



PRELIMINARY ECOLOGICAL APPRAISAL CORNER HOUSE

Project name: Corner House Farm, Edgerley, SY10 8EP

Grid Reference: SJ35351849

Date: 15/07/2022

Prepared by: Phillipa Stirling BSc MSc ACIEEM

Reviewed by: William Prestwood BSc Director

Requested by: Roger Parry and Partners

C	ont	tent	rts control of the co	
1		INT	TRODUCTION	2
	1.3	1	BACKGROUND TO DEVELOPMENT	2
	1.2	2	SCOPE OF SURVEY	2
	1.3	3	KEY PRINCIPLES	2
2		SIT	TE DESCRIPTION	3
	2.	1	LOCATION, LANDSCAPE, AND BACKGROUND	3
3		SU	RVEY METHODOLOGY	3
	3.	1	DESK STUDY	3
	3.2	2	SITE SURVEY	3
	3.3	3	PERSONNEL	4
	3.4	4	CONSTRAINTS	4
4		SU	IRVEY RESULTS	4
	4.3	1	DESK STUDY	4
	4.2	2	HABITATS ON SITE	5
	4.3	3	ADJACENT HABITATS	6
	4.4	4	PROTECTED SPECIES	6
5		POTENTIAL ECOLOGICAL IMPACT		7
	5.	1	HABITAT ASSESSMENT	7
	5.2	2	PROTECTED SPECIES ASSESSMENT	7
6		ΑV	OIDANCE, MITIGATION AND ENHANCEMENT	7
	6.3	1	HABITAT MITIGATION	7
	6.2	2	PROTECTED SPECIES MITIGATION	7
	6.3	3	ECOLOGICAL ENHANCEMENT	8
7		SU	IMMARY	9
	8	R	REFERENCES	10
		FIG	GURE 1 LOCATION. 1:50,000	11
		FIG	GURE 2 AERIAL PHOTOGRAPH	12
		FIG	GURE 3 PONDS WITHIN 250M	13
		API	PENDIX 1 PHOTOGRAPHS	14

1 INTRODUCTION

1.1 BACKGROUND TO DEVELOPMENT

Planning permission will be sought for the construction of an agricultural building at Corner House Farm.

Arbor Vitae were commissioned by Roger Parry and Partners to undertake a Preliminary Ecological Appraisal in order to assess the impact of the development on habitats and protected species.

1.2 SCOPE OF SURVEY

The survey is primarily designed to:

- Identify and record habitats and important ecological features on site;
- Evaluate the potential of the proposed development site to provide opportunities for protected species;
- Determine any likely impact which the development and landscape proposals may have on these.
- Identify opportunities for the enhancement of habitats and biodiversity features on site.

1.3 KEY PRINCIPLES

All ecological surveys conducted by Arbor Vitae Environment Ltd are underpinned by the following key principles, as outlined by CIEEM (2018):

Avoidance - Seek options that avoid harm to ecological features (for example, by locating on an alternative site).

Mitigation - Adverse effects should be avoided or minimized through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.

Compensation - Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.

Enhancements - Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

2 SITE DESCRIPTION

2.1 LOCATION, LANDSCAPE, AND BACKGROUND

Corner House Farm is located at Edgerley just west of Nesscliffe (Figure 1). The land surrounding the site is a mixture of agricultural arable and grassland with residential properties and farmsteads throughout (Figure 2).

The proposals will include the construction of an agricultural building within a paddock and part of a dis-used vegetable plot.

3 SURVEY METHODOLOGY

3.1 DESK STUDY

An initial desk study was composed to gain background information regarding any protected species or designations within the area. The main sources of information were MagicMap, Shropshire Environmental Network and NBN Atlas.

3.2 SITE SURVEY

A site visit was made on 05/07/2022. The survey was carried out in accordance with CIEEM (2017) best practice guidelines. The objective of the survey was to find and record any signs of use by protected species and to note the habitat features present.

An assessment of the available habitats both on and adjacent to the site led to consideration of the potential of the site for the following protected species:

- Badger
- Bats
- Breeding birds
- Great Crested Newt

The survey methodology was tailored to evaluate the area for these species in the following ways:

Badger

An area within 50 metres of the site was closely searched for the following signs of badger activity:

- Setts,
- Tracks and footprints,
- Latrines,

Snuffle holes.

Bats

The site was assessed in terms of its suitability to support bat species. Hedgerow habitat and nearby potential habitat were assessed and recorded and potential impacts from the proposals considered.

Breeding birds

The site was assessed in terms of its suitability to support breeding bird populations. Hedgerow habitat and nearby potential habitat were assessed and recorded.

Great crested newt

A desk study and a ground search were conducted to search for any areas of open water within 250 metres. Waterbodies were then assessed based on the Habitat Suitability Index for great crested newts (Oldham et al., 2000 and ARG UK, 2010).

3.3 PERSONNEL

The survey was carried out by Phillipa Stirling MSc ACIEEM: Ecologist. Natural England bat licence number: 2021-52205-CLS-CLS and GCN licence number: 2019-42631-CLS-CLS.

3.4 CONSTRAINTS

There were no constraints to the survey being carried out successfully.

4 SURVEY RESULTS

4.1 DESK STUDY

The desk study found that within 1km of the site there were the following designations:

Name	Designation	Distance from site
Holly Banks Meadows	Local Wildlife Site	0.9km
The search included Ramsar,	SSSI, SAC, SPA, LWS, NNR and LNR. ¹	

Results from the desk study revealed that within a 1km radius of the proposed development site the following protected species have been recorded:

¹ **SSSI**: Site of Special Scientific Interest, **SAC**: Special Area of Conservation, **SPA**: Special Protection Area, **LWS**: Local Wildlife Site **NNR**: National Nature Reserve, **LNR**: Local Nature Reserve.

Species	Distance	Protection
Otter	0.1km	European Protected Species, Wildlife and Countryside Act 1981.
Badger	0.1km	Protection of Badgers Act 1992, Wildlife and Countryside Act 1981.
Natterers Bat Noctule Brown long-eared Common pipistrelle Soprano pipistrelle	0.1km	European Protected Species, Wildlife and Countryside Act 1981.
Kingfisher	0.7km	Wildlife and Countryside Act 1981.

4.2 HABITATS ON SITE

All habitats are classified using JNCC's Phase 1 Habitat Survey Handbook (JNCC, 2010).

Raised beds

Part of the site to be built upon is a dis-used vegetable plot with several raised beds and cultivated areas which are now dominated by bramble which has been cut short. There is a damaged greenhouse at the west boundary.

Improved grassland

Part of the building will be within an improved grassland paddock which is used for grazing horses. The field is cut annually to take a hay crop. Species recorded within the grassland sward during the survey were: perennial ryegrass, Yorkshire fog, cock's foot, creeping bent, creeping buttercup, common sorrel, chickweed, creeping thistle, hogweed, nettle. Areas of bramble are also developing around the margins of the field.

Non-native hedgerow

The north-west boundary of the site is bounded by *Leylandii* hedge with lilac, elder, a single young silver birch and sour cherry.

Building

There is a small single storey stable at the north-west corner of the site. The base of the stable is brick construction with a timber frame and cladding to make up the elevations. The roof is covered with corrugated tin and there are no enclosed spaces or cavities.

4.3 ADJACENT HABITATS

Native hedgerow

The north boundary of the field site and allotment is marked by a native hedge. Species include: Wych elm, hawthorn, elder, dog rose, bramble and ivy.

4.4 PROTECTED SPECIES

Badgers

There are no signs of badger on the site or within the search area. There is a record of badger approximately 100m to the west of the site from 2016.

Bats

There are no suitable roosting sites on or adjacent to the site and the habitats present provide limited opportunities for bat species. Hedgerow adjacent to the site could be used for foraging and commuting.

Breeding birds

No evidence of breeding birds was found on site during the survey. The site doesn't offer any particularly likely nesting sites but adjacent hedgerows could be used by breeding birds.

Great Crested Newt

There is one pond present within 250m of the site which lies 50m north. The pond is a manmade ornamental feature set within a shortly mown lawn. The banks of the pond have been worn of any vegetation and vegetation is limited to flag iris.

GCN HSI Calculator					
	Pond Name	POND 1			
	Position	SJ35381853			
SI No	SI Description				
1	Geographic location	1			
2	Pond area	0.05			
3	Pond permanence	0.9			
4	Water quality	0.33			
5	Shade	1			
6	Water fowl effect	0.33			
7	Fish presence	0.67			
8	Pond Density	1			
9	Terrestrial habitat	0.3			
10	Macropyhyte cover	0.3			
	HSI Score	0.44			
Pond s	uitability (see below)	Poor			

5 POTENTIAL ECOLOGICAL IMPACT

5.1 HABITAT ASSESSMENT

The proposals will impact a relatively small area of improved grassland and raised beds. No priority or protected habitats will be effected and the overall ecological impact will be negligible.

5.2 PROTECTED SPECIES ASSESSMENT

Badger

The survey revealed no signs of use by badger on or adjacent to the site. The habitats present may provide suitable foraging areas but overall value to badgers is low. The proposals will have no impact upon this species.

Bats

The proposals will have no impact upon habitats features of value to bat species and therefore no impact upon bats.

Breeding birds

The further clearance of vegetation from the site to facilitate development work has the potential to disturb breeding birds if they begin to nest on the site. Precautionary measures will be adopted to avoid all disturbance.

Great crested newt

A single pond lies 50m from the site and provides 'poor' suitability as a breeding site for GCN. There are no records of GCN within 1km of the development area and the habitats on site to be lost provide sub-optimal terrestrial opportunities for this species. The proposals will have no impact upon GCN.

6 AVOIDANCE, MITIGATION AND ENHANCEMENT

6.1 HABITAT MITIGATION

Mitigation for the loss of improved grassland and raised beds is not required.

6.2 PROTECTED SPECIES MITIGATION

Bats

All artificial lighting will be designed with nocturnal wildlife in mind. The following measures will be incorporated into lighting plans for the site:

- Hedgerows and key habitat features including mature trees on the site will not be illuminated in order to retain dark movement corridors for nocturnal wildlife.
- Security lighting will be set on motion sensors with short timers (<1 minute) and should be LED lighting.
- External lights will be hooded and directed toward the ground to reduce upward light spill.
- A warm white spectrum will be adopted throughout the scheme to reduce blue light component (<2700Kelvin).
- Internal luminaires will be recessed where installed in proximity to windows to reduce glare and light spill. LED luminaires should be used internally where possible due to their sharp cut-off, lower intensity, and dimming capability.
- Luminaires will always be mounted horizontally with an upward light ratio of 0%.

Breeding birds

Any necessary vegetation removal will be carried out between September and February in a given year.

6.3 ECOLOGICAL ENHANCEMENT

In order to provide opportunities for a variety of wildlife, we recommend that a nest box scheme is adopted as follows:

- Two Woodcrete general purpose bat boxes, suitable for crevice-dwelling species. To be installed high up on the completed building in an area not illuminated by any lighting. At least 3m from the ground.
- Two Woodcrete cavity nesting bird boxes with 28mm or 32mm access holes. To be installed on the side of the completed building. At least 2.5m from the ground.

7 SUMMARY

Planning permission will be sought for the construction of an agricultural building at Corner House Farm. Arbor Vitae were commissioned by Roger Parry and Partners to undertake a Preliminary Ecological Appraisal in order to assess the impact of the development on habitats and protected species.

The proposals will impact a relatively small area of improved grassland and raised beds. No priority or protected habitats will be effected and the overall ecological impact will be negligible.

The survey revealed no signs of use by badger on or adjacent to the site. The habitats present may provide suitable foraging areas but overall value to badgers is low. The proposals will have no impact upon this species.

The proposals will have no impact upon habitats features of value to bat species and therefore no impact upon bats. All artificial lighting will be designed with nocturnal wildlife in mind.

The further clearance of vegetation from the site to facilitate development work has the potential to disturb breeding birds if they begin to nest on the site. Precautionary measures will be adopted to avoid all disturbance. Any necessary vegetation removal will be carried out between September and February in a given year.

A single pond lies 50m from the site and provides 'poor' suitability as a breeding site for GCN. There are no records of GCN within 1km of the development area and the habitats on site to be lost provide sub-optimal terrestrial opportunities for this species. The proposals will have no impact upon GCN.

In order to provide opportunities for a variety of wildlife, we recommend that a nest box scheme is adopted as follows: Two Woodcrete general purpose bat boxes and two Woodcrete cavity nesting bird boxes.

8 REFERENCES

ARG UK (2010). ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index. Amphibian and Reptile Groups of the United Kingdom

Bat Conservation Trust (2018) Bats and artificial lighting in the UK. *Bats and the Built Environment series*, Guidance Note 08/18. Institution of Lighting Professionals.

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

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

GOV.UK. (2015) Badgers: surveys and mitigation for development projects. [online] Available at: [Accessed 29 October 2021].

Harris, S., Creswell, P. and Jefferies, D. (1989) Surveying Badgers. 1st ed. London: The Mammal Society, pp.3-21.

Hundt L (2012) Bat Surveys: Good Practice Guidelines, 2nd edition, Bat Conservation Trust.

JNCC (2010) Handbook for Phase 1 habitat survey - a technique for environmental audit, ISBN 0 86139 636 7.

Mitchell-Jones, T. (2004) Bat mitigation guidelines. External Relations Team, English Nature.

Natural England (2002) Badgers and Development. 1st ed. Peterborough: Natural England, pp.2-12.

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus). Herpetological Journal 10(4), 143-155.

FIGURE 1 LOCATION. 1:50,000

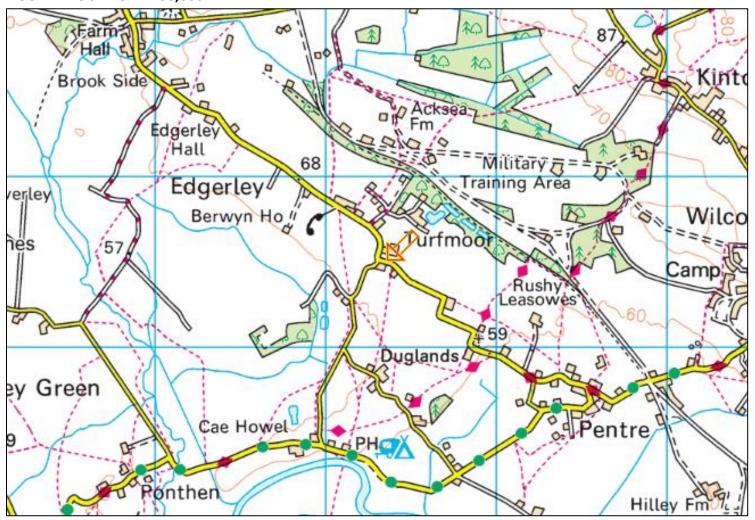




FIGURE 2 AERIAL PHOTOGRAPH





FIGURE 3 PONDS WITHIN 250M









Interior of stable.



