



The Elms, Darland Lane, Darland, Rossett, Wrexham, LL12 0BA

Further Bat Surveys

17th September 2021

INTRODUCTION

Following an initial Bat Scoping Survey undertaken on the 19th March 2021, Kingdom Ecology have completed a further set of bat dusk and dawn surveys of a detached house and garage located at The Elms, Darland Lane, Darland, Rossett, Wrexham, LL12 0BA (National Grid Reference SJ 3792 5792). The additional bat dusk and dawn surveys were undertaken on the 18th July and the 2nd September 2021. Proposals are to demolish the existing detached garage, construct a new garage and to extend the main dwelling which will require works to parts of the existing roof (see Figure 1 for works extent).

Surveys were led by Richard Roe (BSc, MSc, MIEEM, CEnv). Richard has extensive experience of undertaking bat surveys as a professional ecological consultant with over twenty years' experience. Richard is also a licensed bat worker.

BAT SCOPING SURVEY FINDINGS

The study site comprises of a detached two storey house and detached garage located on Darland Lane, Darland, Rossett. The house is currently occupied. See Figure 1 in the Appendix for the site layout.

The main house supports a single loft space which was found to be heavily cobwebbed and supporting no obvious access points to its interior for roosting bats.

Externally the house offers potential bat roosting habitat where there are crevices beneath the building's eaves, at its south facing gable and beneath lifting areas of lead flashing associated with the dormer windows of a newer extension.

The initial bat scoping survey did not identify any field signs indicative of roosting bats. Nevertheless, the house is considered to offer '**moderate**' bat roosting potential.



There is also a double garage building at the site. This is a relatively modern structure and is generally well sealed. However, there are some potential bat roosting features offered at the building's north facing gable where decayed verge mortar offers potential access between the roof slates and underfelt; and at the building's west facing gable where there is a narrow crevice between a length of fascia boarding. A single old bat dropping (likely from a pipistrelle bat species) was found behind the fascia boarding (Bat Target Note 1 on Figure 1 and Photograph 2). This dropping confirms that the gap has been used by roosting bats in the past.

No other bat field signs were found associated with the garages.

Taking account of the potential bat roosting features identified, the presence of a single bat dropping and the building's location, the building was also assessed as offering '**moderate**' bat roosting suitability.

The site is located on the edge of the village of Rossett with some areas of good bat foraging habitat located nearby including a nearby pond plus associated areas of hedgerow and small woodlands. Consequently, habitats around the site are considered likely to be of at least 'moderate' value to foraging bats.

In accordance with Bat Conservation Trust's 'Good Practice Survey Guidelines', at least two dusk/dawns surveys were recommended to further assess the site.

BAT DUSK ACTIVITY SURVEY

Methods

In accordance with the recommendation within the initial scoping survey, an additional bat dusk survey was undertaken on the 18th July 2021 with an additional dawn survey undertaken on the 2nd September 2021.

Four experienced surveyors were used to allow full coverage of all features affected by the proposed development. This comprised of two surveyors to assess the garage and two surveyors to assess the affected sections of the main house. See Figure 1 in the Appendix for surveyor locations.

Surveyors were equipped with heterodyne, frequency division and time expansion bat detectors (Echometer Touch 2 and Anabat Walkabout bat detectors).

The dusk survey commenced 15 minutes before sunrise and continued up to 90 minutes after sunset. The dawn survey commenced 90 minutes before sunrise and continued until 15 fifteen minutes after sunrise. All bat species and bat behaviour were recorded.



Emergence Survey Results

The bat emergence survey was undertaken under suitable conditions on the 18th July 2021 with weather recorded as dry, overcast, with a light breeze and with a temperature of 16°C. Sunset was recorded at 20.32.

In summary, no bats were identified roosting within either building.

The survey recorded moderate levels of bat activity within vicinity of the site. This activity including intermittent common and soprano pipistrelle bat foraging activity within the gardens of the property throughout the survey. The first common and soprano pipistrelles were recorded at 21.07 and 21.08.

Further bat activity included occasional noctule passes over the site plus whiskered bat and brown long-eared bat passes.

No other significant bat activity was recorded.

Dawn Survey Results

The bat dawn survey was undertaken under suitable conditions on the 2nd September 2021 with weather recorded as calm, dry and overcast, and with a temperature of 13°C. Sunrise was recorded at 06.24.

In summary, no bats were identified roosting within the affected parts of the building. However, a soprano pipistrelle bat was recorded roosting within an adjacent section of building. The bat was observed to enter a crevice in the mortar of an east facing gable at 06.18 (see Photograph 1 below and Bat Target Note 2 on Figure 1 for roost location). This section of the building will not be affected by works and so the roost will be retained and remain undisturbed. No other roosting bats were recorded.

Soprano pipistrelle bats were recorded intermittently foraging and social calling over the gardens and along the adjacent lane throughout survey. A whiskered bat was also recorded passing through the site. Other than the roosting bat, the final bat registration was recorded at 06.08.

No other significant bat activity was recorded.

A further search for bat droppings at the west facing garage fascia (Bat Target Note 1) was carried out following the dawn survey using a torch and endoscope. No bat droppings or other field signs indicative of recent bat activity were found. This search included both behind the fascia boarding and beneath the boarding.



Recommendations

Field survey has comprised of an update bat emergence survey and bat dawn survey along with a further inspection of the west face of the garage building for bat field signs.

No roosting bats were identified associated with the affected sections of the buildings. A bat roost was identified within a gable end of the main house but this part of the building will not be affected by works and so the bat roost will be retained.

The scoping survey undertaken in March 2021 had identified a single old bat dropping associated with the west facing fascia of the garage building (Target Note 1 on Figure 1). No bats were identified roosting at this location during the July and September dusk/dawn surveys and no additional bat field signs were found here following the further inspection in September.

It is therefore considered to be unlikely that this section of the building or any other parts of the proposed development area support an active bat roost.

Nevertheless, it is recommended that care is taken during works, in particular the garage fascia boarding at Target Note 1 should be carefully removed by hand prior to demolition. If any bats or further evidence of bats are found, then works should immediately stop and further advice should be sought from an appropriately qualified ecologist.

It is also recommended that opportunities to enhance the ecological value of the development area are taken. This can be achieved through the installation of bat boxes into the proposed extension and the new garage building.

It is recommended that two bat boxes are provided. These could comprise of integral bat boxes that can be built into the structure of the new buildings so as to remain visually unobtrusive and to be permanently fixed in place. A suitable model of bat box would be the Habibat 003 or the Ibstock C bat box. The bat boxes should be located within a gable end, as close to the apex as possible. The bat boxes should ideally face a southerly direction and should be located at a minim height of 3m.

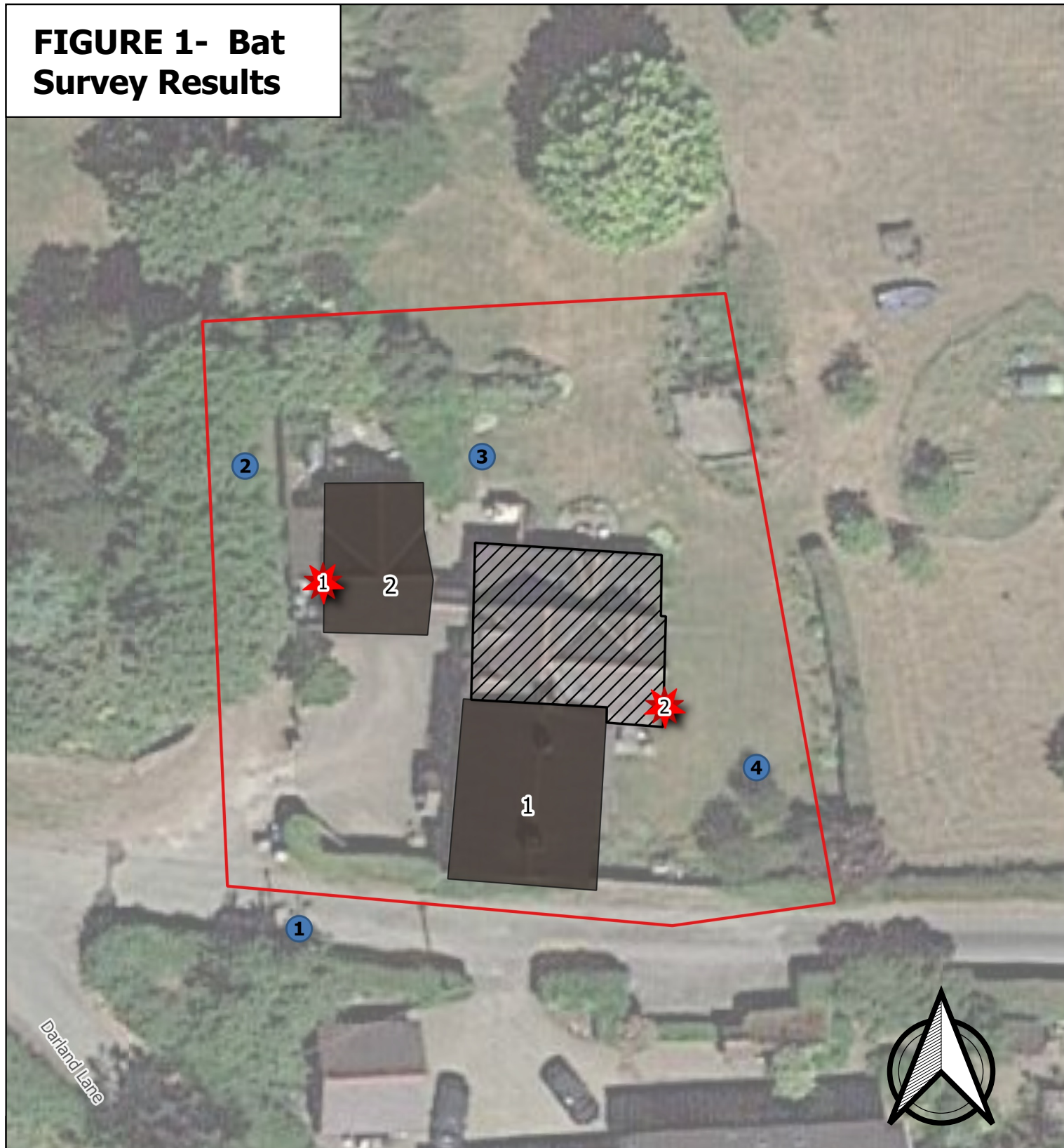
Photograph 1- Bat Roost Location within Unaffected Section of Building



Photograph 2- Fascia Boarding to be removed by hand



FIGURE 1- Bat Survey Results



KEY

0 5 10 15 20 m

 Study Site

 Unaffected Section of Building

 Bat Surveyor

 Bat Target Note

 Building