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Bat & Bird Appraisal at Beauchamps Cottage, Wyddial, Buntingford, SG9 0EP.

On Behalf Of:

Mr. R. Forsyth

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Skilled Ecology Consultancy Ltd.

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0 SUMMARY

- 0.1 Skilled Ecology Consultancy Ltd. was commissioned by Mr. R. Forsyth to undertake a bat and bird appraisal of at Beauchamps Farm, Wyddial, Buntingford, SG9 0EP. The report is required to accompany a planning application for the demolition of an existing cottage and attached barn and erection of replacement single residential dwelling.
- 0.2 The survey was conducted on the 11th March, by experienced ecologist James Pickerin BSc (Hons) GCIEEM (licensed to survey for bats (level 2) and great crested newts *Triturus cristatus* (level 1)). The survey consisted of an inspection for preferred habitat types and signs and evidence of protected and priority bat and bird species following Natural England (English Nature) Guidelines. A local biological record search was undertaken.
- 0.3 The proposed development site is approximately 0.05ha in area and found to be an existing small farm cottage and attached modern farm storage barn, with existing access and a small attached garden space with amenity grassland, ornamental trees and garden bedding.
- 0.4 The building was found to be a small double-storey cottage with a brick plinth and timber cladding. The building supported a timber-framed, pitched roof with clay tiles. The building had a vaulted ceiling in the main section and therefore did not support a roof void, however a small void was present in a side section and was surveyed. Attached to the cottage was a modern barn storage building with timber framing using modern joinery, including the use of metal screws, pins and plates, and corrugated iron roof and timber cladding. The barn had a brick plinth.
- 0.5 A high population of house sparrows *Passer domesticus* (UK priority species) were observed using the site. Signs or evidence of roosting bats were not observed and the risk of presence of roosting bats was considered negligible. No other signs or evidence of protected, priority or rare species were noted or considered likely to be impacted by the proposed development.
- 0.6 Further ecological surveys were considered unnecessary. However, to compensate for loss of house sparrow nesting habitat and to minimise any residual risk of impact to bats, recommendations, detailed later in the report, should be followed.
- 0.7 With the recommendations followed as described, it was considered that the proposed development could proceed with a negligible risk of harm or impact to bats, bat roosts, local bat conservation, or birds.
- 0.8 By implementing the biodiversity enhancements, the proposed development will be enhanced further for the benefit of local wildlife to create a net-gain in accordance with national planning policy.

1 INTRODUCTION

1.1 Background

- 1.1.1 Skilled Ecology Consultancy Ltd. was commissioned by Mr. R. Forsyth to undertake a bat and bird appraisal of at Beauchamps Farm, Wyddial, Buntingford, SG9 0EP. The report is required to accompany a planning application for the demolition of an existing cottage and attached barn and erection of replacement single residential dwelling.
- 1.1.2 Bats and birds are protected by law and some bat and bird species, such as brown long-eared *Plecotus auritus*, are also UK priority species. Protected and priority species are a material consideration for individual planning decisions under the National Planning Policy Framework, 2019 (NPPF) (MHCLG, 2019).
- 1.1.3 This study and report complies with the Chartered Institute for Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisals (Second Edition, 2017).

2 METHODOLOGY

2.1 Desk Study

- 2.1.1 A local biological data search was obtained through Herts Environmental Records Centre (HERC, 2020) to search for records of protected, priority and rare wildlife, and local wildlife sites.
- 2.1.2 A search of the Multi-Agency Geographical Information for the Countryside (MAGIC) was also conducted, to check for statutory nature conservation sites.
- 2.1.3 The record search results were then combined with the findings of the site survey to assess the risk of bat & bird issues, relevant to planning, occurring on the site.

2.2 Study Limitations

- 2.2.1 The site and surrounds were assessed based on their condition at the time of the survey visit.
- 2.2.2 No major study limitations were found.

2.3 Initial Site Survey

Habitats and Surroundings

- 2.3.1 The site was visited on the 11th March 2020 by experienced ecologist by experienced ecologist James Pickerin BSc (Hons) (ecologist licensed to survey for great crested newts *Triturus cristatus* and bats - level 2) to survey

for the risk of presence and the risk of impact to bats and birds.

- 2.3.2 Equipment available for use during the survey included: high powered torch, ladder, digital camera, binoculars, and video endoscope.
- 2.3.3 The survey methods followed English Nature Bat Mitigation Guidelines (English Nature, 2004) and Bat Conservation Trust Best Practice Guidelines, therefore considerations were:
- the availability of access to roosts for bats;
 - the presence and suitability of cracks, crevices, tiles, soffits, hollows, ivy growth and other places as roosts;
 - signs of bat activity or presence, such as; the bats themselves, droppings, grease marks, scratch marks, urine spatter and prey remains.
- 2.3.4 The availability of access to roosts was assessed based upon the presence of holes large enough to allow entry to bats and lack of cobwebs and dirt.
- 2.3.5 The outsides of buildings were inspected for gaps, cavities, access points and crevices, and any signs of bats (droppings, staining, urine spatter), in accordance with Natural England (English Nature) guidelines (English Nature, 2004).
- 2.3.6 The insides of buildings were then inspected for signs of bat activity and opportunities for roosts. As many crevices as could safely be accessed were checked for suitability and signs of bats. All surfaces were inspected.

3 RESULTS AND RISK

3.1 Site Description & Location

- 3.1.1 The proposed development site is approximately 0.05ha in area and found to be an existing small farm cottage and attached modern farm storage barn, with existing access and a small attached garden space with amenity grassland, ornamental trees and garden bedding (see Appendix 8.1; Figure 1 & 2; Appendix 8.2; photographs 1 - 8). The proposed site was set in a small farm complex and surrounded by a residential dwelling to the north, and farm and stable buildings to the west. Surrounding habitats included buildings, hardstanding, amenity grassland, hedgerow, garden environments and scattered trees.
- 3.1.2 The building was found to be a small double-storey cottage with a brick plinth and timber cladding. The building supported a timber-framed, pitched roof with clay tiles. The building had a vaulted ceiling in the main section and therefore did not support a roof void, however a small void was present in a side section and was surveyed.

- 3.1.3 Attached the cottage was a modern barn storage building with timber framing using modern joinery, including the use of metal screws, pins and plates, and corrugated iron roof and timber cladding. The barn had a brick plinth.
- 3.1.4 The proposed site was positioned south-east of the small village of Wyddial. The site was surrounded more generally by the small farm complex and arable agriculture.
- 3.1.5 Three ponds were located within 500m of the proposed site (Ordnance Survey Map, 2019): Pond 1 was located 50m north of the site, and found to be a large ornamental moat for the adjacent dwellings, Pond 2 was located 350m south-west and Pond 3 was located 500m west. Access to Ponds 2 and 3 was unavailable at the time of survey.

3.2 Nature Conservation Sites

- 3.2.1 No statutorily designated nature conservation sites are present within 2km of the proposed site (HERC, 2020; MAGIC, 2020).
- 3.2.2 Ancient Woodland and veteran trees are regarded as irreplaceable habitats (NPPF, 2019). Designated Ancient Woodlands are present within 2km of the proposed site, the nearest Ancient Woodlands is Capons Wood, located 1.7km north-west (HERC, 2020; MAGIC, 2020).
- 3.2.3 Additionally, seven non-statutorily designated nature conservation sites are present within 2km of the proposed site (HERC, 2020). These are: Bushy’s Grove Local Wildlife Site (LWS), located 340m north-east and designated due to ancient semi-natural woodland; Beauchamps Green Lane LWS, located 590m south-east and designated due to an old green lane with calcareous ditch and hedge; Moles Farm Area, Wyddial LWS, located 840m west and designated due to buildings, ponds and environs for protected species; Capons Wood LWS, located 1.7km north-west and designated due to ancient woodland; Alswick Hall Area LWS, located 1.8km south and designated due to buildings and environs for protected species; Alswick Wood CWS located 1.9km south and designated due to ancient woodland; and Antsey Chalk Pit LWS, located 1.9km north-east and designated due to important calcareous flora on the pit margin (ibid.)

3.3 Data Search

- 3.2.1 The biological data search conducted on behalf of Skilled Ecology by HERC (2020) is summarised in Table 1 below.

Table 1: Summary of local bat and bird records.

Species	Location from the Site	Year of Record
<i>Bats (all UK & EU protected)</i>		
Common pipistrelle	Within 2km	2013

Soprano pipistrelle	Within 2km	2013
Serotine	Within 2km	2013
Brown long-eared	Within 2km	2013
Lesser Noctule	Within 2km	2007
Natterer's	Within 2km	2017
Daubenton's	Within 2km	2017
Western barbastelle	Within 2km	2012
Birds		
Lapwing (UK priority & red-listed)	Within 2km	2014
Woodcock (UK priority & red-listed)	Within 2km	2013
Cuckoo (UK priority & red-listed)	Within 2km	2003
Turtle dove (UK priority & red-listed)	Within 2km	2010
Linnet (UK priority & red-listed)	Within 2km	2016
House sparrow (UK priority & red-listed)	Within 2km	2016
Skylark (UK priority & red-listed)	Within 2km	2016
Song thrush (UK priority & red-listed)	Within 2km	2016
Starling (UK priority & red-listed)	Within 2km	2016

3.4 Protected, Priority & Rare Species

Building Suitability for Bats

- 3.3.1 The cottage and barn were inspected for bats as part of the survey. Evidence of bat activity was not observed internally or externally.
- 3.3.2 Internally, the barn was very low in suitability for roosting bats, supporting a negligible opportunities for roosting within or around the modern, bolted joinery, additionally, due to the presence of a high number of nesting house sparrows, discarded nesting material and associated cobwebbing pervasively covered whole beams of wood regularly around the barn.
- 3.3.3 Externally the barn building supported negligible bat roosting potential, with the corrugated iron offering negligible opportunities for roosting.
- 3.3.4 Internally, the cottage building was very well sealed and still in occupation. The existing loft void was found to be in very good condition with modern joinery and lining sealing the void well. The void was searched and no evidence of bats, such as live bats, droppings, urine stains or scratch marks were observed.
- 3.3.5 Externally, areas around roof tiles were closely inspected for evidence of bats and potential for roosting. The building exterior was in very good condition; few loose tiles or viable gaps were evident. Gaps observed were closely inspected with a powerful torch and found to be shallow and poor in quality for roosting bats. Therefore, the exterior was also negligible in suitability for bats with very few suitable opportunities for roosting present.

- 3.3.6 No individual bats, bat droppings or urine stains were present internally in, or externally on, the cottage.

Habitat Suitability for Bats

- 3.3.7 The immediate surrounding habitats (farm complexes, arable fields, some hedgerow and ponds), were likely to produce moderate quantities of flying insects for feeding bats and shelter for commuting bats, indicating the likely presence of at least moderate numbers of foraging bats of the more common and widespread species.

Building Suitability for Birds

- 3.3.8 Externally, three main areas of house sparrow *Passer domesticus* activity were observed around the barn, where a moderate number of birds were observed entering and exiting the building. Historical dropping staining was evident beneath these areas.
- 3.3.9 Internally, house sparrow nesting was observed in various areas around the barn. Access or potential into the barn for larger birds such as barn owls was deemed negligible.
- 3.3.10 No other signs or evidence of other nesting or roosting by protected, priority or rare birds were observed.

Other Protected & Priority Species

- 3.3.11 The site was deemed negligible in terrestrial habitat suitability for great crested newts or other amphibians. Pond 1 was assessed for suitability for great crested newts by undertaking a Habitat Suitability Index assessment as developed by Oldham *et al.* (2000) (see Table 2).
- 3.3.12 The assessment indicated that Pond 1 was poor in suitability for great crested newts, this was due to known large population of large fish, poor water quality, extensive fowl and denudation.

Table 1 - Habitat Suitability Index score for Pond 1, 11th March 2020.

Pond	1
SI1 - Location	1
SI2 - Pond area	0.95
SI3 - Pond drying	0.9
SI4 - Water quality	0.33
SI4 - Shade	1

SI6 - Fowl	0.01
SI7 - Fish	0.01
SI8 - Ponds	1
SI9 - Terr'l habitat	1
SI10 - Macrophytes	N/A
HSI	0.31

HSI Pond suitability
 <0.5 = poor
 0.5 – 0.59 = below average
 0.6 – 0.69 = average
 0.7 – 0.79 = good
 > 0.8 = excellent

4 DISCUSSION OF RISK AND LEGISLATION

4.1 Protected, Priority & Rare Species

Bats

4.1.1 Bats are protected under the Wildlife and Countryside Act 1981 as amended by the Countryside Rights of Way Act 2000 and under the Conservation of Habitats and Species Regulations 2017. Some bats are also UK priority species. A summary of the offences likely to be relevant to development are:

- Intentionally or deliberately kill, injure or take a bat;
- Intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection, whether bats are present or not;
- Damage or destroy a breeding site or resting place of any bat;
- Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection;
- Deliberately disturb a bat anywhere.

4.1.2 Bats have been recorded locally (HERC, 2020), and local habitats were likely to support moderate populations of bats. However, the buildings proposed for impact were found to support negligible roosting opportunities within the buildings, and on the building exteriors. No signs or evidence of bat activity were discovered associated with the cottage or barn.

- 4.1.3 Consequently, due to the construction style, building materials and low numbers of viable roosting opportunities, combined with the lack of evidence of bat activity observed, it was considered highly unlikely that bats were roosting in the buildings or that bats would be significantly impacted by the proposed development.
- 4.1.4 This small-scale development is highly unlikely to have any negative impact on local foraging and commuting bats, bat populations or bat conservation.
- 4.1.5 Therefore, further bat surveys or mitigation were considered unnecessary.
- 4.1.6 However, to minimise any residual risk of harm or impact to bats, impact avoidance precautionary measures, detailed below, should be followed.

Birds

- 4.1.7 Wild birds are protected under the Wildlife and Countryside Act 1981 and, with certain exceptions (e.g. pest species) in certain situations, it is an offence to intentionally:
- Kill or injure any wild bird;
 - Take, damage or destroy the nest of any wild bird while it is in use or being built;
 - Take or destroy the egg of any wild bird.
- 4.1.8 Some bird species (such as barn owls) are also specially protected under Schedule 1 of the Wildlife and Countryside Act 1981 and others are UK priority species.
- 4.1.9 House sparrows were found to be using the building in several locations for nesting. House sparrow are a UK priority species and red-listed Bird of Conservation Concern. House sparrow numbers have declined significantly over the past 30 years. Government guidance is to prevent net loss of populations of UK priority species, though stops short of legal protection for individual UK priority birds. The site is primarily used for nesting by house sparrow and is not a significant foraging resource.
- 4.1.10 No other UK priority birds or protected birds were likely to use the site for nesting or roosting.
- 4.1.11 Further bird surveys were considered unnecessary. However, to compensate for the loss of house sparrow nesting resource and to prevent harm to actively nesting birds, precautionary measures, detailed later in the report, should be followed.

Other Protected & Priority Species

- 4.1.12 No signs or evidence of other protected, priority or rare species were observed on the site. The risk of presence or impact to such species was very low.

Further ecological surveys or mitigation for any other protected, priority or rare species was unnecessary.

4.2 Other Issues

Statutorily Designated Conservation Sites & Sensitive Habitats

4.2.1 The site was not within 2km of a statutorily designated nature conservation site. Additionally, the risk of impact to non-statutorily designated nature sites was considered very low due to the distance to the designations from the proposed site, the small scale of the proposed development and common habitat types present.

4.2.2 Furthermore, the proposed development is for replacement of an existing dwelling, therefore, no local population increase would be caused by the proposed development.

4.2.3 Therefore, the risk of direct or indirect impact to local nature conservation sites was negligible. Further surveys or mitigation were considered unnecessary.

5 RECOMMENDATIONS

5.1 Impact Avoidance Precautionary Measures & Habitat Compensation

Bats

5.1.1 The site was unlikely to support roosting bats and the proposed development unlikely to significantly impact upon bats. However, to minimise any residual risk of impact to bats, the following precautionary measure should be undertaken:

- During demolition in the unlikely event that roosting bats or significant signs of bats (droppings) are discovered, works on the site should cease and an ecologist should be called for advice on how to proceed. An information sheet for contractors on what to look for can be found in Appendix 3.
- Any new proposed external lighting should be minimised. Where external lighting is required it should be warm white LED lamps with glass glazing, rather than plastic, as these produce the least amount of UV light possible, minimising the attraction effects on insects and minimising disturbance to local bats;
- Any external lighting proposed for the development should be aimed carefully, to minimise illumination of boundary habitats and avoid light spillage into the sky, or horizontally out from any buildings, by using hoods or directional lighting;

- External security lighting should be set on short timers and be sensitive to large moving objects only, to prevent any passing bats switching them on.

Birds

- 5.1.2 To compensate for loss in nesting habitat for house sparrows, three Vivara Pro WoodStone House Sparrow Nest Boxes should be installed into the northern elevation of the new dwelling. The boxes would be installed into the walls and form permanent features and last in perpetuity.
- 5.1.3 It is recommended that to prevent harm to nesting birds commencement of demolition/construction works should be undertaken outside of the main bird nesting season (March until the end of August). If this timescale is not possible then an ecologist should survey the site for active bird nests just prior to the commencement of works within the nesting season.
- 5.1.4 If an active bird nest was found, it would be necessary to protect the nest from harm or disturbance until the bird had finished nesting.

5.2 Enhancements

- 5.2.1 By the following the below biodiversity enhancements, the development will improve the site for local wildlife and provide a net-gain in accordance with national planning policy (NPPF, 2019).
- 5.2.2 The addition of bat boxes and bee bricks on the new building will increase the potential roosting and nesting sites for local bats and bees. Specifically, the following boxes should be used;
- 2 x Integrated Eco bat boxes;
 - 4 x Bee Bricks;
- 5.2.3 Bat boxes and bee bricks can be purchased on-line through suppliers such as The Wildlife Shop and NHBS.
- 5.2.4 Integrated bat boxes and bee bricks should be installed high in new buildings, with the bee bricks positioned between north-west and north-east, and the bat boxes between south-west and south-east.
- 5.2.5 Any new proposed soft landscaping should include only native and wildlife attracting plants.

6 CONCLUSION

- 6.1 The site is used by nesting house sparrows. Signs or evidence of roosting bats were not observed. The risk of significant impact to any other protected, priority or rare species or notable habitats was negligible.
- 6.2 Further ecological surveys were considered unnecessary. However, to compensate for house sparrow nesting loss and to minimise any residual risk of impact to bats, recommendations are provided in the report and should be followed accordingly.
- 6.3 By implementing the biodiversity enhancements, the proposed development will be enhanced further for the benefit of local wildlife to create a net-gain in accordance with national planning policy.

7 REFERENCES

Bat Conservation Trust (2016) *Bat Surveys- Good Practise Guidelines, 3rd Edition*. Bat Conservation Trust, London.

English Nature (2004). *Bat Mitigation Guidelines Version 2004*. English Nature, Peterborough.

HERC (2020). *Data search results for TL 38213 31353*. HERC, St. Albans.

Ministry of Housing, Communities and Local Government (2019). *National Planning Policy Framework, February 2019*. Fry Building, London.

Oldham, R.S., Keeble, J., Swan, M.J.S. and Jeffcote, M. (2000). *Evaluating the Suitability of Habitat for the Great Crested Newt (Triturus cristatus)*. Herpetological Journal Vol. 10 pp. 143-155.

Internet reference: www.gridreferencefinder.com (accessed in 2020).

www.magic.gov.uk (accessed in 2020).

8 APPENDICES

8.1 Appendix 1: Figures

Figure 1: Site location.



8.2 Appendix 2: Photographs

Photograph 1: Front of barn, looking south. 11th March 2020.



Photograph by James Pickerin 2020

Photograph 2: Front of cottage, looking north. 11th March 2020.



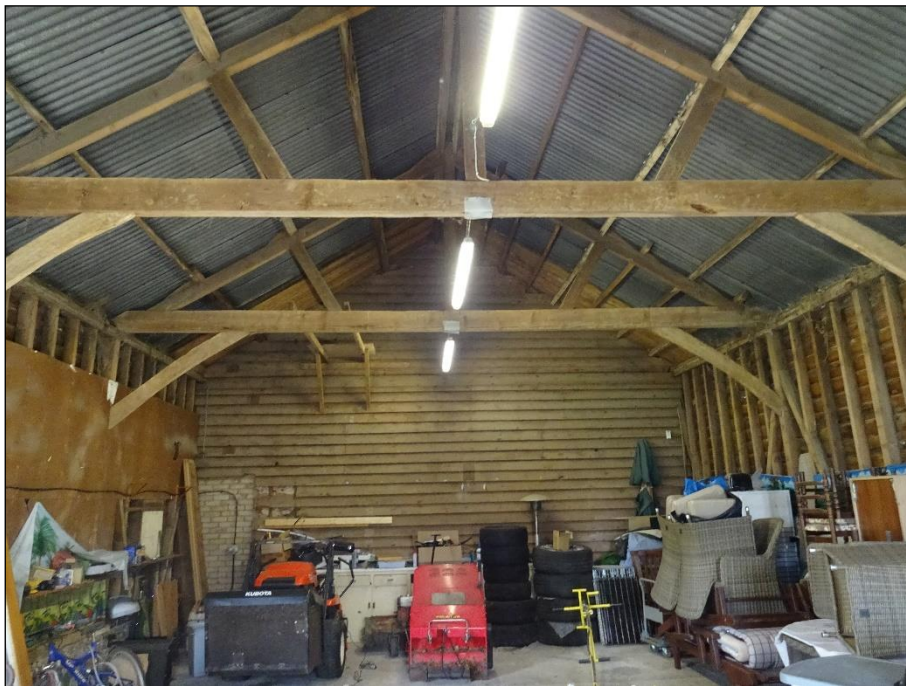
Photograph by James Pickerin 2020

Photograph 3: View of tiles in good condition. 11th March 2020.



Photograph by James Pickerin 2020

Photograph 4: View of barn interior. 11th March 2020.



Photograph by James Pickerin 2020

Photograph 5: View of loft space. 11th March 2020.



Photograph by James Pickerin 2020

Photograph 6: View of exterior evidence of house sparrow. 11th March 2020.



Photograph by James Pickerin 2020

Photograph 7: View of interior evidence of house sparrow. 11th March 2020.



Photograph by James Pickerin 2020

Photograph 8: View of Pond 1. 11th March 2020.



Photograph by James Pickerin 2020

8.3 Appendix 3: Bat Droppings Information Sheet

Bat Droppings

Bats and their roosts are protected by law. Even if a building has been surveyed and seems likely to be free of bats, there is always a chance that other people may encounter evidence of bats when working on a site, particularly if parts of a site have been inaccessible to the surveyor.

Bats may use a roost all year round, so the easiest way for most people to become aware of a bat roost is through the presence of their distinctive droppings.

Where to Pay Particular Attention

Places to particularly look out for bat droppings in a building already surveyed are as follows:

- under ridge tiles and adjacent tiles/slates;
- in the area of the barge board and soffit;
- on the floor of roof spaces that a bat surveyor has not accessed;
- in wall cavities,

What to Look for

Bat droppings resemble mouse droppings, being small, black or brown, elongated ovals. However, they differ in a critical way:

If rubbed between forefinger and thumb (wear gloves for this), bat droppings, even fresh ones, crumble to a fine powder / dust. Mouse droppings are pasty when fresh, and go very hard when old.



If you find bat droppings or bats, cease working in that area and notify the site owner / site manager.

If you find a bat do not attempt to handle it. Not only is it illegal, but some bats in the UK carry a rabies-like virus which may be fatal to humans bitten by an infected bat.