

Bat Survey Report and Great Crested Newt Assessment

Site Name: Holly Farm, Honiley Road, Beausale,
Warwick, CV35 7NU

National Grid Reference: SP 24118 70352

Date of Surveys: Summer 2020
Update survey 9th September 2022

DR PENNY ANGOLD
CONSULTANT ECOLOGIST

Report prepared by AMPA Associates Limited
penny@ampa-associates.com
Mobile: 07515 051 333

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A - Executive summary

There are plans to replace the old farmhouse at Holly Farm, which is currently in a state of disrepair, and create a family home. A bat survey and newt assessment have been requested to inform the planning application.

The survey site comprises an existing dwelling in a poor state of repair.

There are potential roost features for bats in the existing house in the form of uneven tiles, and gaps under ridge tiles in the existing roof structure of the house. However, the roof void is unlined so there are minimal concealed roosting places within the roof void, and the void is heavily used by rats. There is also a large jackdaw population in the farmhouse. The risk of bats using the house as a place of rest or shelter was low to moderate, although the surroundings are high potential for bats, because of the unlined roof void, the lack of evidence of bats, and the activity by potential predators in and around the farmhouse. No evidence of bats was seen, but bats are very cryptic and roosts will often not be detected by external survey.

Nocturnal surveys were therefore undertaken in 2020 to determine whether bats are using the building for rest or shelter. A dusk and a dawn survey were undertaken during ideal weather conditions in peak activity season for bats. No bats emerged from or entered the buildings. Therefore we conclude that bats are not using the farmhouse for rest or shelter, and there will be no adverse impact on bats as a result of the proposed refurbishment and extension of Holly Farm house.

The pond within the grounds is dried and has poor potential for great crested newts. There are no other ponds within a 250 metre radius of the farmhouse.

The Natural England risk calculator for great crested newt shows that provided individual newts are not killed or injured, destruction of up to 0.01Ha of habitat within 100 metres of a breeding pond is unlikely to cause an offence; and there is no such breeding pond within 100 metres of the farmhouse. Therefore there is no predicted adverse impact of the proposed development on great crested newts, but as a matter of good practice a method statement approach for amphibians is recommended.

As with all rural construction projects, any trenches left uncovered overnight must have planks placed from the bottom of the trench at an angle to allow any animals that fall into the trench to climb out. This will prevent animals such as amphibians, hedgehogs, or badgers from becoming trapped.

Enhancement opportunities: the site comes with patches of deciduous woodland. We recommend a scheme of bat and bird boxes to be installed to enhance the habitat for these species.

B - Introduction

B.1.1 Background to activity/development

There are plans to replace the existing farmhouse to create a family home. A bat survey and great crested newt assessment have been requested to inform the planning application.

B.2. Legislative Background

There are various articles of protected species legislation that might apply to flora and fauna on this site. It is known that certain species of bats typically roost in buildings, and that a significant proportion of buildings may be used by bats at some time in the year. Bats are also known to use trees, caves and other crevices as places of rest or shelter.

All species of bat, both vesper bats (*Vespertilionidae*) and horseshoe bats (*Rhinolophidae*) are protected by law.

Bats are protected under schedule 5 of the Wildlife and Countryside Act (1981) (As amended) from being disturbed whilst occupying a place of rest or shelter; and under the CROW Act 2000 (which adds 'reckless' to 'deliberate').

The Conservation of Habitats and Species (Amendment) (EU Exit Regulations 2019) continue the protections held under Habitats Regulations 2017 which state that:

'A person who

- (a) deliberately captures, injures or kills any wild animal of a European Protected Species;
- (b) deliberately disturbs wild animals of any such species

(d) damages or destroys a breeding site or resting place of such an animal.'

is guilty of an offence.

It also emphasises that disturbance, particularly includes disturbance likely to impair ability to breed, reproduce, or rear or nurture young, to hibernate or migrate, or to affect significantly the local distribution and abundance of the species.

Hedgehogs, amphibians and reptiles are protected from killing or taking, or killing or injuring respectively under the Wildlife and Countryside Act 1984, and nesting birds are also protected. Badgers are protected by the Wildlife and Countryside Act as well the Protection of Badgers Act 1992, which makes it illegal to kill, injure or take badgers or to interfere with a badger sett.

Protected species are therefore a material consideration for planning. Councils also have a duty to consider biodiversity under the NERC Act.

Note: this is an interpretation of the legal position. For a definitive guide to the law, the reader is referred to the original legislation.

B.3 Objectives of the surveys

- To assess the risk of bats using the site as a place of rest or shelter
- Predict the impact on bats of the proposed redevelopment of the site.
- To assess the risk of great crested newts being present on the site
- To consider any measures necessary to protect great crested newt from disturbance or injury during the proposed works

B.4 Scaled plan/Map of survey area

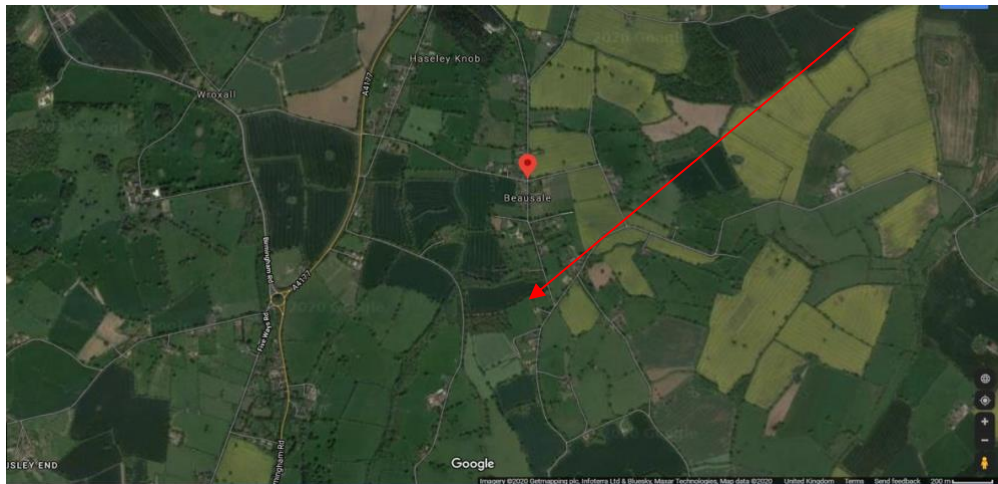


Figure 1 - Location map satellite view from Google Maps Holly Farmhouse
The site is set in rural Warwickshire off a minor road, and provides an almost linear refuge of meadow and broadleaved wooded areas between intensive arable fields. There is a lawn area between the farmhouse and the road, to the side of which is the small, almost dry pond on the site itself.

B.5 Site/Habitat description.

The survey site comprises a farmhouse in a poor state of repair, and a small formal garden with extensive newly turfed area up to the road.



The 'pond' is a damp depression with emergent plants under the trees at the south side of the lawn area. The farmhouse has a rear extension since 2020 but the fabric of the original farmhouse is unchanged.

C – Methodologies

A preliminary or daytime ecological assessment for bats was conducted on the 9th July 2020, followed by an update assessment using the same methods on 9th September 2022, both by Dr Penny Angold CEnv, CBiol MCIEEM, in good weather conditions. The building and any trees affected by the proposed works were assessed for potential roost features or for evidence of use by bats, using high power Cluson torch, 4m ladders, close-focussing binoculars, mirrors and endoscopes as appropriate, in accordance with BCT survey guidance. Evidence would include droppings, urine splash, grease marks from fur, scratch marks etc as well as live or dead bats and assessing potential for bats in accordance with current guidance.

The site was also assessed for potential for or evidence of breeding birds including nesting material, eggs or eggshell, chicks, or any birds showing territorial or breeding behaviour.

A great crested newt Habitat Suitability Index assessment was undertaken on the pond, and the habitat was assessed for its potential for amphibians including refugia searches of any suitable habitat found.

A dusk nocturnal bat survey was undertaken on 10th July 2020, and a dawn survey on 23rd July 2020. The building was watched by Natural England licenced surveyor Dr Penny Angold, using a Petersson D240x time expansion bat detector recording to Edirol R-09 recorder, and Isobel Mackiewicz using an Anabat SD1 frequency division bat detector. Two Sony nightshot infra-red cameras with additional infra-red lighting, and two SM2 bat detectors were also deployed during each survey in accordance with current guidance.

Dusk survey began ¼ hour before sunset and ended 2 hours after sunset. Dawn survey began 2 hours before sunrise and ended 15 minutes after sunrise.

C.5.2 Personnel

Experience of surveyors (at time of nocturnal survey in 2020):

PGA: Natural England Licenced bat worker Dr Penny Angold CEnv, CBiol, MCIEEM MRSB had over 16 years' experience of ecological surveying and holds Natural England class licences for Bats, Barn owls and Great crested newts.

IM: Isobel Mackiewicz was in her 2nd year of surveying for AMPA Associates Ltd.

C.3 Constraints

None noted

D – Results

There are no trees within the survey site that would be impacted by the proposed works with potential roost features for bats.

The building is a brick and tile detached house. There are numerous potential roost features for bats under uneven tiles and ridge tiles on the roofs. There was no noticeable alteration to the roof between the 2020 and 2022 surveys.





The house loft was dirty and had evidence of rats throughout. The rats had evidently been very active and made nests of the insulation. The roof was unlined and no potential roost features for bats were located. In 2022, the insulation appeared dirtier with further evidence of rats and jackdaws in the void.

There was evidence of jackdaw nesting in the chimneys of the farmhouse, and a dead jackdaw was found in the house in 2020.



The limited number of concealed potential roosting features in the farmhouse, due to the unlined roof, and the presence of predators in the farmhouse in the form of rats and jackdaws, led to an assessment of low to moderate potential for bats in the farmhouse. In accordance with BCT guidance, a dusk and a dawn nocturnal survey were undertaken in ideal weather conditions during peak survey in 2020.

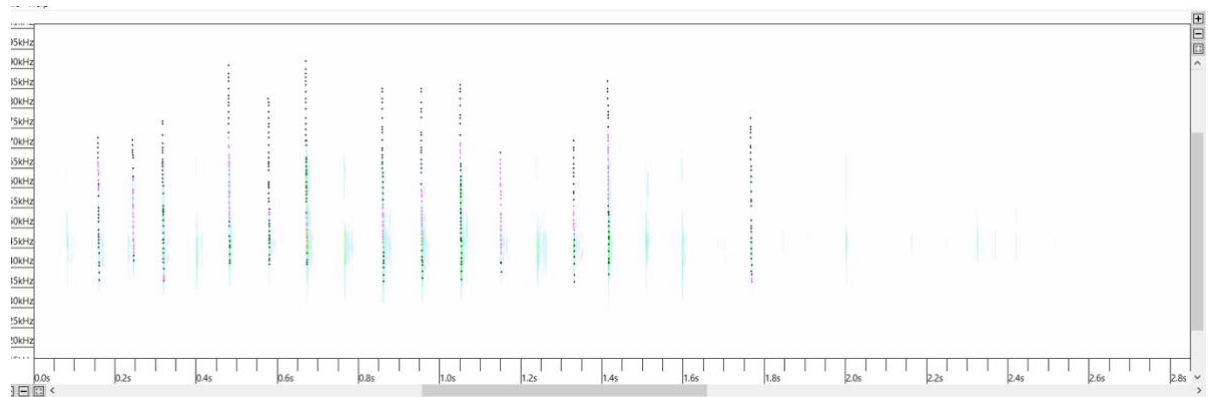
Nocturnal survey was led by Natural England licenced surveyor Dr Penny Angold, using a Petersson D240x time expansion bat detector recording to Edirol R-09 recorder, and an anabat SD1 detector, and two SM2 bat detectors. Two Sony nightshot video cameras with extra infra-red lighting were used, and experienced nocturnal surveyor Isobel Mackiewicz was second surveyor.

Date	start	end	Sunset/sunrise	surveyors	Temp (°C)	Wind (BF)	Cloud Cover (%)	Rain
10/07/20	21:00	23:27	21:27	PGA IM 2*cameras	14	Calm	60	None
23/07/20	03:15	05:30	05:16	PGA IM 2*cameras	13	Calm	20	None

No bats emerged from or entered the buildings.

Common pipistrelle bats were foraging around the site from 37 minutes after sunset for the remainder of the survey, and from the start of the survey until 40 minutes before sunrise. Brown long eared bats were foraging from 90 minutes after sunset, and were heard on arrival during the dawn survey. Natterers bats were foraging from 80 minutes after sunset. Noctule bats were heard passing about an hour after sunset. There was no pattern of flight over the site, with bats generally circling and foraging apparently randomly over the entire area. The first bats arrived from the east during the dusk survey, and the last bats left to the south during the dawn survey. Bats did fly over the farmhouse when foraging, but none flew particularly close and none went near the potential roost features.

Sonogram of Natterer's bat foraging over the site



The site has poor habitat quality for great crested newts in the immediate vicinity of the house, being predominantly lawn. The wider terrestrial habitat is good, but the existing pond is dried and unsuitable for amphibians, and no other ponds were identified within 250 metres of the farmhouse.

The only 'pond' on the site is on the lawn area and will remain undisturbed during the proposed refurbishment of the farmhouse. This pond is very heavily clogged with twigs and leaf litter, has some emergent vegetation, but no standing water:



A great crested newt Habitat Suitability Index assessment was undertaken on the pond. Due to the small area and the pond drying every year, the pond was assessed as having poor suitability for great crested newt.

Holly Farm HSI assessment	
Pond	lawn 'pond'
S1 location	1
S2 area 5m2	0.01
S3 pond drying annually	0.1
S4 water quality poor	0.33
S5 shade 80%	0.6
S6 fowl none	1
S7 fish none	1
S8 ponds none	0.1
S9 terrestrial good	1
S10 macrophytes 20%	0.5
total S1*...S10	0.000158
^1/10	0.33
result	poor

The Natural England risk calculator for great crested newt shows that provided individual newts are not killed or injured, destruction of up to 0.01Ha of habitat within 100 metres of a breeding pond is unlikely to cause an offence.

E – Interpretation and Evaluation of Results

The site comprises an existing farmhouse in a state of disrepair that is to be replaced to create a comfortable family home.

There are numerous potential roost features for bats in the existing house in the form of uneven tiles, and gaps under ridge tiles in the existing roof structure of the house. However, the roof void is unlined so there are minimal concealed roosting places within the roof void, and the void is heavily used by rats. There is also a large jackdaw population in the farmhouse. The risk of bats using the house as a place of rest or shelter was moderate, because of the unlined roof void and the activity by potential predators. No evidence of bats was seen, but bats are very cryptic and roosts will often not be detected by external survey.

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As with all rural construction projects, any trenches left uncovered overnight must have planks placed from the bottom of the trench at an angle to allow any animals that fall into the trench to climb out. This will prevent animals such as amphibians, hedgehogs, or badgers from becoming trapped.

Enhancement opportunities: the site comes with patches of deciduous woodland. We recommend a scheme of bat and bird boxes to be installed to enhance the habitat for these species.

The replacement house will be largely on the footprint of the existing buildings and recently laid species poor lawn, and will not therefore result in a loss of biodiversity on the site.

Farmhouse in September 2022 showing the rear extension, with the otherwise unaltered farmhouse behind, the adjacent gravel / hardstanding and lawned area to rear, and species poor lawn with small holly hedge at front (below):



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F – References

- British Standards Institution (2013). British Standard 42020: 2013. Biodiversity – Code of practice for planning and development. British Standards Institution, London.
- British Standards Institution. (2012). British Standard 5837:2012, Trees in relation to design, demolition and construction – recommendations. British Standards Institution, London.
- Department for Communities and Local Government (2012). National Planning Policy Framework. Available:
<http://www.communities.gov.uk/planningandbuilding/planningsystem/planningpolicy/planningpolicyframework/>
- Institute of Environmental Assessment. (1995). Guidelines for Baseline Ecological Assessment, Institute of Environmental Assessment. E&FN Spon, An Imprint of Chapman and Hall. London.
- Mitchell-Jones, AJ. Bat Mitigation Guidelines (2004). English Nature
- BCT (2016). Bat Surveys – Good Practice Guidelines.
- Mitchell-Jones & McLeish (2004). The bat worker’s manual. JNCC

This study has been undertaken in accordance with British Standard 42020:2013 “Biodiversity, Code of practice for planning and development”. The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management’s Code of Professional Conduct. We confirm that the opinions expressed are our true and professional opinions.

Dr Penelope Angold CEnv, CBiol, MCIEEM, MSB.