PRELIMINARY BAT ROOST ASSESSMENT

MORTIMER'S WAREHOUSE, RIVERSIDE, DRIFFIELD, EAST RIDING OF YORKSHIRE FOR MS JAYNE BRIGGS



(February 2021) (Contract number 315)

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PROJECT DATA

Site Address	Mortimer's Warehouse, Riverside, Driffield, East Riding of Yorkshire YO25 6NW
Project Proposed	Change of use of existing warehouse building to allow multiple uses, construction of an access ramp, replace existing windows and doors, replace existing timber framed doors to the east elevation with timber framed windows and associated works
Boundary as Specified by Client	Yes
Central Ordnance Survey Grid Reference	TA 02844 57244
Survey Dates	13 February 2021
Date Report Issued	14 February 2021
Report Version	Version 1

SUMMARY

A preliminary bat roost assessment of Mortimer's Warehouse, Riverside, Driffield, East Riding of Yorkshire, was undertaken on 13th February 2021. Ms Jayne Briggs intends to apply for permission to change the use of the existing warehouse building to allow multiple uses, the construction of an access ramp, replacement of existing windows and doors, replacement of existing timber framed doors to the east elevation with timber framed windows and associated works. Following the assessment, the warehouse was judged to have 'negligible' potential to support roosting bats as no potential bat roosting features or bat access points were observed.

The results of this survey indicate that no further bat surveys are required.

INTRODUCTION

This report has been prepared by Craig Emms and Linda Barnett who were contracted by Ms Jayne Briggs to undertake a preliminary bat roost assessment of Mortimer's Warehouse, Riverside, Driffield, East Riding of Yorkshire. Ms Briggs intends to apply for permission to change the use of the existing warehouse building to allow multiple uses, the construction of an access ramp, replacement of existing windows and doors, replacement of existing timber framed doors to the east elevation with timber framed windows and associated works. The warehouse is located at central Ordnance Survey Grid Reference: TA 02844 57244 and hereafter is referred to as 'the site'.

The site is located at the end of a row of residential buildings in the southern part of Driffield and alongside the Driffield Navigation Canal, just south of where the canal is joined by The Beck. The landscape surrounding the warehouse is dominated by residential and commercial properties with the closest agricultural land located approximately 160m south-east of the building.

The preliminary bat roost assessment was undertaken in February 2021.

This report describes the survey carried out and outlines mitigation measures for the highly unlikely presence of bats.

AIMS AND OBJECTIVES

The aims of the study were to:

- Identify, quantify and report on the use of the site by roosting bats.
- Identify potential impacts of conversion works on roosting bats and suggest appropriate outline mitigation and compensation measures.
- Identify the legal and policy implications of any anticipated impacts.
- Make recommendations for any necessary further survey work or licensing, as required.

Ecological information for the assessment and subsequent recommendations is provided by the results of the preliminary bat roost assessment conducted in 2021.

Relevant background information to roosting bats and their legal protection is provided in the Appendix.

CONSTRAINTS

All surveys are a snapshot of a site at the time of the survey. However best practice has been followed and all reasonable effort made to complete the surveys to a high standard. There were no limitations to the field study with full access to the interior and exterior of the warehouse.

Ecological constraints will change over time and therefore the findings of this report are considered to be valid for a period of one year, after which the report should be reviewed to consider whether the survey should be updated.

METHODOLOGY – FIELD SURVEY

The preliminary bat roost assessment was undertaken by Craig Emms (Natural England Class Licence Registration Numbers: 2015-12020-CLS-CLS and 2015-12019-CLS-CLS) and Dr Linda Barnett (Natural England Class Licence Registration Numbers: 2015-15048-CLS-CLS and 2015-15046-CLS-CLS). The survey was conducted on 13th February 2021 following the methodology contained in Collins (2016). The survey date falls within the optimal survey period to conduct preliminary roost assessments on structures.

The preliminary bat roost assessment involved a detailed external and internal inspection of the building specifically for potential or actual bat access points and roosting places and any direct evidence of bats, including:

- Live or dead bats
- Droppings
- Urine splashes
- Fur-oil staining
- Squeaking noises

The building was then attributed a grade of negligible, low, moderate or high suitability to support roosting bats according to Bat Conservation Trust guidelines criteria following Collins (2016). Table 1 in the Appendix provides a more detailed explanation of the bat roost assessment criteria. If evidence of bats is found further surveys may be necessary.

RESULTS – GENERAL SITE DESCRIPTION

The site is situated in the southern part of Driffield. Buildings adjacent to the site include residential properties. River Hull Headwaters Site of Special Scientific Interest is located approximately 443m to the south of the site at its closest point.

According to MAGIC (Multi-Agency Geographic Information for the Countryside www.magic.gov.uk) three European Protected Species licences have been granted within a 2 km radius of the site for bats. The first was for the destruction of a common pipistrelle resting place located approximately 388m north-west of the site. The registered number of this licence is EPSM2010-1915 and it was granted for the period 2010-2012. The second was for the destruction of a brown long-eared bat resting place located approximately 1.08 km north-west of the site. The registered number of this licence is EPSM2012-4021 and it was granted for the period 2012-2013. The third was for the destruction of a common pipistrelle resting place located approximately 580m north-west of the site. The registered number of this licence is 2017-31180-EPS-MIT and it was granted for the period 2017-2018.

RESULTS – DESCRIPTION OF THE SURVEYED BUILDING

The site consists of a disused warehouse with a floor-space of approximately $176m^2$. The warehouse is connected to a residential building to the north (see Plate 1).

The warehouse consists of a three-storey brick-built structure with a pitched tiled roof that is immediately adjacent to the Driffield Navigation Canal (see Plate 2). The brick walls and roof are in very good condition with no holes, gaps or crevices that could be used as access points or as potential roosts by bats. There is a timber-framed door on the western aspect (see Plate 3), and a sliding door located on the southern aspect (see Plate 4). Three timber-framed doorways are present on each of the floors overlooking the adjacent canal (see Plate 5). Several timber-framed windows are located on the western and eastern aspects of the warehouse. All of the doorways and windows are currently tightly boarded up or are kept locked, with no potential access points for bats present.

Previously, the northern sections of the building's floors were used for the storage of grain (see Plate 6) while the southern sections contain metal agricultural grain silos (see Plate 7). The timber-built floors are connected internally via timber staircases.

The pitched roof consists of clay pan tiles. There are no gaps beneath tiles or any missing tiles. The ridgeline is complete and cemented to the roof (see Plate 8). The gable ends of the warehouse are also cemented to the roof and there are no gaps or crevices present (see Plate 9). There is no separate roof space with the second floor being open to the roof. The internal frame

consists of tightly-fitting timber king and queen posts, braces, rafters and purlins, all in good condition (see Plate 10). The interior of the roof is lined with roofing felt, again in good condition with no holes or tears present (see Plate 11).

There were no direct signs of roosting bats observed in the interior of the warehouse and no potential bat access points observed on the exterior.

RESULTS – PLATES OF THE SURVEYED BUILDING



Plate 1: the connection between the warehouse and the neighbouring residential property. Photograph taken from the west.



Plate 2: the warehouse is adjacent to the canal. Photograph taken from the south-east.



Plate 3: the door and windows on the western aspect of the warehouse.



Plate 4: the sliding door on the southern aspect.



Plate 5: the doors and windows on the eastern aspect.



Plate 6: the northern part of the interior of the first floor.



Plate 7: one of the metal grain silos.



Plate 8: the pitched tiled roof of the warehouse. Photograph taken from the west.



Plate 9: the southern gable end of the warehouse.



Plate 10: the interior timber frame of the roof.



Plate 11: the interior roofing felt.

RESULTS – DESCRIPTION OF OBSERVATIONS OF ROOSTING BATS OR POTENTIAL BAT ROOSTING FEATURES AND BIRD NESTS

No direct signs of roosting bats were observed in the warehouse and no potential bat roosting features or bat access points were observed. No bird nests were observed.

RESULTS – SUMMARY OF SURVEY FINDINGS

PRELIMINARY BAT ROOST ASSESSMENT

The warehouse was judged to have 'negligible' suitability to support roosting bats because:

• the structure has negligible habitat features that are likely to be used by roosting bats.

No direct evidence of roosting bats was found in the warehouse.

DISCUSSION

DEVELOPMENT PROPOSALS

At the time of writing the report, the development proposals entail the change of use of the existing warehouse building to allow multiple uses, the construction of an access ramp, replacement of existing windows and doors, replacement of existing timber framed doors to the east elevation with timber framed windows and associated works.

EVALUATION

It is highly unlikely that bats roost in the warehouse. No further surveys are required (see Recommendations for Mitigation and Further Surveys below).

POTENTIAL IMPACTS

All British bats are protected from disturbance, killing and injury and their roosts are also protected (see the Appendix or further details).

RECOMMENDATIONS FOR MITIGATION AND FURTHER SURVEY

RECOMMENDATIONS

• In the highly unlikely event that roosting bats are found during the conversion works on the warehouse, all works must cease immediately and advice be sought from Natural England.

Please be aware that bats, as European Protected Species, are protected under the "strict liability" regimen. There is no defence for unintentional/incidental harm.

CONCLUSIONS

No further bat surveys are required.

REFERENCES

Collins, J. (Ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition)*. The Bat Conservation Trust, London, UK.

APPENDIX

BACKGROUND TO ROOSTING BATS AND THEIR LEGAL PROTECTION

BAT ROOSTS

Bats use a variety of different structures for the purposes of roosting, including mature trees, caves, mines, buildings (both modern and ancient), bridges and tunnels. In addition, many bat species will occupy purpose-built bat-boxes or even boxes designed to house nesting birds. Bats also use different types of roost at different times of year, including:

- **Day Roost** a place where individual bats, or small groups of male bats, rest or shelter in the day but are rarely found by night in the summer;
- **Night Roost** a place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony;
- Feeding Post a place where individual bats or a few individuals rest or feed during the night but are rarely present by day;
- **Transitional/Occasional Roost** used by a few individuals or occasionally by small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation;
- **Swarming Site** where large numbers of male and female bats gather in late summer to autumn. These appear to be important mating sites;
- **Mating Site** sites where mating takes place from late summer and can continue through the winter;
- **Maternity Roost** where female bats give birth and raise their young to independence;
- **Satellite Roost** an alternative roost found in close proximity to the main nursery colony used by a few individual females to small groups of breeding females throughout the breeding season.

The use of roosts is rather unpredictable, particularly amongst tree-roosting species, but female bats are typically loyal to maternity roosts.

LEGISLATION

All species of bat in Britain are 'European Protected Species' and are protected under the Conservation of Habitats and Species Regulations 2017, and the Wildlife and Countryside Act 1981, as amended by the Countryside & Rights of Way Act 2000. These pieces of legislation combine to give substantial protection to bats and their habitats, making it an offence to:

- Deliberately capture, injure or kill a bat;
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat;
- Intentionally or recklessly obstruct access to a bat roost.

Suitability	Description of Roosting habitats	Commuting and foraging
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically.	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream or lone tree (not in a parkland situation)
	However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).	or a patch of scrub, but isolated, <i>i.e.</i> not very well connected to the surrounding landscape by another habitat.
	A tree of sufficient size and age to contain Potential Roost Features (PRFs) but none seen from the ground or features seen with only very limited roosting potential.	
Moderate	A structure or tree with one or more PRFs that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat, but unlikely to support a roost of high conservation status (with respect to roost type only - the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected with the wider landscape that could be used by bats for commuting such as lines of trees, scrub, grassland or water or linked back gardens.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, tree-lined watercourses, grazed parkland, hedgerows, lines of trees, broad-leaved woodland and woodland edge. Site is close to and connected to known

Table 1: Bat Roost Assessment Criteria.

Note: Adapted from Collins, 2016.

QUALITY ASSURANCE

This report format is designed to comply with statutory authority (*e.g.* Natural England, Natural Resources Wales and Scottish Natural Heritage) and the Chartered Institute of Ecology and Environmental Management relevant standing advice. Further studies may be required where there is evidence of protected species or if other notable ecological factors are found.

Craig Emms MSc, MCIEEM Linda Barnett BSc (Hons), PhD, MCIEEM

Craig and Linda are professional ecologists with over 65 years of combined practical experience in nature conservation, wildlife research and management and ecological consultancy, gained from working in the UK and overseas. Craig has a MSc. in Ecosystems Analysis and Governance and Linda has a PhD in Genetics. Together they have carried out original academic research on a broad range of wildlife; insects, amphibians, reptiles, birds and mammals (including bats), and published the results as scientific papers in a number of international peer-reviewed journals. Linda co-authored the Species Action Plans for Britain's eight most endangered butterflies while working for Butterfly Conservation, and has supervised students in research projects on hazel dormouse, great crested newts and moths whilst she was co-ordinating and lecturing on a Masters course in Analytical Biology at the University of Warwick. Craig was also a lecturer in ecological methods on two Masters courses at the University of Warwick. Linda and Craig are skilled and practiced field ecologists, especially with regard to wildlife and countryside management. They are licenced by Natural England as bat and great crested newt surveyors (and are volunteer bat roost visitors/handlers for Natural England and registered bat carers for the Bat Conservation Trust) and have an extensive and broad experience of a great variety of field surveys including mammals (otter, badger, water vole, hedgehog, small mammals and bats), birds, reptiles, amphibians, dragonflies, butterflies and moths. Both have undergone training in the use of eDNA methodology and field sample collection. Craig is also licenced by Natural Resources Wales as a bat and great crested newt surveyor, by the British Trust for Ornithology as a bird nest recorder, and has been the named ecologist and clerk of works on many bat mitigation and compensation (development) licences.

Please be aware that ecological reports generally have a limited period of currency. Many statutory authorities now regard one year as the maximum time that should elapse before a report will need to be updated. Where a European Protected Species licence is to be applied for once planning permission has been granted, a walk-over of the site should be carried out within three months of an application being submitted to check that the habitats have not changed significantly since the survey was carried out.

Any information relating to legal matters, designs, specifications, advice, suggestions, or comments written or verbal in this report is provided in good faith and for consideration only,

and does not purport in any way to give any advice on or interpretation of the law whatsoever. Professional legal advice should always be sought.

It is a requirement under the CIEEM code of practice to provide recorded data to biological record centres. For certain records (*i.e.* data obtained under a government survey licence) we also have a legal obligation to forward such data.

If you have special cause to restrict the distribution of this data (which will be in the public domain), please contact us to discuss this further within one month of the issue of this report.

Note. Whilst all due and reasonable care is taken in the preparation of reports, Craig Emms and Linda Barnett accept no responsibility whatsoever for any consequences of the release of this report to third parties. Please be aware that site surveys inevitably miss species not apparent on the date of visit(s) by reason of seasonality, mobility, habits or chance. Results are indicative and given in good faith but they are not a guarantee of presence or absence of any particular taxa.