La Bodega
1 Pant Road
Dowlais
Merthyr Tudful
CF48 3SH

An Ecological Survey Report

(Revision 1)
(including a Green Infrastructure Statement)

For

Mr Kristian Davis

February 2024

Morgan EcolOgy

Status	Name	Date
Author	Phil Morgan CEnv MCIEEM, Principal Ecologist	19 February 2024
Reviewer	Diane Morgan BA (Hons) ACIEEM, Senior Ecologist	19 February 2024

Contents

Tables

Figures

Plates

1 Summary

Ecological survey has been undertaken of La Bodega, otherwise known as 1 Pant Road, Dowlais. Survey involved a Preliminary Ecological Appraisal of the property and a Preliminary Roost Assessment of the building, undertaken in mid-December 2023, by two experienced, licenced, independent ecologists, using appropriate survey equipment.

Survey was undertaken in reasonable conditions for the time of year, but the site had been subject to the removal of structures and was in the process of being worked on, as permitted development. The owner of the former public house/restaurant, is seeking a change of use, from the local planning authority, Merthyr Tudful County Borough Council, and this prompted the commissioning of the ecological assessment. The intension is to provide much needed apartment type domestic accommodation in the area.

Limitations to the survey arise from the demolition of a rear extension, and several temporary lean-to type structures. However, their removal, and the relatively tidy condition of a rear yard area, meant that it was possible to quickly establish the nature of the very limited botanical interest of the site, which is largely typical of domestic gardens/disturbed ground.

Complete access was possible to the whole of the original building, but the presence of vermiculite insulation (an asbestos based product), meant that the surveyors could not move the insulation in the loft as they might with more benign products. Whilst no evidence was found for the presence of bats, such evidence might have been hidden within the vermiculite. No evidence was found for the presence of roof nesting birds, or other protected species on the property.

The roof area was judged to have moderate potential to be used by bats, but rainwater incursion was obvious, which was damaging the first floor ceilings. It is understood that the owner proposes to re-roof the building as soon as possible, because of the rainwater damage, which the structure is already suffering. Appropriate recommendations are therefore made in this report to proceed with due caution.

It is possible that a future application may be made to add a new extension, to further exploit the potential of the site, and provide additional apartment type accommodation. This was taken into account whilst considering the site, and writing this report.

Planning legislation requires that applications give due consideration to providing Net Benefits for Biodiversity, and a Green Infrastructure Statement. Recommendations are therefore included, to make provision for biodiversity, benefitting species such as bats, birds and insects.

As part of these benefits, and contributing to the Green Infrastructure Statement, measures are also made with respect to tree and shrub planting, to contribute to carbon sequestration, and greening the local community. Other measures recommended include porous car parking areas which is vital in future with the expected increase in rainfall resulting from climate change.

It is considered that if the recommendations in this report are followed, the risk to protected species will be minimised, and development of the site can make a positive contribution to biodiversity in this part of Dowlais.

2 Background

La Bodega, 1 Pant Road, is a former public house/restaurant, situated in the Pen y Wern part of Dowlais. It stands on the west side of the road, and forms the south-western end of a short terrace of shops. It fronts on to Pant Road, and there is a modest sized plot of land behind, with access off the aforementioned road, and Glendower Street. Most of the surrounding area is made up of domestic dwellings, with some small business enterprises, retail shops etc. The property is

located at National Grid Reference (NGR), SO 0644 0830, at an altitude of 323m Above Ordnance Datum (AOD), in what was in the past, a heavily industrialised part of Merthyr Tudful.

The owner wishes to carry out three elements of work on the property. First, to refurbish the original building. Second, to seek planning consent for a change of use to permit the provision of a number of apartment/dwellings. Third, if permitted, to extend the building at the rear, to provide additional dwelling accommodation.

The first of these proposals will result in the structure being effectively gutted, to allow the provision of new walls, ceilings, and floors. The original building will also be re-roofed. Considerable work has already been undertaken at the site, including the removal of a rear extension, and several lean-to type temporary/demountable structures. The re-roofing of the original building is likely to be re-roofed early in the 2024, in what is considered to be permitted development. The building is not listed in any respect, although it is likely to be quite old, dating to at least the early 19th Century.

As the second and third elements of the owner's proposals require planning consent from Merthyr Tudful County Borough Council, Utopia Design Architectural Services, on behalf of the owner, commissioned Morgan Ecology to carry out a Preliminary Roost Assessment (PRA) of the building, and a Preliminary Ecological Appraisal (PEA) of the grounds of the property. Assessment was undertaken in late December 2023, by two an experienced, independent ecologists. The appraisal covered bats, nesting birds, other protected species, and a general evaluation of the site, and its surroundings. This report sets out the findings.

Principal objectives of the survey effort were to:

- determine if bats, nesting birds, or other protected species were present in, or had the potential to roost in the existing structure;
- consider if there will be impacts on bats and birds from the proposed works;
- to gather sufficient information to be able to make appropriate recommendations;
- to make recommendations with respect to Net Benefits for Biodiversity; and,
- make recommendations to contribute to a Green Infrastructure Statement.

3 Survey team experience

The lead surveyor, and author of this report is Phil Morgan, who has 40 years' experience of undertaking building, tree, and cave surveys for all bat species. In addition, he has undertaken foraging and flight line surveys using heterodyne and other echo-location equipment, and in 1991 made a significant contribution to a Bristol University run project, which established the methodology used in the National Bat Monitoring Programme. Phil has also undertaken numerous radio tracking exercises on both lesser horseshoe and Daubenton's bats. He holds a Natural Resources Wales (NRW) licence for bats (S091084/1), as well as other species including dormice. Phil was previously the Ecologist with Dŵr Cymru Welsh Water, and responsible for nature conservation activities over 37,000ha of land, before becoming Principal Ecologist with the Just Mammals Consultancy LLP, a business which he established in 2001. He is now the Principal with Morgan Ecology. He is a Chartered Environmentalist, with the Society for the Environment (CEnv), and a full Member of the Chartered Institute for Ecology and Environmental Management (MCIEEM). Phil has, for the past 27 years, been the County Mammal Recorder for Vice County 42: Sir Frycheiniog/Brecknockshire, and is responsible for verifying bat and terrestrial mammal records in that area.

Assisting with the survey was Diane Morgan, an Associate Member of the Chartered Institute of Ecology and Environmental Management (ACIEEM). Diane has considerable experience (over 30 years) of surveying built structures for bats, and has carried out ringing of Daubenton's bat as part of a multi-year project on the species, undertaken monitoring work on several important lesser horseshoe maternity sites, and assisted in radio tracking projects on the same species. Prior to

her current role, she was the Director of Brecknock Wildlife Trust, and involved in a wide range of nature conservation work including species and habitat protection, and conservation land management. Diane holds an NRW licence to disturb bats (S090641/1; expiry January 2024). Other areas of interest include otters, dormice, water voles, reptiles, amphibians, fungi and crayfish. Diane is a Senior Ecologist with Morgan Ecology.

4 Assessment methodology

A Preliminary Roost Assessment (PRA), was undertaken of the original building, with the aim of detecting any signs of bat or bird presence. It was possible to undertake an assessment of the interior, including the loft. All parts of the interior were inspected, including the cellar/basement, windows, and window openings, and any other openings in outer walls. The surveyors were seeking signs which might indicate the presence of bats, or nesting birds. In the case of bats, evidence was considered to include actual bats, or signs of bats, in the form of bat droppings (faeces), discarded feeding remains (e.g. butterfly wings, crane-fly legs), and fur oil staining (on roof timbers).

The surveyors also considered the exterior of the original building. To assist in the external assessment, binoculars were used to identify, and examine Potential Roosting Features (PRFs). Any gaps or crevices in the structure were inspected as closely as possible. The context of the property within the surrounding landscape was also assessed at this time. Potential for hibernation by bats was also considered, so apart from the cellar/basement, any entrances low down on the walls, particularly on the west side of the building, were also assessed.

Presence of nesting birds was considered, particularly those which might nest in roof areas. The surveyors recorded any signs of historic and current bird activity including nest-building, feeding at nest sites, and any indirect evidence such as nest remains, bird droppings, and feathers.

General consideration was made of the property for the presence of other protected species (e.g. amphibians, reptiles, etc), so boundaries, as well discarded items in the grounds were also considered, to confirm or dismiss their presence, which might have to be taken into consideration in the development. Possible presence of terrestrial mammal species, such as badger (*Meles meles*), hazel dormouse (*Muscardinus avellanarius*), and western European hedgehog (*Erinaceus europaeus*), was also undertaken.

Table 1 below details the equipment used by the surveyors when carrying out the PRA.

Table 1: Equipment used in the assessment

Equipment items	Purpose used
Aluminium extending step-ladder (1)	Accessing loft
Bushnell binoculars (1)	Inspecting roof slates, barge boards
Canon IXUS 100IS digital camera (1)	Taking photographs
Cluson RE1T red eye torch (1)	Illuminating internal roof areas
Greencat 8x30 8.5° close focussing monocular (1)	Inspecting roof timbers of bat presence
Ledlenser MH8 head lamp (1)	Inspecting cavities, roof timbers
Ridgid SeeSnake Inspection Camera Micro CA-150 (1)	Inspecting cavities

Additionally, and in compliance with the latest guidance update to Chapter 6 of Planning Policy Wales 12 (PPW12) – the surveyors considered the property with respect to enhancements, to contribute to Net Benefits for Biodiversity (NBB), and a Green Infrastructure Statement (GIS).

5 Site description

La Bodega, which is also 1 Pant Road, is a relatively old building, likely dating back to the early 19th Century. Inspection of the Ordnance Survey 25-inch map (1892 – 1914), reveals that the area was developed around the Ivor Iron Works site, and it is likely that La Bodega was originally a public house, a role it fulfilled throughout its history. Details of the existing building are summarised below in Table 2.

Table 2: La Bodega description

Building type	Construction materials	Remarkable features	Condition at time of PRA
A semi-detached, end of terrace, three storey former public house/restaurant, built on a north-west/south-east alignment, with conventional pitched roof, with street frontage, standing within a small mature garden/yard area, probably dating from the early 19th Century	Conventional stone and brick built, with exterior cement render; slate and clay ridge, timber framed roof, with no lining membrane, thin layer of vermiculite (asbestos contaminated) insulation; uPVC and timber soffits/barge boards, plastic and metal/rainwater goods, uPVC and timber double glazed windows, timber and metal entrance doors/frames	Exterior signs and brackets; former interior/exterior doorways blocked with bricks and cement blocks; cellar with allied brick/stone lined tunnel, running downhill to the west, beneath side access path	Roof leaking in places; windows and doors in place, but one window to front missing, and two to rear; general air of damp interior; open area to rear with multitude of hard surfaces (e.g. concrete), and brick/stone walls

Standing on the west side of Pant Road, a relatively busy thoroughfare, the front (north-eastern elevation) opens straight on to a pavement. Access to rear is via a gated, slopping cement path at the south-east end of the building. Area to the rear is now a yard (approximate 180m²), which extends behind 2 Pant Road. From consulting aerial photographs, the yard area previously comprised a rear extension (since demolished), and several lean-to type structures (which have been removed). Access to the rear yard is also possible off Glendower Street and the yard comprises mainly concrete surfaces.

Natural features nearby are very limited, with a single mature tree on Glendower Street, and short hedgerows/boundary features on the opposite site of Pant Road. Further away, to the east, are mature trees and shrubs on the site of the former Ivor Iron Works, and to the north-west, similar habitats on the site of what were old railway yards. Generally however, the surroundings are typical of an urban environment.

6 Constraints or limitations

The surveyors were given complete freedom of access to the property, and there were no limitations in assessing the surrounding land. However, considerable work has been undertaken at the property, including the demolition of a rear two-storey extension, and removal of all of the lean-to/temporary structures. The rear of the property has therefore been effectively cleared of all evidence of the previous structures (which can be viewed on recent aerial photographs).

Inside the original building, there has also been considerable work undertaken. Although not gutted, the ground and first floors, which were probably open dining areas, have had some features removed, including one window, at the front, and two at the back (although their frames were in place). It is likely that the windows were removed to facilitate the ejection of demolished/dismantled materials into waiting skips, but this does open the possibility of occasional access by birds or bats.

Further, internally, vermiculite insulation was found in the loft. This is an asbestos based material, and the surveyors felt it unwise to disturb it in order to search for evidence of bats. Inspection was limited to the areas around the end walls, around the base of the king post, and along the line of the ridge board.

In terms of carrying out the PEA, the winter is a poor time of year to undertake such an assessment. Many plants are dormant, have died back, or are limited to odd blades of grass, or leaves. Nonetheless, a basic assessment of the plant types/habitats was possible.

7 Record search

Following normal practice, a record search was commissioned from the South East Wales Biodiversity Record Centre (SEWBReC), and this search (unique reference 0234-714), revealed the presence of 60 historic records of bats within 2km. The records straddle the boundary between

Vice County 41 (Glamorganshire), and Vice County 42 (Brecknockshire). The Vice County 42 records have largely been verified/validated. Sadly however, very few of the Vice County 41 records have been assessed, and many of them will never be verified, because they have been supplied by large ecological consultancies which did not retain the data (i.e. sonograms), for the County Recorder to be able to verify them. In many cases, the validity of these records is therefore questionable.

Importantly, none of the bat records relate to La Bodega. The nearest identified bat roost is some 608m to the north-west, where a brown long-eared bat (*Plecotus auritus*), at was found inside a large open building in September 2008. However, this particular record, like over 40 of the records in the data set, is unassessed. Other species in the dataset include lesser horseshoe bat (*Rhinolophus hipposideros*); greater horseshoe bat (*Rhinolophus ferrumequinum*); common pipistrelle bat (*Pipistrellus pipistrellus*); soprano pipistrelle bat (*Pipistrellus pygmaeus*); unidentified pipistrelle species (*Pipistrellus sp.*); Daubenton's bat (*Myotis daubentonii*); Natterer's bat (*Myotis nattereri*); as well as unidentified myotid bats (*Myotis sp.*); noctule bat (*Nyctalus noctula*); and serotine bat (*Eptesicus serotinus*). The majority of these records relate to foraging or commuting activity, but a few day roosts, and two maternity sites had also been recorded within 2km of the property.

With respect to birds, the search revealed just 8 records with none at the survey site. Species noted included great tit (*Parus major*); blue tit (*Cyanistes caeruleus*); European barn swallow (*Hirundo rustica*); starling (*Sturnus vulgaris*); kestrel (*Falco tinnunculus*); herring gull (*Larus argentatus*); and house sparrow (*Passer domesticus*). There were no records of barn owl (*Tyto alba*) in the dataset.

Herring gull, house sparrow, and starling, are all red list species on the BTO's list of Birds of Conservation Concern; birds which are considered to have the greatest conservation concern, and whose numbers and ranges are declining. Kestrel, is an amber list species; birds which are considered to have an unfavourable conservation status. Whilst the bird records are not extensive, and clearly missing species which might be expected to be found in domestic gardens, those that are listed include three red list species, and one amber list species.

The property is not designated for nature conservation reasons. By consulting the Magic Map Application, it was determined that there was one protected site within the 2km search radius, including Cwm Taf Fechan woodlands Site of Special Scientific Interest (SSSI), some 1.7km to the north-west, at its nearest point. It is not considered that this important site will be directly affected by the development proposals. There are no Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, or National Nature Reserves (NNR) within the search area.

Information provided by the Council ecologist advises that the property is within a B-line route. These are routes originally proposed by Buglife, as locations where efforts must be made to provide food plants for bees and other insect species. The presence of the property within such a route was therefore taken into account when considering the recommendations made in this report.

No Sites of Interest for Nature Conservation (SINC), were found within the 2km search radius, although one Historic Park and Garden, at Cyfarthfa Castle/Park, lies just outside to the south-west. It is not considered that this site will be impacted by the development.

8 Survey findings

The PRA and PEA were conducted on Tuesday the 19th of December 2023, in variable weather conditions. Details of the timing, and conditions under which survey was conducted are given in Table 3 below. Wind speeds employ the Beaufort scale.

Table 3: Survey and conditions

Date	Survey type	Timing	Weather conditions
19/12/2023	Preliminary Roost Assessment (PM/DM); Preliminary Ecological Appraisal (PM)	10.10 – 11.00 hours Greenwich Mean Time (GMT)	Air temperature: 9°C Cloud cover: 8/8 oktas Conditions: Rain showers Wind speed: F1, light air
Surveyors	Diane Morgan (DM), Phil Morgan (PM)		

The surveyors assessed the rear of the property first, noting the removal of the rear extension, and temporary lean-to structures. The area was found to be relatively clear, with no particular discarded objects which might afford any shelter for wildlife. The few plants which were present in this area were recorded, and the rear, and south-eastern end of the original building were examined and photographs taken. Potential bat access points were noted in several places at the rear of the building, where openings were present above and below security doors (fitted over openings which previously accessed the rear extension), at two removed windows, and at the south-west gable end of the original structure. Many of the openings noted were considered to be large enough to be exploited by small bird species.

Assessment next considered the cellar/basement area of the building. This area was found to be divided into four store rooms; two of which are divided by the access staircase from the ground floor area. It is proposed that the staircase will be removed as part of the development, and access to the cellar/basement storage will be by means of a door from the back yard area. No signs of bats or nesting birds were noted in this area, although it would likely provide reasonably stable conditions suitable to allow bat hibernation to occur. A curious feature, off the smallest store room, was an underground tunnel, lined in stone and brick, which appears to follow the line of the falling external pathway at the south-east end of the building. Whilst its original purpose was unknown, this was considered to be very suitable for bat hibernation usage, in terms of being cool and quiet. However, there was no obvious external access to this feature.

Consideration of the ground and first floor areas noted that whilst some items were stored on these floors, they were largely open, and effectively single rooms on both levels. It was assumed that these areas were unchanged, and would have provided dining areas when the property was used as a restaurant. No evidence was found in these areas for the presence of bats or nesting birds, although access would currently be possible by both groups.

As noted earlier in this report, inspection of the loft was limited by the presence of vermiculite insulation on the floor. The surveyor was not able to move this material, which is asbestos based, for obvious health and safety reasons. No obvious signs for bat presence were noted in the form of droppings, but the loft area was very damp, with water falling into various receptacles on the floor, to catch rainwater in an obviously leaking roof! However, by switching off the torch, it was possible to see outside daylight in several places, particularly at the south-east gable end wall plate. No evidence of bird presence was noted within the roof area.

External examination of the front of the building, from Pant Road, determined that there were gaps at the ridges of the roof which could be exploited by bats, as well as various slipped slates, and gaps around the base of the single chimney, where the lead flashing had lifted. Gaps were also noted at the barge board on the south-eastern gable of the building. Overall, and because of the gaps noted above, which provide access to Potential Roosts Features (PRF's), the original building was judged to offer moderate potential to be used by bats. It could also be exploited by roof nesting birds such as house sparrow (*Passer domesticus*). Various street lights were noted along the road, which would likely lead to La Bodega being well illuminated at night.

Finally, the surveyors considered the context of the building in its surroundings. Apart from the aforementioned single tree on Glendower Street, and a short hedgerow bordering a car parking area on Pant Road, there is little natural vegetation within a 50m radius. There is a line of mature trees, running north to south, roughly 50m to the east, as well as landscaped areas on the site of the former Ivor Iron Works site, further to the east, and former railway yards to the north-west.

Other than these features, small domestic gardens provide the only habitats which might readily be exploited by wildlife.

Table 4 below lists the plants, and other species noted on site during the survey. None of the species recorded are regarded as rare or endangered, and are on the contrary, common and widespread. No invasive non-native (INNs) plant species were observed.

Table 4: Site species list

Species (common name)	Species (scientific name)	Nature of observation
Annual rye grass	*Lolium multiflorum*	Present
Blackbird	*Turdus merula*	Heard calling
Bramble	*Rubus fruticosus*	Present
Common box	*Buxus sempervirens*	Present
Dandelion	*Taraxacum spp.*	Present
Dogwood	*Cornus sanguinea*	Present
Groundsel	*Senecio vulgaris*	Present
Herb-Robert	*Geranium robertianium*	Present
Ivy	*Hedera helix*	Present
Maidenhair spleenwort	*Asplenium trichomanes*	Present

The site was considered to be unsuitable to support species such as amphibians and reptiles, and terrestrial mammals such as badger, dormouse, and hedgehog. Whilst hedgehogs may be present in the wider area, the highly urbanised location makes the presence of any protected terrestrial species highly unlikely.

9 Discussion

Undertaking ecological assessment of a property, which is in effect a construction site, albeit a relatively tidy one, is always difficult. Ideally any development would be assessed before any work begins, but too often the ecologist plays the role of Cinderella – being the last one invited to the ball! Sadly, this is the case at La Bodega, where a two storey extension at the rear of the original building had been demolished, and a number of lean-to, demountable buildings have already been removed.

Additionally, other constraints, such as the vermiculite insulation in the loft of the former public house/restaurant, prevented detail inspection of the loft floor for health and safety reasons. Seasonality is also an issue in terms of assessing the botanical interest, although, given the relatively all-encompassing nature of the structures previously on site, opportunities for plants, and other protected species will have been very limited.

With respect to the record search, this indicated that there were no previous records for bats or roof nesting birds at the property, or for that matter, in particularly close proximity to La Bodega. However, absence of records does not mean absence of presence, and much of our wildlife goes un-recorded due to the lack to knowledgeable recorders.

Notwithstanding, the record search results, no evidence was found for the presence of bats in terms of day roosting, night feeding perches, and in particular the possibility of the original building being used as a maternity roost. The presence of a cellar/basement, and particularly with the feature of the tunnel, would make the building attractive to hibernating bats. Although no temperature was taken within the tunnel, it appeared much cooler than the rest of the basement. However, whilst it would be possible for bats to find access to the basement presently, it is unlikely that it could have been accessed prior to the removal of the buildings in the yard area.

Despite the lack of evidence for bat presence, the original building does have moderate potential to be used by bats, and apart from the leaking roof, there was potential for bats to access the wall plate at the south-west gable, gaining access by means of the barge board area, and slipped slates, but also at the ridges of the roof, where gaps were evident, both at the ridges and at the lead

flashing around the single chimney. Other opportunities have been provided by the removal of the rear extension, and the missing windows.

Bats are protected under the provisions of Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), whilst their roosting places are also protected under the provisions of the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019. All bats, and their places of rest, are fully protected under British legislation, and as such, where there is evidence for the presence of bats, or where there is potential for them to be present, detailed assessment is appropriate.

When the nature conservation significance of the original building is considered against recognised criteria (*Bat Mitigation Guidelines 2004* and *Good Practice Guide: NRW Approach to Bats and Planning October 2015*), the nature conservation status of the structure is assessed to be moderate. However, more information is needed to confirm if bats are actually present, and how it might be being used (e.g. day roost). Recommendations are therefore made below for additional survey to be undertaken.

No evidence was found for the presence of bird nests, or roof nesting birds, but it is likely that species such as wren (*Troglodytes troglodytes*), and house sparrow, will be able to access the wall plate at the south-east gable end of the building, as they can squeeze into the gaps at the barge board/slipped slates. No evidence was noted for the presence of barn owl (*Tyto alba*), at the property, and there are no previous records of the species in the search results.

All breeding birds are protected under the provisions of the Wildlife and Countryside Act 1981 (as amended), and active bird nests cannot legally be disturbed or destroyed. Birds are highly mobile, and can use or abandon sites readily. Whilst no evidence for nesting was found, this cannot be totally discounted, and given that the building is to be re-roofed, it is appropriate to give advice in this respect, in the event that birds are found during any future work.

Potential presence of herpetiles (i.e. amphibians and reptiles), was generally dismissed given the isolated nature of the property, although common species such as frogs and toads might be present in the wider area, the highly urban nature of the site would tend to preclude their presence. Presence of species such as badger and dormice can also be dismissed for much the same reasons, but hedgehogs could be present, although the area must be highly perilous to live in for the species, and foraging opportunities would be very limited.

No evidence was found for the presence on invasive non-native plant species such as Japanese knotweed (*Reynoutria japonica*), giant hogweed (*Heracleum mantegazzianum*), Himalayan balsam (*Impatiens glandulifera*), or any other currently listed invasive plants/animals.

Recommendations offered herein, must also consider the three elements of the owner's intentions for the property. Much work has already been undertaken, and more will take place in the near future, if not already begun at the time of writing. Change of use may not have a significant impact, but working towards the new internal arrangements may have potential impacts, but equally afford opportunities for biodiversity. The addition of a rear extension development also offers potential for enhancements to benefit wildlife.

Section 6 of the Environment (Wales) Act 2016 requires the local planning authority to seek to maintain and enhance biodiversity. The Welsh Government has clarified this to mean that developments must include biodiversity enhancement measures prior to the determination of the application. There are opportunities to accommodate biodiversity enhancement measures within this development, and accordingly recommendations are made below to deliver Net Benefits for Biodiversity (NBB).

Similarly, the current PPW 12, requires that Green Infrastructure is considered with any development. Increasingly opportunities for biodiversity are more and more isolated. La Bodega

sits in a relatively central location between two relatively green oasis in this part of Dowlais, with the former Ivor Iron Works site some 90m to the east, and the reclaimed former railway yards some 110m to the west. The opportunity therefore presents itself to act as a stepping stone between the two green areas, and to comply with the requirements of PPW12. Green Infrastructure provided by gardens is therefore becoming ever more important, and it is appropriate to make recommendations in this respect below.

10 Recommendations

As set out in the Background section of this report, three elements need to be addressed, and these to an extent are running in parallel. First, to refurbish the original building. Second, to seek planning consent for a change of use, to permit the provision of a number of apartment/dwellings. Third, if permitted, to extend the building at the rear, to provide additional dwelling accommodation.

Existing work in hand and permitted development

No evidence was found for bat presence at La Bodega, or for that matter, nesting birds. The site is unlikely to support other protected species (e.g. herpetiles, terrestrial mammals, protected plants).

Most of the work to the rear yard area has already been completed, but the original building remains in a relatively open state where bats and birds can gain entry, and could potentially be disturbed during on-going, and proposed works, such as re-roofing. Such works fall within the heading of permitted development. Nonetheless, permitted development does not allow protected species to be disturbed, harmed, or for their places of rest to be blocked or destroyed (see Appendix V).

Bats are protected under the provisions of Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), whilst their roosting places are also protected under the provisions of the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019. All bats, and their places of rest, are fully protected under British legislation, and as such, where there is evidence for the presence of bats, or where there is potential for them to be present, detailed assessment is appropriate. The PRA at La Bodega has identified that it has moderate potential to be used by bats, and ideally observations would be undertaken of the building in summer, to establish if bats are actually entering or emerging from the building. To proceed without further survey is permitted, as no evidence was found for bat presence, but, recommendations are appropriate if re-roofing work takes place in the immediate future.

The owner must be aware that bats can be encountered unexpectedly during any development, and if this occurs, it is important to immediately stop activity in the vicinity of the bat(s). It is possible that a bat will be in a torpid state and unable to fly off for several minutes or even up to 20 minutes. Advice must be sought from Natural Resources Wales, or if this is not possible, then from an ecologist who holds a licence to disturb bats. To proceed without taking advice would be an offence under the provisions of the Wildlife and Countryside Act 1981 (as amended) (see Appendix V).

In the event that a bat is found, then further appraisal of the building cannot be avoided. It may be necessary for the owner to obtain a European Protected Species (EPS) licence from Natural Resources Wales (NRW) before completing works. However, before it is possible to apply for an EPS licence, confirmation of the species present would be needed, and how they are using the roof (e.g. day roosting).

To support the application for a licence, it will be necessary to provide a detailed Ecological Method Statement (EMS). For re-roofing to take place, a robust Scheme of Mitigation is required to ensure that the Favourable Conservation Status (FCS) of the bat species is not adversely

affected. The following broad principles must be followed within any Scheme of Mitigation of compensation at the site and will need to be delivered under the auspices of an EPS licence:

- bats must not be left without a place to roost;
- major works must be timed to avoid periods of the year when bats are likely to be present;
- any new roost structures provided as part of mitigation and compensation proposals must be suitable for the species of bat, and type of roost affected by the development;
- any scheme must ensure that the 'action authorised will not be detrimental to the maintenance of the population of the species concerned at a FCS in their natural range', and;
- post-development monitoring will be needed to comply with the EPS licence, and must form part of the Scheme of Mitigation for local authority planning procedures.

Considerable supporting documentation is needed, including the licence application form; a detailed Ecological Method Statement (providing information on the survey effort with recent survey data not older than 18 – 24 months), and details of the local status of the species concerned; the duties of an independent experienced Ecological Clerk of Works (ECW); as well as the duties and responsibilities of the various contractors (e.g. builders, carpenters, electricians, plumbers etc), and the owner/developer of the site. A Local Planning Authority consultation document must also be completed and signed, and any pre-commencement conditions of the planning consent concerning ecology must be formally approved and signed off by the planning authority. Given this circumstance, the obtaining of planning permission will tie into work to refurbish the building.

Further guidance regarding EPS licence is given below (see Appendix VI). Timing of works will be important, and ideally, avoids the summer breeding period.

If work must proceed, than a breathable membrane must be avoided. Modern breathable membranes (MBM) are often light in colour, and weight, with low thermal retention properties; they can sag into pockets and can have a smooth and shiny finish which offers no purchase to bats. Research has demonstrated that none of the MBM currently on the market are safe to use in bat roosts and that all present a potentially lethal threat to bats. In this case the lining membrane beneath the pitched roof must be a 1F bitumen liner. This is essential if the proposals to deliver Net Benefits for Biodiversity (NBB) (see below), are to be achieved. Under no circumstance must a dry ridge system be used on the roof.

At the south-east gable end provision must be made for bats to access the wall plate. It is expected that the existing spaces at the tops of the gable end wall will be retained or reproduced. The barge boards must be attached to a flying rafter. The upper sections (either side of the apex) must provide spaces for bats whereby the bats can climb up the exterior stonework, and enter the space between the ladder noggings, and, if they wish, crawl down into the loft (see Figure 4). Access slots must be small to avoid large birds gaining access to the wall plate, and openings of 300mm in length, by 18mm in depth are sufficient. In the absence of evidence to confirm bat presence, this is considered to be an enhancement.

Again, if re-roofing must proceed, then all work must be completed by the end of February to avoid the risk of bats or birds taking up occupation of the roof whilst work is on-going. Guidance is given above with respect to bats, but, breeding birds are also protected under the provisions of the Wildlife and Countryside Act 1981 (as amended). An active bird nest cannot legally be disturbed or destroyed. Once a nest is established, the birds must be able to have access at all times until the young have fledged, and the nest is no longer active. The bird breeding season commences as early as March and continues into August for species which rear a second or third brood. If an active nest is found elsewhere, it must also be retained and protected. A cordon must be established for a safe working zone a suitable distance from the nest, and not until the chicks have fledged can the nest be destroyed.

Change of use and possible extension

Change of use, of itself, is not considered to bring about any damaging effects with respect to biodiversity. Indeed, with respect to the roof area, the provision of insulation, and domestic use, will likely result in the loft being quieter than it was as a restaurant, although dwellings can of course be active through the night.

A Bat Conservation Trust study of the impacts of lighting on bats has considered the increased risk of the bats being preyed on in well illuminated areas. Lighting was also found to be harmful when present near woodland edges and hedgerows (not an issue with this property), as well as causing isolation of colonies, and altering insect prey behaviour. If external security lights are to be fitted as part of the proposals, these much be installed no higher than 2.3m above ground level, and use low wattage bulbs. There must be no upward light spill and shrouds or deflector fittings are a simple way of avoiding this. Lights must be on timers to ensure that lights are extinguished within 30 seconds of movement ceasing. It is also desirable that internal lighting is sunk into ceilings, rather than pendant lights, as this appears to reduce external lighting impacts if curtains or blinds are not used.

As already explained above, if roofing works could be postponed until addition appraisal work can be undertaken, then specific mitigation recommendations could be made. However, in the absence of being able to do such observations, it is appropriate to make provision for bats and nesting birds, on the basis of the species which are likely to be present. An enhancement is proposed above, in allowing bats to access the gable end ladder noggings. However, other provision must be made for bats, and this must be carried out at the rear of the existing building, close to the south-east gable end wall (see Plate 4).

Net benefits for biodiversity

New development provides the opportunity to enhance the biodiversity of the site, and to comply with Planning Policy Wales 12 (PPW12), which has recently been revised to encourage further recovery for nature, a number of enhancements are recommended as suitable for a site of this size. As starlings have been recorded in the area, it is recommended that a suitable nest box (see Plate 15) (see also separate Architects drawing – La Bodega Full 02B), is provided. A suitable location would be on an upper wall of any extension if subsequently permitted. It must be positioned so that it is not above, or near to, any window or doorway. A small nest box can also be provided (see Plate 16), but care will have to be undertaken with any installation to avoid direct sunlight, and rainwater incursion. Positioning so that it cannot be accessed by domestic cats will also be essential. Most manufacturers/suppliers provide instructions on suitable locations but a sheltered position is best.

A Schwegler 1FR bat tube (see Plate 17) (or similar agreed), must be sunk into the stone work, and an example is provided of how such a box must be integrated into a wall (see Plate 18) (see also separate Architects drawing – La Bodega Full 02B). The box can be covered with a cement screed, so that it is not obvious when viewed from the ground. This location is considered to be suitable, because although it is near to a rain water downpipe, it otherwise affords a good location in sunlight, which will offer thermal gain, and an otherwise unobstructed flight route for access.

It subsequently the owner pursues the idea of an extension at the rear, the location of the box suggested above will still be relatively unobstructed. A second box can also be included in the construction of any extension on the south side of such a structure. Ideally it would be built in at eaves level and away from any windows or doorways.

As detailed by the planning ecologist, much of Merthyr Tudful lies within a designation known as a ‘B-line’, a concept formulated by Buglife. It sensibly argues that many of our insects, including pollinating bees, are struggling to cope with modern development and likely climate change. The development at La Bodega offers an opportunity to benefit bees and other insects. Ideally some

of the back yard area can be used to provide suitable flowering plants, either in borders, or, in pots/planters.

Even small corners can be utilised, to provide enhancements for insects, and a dense planting of lavender (*Lavandula spp.*), will benefit bee species in particular. Other plants which can be included, and which will benefit insects at different time of year are listed in Table 5 below. An area of some 26m² has been set aside at the rear of the property (see separate Architects drawing – La Bodega Full 03A), and this will be used for planting examples of the plant species in Table 5.

Table 5: Plants for insects

Plant	Planting locations	Benefitting insects
Borage	Garden edges, walled borders, pots	Flying insects including bees
Honeysuckle	Garden edges	Bees, moths, other flying insects
Lavender	Garden edges, walled borders, pots	Bees, moths, other flying insects
Michaelmas daisy	Pots, walled borders	Butterflies
Sweet William	Garden edges, walled borders	Flying insects including bees
Wallflowers	Garden edges, walled borders	Butterflies

Green infrastructure statement

It is necessary to submit a Green Infrastructure Statement (GIS), to the planning authority for compliance with PPW12. As well as stating the provision of enhancements for biodiversity, as described above, there is scope for some tree and shrub planting, as well as other measures, taking into account the effects of climate change, which is projected to result in higher rainfall levels in Wales.

Table 6 below lists suitable small garden tree species which would be suitable at La Bodega. It is important that trees are purchased from local suppliers to avoid plant diseases, which can be introduced with imported stock. It is not expected that the owners will plant examples of all of the trees and shrubs listed, but, planting one of them will make a contribution to local biodiversity, reducing the water table, and carbon sequestration. The area of some 26m² at the rear of the property (see separate Architects drawing – La Bodega Full 03A), will be used for planting an example of the species set out in Table 6.

Table 6: Small garden tree and shrub species

Plant	Biodiversity benefits
Alder	Nectar for bees, and seeds for birds
Blackthorn	Nectar for bees, and seeds for birds
Bird cherry	Nectar for insects, and seeds for birds
Crab apple*	Nectar for insects, seeds for birds and small mammals
Dog rose	Nectar for insects, seeds for birds
Dogwood	Good for moths and caterpillars, birds
Elder	Nectar for insects, food for birds and small mammals
Field maple*	Food for insects, birds and mammals
Goat willow	Good for insects
Hawthorn	Food for insects, birds and mammals
Hazel	Food plant for small mammals
Holly	Food plant for insects and birds
Rowan (Mountain ash)*	Food plant for insects and birds
Silver birch*	Seeds and invertebrates for birds

*** Tree species which would be appropriate at La Bodega**

There is scope for installing a porous ground surface in the zone to the rear of the property. An area has already been identified for the location of private car parking. This area is currently a concrete surface, and it is expected that rainwater run-off may result from it being left in this condition. A porous parking area will reduce surface water run-off into Glendower Street, and it is therefore recommended (see separate Architects drawing – La Bodega Full 03A).

11 Conclusions

La Bodega is currently subject to on-going permitted development refurbishment, as well as being the subject of an application to the local planning authority for permission to change the use of the property. It may at some point in the future be the subject of a further application to extend the original building at the rear. As detailed above, assessing the property given the current on-going refurbishment has provided challenges, but no evidence has been found for the presence of protected species. The original building, which was a public house/restaurant, does however have potential to be used by bats, and the roof area was assessed to have moderate potential.

Re-roofing of the building is likely to take place in the very near future, and so the usual process, where summer bat emergence observations would be undertaken, are likely to be overtaken by events. In the absence of evidence for the presence of protected species, the owner is at liberty to do so. Nonetheless, recommendations are made within this report to minimise the risks for bats. Procedures which must be followed if a bat is found so as to avoid an unlawful action. In order to deliver Net Benefits for Biodiversity, enhancements which can be carried out now for both bats and nesting birds.

A Green Infrastructure Statement is also included within this document in compliance with current planning requirements, which will make a contribution to the local community, as well as helping to reduce the impacts of climate change in the area. If all the recommendations in this report are delivered, with respect to environmental/biodiversity enhancements, any negative impacts will be nullified and positive actions can be undertaken to benefit wildlife and the local area.

12 References

Aebischer, N.J., Balmer, B., Brown, A.F., Eaton, M.A., Douse, A., Lindley, P., McCulloch, N., Noble, D.G., Stanbury, A., and Win, I. (2021). '*Birds of Conservation Concern 5: The Population Status of Birds in the United Kingdom, Channel Islands, and the Isle of Man*'. British Trust for Ornithology, Thetford

Anon. (2023). '*Bats and Artificial Lighting at Night: Guidance Note 08/23*'. The Institution of Lighting Professionals and Bat Conservation Trust, Rugby

Anon. (2017). '*Guidelines for Preliminary Ecological Appraisal – 2nd Edition'*. Chartered Institute of Ecology and Environmental Management, Winchester

BS42020:2013 (2013). '*Biodiversity – Code of Practice for Planning and Development*'. British Standards Institution, London

Collins, J. (Ed.) (2023). '*Bat Surveys for Professional Ecologists – Good Practice Guidelines – 4th Edition*'. Bat Conservation Trust, London

Mitchell-Jones A.J. and McLeish A.P. (2004). '*The Bat Workers Manual – 3rd Edition*'. English Nature, Peterborough

Ninnes, R. (2015). '*NRW Approach to Bats and Planning*'. Natural Resources Wales, Bangor

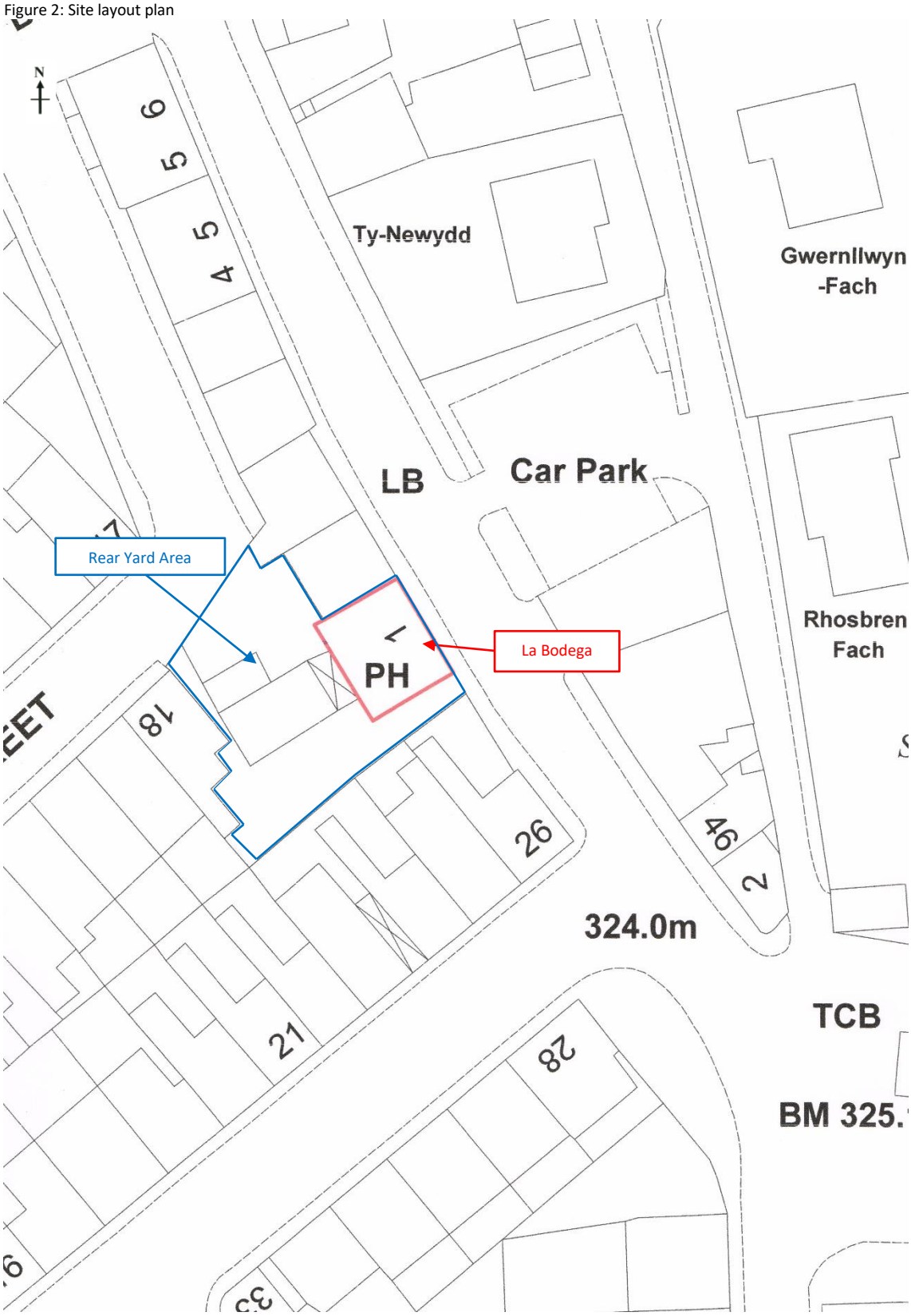
Reason, P.F. and Wray, S. (2023). '*UK Bat Mitigation Guidelines – A Guide to Impact Assessment, Mitigation and Compensation for Developments Affecting Bats*'. Chartered Institute of Ecology and Environmental Management, Winchester

Spoelstra, K., van Grunsven, R., Ramakers, J., Ferguson, K., Raap, T., Donners, M., Veenendaal, E., and Visser, M. (2017). *Response of Bats to Light with Different Spectra: Light-shy and Agile Bat Presence is Affected by White and Green, but not Red Light.* Proceedings of the Royal Society Biological Sciences, 283 (18550, p.20170075)

Appendix I: Site location/layout plans

Figure 1: Site location plan

Figure 2: Site layout plan



Appendix II: Site photographs

Plate 1: Street frontage of La Bodega, viewed from east

Plate 2: South-eastern aspect

Plate 3: Rear of La Bodega, viewed from the north-west

Plate 4: Rear, viewed from the west, showing scar of removed building, and proposed bat box (yellow)

Plate 5: Rear, showing entrance to cellar

Plate 6: Ramp on south side of building, looking east

Plate 7: Rear of La Bodega, showing open area following removal of extension and lean-to structures

Plate 8: Rear, looking north into Glendower Street

Plate 9: North end of the loft

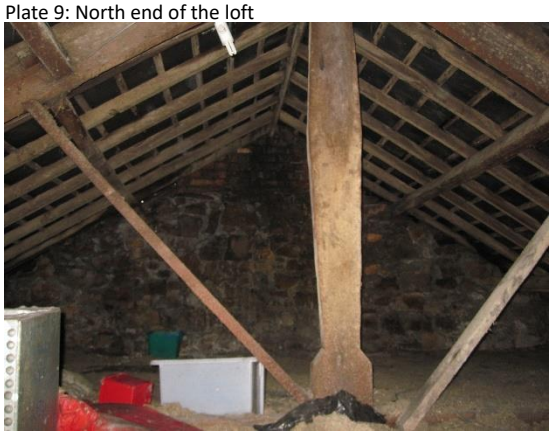


Plate 10: Southern end of loft

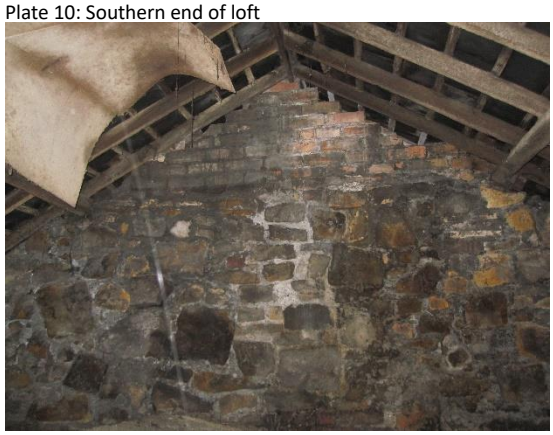


Plate 11: First floor area

Plate 12: Ground floor rear door, showing ready access for bats and birds at top and bottom of door

Plate 13: Part of cellar/basement area

Plate 14: Lined tunnels off cellar/basement

Appendix III: Biodiversity enhancements for bats and birds

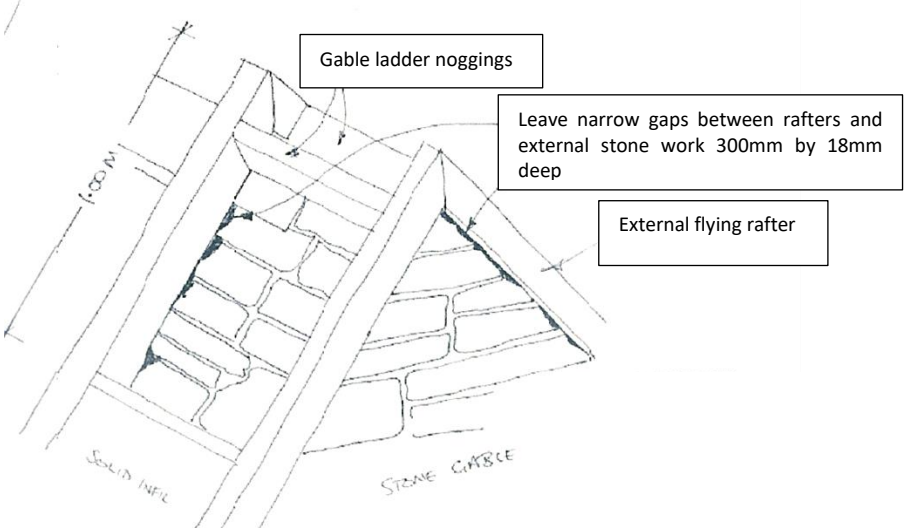
Plate 15: Starling nest box

Plate 16: Small bird nest box

Plate 17: Schwegler 1FR bat tube

Plate 18: Example of integrated box being put in place

Figure 3: Gable end bat access proposals



Appendix IV: Ecology of bats

During the evolution of life on Earth, as far as is known, only four groups of animals have achieved the ability to fly by their own means/physical powers. These groups include the long extinct Pterosaurs – flying dinosaurs; insects (e.g. bees, butterflies, flies); birds; and bats. This makes bats, as the only flying mammals, particularly special, and due to this ability, they are widespread, with roughly 1400 different species found across the globe.

This diversity means that they have evolved to exploit many habitats and opportunities, from deserts to forests, and lakes, and cities. Only the open seas and oceans, and ice caps are devoid of bats, although crossings of seas by bats have been recorded on numerous occasions. Bats fall into two groups, the mega-chiroptera – the old world fruit bats – and the micro-chiroptera – mostly smaller, mainly insect eating bats. Both groups evolved separately: the fruit bats from a lemur like ancestor, whilst the micro-chiroptera evolved from a shrew like ancestor, probably just before the dinosaurs became extinct – they are therefore a very ancient group of animals.

In Britain, there are some 18 species currently present and most of these are considered to be breeding in the country. They are all micro-chiroptera and eat only insects. Whilst there are many 'old wives tales' about bats, many of them are false, and bats are highly social animals with excellent eyesight, particularly in poor light. They are mammals, being warm blooded and giving birth to live young – usually only one baby at most – although twins are sometimes found in Scotland, where insect populations allow female bats to occasionally support more than one pup. They can also be long living, although typically smaller bats live for around five years. However, some species, such as Daubenton's bat, have been recaptured over 21 years since they were originally encountered!

Whilst not unique, bats have evolved to see with sound – known as echo-location – something whales and dolphins can also do, as well as some birds, insects, and terrestrial mammals like shrews. In bats it is particularly refined, allowing them to detect moving objects and determine if an insect, such as a moth or gnat is good to eat.

British bats live in a variety of places, and following the last ice age, most lived in caves or rot holes on trees since bats have no means to gnaw or chew at wood, or make modifications to a structure. Today, with very little woodland left in Britain, bats have had to learn to exploit modern structures, and although some still rely on caves in order to hibernate, bats are good at finding access points around the roof features of buildings. Some like to roost within loft spaces, these loft dwelling species include the lesser horseshoe, and greater horseshoe bats, as well as the brown long-eared bats, although all bats are capable of exploiting roof spaces if necessary.

However, most bats exploit the verges or edges of the roof space and sometimes the walls of a building, and these animals are known as crevice roosters – including our most common species – the pipistrelle bats.

In the past 70 years agricultural practices, resulting in habitat fragmentation, and the use of pesticides have resulted in a massive reduction in bat numbers, driving some to the edge of extinction, and for this reason all bats in Britain are legally protected.

Appendix V: Legislation

All British bats, and their roosts (whether occupied or not) are legally protected. The main legislation is the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000). Protection is also afforded under the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019. Under the provisions of these legal protections, anyone found guilty of harming bats or damaging, destroying or denying access to a bat roost, can be subject to fines or custodial sentences.

In an effort to start to address the decline in bat populations, the Natural Environment and Rural Communities Act 2006, and the Environment (Wales) Act 2016 require all public authorities/bodies to have regard for the conservation of biodiversity – e.g. when considering planning applications. With regard to Wales, species and habitats of principal importance are listed in Section 7 of the Environment (Wales) Act 2016 which includes 8 bat species: common and soprano pipistrelles, noctule, brown long-eared, greater and lesser horseshoes, barbastelle, and Bechstein's bats.

A legal ruling (Woolley v. Cheshire East Borough Council) has set a precedent stating that it is necessary for a planning authority to be appropriately informed or aware of the presence (or absence) of legally protected species prior to considering the issues of a planning proposal. Good practice is to assess as soon as possible if bats are present at potential sites for development and possibly even before land is purchased. In some cases the period required for adequate survey work may span more than one calendar year. If a development, including demolition or change of use, is likely to impact on bats and their roosts then a derogation licence will usually be required. Adequate survey results are a necessary input to any licence application. If bats are not found until late in the development stage this may result in expensive delays while a derogation licence is sought and even in offences being committed.

The law with respect to dwellings and other structures is applied equally. Where disturbance is deemed likely to have a significant effect on bats to survive, breed and rear their young or will affect the local distribution and abundance of the species, a European Protected Species licence issued by Natural Resources Wales. A licence application must demonstrate that the development will not be detrimental to the maintenance and favourable conservation status of the species concerned.

All wild birds, their eggs and nests are protected by The Wildlife and Countryside Act 1981 (as amended). It is an offence, with certain exceptions, to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- intentionally take or destroy the egg of any wild bird;
- sell wild birds or put them on display for sale;
- use traps or similar items to kill, injure or take wild birds; and
- intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Penalties that can be imposed for criminal offences in respect of a single bird, nest or egg contrary to the Wildlife and Countryside Act 1981 (as amended) is an unlimited fine, up to six months imprisonment or both. In exceptional cases NRW can issue a licence for a specific purpose, so that legitimate work may be undertaken without breaking the law. However, this is exceptional, and not something that is normally expected or done.

Appendix VI: European protected species licences

Under the Conservation of Habitats and Species Regulations 2019 a licence can only be issued if NRW are satisfied that:

- there are imperative reasons of overriding public interest including those of a social or economic nature;
- there is no satisfactory alternative, and;
- the action authorised will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range.

NRW will require a copy of the issued planning consent for the refurbishment/rebuilding of the dwelling, as well as an explanation of why there is a need to carry out the proposed work, and what alternative solutions have been considered (e.g. other sites) and why they have been discounted. The alternative of retaining the roost within the development must be considered. The last point will depend on the possibility of implementing appropriate mitigation and on assurances that it can be and will be carried out and maintained and the results monitored. NRW aim to process applications within 30 working days, but in practice licences often take longer depending on the number of applications being processed at any one time. NRW have recently stated that they will now charge for the issuing of an EPS licence, but, it is not clear at this point if the refurbishment of a dwelling will incur a charge.

This document has been produced by Morgan Ecology, exclusively for Mr Kristian Davis. It cannot used by any other person or enterprise, for any other purpose, than that specified, without the written consent of Morgan Ecology. Any liability arising from misuse by a third party, of this document, for any purpose not wholly connected with the above, shall be the responsibility of that party, who shall indemnify Morgan Ecology against all claims, costs, damages, and losses, arising out of such misuse.

Unless specifically assigned or transferred within the Terms and Conditions, Morgan Ecology asserts and retains all Copyright, and other Intellectual Property Rights, in and over the document, and its contents.

In preparing this document, we assert that we have exercised reasonable skill and care, taking into account the project objectives, the agreed scope of the work, prevailing site conditions, the degree of manpower and resources allocated to the project, and in compliance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.

This document is valid for a defined period, in compliance with National Guidelines, for a period of one year from the front cover date.

Details of the species recorded during this survey have been passed to the South East Wales Biodiversity Record Centre.

Morgan Ecology provides ecological services with respect to bats and terrestrial mammals, and is based in Mid-Wales. It specialises in providing affordable, and expert services on protected species, for a wide of clients.

Morgan Ecology – Shaping the future

Llys Newydd, Llanfihangel Talyllyn, Aberhonddu LD3 7TG Tel: 07713 258937