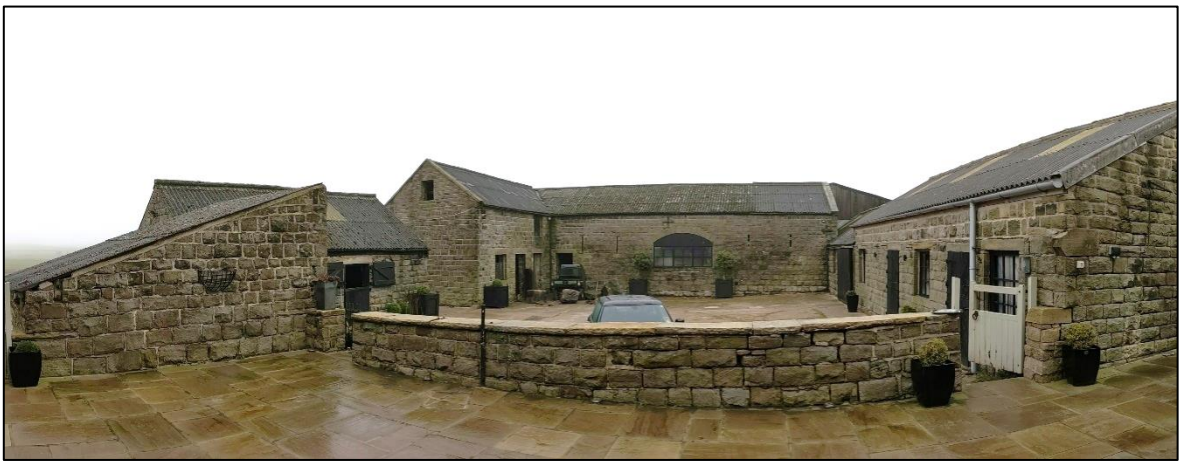
Ranah Stones Farm, Hazlehead

Bat and Barn Owl Survey Report

3rd January 2020



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1. Summary

1.1.1 A bat and owl survey of buildings at Ranah Stones Farm was commissioned by architect Malcolm Walker of Walker Associates Architects LLP on behalf of the client Susan Fox-Coburn on 11th December 2019.

1.1.2 The survey was undertaken to support a planning application which includes the conversion of three existing agricultural buildings and construction of a connecting passageway between a kitchen on the farmhouse and a fourth barn. The barns to be converted will provide a new holiday let and a toilet and shower block to serve the existing camping and caravan facilities.

1.1.3 Whilst the proposed development is almost exclusively within existing building footprints, it will also be necessary to alter visibility splays at the entrance to the Ranah Stones Farm site. This will affect vegetative habitats immediately east of the existing drystone wall. This report includes a brief description of habitats within this area.

1.1.4 A bat survey of several site buildings was undertaken by Bagshaw Ecology in 2018 and the survey findings have been taken into account in the writing of this report.

1.1.5 No signs of bat occupation were recorded from either the inside or outside of the surveyed buildings, however B1, B2, B3, B4 & B6 display significant potential for use by roosting bats. Further nocturnal survey of B1, B2 & B3 is required in order to confidently determine the presence/absence of roosting bats. This survey can only be undertaken during the bat activity period (peak season: Mid-May to August).

1.1.6 The requirement or otherwise for bat mitigation and/or derogation licensing is not currently known and will be dependent upon the findings of further bat survey.

1.1.7 Building 3 supports a barn owl roost site, whilst there are swallow nests in B2 & B3. Long term mitigation for roosting barn owl has already been installed, whilst swallows are currently being encouraged to nest in B4. Works should either be timed to avoid the bird nesting season (March to September inclusive) or a pre-works nesting bird check should be undertaken.

1.1.8 The development will entail realigning a drystone wall at the farm access point onto the A616/Whams Rd. This will entail the loss of narrow sections of adjacent vegetative habitat. Sections of habitat to be lost are of no more than site level importance to nature conservation, however, it is recommended a newly planted row of willow, to the north of the access point is re-instated using native species of tree or shrub.

2. Introduction

2.1.1 A bat and barn owl survey of buildings at Ranah Stones Farm was commissioned by architect Malcolm Walker of Walker Associates Architects LLP on behalf of the client Susan Fox-Coburn on 11th December 2019.

2.1.2 The survey was undertaken to support a planning application which includes the conversion of three existing agricultural buildings and construction of a connecting passageway between a kitchen on the farmhouse and a fourth barn. The barns to be converted will provide a new holiday let and a toilet and shower block to serve the existing camping and caravan facilities.

2.1.3 Whilst the proposed development is almost exclusively within existing building footprints, it will also be necessary to alter visibility splays at the entrance to the Ranah Stones Farm site. This will affect vegetative habitats immediately east of the existing drystone wall. This report includes a brief description of habitats within this area.

2.1.4 Historic bat survey of Buildings 1-4 (Figure 2) was undertaken by Bagshaw Ecology in 2018. This included a preliminary roost assessment (BE, 2019a) of all buildings undertaken on 22nd May 2018, with a single emergence survey of Building 2 carried out on 25th July 2018 (BE, 2019b).

2.1.5 Bat survey work undertaken by Bagshaw Ecology in 2018 did not record any evidence of bat roosting from site buildings, however, barn owl pellets were observed within B3 (Figure 2) during the building inspection. Although no bat roosting was recorded during the nocturnal survey, a common pipistrelle *Pipistrellus pipistrellus* bat was recorded foraging/commuting on site.

2.1.6 Ecological survey works detailed in this report were carried out by Robert Bell of Middleton Bell Ecology on 18th December 2019.

3. Habitat Assessment

3.1.1 The surveyed buildings are located at the southeast end of the Rannah Stones Farm building complex, with further modern steel framed barns located immediately northwest of the surveyed structures. The farmstead is positioned in an exposed position at an altitude of 277m with the local area dominated by pasture.

3.1.2 A belt of mixed woodland is located 210m north of the site, which connects to woodland bordering the former Manchester to Sheffield railway (now the Trans-Pennine Trail), which itself runs broadly parallel with the River Don.

3.1.3 Higher quality bat foraging habitat is limited close to site and whilst a range of bat species is expected to utilise optimum foraging habitat on the nearby Trans-Pennine Trail, the abundance of bats using the actual site is likely to be quite low.

Table 1. Location and habitat table

Name and address: Ranah Stones Farm, Hazlehead			
OS Grid Ref. SE 20013 02353		Altitude. 277m	
Local Planning Authority: Barnsley Metropolitan Borough Council			
Features on site and adjacent to site			
Feature	On site	Adjacent	Comments
Buildings	✔	✔	The surveyed buildings are located within a wider farmstead
River			Upstream section of River Don approximately 630m north
Standing water			Series of ponds 320m southeast
Bridges tunnels and culverts			Bridges and tunnels over the River Don
Trees			Numerous mainly newly planted trees around the south and west boundaries of the wider farmstead
Woodland			Nearest area of extended woodland 210m north
Grassland		✔	Area dominated by pasture fields with grassland on opposite side of track to south

Figure 1. Site location, as indicated by red circle

3.2 Aims

3.2.1 The survey was conducted to help determine the following:

- The presence/absence of roosting bats.
- Bat roosting areas and access/egress points into the structures.
- The presence/absence of roosting and/or nesting barn owl.
- The level of bat roost potential associated with the structures.
- The number and species of bat roosting within the structures.
- Identify further survey work or mitigation requirements.

4. Methodology

4.1 Data Consultation

4.1.1 Bat records for locations within 2km of the site were obtained from South Yorkshire Bat Group (SYBG).

4.1.2 Protected and notable species records were requested from Barnsley Biological Records Centre (BBRC) for locations within 1.5km of the site. Bat and barn owl records are detailed in full. Other species records which may be relevant to the wall re-alignment works are detailed as necessary.

4.1.3 A search of the Multi-Agency Geographical Information for the Countryside (MAGIC) website was also undertaken to identify historic European Protected Species (EPS) licences obtained for locations within 2km of the site.

4.2 Field Survey

Preliminary Roost Assessment

4.2.1 The following personnel conducted the preliminary roost assessment on 18th December 2019:

- Robert Bell (MCIEEM; Bat Survey Class License WML-A34-Level 4, 2016-25236-CLS-CLS; Barn Owl Survey Class Licence CL29/00070)

4.2.2 Current scheme proposals impact most of the traditionally constructed buildings on the Ranah Stones Farm site to varying extents. Consequently, all stone buildings on the site were included in the survey.

4.2.3 The following activities were carried out during the surveys in compliance with relevant Bat Survey Guidelines (Collins 2016) and barn owl survey guidance (Shawyer, 2011):

- A brief inspection and assessment of the site and habitats present to within 300m.
- An extensive examination of all parts of the buildings both inside and out to record structural features and condition and to record features that may be suitable for roosting bats. Particular attention was paid to any crevices or gaps in walls, lintels, gaps between beams and joists and to the possibility of finding droppings stuck to walls, floors or other surfaces, or insect remains below beams, among a number of other factors. All signs indicative of a bat roost

presence including live or dead bats, droppings, feeding remains, scratch marks and staining were recorded.

- An assessment of the buildings' bat roost potential (negligible, low, moderate, high or confirmed roost).
- If barn owl signs are present, determination of whether the building comprises an Occupied Breeding Site (OBS), Active Roost Site (ARS) or Temporary Roost Site (TRS).

4.2.4 The following equipment was used or at hand during the survey:

- Clulight
- Binoculars
- Endoscope
- Ladders
- Camera

Boundary Wall Habitat Survey

4.2.5 In addition to the survey of buildings, the existing stone boundary wall at the farm entrance onto A616 Whams Road will be re-aligned to clear visibility splays. This will comprise the only foreseeable impacts on vegetated habitats connected to the proposed development. During field survey of the site, habitats within 5m of the boundary wall were surveyed for a distance of 215m both north and south of the site entrance.

4.3 Survey Limitations

4.3.1 No limitations to an effective preliminary bat roost appraisal were identified.

4.3.2 Survey of habitats to be impacted by realignment of drystone walls at the site entrance was undertaken in December, which is outside of the survey period for undertaking detailed botanical surveys. However, considering the habitats present on site, this is not considered a significant constraint.

5. Results

5.1 Data Consultation

5.1.1 South Yorkshire Bat Group provided 15 bat records for locations within 2km of the site, however, no bat records related to the site itself.

5.1.2 Species positively identified in the records included common pipistrelle, brown long-eared bat *Plecotus auritus*, Daubenton's bat *Myotis daubentonii* and Natterer's bat *Myotis nattereri*. Other records related to either an unidentified *Pipistrellus,* unidentified *Nyctalus* or unidentified bat species. The closest record to site comprised droppings of an unidentified bat species, recorded from a dwelling 830m northwest of the site in 1991. The closest confirmed roost comprises a bridge over the River Don approximately 910m northwest of the site, which was recorded as being used by four roosting Daubenton's bat in 2019, with a record of eight roosting Natterer's bat from the same structure in 1991.

5.1.3 Barnsley Biological Records Centre (BBRC) provided five bat records for locations

within 1.5km of the site. These records were also included in the SYBG dataset. No barn owl records, or other records relevant to the wall re-alignment, were provided by BBRC.

5.1.4 No bat EPS mitigation licences have been issued for locations within 2km of the site.

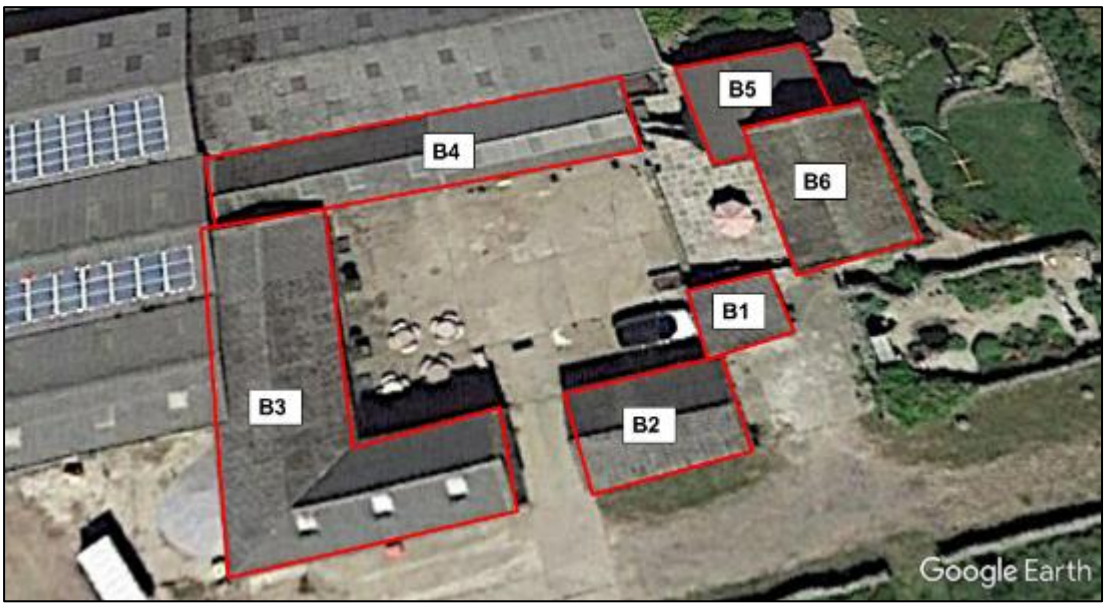
5.2 Field Survey

Preliminary Roost Assessment

5.2.1 The layout of surveyed buildings is shown in Figure 2. No signs of bat presence were recorded from any of the surveyed buildings however B1, B2, B3 & B4 are considered to offer a low level of bat roost potential, with B6 offering moderate bat roost potential. Building 5 is considered to offer negligible potential for this use. Evidence of barn owl roosting was recorded from a roof truss in B3, with historic swallow nesting recorded from B2 & B3.

5.2.2 Buildings 1, 2, 3 & 4 all comprise traditional stone agricultural buildings with numerous potential bat roosting features. The site is located away from much high quality foraging habitat and is in an exposed position. The 2018 bat survey also recorded little bat activity on site. If the surveyed buildings were in a different more sheltered location, closer to prime foraging habitat, these buildings would have been assessed as offering a higher level of bat roost potential, however, in this situation the assessment is considered to be accurate.

Figure 2. Building numbering plan



Building 1

5.2.3 Building 1 (B1) comprises a late 19th Century single-storey outbuilding with solid stone walls and a sloping (mono-pitched) corrugated asbestos sheet roof (Plate 1). A single wooden door is present in the west elevation, with a single pane window in the south elevation.

5.2.4 Externally B1 has numerous holes into the exterior of the stone walls across all

elevations, with a crevice also present between the timber window frame and adjacent stonework. Internally the roof is suspended on timber joists with the building used as a store. In common with the exterior, numerous cracks lead into the stone walls from the interior of the building. Building 1 is considered to offer an overall low level of bat roost potential.

Plate 1. B1 on left of image, with B2 and B3 in centre and B4 on right

Building 2

5.2.5 Building 2 (B2) comprises a late 19th Century single-storey stable building with solid stone walls and a pitched corrugated asbestos sheet roof. Two wooden stable doors are present in the north elevation, with an additional stable door in the east elevation.

5.2.6 Externally B2 has numerous holes into the exterior of the stone walls across all elevations with part of the eastern gable missing at its apex (Plate 2), allowing easy potential access to the interior of the building for bats. An extended crack runs down the southern elevation.

5.2.7 Internally the roof is unlined and suspended on a king post truss, ridge beam, purlins and rafters (Plate 3) with white-washed walls. Cracks in the mortar joints of the masonry allow potential access for bats into the walls from the interior of the structure. The building was used to shelter goats at the time of survey with a disused swallow *Hirundo rustica* nest noted from the interior of the building.

5.2.8 Building 2 is considered to offer an overall low level of bat roost potential.

Plate 2. Southwest corner of B2

Plate 3. South and east elevations of B2 (right) and B3 (left)

Plate 4. Interior of B2

Plate 5. Southwest corner of B3

Plate 6. Section of south elevation of B3 with gaps between masonry and behind timber fascia both visible

Building 3

5.2.9 Building 3 (B3) comprises a late 19th Century L-shaped two-storey height barn with solid stone walls and a pitched corrugated asbestos sheet roof (Plates 1, 3 & 5). Stone copings are present on north and east gables (Plate 3). Building 4 adjoins B3 on the latter building's north gable, whilst a modern steel framed barn adjoins B3 on its west elevation. Timber loading hatches are present at first floor level on north and south elevations, with sliding wooden doors on the south elevation (Plate 5). Single wooden doors are present on the north, east and west elevations with a large single pane window and arrow slit vents on the east elevation. An uncovered hatch shaped opening is present at first floor level in the east gable (Plate 3)

5.2.10 Bats and birds could potentially access the interior of B3 in numerous locations notably including the open hatch in the east gable, arrow slits in the east elevation, a hole in a hatch cover in the south elevation and missing window-panes on a north elevation window. A timber fascia board with a variable width gap behind (up to 50mm) is present on the south elevation behind which bats may roost, whilst bats could also access the interior of the solid stone walls via a number crevices between external masonry. There is also access to the wall plate on all building elevations, except the north gable.

5.2.11 Internally the roof is unlined and suspended on king post trusses, a ridge beam, purlins and rafters (Plate 7). The southern section of B3 is two-storey with the remainder single storey. Potential bat roost locations in the barn interior include crevices between timber, stone and concrete lintels above doors and windows with cracks between internal masonry also providing potential access into walls.

5.2.12 Five barn owl *Tyto alba* pellets were recorded from the first floor below a roof truss on which the barn owl appears to roost, at the southwest corner of B3 (Plate 8). This has been classified as an occasionally used Active Roost Site, on the basis mainly of the number of pellets present. It appears the barn owl accesses the building via an adjacent hatch opening in the wall. No further evidence of bats or birds was recorded from B3, with all potential barn owl nest sites in both this building and all other surveyed buildings visually inspected. Building 3 is considered to offer an overall low level of bat roost potential.

Plate 7. Looking south within B3

Plate 8. Two barn owl pellets in B3

Building 4

5.2.13 Building 4 (B4) comprises a late 19th Century single-storey barn with solid stone walls and a pitched corrugated asbestos sheet roof (Plate 9). The roof is 'stepped' down in middle (different heights) and asbestos verge capping is present on the east gable and at the central point where the roof drops in height. Single pane windows and stable doors are present in the south elevation, with a new timber wall plate having been fitted at the eastern end of B4.

5.2.14 Externally, there is a crevice present between the base of the timber wall plate and adjacent masonry on the south elevation, with other crevices between external stone-work also present. Several open windows in the south elevation allow potential bat and bird access to the interior of B4.

5.2.15 Internally the roof is unlined and suspended on a king post truss, a ridge beam, purlins and rafters (Plate 10) with white-washed walls. Two stone dividing walls with gaps across the top separate internal rooms at the east end of B4. As with other stone buildings on site, holes in the mortar joints of masonry allow bat access into the walls.

5.2.16 Building 4 is considered to offer an overall low level of bat roost potential.

Plate 9. Southeast corner of B4

Plate 10. Looking towards B3 from interior of B4

Building 5

5.2.17 Building 5 (B5) comprises a late 19th Century single-storey extension to B6, with solid stone walls and a sloping concrete tile covered roof (Plate 11). A timber fascia board is present on the west elevation and the building has double glazed windows with uPVC frames. No features displaying significant bat roost potential were recorded from the exterior of this building. Internally a small roof void with a triangular cross section is present. B5 was considered to offer negligible bat roost potential.

Plate 11. The farmhouse with B5 the single storey section (left) and B6 the original two storey section (centre)

Building 6

5.2.18 Building 6 (B6) comprises a late 19th Century two storey farmhouse, with solid stone walls and a pitched roof covered with stone slates (Plate 11). Stone copings are present on the north and south gables and the building has uPVC framed double glazed sash windows.

5.2.19 The main potential bat roosting feature noted from the exterior of B6 comprises crevices between the stone roof slates, with bats also potentially able to access the wall plate, behind the gutter.

5.2.20 Internally the roof is lined with Type 1F felt and suspended on a ridge beam, purlins, rafters and laths. Glass fibre insulation is present on the ceiling and the height from ceiling to ridge is 2.5m. No evidence of bats was recorded with the roof void quite heavily laden with cobwebs (Plate 12). Mouse *Mus musculus* droppings were present in the void. B6 is considered to offer moderate bat roost potential.

Plate 12. Interior of B6 roof void

Plate 13. Line of hybrid willow growing against east side of wall, to north of junction between A616 Whams Rd and Ranah Stones Farm access track

Boundary Wall Habitat Survey

5.2.21 To the north of A616 - Whams Rd and the driveway to Ranah Stones Farm the drystone wall has been recently planted with hybrid willow *Salix* spp. saplings on its east side, with species poor semi-improved rank grassland at the base of the willows saplings and along the bottom of an adjacent post and wire fence. This grassland

included abundant Yorkshire fog *Holcus lanatus* and cocksfoot *Dactylis glomerata* with creeping thistle *Cirsium arvense* also frequently occurring and suggestive of nutrient enrichment, presumably as a result of grazing animals taking shelter against the wall.

5.2.22 To the south of the access track's junction with the A616 - Whams Rd, the drystone wall is bordered by poor semi-improved grassland, with species recorded including frequent Yorkshire fog and perennial rye grass *Lolium perenne* together with occasional red fescue *Festuca rubra*. Herb species included frequent creeping thistle, occasional nettle *Urtica dioica*, cow parsley *Anthriscus sylvestris* and common chickweed *Stellaria media*. Again, the species present suggests nutrient enrichment in this area.

Plate 14. Semi-improved grassland beside wall to south of access track junction with A616 - Whams Rd

6. Assessment

6.1 Summary and Evaluation of Findings

Bats

6.1.1 No evidence of current bat roosting or bat presence of any kind was recorded during the building inspections, however, four of the five surveyed buildings offer significant bat roost potential.

6.1.2 Buildings 1, 2 & 3 display low bat roost potential and it is proposed to convert B1 & B2 into a holiday let, whilst B3 is to be converted into a toilet and shower block. B4 also displays low bat roost potential but will not be impacted, other than through the construction of a passageway, connecting the barn to the main farmhouse kitchen (B5), with B5 displaying negligible bat roost potential. The main farmhouse building (B6) displays moderate bat roosting potential but will not be impacted by the proposed development.

Birds

6.1.3 A barn owl roost site was recorded from the first floor of B3. The barn owl appears to roost on the roof truss and has been observed flying into the building via a hatch opening at first floor level. Only five pellets were recorded and though considered an Active Roost Site (Shawyer, 2011), this location only appears to experience occasional use. All potential nesting locations in the surveyed buildings were subject to direct visual inspection and there are no indications of historic use of the building by nesting barn owl.

6.1.4 Disused swallow nests were recorded from B2 & B3, with the site owner's having observed regular annual use of these buildings. It is quite possible that other bird species also nest in the surveyed site buildings.

Boundary wall habitats

6.1.5 Habitats to be impacted by proposed realignment of the existing drystone wall at the site access are limited in extent and are not considered to be of importance to nature conservation at greater than the site level.

6.2 Legislation and Policy Guidance

Bats

6.2.1 Bats receive protection under the Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 (as amended).

6.2.2 It is an offence to:

- Deliberately capture (or take), injure or kill a bat.
- Intentionally or recklessly disturb bats whilst they are occupying a structure or place used for shelter or protection or obstruct access to any such place.
- Damage or destroy the breeding or resting place (roost) of a bat.
- Possess a bat (live or dead), or any part of a bat.
- Intentionally or recklessly obstruct access to a bat roost.
- Sell (or offer for sale) or exchange bats (dead or alive), or parts of parts.

6.2.3 The Convention on Biological Diversity, signed in Rio de Janeiro, Brazil in 1992, requires member states to develop national strategies and to undertake a range of actions aimed at maintaining or restoring biodiversity. The UK Biodiversity Strategy was produced in response to the Convention.

6.2.4 In England & Wales, the Natural Environment and Rural Communities (NERC) Act, 2006 imposes a duty on all public bodies, including local authorities and statutory bodies, in exercising their functions, "to have due regard, as far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". It notes that "conserving biodiversity includes restoring or enhancing a population or habitat". Barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, brown long-eared, greater horseshoe *Rhinolophus ferrumequinum*, lesser horseshoe *Rhinolophus hipposideros*, noctule *Nyctalus noctula* and soprano pipistrelle *Pipistrellus pygmaeus* bats are included as priority species within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. At a more local level there are Local Biodiversity Action Plans for smaller geographical areas which may cover a greater or lesser range of bat species.

6.2.5 Where it is proposed to carry out works which will have an adverse impact on roosting bats, the site must either be registered on the Bat Mitigation Class Licence (BMCL) or a European Protected Species (EPS) license must first be obtained from Natural England. This requirement applies even if no bats are expected to be present when the work is carried out.

6.2.6 The National Planning Policy Framework for England was revised in 2019. This document states that plans should 'promote the conservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity'.

Birds

6.2.1 All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which makes it illegal (subject to exceptions) to:

- Intentionally kill, injure or take any wild bird.
- Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.

6.2.2 Barn owl are included on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) with special penalties relate to offences concerning these species. In addition to the offences detailed above relating to all wild birds, it is illegal to intentionally or recklessly disturb any Schedule 1 bird or their dependent young while nesting.

6.3 Further Survey, Recommendations and Enhancements

Bats

6.3.1 In order to confidently determine the presence/absence of roosting bats it is recommended that a single dusk emergence or dawn return survey of B1, B2 & B3 is undertaken. A total of four surveyors will be required to cover the three buildings and survey should be undertaken in line with best practice guidance (Collins, 2016).

6.3.2 The section of B4 to be impacted by the proposals does not display bat roost potential, whilst B6 will not be impacted by the proposed scheme and B5 does not display significant bat roost potential.

6.3.3 The requirement or otherwise for bat mitigation and/or derogation licensing is not currently known and will be dependent upon the findings of further bat survey.

Birds

6.3.4 A barn owl nest box has been recently installed within the interior of a new barn at the north end of the farmstead (Figure 3). Access to the box is via a hole cut in timber boarding which forms the east gable of this barn. This box has not yet been used; however, a new hedgerow has been planted along the top of a bank close to the gable and it is hoped this will increase the likelihood of future usage. This box was inspected during the survey and it is considered that it offers a suitable alternative roost site to the existing roost site present in Building 3, which will be lost during the development.

6.3.5 Swallows are being encouraged by the site owner to nest in B4, through the leaving open of windows into this building from the courtyard. This offers alternative swallow nesting options to those present in B2 & B3, with nest space in B2 & B3 to be unavailable following the proposed redevelopment works. It is advised that alternative swallow nesting options on the site may be further increased by making suitable nesting spaces in the steel framed barns to the north and west of the surveyed structures. Swallows prefer outbuildings which provide dark ledges and nooks and crannies for nesting. Swallows may be encouraged to nest in these modern buildings by the fixing of timber boards to vertical walls within darker and less-disturbed sections of these buildings, against which nest platforms could be built (on which swallows may construct nests), or better still artificial swallow nest cups could be fitted.

Figure 3. Existing barn owl box location shown by yellow star

6.3.6 It is recommended that building re-development works take place outside the bird nesting period (March-September). If any works to these structures are to commence outside this time, then a nesting bird check should first be undertaken by an ecologist.

Boundary wall habitats

6.3.7 The line of hybrid willow to the north of the current Ranah Stones Farm access point will be lost during re-alignment of the wall. It is recommended that this tree line is re-instated using either a native willow species or alternative native species of tree or shrub.

6.4 Conclusions

6.4.1 No signs of bat occupation on either the inside or outside of the surveyed buildings was recorded, however, B1, B2, B3, B4 & B6 display significant potential for use by roosting bats. Further nocturnal survey of B1, B2 & B3 is required in order to confidently determine the presence/absence of roosting bats.

6.4.2 The requirement or otherwise for bat mitigation and/or derogation licensing is not currently known and will be dependent upon the findings of further bat survey.

6.4.3 Building 3 supports a barn owl roost site, whilst Buildings 2 & 3 support nesting swallow. Long term mitigation for roosting barn owl has already been installed, whilst swallows are currently being encouraged to nest in B4.

6.4.4 Works should either be timed to avoid the bird nesting season or a pre-works nesting bird check should be undertaken.

6.4.5 The development will entail re-aligning a drystone wall at the junction of the farm access and the A616 - Whams Rd. This will entail the loss of narrow sections of adjacent vegetative habitat. Sections of habitat to be lost are of no more than site level importance however it is recommended the newly planted row of willow to the north of the access point is re-instated using a native species of tree or shrub.

7. References

BE (2018a) BE702.1a Preliminary Roost Assessment - Ranah Stones, Hazlehead, Crowedge. Bagshaw Ecology, Hebdon Bridge

BE (2018b) BE702.2a Ranah Stones Farm Bat Activity Survey. Bagshaw Ecology, Hebdon Bridge

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Shawyer, C. (2011) Barn Owl *Tyto alba* Survey Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in Survey and Reporting. IEEM, Winchester.