



ARBOR VITAE
ECOLOGIST • FORESTER • LAND-USE

Preliminary Ecological Appraisal

Date prepared:	26/08/2026
Site name:	FFERM WERN FAWR
Site address:	Fferm Wern Fawr, Llangynhafal, Ruthin, Denbighshire, LL15 1RT
Grid reference:	SJ138622
Local authority:	Denbighshire County Council
Client:	Roger Parrys and Partners
Survey dates:	17/08/2026
Prepared by:	William Prestwood BSc
Reviewed by:	Charlotte Skinner MSc

Contents

1	INTRODUCTION	2
1.1	BACKGROUND TO DEVELOPMENT	2
1.2	SCOPE OF SURVEY	2
1.3	KEY PRINCIPLES.....	2
2	SITE DESCRIPTION	3
2.1	LOCATION, LANDSCAPE, AND BACKGROUND	3
3	SURVEY METHODOLOGY	3
3.1	DESK STUDY	3
3.2	SITE SURVEY.....	3
3.3	PERSONNEL.....	4
3.4	CONSTRAINTS	4
4	SURVEY RESULTS.....	5
4.1	DESK STUDY	5
4.2	HABITATS ON SITE	6
4.3	ADJACENT HABITATS	6
4.4	PROTECTED SPECIES	6
5	POTENTIAL ECOLOGICAL IMPACT	7
5.1	HABITAT ASSESSMENT.....	7
5.2	PROTECTED SPECIES ASSESSMENT.....	7
6	AVOIDANCE, MITIGATION AND ENHANCEMENT	8
6.1	HABITAT MITIGATION.....	8
6.2	PROTECTED SPECIES MITIGATION	9
6.3	ECOLOGICAL ENHANCEMENT.....	10
7	SUMMARY.....	10
8	REFERENCES.....	11
	FIGURE 1 LOCATION	13
	FIGURE 2 AERIAL PHOTOGRAPH	14
	FIGURE 3 PROPOSED BLOCK PLAN	15
	APPENDIX 1 PHOTOGRAPHS	16

1 INTRODUCTION

1.1 BACKGROUND TO DEVELOPMENT

Planning permission will be sought for the erection of a new poultry shed to house 16,000 birds.

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

The farm lies on the lower western slopes of part of the Clwydian range at 140 metres AOD. The land rises sharply to the east to the prominent peak of Moel Famau at 554 metres.

The farm overlooks the valley of the Afon Clwyd. Grass fields with hedgerows dominate the local landscape with occasional small blocks of woodland, particularly associated with stream valleys.

The farmstead includes a newly built house, along with a range of modern farm buildings to house cattle and stores of hay and straw. The original farmhouse, in different ownership, is within the same curtilage.

3 SURVEY METHODOLOGY

3.1 DESK STUDY

An initial desk study was completed to gain background information regarding any protected species or designations within the area. The main sources of information were MagicMap, Data Map Wales and NBN Atlas.

3.2 SITE SURVEY

A site visit was made on 17/08/2026. 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
- Hedgehogs

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).

Hedgehogs

The site was assessed for its suitability for hedgehogs, both in terms of foraging habitat and hibernation potential.

3.3 PERSONNEL

The survey was carried out by William Prestwood BSc, ecologist with 40 years' experience.

3.4 CONSTRAINTS

Breeding birds would not have been present at the time of the survey but previous nesting and appropriate nesting sites would have been apparent.

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
Clwydian Range and Dee Valley	AONB	Farm is within AONB
Unnamed wood	Ancient woodland	275m northeast
Unnamed wood	Ancient woodland	415m southeast
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/key species have been recorded:

Species	Distance	Protection
Mammals		
Hedgehog	0.5km	Wildlife and Countryside Act 1981.
Birds		
41 species of birds have been recorded within 1km of which the following red or amber listed species may be associated with the habitats on site		
House sparrow Dunnoek Greenfinch Song thrush Mistle thrush Brambling Redwing Fieldfare Yellowhammer Starling	0.3-1km	Wildlife and Countryside Act 1981.

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.

4.2 HABITATS ON SITE

All habitats are classified using UK Habitats Classification V2.1.

Modified grassland

The building would occupy a section of a modified grassland field. The sward is very limited in species and is dominated by perennial rye grass.

The ranging area extends over two fields, both of which are modified grassland with little botanical or other ecological interest.

4.3 ADJACENT HABITATS

Native hedgerow

A 2 metre high hedgerow forms the eastern edge of the site and will lie between the existing farm buildings and new poultry shed. The hedge comprises native species including hawthorn, blackthorn and hazel.

4.4 PROTECTED SPECIES

Badgers

There are no historical records of badger at the site and no field signs were found within the search area.

Bats

There are no potential bat roosts on the site or within the vicinity. The existing farm buildings are unsuitable as bat roost sites. The adjacent hedgerow may act as a flight line/foraging site for bats.

Breeding birds

The adjacent hedge provides common farmland species with potential nest sites.

Great crested newt

This species has not been recorded within 3 kms of the site and is scarce within a 5km radius.

Two ponds were identified on maps within 200 metres, one being at 98m east and one at 198m west. The closest pond was dry at the time of survey, is evidently very silted up and also heavily shaded. Its suitability as a breeding site for GCN is 'below average'.

The pond marked on maps to the west is within other ownership and not accessible for survey. Given its distance from the construction site and the sub-optimal nature of the intervening terrestrial habitat, the risk to GCN (even if locally present) is clearly negligible. Reasonable Avoidance Measures will be adopted to ensure that any residual risk is avoided.

Hedgehogs

This species has been recorded locally. The closely grazed fields provide limited foraging potential for hedgehogs but the hedgerow network on the fringes of the site provide shelter, food resources and possible hibernation sites.

5 POTENTIAL ECOLOGICAL IMPACT

5.1 HABITAT ASSESSMENT

The loss of approximately 1600m² of modified grassland is of negligible ecological significance.

The adjacent hedgerow will be retained and a Root Protection Zone of at least 3 metres will be put in place to protect roots.

5.2 PROTECTED SPECIES ASSESSMENT

Badger

The proposals will have no impact on badger populations.

Bats

The proposals will have no impact on bat populations. Bat foraging behaviour can be affected by increased illumination of features such as hedgerows. Any external lighting should be guided by a wildlife-friendly lighting plan in order to keep the hedgerow corridor dark.

Breeding birds

The proposals will have no impact on bird populations other than for the brief construction period when the hedgerow may be disturbed by noise etc.

Great crested newt

It is unlikely that GCN breed locally and the risk to GCN from the proposed works has been shown to be negligible. Assuming that the nearest pond is unsuitable for GCN but accepting that the un-surveyed pond at 200 metres distance may be suitable, the Natural England Rapid Risk Assessment tool (see below) indicates that the proposed works are 'highly unlikely' to impact GCN.

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding	0.1 - 0.5 ha lost or damaged	0.1
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
		Maximum: 0.1
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

Studies have demonstrated that 95% of all summer refuges of GCN fall within 63m of their summer breeding pond (Jehle, 2000). Subsequent studies also found that capture rates of GCN were at their highest within 50m of a breeding site with a significant reduction in capture rates beyond 100m (Cresswell and Whitworth, 2004).

Hedgehogs

The installation of close mesh fencing around the ranging area could impede the movement of hedgehogs into and out of the site.

6 AVOIDANCE, MITIGATION AND ENHANCEMENT

6.1 HABITAT MITIGATION

No mitigation for loss of habitat will be necessary.

Installation of mesh fencing around the perimeter of the ranging area will further protect hedgerows from grazing and will enable a narrow grass margin to be left at the base of hedges. This will create a field margin of tall grasses to develop, improving hedgerows as a wildlife corridor.

6.2 PROTECTED SPECIES MITIGATION

Bats

A nocturnal wildlife-friendly lighting plan should be adopted if external lighting is required.

Breeding birds

Ideally, construction works will take place outside the nesting season to avoid disturbance to breeding birds in the adjacent hedge.

Hedgehogs

Due to the potential impact of mesh fencing on the movement of hedgehogs, provision should be made to enable hedgehogs to access and leave the site. This can be achieved by installation of hedgehog 'gates'. These are small, 13cm x 13cm, holes created in the fence. Metal frames can be purchased for this purpose. These will allow passage of hedgehogs but not chickens.

Great crested newts

Although the risk to GCN is considered negligible, the following measures will be adopted:

General Avoidance Measures

The following measures should be implemented to decrease the likelihood of killing/injuring GCN (and other small animals) that are present locally:

- If piles of rubble, logs, bricks, other loose materials or other potential refuges are to be disturbed, this will be done by hand and carried out during the active season (March to October) when the weather is warm to allow animals to disperse naturally.
- The grassland areas will be kept short prior to and during construction to avoid creating attractive habitats for wildlife.
- All building materials, rubble, bricks and soil must be stored on raised platform (e.g. wooden pallets) to prevent their use as refuges by wildlife.
- Where possible, trenches will be opened and closed in the same day to prevent any wildlife becoming trapped. If it is necessary to leave a trench open overnight then it will be provided with a means of escape in the form of a shallow ramp.
- Any open pipework should be capped overnight. All open trenches and pipework will be inspected at the start of each working day to ensure no animal is trapped.

- Any common reptiles or amphibians discovered will be allowed to naturally disperse. Advice will be sought from an appropriately qualified and experienced ecologist if large numbers of common reptiles or amphibians are present.
- If a great crested newt is discovered at any stage, then all work must immediately halt and an appropriately qualified and experienced ecologist and NRW will be contacted for advice.

6.3 ECOLOGICAL ENHANCEMENT

In order to provide shelter, breeding and hibernating 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 should be installed into mature trees within the boundary hedgerows. No lighting should be installed in the vicinity of the boxes. They should be at least 3m from the ground and face south or south west.
- Two Woodcrete cavity nesting bird boxes with 28mm or 32mm access holes. These should be positioned within mature trees on the boundary of the site and the access should face away from the prevailing wind.

7 SUMMARY

Planning permission will be sought for the erection of a new poultry shed to house 16,000 birds.

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

A survey of the site was carried out on 17 August 2026.

The proposed location for the new shed and service yard will occupy an area of modified (agriculturally improved) grassland of negligible ecological interest. The ranging area limits chickens to two fields which are both modified grassland. A native hedgerow along side the shed will be retained and protected from physical disturbance.

Consideration was given to the potential impact on protected/key species including badgers, bats, breeding birds, great crested newts and hedgehogs. No impact on badgers is expected. No bat roost sites exist within the immediate vicinity, although the adjacent hedgerow is likely to be used as a foraging site and would therefore be susceptible to disturbance from exterior lighting. A wildlife-friendly lighting plan will be adopted. No

impact is expected on breeding birds using the hedgerow other than during the construction period.

Two ponds were identified within 200 metres of the site. The nearest appears unsuitable as a breeding site for GCN. The second pool was not surveyed but may support GCN, although there are no records of this species within 3kms. Given the distance, the limited area of disturbance and the sub-optimal terrestrial habitat on the site, it is highly unlikely that there is any risk to GCN. Reasonable Avoidance Measures will be put in place to remove any residual risk.

The ranging area will be fenced and may restrict movement of hedgehogs. Hedgehog 'gates' will be installed to maintain access by this species.

Enhancement for biodiversity will be achieved in the form of bat boxes and bird boxes.

The survey concluded that no habitats of ecological interest would be impacted by the proposals and that minor potential impacts on bats, great crested newts and hedgehogs could be readily mitigated.

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.

Bright, P., Morris, P., and Mitchell-Jones, T. (2014) The dormouse conservation handbook, 2nd edition, Natural England.

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 (4th edn). The Bat Conservation Trust, London.

Cresswell, W. and Whitworth, R., 2004. An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt. Natural England Research Reports, p.36.

Dean, M., Strachan, R., Gow, D. & Andrews, R. (2016) *The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series)* Eds Fiona Mathews and Paul Chanin. The Mammal Society, London.

Edgar, P., Foster, J. and Baker, J. (2010). Reptile Habitat Management Handbook. Amphibian and Reptile Conservation, Bournemouth.

Gent, A.H., and Gibson, S.D, eds (2003) *Herpetofauna workers' manual*. Peterborough, Joint Nature Conservation Committee.

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.

Holdich D (2003). Ecology of the White-clawed Crayfish. Conserving Natura 2000 Rivers Ecology Series No. 1. English Nature, Peterborough.

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

Jehle, Robert. (2000). The terrestrial summer habitat of radio-tracked great crested newts (*Triturus cristatus*) and marbled newts (*T. marmoratus*). *Herpetological Journal*. 10. 137-142.

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.

People's Trust for Endangered Species (2019) Hedgehogs and development. British Hedgehog Preservation Society. Accessed 11/04/2023. Available at: <https://www.hedgehogstreet.org/wp-content/uploads/2019/03/Hedgehogs-and-developers-ZR.pdf>

UKHab Ltd (2023). UK Habitat Classification Version 2.1

FIGURE 1 LOCATION



ARBOR VITAE
ECOLOGY • FORESTRY • LAND USE

FIGURE 2 AERIAL PHOTOGRAPH



ARBOR VITAE
ECOLOGY • FORESTRY • LAND USE

Ordnance Survey, (c) Crown Copyright 2020. All rights reserved. Licence number 100021432

This drawing is a plan view of the site and is not a section. It is not to be used for any purpose other than the one for which it was prepared. The user of this drawing is responsible for ensuring that it is used in accordance with the terms and conditions of the licence. The user of this drawing is responsible for ensuring that it is used in accordance with the terms and conditions of the licence.

Roger Parry & Partners

Rural & Agricultural - Commercial

Project	Proposed extension of a 1.5MVA substation and associated infrastructure		
Drawing No	Proposed Block Plan		
Location	From Old Farm, Longmole, North, Longmole, N 10 101		
Date	01/10/2020		
Scale	1:500 @ A1		
Drawing No	01/10/2020	Rev	1
Drawn By	JH	Date	01/10/2020

BRICKEN HOUSE, 1 & 10 DORSET COURT, CHD
 BRICKEN PART, DORSET COUNTY, DT1 3BL
 01248 30000
 01248 30001
 01248 30002
 01248 30003
 01248 30004
 01248 30005
 01248 30006
 01248 30007
 01248 30008
 01248 30009
 01248 30010
 01248 30011
 01248 30012
 01248 30013
 01248 30014
 01248 30015
 01248 30016
 01248 30017
 01248 30018
 01248 30019
 01248 30020
 01248 30021
 01248 30022
 01248 30023
 01248 30024
 01248 30025
 01248 30026
 01248 30027
 01248 30028
 01248 30029
 01248 30030
 01248 30031
 01248 30032
 01248 30033
 01248 30034
 01248 30035
 01248 30036
 01248 30037
 01248 30038
 01248 30039
 01248 30040
 01248 30041
 01248 30042
 01248 30043
 01248 30044
 01248 30045
 01248 30046
 01248 30047
 01248 30048
 01248 30049
 01248 30050
 01248 30051
 01248 30052
 01248 30053
 01248 30054
 01248 30055
 01248 30056
 01248 30057
 01248 30058
 01248 30059
 01248 30060
 01248 30061
 01248 30062
 01248 30063
 01248 30064
 01248 30065
 01248 30066
 01248 30067
 01248 30068
 01248 30069
 01248 30070
 01248 30071
 01248 30072
 01248 30073
 01248 30074
 01248 30075
 01248 30076
 01248 30077
 01248 30078
 01248 30079
 01248 30080
 01248 30081
 01248 30082
 01248 30083
 01248 30084
 01248 30085
 01248 30086
 01248 30087
 01248 30088
 01248 30089
 01248 30090
 01248 30091
 01248 30092
 01248 30093
 01248 30094
 01248 30095
 01248 30096
 01248 30097
 01248 30098
 01248 30099
 01248 30100
 01248 30101
 01248 30102
 01248 30103
 01248 30104
 01248 30105
 01248 30106
 01248 30107
 01248 30108
 01248 30109
 01248 30110
 01248 30111
 01248 30112
 01248 30113
 01248 30114
 01248 30115
 01248 30116
 01248 30117
 01248 30118
 01248 30119
 01248 30120
 01248 30121
 01248 30122
 01248 30123
 01248 30124
 01248 30125
 01248 30126
 01248 30127
 01248 30128
 01248 30129
 01248 30130
 01248 30131
 01248 30132
 01248 30133
 01248 30134
 01248 30135
 01248 30136
 01248 30137
 01248 30138
 01248 30139
 01248 30140
 01248 30141
 01248 30142
 01248 30143
 01248 30144
 01248 30145
 01248 30146
 01248 30147
 01248 30148
 01248 30149
 01248 30150
 01248 30151
 01248 30152
 01248 30153
 01248 30154
 01248 30155
 01248 30156
 01248 30157
 01248 30158
 01248 30159
 01248 30160
 01248 30161
 01248 30162
 01248 30163
 01248 30164
 01248 30165
 01248 30166
 01248 30167
 01248 30168
 01248 30169
 01248 30170
 01248 30171
 01248 30172
 01248 30173
 01248 30174
 01248 30175
 01248 30176
 01248 30177
 01248 30178
 01248 30179
 01248 30180
 01248 30181
 01248 30182
 01248 30183
 01248 30184
 01248 30185
 01248 30186
 01248 30187
 01248 30188
 01248 30189
 01248 30190
 01248 30191
 01248 30192
 01248 30193
 01248 30194
 01248 30195
 01248 30196
 01248 30197
 01248 30198
 01248 30199
 01248 30200
 01248 30201
 01248 30202
 01248 30

APPENDIX 1 PHOTOGRAPHS



The site proposed for the siting of the shed, from the south.



The site from the north.



The nearest pond to the site is silted up and shaded.



ARBOR VITAE
ECOLOGY • FORESTRY • LAND USE



The view across the main ranging area

