



# 2020

## Model Farm, Knolton, Overton, Wrexham LL13 0LF- Extended Phase 1 Survey



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Report No. Model Farm EXT1/012020

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24/03/2020



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**24 March 2020**

**Model Farm, Knolton, Overton, Wrexham LL13 0LF**

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## Executive Summary

- Bat risk potential: No trees with cavities or cracks would be impacted by this development. No Further surveys required
- Survey carried out in October when Great-crested Newt (GCN) assessment not reliable other than to suggest potential. The small pond situated within the site at Grid Ref SJ36894040 has suitability for GCN but the nature of the development would suggest a Reasonable Avoidance Measures Approach to managing the GCN risk would be achievable.
- A badger outlier sett was identified at Grid Ref SJ36914040 on 8<sup>th</sup> October and a dead badger was close to the sett entrance. A further survey visit on 11<sup>th</sup> November found the sett flooded and collapsed. Following conversation with Natural Resources Wales this location was no longer deemed a badger sett, but a one-way badger gate was fitted as a precaution to prevent badgers re-excavating once the ground had dried.
- Badger activity is therefore confined to feeding and commuting routes through and external to the site and no setts or other features importance to the local badger population are impacted by this development.
- No other European Protected Species are impacted by this development.
- No bird nesting risk impacts noted during the survey.

## 1. Introduction

In autumn 2019 Jeff Clarke Ecology Ltd was appointed by Ms. Amy Bannister-Bell via Equestrian Design to carry out an Extended Phase 1 Survey in relation to land at Model Farm, Knolton, nr Wrexham. Site Centroid Grid Reference SJ36934042. The extended Phase 1 survey was undertaken by two experienced ecologists, namely Jeff Clarke: a specialist in bird, mammal, herpetological and invertebrate surveys; and Hayley Care NRW licensed GCN ecologist. The survey was undertaken on the 8<sup>th</sup> October 2019.

There are no known recent ecological surveys related to this site and at the time of writing the report the local authority planning website had failed, so on that principle a precautionary approach is adopted in relation to protected species.

The site is located in a very rural part of Wales close to the Welsh English border. The nearest significant conurbation is Wrexham approximately 9km to the NE and Chirk 7km WSW. The nearest notable wildlife sites are the Fenn's, Whixall and Bettesfield Moss complex 11km to the ESE and the Shropshire meres 6km to the SSE. The farms in the area are mainly pastoral or mixed pastoral/arable. The nearest functionally connected block of woodland, Queensbridge Dingle is 0.35km SSE

For the purposes of this survey it requires the production of Phase 1 vegetation map illustrating the vegetation mosaic and attribute the plant community to a phase 1 designation. The extended elements of the survey examined the protected species that may be impacted by the proposed land use change. The survey was carried on 8<sup>th</sup> October 2019 and was followed by further badger survey work on the 11<sup>th</sup> Nov 2019.

The site contains a number of important wildlife features, notably a small wildlife pond, that dries out in most summers; a number of hedgerows dividing the relatively small fields and some mature trees with features for bats.

GCN are a legally protected species under European law and are included under Schedule 5, Section 9 of the *Wildlife and Countryside Act 1981* (see below). As part of the ecological appraisal process, the extent and suitability of the terrestrial habitats were closely examined in relation to the potential impact of the development from a construction and post-construction perspective on any extant GCN populations.

Badgers are relatively common in the area of North Wales in question and close examination of all potential Badger evidence were included as part of the site survey.

Breeding birds were not surveyable as the survey took place outside the optimum period however the location and nature of the proposed construction, stable block and ménage would be unlikely to impact negatively on breeding bird potential.

## 2. LEGISLATION

### **Great Crested Newt *Triturus cristatus***

GCN are protected under British and European law, therefore surveys are required to check for their presence in areas where GCN, their breeding ponds, or their habitat are likely to be disturbed for any reason.

**Under Regulation 39 of the *Conservation (Natural Habitats &c.) Regulations 1994 (as amended 2007)*, a person commits an offence if he/she;**

- (a) Deliberately captures, injures or kills any wild animal of a European protected species;
- (b) Deliberately disturbs wild animals of any such species in such a way as to be likely significantly to affect:
  - (i) The ability of any significant group of animals of that species to survive, breed, or rear or nurture their young; or
  - (ii) The local distribution or abundance of that species;
- (c) Deliberately takes or destroys the eggs of such an animal; or
- (d) Damages or destroys a breeding site or resting place of such an animal.

**It is an offence for any person:**

- (a) To have in his possession or control;
- (b) To transport;
- (c) To sell or exchange; or
- (d) To offer for sale or exchange any European protected species,

**Under the *Wildlife and Countryside Act, 1981 (as amended)*, it is an offence to:**

- Intentionally kill, injure or take a great crested newt,
- Possess or control any live or dead specimen or anything derived from a great crested newt,
- Intentionally or recklessly damage, destroy, or obstruct access to any structure or place used for shelter or protection by a great crested newt,
- Intentionally or recklessly disturb a great crested newt while it is occupying a structure or place, which it uses for that purpose.

This legislation applies to all life stages of GCN. Heavy fines (up to £5,000 per incident) can be imposed for **each** offence, and a prison sentence of up to 6 months for each offence can be given to any person found guilty of an offence. In certain circumstances any machine, tool or implement involved in an illegal act can also be seized.

Natural England (NE) issue licences for the disturbance of European Protected Species including GCN, certain criteria must be met before a licence can be issued to enable otherwise prohibited works to proceed. Such criteria may be subject to change without notice. For further information please visit <https://naturalresources.wales/permits-and-permissions/species-licensing/uk-protected-species-licensing/?lang=en>

### **Bat Legislation**

In Britain all bat species and their roosts are legally protected, by both domestic and international legislation.

**This means you will be committing a criminal offence if you:**

1. Deliberately capture, injure or kill a bat
2. Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats
3. Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)
4. Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat
5. Intentionally or recklessly obstruct access to a bat roost

[Table detailing the legal and conservation status of all UK bats](#)

*Please refer to the legislation for the precise wording - the above is a brief summary only.*

[How to Report a Bat Crime](#)

## **Licensing**

Licences to permit illegal activities relating to bats and their roost sites can be issued for specific purposes and by specific licensing authorities in each country. These are sometimes called 'derogation licences' or 'European Protected Species' licences, and are issued under the Habitats Regulations. It is an offence not to comply with the terms and conditions of a derogation licence. If you carry out work affecting bats or roosts without a licence, you will be breaking the law.

- [Further information on derogation licences](#)
- [Find out where bats may be roosting](#)
- [Find out what actions can damage roosts and disturb bats](#)

## **Who needs to take particular note of the legislation?**

- Property owners/householders who have a bat roost in their property ([visit our helpline pages](#) to find out what to you should do if you need to do works that could impact on a roost, or if you have queries about your bat roost)
- Woodland owners, arboriculturalists and foresters. [Information about woodlands and bats](#)
- Pest controllers. [Information about bats in buildings](#)
- Planning officers & building surveyors. [Visit our planning page](#)
- Architects, property developers, demolition companies, builders and roofers

## **Which legislation is relevant for bats and roosts?**

- In England and Wales, the relevant legislation is the Wildlife and Countryside Act (1981) (as amended); the Countryside and Rights of Way Act, 2000; the Natural Environment and Rural Communities Act (NERC, 2006); and by the Conservation of Habitats and Species Regulations (2017).
- In Scotland, the key legislation that applies is the Conservation (Natural Habitats &c.) Regulations 1994 (as amended).
- In Northern Ireland bats are listed under Schedule 2 of the Conservation (Natural Habitats etc) Regulations (Northern Ireland) 1995 and in the Republic of Ireland, under Schedule 5 of the Wildlife Act 1976 and Schedule 1 of the European Communities (Natural Habitats) Regulations 1997.

Defences include:

1. Tending/caring for a bat solely for the purpose of restoring it to health and subsequent release
2. Mercy killing where there is no reasonable hope of recovery (provided that person did not cause the injury in the first place - in which case the illegal act has already taken place).

Penalties on conviction – people committing bat crimes can face six months imprisonment and/or unlimited fines. Additionally, any profits made as a consequence of not following lawful process can be confiscated and items used to commit the offences such as vehicles, plant or machinery can be forfeited.

*Last updated March 11.*

## **Badger *Meles meles***

### **Legislation and Guidance**

Under the Protection of Badgers Act 1992, badgers and their setts have the following protection. It is an offence to:

- wilfully kill, injure, ill-treat or trap badgers
- intentionally or recklessly damage, destroy or obstruct setts which show signs of current use by badgers, including seasonal use
- disturb badgers whilst they are occupying a sett or cause a dog to enter a sett.

There are a number of statutory defences under the Act, relating to mercy killing and incidental disturbance or damage to setts where this is unavoidable.

### **Licensable activities**

The Act also contains provisions to permit by means of a licence certain activities which would otherwise be prohibited, such as injuring, killing or taking badgers or interfering with a badger sett. There are 2 types of licence, which must be obtained before any work goes ahead:

- licences from Natural Resources Wales for new development
- licences from DEFRA for all non-development matters. These include problems caused by badgers on existing roads and rights of way.

**As a guide, the following activities may require a licence:**

- using heavy machinery within 30 metres of any entrance to an active sett.
- using lighter machinery, particularly for digging, within 20 metres of any entrance to an active sett.
- light work such as hand digging or scrub clearance within 10 metres of any entrance to an active sett.

A licence may be granted with conditions. For example, for large setts, there may be requirements to:

- provide an artificial sett in a suitable safe area 6 months or more before destruction of a natural sett - if the sett is to be destroyed and no alternative setts are available
- enhance feeding areas and access routes for badgers both before and during building work.

Disturbance to badgers in setts, sett exclusion and destruction should be avoided completely between the beginning of December and the end of June due to breeding and rearing of cubs and the reluctance of badgers to emerge for long periods in winter. It is most unlikely that licences will be issued for this period.

**Unlicensable activities**

Licences are only provided for certain specified activities. Other work may only be carried out close to a badger sett if:

- it is incidental to an otherwise lawful operation
- it is necessary and unavoidable
- any injury, damage or disturbance is avoided or minimised – through a variety of mitigating measures such as appropriate use of machinery and timing of work to avoid the breeding season.

It is important to know that destruction of a badger's foraging territory, the interruption of their paths to such territory or to water sources might be classed as cruel ill-treatment. Developments should ensure that this does not occur. Tunnels, gates and fencing can be provided to allow badgers access to existing feeding areas.

### 3. Location and Site Description



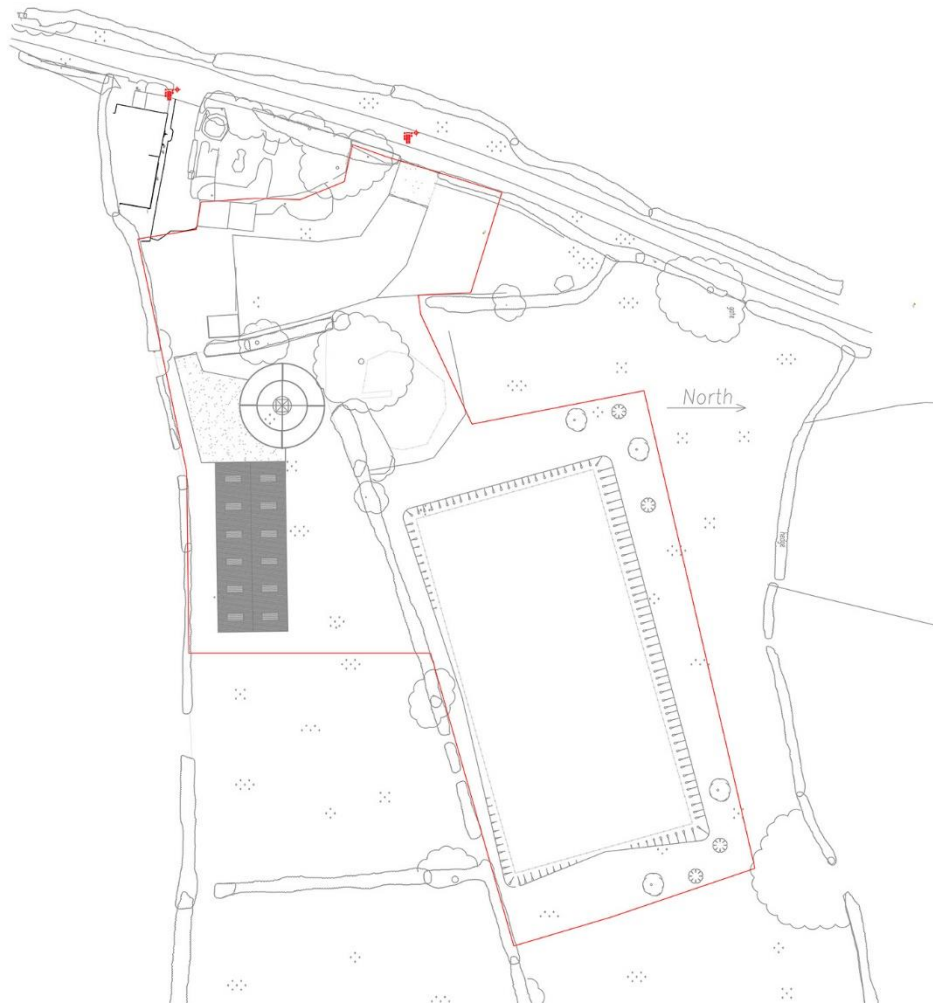
**Model Farm, Knolton - development proposal location**

As can be seen from the above image, the site (Model Farm) is located between two roads the A528 is a major road situated on the east side of the property, this would in all probability be regarded as a significant physical barrier to GCN movement and on the west side is an uncatagorised minor access road. The fields in the area and within the site are characterised by their small size and mostly intact hedgerows. The majority of fields in the vicinity are pastoral type.

Model Farm is pastoral and has largely intact hedge-lines. It contains a small pond which dries in most summers. The pond has the potential for GCN presence in some years. There is a small orchard and garden as part of the farmstead. The wider landscape is similar in nature, though field size is significantly greater to the west of the minor road. Pastoral Farms also dominate in the wider setting.

The nearest functionally connected area of woodland is Queensbridge Dingle, this is the largest area of habitat in the locality that would be deemed prime terrestrial habitat for GCN. Though only a small proportion (1.5 hectares ) of the woodland is situated to the west of the A528. It is over 250m from the red line boundary.

Below the red line plot defines the placement of stables and arena in the development. This option does not require the require the removal of any hedgerow and does not impact on any sensitive areas. From an ecological impact perspective this has minimal impact.



**Red line development plot and surveyed area at Model Farm, Knolton.**

## **4. Phase 1 Habitat Survey Report**

### **Phase I Survey Results / Description**

08.10.19

Weather: 14°C, Dry, 50% cloud cover, light air

HC and JC

### **Protected Species Potential/Presence**

Bat potential in mature trees, active outlier sett in scrub near pond (and dead badger present), latrine and mammal tracks present, GCN potential in pond (two ponds on site) but wrong time of year to confirm, nesting bird potential in trees and hedgerows.

### **Methodology**

## **Definitions / Scope**

The 'site' is defined by the red line boundary as shown on Phase I Habitat Features Plan

### **'Extended' Phase I Survey**

An 'extended' Phase I survey of the site was undertaken on the 8th October 2019 by Jeff Clarke, Director of Jeff Clarke Ecology Ltd and a highly experienced multi-disciplinary ecologist. Jeff was assisted by Hayley Care, an ecologist with 8 years' experience and an Associate member of CIEEM. The survey technique followed was based upon Phase I survey methodology (JNCC, 2010). This method provides an inventory of the habitat types present and dominant species.

Where access allowed, habitats on land adjacent to the site were also considered. This enabled assessment of the site within the context of the wider landscape, and provided information to assist the evaluation of possible impacts of the site's future development.

Any evidence or potential for protected and/or priority fauna or flora was also recorded. The habitats identified were evaluated for their potential to support legally protected and priority species.

The weather conditions during the survey were optimal; dry and calm with 50% cloud cover and 14°C.

### **Evaluation**

The evaluation of ecological features is defined in accordance with published guidance (CIEEM, 2016). The level of importance of specific ecological features is assigned using a geographic frame of reference: international being the most important then national, regional, county, local and within the site boundary only.

These values are decided based on characteristics that can be used to identify an ecological feature's importance in terms of biodiversity, such as site designations or the quality of the feature, its diversity or composition, species populations or assemblages.

### **Ecological Features and Evaluation**

#### **Context**

The site extends to approximately 1.4ha and comprises three fields of species poor semi-improved grassland bounded by mature and well established hedgerows. There are scattered mature trees present within these hedgerows and a seasonally wet pond (P1) is situated at the boundary between all three fields.

Land adjacent to the site comprises further fields of grassland bounded by a network of mature and well established hedgerows and trees. A farm dwelling and associated outbuildings and garden with small pond lie to the southwest of the site. Grange road lies adjacent to the site to the east and Unnamed Road lies to the west.

### **Ecological Features**

The habitats present on site are described below and can be seen on the Habitat Features plan on **Figure 1**.

#### **Species Poor Semi-Improved Grassland**

The site comprises three fields of species poor semi-improved grassland bounded by mature and well established hedgerows.

Fields C1 and C2 are two large grassland fields which look to have been cut recently. The species sward in these two fields is dominated by perennial rye grass with abundant yorkshire fog, frequent creeping buttercup, broadleaved dock, white clover, dandelion and occasional meadow buttercup and tormentil.



**C1 large species poor semi-improved grassland field (photo facing west from the eastern field boundary)**



**Field C2 another large species poor semi-improved grassland field which has been cut (photograph facing west)**

The smaller area of grassland to the west of the site (C3) has had scattered fruit trees removed within the last year so has not been historically managed in the same way as the two larger fields. As such, although it has been cut it is still tussocky in places. The sward here includes is predominantly Yorkshire fog with cocksfoot, ribwort plantain, creeping buttercup, dandelion, hogweed, common sorrell, red clover, self-heal and willow herb species. The grassland has been cut in the recent past with some of the arisings left.



**Field C3, historically an orchard area now is managed as grassland (photograph facing northeast)**

To the west of C3 lies old building foundations and also a stock proofed goat pen. The grassland has not been mown so short around the former foundations and this is where the most of the red clover occurs.



**Goat pen and former building foundations within the southern end of C3 (photograph facing north)**

Species poor semi-improved grassland is a common and widespread habitat with limited sward diversity. As such is considered to be of **negligible ecological importance**.

### **Mature trees**

The site has a number of mature trees, namely within the hedgerow boundaries. The trees are predominantly mature oak and hawthorn but there is an ash in the northeast corner of compartment C1 and an apple and holly within hedgerow H4.



### **Mature trees are present within the hedgerow network across the site**

Trees take many years to mature, the oaks in particular are large mature specimens, and as such cannot be replaced in the short to medium term. Mature trees provide habitat connections in an otherwise open landscape, particularly as they are integrated within the hedgerow networks. Overall it is considered that mature trees on site are of **local ecological importance**.

## Hedgerows

The fields and site are bounded by a series of mature, well established hedgerows which are described in the table below.

| Hedge Ref | Description                                                                                                                                                                                                                                                                                                                | Photo                                                                                |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| H1        | <p>Mature intact hedgerow, flail cut and lining the site and Red Hall Lane. On a slight bank on the site side.</p> <p>Dominated by holly with hawthorn, oak, field maple, goat willow, hazel with hedge bindweed, ivy, bramble and cleavers. A large mature oak is also present.</p> <p>Approx 1.5m high and 0.5m wide</p> |    |
| H2        | <p>Mature intact hedgerow, flail cut and lining the site to the north.</p> <p>Blackthorn, hawthorn, hazel, goat willow with some black bryony. Large mature oak present in the centre and an ash in the eastern end.</p> <p>Approx 1.5m high and 0.5m wide</p>                                                             |  |

|    |                                                                                                                                                                                                                                                                                                                  |                                                                                      |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| H3 | <p>Mature intact hedgerow, flail cut on the site side and lining the site on the east and Grange road.</p> <p>Hawthorn, oak, hazel, ash, holly and dog rose.</p> <p>Approx 1.5m high and 0.5m wide</p>                                                                                                           |    |
| H4 | <p>Mature hedgerow which is mostly intact but with a couple of small gaps along the central length. The western end has been cut higher nearer the pond and dense scrub.</p> <p>Dominated by holly and hawthorn with field maple, goat willow, ash, blackthorn, hazel.</p> <p>Approx 1.5m high and 0.5m wide</p> |   |
| H5 | <p>Mature intact hedgerow which is flail cut.</p> <p>Dominated by holly with field maple, elder and hawthorn with a mature hawthorn tree in the centre.</p> <p>Approx 1m high and 1m wide</p>                                                                                                                    |  |

|    |                                                                                                                                                                                                                                                                                     |                                                                                      |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| H6 | <p>Defunct hedgerow formed of short sections of hawthorn cut as hedge. Some hawthorn and field maple standalone trees and a large mature oak extend out into the centre of the field.</p>                                                                                           |    |
| H7 | <p>Mature intact hedgerow dominated by holly with hawthorn, elder, field maple and bramble. An ornamental pampas grass is situated at the north end of the hedgerow nearest the pond and a mature hawthorn is present near the southern end.</p> <p>Approx. 2m high and 2m wide</p> |    |
| H8 | <p>Dominated by holly with elder, hawthorn, blackthorn, dog rose, hazel with ivy, hedge bindweed and bramble.</p> <p>Approx. 2m high and 2m wide</p>                                                                                                                                |  |
| H9 | <p>Dominated by hawthorn with blackthorn, dog rose, goat willow, elder, holly and bramble.</p> <p>An old oak is present at the northern end of the hedge.</p> <p>Approx 1.5m high by 0.5m wide</p>                                                                                  |  |

|     |                                                                                                                                                                                |                                                                                    |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| H10 | Ornamental intact leylandii hedgerow<br><br>Approx 2m high by 0.5m wide.                                                                                                       |  |
| H11 | Mature intact hedgerow dominated by hawthorn with hazel, holly, oak with bramble and some mature trees including willow, hawthorn and oak).<br><br>Approx. 2m high and 2m wide |  |

Hedgerows are a priority habitat, forming direct connections between the site and habitats in the wider locality which enable opportunities for movement across the landscape as well as providing foraging and cover for wildlife. Well-established, mature hedgerows, take time to develop and cannot be replaced in the short term. As such the hedgerows present on site are considered to be of **local ecological importance**.

### **Pond**

Pond P1 is a seasonally wet pond which is dominated by typha and common club rush with some flag iris also present. Although the area of the pond is approximately 250m<sup>2</sup> it currently holds only a small amount of water, the surface of which is covered in duckweed.

The pond is overshadowed on the southwest by a large mature oak. It is surrounded by tall ruderals and bramble scrub, with a stand of dense scrub present along its southern banks. It is partially fenced by stock fencing.

Ponds are a priority habitat and although are not uncommon in the locality, they are increasingly being lost due to encroachment, drying out or being filled in. Ponds are a valuable resource to wildlife and provide many functions. The fact that this pond lies adjacent to the central hedgerow also means that it is directly connected to the wider hedgerow network and as such could be considered to be accessible to species across a wider area than the site alone. It also provides a small area of diverse habitat in an otherwise open and intensively managed landscape. Overall, it the pond is considered to be of **local ecological importance**.



**Pond P1 is dominated by reedmace and common club rush with the water surface covered in duckweed.**

A second pond P2, lies adjacent to the site. P2 is a small plastic formed garden pond situated within the amenity grassland approximately 12m west of the site. It is approximately 1m<sup>2</sup> in area but does hold water and is surrounded by a small rockery which has the opportunity to provide shelter for any amphibians present. No emergent vegetation is present.



**Pond P2 is a small plastic formed garden pond**

There are another two potential offsite ponds shown on maps., however they are on private land that could not be accessed during the survey to enable confirmation on their presence.

### **Tall ruderal and Dense scrub**

The pond is bordered by tall rural vegetation dominated by common nettle, creeping thistle and bramble with some woody nightshade at the pond margins. The ruderals connect to a stand of dense scrub which lies between hedgerow H4 and the pond. The scrub comprises predominantly unmanaged hawthorn with hazel, goat willow and holly.



### **A stand of dense scrub lies between the pond and hedgerow H4**

The tall ruderal vegetation and scrub comprise common and widespread species, however they do offer cover and foraging opportunities in an otherwise intensively managed and open landscape. As such they are considered to be of **ecological importance within the site**.

### **Offsite / Adjacent Habitats**

The landscape surrounding the site is predominantly semi-improved grassland bounded by well-established mature hedgerows with trees. These fields looked to be managed as grassland for either grazing or hay/grass crop. Other habitats close to the site are described below.

### **Amenity Grassland and Ornamental Shrubs**

The garden associated with the dwelling comprises short mown lawn bordered with ornamental planting and shrubs, including a well-established laurel, and mature cedar and holly trees.

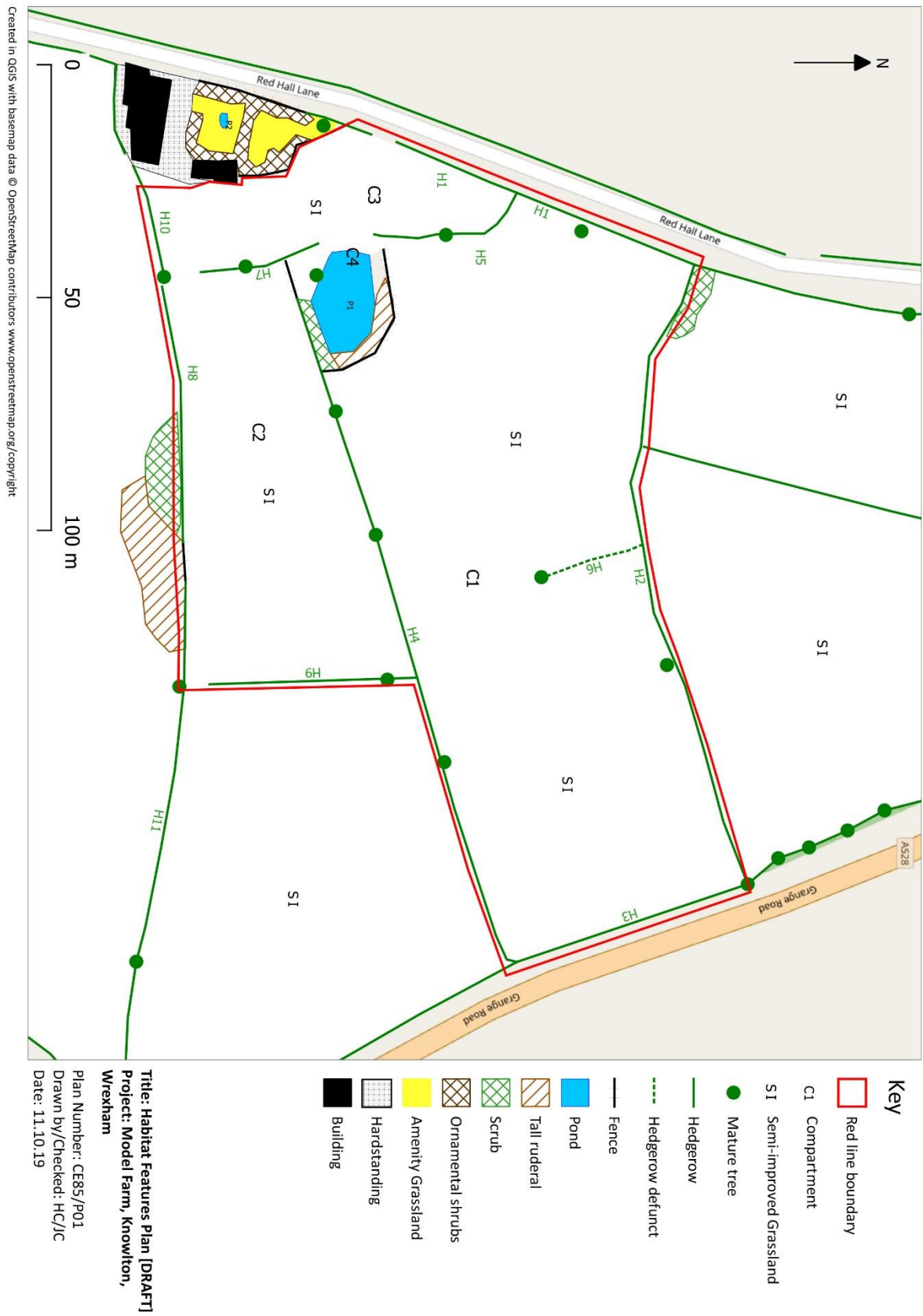


**The ornamental shrubs and amenity grassland garden lies to the south west of the site.  
(Photo facing north towards the site)**

### **Buildings**

The main farmhouse buildings lie to the southwest of the site boundary and have two outbuildings nearby, one of which currently houses a couple of goats.

## 5. Phase 1 Habitat Map

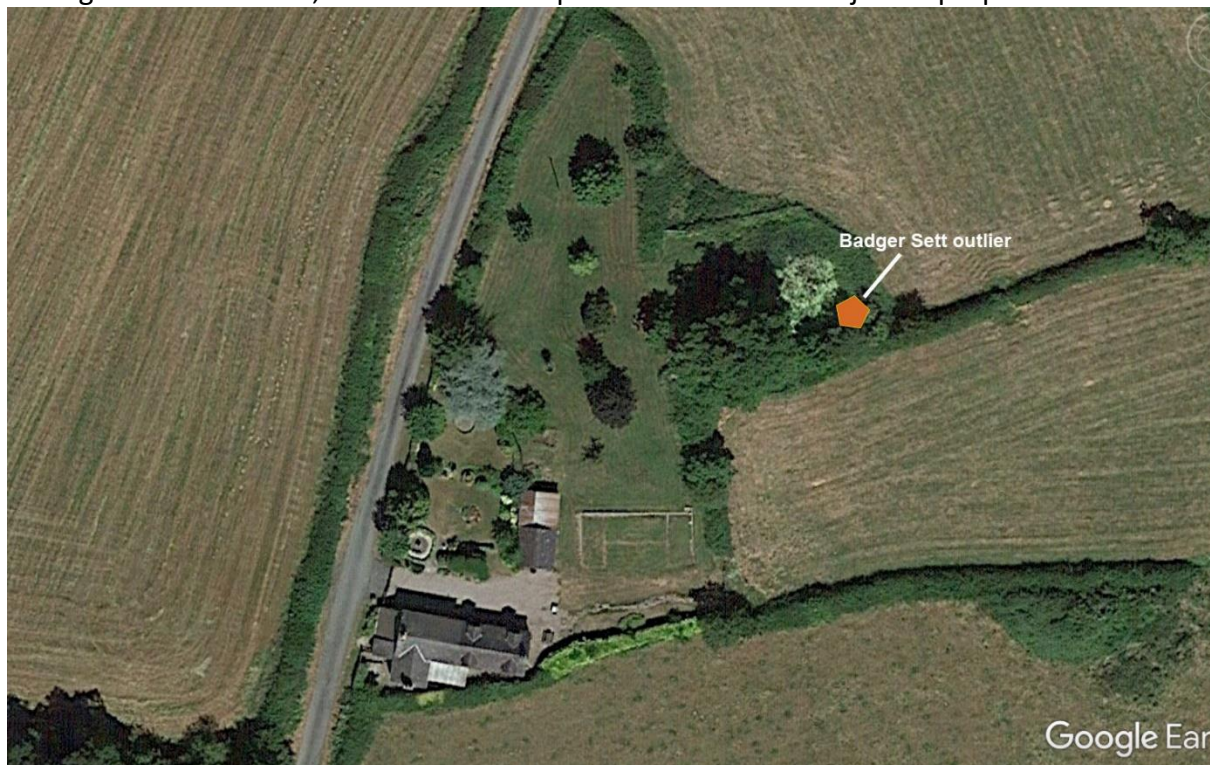


## 6. Environmental Impact Assessment for Great-crested Newt

**6.1 Amphibians:** The date of the survey was not within the time-range for a suitable survey of the on-site pond in relation to potential for GCN. The nature of the development would allow for Reasonable Avoidance Measures (RAMs) to be adopted.

## 7. Environmental Impact Assessment Additional Protected Species

**7.1 Badger:** During the 8<sup>th</sup> October survey an outlier badger sett was identified at the location cited in the map below. Grid Ref SJ36914040 Badger highways could be found throughout the but site; no main sett was present or visible in adjacent properties.



Plans were being made to mitigate for the presence of the outlier sett, this included a return visit on the 11<sup>th</sup> November to map the extent and direction of the sett. This however proved superfluous to needs after several weeks of very heavy rain and poor conditions caused the collapse and flooding of the sett.

Following this discovery discussions were had with Natural Resources Wales and they determined that the location should no longer be regarded as a 'outlier sett' but just a hole in the ground. As a precautionary measure against the site being re-opened by badgers in the future, once ground conditions had returned to normal, the suggested a one-way badger gate be fitted. This was carried out in early January 2020. On this basis no further badger mitigation work is required to enable the development to proceed.



A Badger Outlier Sett photographed on 8<sup>th</sup> October 2019



Collapsed and flooded former Badger Outlier photographed on the 11<sup>th</sup> November 2019

**7.2 Water Vole:** The small on-site pond has no connective drainage system. It was checked for Water Vole signs. None were found. No further survey effort required.

**7.3 Bats:** Several mature trees on the site have bat potential, however no trees with any roost opportunities are impacted by this development therefore no further survey is required. *Please note: that should lighting of the arena be part of the development then further work will be required to minimise the impact of light pollution, including activity bat surveys and mapping of site use by bats.*

**7.4 Birds:** No bird nesting areas are impacted by the development proposal.

## 8. Conclusion

**8.1** The surveys demonstrated that in the event the proposal is passed for the approval of the planning authority then no protected species would be impacted where the risk could not be dealt with via Reasonable Avoidance Measures.

**8.2** At the current time it is not anticipated that any trees with bat roost features will be impacted by the development proposals on the site. If, however the removal of any such trees does become a necessity then full bat/bird inspection and emergence/return surveys will be essential.

*Note: Since the surveys a number of trees on the site were lost during the major winter storms of January and February 2020.*

**8.3** The Badger Outlier identified on the 8<sup>th</sup> March, has now collapsed and flooded. On the advice of NRW this has now been declassified as a sett and a 1-way badger gate has been fitted to prevent re-excavation at a later date. This will be removed at the conclusion of the development. This will allow badgers to re-establish in the event of suitable ground conditions returning.

**8.4** Without detailed GCN surveys it is not possible to conclude that GCN are likely to be present or absent. Therefore, the principle will be to adopt the assumption that GCN presence is likely. Despite this the nature of the development will allow the use of RAMs to mitigate the risk to GCN.

**8.5** There are no other protected species e.g Water Vole present or likely to be potentially impacted by the development.

## 9. Reasonable Avoidance Measures Recommendations

**9.2** No excavations should be left open overnight to prevent any amphibian becoming entrapped. If this not possible any excavations should be sealed and inspected the following morning. In the event that a suspected Great crested Newt is found in the trenching or excavations, the Ecologist should be called for advice.

**9.3** All on-site debris and stored materials should be dismantled and removed carefully as amphibians may be present, if a suspected Great-crested Newt is found the ecologist should be called for advice.

**9.4** Any materials arising from the creation of the arena or stable-block should be dispersed within the site on the day of excavation. No piles of soil or other materials that will later require removal or dispersal should be left overnight.

**9.5** Two periods of the year provide the minimal risk for carrying out any excavations. Mid-April to end of June (GCN in breeding ponds) and November to End of February (Hibernation). Excavations should not be carried out under RAMs outside these periods.

## References

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**23/03/2020**

