woodland at the hillside above.

The lowest terrace, level with the roadside pavement, is a clear area of hardcore, bounded by a concrete block wall.

The middle tier, approximately level with bungalows closely adjoining at each side, has a small length of free-standing brick cavity wall, presumed to be a remnant of a previous building. From examination of a site photo', the LPA recognised the possibility of bat-roost opportunity at the cavity and at through-wall voids, and these possibilities were investigated at the survey visit. The wall is a little over 2m in height, and some 4+m in length; the cavity is entirely open at the top, giving conditions that are too open/exposed for bat use, and, from off-ladder direct visual examination, there was clearly no bat-use of the cavity; the through wall "vent voids" were also entirely open and examinable, and offered no possible roost opportunity.



The middle tier is clear of any vegetation, and has a broken remnant floor slab with levelled rubble around.

The upper level, itself partly terraced by a mid-length retaining wall, is a cleared garden, with very sparse and patchy ground vegetation. A wooden panel fence separates the garden from the woodland beyond.

The western site boundary is a low privet hedge, to the adjoining garden; the eastern boundary is a low fence.

9.2 emergence watch/overnight (dusk-dawn) remote data recording/DNA genotyping: other-season use- assessment:

There is no possible bat-roost opportunity at the site, and further investigation, including direct activity survey, is unnecessary/inappropriate.

9.3 evidence of owl presence: none

9.4 reptiles:

The absence of ground cover at almost all of the site suggests that reptile occurrence here is less likely than at the established gardens at the bungalows at either side. No animals were found at the turning of (very limited) site debris.

However, if any Slow worms/Common lizards are present at the site, the *post* demolition rubble/hardcore and the remnant floor slab at the middle tier both offer some potential for sheltering animals. The lack of ground cover/habitat precludes any other species at the site.

In the context of this assessment, it is recommended that a “proceed with caution” methodology is appropriate at site-development works:-

- when lifting/removing rubble/debris/the remnant slab, watch should be kept for reptiles (Slow worms, Common lizards) that might be sheltering below
- any individual reptile found during works should be hand-caught and in-bucket transferred to *either* an adjacent garden *or* to the over-fence woodland edge
- if >2 animals are found during works, the project ecologist shall be called to-site, in order to advise and, if appropriate, initiate systematic search/capture/translocation; in such an eventuality, the ecologist shall inform, and liaise with, NPT Biodiversity Unit officers.

10 summary/discussion

- 10.1 The possible roost-opportunity visible at site-photo's proves, at direct examination, to be entirely unsuitable: there is no bat-interest at the site.
- 10.2 After site examination, reptile presence is thought to be unlikely, and the above “proceed with caution” constraint is considered to be an appropriate way to address the possibility of reptiles on-site.

Rob Colley
June 2013