

Guest Memorial
Bowls & Social Club
Merthyr Tydfil
CF48 3LJ



An **Ecological Survey**
Report By:



On **Behalf Of:**

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1 Executive Summary

- 1.1 The owners of the Guest Memorial Bowls and Social Club in Dowlais, Merthyr Tydfil wish to convert a shed, currently used for storage, into changing rooms. The project will require planning permission from Merthyr Tydfil County Borough Council. To inform the planning process, a Preliminary Roost Assessment was carried out in November 2023 by an experienced, licensed ecologist and an assistant.
- 1.2 Day time inspection of the shed found no live bats. No evidence of bats was found internally or externally. However, the shed was assessed to have **moderate** potential to be used by crevice roosting bat species, due to cracks in the render and brickwork, missing mortar and other gaps in the structure. These features are typical of the locations bats will utilise for roosting, and as a consequence of this potential, additional survey is needed.
- 1.3 It is recommended that two dusk emergence/activity observations for bats is carried out on the shed between the beginning of May and the end of August. This is the minimum level of additional appraisal required to adhere to national guidelines and support the needs of the planning authority, as well as apply to Natural Resources Wales for a European Protected Species licence, if one is subsequently required.
- 1.4 Breeding birds were also considered. The survey was conducted outside of the nesting season and no active bird nests or evidence of nesting birds were noted in the shed. Magpies were observed flying in and out of the conifers directly behind the shed. 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. General advice on the legal protection afforded to breeding birds is provided in this report in the event a nest is found during works.
- 1.5 Enhancements will be required in order to comply with Planning Policy Wales: Edition 12. Further details of recommended enhancements will be provided in the full bat survey report.

2 Introduction

- 2.1 The owners of the Guest Memorial Bowls & Social Club in Merthyr Tydfil propose to renovate a shed currently used as storage to provide changing facilities. The proposed works will include extensive internal renovation, the removal of roof coverings, installation of a new roof and renovation of the walls. The project will require planning permission from the local planning authority, Merthyr Tydfil County Borough Council.
- 2.2 In order to consider the presence, or potential presence, of protected species, a Preliminary Roost Assessment (PRA) was commissioned from Just Mammals Limited and undertaken by a licenced Ecologist in November 2023. Assessment comprised of a daytime inspection of the building both externally and internally. Details of the site location are given in Table 1 below.

Table 1: Survey Site Details

Address	Grid Reference	Altitude
The Guest Memorial Bowls & Social Club, Merthyr Tydfil, CF48 3LJ	SO06863 08009	320m Above Ordnance Datum

- 2.3 Objectives of the assessment effort were to:
 - determine if bats or birds are present in, or have the potential to, roost at the building.
 - consider if there will be impacts on bats from the proposed works.
 - gather sufficient information to be able to make appropriate recommendations.

3 Survey Team Experience

- 3.1 The survey was carried out by Grace Dooley BSc (Hons) MSc ACIEEM, an experienced, licensed senior ecologist with Just Mammals Limited (NRW licence number S091842/2). Assisting with the survey, and author of this report, is Catherine Povey BSc (Hons) MSc, trainee ecologist with Just Mammals Limited.

4 Survey Methodology

- 4.1 The PRA involved a daytime visual appraisal of the buildings (externally and internally) seeking signs of bat presence. External survey examined outer surfaces from the ground, looking for signs

of bat presence, including bat faeces (droppings). A high-powered lamp and close focusing monocular were used to examine potential access and roosting areas. Gaps or crevices were inspected as closely as possible. The context of the building within the surrounding landscape was also assessed.

- 4.2 Internal survey searched for bats or the remains of dead bats (including dead juveniles and babies, which might indicate the presence of a maternity site) and signs of bats including bat faeces (droppings) on floors, ledges, walls, stored items and other surfaces. The roof structure was inspected as far as was possible. Urine staining, both on paintwork and window glass or staining on timbers caused by oil from bat fur were also searched for, as well as discarded fragments of insects, such as moth wings.
- 4.3 In addition to the search for evidence, the potential for bats using the building for summer day or night roosting was also assessed. The potential for use as a hibernation roost was also investigated during the survey, paying particular attention to low level structures on north facing elevations.
- 4.4 Nesting birds were also considered, with the surveyor looking for signs of historic bird activity, nest remains, evidence of collections of bird dropping, feathers or any other indications of use by birds.

5 Site Description

- 5.1 The Guest Memorial Bowls and Social Club is situated in Dowlais in north-east Merthyr Tydfil. The shed to be developed is adjacent to the Bowls Club carpark to the north-east of the site. It is separated from Gwernllwyn Road to the north by a row of tall conifers. The shed pre-dates the bowling club and was originally part of a larger structure which has since been demolished. It is rectangular, on a roughly north-west, south-east axis, brick-built and rough rendered to the front and sides. Walls are dual-skin although with no cavity present in between, as seen from the interior. The roof is pitched and covered with slate-type tiles supported by a timber frame. The original windows have been bricked up and access is via two roller doors on the south-west elevation.
- 5.2 It is divided into two rooms internally, with a brick fireplace on the dividing wall in the smaller, south-easterly room. The chimney has been removed externally and the roof re-covered resulting in a bulge in the ridgeline at that point. The building is open to the roof with no loft space. At one time the shed was used as a garage with access on the north-west side. The garage doorway has been blocked up and rendered up to the gable, which is covered with corrugated metal. The ceiling in the smaller space is lined with timber sarking with a bitumen lining beneath the roof tiles. The larger space has uncovered bitumen lining above open rafters.
- 5.3 The bowls club is situated in mature gardens of approximately 2 hectares. To the north-west of the club, within a few metres, is a brownfield site of approximately 12 hectares with mature tree growth, historically the Dowlais steel and ironworks, closed since 1987. The bowling club is within a kilometre of open countryside, consisting of a post-industrial mining landscape to the east and south and the Bannau Brycheiniog National Park approximately 2km to the north. There are two large ponds approximately 500m north-east of the site with a total of five large ponds within 3km. Connectivity between the shed and suitable bat foraging habitat is good by way of the mature trees of the surrounding gardens to the brownfield site and on to the wider countryside and ponds.

6 Desktop Study

- 6.1 The context of the site was considered with regard to statutory sites of nature conservation interest, such as SSSIs, SACs, National Nature Reserves (NNRs), and Local Nature Reserves (LNRs) etc. There are no designated sites within a 2km radius, the closest being the Taf Fechan SSSI which is approximately 3km to the north-west.
- 6.2 A Biodiversity Information Service (BIS) record search was commissioned which revealed thirty-three bat records within a 2km radius of the site (unique LERC reference number 0234-704). Of particular interest are records referring to bats hibernating in Morlais railway tunnel approximately 1.5km to the north-west of the site. Four species of bat have been recorded at the hibernation site; brown long eared (*Plecotus auritus*), Daubenton's (*Myotis daubentonii*), Natterer's (*Myotis nattereri*) and lesser horseshoe (*Rhinolophus hipposideros*). The majority of other records relate to common and soprano pipistrelles (*Pipistrellus pipistrellus* and *Pipistrellus pygmaeus* respectively) commuting and foraging in the area.
- 6.3 The record search also returned thirty-seven records for birds within 1km of the building. Two

records were for birds on Schedule 1 of the Wildlife & Countryside Act 1981; barn owl (*Tyto alba*) and peregrine falcon (*Falco peregrinus*). Twelve records were for birds listed in Section 7 of the Environment (Wales) Act 2016; kestrel (*Falco tinnunculus*), herring gull (*Larus argentatus*), house sparrow (*Passer domesticus*) and starling (*Sturnus vulgaris*). Twelve records were for birds on the Birds of Conservation Concern Red List including swift (*Apus apus*) and house martin (*Delichon urbicum*).

7 Survey Constraints

- 7.1 There were no survey constraints, all areas of the site were accessible, and weather conditions were suitable for survey.

8 Survey Results

- 8.1 A single day time visit was made to the site on Thursday 30th November 2023. Table 2 below summarises the details of the conditions under which the survey was undertaken. Wind speeds shown employ the Beaufort scale.

Table 2: Summary of Survey Activity and Weather Conditions

Date	Survey Type	Timing	Weather Conditions
30/11/2023	Day time visual inspection	14:00 – 15:00 hours Greenwich Mean Time	Air temperature: 2°C Cloud cover: 1/8 oktas Wind speed: F1, light air Conditions: Dry
Surveyors	Grace Dooley, Catherine Povey		

- 8.2 Assessment commenced with an internal inspection of the shed, which found no live bats. No evidence of bats was found internally, no bat droppings, staining or insect remains were noted.
- 8.3 Externally, survey of the shed revealed no live bats or evidence of bats in the form of bat droppings, staining or insect remains. However, the building was considered to offer potential access points which bats or birds could exploit. These features were identified as:
- cracks in the render and brickwork in the north-west gable end wall open to the exterior.
 - missing mortar creating a gap under a central ridge tile.
 - misaligned bargeboards on the south-east gable end creating access gaps.
 - cracks through the sarking and bitumen liner of the ceiling in the smaller space which are open to the exterior, although these are very narrow.
 - gaps between the corrugated metal and soffit on the north-west gable end.
- 8.4 The building was also assessed for its potential to support hibernating bats. A chimney is present that has been capped below the roof line, with its hearth in the eastern room. No other potential features that could support hibernation were noted.
- 8.5 Breeding birds were also considered during the inspection. No active bird nests were found, and no evidence of birds was noted in the building. Magpies (*Pica pica*) were observed in the conifers behind the shed.

9 Discussion and Conclusions

- 9.1 The desktop study revealed that the closest designated statutory site of nature conservation interest is the Taf Fechan SSSI, approximately 3 km to the north-west. The development proposals are not considered likely to impact on this or any of the designated sites in the vicinity.
- 9.2 Inspection of the shed found no live bats internally or externally. No evidence of bats was found internally or externally, no bat droppings, staining, or insect remains were noted. The survey was completed in November, when bats are likely to be absent from their summer roosts, and it is not considered to be surprising that no bats were observed during the survey. Large quantities of bat droppings and staining are indicators of the presence of a larger roost, such as a maternity roost. There was an absence of any evidence of such a roost observed during the survey.
- 9.3 The building is considered to offer **moderate** potential to be used by crevice and non-crevice roosting bat species, on account of the potential access points identified above. As identified in the previous section, there was no evidence identified of a maternity roost, and it is considered to be unreasonable to assume that such a roost would be present based on the evidence recorded. All UK bats and their roosts are protected under the Conservation of Habitats and Species

Regulations (Amendment) (EU Exit) 2019 and the Wildlife and Countryside Act 1981 (as amended). Therefore, the shed will require further assessment to determine whether bats are using it as a roost.

- 9.4 Presence of bats at other times of year, apart from the summer, was also considered. No low-level gaps, cracks or crevices were identified. As noted, no evidence of bats was identified on the interior, with both roller doors only open periodically and at irregular intervals for the use by the greenkeeper. Gaps were identified between the sarking panels through which daylight was observed, however these gaps were concluded to be too narrow to permit access by bats. The sarking is tight against the wall tops and it is not considered that bats could gain access to the interior of the eastern room in order to access the chimney. In addition, as previously noted and shown in Plate 7, the building has no wall cavity and is therefore considered as a whole to be unsuitable for hibernation activity by bats. Externally, no low-level features were observed on the north elevation, and therefore the shed is assessed to have negligible potential to be used by hibernating bats.
- 9.5 As no active bird nests and no evidence of birds nesting was observed, it is unlikely that the shed is a bird nesting site. The magpies observed on site may be using the conifers behind the shed for nesting as magpies prefer to nest in tall, dense trees. All nesting birds, their eggs, chicks and nests whilst in use or are being built are protected under the Wildlife and Countryside Act 1981 (as amended) and once a nest is established it is an offence to disturb or destroy the nest. Advice concerning breeding birds is given below.

10 Recommendations

- 10.1 Two dusk emergence/activity observations must be carried out on the shed between the beginning of May and the end of August, augmented with the use of Night Vision Aids (NVA). This is the minimum level of extra assessment to comply with national guidelines and required to support the needs of the local planning authority. If bats are found to be present, then a European Protected Species (EPS) licence will be required to undertake the development.
- 10.2 Sufficient observers will be needed to watch key aspects of the building, and survey must be undertaken under appropriate climatic conditions in compliance with national guidelines. Survey must therefore be carried out on dry evenings, with relatively low wind speeds and at temperatures in excess of 8°C.
- 10.3 The bird breeding season commences as early as March for some species and continues to late August for species which rear a second or third brood. If an active nest is found, it must be retained and protected from disturbance. A cordon must be established for a safe working zone a suitable distance from the nest site, and not until the chicks have fledged can the nest be destroyed, and the cordon taken down.
- 10.4 Enhancements will be required in order to comply with Planning Policy Wales: Edition 12 (PPW12). Further details to comply with PPW12 will be provided in the full report.

11 Bibliography

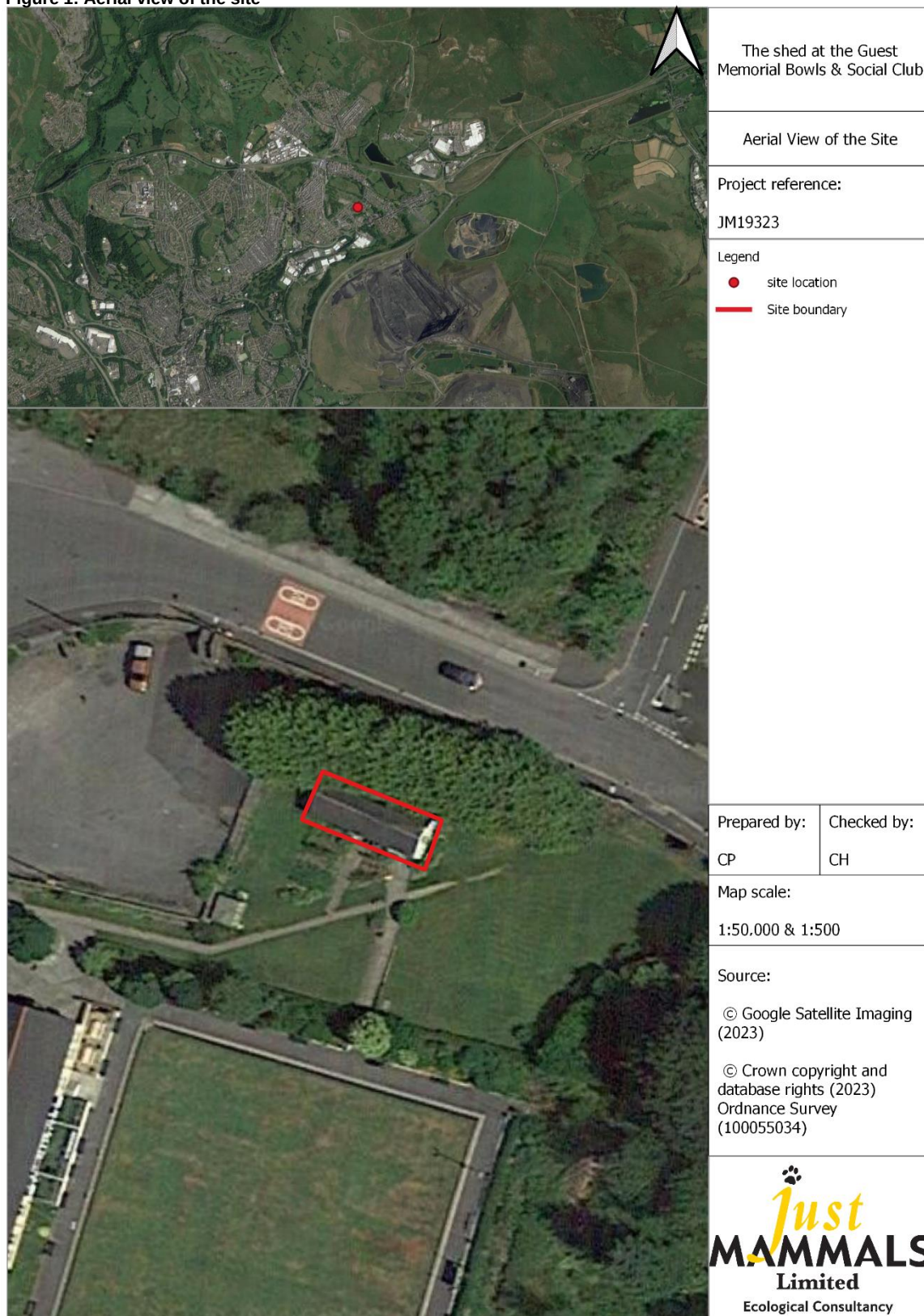
Aebischer, N.J., Balmer, B., Brown, A.F., Eaton, M.A., Douse, A., Lindley, P., McCulloch, N., Noble, D.G., Stanbury, A., Win, I. (2021). *'Birds of Conservation Concern 5: The Population Status of Birds in the United Kingdom, Channel Islands and the Isle of Man'*. British Trust for Ornithology, Thetford

Reason, P & Wray, S. (2023). *'Bat Surveys for Professional Ecologists – Good Practice Guidelines – 4th Edition.'* Bat Conservation Trust, London

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

Appendix I: Site Location Plan

Figure 1: Aerial view of the site



Appendix II: Site Photographs

Plate 1: The shed from the south



Plate 2: The shed from the west



Plate 3: Gap under central ridge tile



Plate 4: Gap under bargeboard southeast gable end



Plate 5: Crack in north-west facing gable end



Plate 6: Gaps in corrugated metal on north-west facing gable end



Plate 7: Interior – larger, north-west room, with absence of cavity shown by red arrow



Plate 8: Fireplace in smaller, south-east room



Plate 9: General character of eastern room



Plate 10: Narrow gaps in ceiling sarking– eastern room



Plate 11: Interior of western wall showing gap

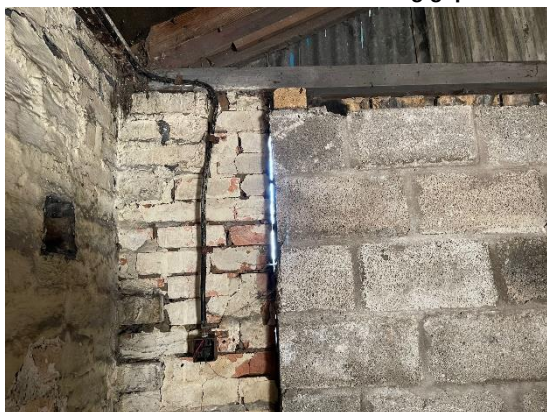


Plate 12: Northern wall



Plate 13: Wider view of northern wall



Appendix III: Ecology of British Bats

There are at least 18 species of bats breeding in Britain. Most of them are regarded as threatened due to a variety of factors including habitat loss, intolerance and disturbance/damage or loss of roosts. Of these species a number regularly use buildings at certain times of year in order to find safe secure roost sites. Often several different species can use a building over the course of the year, and not all species are present at the same time, making assessment of their presence complex.

Bats are highly mobile flying mammals, which in Britain feed entirely on insects. They have evolved over seventy million years and have developed sophisticated mechanisms to allow them to effectively 'see' in the dark by using sound waves. This system is called echo-location which enables them to track and hunt down small moving insects whilst in flight, rather like radar does in a modern military fighter aircraft. It is possible to record this sound, and because each species of bat echo-locates in a different way, determine what the species is without actually handling the animal which made the call.

In winter, when their prey is scarce, British bats hibernate or enter torpor, in cool parts of caves, buildings (cavity walls), and tree cavities. They may wake occasionally and will feed if evening temperatures are greater than 7°C, when flying insects can be active. Generally however, activity during cold winters is very limited and bats only become fully active in spring, with late March and early April being a critical time for animals desperately trying to save energy whilst gaining weight. Disturbance during these months can therefore be more devastating to bats than at other times of year.

By late spring female bats will gather together in maternity roosts in order to give birth and rear their single baby in June. Such maternity roosts are often near to important foraging areas in order to save energy as flight requires vast energy resources. Flight routes to and from such roosts can therefore also be important and some bats are extremely light averse preferring dark locations without street or security lamps which can force them to take complex routes to reach foraging areas. Such lighting can also badly degrade foraging areas where they occur close to buildings and hedgerows and tree lines can be particularly important areas for bat foraging to take place particularly when close to the roost building.

Whilst females form maternity colonies, usually in warmer roofs or trees, male bats tend to seek out cooler sites which may not be so close to the foraging areas. Males are often solitary and do not exhibit the social behaviour that marks out females during the birthing period. Non-breeding females will also roost in this way, when they have no need to spend energy on raising a single baby.

Several British bat species are known to rely heavily on buildings to roost. Of these species, the most likely are the soprano pipistrelle bat and the common pipistrelle. Other bat species regularly found in buildings are the brown long-eared bat; Natterer's bat; Brandt's bats and whiskered bat. Pipistrelle species and the small myotis or mouse-eared species (Brandt's, whiskered etc) often favour locations at the ridge or around the exterior shell of the structure. Brown long-eared and Natterer's tend to prefer living within the roof area of a building – large lofts being popular.

Other species that are known to use the internal areas of built structures such as barns include the two horseshoe species, the greater horseshoe bat (*Rhinolophus ferrumequinum*), and lesser horseshoe bat, as well as western barbastelle bat (*Barbastella barbastellus*).

Appendix IV: Relevant Legislation

Bats

All species of bat in Britain, and their places of rest are protected under the provisions of the Wildlife and Countryside Act 1981 (WCA), Section 9(1), 9(4)(a) and 9(4)(b) as amended by Schedule 12 of the Countryside and Rights of Way Act 2000. Further protection is afforded by the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019. In relation to structures used by bats for shelter or protection (i.e. roosts), this legislation makes it an offence to either intentionally or recklessly damage, destroy or obstruct access to any site used by bats, whether bats are present at the time or not, or to intentionally or recklessly disturb bats within a roost.

Infringements under this legislation include building demolition, removal of hollow trees, blocking, filling or installing grills over old mines or tunnels, building alteration or maintenance work, re-pointing of stone walls, getting rid of unwanted bat colonies, re-roofing, remedial timber treatment, re-wiring or plumbing in roofs, treatment of wasps, bees or cluster flies (Mitchell-Jones, 1992; Childs, 2001). Greater horseshoe bat, lesser horseshoe bat, Bechstein's bat, greater mouse eared bat and barbastelle are included in Annex II of the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019 and hence require special protection.

Maximum penalties for committing offences relating to bats or their roosts can amount to imprisonment for a term not exceeding six months or to fines of up to Level 5 on the standard scale under the Criminal Justice Act 1982/1991 (i.e. £5000 in April 2001) per roost or bat disturbed or killed, or to both. Bodies corporate and their directors/secretaries are liable for offences under the 2017 Regulations and the WCA. Additionally, where such an offence results in the offender benefitting in a monetary form from the illegal action, confiscation or civil recovery of the proceeds can occur under the Proceeds of Crime Act 2002.

It is sensible to assess as soon as possible if bats are present at potential sites for development – preferable before the land is acquired. 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 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 delays while a 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 conservation status of the species concerned.

This explanation must be regarded only as a guide to the law. For further details, reference must be made to the Wildlife and Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019 and the Countryside and Rights of Way Act 2000.

Wild birds

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 and Natural England issues licences for specific purposes, so that legitimate work may be undertaken without breaking the law.

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