Ecological Survey and Assessment for Ryes Farm Barn Gosbeck

On behalf of:

Mr & Mrs Tim Owens
Ryes Farm
Pettaugh Lane
Gosbeck
Suffolk
IP6 9SF

Prepared by:

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Essex Mammal Surveys

March 2023

Contents

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1) Summary

As part of a planning proposal involving a barn at Ryes Farm, Pettaugh Lane, Gosbeck, Suffolk IP6 9SF, a site visit was conducted on 21st March 2023 to determine whether the site had the potential to be occupied by protected species, which would be affected if any proposed development were to go ahead.

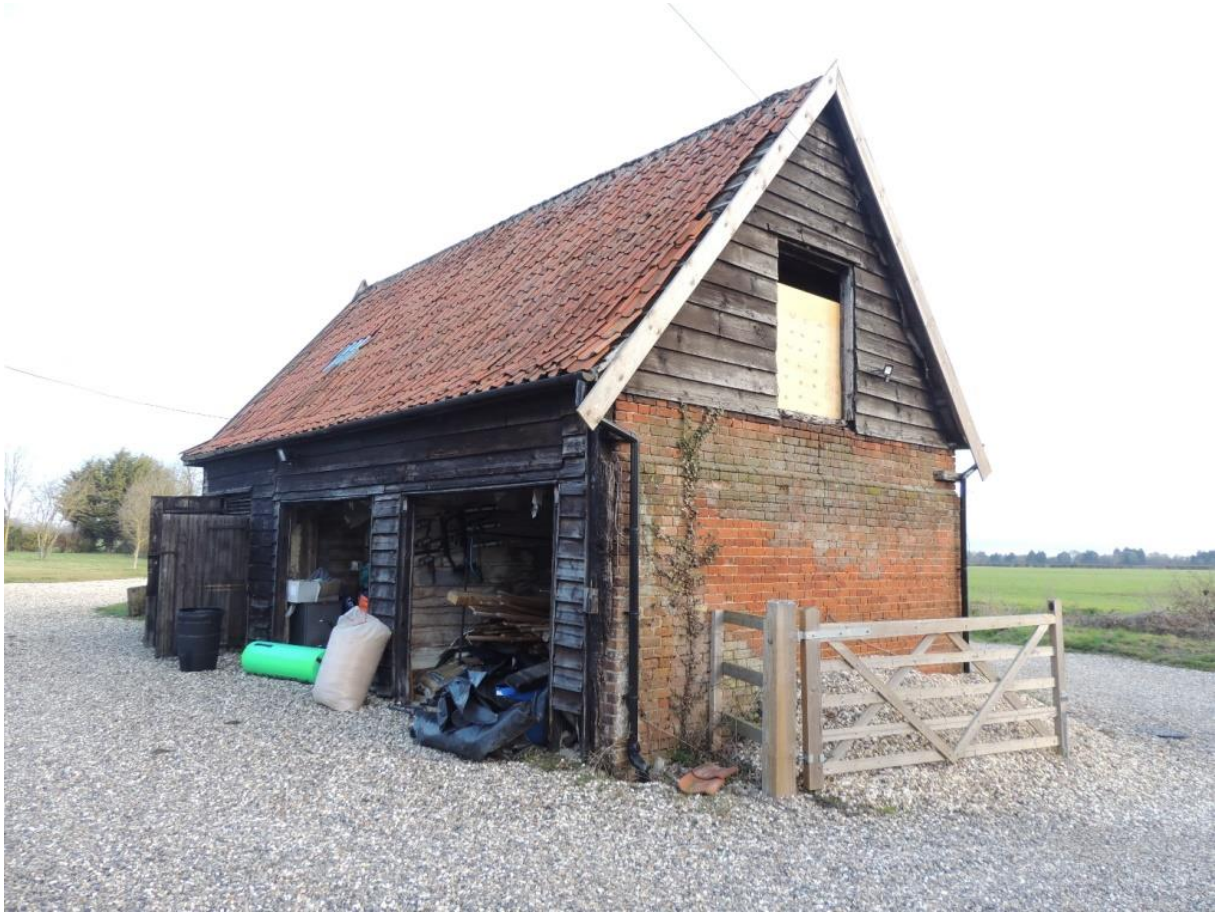

Photo 1: Southern (gabled) and western elevations. The proposal is to convert to residential use. Note extent of gravel

The survey building is a detached, brick barn with a felted pantile roof. Both gable walls have wooden cladding, with the building being aligned approximately N-S. The survey found that the ground floor was open to the west, with the bays used for storage. The sections had no features that might be occupied by bats and the ceiling was formed from the boards and joists supporting the upper floor. A secure storage shed at the north-western corner also had no evidence of the presence of bats. The upper floor is open to the roof and accessed via a staircase in the north-western part of the barn. The top floor receives daylight illumination via a large window in the northern wall, a missing window (partly boarded up – see Photo 1) in the southern wall and also via a transparent panel in the western slope of the roof. In such conditions, bats seek out dark areas or crevices in which to roost and the lack of such features in the walls and beams meant that the building was less suitable as a roosting place for bats. In addition, the roof was of a cluttered construction with many cobwebs on the beams. Again, these are conditions that are usually unsuitable for roosting by bats and no

evidence of their presence was found on the upper floor of the building. Externally, there were no crevices on the external walls that might offer potential roosting places for bats.

There is no vegetation affected by the project that has crevices, loose bark or woodpecker holes that might be colonised by bats. **No** evidence of their presence was found at this site.

The lack of potential roosting places and absence of any evidence of the presence of bats means that **no** further surveys are required for this building. It is considered that the building had **negligible potential** as a roosting place for bats.

Since there was no evidence of bats at the site, a European Protected Species Licence will **not** be required for this project.

The building receives regular disturbance which would make the site unsuitable for occupation by barn owls. No evidence of this species was found.

Beyond the boundaries of Ryes Farm, the site is bordered on all four sides by arable fields in active production. Immediately to the north is an area of maintained lawn; to the south, Ryes Farm and its maintained gardens; to the west by The Cowshed, a holiday property and to the east by the drive to the site. There are no features that might be attractive to basking by reptiles, and, with the site surrounded by maintained gardens and fields, there is no suitable habitat nearby from which the site could be colonised by reptiles. A man-made pond in the rear garden is stocked with fish, and that pond, together with three others, are all visited by wildfowl. The three natural ponds all dry out during the summer. The ponds are bordered by short grass or arable fields, all barriers to the terrestrial dispersal of great crested newts.

No evidence of digging by badgers was found at the site or within 30m of its boundaries.

Although no evidence of bats was found, it is probable that bats from nearby roosts will forage over the site and in the gardens of the adjacent property. This foraging behaviour would be expected to continue after the completion of the building work and therefore it is considered that the proposal for this site will not have a detrimental effect on the local bat population, or on protected species.

According to the latest guidance (December 2017) from CIEEM, the following is advised:

Very occasionally it might be possible to carry out a robust Preliminary Ecological Appraisal without obtaining LERC/NBDC/CEDaR data; this will usually only apply to low impact or small-scale projects (e.g. by virtue of size, extent, duration of works, magnitude and locality), and should be determined on a case-by-case basis. In all cases, the decision not to obtain these data should be justified in the report. The following is not intended to be an exhaustive list, but gives examples of the type of sites where such data might not be needed:

- **a field in active arable cultivation where there is no impact on any hedges, trees or waterbodies;**
- **small areas of cultivated garden/amenity grassland, as above; or**
- **small urban sites comprising mostly asphalt or compacted hardstanding.**

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

The survey area just relates to the survey site. It comprises short grass and gravel hardstanding. No standing water, trees or hedges are affected by the proposal. This is a low impact project that will have no impact on any designated sites.

2) Introduction

Essex Mammal Surveys were requested to carry out a survey of a barn at Ryes Farm, Gosbeck to investigate for signs indicating the presence of bat colonies and their roosts. The identification of protected and priority species is vital in the proposed development of a site to comply with existing legislation and also allows any work that may otherwise be detrimental to these species to be appropriately scheduled.

The objectives of the survey were to:

- assess the habitats on the site (noting any Priority habitats) including the potential of the site to support protected species (bats, reptiles, water voles, great crested newts and badgers) or any other species that may act as a constraint on development eg Priority species (s41 NERC Act 2006)
- determine any impact of development on any wildlife of conservation concern within the area
- produce a strategy for avoiding, mitigating and compensating for any potential impacts identified with reasonable enhancements for biodiversity.

John Dobson, a bat worker and trainer licensed by Natural England (Licence No. 2015-15258-CLS-CLS), and author of *Mammals of Essex* (Essex Field Club, 2014) carried out the survey on 21st March 2023. John Dobson has been elected a Fellow of the British Naturalists' Association and received the David Bellamy Award for natural history in 2015. The site is located at Grid Reference: TM169569.

This report has been compiled in accordance with the Bat Conservation Trust's *Bat Survey Guidelines for Professional Ecologists: Good Practice Guidelines.*

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

However, the first page of all three editions includes the following: *The guidelines should be interpreted and adapted on a case-by-case basis according to site-specific factors and the professional judgement of an experienced ecologist. Where examples are used in the guidelines, they are descriptive rather than prescriptive.*

John Dobson has extensive experience of barn owl nest sites and pellets, having collected pellets from a site at Canewdon for 24 consecutive months during 1995-1997. The data from this study formed part of the total of 6,950 pellets analysed for prey items, the results of which were published in *The Mammals of Essex* (Lopinga Books, Wimbish, 1999). Most recently, in September 2011, in the company of a licensed bird ringer, five barn owl nest sites

were visited on Foulness and 277 pellets recovered for analysis. The results of this research were published in the *Essex Naturalist* 2015. Pellets collected ranged from recent, black, shiny examples, through shades of grey to crumbling, dusty examples of greater age.

3) Legislation and planning policy relating to bats, badgers, barn owls, reptiles and NERC 2006 and s41 Priority species and habitats

All bat species in Britain are protected under the Wildlife and Countryside Act 1981 through inclusion on Schedule 5. They are also protected under the Conservation (Natural Habitats &c.) Regulations 1994 (which were issued under the European Communities Act 1972), through inclusion on Schedule 2. From January 31st 2020 these Regulations were consolidated into the Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019.

European protected animal species and their breeding sites or resting places are protected under Regulation 39. It is an offence for anyone to deliberately capture, injure or kill any such animal or to deliberately take or destroy their eggs. It is an offence to damage or destroy a breeding or resting place of such an animal. It is also an offence to have in one's possession or control, any live or dead European protected species.

The threshold above which a person will commit the offence of deliberately disturbing a wild animal of a European protected species has been raised. Now, a person will commit an offence only if he deliberately disturbs such animals in a way as to be likely significantly to affect (a) the ability of any significant groups of animals of that species to survive, breed, or rear or nurture their young, or (b) the local distribution of abundance of that species. However, please note that the existing offences under the Wildlife and Countryside Act (1981) as amended which cover obstruction of places used for shelter or protection (for example, a bat roost), disturbance and sale still apply to European protected species.

This legislation provides defences so that necessary operations may be carried out in places used by bats, provided the appropriate Statutory Nature Conservation Organisation (in England this is Natural England) is notified and allowed a reasonable time to advise on whether the proposed operation should be carried out and, if so, the approach to be used. The UK is a signatory to the Agreement on the Conservation of Bats in Europe, set up under the Bonn Convention. The Fundamental Obligations of Article III of this Agreement require the protection of all bats and their habitats, including the identification and protection from damage or disturbance of important feeding areas for bats.

Paragraph 98 of Circular 06/2005 states that '*the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat*'.

Section 15 of the National Planning Policy Framework 2018 (NPPF) states that '*the planning system should contribute to and enhance the natural and local environment by ….minimising impacts on and providing net gains for biodiversity….*'

Since August 2007, building development that affects bats or their roosts needs a Protected Species Licence under The Conservation (Natural Habitats &c.) (Amendment) Regulations 2007 administered in England by Natural England.

Schedule 12, paragraph 13 of the CROW Act (2000) makes an offence under Section 9 of the Wildlife & Countryside Act (1981) an arrestable offence. As a result, the police gain additional power to aid the investigation and enforcement of the legislation protecting bats.

In relation to the badger, the Wildlife and Countryside Act (1981) and its subsequent amendment (1985) made it an offence to take, kill, injure or ill-treat a badger. The badger gained further protection under the auspices of The Protection of Badgers Act (1992) which consolidates all former protective legislation in relation to badgers, except their inclusion on Schedule 6 of the Wildlife and Countryside Act 1981.

Under the 1992 Act, the badger sett is protected against obstruction, destruction, and damage; furthermore the animal's access to and from the sett must not be impeded. It should be noted that the concept/definition of the sett extends beyond the main sett to include annexe, subsidiary and outlying setts. However, it must be noted that although the badger and its sett are protected (including access to the sett), the wider habitat and foraging ground is not.

With legal responsibilities and planning implications, it is essential that any ecological assessment of a potential development site, including the area of this report, must determine the possible presence or absence of any protected species as part of any planning development consideration.

Without this assessment the potential developer would be unable to demonstrate due diligence in his responsibilities. Furthermore the local planning authority would not have been provided with sufficient information for a planning decision to be made. This could result in the application being designated incomplete and not determined, or simply refused.

The barn owl is protected under Schedule 1 and Schedule 9 of the Wildlife and Countryside Act 1981. It is therefore an offence to injure, kill or capture the bird, to disturb nesting birds, to take eggs, and to release captive owls into the wild without a licence. The barn owl is also recognised by the UK Biodiversity Group as a "Species of Conservation Concern".

Reptiles such as common lizard, slowworm, grass snake or adder (the species recorded in East Anglia), are protected under Section 9 of the Wildlife & Countryside Act (1981) as amended. The legislation makes it illegal to deliberately or recklessly kill or injure any native reptile. This protection therefore requires that reasonable effort be made to avoid harm to reptiles during developments on land occupied by reptiles.

Priority species likely to be present and affected by this development and therefore require consideration are Common Toad and Hedgehog.

There is no habitat at the site that would support Otter, Hazel Dormouse, Harvest Mouse or White-clawed Crayfish.

4) Methods

4.1 Bats

The exterior surfaces of the building were examined for any signs of use as bat roosts, such as the presence of droppings on walls, windows or staining around roost entrances. The use of a crevice by a colony of bats produces droppings on brickwork and adjacent surfaces close to the crevice, together with an accumulation of droppings beneath the roost entrance. However, upon examination, many surfaces will have one or two droppings, randomly placed, caused by bats seeking out new roost sites.

The internal survey was conducted using a powerful torch. The roof of the building was searched for evidence of roosting, the floor areas for droppings and the beams for crevices and staining indicative of the presence of roosting bats. An Xtend & Climb Pro Ladder and a ProVision 300 endoscope were available to inspect crevices in brickwork and around beams.

The trees were examined for loose bark, holes and crevices that could potentially be used by roosting bats. The presence or past usage of a crevice by bats can be detected by the presence of droppings on bark adjacent to the hole and sometimes by a dark urine stain on the trunk of the tree below the roost entrance. Trees with such evidence can then be observed at sunset during the summer and emerging bats recorded. In warm weather and prior to evening emergence, roosting bats may also be detected by squeaking or "chattering" noises which can be heard from several metres distance.

4.2 Badgers

The survey area (extending 30m beyond the site boundary) was investigated for evidence of badgers such as setts, well-worn paths, footprints, guard hairs caught on wire or vegetation and latrines.

4.3 Reptiles

The site was inspected for any feature that might support reptiles such as sheltered refuge features (e.g. logs, compost heaps) open sunny areas for basking and varied habitats such as rockeries and grassy areas for feeding.

4.4 Barn owls

The building was inspected for cavities that might form potential nesting sites. The ground area of the building was searched for feathers, nest debris and pellets – the remains of small mammals and other prey items that are regurgitated from a perch. Where owls are present, there is usually splashing of excreta on the ground as this is expelled whilst perching.

4.5 Priority species

Priority species likely to be present and affected by this development and therefore require consideration are Common Toad and Hedgehog.

5) Results

5.1 Bats

The survey building is a detached, brick barn with a felted pantile roof. Both gable walls have wooden cladding, with the building being aligned approximately N-S. The survey found that the ground floor was open to the west, with the bays used for storage. The sections had no features that might be occupied by bats and the ceiling was formed from the boards and joists supporting the upper floor. A secure storage shed at the north-western corner also had no evidence of the presence of bats. The upper floor is open to the roof and accessed via a staircase in the north-western part of the barn. The top floor receives daylight illumination via a large window in the northern wall, a missing window (partly boarded up – see Photo 1) in the southern wall and also via a transparent panel in the western slope of the roof. In such conditions, bats seek out dark areas or crevices in which to roost and the lack of such features in the walls and beams meant that the building was less suitable as a roosting place for bats. In addition, the roof was of a cluttered construction with many cobwebs on the beams. Again, these are conditions that are usually unsuitable for roosting by bats and no evidence of their presence was found on the upper floor of the building. Externally, there were no crevices on the external walls that might offer potential roosting places for bats.

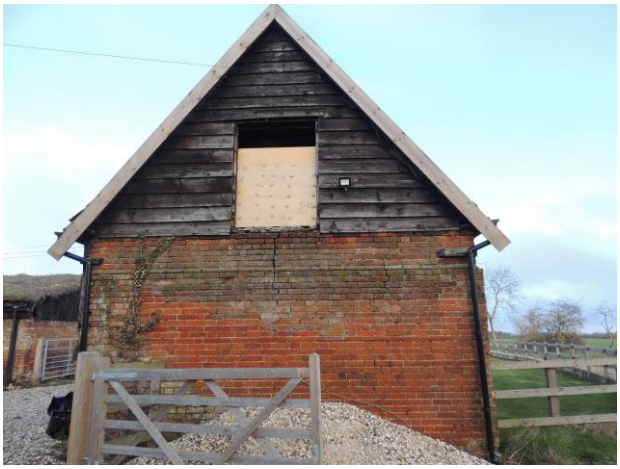

Photo 2: Southern elevation

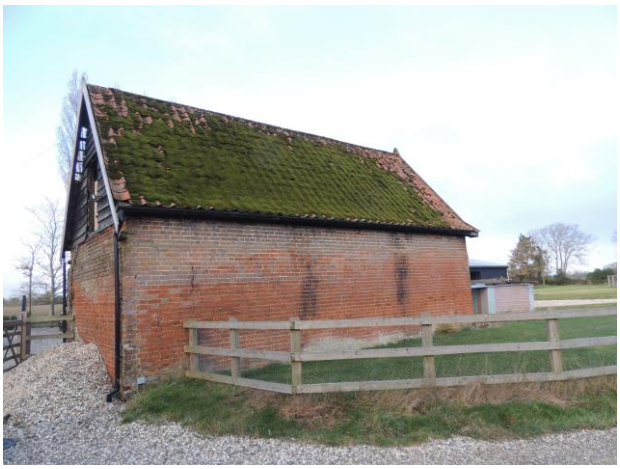

Photo 3: Eastern elevation

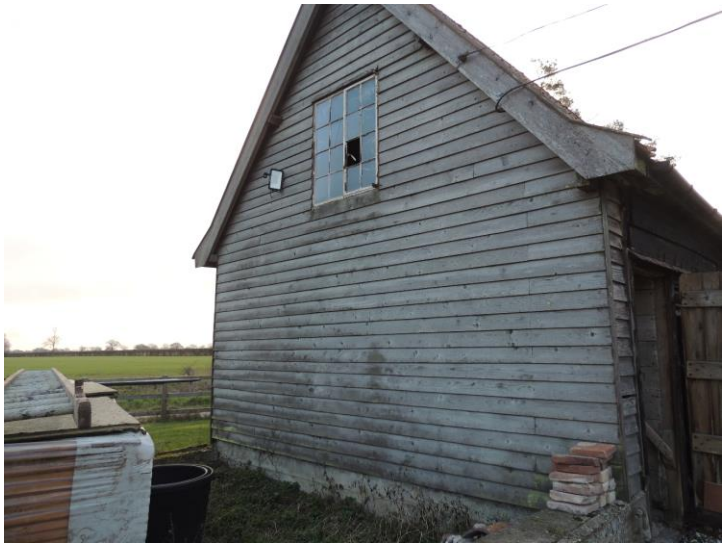

Photo 4: Northern elevation

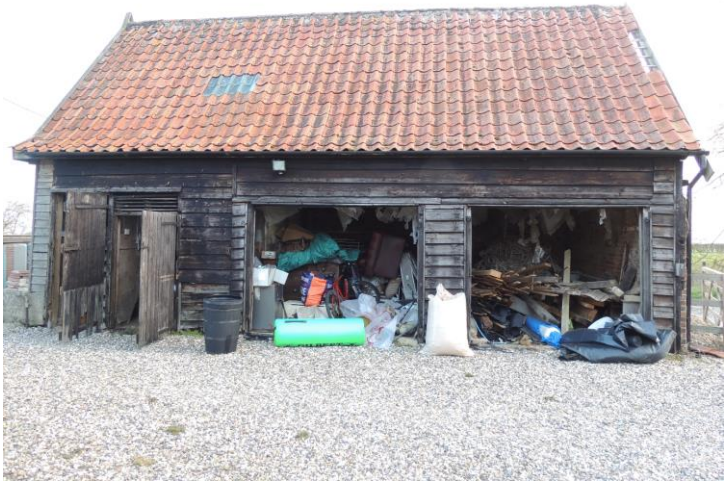

Photo 5: Western elevation. Note tight seal to roof tiles

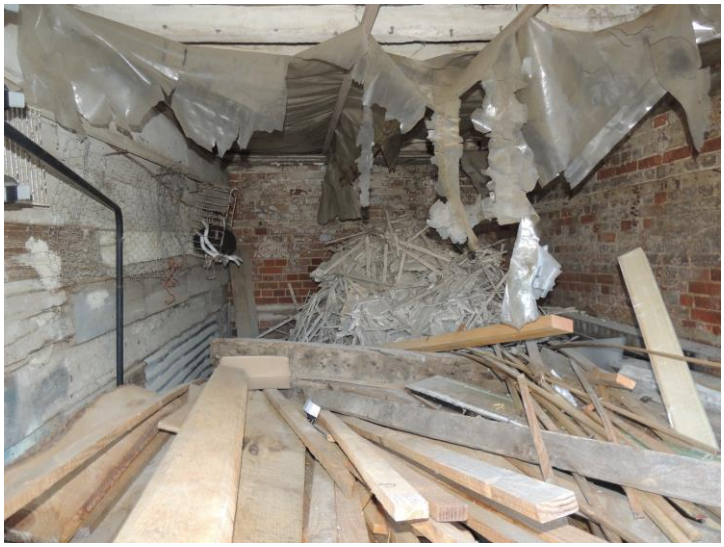

Photo 6: The wood store had no features that might be occupied by bats

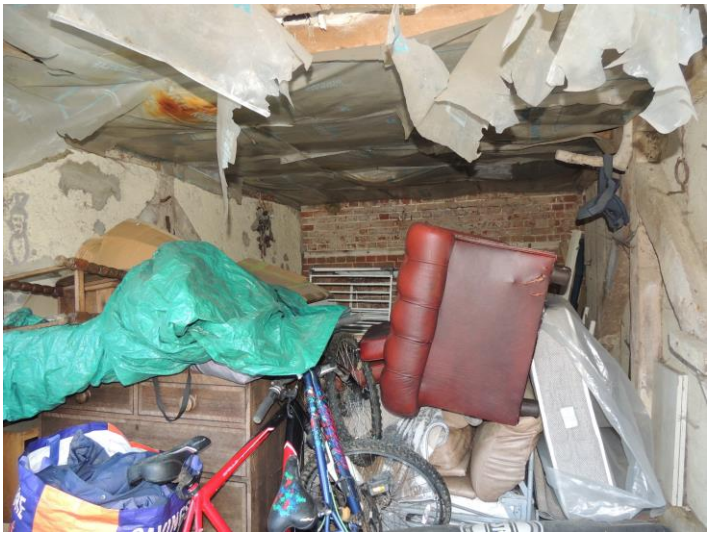

Photo 7: The open-fronted store had no features that might be occupied by bats

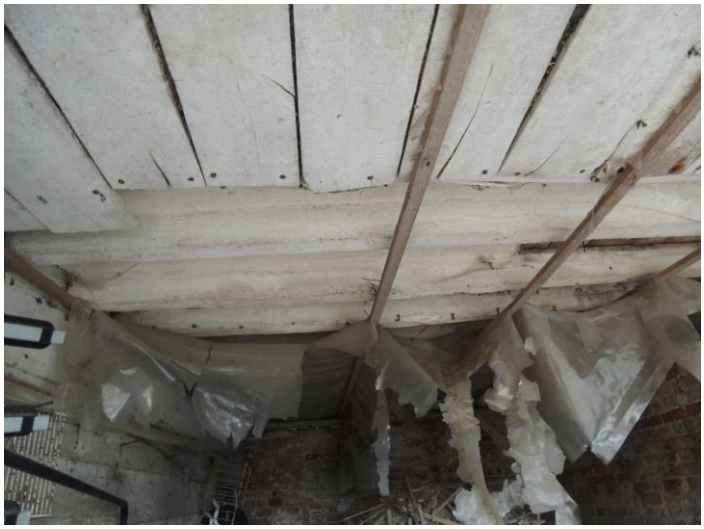

Photo 8: The ground floor ceiling had no features that might be occupied by bats

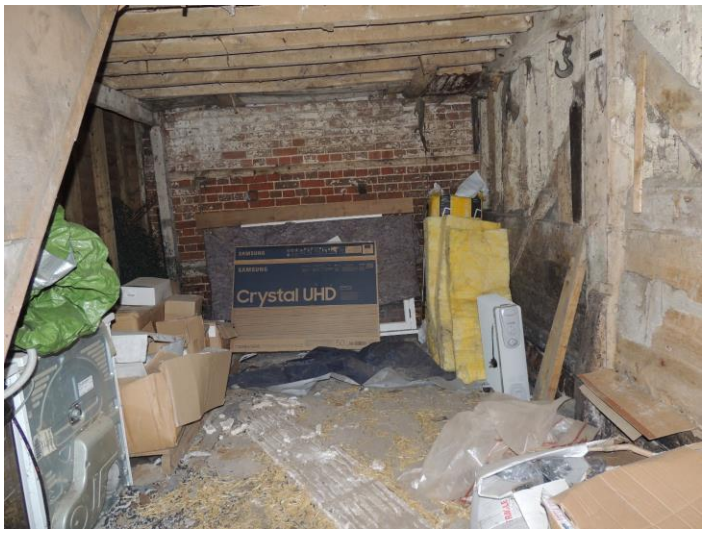

Photo 9: The shed at the NW end had no features that might be occupied by bats

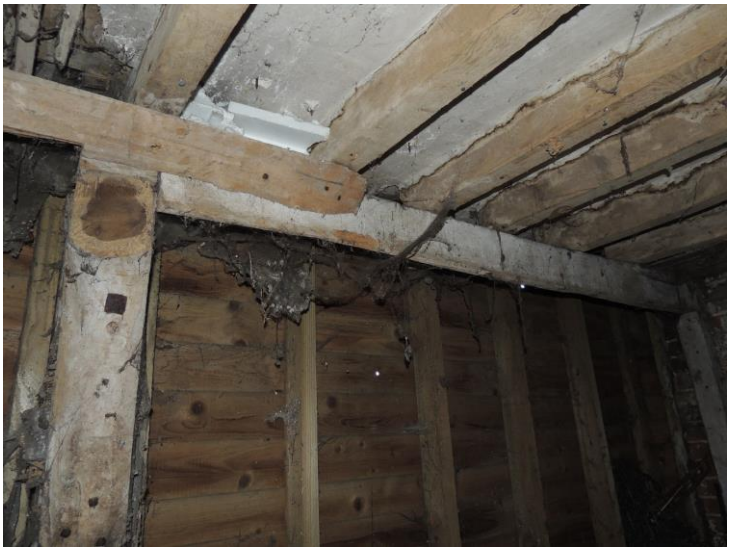

Photo 10: Showing cobwebs on wall of secure shed

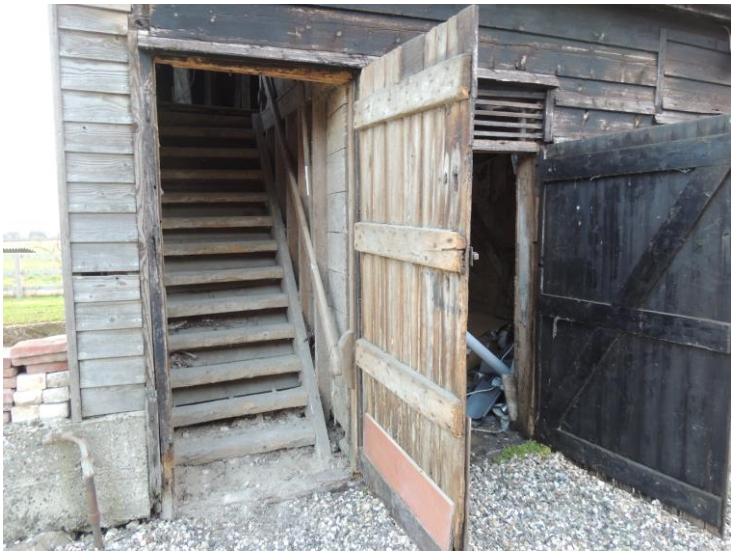

Photo 11: The staircase to the upper floor

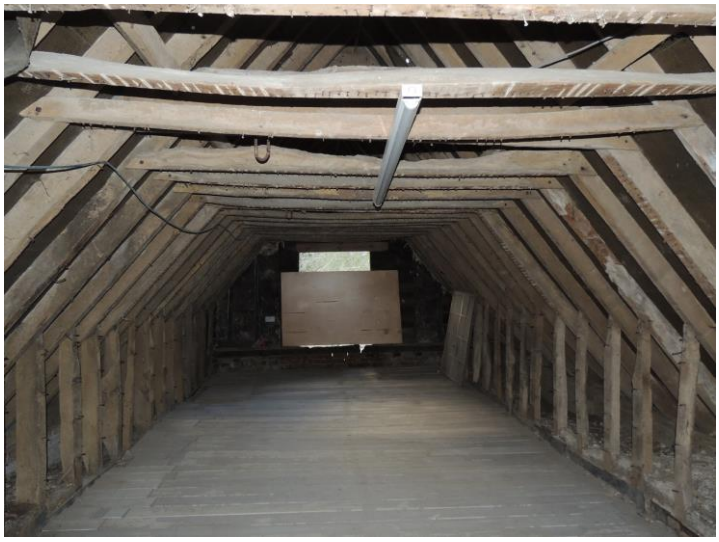

Photo 12: Looking southwards on upper floor. Note cluttered roof structure

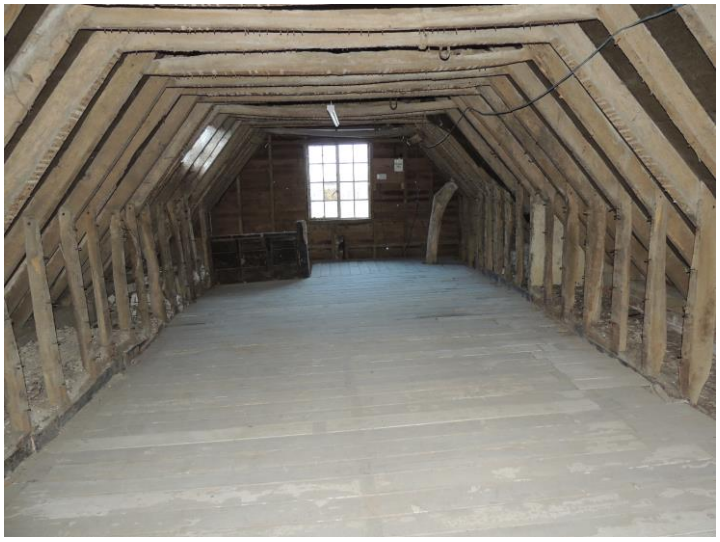

Photo 13: Looking northwards. Note lack of evidence of bats on floor

Photo 14: Note cobwebs on rafters

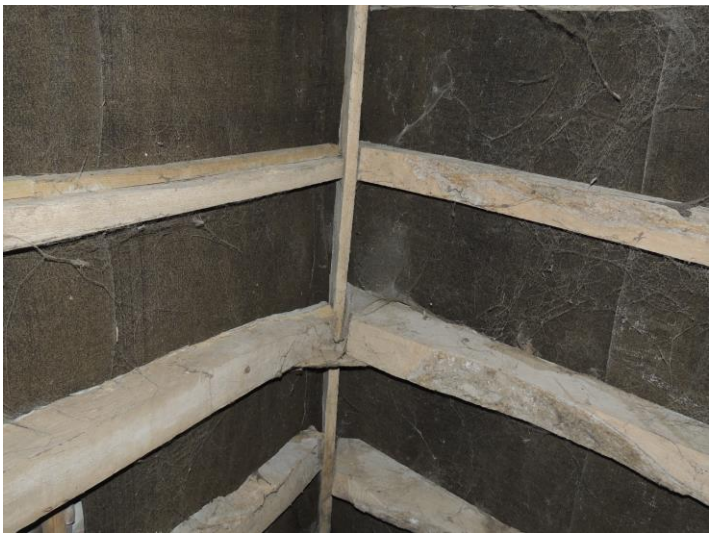

Photo 15: Note cobwebs on rafters

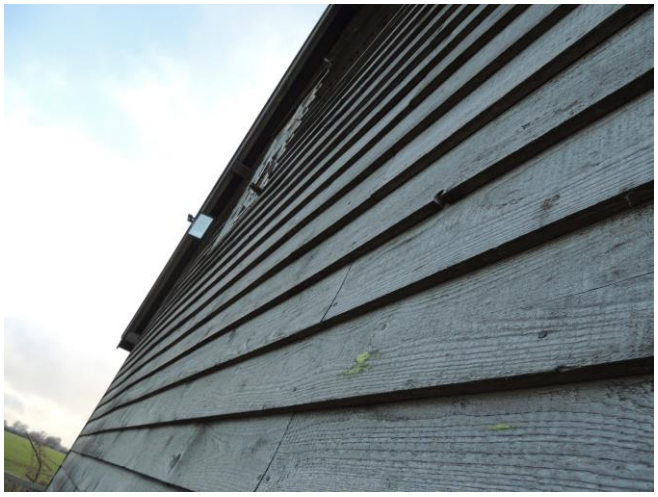

Photo 16: Note tight seal to cladding

There is no vegetation affected by the project that has crevices, loose bark or woodpecker holes that might be colonised by bats.

No evidence of their presence was found at this site.

5.2 Badgers

There were no latrines or digging by badgers found at the site, or within 30m of its boundaries.

5.3 Reptiles

Beyond the boundaries of Ryes Farm, the site is bordered on all four sides by arable fields in active production. Immediately to the north is an area of maintained lawn; to the south, Ryes Farm and its maintained gardens; to the west by The Cowshed, a holiday property and to the east by the drive to the site. There are no features that might be attractive to basking by reptiles, and, with the site surrounded by maintained gardens and fields, there is no suitable habitat nearby from which the site could be colonised by reptiles. A man-made pond in the rear garden is stocked with fish, and that pond, together with three others, are all visited by wildfowl. The three natural ponds all dry out during the summer. The ponds are bordered by short grass or arable fields, all barriers to the terrestrial dispersal of great crested newts.

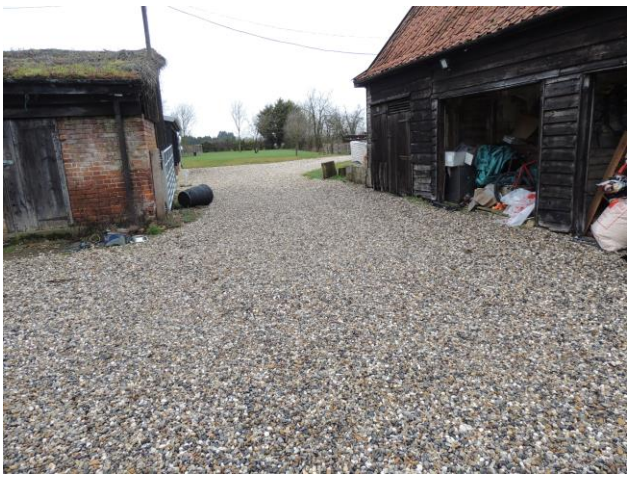

Photo 17: Western side of barn – note extent of gravel

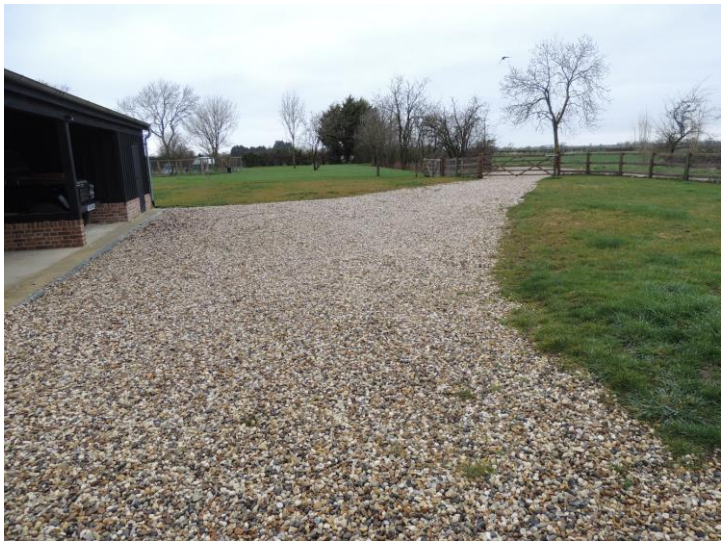

Photo 18: The gravel drive to the north of the site

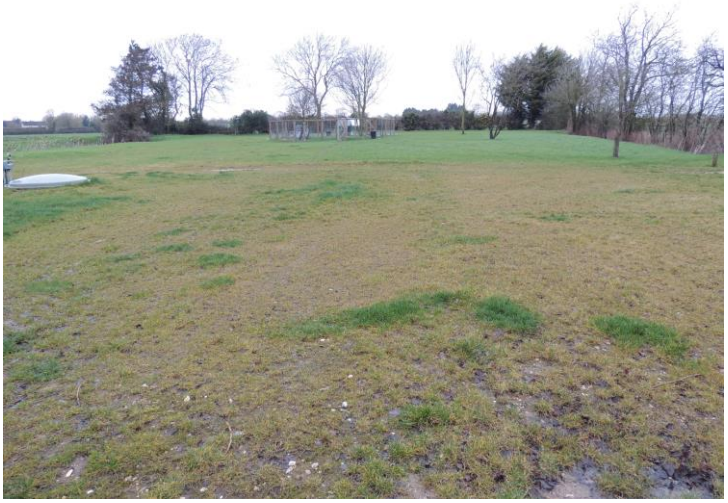

Photo 19: Showing area of maintained grass to the north

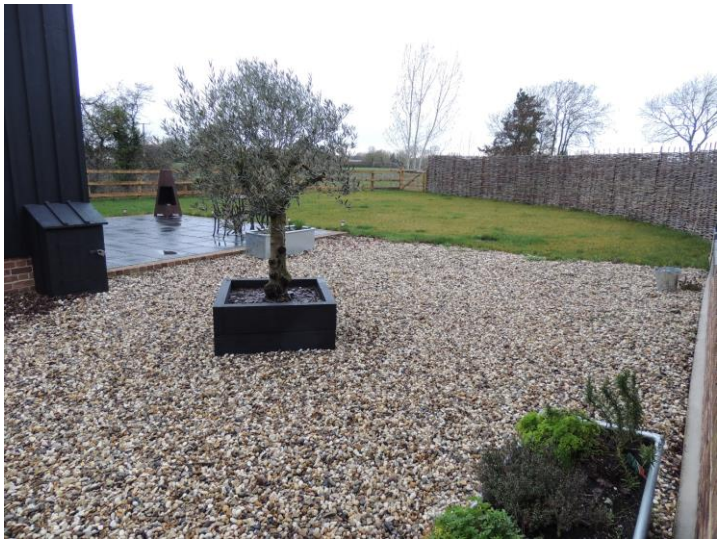

Photo 20: The Cowshed and associated garden

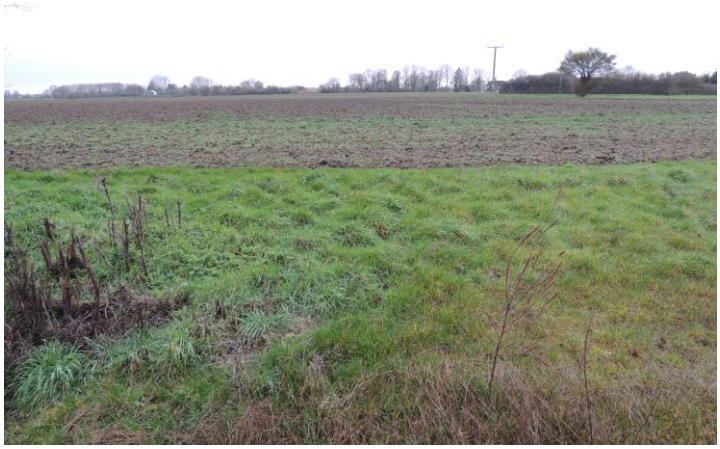

Photo 21: The arable field to the west

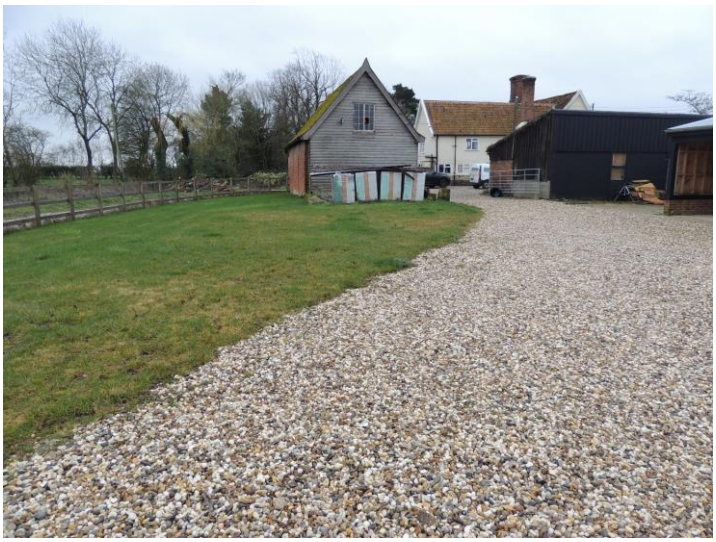

Photo 22: Looking N-S with barn to left

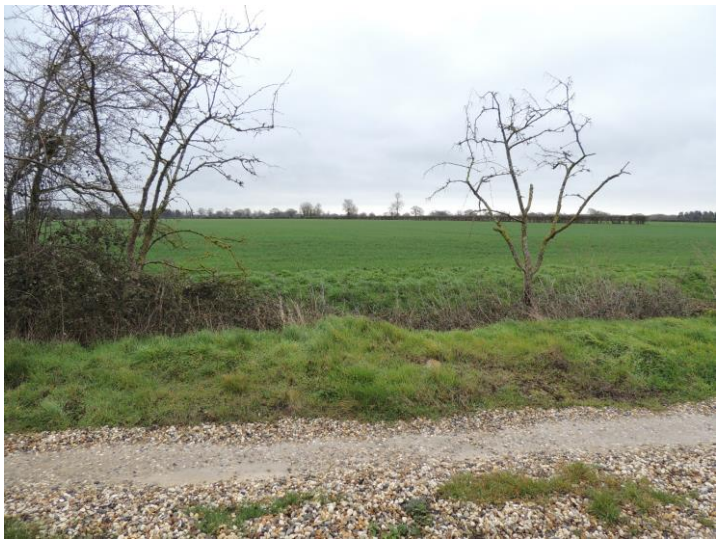

Photo 23: Arable field to east

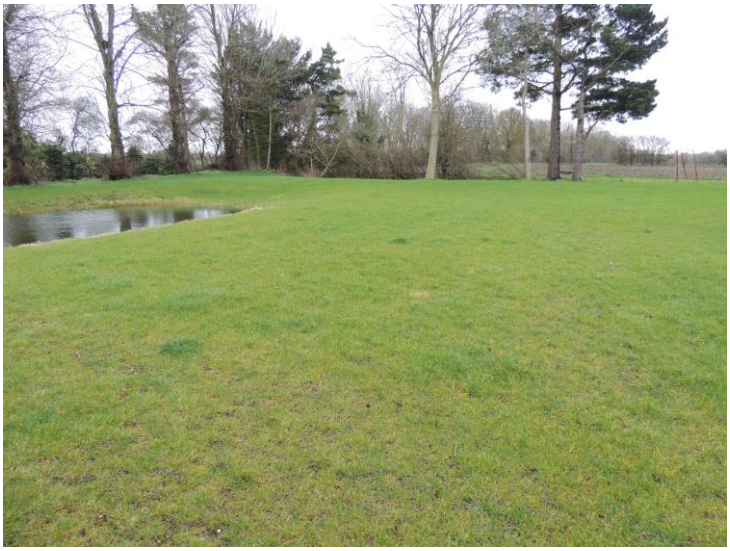

Photo 24: Maintained garden of Ryes Farm

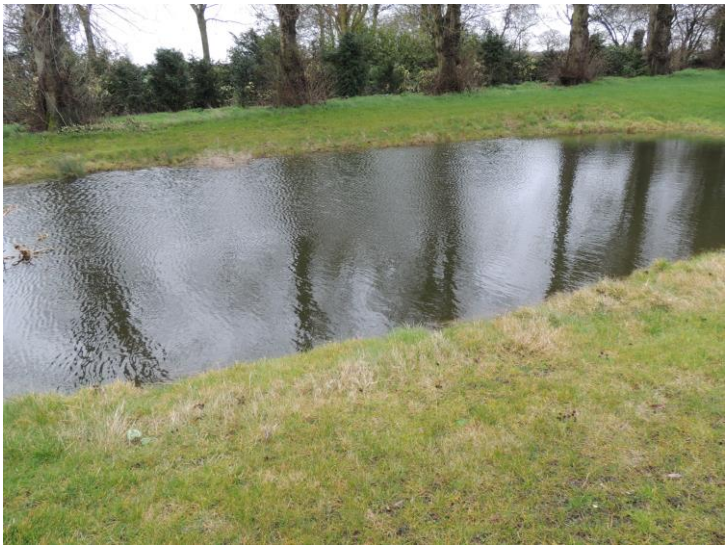

Photo 25: Pond in rear garden is stocked with fish….

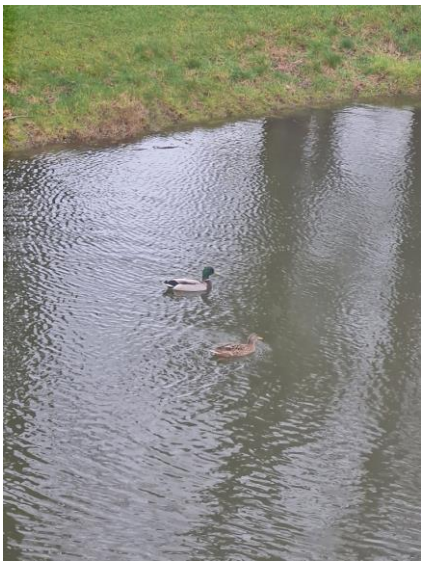

Photo 26: …and visited by wildfowl

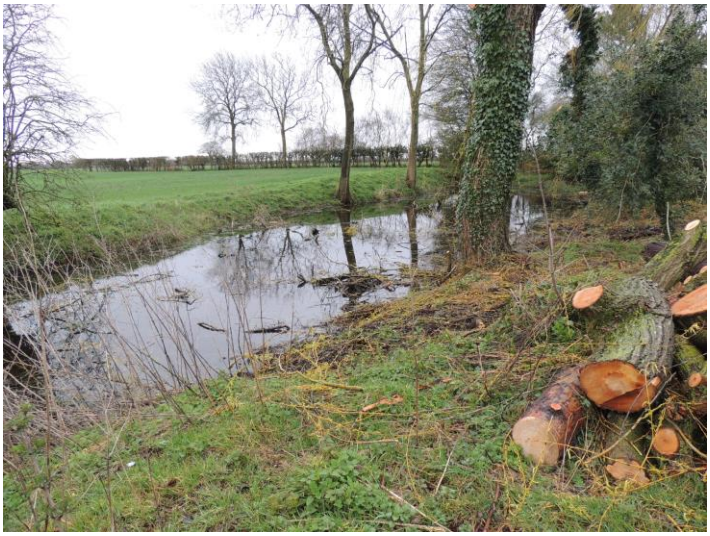

Photo 27: Pond to the east

Photo 28: The pond to the east dries up in summer

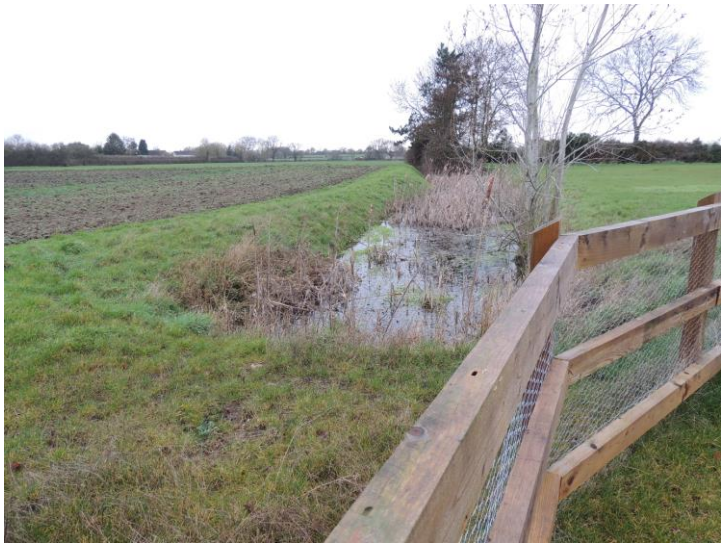

Photo 29: A pond next to a field is visited by wildfowl and dries in summer

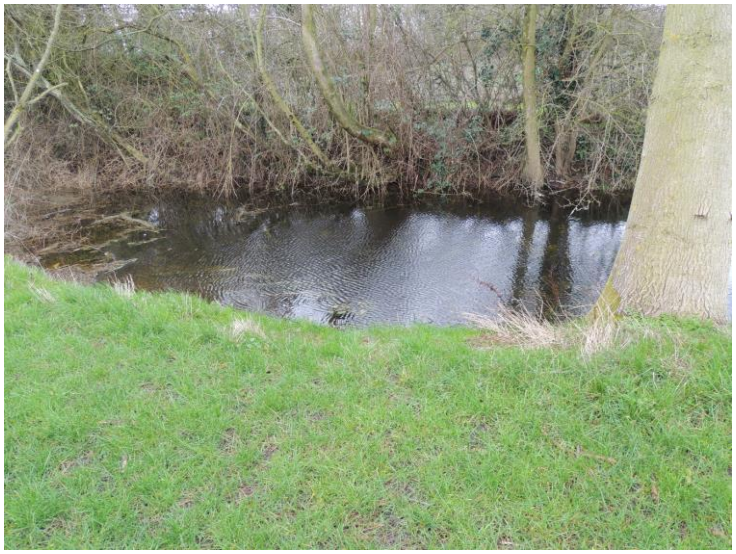

Photo 30: A pond next to a field to the south is visited by wildfowl and dries in summer

5.4 Barn owls

The lack of suitable trees and buildings made the site unsuitable for occupation by barn owls and no evidence of this species was found.

5.5 Priority species

Priority species likely to be present and affected by this development and therefore require consideration are Common Toad and Hedgehog.

6) Discussion

Bats are inquisitive, highly mobile animals, which constantly investigate their surroundings, evaluating good feeding areas and potential roosting opportunities. Where suitable habitat such as woodland, woodland edge or sheltered pasture occurs, bats will travel up to several kilometres to take advantage of this resource. To reach favoured sites, small bats will follow linear landscape features such as hedgerows, streams and lanes etc. The absence of such features can make an otherwise suitable site inaccessible to bats. In addition, new roosts will become established in such areas - examples being the rapid colonisation of artificial roost boxes placed in conifer forests or the occupation of new houses by nursery colonies of pipistrelle bats within a year or two of their completion.

Although no evidence of bats was found, it is probable that bats from nearby roosts will forage across the site. This behaviour would be expected to continue after any building work has been completed and therefore it is considered that the planning proposal for this site will not have a detrimental effect on the local bat population or on protected species.

7) Assessment of impacts

The site is covered by the building, short grass and a gravel drive. It is bordered by arable fields, gravel hardstanding and a maintained garden and has no Priority habitats. However, it is possible that Common Toad and Hedgehog are present in the area, outside the site. It is

therefore recommended that any trenches dug during the construction phase are covered at night, or, if open, that sloping planks are left in the trench such that any mammals and amphibians are able to escape. All open trenches should be checked for mammals and amphibians each morning.

There is no habitat at the site that would support Otter, Hazel Dormouse, Harvest Mouse or White-clawed Crayfish.

8) Recommendations for reasonable biodiversity enhancements

1: It is recommended that the existing gaps along the site boundaries are retained to allow hedgehogs and common toads to forage across the site as, potentially, at present. However if any boundary fences are to be introduced, see below:

A gap 13cm by 13cm is sufficient for any hedgehog to pass through. This will be too small for nearly all pets.

Hedgehogs travel around **one mile** every night through our parks and gardens in their quest to find enough food and a mate. If you have an enclosed garden this can prevent hedgehogs from dispersing throughout their territory. It is now known that one of the main reasons why hedgehogs are declining in Britain is because our fences and walls are becoming more and more secure, reducing the amount of land available to them. Developers can make their life a little easier by removing the barriers within their control – for example, by making holes in or under our garden fences and walls for them to pass through.

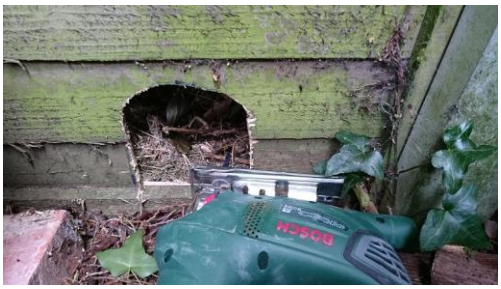

Photo 31: Hedgehog pathway at base of fence

Alternatively:

- Remove a brick from the bottom of the wall
- Cut a small hole in your fence if there are no gaps
- Dig a channel underneath your wall, fence or gate

2: Two bird nesting boxes to be sited on trees or buildings at Ryes Farm.

3: A Hedgehog nesting box to be sited at base of a boundary hedge.

4: Two solitary bee hives to be erected at the site.

A range of designs are commercially available, but they may be manufactured from durable FSC timber and provide valuable habitat for bees in modern gardens. They are designed specifically to attract non-swarming bees like the Red Mason Bee, Leafcutter Bee and other solitary bees which are naturally attracted to holes in wood.

Photo 32: Solitary bee hive

Attracting solitary bees to the garden is not only safe, but beneficial to pollination of flowers, fruit and vegetables.

Siting: Site in a visible warm place ideally oriented to face between southeast and south and to catch some sun. It is helpful to have soil nearby, and food sources such as flowers, orchards and fruit.