

Proposed Bat Survey Strategy for St Mary's Hospital Extension

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Overview and Background to Strategy

The Hospital Extension project on St Mary's is vital infrastructure for the islands, but is time-restricted by the availability of funding. This significant project commenced in December 2023 and must be complete by March 2025.

There is serious risk that, if the project is not consented at committee on 18th March 2024, the NHS will withdraw funding and the island will lose the asset.

This situation is not ideal, and requires a more detailed and nuanced approach to facilitate the project whilst ensuring that bats are fully accounted for and protected. It is clearly not desirable for bats to result in the cancellation of the project and the negative publicity this would entail, especially when considering the wider attitudes to, and conservation of, bats.

Survey Results Summary

The building assessment outlined in the PEA and PRA report¹ is summarised in the table below with notes on minor updates following refinement of proposals and/or additional internal inspections.

| Building Ref | Bat Potential | | Impact |
|---------------------|------------------|-------------------------|--|
| | Maternity Roosts | Individual Roosts | |
| B1, B2, B3, B8, B10 | Negligible | Negligible | Demolition/removal |
| B4 | Negligible | Low | Demolition |
| B5 | Negligible | Negligible ² | Demolition |
| B6 | Negligible | Low | Tie-in of new Modular Units in a single pitched-roof location with no PRF ³ ; and one flat-roof aspect with negligible bat potential. No impacts to the remainder of the structure. |
| B7 | Negligible | Low | Demolition |
| B9 | Negligible | Low | Demolition |

¹ <https://www.scilly.gov.uk/sites/default/files/planning-apps/planning-application-p/24/006/ful/P-24-006%20Preliminary%20Ecological%20Assessment%20and%20PRA.pdf>

² Identified previously as Low Potential in PRA submitted in support of planning – now downgraded to Negligible after full internal inspection was achieved – evidence supporting this can be provided alongside the PAS results.

³ At the time of the original PRA in January 2024, the precise impacts to the main hospital structure were not confirmed. Since this has been identified, a return visit was undertaken to inspect the specific locations where the new modular units would be tied in. The pitched roof section has no access points at all – therefore it could theoretically be downgraded below but it is proposed to maintain a 'low potential' assessment from an abundance of caution.

The building assessment identifies Low Potential for use by individual roosting bats in a number of buildings – B4, B6, B7 and B9. However, the PRA identifies Negligible Potential for all building structures with regards to maternity use.

The Good Practise Guidelines recommend a single Presence/Absence Survey (PAS) for Low Potential buildings which should be conducted between May and September⁴. However Section 7.2.28 of the guidelines states that:

“Surveys should be designed around the information that is required to achieve the survey aims. Recommended timings for surveys are given in Table 7.1.... This should be adjusted (earlier or later) if necessary by the ecologist, bearing in mind the site-specific circumstances, although this should be justified in the survey report.”

This establishes that the dates are guidelines and that variation is acceptable when the specified criteria are met.

In this instance, we are proposing the following approach:

- A single PAS in mid-April with survey results to be submitted prior to the Planning Meeting on 18th April 2024;
- A further pre-demolition PAS to be conditioned in any consent granted – to be carried out in the summer season to control any residual risk.

The justification for this approach, using Section 7.2.28 as a framework, is as follows:

Survey Aim

The aim is to undertake a single PAS to assess the use of Low Potential buildings for day/transitional use by individual bats to meet recommended survey effort within the Good Practise Guidance.

Assessment of maternity use is not required due to Negligible Potential for this roost type being determined.

Good Practise Guidelines for Individual Roosts

Whilst PAS for individual roosts are often undertaken in the maternity season, individual roosts can be detected throughout the active season from April – September⁵. Roosts used by individuals comprise both transitional and day roosts. The recommendation for a single survey for a Low Potential building necessitates just one of these temporally distinct roost types be routinely surveyed under industry standard survey approaches. Whilst the timeframe for a summer roost arguably covers a longer time period; there are typically a higher number of transitional roosts as females during this time are roosting in a large number of small roosts, rather than in a small number of maternity aggregations.

Section 7.2.26⁶ identifies that April is suitable to detect transitional roosts. Within the standard guidelines therefore, the aim of the survey can be met through a mid-April survey. The justification in this instance is further strengthened by considering the climatic conditions in Scilly as detailed in the following section.

⁴ Table 7.1 of the Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition).

⁵ Section 7.5.25 of the Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition).

⁶ Section 7.5.26 of the Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition).

Scilly Climate

The guidance with regard survey timings is for the whole of the UK and Section 7.2.28 states that “*timings can be adjusted earlier or later... bearing in mind the site-specific circumstances*”.

The Isles of Scilly are situated off the south-western tip of the UK which puts it at the earliest extreme of the life cycle and survey timings described in the nationwide Good Practise Guidelines. In addition to its geographic position, the small island characteristics mean the weather is significantly stabilised by the buffering effects of the sea, resulting in much more consistent temperatures year-round. Winter weather conditions in Scilly are more akin to spring in the mainland as can be seen in the table below sourced from the Met Office averages (1990 – 2020)⁷.

| Month | Average temperature (°C) | Maximum | Average temperature (°C) | Minimum |
|----------|--------------------------|---------|--------------------------|---------|
| January | 9.91 | | 6.42 | |
| February | 9.99 | | 6.26 | |
| March | 10.89 | | 6.69 | |
| April | 12.59 | | 7.51 | |
| May | 14.69 | | 9.53 | |

This results in common pipistrelles being active at a far higher level throughout the winter – a static detector recorded this species on the wing on 78% of nights over a 90 day period from 20th January to 20th April 2023⁸.

Spring is significantly advanced on the islands compared with the mainland, and it is reasonable to conclude that bat activity levels in mid-April would be akin to May in much of the UK.

Population Status

The Big Bat Survey⁹ was undertaken across all inhabited islands from May – October in 2022 and 2023 – this covered every 500m square in 2023 for a minimum of 4 nights and gives a very strong evidence base to understand the populations of bats on the islands. Backed up by historical and current records from an active local Bat Group; and multiple surveys undertaken for ecological consultancy purposes, the following species composition is determined:

- **Common pipistrelle** is the only widespread resident breeding species found on all inhabited islands;
- **Soprano pipistrelle** were historically present but encounters on the 2022/3 statics are at such a consistently low level that this species is no longer considered to be a resident breeding population;
- **Brown long-eared bat** is confirmed from DNA evidence and radiotracking studies – the distribution of the species is understood to be within Holy Vale and The Garrison where there is significantly higher tree cover than on much of the rest of the islands. Wooded habitat, in line with the widely understood ecological niche of this species, is likely to

⁷ <https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-averages/gbgebz4kn>

⁸ Data recording as part of the Isles of Scilly Wildlife Trust / Scilly Bat Group joint static monitoring project running from 2022 – 2025 – the winter static data will be published in the 2023 results report which is currently in production.

⁹ <https://www.ios-wildlifetrust.org.uk/our-projects/big-scilly-bat-survey>

restrict its distribution on the islands and the area around the hospital is considered suboptimal on this basis;

- **Nathusius pipistrelle** is present at a very low level through the summer and autumn – encounter rates are not consistent with a resident breeding population;
- **Leisler's** is an occasional vagrant in the summer months.

The distance of 28 miles between the mainland and Scilly result in high confidence that this is a stable species composition – only modified by those species which undertake long distance flights such as *Nathusius pipistrelle* and *Leisler's*.

The only likely encounter at the Hospital Site therefore is common pipistrelle. Given our knowledge of the population size and/or distribution of other bat species, the chances of their presence on the site is negligible.

Precautionary Principle

A mid-April survey would therefore achieve the aims of the PAS requirements to support a Planning Application in accordance with the Best Practise Guidance and meeting the requirements of the ODPM Circular 06/2005.

The tight timeframe which requires this approach is dictated by the need for planning to be achieved by 18th April 2024 to secure project viability. It does not preclude the ability to undertake additional surveys post-determination which would provide a backstop to control any residual risk of summer roosts being identified. A requirement for a pre-demolition PAS could therefore be conditioned in accordance with the Precautionary Principle without compromising the ODPM Circular.

In the unlikely event that a roost is identified by pre-demolition surveys, the legislative protection of bats and roosts would control any risk without further recourse to the LPA. The project already incorporates the installation of 5 bat boxes to create enhanced roosting features post-development which would ensure that the consented development would not require modification in this eventuality. An EPSML would be sought if required to allow works to proceed with legislative compliance.

Survey Protocol

Surveys would be completed with full NVA coverage (Nightfox Whisker/Red or Track IR Thermal Scope) on the buildings and PRF to be impacted. All NVA footage would be reviewed to confirm results post-survey.

Five surveyors would be used to ensure that all aspects of the relevant buildings would be covered. This would be led by one/two licenced bat workers with other surveyors being suitably experienced in undertaking bat surveys and operating under the direction of the licenced bat workers.

The survey would be undertaken between the 10th and 16th April 2024. The window would be used to select the optimal weather conditions within this timeframe which the winter static data indicates is a more significant predictor of activity levels than date. Where possible, the survey would be scheduled towards the end of this window.

Footage would be reviewed and the report finalised for issue on 17th April 2024 at the very latest. This would allow review prior to the Planning Meeting held on 18th April 2024 provided schedules are aligned to permit this.