



BAT MITIGATION STRATEGY

PLAS POWER HOME FARM BUILDINGS RUTHIN ROAD COEDPOETH WREXHAM LL11 3BP

- Planning permission has been granted (P/2019/0640) for change of use of the farm buildings/barns and conversion to 3 No. residential dwellings. There is no reasonable alternative to the proposed action available and the action must take place to either 'preserve public health, or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment'.
- A bat/bird scoping survey was carried out on 13 March 2019. No bats were encountered. The only evidence of recent bat activity was observed in the form of old droppings on the white wall tiles in the central room of the barn complex. A section of the roof had collapsed. Gaps were observed beneath slates/ridge tiles and the eaves. The barn was assessed as having a moderate potential for roosting bats. The surrounding habitat was assessed as having a moderate potential for foraging bats.
- Further emergence surveys were carried out on 16 May and 2 June 2019. Bats were observed emerging from building. The barn is a confirmed roost being used by 4 x Brown Long-eared, 1 x Natterers and 2 x Common Pipistrelle bats as a day roost.
- An application for an EPS derogation licence will be submitted to Natural Resources Wales, as a small day roost will be disturbed/destroyed during the proposed works. A NRW licence is required in order to avoid an offence being committed.
- Mitigation in the form of compensation will be provided prior to work commencing.

- A dedicated bat loft (internal floor area approx. 4.3m x 5.3m) will be provided in the South section of the loft void of the outbuilding to the South of the barn (proposed garage). Traditional hessian backed 1F bitumastic underfelt will be used on the pitched roof, which will be covered with natural slates. Access for bats will be incorporated by leaving gaps under slates/ridge tiles and eaves and by installing bat slates in the West section of the roof. This replacement roost will be completed between December 2019 – April 2020, so that an alternative roost is available for when bats emerge from hibernation in the Spring.
- Two simple crevice boxes will be constructed from untreated rough sawn boards (1.5m long x 15cm deep, with 22mm battens fixed between the boards at either end and along the top edge, to create a roosting space, with the underside open for bat access). The crevice boxes will be hung from the underside of the roof, as near to the apex/ridge board of the bat loft as possible, with a box either side of the ridge beam.
- As Lesser Horseshoe bats are recorded in the vicinity, a ‘fly-in’ access to the roost will be provided. This will be in the form of either a ‘letterbox’ opening in the South gable-end (300mm wide x 225mm high), positioned so the opening is no more than 500mm above the level of the bat loft floor, or as a small lead covered or slated open dormer in the West pitch of the bat loft roof (external entrance 300mm wide x 200mm high and the dormer cover 300mm deep), with the entrance sloping upwards with a smooth metal sheet lining on all interior sides to prevent predator entry. The dormer should be set low on the roof so the interior entrance of the tunnel is no more than 500mm above the level of the bat loft floor. Additional bat access features will be incorporated into the new bat loft (gaps beneath slates/ridge tiles/eaves and 2 x bat slates).
- Any timber treatment should only utilise chemicals from the list of Natural Resources Wales Approved Products.
- Any lighting in the vicinity of the new development will conform to the BCT/ILP ‘Bats and Lighting in the UK’ Guide Note 08/2018 (www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/). Subdued lighting will be used and the illumination will be directed downwards (upward light ratio 0%). LED luminaires will be used where possible, with a warm white spectrum (<2700Kelvin) to minimise blue light component. Luminaires will have peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats. The use of motion sensor-triggered security lighting with short (1 min) timers, will be used. It is essential that roost access points and flightlines used for foraging/commuting (e.g. hedgerows, lines of trees) are not illuminated.
- The predicted impact on individual bats of all species concerned would be high and the impact on the favourable conservation status of locally recorded bats would be low. It is essential that appropriate compensation and mitigation measures are implemented and that Reasonable Avoidance Measures are followed, in order to minimise the impact on locally recorded bats.



Reasonable Avoidance Methods

Site Induction

- As part of the site induction process, all staff working on site will be made aware of the presence of bats within the building and their status as a UK Protected Species. The toolbox talk will explain why bats are protected and that it is illegal to intentionally kill, injure or take any bat; that the work is being carried out under an NRW licence (to avoid an offence being committed); any work that could disturb bats must be supervised by the appointed licenced ecologist; the measures that are to be implemented to avoid affecting bats will be explained (as detailed on the Method Statement) and; what steps should be taken if a bat is discovered.
- Contractors will be instructed to cease work in the event that a bat is discovered within the building and not to start work until being advised by the ecologist. If a bat is discovered, the licenced ecologist will contact the NRW (Buckley Office) and report what species and number of bats were involved and what action was taken. Contact details will be displayed within the site cabin.
- The ecologist will get all the workers involved to read through Contractors Induction form and to sign and date the form, keeping a copy in the site office.
- If applicable, a bio-security risk assessment and method statement will be prepared and a log of implementation of measures kept (e.g. footwashes etc.).

General Recommendations

- Timing of the development works is crucial. The optimum time for work potentially involving bats is 1st September - 1st May.

Development works

- It is proposed to strip the roofs of the barn and the outbuilding to be used for the new bat loft, carry out repairs and re-slate, between December 2019 – April 2020 to minimise disturbance to bats.
- The appointed ecologist will directly supervise the work, to ensure no harm comes to any potential bats that may still be present [Note - wearing underpants over trousers, a cape, batman T-shirt and mask are not obligatory]. After first inspecting the areas to ensure no bats are present, the individual slates and ridge tiles will be carefully lifted by hand and checked underneath for bats, to ensure no bats are injured. Similar care will be taken to check stonework, window frames etc. if any repairs need to be carried out.
- If any bats are discovered, work will stop and not resume until advised by an ecologist. If any bats are discovered that do not fly, they will be carefully taken by hand by the ecologist and released immediately at the site into the new bat box or bat loft already installed. If this is not possible they will be rehabilitated at a suitable centre with later release at site. In the event of bats being discovered, NRW will be informed as to what species, numbers and what action was taken.
- The rest of the development to convert the barn will take place between April 2020 – April 2025.



Supervision, Monitoring and Audited report

- An email will be sent to the NRW Species team advising them of the start date of work under the licence.
- A copy of the NRW licence will be kept in the site office, for inspection by the police or NRW.
- All agents of the licensee shall have a letter signed by the licensee appointing them by name as the duly accredited agent, available for inspection by the police or NRW.
- All works that could result in disturbance to bats will be supervised by a Licenced Bat Worker (e.g. stripping roofs) and the dates/actions will be recorded by the ecologist. The ecologist will inspect the building first, before confirming the work can proceed.
- The ecologist will carry out an audit process to check the appropriate compensation/mitigation has been implemented in the timescales specified, and that the correct materials have been used. A site visit will be made when the roof of the new bat loft has been felted and battened, to check 1F bitumastic felt has been used. A second visit will be made after the roof of the new bat loft has been covered with slates, to check gaps/bat slates and the 'fly-in' access etc. have been correctly incorporated. A third visit will be made when the bat loft has been completed, to ensure all mitigation and additional bat-friendly features have been provided as specified in the Method Statement ('fly-in access, crevice boxes etc.).
- After completion of the new bat loft, a post-construction monitoring and surveillance scheme will be implemented (3 x emergence surveys between May-Aug/Sept), to assess the success of the mitigation strategy.
- Dusk emergence surveys will start 15 minutes before sunset and continue for 1.5-2 hours after sunset. Dawn re-entry surveys will start 1.5-2 hours before sunrise and continue for 15 minutes after sunrise. The surveys should be carried out with at least 2 weeks between surveys, in order to obtain sufficient information over the bat active season.
- It is anticipated that up to 4 surveyors will be required per survey, in order to see all aspects of the new bat loft building. The surveyors will visually monitor the building for emerging (or re-entering) bats, whilst recording bat calls on a digital bat detector (Anabat Walkabout).
- If the initial series of monitoring surveys only detect a low number of bats (due to possible disturbance by the on-going construction work), further monitoring will be carried out during the following season, to assess if the mitigation has been successful.
- An *EPS licences: Bats compliance audit report, Licence return form* and a final audit/monitoring report will be submitted on completion of the development and monitoring, as a condition of the NRW Derogation licence.
- Records of the monitoring surveys will be submitted to Cofnod.



Supervision, Monitoring and Audited report

- If the mitigation is successful and Lesser Horseshoe bats start to use the new bat loft as a maternity roost, Clwyd Bat Group will be notified, to give opportunity for volunteers to carry out further ongoing summer colony counts, to monitor the population. This will obviously require communication with the property owners, in order to obtain consent to visit the site to carry out surveys.

